

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

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

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

Incident ID	nOY1809249211
District RP	1RP-5003
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.7459831 Longitude -103.5429764
(NAD 83 in decimal degrees to 5 decimal places)

Site Name TONTO 15 STATE #001	Site Type Oil & Gas Facility
Date Release Discovered: 3/14/2018	API# (if applicable) 30-025-28897

Unit Letter	Section	Township	Range	County
I	15	18S	34E	Lea

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

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 7	Volume Recovered (bbls) 5
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

While conducting daily rounds, Operator arrived onsite and observed standing fluids around the perimeter of the wellhead. Upon investigation, it was found the stuffing box had released and misted approx. 6.32 bbl. onsite around the wellhead. Misting affected a 55 ft x 3 ft. area and a 30 ft x 30 ft. area. A vac truck was dispatched to recover standing fluids. Contaminated soils will be removed and disposed of at R360.

Amended Closure Report Starts on Page 76

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<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p>	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Callie Karrigan</u> Title: <u>Environmental Professional</u>
Signature: <u><i>Callie Karrigan</i></u> Date: 4/02/2018
email: __ Telephone: __
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	nOY1809249211
District RP	1RP-5003
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?	<u><50</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

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Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 9/21/2023

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

OCD Only

Received by: _____ Date: _____

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Closure

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

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

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

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

Printed Name: Melodie Sanjari Title: Environmental Professional
Signature: Melodie Sanjari Date 9/21/2023
email: msanjari@marathonoil.com Telephone: 575-988-8753

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Brittany Hall Date: 11/6/2023
Printed Name: Brittany Hall Title: Environmental Specialist



Souder, Miller & Associates ♦ 201 S. Halagueno St. ♦ Carlsbad, NM 88220
(575) 689-8801

REVIEWED

By Olivia Yu at 10:22 am, Jul 25, 2018

July 10, 2018

NMOCD District I
Olivia Yu
1625 N. French Drive
Hobbs, NM 88240

#5E27122-BG8

NMOCD agrees that delineation is completed for 1RP-4869 & 1RP-5003. See email correspondence regarding remediation.

SUBJECT: SOIL REMEDIATION CLOSURE REPORT FOR THE INCIDENTS AT THE TONTO 15 STATE #1, LEA COUNTY, NEW MEXICO

Dear Ms. Yu:

On behalf of Marathon Oil Permian LLC, Souder, Miller & Associates (SMA) has prepared this CLOSURE REPORT that describes the assessment, delineation and remediation for the releases associated with the Tonto 15 State #1. The site is in UNIT I, SECTION 15, TOWNSHIP 18S, RANGE 34E, NMPM, Lea County, New Mexico, on State land. Figure 1 illustrates the vicinity and location of the site. Table 1, below, summarizes information regarding the release.

Table 1: Release information and Site Ranking	
Name	Tonto 15 State #1
Company	Marathon Oil Permian LLC
Incident Number	1RP-4869 1RP-5003
API Number	30-025-28897
Location	32.7459831, -103.5429764
Estimated Date of Release	1RP-4869-October 29, 2017 1RP-5003-March 14, 2018
Date Reported to NMOCD	1RP-4869-November 2, 2017 1RP-5003-March 15, 2018
Land Owner	State
Reported To	NMOCD District I
Source of Release	1RP-4869-Stuffing Box 1RP-5003-Stuffing Box
Released Material	1RP-4869-Oil 1RP-5003-Oil
Released Volume	1RP-4869-23 bbls 1RP-5003-6.32 bbls
Recovered Volume	1RP-4869-12 bbls 1RP-5003-5.3 bbls
Net Release	1RP-4869-11 bbls 1RP-5003-1.02 bbls
Nearest Waterway	Surface water is approximately 2,660' SW of location
Depth to Groundwater	Estimated to be 100'
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	0
SMA Response Dates	April 26, 2018, May 17, 2018, June 7, 2018

Tonto 15 State #1
July 10, 2018

Page 2 of 4

1.0 Background

On October 29, 2017, a 23 bbl oil spill occurred due to a valve at the well being inadvertently closed, which resulted in the stuffing box forming a leak (1RP-4869). The surface impact was confined to the well pad and access road. An area of approximately 144 feet wide by 4 feet long was impacted on the well pad. An area approximately 16 feet wide and 48 feet long was impacted on the access road. A vacuum truck was able to recover approximately 12 bbls of standing fluid.

On March 14, 2018, a 6.32 bbls oil spill occurred due to a stuffing box leak (1RP-5003). The surface impact was confined to the well pad. Two areas of impact were observed measuring approximately 55 feet wide by 3 feet long and 30 feet wide by 30 feet long. A vacuum truck was able to recover approximately 1 bbl of standing fluid.

2.0 Site Ranking and Land Jurisdiction

The release site is located near Artesia, New Mexico with an elevation of approximately 4,020 feet above sea level. SMA searched the New Mexico State Engineer's Office (NMOSE) online water well database for water wells in the vicinity of the release. Several wells are located within a three-mile radius of the site. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be 100 feet below ground surface (bgs).

Recommended Remediation Action Levels (RRALs) are determined by the site ranking according to the NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (1993). Below in Table 2 are the remediation standards and the site ranking for this location. Justification for this site ranking is found in Figure 1 and Appendix B.

Table 2.

Soil Remediation Standards	0 to 9	10 to 19	>19
Benzene	10 PPM	10 PPM	10 PPM
BTEX	50 PPM	50 PPM	50 PPM
TPH	5000 PPM	1000 PPM	100 PPM

Depth to Groundwater	NMOCD Numeric Rank
< 50 BGS = 20	
50' to 99' = 10	
>100' = 0	0
Distance to Nearest Surface Water	NMOCD Numeric Rank
< 200' = 20	
200' - 1000' = 10	
>1000' = 0	0
Well Head Protection	NMOCD Numeric Rank
<1000' (or <200' domestic) = 20	
> 1000' = 0	0
Total Site Ranking	0

Tonto 15 State #1
July 10, 2018

Page 3 of 4

3.0 Release Characterization

On April 26, 2018, SMA field personnel assessed the release area. Soil samples were field-screened using a mobile EC unit (EPA 4500) and a calibrated MiniRAE 3000 photoionization detector (PID). Five sample locations (L1-L5) were augured by hand to a maximum depth of 1 foot bgs to characterize the release.

On May 17, 2018, SMA field personnel returned to the location to further delineate sample locations L1 through L5 with a backhoe service. The backhoe encountered limestone bedrock across the pad at depths that ranged from 10 inches to 2 feet. This occurrence is validated in the Web Soil Survey (USDA), which states that bedrock should be found from 10 to 16 inches and will continue to at least 80 inches.

As summarized in Table 3, results indicated that hydrocarbon impacts were primarily surficial (0.5 foot), with chloride impacts extending to at least 1.5 feet. SMA recommended excavation of the impacted area to remove chloride-contaminated soil, or until bedrock was encountered.

All samples were collected and processed according to NMOCD soil sampling procedures. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analysis for MRO, DRO, and GRO by EPA Method 8015D, BTEX by EPA Method 8021, and Chlorides by Method 300. Sample locations are depicted on Figure 2. All field screening and laboratory results are summarized in Table 3. Laboratory reports are included in Appendix C.

4.0 Soil Remediation

SMA guided the excavation in the impact area to bedrock. Sample L4 was excavated to 1 foot bgs, sample locations L2 and L3 were excavated to 1.5 feet bgs, and the pooling area around sample location L5 was excavated to 2 feet bgs. SMA continuously guided the excavation activities by collecting soil samples for field screening with a mobile EC unit (EPA 4500) and PID unit. Seven sidewall samples were collected from the excavated area to demonstrate lateral delineation. However, one sidewall (SW6) and two bottom hole (L2 and L3) samples still resulted in elevated chlorides, so these areas were extended and resampled on June 20, 2018.

All samples were collected and processed according to NMOCD soil sampling procedures. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analysis for MRO, DRO, and GRO by EPA Method 8015D, BTEX by EPA Method 8021, and Chlorides by Method 300. Contaminated soils were removed and replaced with clean backfill material to return the surface to previous contours. The contaminated soils were transported for proper disposal at an NMOCD permitted disposal facility. Sample location L1 was not excavated due to multiple electrical lines and proximity to the pump jack. We are requesting to defer the cleanup in the area until site abandonment.

5.0 Scope and Limitations

The scope of our services consisted of the performance of assessment sampling, verification of release stabilization, regulatory liaison, remediation and preparation of this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

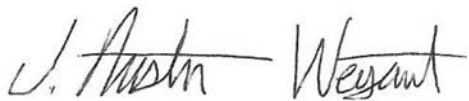
Tonto 15 State #1
July 10, 2018

Page 4 of 4

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-8801 or Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Reviewed by:

A handwritten signature in blue ink that reads "Austin Weyant". The signature is written in a cursive, flowing style.

Austin Weyant
Project Scientist

A handwritten signature in blue ink that reads "Shawna Chubbuck". The signature is written in a cursive, flowing style.

Shawna Chubbuck
Senior Scientist

ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map

Figure 2: Site and Sample Location Map

Tables:

Table 3: Summary of Sample Results

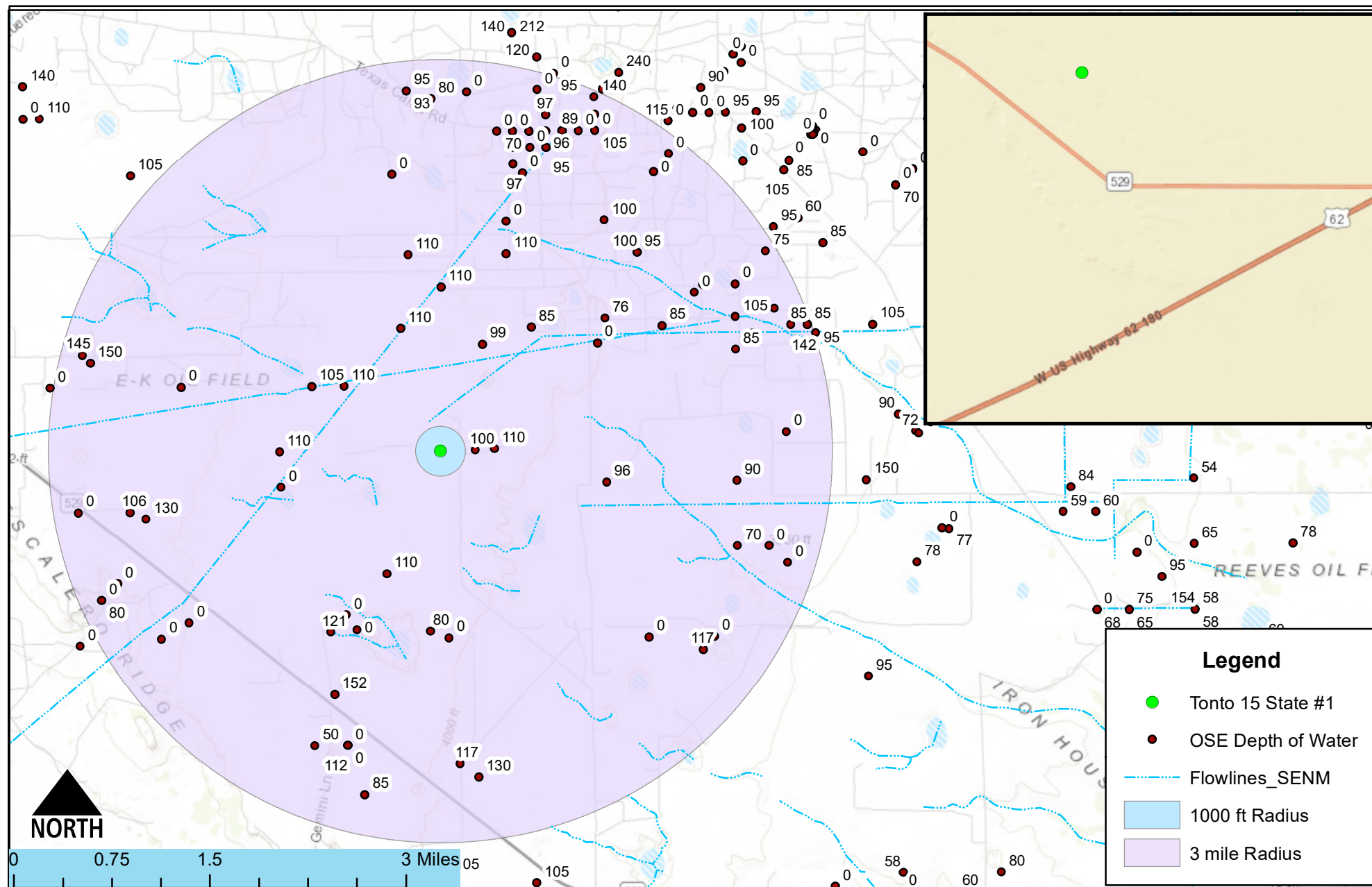
Appendices:

Appendix A: Form C141 Initial

Appendix B: NMOSE Wells Report

Appendix C: Laboratory Analytical Reports

FIGURE 1 VICINITY AND NMOSE DATA MAP



Vicinity and Well Head Protection Map
Tonto 15 State #1 - Marathon
S15-T18S-R34E, New Mexico

Figure 1

Date Saved:
5/14/2018

By: _____	Date: _____	Revisions	Descr: _____
By: _____	Date: _____		Descr: _____

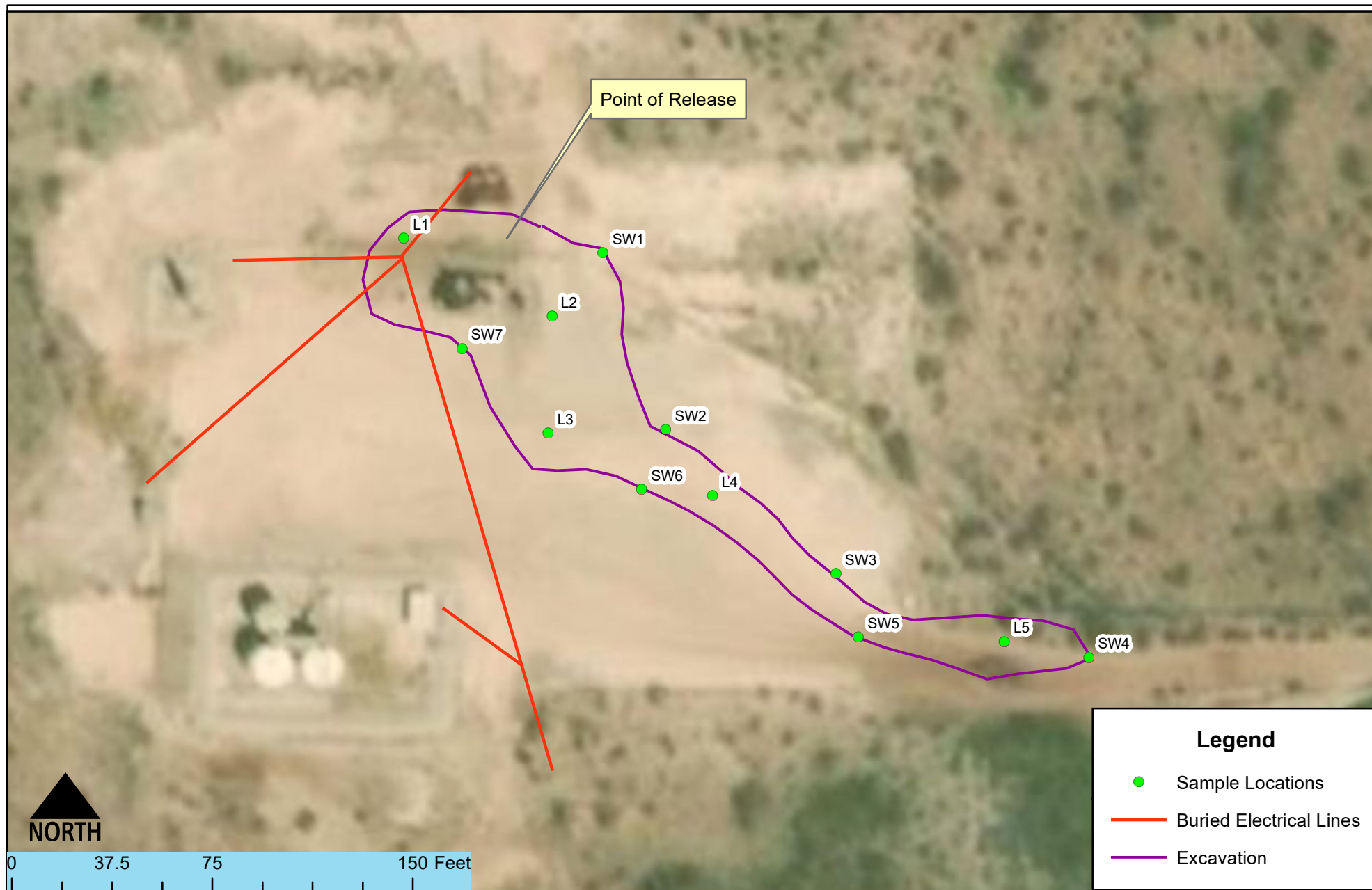
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Drawn **Heather Patterson**
Checked _____
Approved _____



201 South Halaguena Street
Carlsbad, New Mexico 88221
(575) 689-7040
www.soudermiller.com
Serving the Southwest & Rocky Mountains

FIGURE 2 SITE AND SAMPLE LOCATION MAP



Site and Sample Location Map
 Tonto 15 State #1 - Marathon
 S15-T18S-R34E, New Mexico

Figure 2

Date Saved:
 7/10/2018

Revisions		
By: _____	Date: _____	Descr: _____
By: _____	Date: _____	Descr: _____

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Drawn Heather Patterson
 Checked _____
 Approved _____



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TABLE 3

SUMMARY SAMPLE RESULTS

Tonto 15 State #1

Table 3.

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Action Taken	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- Laboratory mg/Kg
NMOCD RRAL's for Site Ranking 0				50 mg/Kg	10 mg/Kg				5000 mg/Kg	600
L1	4/26/2018	0.5	in-situ	141	<0.49	970	23000	9300	33270	920
	5/17/2018	2.5	in-situ	<0.23	<0.025	<5.0	45	55	100	490
L2	4/26/2018	0.5	excavated	49.9	<0.46	480	17000	7900	25380	210
	5/17/2018	1	excavated	<0.23	<0.023	<4.7	66	53	119	860
	6/7/2018	1.5	excavated	--	--	<4.8	500	420	920	770
	6/20/2018	1.75	in-situ	--	--	<4.7	12	<47	12	120
L3	4/26/2018	0.5	excavated	120	<0.50	970	17,000	6,200	24,170	250
	5/17/2018	1	excavated	0.5	<0.024	9.8	2000	1200	3209.8	2100
	6/7/2018	1.5	excavated	--	--	5.2	680	640	1325.2	1900
	6/20/2018	1.75	in-situ	--	--	<4.6	180	<48	180	160
L4	4/26/2018	0.5	excavated	147	<0.48	1400	17000	5900	24300	300
	5/17/2018	1	in-situ	<0.23	<0.025	<5.0	23	<50	23	530
L5	4/26/2018	1	excavated	2.75	<0.12	31	6100	3800	9931	920
	5/17/2018	1.5	excavated	<0.23	<0.024	<4.8	690	470	1160	1200
	5/17/2018	2	in-situ	<0.23	<0.024	<4.9	22	<50	22	250
SW1	6/7/2018	sidewall	in-situ	--	--	<4.8	60	61	121	180
SW2	6/7/2018	sidewall	in-situ	--	--	<4.7	110	210	320	610
SW3	6/7/2018	sidewall	in-situ	--	--	<4.8	<9.9	<50	<65	480
SW4	6/7/2018	sidewall	in-situ	--	--	<4.9	550	390	940	57
SW5	6/7/2018	sidewall	in-situ	--	--	<4.7	160	350	510	120
SW6	6/7/2018	sidewall	excavated	--	--	<4.8	35	60	95	1200
	6/20/2018	sidewall	in-situ	--	--	--	--	--	--	550
SW7	6/7/2018	sidewall	in-situ	--	--	<4.8	20	<47	20	380
SP	4/26/2018	comp	hauled	13.1	<0.12	94	7400	5300	12794	1500

"--" = Not Analyzed

APPENDIX A FORM C141 INITIAL

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

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Marathon Oil Permian LLC	Contact Raquel Chacon
Address 5555 San Felipe Street, Houston, Texas 77056	Telephone No. 281-910-0441 (cell) 575-297-0988 (office)
Facility Name: Tonto 15 State #1	Facility Type Oil and gas production facilities
Surface: Owner: State of NM	Mineral: Owner: State of NM
API No. :30-025-28897	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	15	18S	34E	1980	South	900	East	Lea

Latitude 32.745796 Longitude -103.542489

NATURE OF RELEASE

Type of Release : Oil	Volume of Release : 23 bbls	Volume Recovered : 12 bbls
Source of Release: stuffing box	Date and Hour of Occurrence 10/29/2017 approximately 8:00 am	Date and Hour of Discovery 10/29/2017 4:30 pm
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.* Not applicable.		

RECEIVED

By Olivia Yu at 3:22 pm, Nov 15, 2017


Describe Cause of Problem and Remedial Action Taken.*

The valve at the wellhead was found to be shut by an unknown source. The well was still active and resulted in a release at the stuffing box. The pumping unit was shut in immediately until the cause was discovered. A vacuum truck was called out to recover any standing fluid. The stuffing box was repacked, and the unit was put back on-line.

Describe Area Affected and Cleanup Action Taken.*

The area affected was on the well pad and access road. The area on the well pad was 144' wide by 4' long and the area on the road was 16' wide and 48' long. An 811 call was placed immediately in order for a backhoe to remove contaminants in order to prevent further impact to soils or tracking with vehicles. Soil samples will be submitted to a laboratory when removal is complete for BTEX, TPH, and Cl to show corrective actions were effective.

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.

Signature: Raquel Chacon	OIL CONSERVATION DIVISION	
Printed Name: Raquel Chacon	Approved by Environmental Specialist: 	
Title: HES Environmental Professional	Approval Date: 11/15/2017	Expiration Date:
E-mail Address: rchacon@marathonoil.com	Conditions of Approval:	Attached <input checked="" type="checkbox"/>
Date: 11/2/2017 Phone: 281-910-0441(cell) 575-297-0988 (office)	see attached directive	

* Attach Additional Sheets If Necessary

1RP-4869

nOY1731955602

pOY1731959593

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _11/6/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4869_ 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 division-approved corrective action 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 _12/15/2017_. 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

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
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Marathon Oil Permian LLC	Contact Callie Karrigan
Address 5555 San Felipe Street, Houston, Texas 77056	Telephone No. 405-202-1028 (cell) 575-297-0956 (office)
Facility Name: Tonto 15 State #1	Facility Type Oil and gas production facilities
Surface: Owner: State	Mineral: Owner: State
API No. :30-025-28897	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	15	18S	34E	1980	South	900	East	Lea

Latitude 32.746234 Longitude **32.7459831,-103.5429764**

NATURE OF RELEASE

Type of Release : Oil	Volume of Release : 6.32 barrels	Volume Recovered : 5.30 barrels
Source of Release: stuffing box	Date and Hour of Occurrence 3/14/18 unknown	Date and Hour of Discovery 3/14/18 01:15 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu	
By Whom? Callie Karrigan	Date and Hour 03/15/18 11:15 am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
Not applicable.

RECEIVED

By Olivia Yu at 1:31 pm, Apr 02, 2018


Describe Cause of Problem and Remedial Action Taken.*

While conducting daily rounds, Operator arrived onsite and observed standing fluids around the perimeter of the wellhead. Upon investigation, it was found the stuffing box had released and misted approximately 6.32 barrels onsite around the wellhead.

Describe Area Affected and Cleanup Action Taken.*

Misting affected a 55x3 are and a 30x30 area. A vac truck was dispatched to recover standing fluids. Contaminated soils will be removed and disposed at R360. Confirmation samples will be taken and the affected area will be backfilled. In addition, the wellhead and equipment will also be washed and wiped down.

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.

Signature: <i>Callie Karrigan</i>	OIL CONSERVATION DIVISION	
Printed Name: Callie Karrigan	Approved by Environmental Specialist: 	
Title: HES Professional	Approval Date: 4/2/2018	Expiration Date:
E-mail Address: cnkarrigan@marathonoil.com	Conditions of Approval:	Attached <input checked="" type="checkbox"/>
Date: 03/28/18 Phone: 405-202-1028(cell) 575-297-0956(office)	see attached directive	

* Attach Additional Sheets If Necessary

1RP-5003

nOY1809249211

pOY1809249756

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-5003 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 division-approved corrective action 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 5/2/2018. 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:

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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

APPENDIX B

NMOSE WELLS REPORT



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 04531	L	LE		1	3	14	18S	34E		637016	3624067*	512	125	100	25
L 09775	L	LE		1	2	3	14	18S	34E	637249	3624084	744	183	110	73
L 05881	L	LE		1	1	15	18S	34E		635395	3624846*	1355	230	110	120
L 01613 S2	L	LE		2	3	3	11	18S	34E	637095	3625374*	1435	220	99	121
L 05876	L	LE		3	1	4	10	18S	34E	636085	3625563*	1554	230	110	120
L 05374	L	LE		2	2	16	18S	34E		634994	3624840*	1696	192	105	87
L 05882	L	LE		1	4	16	18S	34E		634605	3624030*	1899	230	110	120
L 01613	L	LE		3	1	4	11	18S	34E	637696	3625589*	1933	211	85	126
L 13211 POD1	L	LE		4	3	4	16	18S	34E	634629	3623592	1934	140		
L 05875	L	LE		4	2	10	18S	34E		636581	3626073*	2008	230	110	120
L 09767	L	LE		3	3	13	18S	34E		638636	3623688*	2165	182	96	86
L 03765 POD4	L	LE		2	1	2	27	18S	34E	636475	3621831	2235	180	80	100
L 09750	L	LE		3	3	22	18S	34E		635440	3622029*	2298	200		
L 05574	R	L	LE	1	3	3	12	18S	34E	638509	3625399*	2407			
L 05355	L	LE		1	2	10	18S	34E		636173	3626469*	2425	186	110	76
L 02499 POD3	L	LE		1	1	1	27	18S	34E	635252	3621814	2576	180	121	59
L 05885	L	LE		2	1	11	18S	34E		637380	3626489*	2576	230	110	120
L 05079	L	LE		1	3	12	18S	34E		638604	3625702*	2662	159	76	83
L 02722 S3	L	LE		4	3	02	18S	34E		637374	3626892*	2956			
L 13634 POD1	L	LE		3	3	1	27	18S	34E	635352	3621122	3160	182	152	30
L 01614	L	LE		3	1	4	12	18S	34E	639305	3625618*	3202	204	85	119
L 05139	L	LE		2	1	12	18S	34E		638992	3626517*	3492	150	95	55
L 07361	L	LE		2	1	12	18S	34E		638992	3626517*	3492	202	100	102
L 04160	L	LE		3	3	01	18S	34E		638585	3626911*	3524	165	100	65
L 09752	L	LE		3	1	2	20	18S	34E	632968	3623188	3643	179	130	49
L 05788 POD10	L	LE		4	4	1	02	18S	34E	637459	3627596*	3656	240	100	140

*UTM location was derived from PLSS - see Help

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






























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(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD		Q Q Q							X	Y	Distance	Depth Well	Depth Water	Water Column
	Sub-Code	basin	County	64	16	4	Sec	Tws	Rng						
L 05788 POD17	L	LE	4	4	1	02	18S	34E	637459	3627596*		3656	240	97	143
L 13563 POD1	L	LE	4	4	4	20	18S	34E	633506	3621920		3686	200		
L 03721	L	LE		3	3	18	18S	35E	640241	3623717*		3753	161	90	71
L 10236	L	LE		3	3	27	18S	34E	635466	3620420*		3790			
L 10344 POD2	L	LE		3	3	27	18S	34E	635466	3620420*		3790	142	112	30
L 13526 POD1	L	LE	2	2	1	20	18S	34E	632769	3623271		3818	196	106	90
L 05788 POD19	L	LE	2	4	1	02	18S	34E	637459	3627796*		3850	240	98	142
L 12633 POD1	L	LE	2	2	2	34	18S	34E	636852	3620203		3877	180	117	63
L 04851	L	LE		4	2	12	18S	34E	639801	3626130*		3889	155	95	60
L 05788 POD20	L	LE	1	3	2	02	18S	34E	637662	3627802*		3911	240	96	144
L 05788 POD7	L	LE	1	3	2	02	18S	34E	637662	3627802*		3911	240		
L 05172	L	LE		3	3	07	18S	35E	640214	3625331*		3919	161	85	76
L 03888	L	LE		3	1	19	18S	35E	640253	3622912*		3922	107	70	37
L 10202	L	LE		4	4	28	18S	34E	635065	3620414*		3925	70	50	20
L 05788 POD11	L	LE	2	3	2	02	18S	34E	637862	3627802*		3975	240	95	145
L 05788 POD16	L	LE	2	3	2	02	18S	34E	637862	3627802*		3975	240	96	144
L 05788 POD6	L	LE	2	3	2	02	18S	34E	637862	3627802*		3975	240	94	146
L 05788 POD9	L	LE	2	3	2	02	18S	34E	637862	3627802*		3975	250	95	155
L 05788 POD15	L	LE	4	2	1	02	18S	34E	637451	3627998*		4044	240		
L 05788 POD4	L	LE	4	2	1	02	18S	34E	637451	3627998*		4044	240	98	142
L 04931 X	L	LE		1	3	07	18S	35E	640208	3625735*		4062	212	105	107
L 09576	L	LE		1	1	35	18S	34E	637082	3620041*		4066	180	130	50
CP 01582 POD1	CP	LE	2	1	2	29	18S	34E	633167	3621715		4081	180	180	0
L 02722 S	L	LE	3	1	2	02	18S	34E	637654	3628004*		4102	236	70	166
L 05788 POD14	L	LE	3	1	2	02	18S	34E	637654	3628004*		4102	240	97	143
L 05788 POD18	L	LE	3	1	2	02	18S	34E	637654	3628004*		4102	240	97	143
L 05788 POD21	L	LE	3	1	2	02	18S	34E	637654	3628004*		4102	240	96	144
L 12926 POD1	L	LE	2	2	3	25	18S	34E	639839	3621631		4129	182	117	65
L 05788	L	LE	4	1	2	02	18S	34E	637854	3628004*		4162	230	97	133

*UTM location was derived from PLSS - see Help

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



























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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD		Q Q Q							X	Y	Distance	Depth Well	Depth Water	Water Column	
	Sub-Code	basin	County	64	16	4	Sec	Tws	Rng							
L 05788 POD12	L	LE	4	1	2	02	18S	34E	637854	3628004*		4162	240	94	146	
L 05788 POD13	L	LE	4	1	2	02	18S	34E	637854	3628004*		4162	240	95	145	
L 04906	L	LE			3	07	18S	35E	640415	3625532*		4176	155	87	68	
L 10345 POD2	L	LE		2	3	20	18S	34E	632620	3622393*		4228	130	120	10	
L 02722 S2	L	LE	3	2	2	02	18S	34E	638057	3628011*		4239	228	89	139	
L 05788 POD2	L	LE	3	2	2	02	18S	34E	638057	3628011*		4239	240	98	142	
L 05788 POD5	L	LE	3	2	2	02	18S	34E	638057	3628011*		4239	240	94	146	
L 05788 POD8	L	LE	3	2	2	02	18S	34E	638057	3628011*		4239	240	95	145	
L 07928	L	LE	4	4	1	19	18S	35E	640639	3622915		4292	175			
L 05788 POD22	L	LE	4	2	2	02	18S	34E	638257	3628011*		4316				
L 08100	L	LE	3	4	4	34	17S	34E	636439	3628393*		4327	135	80	55	
L 05851	L	LE			1	34	18S	34E	635681	3619816*		4329	240	85	155	
L 05788 POD3	L	LE	2	1	2	02	18S	34E	637854	3628204*		4352	240	97	143	
L 04953	L	LE	4	3	3	08	18S	34E	632269	3625104*		4360	200	150	50	
L 06031	L	LE		2	2	02	18S	34E	638158	3628112*		4370	230	102	128	
L 02722	L	LE	3	1	1	01	18S	34E	638460	3628017*		4408	229	105	124	
L 02724 S3	L	LE		3	4	34	17S	34E	636137	3628487*		4436	210	95	115	
L 05883	L	LE		3	4	34	17S	34E	636137	3628487*		4436	244	93	151	
L 10040	L	LE		3	3	08	18S	34E	632170	3625205*		4481	215	145	70	
L 10346	L	LE			3	20	18S	34E	632425	3622187*		4490	130			
L 10436	L	LE			3	20	18S	34E	632425	3622187*		4490	120	80	40	
L 04975	L	LE	2	2	3	07	18S	35E	640688	3625837*		4543	152	105	47	
L 06115	L	LE	1	1	1	01	18S	34E	638460	3628217*		4588	230	110	120	
L 02349	R	L	LE	3	1	4	07	18S	35E	640891	3625641*		4661	207	85	122
L 06029	L	LE		4	4	35	17S	34E	638150	3628523*		4751	230	102	128	
L 04778	L	LE		2	1	07	18S	35E	640575	3626545*		4766	150	75	75	
L 02724 S4	L	LE	3	3	3	36	17S	34E	638451	3628429*		4777	230	140	90	
L 02349 POD2	L	LE	4	1	4	07	18S	35E	641091	3625641*		4849	214	85	129	
L 02349 POD3	L	LE	4	1	4	07	18S	35E	641091	3625641		4849	220	142	78	

*UTM location was derived from PLSS - see Help

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 05842	L	LE		4	35	17S	34E			637948	3628716*	4868	240	95	145
L 06030	L	LE		3	3	36	17S	34E		638552	3628530*	4911	230	102	128
L 04794	L	LE		4	07	18S	35E			641200	3625540*	4921	150	95	55
L 10467	L	LE		1	2	01	18S	34E		639365	3628137*	4975	231	115	116

Average Depth to Water: **101 feet**

Minimum Depth: **50 feet**

Maximum Depth: **180 feet**

Record Count: 88

UTMNAD83 Radius Search (in meters):

Easting (X): 636503.91

Northing (Y): 3624066.14

Radius: 5000

*UTM location was derived from PLSS - see Help

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

5/14/18 2:23 PM

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WATER COLUMN/ AVERAGE
DEPTH TO WATER

APPENDIX C

LABORATORY ANALYTICAL REPORTS



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 10, 2018

Austin Weyant
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-7040
FAX

RE: Tonto

OrderNo.: 1805017

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/1/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1805017

Date Reported: 5/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L1-3"

Project: Tonto

Collection Date: 4/26/2018 2:43:00 PM

Lab ID: 1805017-001

Matrix: SOIL

Received Date: 5/1/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	920	30		mg/Kg	20	5/7/2018 1:43:15 PM	37967
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	23000	1000		mg/Kg	100	5/4/2018 2:40:42 AM	37916
Motor Oil Range Organics (MRO)	9300	5000		mg/Kg	100	5/4/2018 2:40:42 AM	37916
Surr: DNOP	0	70-130	S	%Rec	100	5/4/2018 2:40:42 AM	37916
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	970	97		mg/Kg	20	5/3/2018 12:15:25 PM	37890
Surr: BFB	478	15-316	S	%Rec	20	5/3/2018 12:15:25 PM	37890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.9		mg/Kg	20	5/3/2018 12:15:25 PM	37890
Benzene	ND	0.49		mg/Kg	20	5/3/2018 12:15:25 PM	37890
Toluene	19	0.97		mg/Kg	20	5/3/2018 12:15:25 PM	37890
Ethylbenzene	48	0.97		mg/Kg	20	5/3/2018 12:15:25 PM	37890
Xylenes, Total	74	1.9		mg/Kg	20	5/3/2018 12:15:25 PM	37890
Surr: 4-Bromofluorobenzene	197	80-120	S	%Rec	20	5/3/2018 12:15:25 PM	37890

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 1 of 10

Analytical Report

Lab Order 1805017

Date Reported: 5/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L2-3"

Project: Tonto

Collection Date: 4/26/2018 2:38:00 PM

Lab ID: 1805017-002

Matrix: SOIL

Received Date: 5/1/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	210	30		mg/Kg	20	5/7/2018 1:55:39 PM	37967
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	17000	940		mg/Kg	100	5/4/2018 3:27:39 AM	37916
Motor Oil Range Organics (MRO)	7900	4700		mg/Kg	100	5/4/2018 3:27:39 AM	37916
Surr: DNOP	0	70-130	S	%Rec	100	5/4/2018 3:27:39 AM	37916
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	480	92		mg/Kg	20	5/3/2018 1:02:06 PM	37890
Surr: BFB	314	15-316		%Rec	20	5/3/2018 1:02:06 PM	37890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.8		mg/Kg	20	5/3/2018 1:02:06 PM	37890
Benzene	ND	0.46		mg/Kg	20	5/3/2018 1:02:06 PM	37890
Toluene	4.9	0.92		mg/Kg	20	5/3/2018 1:02:06 PM	37890
Ethylbenzene	16	0.92		mg/Kg	20	5/3/2018 1:02:06 PM	37890
Xylenes, Total	29	1.8		mg/Kg	20	5/3/2018 1:02:06 PM	37890
Surr: 4-Bromofluorobenzene	148	80-120	S	%Rec	20	5/3/2018 1:02:06 PM	37890

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1805017

Date Reported: 5/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-3"

Project: Tonto

Collection Date: 4/26/2018 2:30:00 PM

Lab ID: 1805017-003

Matrix: SOIL

Received Date: 5/1/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	250	30		mg/Kg	20	5/7/2018 2:32:54 PM	37967
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	17000	960		mg/Kg	100	5/4/2018 4:14:34 AM	37916
Motor Oil Range Organics (MRO)	6200	4800		mg/Kg	100	5/4/2018 4:14:34 AM	37916
Surr: DNOP	0	70-130	S	%Rec	100	5/4/2018 4:14:34 AM	37916
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	970	99		mg/Kg	20	5/3/2018 1:49:06 PM	37890
Surr: BFB	495	15-316	S	%Rec	20	5/3/2018 1:49:06 PM	37890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.0		mg/Kg	20	5/3/2018 1:49:06 PM	37890
Benzene	ND	0.50		mg/Kg	20	5/3/2018 1:49:06 PM	37890
Toluene	14	0.99		mg/Kg	20	5/3/2018 1:49:06 PM	37890
Ethylbenzene	41	0.99		mg/Kg	20	5/3/2018 1:49:06 PM	37890
Xylenes, Total	65	2.0		mg/Kg	20	5/3/2018 1:49:06 PM	37890
Surr: 4-Bromofluorobenzene	192	80-120	S	%Rec	20	5/3/2018 1:49:06 PM	37890

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1805017

Date Reported: 5/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L4-3"

Project: Tonto

Collection Date: 4/26/2018 2:23:00 PM

Lab ID: 1805017-004

Matrix: SOIL

Received Date: 5/1/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	300	30		mg/Kg	20	5/7/2018 2:45:18 PM	37967
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	17000	990		mg/Kg	100	5/4/2018 5:01:31 AM	37916
Motor Oil Range Organics (MRO)	5900	5000		mg/Kg	100	5/4/2018 5:01:31 AM	37916
Surr: DNOP	0	70-130	S	%Rec	100	5/4/2018 5:01:31 AM	37916
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1400	97		mg/Kg	20	5/4/2018 1:19:53 PM	37890
Surr: BFB	684	15-316	S	%Rec	20	5/4/2018 1:19:53 PM	37890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.9		mg/Kg	20	5/3/2018 5:44:20 PM	37890
Benzene	ND	0.48		mg/Kg	20	5/3/2018 5:44:20 PM	37890
Toluene	15	0.97		mg/Kg	20	5/3/2018 5:44:20 PM	37890
Ethylbenzene	51	0.97		mg/Kg	20	5/3/2018 5:44:20 PM	37890
Xylenes, Total	81	1.9		mg/Kg	20	5/3/2018 5:44:20 PM	37890
Surr: 4-Bromofluorobenzene	220	80-120	S	%Rec	20	5/3/2018 5:44:20 PM	37890

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1805017

Date Reported: 5/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L5-1

Project: Tonto

Collection Date: 4/26/2018 2:56:00 PM

Lab ID: 1805017-005

Matrix: SOIL

Received Date: 5/1/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	920	30		mg/Kg	20	5/7/2018 3:22:33 PM	37967
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	6100	98		mg/Kg	10	5/5/2018 12:12:43 AM	37916
Motor Oil Range Organics (MRO)	3800	490		mg/Kg	10	5/5/2018 12:12:43 AM	37916
Surr: DNOP	0	70-130	S	%Rec	10	5/5/2018 12:12:43 AM	37916
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	31	25		mg/Kg	5	5/4/2018 2:06:30 PM	37890
Surr: BFB	129	15-316		%Rec	5	5/4/2018 2:06:30 PM	37890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.49		mg/Kg	5	5/3/2018 6:31:19 PM	37890
Benzene	ND	0.12		mg/Kg	5	5/3/2018 6:31:19 PM	37890
Toluene	0.49	0.25		mg/Kg	5	5/3/2018 6:31:19 PM	37890
Ethylbenzene	0.86	0.25		mg/Kg	5	5/3/2018 6:31:19 PM	37890
Xylenes, Total	1.4	0.49		mg/Kg	5	5/3/2018 6:31:19 PM	37890
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	5	5/3/2018 6:31:19 PM	37890

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1805017

Date Reported: 5/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SP

Project: Tonto

Collection Date: 4/26/2018 2:47:00 PM

Lab ID: 1805017-006

Matrix: SOIL

Received Date: 5/1/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	1500	75		mg/Kg	50	5/8/2018 11:55:09 PM	37967
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	7400	96		mg/Kg	10	5/5/2018 12:56:40 AM	37916
Motor Oil Range Organics (MRO)	5300	480		mg/Kg	10	5/5/2018 12:56:40 AM	37916
Surr: DNOP	0	70-130	S	%Rec	10	5/5/2018 12:56:40 AM	37916
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	94	23		mg/Kg	5	5/4/2018 2:53:24 PM	37890
Surr: BFB	207	15-316		%Rec	5	5/4/2018 2:53:24 PM	37890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.47		mg/Kg	5	5/3/2018 6:54:47 PM	37890
Benzene	ND	0.12		mg/Kg	5	5/3/2018 6:54:47 PM	37890
Toluene	2.5	0.23		mg/Kg	5	5/3/2018 6:54:47 PM	37890
Ethylbenzene	4.2	0.23		mg/Kg	5	5/3/2018 6:54:47 PM	37890
Xylenes, Total	6.4	0.47		mg/Kg	5	5/3/2018 6:54:47 PM	37890
Surr: 4-Bromofluorobenzene	119	80-120		%Rec	5	5/3/2018 6:54:47 PM	37890

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1805017

10-May-18

Client: Souder, Miller & Associates
Project: Tonto

Sample ID	MB-37967	SampType:	mblk	TestCode:	EPA Method 300.0: Anions						
Client ID:	PBS	Batch ID:	37967	RunNo:	51083						
Prep Date:	5/7/2018	Analysis Date:	5/7/2018	SeqNo:	1659638	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-37967	SampType:	lcs	TestCode:	EPA Method 300.0: Anions						
Client ID:	LCSS	Batch ID:	37967	RunNo:	51083						
Prep Date:	5/7/2018	Analysis Date:	5/7/2018	SeqNo:	1659639	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	95.0	90	110				

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1805017
10-May-18

Client: Souder, Miller & Associates
Project: Tonto

Sample ID	LCS-37916	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	37916	RunNo:	51013					
Prep Date:	5/2/2018	Analysis Date:	5/3/2018	SeqNo:	1657153	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.6	70	130			
Surr: DNOP	3.5		5.000		70.7	70	130			

Sample ID	MB-37916	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	37916	RunNo:	51013					
Prep Date:	5/2/2018	Analysis Date:	5/3/2018	SeqNo:	1657154	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.8		10.00		78.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Page 8 of 10

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1805017

10-May-18

Client: Souder, Miller & Associates
Project: Tonto

Sample ID	MB-37890		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	37890		RunNo:	50982				
Prep Date:	5/1/2018		Analysis Date:	5/2/2018		SeqNo:	1655670		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	910		1000		91.2	15	316				

Sample ID	LCS-37890		SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS		Batch ID:	37890		RunNo:	50982				
Prep Date:	5/1/2018		Analysis Date:	5/2/2018		SeqNo:	1655671		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	75.9	131				
Surr: BFB	1000		1000		102	15	316				

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Page 9 of 10

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**WO#: **1805017****10-May-18****Client:** Souder, Miller & Associates**Project:** Tonto

Sample ID MB-37890	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 37890		RunNo: 50982							
Prep Date: 5/1/2018	Analysis Date: 5/2/2018		SeqNo: 1655710		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID LCS-37890	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 37890		RunNo: 50982							
Prep Date: 5/1/2018	Analysis Date: 5/2/2018		SeqNo: 1655711		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.96	0.10	1.000	0	95.5	70.1	121			
Benzene	0.98	0.025	1.000	0	97.9	77.3	128			
Toluene	0.99	0.050	1.000	0	99.4	79.2	125			
Ethylbenzene	0.99	0.050	1.000	0	99.2	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	102	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1805017

RcptNo: 1

Received By: Isaiah Ortiz

5/1/2018 9:15:00 AM

IC

Completed By: Ashley Gallegos

5/1/2018 11:44:20 AM

AG

Reviewed By: ENM

5/1/18

Labeled by:

JMO

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH: 5/1
(<2 or >12 unless noted)
Adjusted: 5/1
Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			

Chain-of-Custody Record

Client:

SMA

Mailing Address:

Tonto

Phone #:

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other☐ EDD (Type)

Turn-Around Time: 5 days turn

☐ Standard ☐ Rush

Project Name:

Project #:

Project Manager:

Austin Weyand

Sampler:

Heather Patterson

On Ice:

☒ Yes ☐ No

Sample Temperature: 0.8

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

1805017

4/26/18

2:43

Soil

L1-3"

402

-

-001

4/26/18

2:38

-

L2-3"

-

-002

4/26/18

2:30

-

L3-3"

-

-003

4/26/18

2:23

-

L4-3"

-

-004

4/26/18

2:50

-

L5-1

-

-005

4/26/18

2:47

-

SP

-

-006

Analysis Request

BTEX + MTBE + TMB's (8021)

BTEX + MTBE + TPH (Gas only)

TPH 8015B (GRO / DRO / MRO)

TPH (Method 418.1)

EDB (Method 504.1)

PAH's (8310 or 8270 SIMS)

RCRA 8 Metals

Anions (F⁻, Cl⁻, NO₃⁻, NO₂⁻, PO₄³⁻, SO₄²⁻)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)

Date:

Time:

Relinquished by:

Received by:

Date:

Time:

Remarks:

Marathon

Date:

Time:

Relinquished by:

Received by:

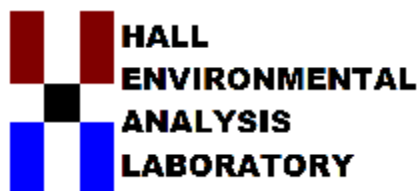
Date:

Time:

Remarks:

Marathon

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 01, 2018

Austin Weyant
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-7040
FAX

RE: Tonto 15-1

OrderNo.: 1805B66

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/22/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1805B66

Date Reported: 6/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L1-2.5

Project: Tonto 15-1

Collection Date: 5/17/2018 12:23:00 PM

Lab ID: 1805B66-001

Matrix: SOLID

Received Date: 5/22/2018 10:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	490	30		mg/Kg	20	5/25/2018 3:16:03 PM	38333
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	45	10		mg/Kg	1	5/24/2018 12:25:34 AM	38269
Motor Oil Range Organics (MRO)	55	51		mg/Kg	1	5/24/2018 12:25:34 AM	38269
Surr: DNOP	114	70-130		%Rec	1	5/24/2018 12:25:34 AM	38269
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/24/2018 1:30:37 AM	38263
Surr: BFB	89.5	15-316		%Rec	1	5/24/2018 1:30:37 AM	38263
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/24/2018 1:30:37 AM	38263
Toluene	ND	0.050		mg/Kg	1	5/24/2018 1:30:37 AM	38263
Ethylbenzene	ND	0.050		mg/Kg	1	5/24/2018 1:30:37 AM	38263
Xylenes, Total	ND	0.099		mg/Kg	1	5/24/2018 1:30:37 AM	38263
Surr: 4-Bromofluorobenzene	99.7	80-120		%Rec	1	5/24/2018 1:30:37 AM	38263

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1805B66

Date Reported: 6/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L2-1

Project: Tonto 15-1

Collection Date: 5/17/2018 12:36:00 PM

Lab ID: 1805B66-002

Matrix: SOIL

Received Date: 5/22/2018 10:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	860	30		mg/Kg	20	5/25/2018 3:28:28 PM	38333
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	66	9.9		mg/Kg	1	5/24/2018 12:49:38 AM	38269
Motor Oil Range Organics (MRO)	53	50		mg/Kg	1	5/24/2018 12:49:38 AM	38269
Surr: DNOP	108	70-130		%Rec	1	5/24/2018 12:49:38 AM	38269
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/24/2018 1:54:09 AM	38263
Surr: BFB	91.2	15-316		%Rec	1	5/24/2018 1:54:09 AM	38263
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	5/24/2018 1:54:09 AM	38263
Toluene	ND	0.047		mg/Kg	1	5/24/2018 1:54:09 AM	38263
Ethylbenzene	ND	0.047		mg/Kg	1	5/24/2018 1:54:09 AM	38263
Xylenes, Total	ND	0.094		mg/Kg	1	5/24/2018 1:54:09 AM	38263
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/24/2018 1:54:09 AM	38263

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 2 of 10

Analytical Report

Lab Order 1805B66

Date Reported: 6/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-1

Project: Tonto 15-1

Collection Date: 5/17/2018 12:45:00 PM

Lab ID: 1805B66-003

Matrix: SOIL

Received Date: 5/22/2018 10:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	2100	75		mg/Kg	50	5/29/2018 2:27:39 PM	38333
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	2000	99		mg/Kg	10	5/24/2018 1:13:50 AM	38269
Motor Oil Range Organics (MRO)	1200	500		mg/Kg	10	5/24/2018 1:13:50 AM	38269
Surr: DNOP	0	70-130	S	%Rec	10	5/24/2018 1:13:50 AM	38269
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	9.8	4.9		mg/Kg	1	5/24/2018 3:00:21 PM	38263
Surr: BFB	181	15-316		%Rec	1	5/24/2018 3:00:21 PM	38263
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/24/2018 3:00:21 PM	38263
Toluene	ND	0.049		mg/Kg	1	5/24/2018 3:00:21 PM	38263
Ethylbenzene	0.12	0.049		mg/Kg	1	5/24/2018 3:00:21 PM	38263
Xylenes, Total	0.38	0.097		mg/Kg	1	5/24/2018 3:00:21 PM	38263
Surr: 4-Bromofluorobenzene	117	80-120		%Rec	1	5/24/2018 3:00:21 PM	38263

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1805B66

Date Reported: 6/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L4-1

Project: Tonto 15-1

Collection Date: 5/17/2018 1:01:00 PM

Lab ID: 1805B66-004

Matrix: SOLID

Received Date: 5/22/2018 10:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	530	30		mg/Kg	20	5/25/2018 4:42:53 PM	38333
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	23	10		mg/Kg	1	5/24/2018 2:02:17 AM	38269
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/24/2018 2:02:17 AM	38269
Surr: DNOP	111	70-130		%Rec	1	5/24/2018 2:02:17 AM	38269
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/24/2018 2:41:07 AM	38263
Surr: BFB	90.4	15-316		%Rec	1	5/24/2018 2:41:07 AM	38263
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/24/2018 2:41:07 AM	38263
Toluene	ND	0.050		mg/Kg	1	5/24/2018 2:41:07 AM	38263
Ethylbenzene	ND	0.050		mg/Kg	1	5/24/2018 2:41:07 AM	38263
Xylenes, Total	ND	0.099		mg/Kg	1	5/24/2018 2:41:07 AM	38263
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/24/2018 2:41:07 AM	38263

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1805B66

Date Reported: 6/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L5-2

Project: Tonto 15-1

Collection Date: 5/17/2018 1:18:00 PM

Lab ID: 1805B66-005

Matrix: SOLID

Received Date: 5/22/2018 10:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	250	30		mg/Kg	20	5/29/2018 1:16:27 PM	38357
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	22	10		mg/Kg	1	5/24/2018 2:26:28 AM	38269
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/24/2018 2:26:28 AM	38269
Surr: DNOP	105	70-130		%Rec	1	5/24/2018 2:26:28 AM	38269
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/24/2018 3:04:37 AM	38263
Surr: BFB	88.6	15-316		%Rec	1	5/24/2018 3:04:37 AM	38263
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/24/2018 3:04:37 AM	38263
Toluene	ND	0.049		mg/Kg	1	5/24/2018 3:04:37 AM	38263
Ethylbenzene	ND	0.049		mg/Kg	1	5/24/2018 3:04:37 AM	38263
Xylenes, Total	ND	0.097		mg/Kg	1	5/24/2018 3:04:37 AM	38263
Surr: 4-Bromofluorobenzene	98.8	80-120		%Rec	1	5/24/2018 3:04:37 AM	38263

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1805B66

Date Reported: 6/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L5-1

Project: Tonto 15-1

Collection Date: 5/17/2018 1:12:00 PM

Lab ID: 1805B66-006

Matrix: SOIL

Received Date: 5/22/2018 10:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1200	75		mg/Kg	50	5/29/2018 3:54:31 PM	38357
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	690	10		mg/Kg	1	5/24/2018 2:20:30 PM	38269
Motor Oil Range Organics (MRO)	470	50		mg/Kg	1	5/24/2018 2:20:30 PM	38269
Surr: DNOP	126	70-130		%Rec	1	5/24/2018 2:20:30 PM	38269
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/24/2018 3:47:11 PM	38263
Surr: BFB	104	15-316		%Rec	1	5/24/2018 3:47:11 PM	38263
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/24/2018 3:47:11 PM	38263
Toluene	ND	0.048		mg/Kg	1	5/24/2018 3:47:11 PM	38263
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2018 3:47:11 PM	38263
Xylenes, Total	ND	0.096		mg/Kg	1	5/24/2018 3:47:11 PM	38263
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	5/24/2018 3:47:11 PM	38263

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**WO#: **1805B66****01-Jun-18****Client:** Souder, Miller & Associates**Project:** Tonto 15-1

Sample ID MB-38333	SampType: mblk			TestCode: EPA Method 300.0: Anions						
Client ID: PBS	Batch ID: 38333			RunNo: 51542						
Prep Date: 5/25/2018	Analysis Date: 5/25/2018			SeqNo: 1679970		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID LCS-38333	SampType: lcs			TestCode: EPA Method 300.0: Anions						
Client ID: LCSS	Batch ID: 38333			RunNo: 51542						
Prep Date: 5/25/2018	Analysis Date: 5/25/2018			SeqNo: 1679971		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.5	90	110			

Sample ID MB-38357	SampType: mblk			TestCode: EPA Method 300.0: Anions						
Client ID: PBS	Batch ID: 38357			RunNo: 51572						
Prep Date: 5/29/2018	Analysis Date: 5/29/2018			SeqNo: 1682543		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID LCS-38357	SampType: lcs			TestCode: EPA Method 300.0: Anions						
Client ID: LCSS	Batch ID: 38357			RunNo: 51572						
Prep Date: 5/29/2018	Analysis Date: 5/29/2018			SeqNo: 1682544		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**WO#: **1805B66****01-Jun-18****Client:** Souder, Miller & Associates**Project:** Tonto 15-1

Sample ID LCS-38269	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 38269			RunNo: 51394						
Prep Date: 5/22/2018	Analysis Date: 5/23/2018			SeqNo: 1676949		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.2	70	130			
Surr: DNOP	5.3		5.000		105	70	130			

Sample ID MB-38269	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 38269			RunNo: 51394						
Prep Date: 5/22/2018	Analysis Date: 5/23/2018			SeqNo: 1676950		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		116	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1805B66
01-Jun-18

Client: Souder, Miller & Associates
Project: Tonto 15-1

Sample ID	MB-38263	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	38263	RunNo:	51480					
Prep Date:	5/22/2018	Analysis Date:	5/23/2018	SeqNo:	1676698	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.4	15	316			

Sample ID	LCS-38263	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	38263	RunNo:	51480					
Prep Date:	5/22/2018	Analysis Date:	5/23/2018	SeqNo:	1676699	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	75.9	131			
Surr: BFB	1000		1000		105	15	316			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**WO#: **1805B66****01-Jun-18****Client:** Souder, Miller & Associates**Project:** Tonto 15-1

Sample ID MB-38263	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 38263		RunNo: 51480							
Prep Date: 5/22/2018	Analysis Date: 5/23/2018		SeqNo: 1676739		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID LCS-38263	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 38263		RunNo: 51480							
Prep Date: 5/22/2018	Analysis Date: 5/23/2018		SeqNo: 1676740		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.8	77.3	128			
Toluene	0.97	0.050	1.000	0	97.0	79.2	125			
Ethylbenzene	0.95	0.050	1.000	0	95.2	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	97.7	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1805B66

RcptNo: 1

Received By: Erin Melendrez 5/22/2018 10:05:00 AM

Completed By: Michelle Garcia 5/22/2018 11:00:13 AM

Reviewed By: IMO 5/22/18

LB: ENM

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

of preserved bottles checked for pH: ENM 5/22/18
(5 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other☐ EDD (Type)Sample Temperature: 4.8

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

On Ice: ☒ Yes ☐ No

Sample Manager:

Sampler: Austin Wegant

Project #:

Project Name: Dub 157Turn-Around Time: 5 days from☐ Standard ☐ Rush

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX + MTBE + TMB's (8021)

BTEX + MTBE + TPH (Gas only)

TPH 8015B (GRO / DRO / MRO)

TPH (Method 418.1)

EDB (Method 504.1)

PAH's (8310 or 8270 SIMS)

RCRA 8 Metals

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)

Remarks:

Verified analysis + M. No. w/ Austin. 5/22/18

Marathon

Received by: SP1 Date: 5/18/18 Time: 0930Relinquished by: SP1 Date: 5/22/18 Time: 1005Received by: SP1 Date: 5/18/18 Time: 0930Relinquished by: SP1 Date: 5/22/18 Time: 1005

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 22, 2018

Austin Weyant
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-7040
FAX

RE: Tonto

OrderNo.: 1806638

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/12/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1806638

Date Reported: 6/22/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW1

Project: Tonto

Collection Date: 6/7/2018 1:05:00 PM

Lab ID: 1806638-001

Matrix: SOIL

Received Date: 6/12/2018 9:43:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	180	30		mg/Kg	20	6/18/2018 4:31:03 PM	38725
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	60	10		mg/Kg	1	6/16/2018 5:02:56 AM	38667
Motor Oil Range Organics (MRO)	61	50		mg/Kg	1	6/16/2018 5:02:56 AM	38667
Surr: DNOP	115	70-130		%Rec	1	6/16/2018 5:02:56 AM	38667
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/13/2018 2:45:19 PM	38635
Surr: BFB	87.1	15-316		%Rec	1	6/13/2018 2:45:19 PM	38635

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1806638

Date Reported: 6/22/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW2

Project: Tonto

Collection Date: 6/7/2018 1:15:00 PM

Lab ID: 1806638-002

Matrix: SOIL

Received Date: 6/12/2018 9:43:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	610	30		mg/Kg	20	6/18/2018 5:08:16 PM	38725
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	110	10		mg/Kg	1	6/16/2018 5:51:29 AM	38667
Motor Oil Range Organics (MRO)	210	50		mg/Kg	1	6/16/2018 5:51:29 AM	38667
Surr: DNOP	124	70-130		%Rec	1	6/16/2018 5:51:29 AM	38667
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/13/2018 3:08:57 PM	38635
Surr: BFB	80.7	15-316		%Rec	1	6/13/2018 3:08:57 PM	38635

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1806638

Date Reported: 6/22/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW3

Project: Tonto

Collection Date: 6/7/2018 1:20:00 PM

Lab ID: 1806638-003

Matrix: SOIL

Received Date: 6/12/2018 9:43:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	480	30		mg/Kg	20	6/18/2018 6:47:34 PM	38733
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/15/2018 1:26:54 AM	38667
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/15/2018 1:26:54 AM	38667
Surr: DNOP	116	70-130		%Rec	1	6/15/2018 1:26:54 AM	38667
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/13/2018 3:32:39 PM	38635
Surr: BFB	79.9	15-316		%Rec	1	6/13/2018 3:32:39 PM	38635

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1806638

Date Reported: 6/22/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW4

Project: Tonto

Collection Date: 6/7/2018 1:25:00 PM

Lab ID: 1806638-004

Matrix: SOIL

Received Date: 6/12/2018 9:43:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	57	30		mg/Kg	20	6/18/2018 6:59:58 PM	38733
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	550	9.3		mg/Kg	1	6/18/2018 5:05:12 PM	38685
Motor Oil Range Organics (MRO)	390	47		mg/Kg	1	6/18/2018 5:05:12 PM	38685
Surr: DNOP	108	70-130		%Rec	1	6/18/2018 5:05:12 PM	38685
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/14/2018 9:56:52 AM	38669
Surr: BFB	91.6	15-316		%Rec	1	6/14/2018 9:56:52 AM	38669

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1806638

Date Reported: 6/22/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW5

Project: Tonto

Collection Date: 6/7/2018 1:35:00 PM

Lab ID: 1806638-005

Matrix: SOIL

Received Date: 6/12/2018 9:43:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	120	30		mg/Kg	20	6/18/2018 7:37:11 PM	38733
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	160	9.9		mg/Kg	1	6/18/2018 5:49:29 PM	38685
Motor Oil Range Organics (MRO)	350	49		mg/Kg	1	6/18/2018 5:49:29 PM	38685
Surr: DNOP	107	70-130		%Rec	1	6/18/2018 5:49:29 PM	38685
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/14/2018 12:17:20 PM	38669
Surr: BFB	88.5	15-316		%Rec	1	6/14/2018 12:17:20 PM	38669

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1806638

Date Reported: 6/22/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW6

Project: Tonto

Collection Date: 6/7/2018 1:40:00 PM

Lab ID: 1806638-006

Matrix: SOIL

Received Date: 6/12/2018 9:43:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1200	75		mg/Kg	50	6/20/2018 5:28:55 AM	38733
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	35	9.6		mg/Kg	1	6/18/2018 6:34:24 PM	38685
Motor Oil Range Organics (MRO)	60	48		mg/Kg	1	6/18/2018 6:34:24 PM	38685
Surr: DNOP	85.0	70-130		%Rec	1	6/18/2018 6:34:24 PM	38685
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/14/2018 12:40:50 PM	38669
Surr: BFB	83.8	15-316		%Rec	1	6/14/2018 12:40:50 PM	38669

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1806638

Date Reported: 6/22/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW7

Project: Tonto

Collection Date: 6/7/2018 1:45:00 PM

Lab ID: 1806638-007

Matrix: SOIL

Received Date: 6/12/2018 9:43:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	380	30		mg/Kg	20	6/18/2018 8:02:00 PM	38733
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	20	9.4		mg/Kg	1	6/18/2018 7:18:45 PM	38685
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/18/2018 7:18:45 PM	38685
Surr: DNOP	89.4	70-130		%Rec	1	6/18/2018 7:18:45 PM	38685
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/14/2018 1:04:21 PM	38669
Surr: BFB	85.3	15-316		%Rec	1	6/14/2018 1:04:21 PM	38669

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1806638

Date Reported: 6/22/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L2-1.5

Project: Tonto

Collection Date: 6/7/2018 2:00:00 PM

Lab ID: 1806638-008

Matrix: SOLID

Received Date: 6/12/2018 9:43:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	770	30		mg/Kg	20	6/18/2018 8:14:25 PM	38733
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	500	9.4		mg/Kg	1	6/18/2018 8:03:06 PM	38685
Motor Oil Range Organics (MRO)	420	47		mg/Kg	1	6/18/2018 8:03:06 PM	38685
Surr: DNOP	85.1	70-130		%Rec	1	6/18/2018 8:03:06 PM	38685
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/14/2018 1:27:53 PM	38669
Surr: BFB	92.5	15-316		%Rec	1	6/14/2018 1:27:53 PM	38669

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1806638

Date Reported: 6/22/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-1.5

Project: Tonto

Collection Date: 6/7/2018 2:15:00 PM

Lab ID: 1806638-009

Matrix: SOLID

Received Date: 6/12/2018 9:43:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1900	75		mg/Kg	50	6/20/2018 6:06:09 AM	38733
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	680	9.7		mg/Kg	1	6/18/2018 8:47:31 PM	38685
Motor Oil Range Organics (MRO)	640	48		mg/Kg	1	6/18/2018 8:47:31 PM	38685
Surr: DNOP	94.9	70-130		%Rec	1	6/18/2018 8:47:31 PM	38685
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	5.2	4.9		mg/Kg	1	6/14/2018 1:51:29 PM	38669
Surr: BFB	142	15-316		%Rec	1	6/14/2018 1:51:29 PM	38669

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1806638

22-Jun-18

Client: Souder, Miller & Associates**Project:** Tonto

Sample ID	MB-38725		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 38725		RunNo: 52050					
Prep Date:	6/18/2018		Analysis Date: 6/18/2018		SeqNo: 1703853		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-38725		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 38725		RunNo: 52050					
Prep Date:	6/18/2018		Analysis Date: 6/18/2018		SeqNo: 1703854		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID	MB-38733		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	38733		RunNo:	52050				
Prep Date:	6/18/2018		Analysis Date:	6/18/2018		SeqNo:	1703885		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-38733		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 38733		RunNo: 52050					
Prep Date:	6/18/2018		Analysis Date: 6/18/2018		SeqNo: 1703886		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1806638

22-Jun-18

Client: Souder, Miller & Associates**Project:** Tonto

Sample ID LCS-38667	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 38667		RunNo: 51922							
Prep Date: 6/13/2018	Analysis Date: 6/14/2018		SeqNo: 1700099		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.2	70	130			
Surr: DNOP	4.9		5.000		97.7	70	130			

Sample ID MB-38667	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 38667		RunNo: 51922							
Prep Date: 6/13/2018	Analysis Date: 6/14/2018		SeqNo: 1700100		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	70	130			

Sample ID LCS-38685	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 38685		RunNo: 52007							
Prep Date: 6/14/2018	Analysis Date: 6/15/2018		SeqNo: 1701649		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.4	70	130			
Surr: DNOP	4.9		5.000		98.4	70	130			

Sample ID MB-38685	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 38685		RunNo: 52007							
Prep Date: 6/14/2018	Analysis Date: 6/15/2018		SeqNo: 1701650		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		99.1	70	130			

Sample ID LCS-38702	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 38702		RunNo: 52041							
Prep Date: 6/15/2018	Analysis Date: 6/18/2018		SeqNo: 1702706		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		95.4	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806638

22-Jun-18

Client: Souder, Miller & Associates

Project: Tonto

Sample ID	MB-38702	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	38702	RunNo:	52041					
Prep Date:	6/15/2018	Analysis Date:	6/18/2018	SeqNo:	1702707	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		102	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1806638

22-Jun-18

Client: Souder, Miller & Associates**Project:** Tonto

Sample ID MB-38635	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 38635			RunNo: 51956						
Prep Date: 6/12/2018	Analysis Date: 6/13/2018			SeqNo: 1698126		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.8	15	316			

Sample ID LCS-38635	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 38635			RunNo: 51956						
Prep Date: 6/12/2018	Analysis Date: 6/13/2018			SeqNo: 1698127		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	110	75.9	131			
Surr: BFB	980		1000		97.6	15	316			

Sample ID MB-38669	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 38669			RunNo: 51984						
Prep Date: 6/13/2018	Analysis Date: 6/14/2018			SeqNo: 1700018		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	870		1000		86.8	15	316			

Sample ID LCS-38669	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 38669			RunNo: 51984						
Prep Date: 6/13/2018	Analysis Date: 6/14/2018			SeqNo: 1700019		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	75.9	131			
Surr: BFB	1000		1000		101	15	316			

Sample ID 1806638-004AMS	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: SW4	Batch ID: 38669			RunNo: 51984						
Prep Date: 6/13/2018	Analysis Date: 6/14/2018			SeqNo: 1700021		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	24.85	0	119	77.8	128			
Surr: BFB	1000		994.0		102	15	316			

Sample ID 1806638-004AMSD	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: SW4	Batch ID: 38669			RunNo: 51984						
Prep Date: 6/13/2018	Analysis Date: 6/14/2018			SeqNo: 1700022		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1806638
22-Jun-18

Client: Souder, Miller & Associates
Project: Tonto

Sample ID	1806638-004AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SW4	Batch ID:	38669	RunNo:	51984					
Prep Date:	6/13/2018	Analysis Date:	6/14/2018	SeqNo:	1700022	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	24.95	0	103	77.8	128	13.5	20	
Surr: BFB	1100		998.0		107	15	316	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1806638

RcptNo: 1

Received By: Erin Melendrez 6/12/2018 9:43:00 AM

Completed By: Erin Melendrez 6/12/2018 10:06:28 AM

Reviewed By:

LB: JB 06/12/18

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH: 5
(≤ 2 or >12 unless noted)
Adjusted? SB
Checked by: SB

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Yes			



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 03, 2018

Austin Weyant
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-7040
FAX

RE: Tonto

OrderNo.: 1806E47

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/23/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1806E47

Date Reported: 7/3/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L2-1.8

Project: Tonto

Collection Date: 6/20/2018 9:00:00 AM

Lab ID: 1806E47-001

Matrix: SOLID

Received Date: 6/23/2018 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	120	30		mg/Kg	20	6/29/2018 5:40:20 PM	38971
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	12	9.4		mg/Kg	1	6/26/2018 6:05:49 PM	38862
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/26/2018 6:05:49 PM	38862
Surr: DNOP	83.5	70-130		%Rec	1	6/26/2018 6:05:49 PM	38862
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/26/2018 8:06:38 PM	38869
Surr: BFB	82.2	15-316		%Rec	1	6/26/2018 8:06:38 PM	38869

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 1 of 6

Analytical Report

Lab Order 1806E47

Date Reported: 7/3/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-1.8

Project: Tonto

Collection Date: 6/20/2018 9:10:00 AM

Lab ID: 1806E47-002

Matrix: SOLID

Received Date: 6/23/2018 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	160	30		mg/Kg	20	6/29/2018 5:52:44 PM	38971
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	180	9.6		mg/Kg	1	6/26/2018 6:28:18 PM	38862
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2018 6:28:18 PM	38862
Surr: DNOP	95.7	70-130		%Rec	1	6/26/2018 6:28:18 PM	38862
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/26/2018 8:30:18 PM	38869
Surr: BFB	81.5	15-316		%Rec	1	6/26/2018 8:30:18 PM	38869

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report

Lab Order 1806E47

Date Reported: 7/3/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW6

Project: Tonto

Collection Date: 6/20/2018 9:20:00 AM

Lab ID: 1806E47-003

Matrix: SOIL

Received Date: 6/23/2018 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	550	30		mg/Kg	20	6/29/2018 6:05:08 PM	38971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 6
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**WO#: **1806E47****03-Jul-18****Client:** Souder, Miller & Associates**Project:** Tonto

Sample ID MB-38971	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 38971		RunNo: 52369							
Prep Date: 6/29/2018	Analysis Date: 6/29/2018		SeqNo: 1717233		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID LCS-38971	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 38971		RunNo: 52369							
Prep Date: 6/29/2018	Analysis Date: 6/29/2018		SeqNo: 1717234		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.2	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**WO#: **1806E47****03-Jul-18****Client:** Souder, Miller & Associates**Project:** Tonto

Sample ID LCS-38862	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 38862			RunNo: 52229						
Prep Date: 6/25/2018	Analysis Date: 6/26/2018			SeqNo: 1711929	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.7	70	130			
Surr: DNOP	4.2		5.000		83.9	70	130			

Sample ID MB-38862	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 38862			RunNo: 52229						
Prep Date: 6/25/2018	Analysis Date: 6/26/2018			SeqNo: 1711930	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		93.1	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Page 5 of 6

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**WO#: **1806E47****03-Jul-18****Client:** Souder, Miller & Associates**Project:** Tonto

Sample ID MB-38869	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 38869		RunNo: 52243							
Prep Date: 6/25/2018	Analysis Date: 6/26/2018		SeqNo: 1712088		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	850		1000		85.4	15	316			

Sample ID LCS-38869	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 38869		RunNo: 52243							
Prep Date: 6/25/2018	Analysis Date: 6/26/2018		SeqNo: 1712089		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.6	75.9	131			
Surr: BFB	980		1000		98.4	15	316			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Page 6 of 6



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1806E47

RcptNo: 1

Received By: Andy Freeman

6/23/2018 10:40:00 AM

Completed By: Isaiah Ortiz

6/25/2018 7:38:58 AM

Reviewed By: ENM

6/25/18

Andy Freeman

Isaiah Ortiz

LB:MMW 6/25/18

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

33 or >12 unless noted

Adjusted?

Checked by:

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail ☐ Phone ☐ Fax ☐ In Person

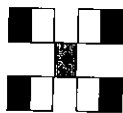
Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

APPENDIX A

CARMONA RESOURCES





August 29, 2023

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

**Re: Amendment to Closure Report
Tonto 15 State #1
Marathon Oil Corporation
1RP-4869 & 1RP-5003
Site Location: Unit I, S15, T18S, R34E
(Lat 32.7459831°, Long -103.5429764°)
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 Tonto 15 State #1. The site is located at the GPS 32.7459831°, -103.5429764° within Unit I, S15, T18S, R34E in Lea County, New Mexico.

1.0 Site Information and Background

1RP-4868 & 1RP-5003

On July 25, 2018 the New Mexico OCD denied the closure report for the following reason: Please be advised that any deferral of a portion of the release area, even if the majority of the impacted area has been remediated, will not require a final C-141. Please note that under the new NMAC 19.15.29, to be in effect in August 2018, there will be no adjustment to the permissible levels left in place. For example, if ≤ 600 mg/kg chloride level is not obtained (+5% standard deviation or standard error not accepted), the excavated area must be laterally or vertically extended. In assessing depth to groundwater, please check USGS database. NMOCOD will agree that delineation has been completed for 1RP-4869 & 1RP-5003. However, several concerns regarding the remediation process: 1. Please demarcated clearly the areas represented by each of the delineation sample locations. Where are the borders among the differing depths of excavation? For example, the area represented by L1 is proposed for deferral, while the L2/L3 area has 1.75 ft removed. The transition edge/sidewall should confirmatory soil samples taken. 2. Was the elevated BTEX, TPH extended, and chlorides at 0.5 ft in the area represented by L1, at least surficially addressed through non-mechanical methods? Any areas to be deferred must be explicitly outlined on a scaled map for documentation.

2.0 Site Characterization and Groundwater

The site is located within a low karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, no known water features are within a 0.50-mile radius of the location. The nearest identified well is approximately 0.28 miles Southeast of the site in S15, T18S, R34E and was drilled in 1996. The well has a reported depth to groundwater of 114.50 feet below the ground surface (ft bgs). A copy of the associated Summary Report is attached in Appendix D of the amended report.

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



3.0 NMAC Regulatory Criteria

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

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

4.0 Site Assessment Activities

On July 25, and September 7, 2023, Carmona Resources, LLC performed site assessment activities to evaluate soil impacts stemming from the release. To assess the vertical extent, seven (7) sample points (S-1 through S-7) were advanced to depths ranging from surface to 3' bgs inside the release area at the previous sample locations (L1, SW1, SW2, SW4, SW5, SW6, and L3). See Figure 3 for the sample locations. For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas. The sample points S-1, and S-7 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 sample points S-2, S-3, S-4, S-5, and S-6 were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015, and modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E of the amended report.

All samples were below the regulatory requirements for TPH, BTEX, and chloride. Refer to Table 1. All sample points have undergone attenuation from precipitation and weather events that occurred from the sampling events April 26, May 17, and June 7, 2018 to the present.

5.0 Conclusions

Based on the assessment results and the analytical data, no further actions are required at the site as any remaining impact was addressed during final reclamation. The final C-141 is attached, and Marathon formally requests the closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-1992.

Sincerely,

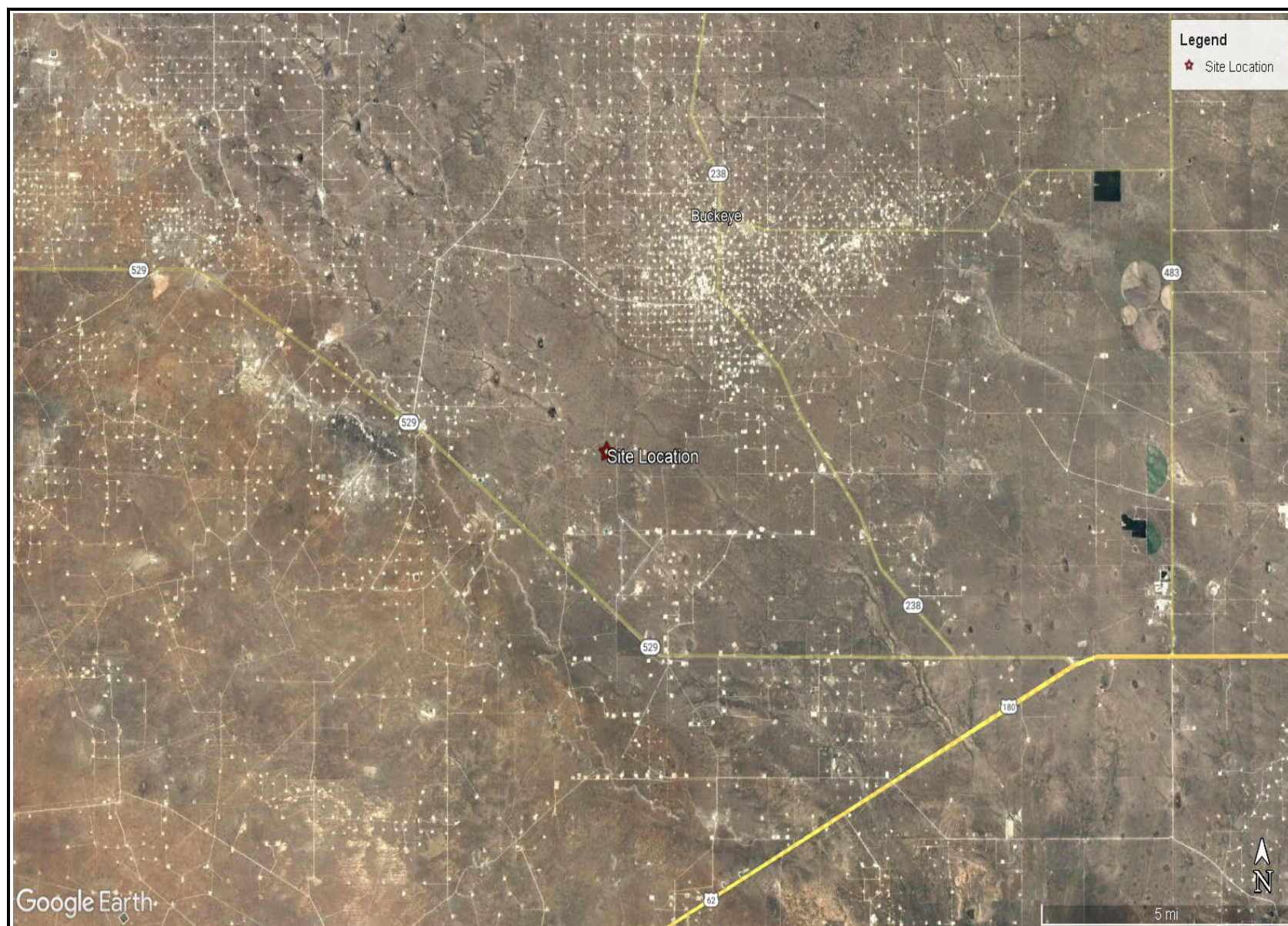
Mike Carmona
Environmental Manager

Clinton Merritt
Sr. Project Manager

FIGURES

CARMONA RESOURCES

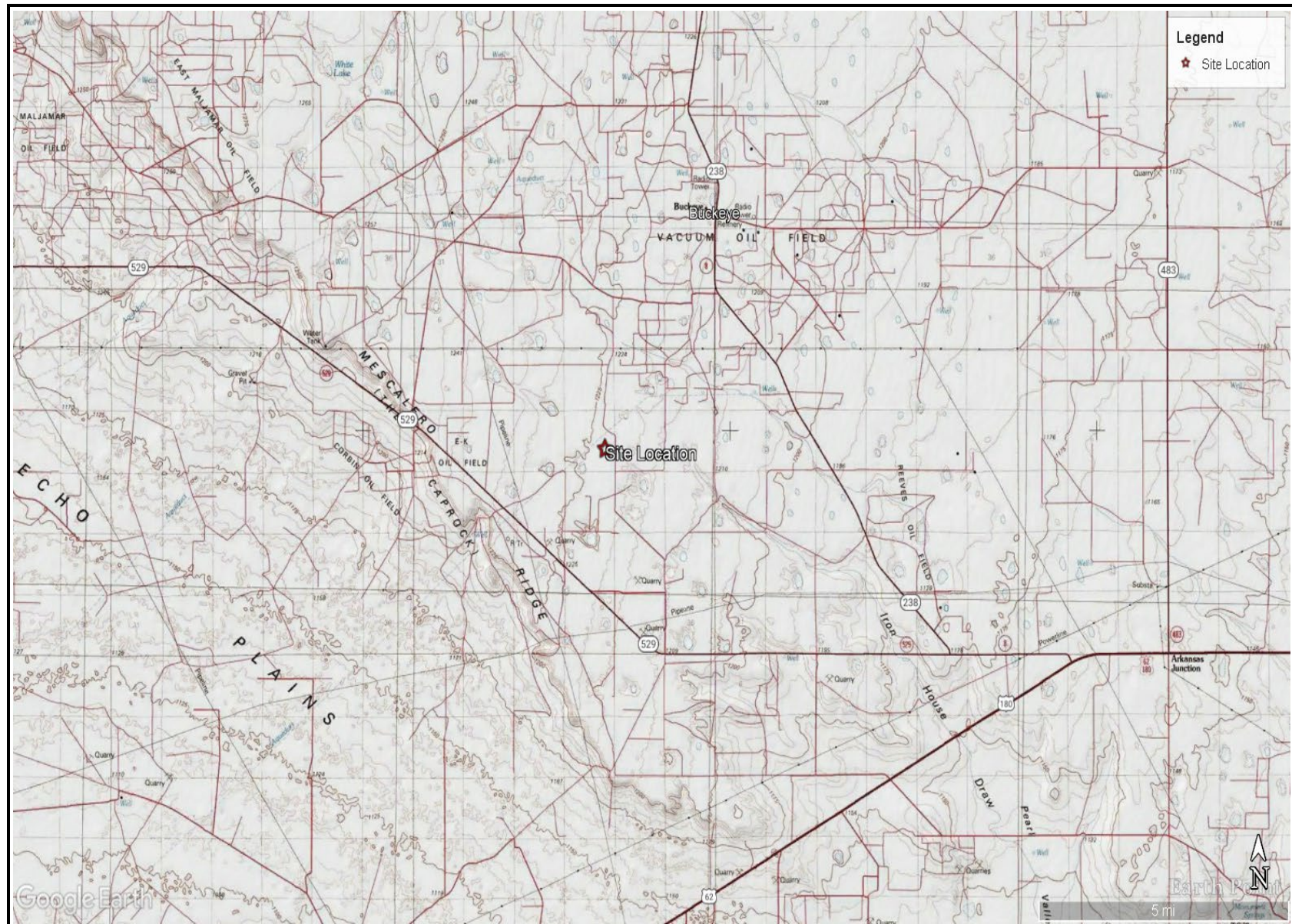




OVERVIEW MAP
MARATHON OIL CORPORATION
TONTON 15 STATE #1
LEA COUNTY, NEW MEXICO
32.7459831°, -103.5429764°



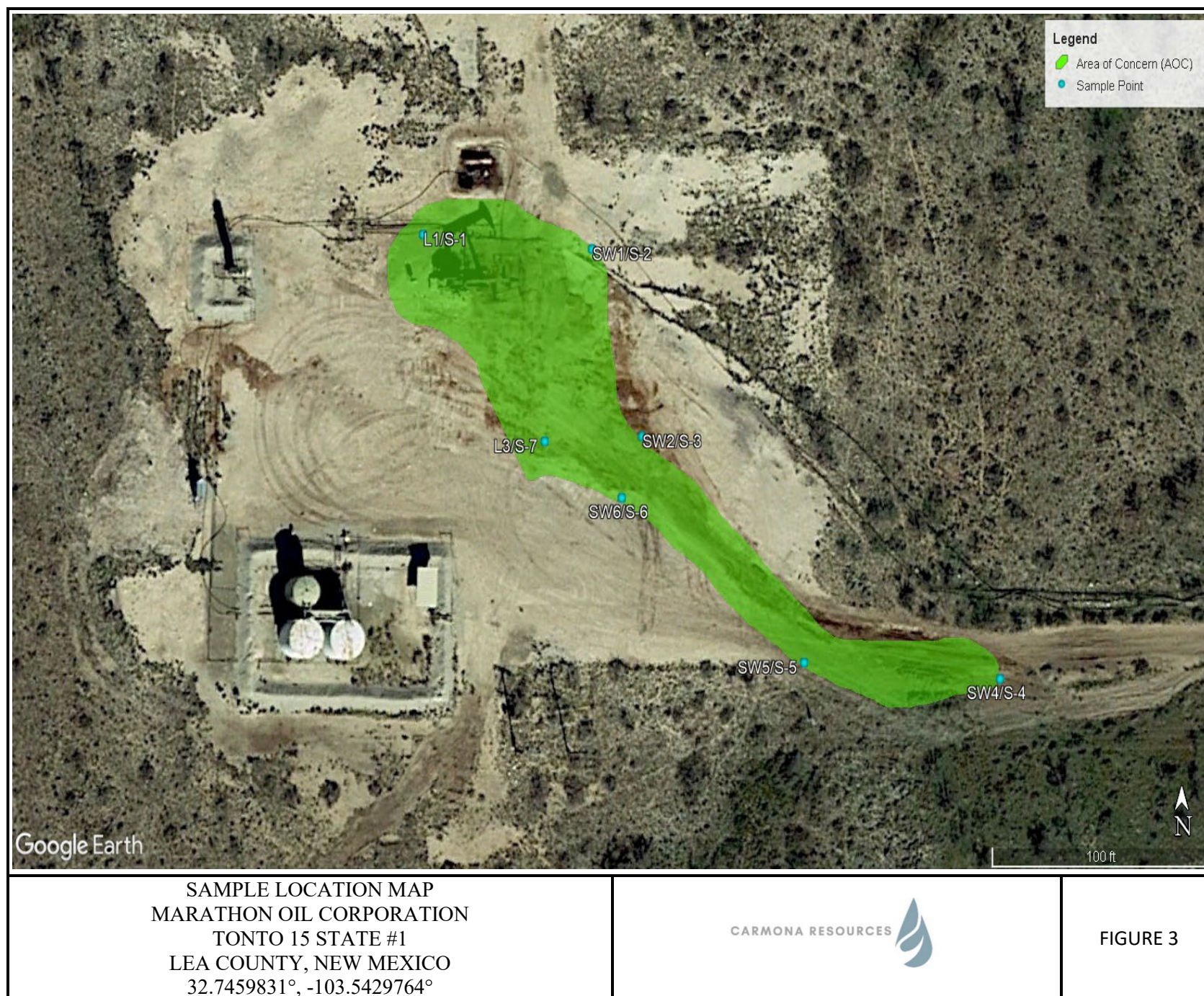
FIGURE 1



TOPOGRAPHIC MAP
MARATHON OIL CORPORATION
TONT0 15 STATE #1
LEA COUNTY, NEW MEXICO
32.7459831°, -103.5429764°



FIGURE 2



APPENDIX B

CARMONA RESOURCES



Table 1
Marathon Oil
Tonto 15 State #1
Lea County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
S-1	9/7/2023	0-1	<49.8	54.4	<49.8	54.4	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	96.0
	"	1.5	<49.6	60.5	<49.6	60.5	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	38.0
	"	2.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	30.1
	"	3.0	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	78.8
S-2	7/25/2023	0-1	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	-
	"	2.0	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	-
	"	3.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	-
S-3	7/25/2023	0-1	<49.6	<49.6	<49.6	<49.6	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	-
	"	2.0	<49.6	<49.6	<49.6	<49.6	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	-
	"	3.0	<50.2	<50.2	<50.2	<50.2	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	-
S-4	7/25/2023	0-1	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	-
	"	2.0	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	-
	"	3.0	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	-
S-5	7/25/2023	0-1	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	-
	"	2.0	<50.3	<50.3	<50.3	<50.3	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	-
	"	3.0	<50.4	<50.4	<50.4	<50.4	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	-
S-6	7/25/2023	0-1	<50.3	<50.3	<50.3	<50.3	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	-
	"	2.0	<50.3	<50.3	<50.3	<50.3	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	-
	"	3.0	<50.5	<50.5	<50.5	<50.5	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	-
S-7	9/7/2023	0-1	<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	97.0
	"	1.5	<50.1	<50.1	<50.1	<50.1	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	67.6
	"	2.0	<50.5	<50.5	<50.5	<50.5	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	86.4
Regulatory Criteria ^A							100 mg/kg	10 mg/kg			50 mg/kg	600 mg/kg

(-) Not Analyzed

^A – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

(S) Sample Point

APPENDIX C

CARMONA RESOURCES



PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 1

Facility: Tonto 15 State #1

County: Lea County, New Mexico

Description:

View Southwest of sample points S-1, S-2, and S-3.



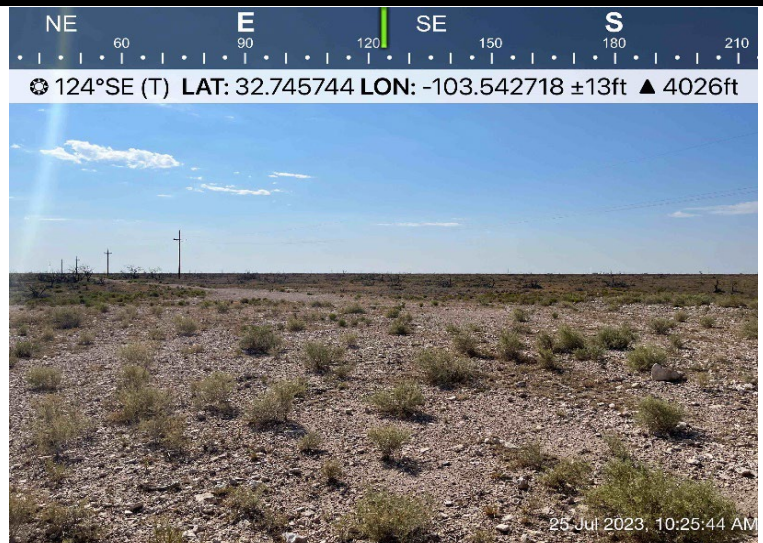
Photograph No. 2

Facility: Tonto 15 State #1

County: Lea County, New Mexico

Description:

View Southeast of sample points S-3, S-4, and S-5.



Photograph No. 3

Facility: Tonto 15 State #1

County: Lea County, New Mexico

Description:

View Northwest of sample points S-5, S-6, and S-7.



APPENDIX D

CARMONA RESOURCES





Environment Testing

1

2

3

4

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12

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14

ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/14/2023 11:15:47 AM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County NM

JOB NUMBER

880-33031-1

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
9/14/2023 11:15:47 AM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-33031-1
SDG: Lea County NM

Table of Contents

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Job ID: 880-33031-1

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-33031-1**

Receipt

The samples were received on 9/8/2023 1:34 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 -2.7°C

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-62082 and analytical batch 880-62040 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-5210-A-1-C) and (880-32833-A-8-A MB). 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: (MB 880-62041/5-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.

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-62103 and analytical batch 880-62118 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.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-1 (0-1') (880-33031-1), S-1 (1.5') (880-33031-2), S-1 (2') (880-33031-3), S-1 (3') (880-33031-4) and (880-33016-A-1-D). 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

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-62152 and analytical batch 880-62392 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

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

Lab Sample ID: 880-33031-1

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 03:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 03:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 03:52	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/08/23 13:56	09/09/23 03:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 03:52	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/08/23 13:56	09/09/23 03:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	09/08/23 13:56	09/09/23 03:52	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/08/23 13:56	09/09/23 03:52	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/11/23 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	54.4		49.8		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/08/23 15:14	09/11/23 18:04	1
Diesel Range Organics (Over C10-C28)	54.4		49.8		mg/Kg		09/08/23 15:14	09/11/23 18:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/08/23 15:14	09/11/23 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130	09/08/23 15:14	09/11/23 18:04	1
o-Terphenyl	152	S1+	70 - 130	09/08/23 15:14	09/11/23 18:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.0		5.03		mg/Kg			09/14/23 02:20	1

Client Sample ID: S-1 (1.5')

Lab Sample ID: 880-33031-2

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/08/23 13:56	09/09/23 04:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/08/23 13:56	09/09/23 04:13	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/08/23 13:56	09/09/23 04:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/08/23 13:56	09/09/23 04:13	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/08/23 13:56	09/09/23 04:13	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/08/23 13:56	09/09/23 04:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/08/23 13:56	09/09/23 04:13	1
1,4-Difluorobenzene (Surr)	73		70 - 130	09/08/23 13:56	09/09/23 04:13	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Client Sample ID: S-1 (1.5')

Lab Sample ID: 880-33031-2

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/11/23 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	60.5		49.6		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/08/23 15:14	09/11/23 18:26	1
Diesel Range Organics (Over C10-C28)	60.5		49.6		mg/Kg		09/08/23 15:14	09/11/23 18:26	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/08/23 15:14	09/11/23 18:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130				09/08/23 15:14	09/11/23 18:26	1
o-Terphenyl	143	S1+	70 - 130				09/08/23 15:14	09/11/23 18:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.0		5.01		mg/Kg			09/14/23 02:27	1

Client Sample ID: S-1 (2')

Lab Sample ID: 880-33031-3

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 04:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 04:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 04:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/08/23 13:56	09/09/23 04:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 04:33	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/08/23 13:56	09/09/23 04:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130				09/08/23 13:56	09/09/23 04:33	1
1,4-Difluorobenzene (Surr)	72		70 - 130				09/08/23 13:56	09/09/23 04:33	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/11/23 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 18:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 18:48	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Client Sample ID: S-1 (2')

Lab Sample ID: 880-33031-3

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 18:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130				09/08/23 15:14	09/11/23 18:48	1
o-Terphenyl	146	S1+	70 - 130				09/08/23 15:14	09/11/23 18:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.1		5.02		mg/Kg			09/14/23 02:33	1

Client Sample ID: S-1 (3')

Lab Sample ID: 880-33031-4

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/08/23 13:56	09/09/23 04:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/08/23 13:56	09/09/23 04:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/08/23 13:56	09/09/23 04:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/08/23 13:56	09/09/23 04:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/08/23 13:56	09/09/23 04:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/08/23 13:56	09/09/23 04:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130				09/08/23 13:56	09/09/23 04:54	1
1,4-Difluorobenzene (Surr)	79		70 - 130				09/08/23 13:56	09/09/23 04:54	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/11/23 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/08/23 15:14	09/11/23 19:09	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/08/23 15:14	09/11/23 19:09	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/08/23 15:14	09/11/23 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130				09/08/23 15:14	09/11/23 19:09	1
o-Terphenyl	140	S1+	70 - 130				09/08/23 15:14	09/11/23 19:09	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.8		4.97		mg/Kg			09/14/23 02:40	1

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Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-32833-A-8-A MB	Method Blank	65 S1-	101
880-33031-1	S-1 (0-1')	79	86
880-33031-2	S-1 (1.5')	96	73
880-33031-3	S-1 (2')	80	72
880-33031-4	S-1 (3')	80	79
890-5210-A-1-A MS	Matrix Spike	113	113
890-5210-A-1-B MSD	Matrix Spike Duplicate	110	96
LCS 880-62082/1-A	Lab Control Sample	122	111
LCSD 880-62082/2-A	Lab Control Sample Dup	110	113
MB 880-62082/5-A	Method Blank	62 S1-	99
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-33016-A-1-E MS	Matrix Spike	120	116
880-33016-A-1-F MSD	Matrix Spike Duplicate	128	124
880-33031-1	S-1 (0-1')	145 S1+	152 S1+
880-33031-2	S-1 (1.5')	138 S1+	143 S1+
880-33031-3	S-1 (2')	138 S1+	146 S1+
880-33031-4	S-1 (3')	135 S1+	140 S1+
LCS 880-62103/2-A	Lab Control Sample	98	109
LCSD 880-62103/3-A	Lab Control Sample Dup	94	108
MB 880-62103/1-A	Method Blank	110	119
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: 880-32833-A-8-A MB

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62041

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/08/23 08:55	09/08/23 17:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130	09/08/23 08:55	09/08/23 17:11	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/08/23 08:55	09/08/23 17:11	1

Lab Sample ID: MB 880-62082/5-A

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/08/23 11:01	09/08/23 22:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62	S1-	70 - 130	09/08/23 11:01	09/08/23 22:40	1
1,4-Difluorobenzene (Surr)	99		70 - 130	09/08/23 11:01	09/08/23 22:40	1

Lab Sample ID: LCS 880-62082/1-A

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09941		mg/Kg		99	70 - 130
Toluene	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.1016		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2210		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1157		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-62082/2-A

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09561		mg/Kg		96	70 - 130	4	35

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QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

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

Lab Sample ID: LCSD 880-62082/2-A

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09614		mg/Kg		96	70 - 130	5	35
Ethylbenzene	0.100	0.09614		mg/Kg		96	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2067		mg/Kg		103	70 - 130	7	35
o-Xylene	0.100	0.1039		mg/Kg		104	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-5210-A-1-A MS

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.08017		mg/Kg		80	70 - 130
Toluene	<0.00199	U	0.0998	0.08157		mg/Kg		82	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.08150		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1714		mg/Kg		86	70 - 130
o-Xylene	<0.00199	U	0.0998	0.08588		mg/Kg		86	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-5210-A-1-B MSD

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08514		mg/Kg		85	70 - 130	6	35
Toluene	<0.00199	U	0.100	0.08931		mg/Kg		89	70 - 130	9	35
Ethylbenzene	<0.00199	U	0.100	0.08778		mg/Kg		88	70 - 130	7	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1806		mg/Kg		90	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.09035		mg/Kg		90	70 - 130	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-62103/1-A

Matrix: Solid

Analysis Batch: 62118

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62103

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 08:30	1

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QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

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

Lab Sample ID: MB 880-62103/1-A

Matrix: Solid

Analysis Batch: 62118

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62103

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 08:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 08:30	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				09/08/23 15:14	09/11/23 08:30	1
o-Terphenyl	119		70 - 130				09/08/23 15:14	09/11/23 08:30	1

Lab Sample ID: LCS 880-62103/2-A

Matrix: Solid

Analysis Batch: 62118

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 62103

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	955.3		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	1000	964.0		mg/Kg		96	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	98		70 - 130				
o-Terphenyl	109		70 - 130				

Lab Sample ID: LCSD 880-62103/3-A

Matrix: Solid

Analysis Batch: 62118

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 62103

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	925.0		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	970.3		mg/Kg		97	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	94		70 - 130						
o-Terphenyl	108		70 - 130						

Lab Sample ID: 880-33016-A-1-E MS

Matrix: Solid

Analysis Batch: 62118

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 62103

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	997	955.7		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U	997	1098		mg/Kg		106	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	120		70 - 130						
o-Terphenyl	116		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

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

Lab Sample ID: 880-33016-A-1-F MSD

Matrix: Solid

Analysis Batch: 62118

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 62103

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	997	1180	F2	mg/Kg		118	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	<50.1	U	997	1185		mg/Kg		115	70 - 130	8	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	128		70 - 130								
o-Terphenyl	124		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62152/1-A

Matrix: Solid

Analysis Batch: 62392

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/13/23 23:20	1

Lab Sample ID: LCS 880-62152/2-A

Matrix: Solid

Analysis Batch: 62392

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.8		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-62152/3-A

Matrix: Solid

Analysis Batch: 62392

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	243.8		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-33029-A-1-F MS

Matrix: Solid

Analysis Batch: 62392

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	40.4	F1	251	345.3	F1	mg/Kg		122	90 - 110

Lab Sample ID: 880-33029-A-1-G MSD

Matrix: Solid

Analysis Batch: 62392

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	40.4	F1	251	344.1	F1	mg/Kg		121	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

GC VOA

Analysis Batch: 62040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33031-1	S-1 (0-1')	Total/NA	Solid	8021B	62082
880-33031-2	S-1 (1.5')	Total/NA	Solid	8021B	62082
880-33031-3	S-1 (2')	Total/NA	Solid	8021B	62082
880-33031-4	S-1 (3')	Total/NA	Solid	8021B	62082
880-32833-A-8-A MB	Method Blank	Total/NA	Solid	8021B	62041
MB 880-62082/5-A	Method Blank	Total/NA	Solid	8021B	62082
LCS 880-62082/1-A	Lab Control Sample	Total/NA	Solid	8021B	62082
LCSD 880-62082/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62082
890-5210-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	62082
890-5210-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	62082

Prep Batch: 62041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32833-A-8-A MB	Method Blank	Total/NA	Solid	5030B	

Prep Batch: 62082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33031-1	S-1 (0-1')	Total/NA	Solid	5035	
880-33031-2	S-1 (1.5')	Total/NA	Solid	5035	
880-33031-3	S-1 (2')	Total/NA	Solid	5035	
880-33031-4	S-1 (3')	Total/NA	Solid	5035	
MB 880-62082/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62082/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62082/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5210-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-5210-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 62184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33031-1	S-1 (0-1')	Total/NA	Solid	Total BTEX	
880-33031-2	S-1 (1.5')	Total/NA	Solid	Total BTEX	
880-33031-3	S-1 (2')	Total/NA	Solid	Total BTEX	
880-33031-4	S-1 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 62103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33031-1	S-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-33031-2	S-1 (1.5')	Total/NA	Solid	8015NM Prep	
880-33031-3	S-1 (2')	Total/NA	Solid	8015NM Prep	
880-33031-4	S-1 (3')	Total/NA	Solid	8015NM Prep	
MB 880-62103/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62103/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-33016-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-33016-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 62118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33031-1	S-1 (0-1')	Total/NA	Solid	8015B NM	62103

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QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

GC Semi VOA (Continued)

Analysis Batch: 62118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33031-2	S-1 (1.5')	Total/NA	Solid	8015B NM	62103
880-33031-3	S-1 (2')	Total/NA	Solid	8015B NM	62103
880-33031-4	S-1 (3')	Total/NA	Solid	8015B NM	62103
MB 880-62103/1-A	Method Blank	Total/NA	Solid	8015B NM	62103
LCS 880-62103/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62103
LCSD 880-62103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62103
880-33016-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	62103
880-33016-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	62103

Analysis Batch: 62244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33031-1	S-1 (0-1')	Total/NA	Solid	8015 NM	
880-33031-2	S-1 (1.5')	Total/NA	Solid	8015 NM	
880-33031-3	S-1 (2')	Total/NA	Solid	8015 NM	
880-33031-4	S-1 (3')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 62152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33031-1	S-1 (0-1')	Soluble	Solid	DI Leach	
880-33031-2	S-1 (1.5')	Soluble	Solid	DI Leach	
880-33031-3	S-1 (2')	Soluble	Solid	DI Leach	
880-33031-4	S-1 (3')	Soluble	Solid	DI Leach	
MB 880-62152/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62152/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62152/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33029-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33029-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 62392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33031-1	S-1 (0-1')	Soluble	Solid	300.0	62152
880-33031-2	S-1 (1.5')	Soluble	Solid	300.0	62152
880-33031-3	S-1 (2')	Soluble	Solid	300.0	62152
880-33031-4	S-1 (3')	Soluble	Solid	300.0	62152
MB 880-62152/1-A	Method Blank	Soluble	Solid	300.0	62152
LCS 880-62152/2-A	Lab Control Sample	Soluble	Solid	300.0	62152
LCSD 880-62152/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62152
880-33029-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	62152
880-33029-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62152

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Client Sample ID: S-1 (0-1')**Lab Sample ID: 880-33031-1****Date Collected: 09/07/23 00:00****Matrix: Solid****Date Received: 09/08/23 13:34**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62082	09/08/23 13:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62040	09/09/23 03:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62184	09/11/23 13:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			62244	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 18:04	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	62152	09/11/23 10:16	AG	EET MID
Soluble	Analysis	300.0		1			62392	09/14/23 02:20	CH	EET MID

Client Sample ID: S-1 (1.5')**Lab Sample ID: 880-33031-2****Date Collected: 09/07/23 00:00****Matrix: Solid****Date Received: 09/08/23 13:34**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	62082	09/08/23 13:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62040	09/09/23 04:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62184	09/11/23 13:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			62244	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 18:26	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	62152	09/11/23 10:16	AG	EET MID
Soluble	Analysis	300.0		1			62392	09/14/23 02:27	CH	EET MID

Client Sample ID: S-1 (2')**Lab Sample ID: 880-33031-3****Date Collected: 09/07/23 00:00****Matrix: Solid****Date Received: 09/08/23 13:34**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	62082	09/08/23 13:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62040	09/09/23 04:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62184	09/11/23 13:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			62244	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 18:48	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62152	09/11/23 10:16	AG	EET MID
Soluble	Analysis	300.0		1			62392	09/14/23 02:33	CH	EET MID

Client Sample ID: S-1 (3')**Lab Sample ID: 880-33031-4****Date Collected: 09/07/23 00:00****Matrix: Solid****Date Received: 09/08/23 13:34**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	62082	09/08/23 13:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62040	09/09/23 04:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62184	09/11/23 13:03	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Client Sample ID: S-1 (3')
Date Collected: 09/07/23 00:00
Date Received: 09/08/23 13:34

Lab Sample ID: 880-33031-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			62244	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 19:09	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62152	09/11/23 10:16	AG	EET MID
Soluble	Analysis	300.0		1			62392	09/14/23 02:40	CH	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

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: Tonto 15 State #1

Job ID: 880-33031-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-33031-1	S-1 (0-1')	Solid	09/07/23 00:00	09/08/23 13:34
880-33031-2	S-1 (1.5')	Solid	09/07/23 00:00	09/08/23 13:34
880-33031-3	S-1 (2')	Solid	09/07/23 00:00	09/08/23 13:34
880-33031-4	S-1 (3')	Solid	09/07/23 00:00	09/08/23 13:34



- 1
- 2
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- 12
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- 14

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

Work Order Comments					
Program:	UST/PST	<input type="checkbox"/> PRP	<input type="checkbox"/> Brownfields	<input type="checkbox"/> RC	<input type="checkbox"/> Superfund
State of Project:					
Reporting Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> ST/UST	<input type="checkbox"/> RRP	<input type="checkbox"/> Level IV	<input type="checkbox"/>
Deliverables:	EDD	<input type="checkbox"/>	Adapt	<input type="checkbox"/>	Other

[illegible]

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

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	9-8-23		9/8/23



880-33031 Chain of Custody

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-33031-1

SDG Number: Lea County NM

Login Number: 33031

List Number: 1

Creator: Kramer, Jessica

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:34:56 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31275-1

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



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8/7/2023 12:34:56 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31275-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

Job ID: 880-31275-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-31275-1****Receipt**

The sample was received on 7/26/2023 4:45 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 4.5°C

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-59172 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-59172/20).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-59110 and analytical batch 880-59172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-31278-A-1-A). 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 laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

Client Sample ID: S-2 (2')

Lab Sample ID: 880-31275-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:01	08/04/23 05:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:01	08/04/23 05:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:01	08/04/23 05:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/01/23 09:01	08/04/23 05:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:01	08/04/23 05:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/01/23 09:01	08/04/23 05:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	08/01/23 09:01	08/04/23 05:48	1
1,4-Difluorobenzene (Surr)	70		70 - 130	08/01/23 09:01	08/04/23 05:48	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/04/23 10:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *	49.7		mg/Kg		08/04/23 17:30	08/06/23 14:07	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/04/23 17:30	08/06/23 14:07	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/04/23 17:30	08/06/23 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	08/04/23 17:30	08/06/23 14:07	1
o-Terphenyl	94		70 - 130	08/04/23 17:30	08/06/23 14:07	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31275-1	S-2 (2')	84	70
880-31278-A-1-B MS	Matrix Spike	121	124
880-31278-A-1-C MSD	Matrix Spike Duplicate	119	91
LCS 880-58969/1-A	Lab Control Sample	115	111
LCSD 880-58969/2-A	Lab Control Sample Dup	114	109
MB 880-58969/5-A	Method Blank	73	79
MB 880-59110/5-A	Method Blank	68 S1-	100
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31275-1	S-2 (2')	94	94
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58969/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	08/01/23 09:01	08/03/23 22:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/01/23 09:01	08/03/23 22:38	1

Lab Sample ID: LCS 880-58969/1-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09442		mg/Kg		94	70 - 130
Toluene	0.100	0.08693		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-58969/2-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08592		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08219		mg/Kg		82	70 - 130	6	35
Ethylbenzene	0.100	0.08963		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	12	35
o-Xylene	0.100	0.09268		mg/Kg		93	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0994	0.1002		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0994	0.09371		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.1030		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2125		mg/Kg		107	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1040		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	124		70 - 130

Lab Sample ID: 880-31278-A-1-C MSD

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09502		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.0998	0.09100		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0998	0.1021		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2097		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.1024		mg/Kg		103	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-59110/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	08/02/23 11:14	08/03/23 11:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/02/23 11:14	08/03/23 11:30	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 59409						Prep Batch: 59369						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1-Chlorooctane	128		70 - 130									
o-Terphenyl	112		70 - 130									

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31275-1	S-2 (2')	Total/NA	Solid	5035	
MB 880-58969/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 59110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-59110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31275-1	S-2 (2')	Total/NA	Solid	8021B	58969
MB 880-58969/5-A	Method Blank	Total/NA	Solid	8021B	58969
MB 880-59110/5-A	Method Blank	Total/NA	Solid	8021B	59110
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	8021B	58969
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58969
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	58969
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58969

Analysis Batch: 59323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31275-1	S-2 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31275-1	S-2 (2')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31275-1	S-2 (2')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31275-1	S-2 (2')	Total/NA	Solid	8015 NM	

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

Client Sample ID: S-2 (2')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31275-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	58969	08/01/23 09:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59172	08/04/23 05:48	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59323	08/04/23 10:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			59477	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 14:07	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31275-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31275-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31275-1	S-2 (2')	Solid	07/25/23 00:00	07/26/23 16:45

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



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

Work Order Comments	
Program: UST/PT <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> perfund <input type="checkbox"/>	
State of Project.	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Work Order No: 275

[illegible]

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

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	7-26-23 1045		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31275-1

SDG Number: Lea County, New Mexico

Login Number: 31275

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:35:20 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31276-1

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
8/7/2023 12:35:20 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31276-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

Job ID: 880-31276-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-31276-1****Receipt**

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-2 (3') (880-31276-1).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-59172 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-59172/20).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-59110 and analytical batch 880-59172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-2 (3') (880-31276-1) and (880-31278-A-1-A). 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 laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

Client Sample ID: S-2 (3')

Lab Sample ID: 880-31276-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:01	08/04/23 06:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:01	08/04/23 06:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:01	08/04/23 06:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/01/23 09:01	08/04/23 06:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:01	08/04/23 06:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/01/23 09:01	08/04/23 06:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	08/01/23 09:01	08/04/23 06:09	1
1,4-Difluorobenzene (Surr)	58	S1-	70 - 130	08/01/23 09:01	08/04/23 06:09	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/04/23 10:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *	50.0		mg/Kg		08/04/23 17:30	08/06/23 14:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:30	08/06/23 14:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:30	08/06/23 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	08/04/23 17:30	08/06/23 14:34	1
o-Terphenyl	92		70 - 130	08/04/23 17:30	08/06/23 14:34	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31276-1	S-2 (3')	87	58 S1-
880-31278-A-1-B MS	Matrix Spike	121	124
880-31278-A-1-C MSD	Matrix Spike Duplicate	119	91
LCS 880-58969/1-A	Lab Control Sample	115	111
LCSD 880-58969/2-A	Lab Control Sample Dup	114	109
MB 880-58969/5-A	Method Blank	73	79
MB 880-59110/5-A	Method Blank	68 S1-	100
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31276-1	S-2 (3')	93	92
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58969/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	08/01/23 09:01	08/03/23 22:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/01/23 09:01	08/03/23 22:38	1

Lab Sample ID: LCS 880-58969/1-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09442		mg/Kg		94	70 - 130
Toluene	0.100	0.08693		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-58969/2-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08592		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08219		mg/Kg		82	70 - 130	6	35
Ethylbenzene	0.100	0.08963		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	12	35
o-Xylene	0.100	0.09268		mg/Kg		93	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0994	0.1002		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0994	0.09371		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.1030		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2125		mg/Kg		107	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1040		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	124		70 - 130

Lab Sample ID: 880-31278-A-1-C MSD

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09502		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.0998	0.09100		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0998	0.1021		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2097		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.1024		mg/Kg		103	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-59110/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	08/02/23 11:14	08/03/23 11:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/02/23 11:14	08/03/23 11:30	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 59409						Prep Batch: 59369						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1-Chlorooctane	128		70 - 130									
o-Terphenyl	112		70 - 130									

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31276-1	S-2 (3')	Total/NA	Solid	5035	
MB 880-58969/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 59110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-59110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31276-1	S-2 (3')	Total/NA	Solid	8021B	58969
MB 880-58969/5-A	Method Blank	Total/NA	Solid	8021B	58969
MB 880-59110/5-A	Method Blank	Total/NA	Solid	8021B	59110
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	8021B	58969
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58969
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	58969
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58969

Analysis Batch: 59324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31276-1	S-2 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31276-1	S-2 (3')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31276-1	S-2 (3')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31276-1	S-2 (3')	Total/NA	Solid	8015 NM	

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

Client Sample ID: S-2 (3')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31276-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	58969	08/01/23 09:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59172	08/04/23 06:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59324	08/04/23 10:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			59478	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 14:34	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

1
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13
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Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31276-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31276-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31276-1	S-2 (3')	Solid	07/25/23 00:00	07/26/23 16:45

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

Work Order No: 276

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31276-1

SDG Number: Lea County, New Mexico

Login Number: 31276

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:41:35 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31282-1

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



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8/7/2023 12:41:35 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31282-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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
SQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

Job ID: 880-31282-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-31282-1
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Receipt

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-2 (0-1') (880-31282-1).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

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Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31282-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:18	08/02/23 23:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:18	08/02/23 23:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:18	08/02/23 23:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/01/23 09:18	08/02/23 23:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:18	08/02/23 23:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/01/23 09:18	08/02/23 23:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	08/01/23 09:18	08/02/23 23:31	1
1,4-Difluorobenzene (Surr)	106		70 - 130	08/01/23 09:18	08/02/23 23:31	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/03/23 09:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U *	49.6		mg/Kg		08/04/23 17:30	08/06/23 17:34	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/04/23 17:30	08/06/23 17:34	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/04/23 17:30	08/06/23 17:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	08/04/23 17:30	08/06/23 17:34	1
o-Terphenyl	100		70 - 130	08/04/23 17:30	08/06/23 17:34	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31279-A-1-A MS	Matrix Spike	103	100
880-31279-A-1-B MSD	Matrix Spike Duplicate	108	104
880-31282-1	S-2 (0-1')	105	106
LCS 880-58971/1-A	Lab Control Sample	104	100
LCSD 880-58971/2-A	Lab Control Sample Dup	95	103
MB 880-58971/5-A	Method Blank	84	89
MB 880-58998/5-A	Method Blank	85	89

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31282-1	S-2 (0-1')	97	100
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58971/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	08/01/23 09:18	08/02/23 22:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 09:18	08/02/23 22:08	1

Lab Sample ID: LCS 880-58971/1-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07714		mg/Kg		77	70 - 130
Toluene	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.08911		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1753		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08985		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-58971/2-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.08576		mg/Kg		86	70 - 130	11	35
Toluene	0.100	0.1000		mg/Kg		100	70 - 130	1	35
Ethylbenzene	0.100	0.08572		mg/Kg		86	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1641		mg/Kg		82	70 - 130	7	35
o-Xylene	0.100	0.08388		mg/Kg		84	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.07513		mg/Kg		75	70 - 130
Toluene	<0.00202	U	0.0996	0.08995		mg/Kg		90	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0996	0.08100		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1561		mg/Kg		78	70 - 130
o-Xylene	<0.00202	U	0.0996	0.07987		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-31279-A-1-B MSD

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0994	0.07017		mg/Kg		71	70 - 130	7	35
Toluene	<0.00202	U	0.0994	0.08738		mg/Kg		88	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0994	0.07772		mg/Kg		78	70 - 130	4	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1481		mg/Kg		75	70 - 130	5	35
o-Xylene	<0.00202	U	0.0994	0.07711		mg/Kg		78	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-58998/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	08/01/23 10:59	08/02/23 11:28	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 10:59	08/02/23 11:28	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 59409						Prep Batch: 59369						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1-Chlorooctane	128		70 - 130									
o-Terphenyl	112		70 - 130									

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31282-1	S-2 (0-1')	Total/NA	Solid	5035	
MB 880-58971/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 58998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-58998/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31282-1	S-2 (0-1')	Total/NA	Solid	8021B	58971
MB 880-58971/5-A	Method Blank	Total/NA	Solid	8021B	58971
MB 880-58998/5-A	Method Blank	Total/NA	Solid	8021B	58998
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	8021B	58971
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58971
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	58971
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58971

Analysis Batch: 59203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31282-1	S-2 (0-1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31282-1	S-2 (0-1')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31282-1	S-2 (0-1')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31282-1	S-2 (0-1')	Total/NA	Solid	8015 NM	

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Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

Client Sample ID: S-2 (0-1')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31282-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	58971	08/01/23 09:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59072	08/02/23 23:31	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59203	08/03/23 09:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			59484	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 17:34	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31282-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31282-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31282-1	S-2 (0-1')	Solid	07/25/23 00:00	07/26/23 16:45

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

[illegible]

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31282-1
SDG Number: Lea County, New Mexico

Login Number: 31282

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



Environment Testing

- 1
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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:35:20 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31277-1

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



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8/7/2023 12:35:20 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31277-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

Job ID: 880-31277-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-31277-1****Receipt**

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-3 (2') (880-31277-1).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-59172 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-59172/20).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-59110 and analytical batch 880-59172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-3 (2') (880-31277-1) and (880-31278-A-1-A). 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 laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

Client Sample ID: S-3 (2')

Lab Sample ID: 880-31277-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:01	08/04/23 06:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:01	08/04/23 06:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:01	08/04/23 06:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/01/23 09:01	08/04/23 06:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:01	08/04/23 06:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/01/23 09:01	08/04/23 06:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	08/01/23 09:01	08/04/23 06:29	1
1,4-Difluorobenzene (Surr)	56	S1-	70 - 130	08/01/23 09:01	08/04/23 06:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/04/23 10:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U *	49.6		mg/Kg		08/04/23 17:30	08/06/23 14:59	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/04/23 17:30	08/06/23 14:59	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/04/23 17:30	08/06/23 14:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	08/04/23 17:30	08/06/23 14:59	1
o-Terphenyl	89		70 - 130	08/04/23 17:30	08/06/23 14:59	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31277-1	S-3 (2')	84	56 S1-
880-31278-A-1-B MS	Matrix Spike	121	124
880-31278-A-1-C MSD	Matrix Spike Duplicate	119	91
LCS 880-58969/1-A	Lab Control Sample	115	111
LCSD 880-58969/2-A	Lab Control Sample Dup	114	109
MB 880-58969/5-A	Method Blank	73	79
MB 880-59110/5-A	Method Blank	68 S1-	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31277-1	S-3 (2')	88	89
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58969/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	08/01/23 09:01	08/03/23 22:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/01/23 09:01	08/03/23 22:38	1

Lab Sample ID: LCS 880-58969/1-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09442		mg/Kg		94	70 - 130
Toluene	0.100	0.08693		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-58969/2-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08592		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08219		mg/Kg		82	70 - 130	6	35
Ethylbenzene	0.100	0.08963		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	12	35
o-Xylene	0.100	0.09268		mg/Kg		93	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0994	0.1002		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0994	0.09371		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.1030		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2125		mg/Kg		107	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1040		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	124		70 - 130

Lab Sample ID: 880-31278-A-1-C MSD

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09502		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.0998	0.09100		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0998	0.1021		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2097		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.1024		mg/Kg		103	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-59110/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	08/02/23 11:14	08/03/23 11:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/02/23 11:14	08/03/23 11:30	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate					
Matrix: Solid						Prep Type: Total/NA					
Analysis Batch: 59409						Prep Batch: 59369					
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	128		70 - 130								
o-Terphenyl	112		70 - 130								

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31277-1	S-3 (2')	Total/NA	Solid	5035	
MB 880-58969/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 59110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-59110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31277-1	S-3 (2')	Total/NA	Solid	8021B	58969
MB 880-58969/5-A	Method Blank	Total/NA	Solid	8021B	58969
MB 880-59110/5-A	Method Blank	Total/NA	Solid	8021B	59110
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	8021B	58969
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58969
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	58969
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58969

Analysis Batch: 59325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31277-1	S-3 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31277-1	S-3 (2')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31277-1	S-3 (2')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31277-1	S-3 (2')	Total/NA	Solid	8015 NM	

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

Client Sample ID: S-3 (2')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31277-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	58969	08/01/23 09:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59172	08/04/23 06:29	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59325	08/04/23 10:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			59479	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 14:59	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31277-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31277-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31277-1	S-3 (2')	Solid	07/25/23 00:00	07/26/23 16:45

- 1
- 2
- 3
- 4
- 5
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- 12
- 13
- 14



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

Work Order Comments	
Program, UST/PT <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> perfund <input type="checkbox"/>	
State of Project	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Work Order No: 277

Project Name		Turn Around		ANALYSIS REQUEST										Preservative Codes					
Project Number	2089	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Press. Code											None NO	DI Water- H ₂ O			
Project Location	Lea County, New Mexico	Due Date	5 day												Cool Cool	MeOH Me			
Sampler's Name	CCM														HCL HC	HNO ₃ HN			
PO #															H ₂ SO ₄ H ₂	NaOH Na			
SAMPLE RECEIPT		Temp Blank.	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Thermometer ID	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Wet Ice	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Parameters											
Received Intact:	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Correction Factor	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Temperature Reading	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Corrected Temperature	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>												
Cooler Custody Seals	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Temperature Reading	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Corrected Temperature	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Corrected Temperature	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>												
Sample Custody Seals	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Temperature Reading	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Corrected Temperature	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Corrected Temperature	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>												
Total Containers	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Temperature Reading	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Corrected Temperature	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Corrected Temperature	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>												
Sample Identification		Date	Time	Soil	Water	Grab/Comp	# of Cont	ANALYSIS REQUEST							Preservative Codes				
S-3 (2')		7/25/23		X		G	1												
								ANALYSIS REQUEST							Preservative Codes				
								ANALYSIS REQUEST							Preservative Codes				
								ANALYSIS REQUEST							Preservative Codes				
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								ANALYSIS REQUEST							Preservative Codes				
								ANALYSIS REQUEST							Preservative Codes				

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

Comments Email results to Mike Carmora micarmora@carmonaresources.com , Conner Moehring cmoehring@carmonaresources.com , Clint Merritt MerrittC@carmonaresources.com			
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	7-26-23 1045		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31277-1

SDG Number: Lea County, New Mexico

Login Number: 31277

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:38:46 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31278-1

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
8/7/2023 12:38:46 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31278-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

Job ID: 880-31278-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-31278-1****Receipt**

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-3 (3') (880-31278-1).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-59172 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-59172/20).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-59110 and analytical batch 880-59172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: S-3 (3') (880-31278-1). 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 laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

Client Sample ID: S-3 (3')

Lab Sample ID: 880-31278-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:01	08/03/23 22:59	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:01	08/03/23 22:59	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:01	08/03/23 22:59	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/01/23 09:01	08/03/23 22:59	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:01	08/03/23 22:59	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/01/23 09:01	08/03/23 22:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	08/01/23 09:01	08/03/23 22:59	1
1,4-Difluorobenzene (Surr)	57	S1-	70 - 130	08/01/23 09:01	08/03/23 22:59	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			08/04/23 10:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U *	50.2		mg/Kg		08/04/23 17:30	08/06/23 15:26	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		08/04/23 17:30	08/06/23 15:26	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/04/23 17:30	08/06/23 15:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	08/04/23 17:30	08/06/23 15:26	1
o-Terphenyl	89		70 - 130	08/04/23 17:30	08/06/23 15:26	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31278-1	S-3 (3')	86	57 S1-
880-31278-1 MS	S-3 (3')	121	124
880-31278-1 MSD	S-3 (3')	119	91
LCS 880-58969/1-A	Lab Control Sample	115	111
LCSD 880-58969/2-A	Lab Control Sample Dup	114	109
MB 880-58969/5-A	Method Blank	73	79
MB 880-59110/5-A	Method Blank	68 S1-	100
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31278-1	S-3 (3')	87	89
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58969/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	08/01/23 09:01	08/03/23 22:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/01/23 09:01	08/03/23 22:38	1

Lab Sample ID: LCS 880-58969/1-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09442		mg/Kg		94	70 - 130
Toluene	0.100	0.08693		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-58969/2-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08592		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08219		mg/Kg		82	70 - 130	6	35
Ethylbenzene	0.100	0.08963		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	12	35
o-Xylene	0.100	0.09268		mg/Kg		93	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-31278-1 MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: S-3 (3')

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0994	0.1002		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0994	0.09371		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31278-1 MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: S-3 (3')

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.1030		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2125		mg/Kg		107	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1040		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	124		70 - 130

Lab Sample ID: 880-31278-1 MSD

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: S-3 (3')

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09502		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.0998	0.09100		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0998	0.1021		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2097		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.1024		mg/Kg		103	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-59110/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	08/02/23 11:14	08/03/23 11:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/02/23 11:14	08/03/23 11:30	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 59409						Prep Batch: 59369						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1-Chlorooctane	128		70 - 130									
o-Terphenyl	112		70 - 130									

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31278-1	S-3 (3')	Total/NA	Solid	5035	
MB 880-58969/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31278-1 MS	S-3 (3')	Total/NA	Solid	5035	
880-31278-1 MSD	S-3 (3')	Total/NA	Solid	5035	

Prep Batch: 59110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-59110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31278-1	S-3 (3')	Total/NA	Solid	8021B	58969
MB 880-58969/5-A	Method Blank	Total/NA	Solid	8021B	58969
MB 880-59110/5-A	Method Blank	Total/NA	Solid	8021B	59110
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	8021B	58969
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58969
880-31278-1 MS	S-3 (3')	Total/NA	Solid	8021B	58969
880-31278-1 MSD	S-3 (3')	Total/NA	Solid	8021B	58969

Analysis Batch: 59315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31278-1	S-3 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31278-1	S-3 (3')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31278-1	S-3 (3')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31278-1	S-3 (3')	Total/NA	Solid	8015 NM	

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

Client Sample ID: S-3 (3')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31278-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	58969	08/01/23 09:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59172	08/03/23 22:59	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59315	08/04/23 10:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			59480	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 15:26	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31278-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31278-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31278-1	S-3 (3')	Solid	07/25/23 00:00	07/26/23 16:45

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

[illegible]

Work Order No.:

278

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31278-1

SDG Number: Lea County, New Mexico

Login Number: 31278

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:40:43 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31281-1

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



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8/7/2023 12:40:43 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31281-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

Job ID: 880-31281-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-31281-1
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Receipt

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-3 (0-1') (880-31281-1).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

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Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31281-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:18	08/02/23 23:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:18	08/02/23 23:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:18	08/02/23 23:11	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/01/23 09:18	08/02/23 23:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:18	08/02/23 23:11	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/01/23 09:18	08/02/23 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	08/01/23 09:18	08/02/23 23:11	1
1,4-Difluorobenzene (Surr)	105		70 - 130	08/01/23 09:18	08/02/23 23:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			08/03/23 09:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U *	49.6		mg/Kg		08/04/23 17:30	08/06/23 17:10	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/04/23 17:30	08/06/23 17:10	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/04/23 17:30	08/06/23 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	08/04/23 17:30	08/06/23 17:10	1
o-Terphenyl	98		70 - 130	08/04/23 17:30	08/06/23 17:10	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31279-A-1-A MS	Matrix Spike	103	100
880-31279-A-1-B MSD	Matrix Spike Duplicate	108	104
880-31281-1	S-3 (0-1')	107	105
LCS 880-58971/1-A	Lab Control Sample	104	100
LCSD 880-58971/2-A	Lab Control Sample Dup	95	103
MB 880-58971/5-A	Method Blank	84	89
MB 880-58998/5-A	Method Blank	85	89
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31281-1	S-3 (0-1')	96	98
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58971/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	08/01/23 09:18	08/02/23 22:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 09:18	08/02/23 22:08	1

Lab Sample ID: LCS 880-58971/1-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07714		mg/Kg		77	70 - 130
Toluene	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.08911		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1753		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08985		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-58971/2-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.08576		mg/Kg		86	70 - 130	11	35
Toluene	0.100	0.1000		mg/Kg		100	70 - 130	1	35
Ethylbenzene	0.100	0.08572		mg/Kg		86	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1641		mg/Kg		82	70 - 130	7	35
o-Xylene	0.100	0.08388		mg/Kg		84	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.07513		mg/Kg		75	70 - 130
Toluene	<0.00202	U	0.0996	0.08995		mg/Kg		90	70 - 130

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QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0996	0.08100		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1561		mg/Kg		78	70 - 130
o-Xylene	<0.00202	U	0.0996	0.07987		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-31279-A-1-B MSD

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0994	0.07017		mg/Kg		71	70 - 130	7	35
Toluene	<0.00202	U	0.0994	0.08738		mg/Kg		88	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0994	0.07772		mg/Kg		78	70 - 130	4	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1481		mg/Kg		75	70 - 130	5	35
o-Xylene	<0.00202	U	0.0994	0.07711		mg/Kg		78	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-58998/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	08/01/23 10:59	08/02/23 11:28	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 10:59	08/02/23 11:28	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

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QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 59409						Prep Batch: 59369						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1-Chlorooctane	128		70 - 130									
o-Terphenyl	112		70 - 130									

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31281-1	S-3 (0-1')	Total/NA	Solid	5035	
MB 880-58971/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 58998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-58998/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31281-1	S-3 (0-1')	Total/NA	Solid	8021B	58971
MB 880-58971/5-A	Method Blank	Total/NA	Solid	8021B	58971
MB 880-58998/5-A	Method Blank	Total/NA	Solid	8021B	58998
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	8021B	58971
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58971
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	58971
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58971

Analysis Batch: 59202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31281-1	S-3 (0-1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31281-1	S-3 (0-1')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31281-1	S-3 (0-1')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31281-1	S-3 (0-1')	Total/NA	Solid	8015 NM	

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

Client Sample ID: S-3 (0-1')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31281-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	58971	08/01/23 09:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59072	08/02/23 23:11	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59202	08/03/23 09:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			59483	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 17:10	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31281-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31281-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31281-1	S-3 (0-1')	Solid	07/25/23 00:00	07/26/23 16:45

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



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

Work Order Comments	
Program, UST/PT <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> perfund <input type="checkbox"/>	
State of Project:	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Work Order No: 2881

[illegible]

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

Comments Email results to Mike Carmona mcarmona@carmonaresources.com , Conner Moehring cmoehring@carmonaresources.com , Clint Merritt MerrittC@carmonaresources.com				
	Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
		7-26-23 1045		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31281-1

SDG Number: Lea County, New Mexico

Login Number: 31281

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Clint Merritt
Carmona Resources
310 W Wall St
Ste 500
Midland, Texas 79701
Generated 8/7/2023 2:44:42 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31270-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

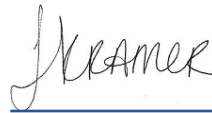
Eurofins Midland

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
8/7/2023 2:44:42 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31270-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

Job ID: 880-31270-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-31270-1****Receipt**

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-4 (2') (880-31270-1).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-59172 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-59172/20).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-59110 and analytical batch 880-59172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-4 (2') (880-31270-1) and (880-31278-A-1-A). 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 880-59255 and analytical batch 880-59403 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-59403/20), (CCV 880-59403/31) and (CCV 880-59403/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-59255 and analytical batch 880-59403 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.

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

Client Sample ID: S-4 (2')

Lab Sample ID: 880-31270-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 04:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 04:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 04:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/01/23 09:01	08/04/23 04:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 04:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/01/23 09:01	08/04/23 04:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	08/01/23 09:01	08/04/23 04:06	1
1,4-Difluorobenzene (Surr)	63	S1-	70 - 130	08/01/23 09:01	08/04/23 04:06	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/04/23 10:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			08/07/23 14:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		08/03/23 14:00	08/06/23 16:41	1
Diesel Range Organics (Over C10-C28)	<50.5	U *	50.5		mg/Kg		08/03/23 14:00	08/06/23 16:41	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/03/23 14:00	08/06/23 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	08/03/23 14:00	08/06/23 16:41	1
o-Terphenyl	86		70 - 130	08/03/23 14:00	08/06/23 16:41	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31270-1	S-4 (2')	84	63 S1-
880-31278-A-1-B MS	Matrix Spike	121	124
880-31278-A-1-C MSD	Matrix Spike Duplicate	119	91
LCS 880-58969/1-A	Lab Control Sample	115	111
LCSD 880-58969/2-A	Lab Control Sample Dup	114	109
MB 880-58969/5-A	Method Blank	73	79
MB 880-59110/5-A	Method Blank	68 S1-	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31114-A-1-D MS	Matrix Spike	125	98
880-31114-A-1-E MSD	Matrix Spike Duplicate	124	99
880-31270-1	S-4 (2')	97	86
MB 880-59255/1-A	Method Blank	156 S1+	154 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58969/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	08/01/23 09:01	08/03/23 22:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/01/23 09:01	08/03/23 22:38	1

Lab Sample ID: LCS 880-58969/1-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09442		mg/Kg		94	70 - 130
Toluene	0.100	0.08693		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-58969/2-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08592		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08219		mg/Kg		82	70 - 130	6	35
Ethylbenzene	0.100	0.08963		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	12	35
o-Xylene	0.100	0.09268		mg/Kg		93	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0994	0.1002		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0994	0.09371		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.1030		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2125		mg/Kg		107	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1040		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	124		70 - 130

Lab Sample ID: 880-31278-A-1-C MSD

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09502		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.0998	0.09100		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0998	0.1021		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2097		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.1024		mg/Kg		103	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-59110/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	08/02/23 11:14	08/03/23 11:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/02/23 11:14	08/03/23 11:30	1

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

Lab Sample ID: MB 880-59255/1-A

Matrix: Solid

Analysis Batch: 59403

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59255

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/23 14:00	08/06/23 08:22	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59255/1-A

Matrix: Solid

Analysis Batch: 59403

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59255

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/23 14:00	08/06/23 08:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/23 14:00	08/06/23 08:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	156	S1+	70 - 130				08/03/23 14:00	08/06/23 08:22	1
o-Terphenyl	154	S1+	70 - 130				08/03/23 14:00	08/06/23 08:22	1

Lab Sample ID: LCS 880-59255/2-A

Matrix: Solid

Analysis Batch: 59403

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59255

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1091		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1432	*+	mg/Kg		143	70 - 130

Lab Sample ID: LCSD 880-59255/3-A

Matrix: Solid

Analysis Batch: 59403

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59255

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1083		mg/Kg		108	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1425	*+	mg/Kg		142	70 - 130	1	20

Lab Sample ID: 880-31114-A-1-D MS

Matrix: Solid

Analysis Batch: 59403

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59255

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	991	822.4		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U *+	991	1171		mg/Kg		118	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	125		70 - 130						
o-Terphenyl	98		70 - 130						

Lab Sample ID: 880-31114-A-1-E MSD

Matrix: Solid

Analysis Batch: 59403

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 59255

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	991	831.2		mg/Kg		81	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U *+	991	1164		mg/Kg		117	70 - 130	1	20

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

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

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	124		70 - 130
o-Terphenyl	99		70 - 130

- 1
- 2
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- 14

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31270-1	S-4 (2')	Total/NA	Solid	5035	
MB 880-58969/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 59110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-59110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31270-1	S-4 (2')	Total/NA	Solid	8021B	58969
MB 880-58969/5-A	Method Blank	Total/NA	Solid	8021B	58969
MB 880-59110/5-A	Method Blank	Total/NA	Solid	8021B	59110
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	8021B	58969
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58969
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	58969
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58969

Analysis Batch: 59318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31270-1	S-4 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31270-1	S-4 (2')	Total/NA	Solid	8015NM Prep	
MB 880-59255/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59255/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59255/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31114-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31114-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31270-1	S-4 (2')	Total/NA	Solid	8015B NM	59255
MB 880-59255/1-A	Method Blank	Total/NA	Solid	8015B NM	59255
LCS 880-59255/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59255
LCSD 880-59255/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59255
880-31114-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	59255
880-31114-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59255

Analysis Batch: 59526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31270-1	S-4 (2')	Total/NA	Solid	8015 NM	

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Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

Client Sample ID: S-4 (2')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31270-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	58969	08/01/23 09:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59172	08/04/23 04:06	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59318	08/04/23 10:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			59526	08/07/23 14:16	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	59255	08/03/23 14:00	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59403	08/06/23 16:41	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

- 1
- 2
- 3
- 4
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- 13
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Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31270-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31270-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31270-1	S-4 (2')	Solid	07/25/23 00:00	07/26/23 16:45

- 1
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Project Manager	Clinton Merritt	Bill to (if different)	Melodie Sanjari
Company Name	Carmona Resources	Company Name	Marathon Oil Corporation
Address	310 W Wall St, Ste 500	Address	990 Town and Country Blvd
City, State ZIP	Midland, TX 79701	City, State ZIP	Houston TX 77024
Phone		Email	msanjari@marathonoil.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Work Order No: 270

[illegible]

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

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	7-26-23 1045		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31270-1

SDG Number: Lea County, New Mexico

Login Number: 31270

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/8/2023 11:28:56 AM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31271-1

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
8/8/2023 11:28:56 AM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31271-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

Job ID: 880-31271-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-31271-1****Receipt**

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-4 (3') (880-31271-1).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-59172 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-59172/20).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-59110 and analytical batch 880-59172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-31278-A-1-A). 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 880-59216 and analytical batch 880-59411 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-4 (3') (880-31271-1), (CCV 880-59411/20), (CCV 880-59411/5), (LCS 880-59216/2-A), (880-31305-A-35-C), (880-31305-A-35-D MS) and (880-31305-A-35-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-59216 and analytical batch 880-59411 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

Client Sample ID: S-4 (3')

Lab Sample ID: 880-31271-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 04:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 04:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 04:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/04/23 04:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 04:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/04/23 04:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	08/01/23 09:01	08/04/23 04:27	1
1,4-Difluorobenzene (Surr)	82		70 - 130	08/01/23 09:01	08/04/23 04:27	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			08/04/23 10:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			08/08/23 12:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/03/23 10:03	08/07/23 17:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		08/03/23 10:03	08/07/23 17:49	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/23 10:03	08/07/23 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	148	S1+	70 - 130	08/03/23 10:03	08/07/23 17:49	1
o-Terphenyl	156	S1+	70 - 130	08/03/23 10:03	08/07/23 17:49	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31271-1	S-4 (3')	91	82
880-31278-A-1-B MS	Matrix Spike	121	124
880-31278-A-1-C MSD	Matrix Spike Duplicate	119	91
LCS 880-58969/1-A	Lab Control Sample	115	111
LCSD 880-58969/2-A	Lab Control Sample Dup	114	109
MB 880-58969/5-A	Method Blank	73	79
MB 880-59110/5-A	Method Blank	68 S1-	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31271-1	S-4 (3')	148 S1+	156 S1+
880-31305-A-35-D MS	Matrix Spike	144 S1+	154 S1+
880-31305-A-35-E MSD	Matrix Spike Duplicate	163 S1+	177 S1+
LCS 880-59216/2-A	Lab Control Sample	130	150 S1+
LCSD 880-59216/3-A	Lab Control Sample Dup	103	122
MB 880-59216/1-A	Method Blank	137 S1+	158 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58969/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	08/01/23 09:01	08/03/23 22:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/01/23 09:01	08/03/23 22:38	1

Lab Sample ID: LCS 880-58969/1-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09442		mg/Kg		94	70 - 130
Toluene	0.100	0.08693		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-58969/2-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08592		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08219		mg/Kg		82	70 - 130	6	35
Ethylbenzene	0.100	0.08963		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	12	35
o-Xylene	0.100	0.09268		mg/Kg		93	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0994	0.1002		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0994	0.09371		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.1030		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2125		mg/Kg		107	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1040		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	124		70 - 130

Lab Sample ID: 880-31278-A-1-C MSD

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09502		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.0998	0.09100		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0998	0.1021		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2097		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.1024		mg/Kg		103	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-59110/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	08/02/23 11:14	08/03/23 11:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/02/23 11:14	08/03/23 11:30	1

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

Lab Sample ID: MB 880-59216/1-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/23 10:03	08/07/23 07:49	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59216/1-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/23 10:03	08/07/23 07:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/23 10:03	08/07/23 07:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130				08/03/23 10:03	08/07/23 07:49	1
o-Terphenyl	158	S1+	70 - 130				08/03/23 10:03	08/07/23 07:49	1

Lab Sample ID: LCS 880-59216/2-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1053		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1214		mg/Kg		121	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	130		70 - 130				
o-Terphenyl	150	S1+	70 - 130				

Lab Sample ID: LCSD 880-59216/3-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59216

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	899.2		mg/Kg		90	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	1000	968.7	*1	mg/Kg		97	70 - 130	22	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	103		70 - 130						
o-Terphenyl	122		70 - 130						

Lab Sample ID: 880-31305-A-35-D MS

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59216

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	952.4		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U *1	1010	1074		mg/Kg		102	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	144	S1+	70 - 130						
o-Terphenyl	154	S1+	70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31305-A-35-E MSD						Client Sample ID: Matrix Spike Duplicate					
Matrix: Solid						Prep Type: Total/NA					
Analysis Batch: 59411						Prep Batch: 59216					
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	1091		mg/Kg		108	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<50.3	U *1	1010	1222		mg/Kg		117	70 - 130	13	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	163	S1+	70 - 130								
o-Terphenyl	177	S1+	70 - 130								

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31271-1	S-4 (3')	Total/NA	Solid	5035	
MB 880-58969/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 59110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-59110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31271-1	S-4 (3')	Total/NA	Solid	8021B	58969
MB 880-58969/5-A	Method Blank	Total/NA	Solid	8021B	58969
MB 880-59110/5-A	Method Blank	Total/NA	Solid	8021B	59110
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	8021B	58969
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58969
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	58969
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58969

Analysis Batch: 59319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31271-1	S-4 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31271-1	S-4 (3')	Total/NA	Solid	8015NM Prep	
MB 880-59216/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59216/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59216/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31305-A-35-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31305-A-35-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31271-1	S-4 (3')	Total/NA	Solid	8015B NM	59216
MB 880-59216/1-A	Method Blank	Total/NA	Solid	8015B NM	59216
LCS 880-59216/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59216
LCSD 880-59216/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59216
880-31305-A-35-D MS	Matrix Spike	Total/NA	Solid	8015B NM	59216
880-31305-A-35-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59216

Analysis Batch: 59635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31271-1	S-4 (3')	Total/NA	Solid	8015 NM	

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Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

Client Sample ID: S-4 (3')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31271-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	58969	08/01/23 09:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59172	08/04/23 04:27	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59319	08/04/23 10:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			59635	08/08/23 12:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	59216	08/03/23 10:03	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59411	08/07/23 17:49	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

- 1
- 2
- 3
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- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31271-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31271-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31271-1	S-4 (3')	Solid	07/25/23 00:00	07/26/23 16:45

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[illegible]

Work Order No.:

2

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31271-1

SDG Number: Lea County, New Mexico

Login Number: 31271

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:40:16 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31280-1

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



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8/7/2023 12:40:16 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31280-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

Job ID: 880-31280-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-31280-1
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Receipt

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-4 (0-1') (880-31280-1).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

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Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31280-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:50	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/01/23 09:18	08/02/23 22:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:50	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/01/23 09:18	08/02/23 22:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	08/01/23 09:18	08/02/23 22:50	1
1,4-Difluorobenzene (Surr)	110		70 - 130	08/01/23 09:18	08/02/23 22:50	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			08/03/23 09:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U *	50.4		mg/Kg		08/04/23 17:30	08/06/23 16:42	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/04/23 17:30	08/06/23 16:42	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/04/23 17:30	08/06/23 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	08/04/23 17:30	08/06/23 16:42	1
o-Terphenyl	92		70 - 130	08/04/23 17:30	08/06/23 16:42	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31279-A-1-A MS	Matrix Spike	103	100
880-31279-A-1-B MSD	Matrix Spike Duplicate	108	104
880-31280-1	S-4 (0-1')	106	110
LCS 880-58971/1-A	Lab Control Sample	104	100
LCSD 880-58971/2-A	Lab Control Sample Dup	95	103
MB 880-58971/5-A	Method Blank	84	89
MB 880-58998/5-A	Method Blank	85	89
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31280-1	S-4 (0-1')	89	92
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58971/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	08/01/23 09:18	08/02/23 22:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 09:18	08/02/23 22:08	1

Lab Sample ID: LCS 880-58971/1-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07714		mg/Kg		77	70 - 130
Toluene	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.08911		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1753		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08985		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-58971/2-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.08576		mg/Kg		86	70 - 130	11	35
Toluene	0.100	0.1000		mg/Kg		100	70 - 130	1	35
Ethylbenzene	0.100	0.08572		mg/Kg		86	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1641		mg/Kg		82	70 - 130	7	35
o-Xylene	0.100	0.08388		mg/Kg		84	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.07513		mg/Kg		75	70 - 130
Toluene	<0.00202	U	0.0996	0.08995		mg/Kg		90	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0996	0.08100		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1561		mg/Kg		78	70 - 130
o-Xylene	<0.00202	U	0.0996	0.07987		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-31279-A-1-B MSD

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0994	0.07017		mg/Kg		71	70 - 130	7	35
Toluene	<0.00202	U	0.0994	0.08738		mg/Kg		88	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0994	0.07772		mg/Kg		78	70 - 130	4	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1481		mg/Kg		75	70 - 130	5	35
o-Xylene	<0.00202	U	0.0994	0.07711		mg/Kg		78	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-58998/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	08/01/23 10:59	08/02/23 11:28	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 10:59	08/02/23 11:28	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

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QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

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QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 59409						Prep Batch: 59369						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1-Chlorooctane	128		70 - 130									
o-Terphenyl	112		70 - 130									

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31280-1	S-4 (0-1')	Total/NA	Solid	5035	
MB 880-58971/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 58998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-58998/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31280-1	S-4 (0-1')	Total/NA	Solid	8021B	58971
MB 880-58971/5-A	Method Blank	Total/NA	Solid	8021B	58971
MB 880-58998/5-A	Method Blank	Total/NA	Solid	8021B	58998
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	8021B	58971
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58971
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	58971
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58971

Analysis Batch: 59201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31280-1	S-4 (0-1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31280-1	S-4 (0-1')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31280-1	S-4 (0-1')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31280-1	S-4 (0-1')	Total/NA	Solid	8015 NM	

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Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

Client Sample ID: S-4 (0-1')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31280-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	58971	08/01/23 09:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59072	08/02/23 22:50	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59201	08/03/23 09:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			59482	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 16:42	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31280-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31280-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31280-1	S-4 (0-1')	Solid	07/25/23 00:00	07/26/23 16:45

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

[illegible]

Work Order No.:

200

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31280-1
SDG Number: Lea County, New Mexico

Login Number: 31280

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/8/2023 11:29:37 AM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31272-1

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
8/8/2023 11:29:37 AM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31272-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

Job ID: 880-31272-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-31272-1****Receipt**

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-5 (2') (880-31272-1).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-59172 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-59172/20).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-59110 and analytical batch 880-59172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-5 (2') (880-31272-1) and (880-31278-A-1-A). 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 880-59216 and analytical batch 880-59411 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-5 (2') (880-31272-1), (CCV 880-59411/20), (CCV 880-59411/5), (LCS 880-59216/2-A), (880-31305-A-35-C), (880-31305-A-35-D MS) and (880-31305-A-35-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-59216 and analytical batch 880-59411 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

Client Sample ID: S-5 (2')

Lab Sample ID: 880-31272-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/01/23 09:01	08/04/23 04:47	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/01/23 09:01	08/04/23 04:47	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/01/23 09:01	08/04/23 04:47	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/01/23 09:01	08/04/23 04:47	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/01/23 09:01	08/04/23 04:47	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/01/23 09:01	08/04/23 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	08/01/23 09:01	08/04/23 04:47	1
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130	08/01/23 09:01	08/04/23 04:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			08/04/23 10:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			08/08/23 12:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/03/23 10:03	08/07/23 18:11	1
Diesel Range Organics (Over C10-C28)	<50.3	U *1	50.3		mg/Kg		08/03/23 10:03	08/07/23 18:11	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/03/23 10:03	08/07/23 18:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	08/03/23 10:03	08/07/23 18:11	1
o-Terphenyl	134	S1+	70 - 130	08/03/23 10:03	08/07/23 18:11	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31272-1	S-5 (2')	105	69 S1-
880-31278-A-1-B MS	Matrix Spike	121	124
880-31278-A-1-C MSD	Matrix Spike Duplicate	119	91
LCS 880-58969/1-A	Lab Control Sample	115	111
LCSD 880-58969/2-A	Lab Control Sample Dup	114	109
MB 880-58969/5-A	Method Blank	73	79
MB 880-59110/5-A	Method Blank	68 S1-	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31272-1	S-5 (2')	135 S1+	134 S1+
880-31305-A-35-D MS	Matrix Spike	144 S1+	154 S1+
880-31305-A-35-E MSD	Matrix Spike Duplicate	163 S1+	177 S1+
LCS 880-59216/2-A	Lab Control Sample	130	150 S1+
LCSD 880-59216/3-A	Lab Control Sample Dup	103	122
MB 880-59216/1-A	Method Blank	137 S1+	158 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58969/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	08/01/23 09:01	08/03/23 22:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/01/23 09:01	08/03/23 22:38	1

Lab Sample ID: LCS 880-58969/1-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09442		mg/Kg		94	70 - 130
Toluene	0.100	0.08693		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-58969/2-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08592		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08219		mg/Kg		82	70 - 130	6	35
Ethylbenzene	0.100	0.08963		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	12	35
o-Xylene	0.100	0.09268		mg/Kg		93	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0994	0.1002		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0994	0.09371		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.1030		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2125		mg/Kg		107	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1040		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	124		70 - 130

Lab Sample ID: 880-31278-A-1-C MSD

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09502		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.0998	0.09100		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0998	0.1021		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2097		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.1024		mg/Kg		103	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-59110/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	08/02/23 11:14	08/03/23 11:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/02/23 11:14	08/03/23 11:30	1

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

Lab Sample ID: MB 880-59216/1-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/23 10:03	08/07/23 07:49	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59216/1-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/23 10:03	08/07/23 07:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/23 10:03	08/07/23 07:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130				08/03/23 10:03	08/07/23 07:49	1
o-Terphenyl	158	S1+	70 - 130				08/03/23 10:03	08/07/23 07:49	1

Lab Sample ID: LCS 880-59216/2-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1053		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1214		mg/Kg		121	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	130		70 - 130				
o-Terphenyl	150	S1+	70 - 130				

Lab Sample ID: LCSD 880-59216/3-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59216

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	899.2		mg/Kg		90	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	1000	968.7	*1	mg/Kg		97	70 - 130	22	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	103		70 - 130						
o-Terphenyl	122		70 - 130						

Lab Sample ID: 880-31305-A-35-D MS

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59216

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	952.4		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U *1	1010	1074		mg/Kg		102	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	144	S1+	70 - 130						
o-Terphenyl	154	S1+	70 - 130						

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QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31305-A-35-E MSD						Client Sample ID: Matrix Spike Duplicate					
Matrix: Solid						Prep Type: Total/NA					
Analysis Batch: 59411						Prep Batch: 59216					
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	1091		mg/Kg		108	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<50.3	U *1	1010	1222		mg/Kg		117	70 - 130	13	20
	MSD %Recovery	MSD Qualifier	Limits								
Surrogate											
1-Chlorooctane	163	S1+	70 - 130								
o-Terphenyl	177	S1+	70 - 130								

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31272-1	S-5 (2')	Total/NA	Solid	5035	
MB 880-58969/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 59110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-59110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31272-1	S-5 (2')	Total/NA	Solid	8021B	58969
MB 880-58969/5-A	Method Blank	Total/NA	Solid	8021B	58969
MB 880-59110/5-A	Method Blank	Total/NA	Solid	8021B	59110
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	8021B	58969
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58969
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	58969
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58969

Analysis Batch: 59320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31272-1	S-5 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31272-1	S-5 (2')	Total/NA	Solid	8015NM Prep	
MB 880-59216/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59216/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59216/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31305-A-35-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31305-A-35-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31272-1	S-5 (2')	Total/NA	Solid	8015B NM	59216
MB 880-59216/1-A	Method Blank	Total/NA	Solid	8015B NM	59216
LCS 880-59216/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59216
LCSD 880-59216/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59216
880-31305-A-35-D MS	Matrix Spike	Total/NA	Solid	8015B NM	59216
880-31305-A-35-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59216

Analysis Batch: 59636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31272-1	S-5 (2')	Total/NA	Solid	8015 NM	

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

Client Sample ID: S-5 (2')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31272-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	58969	08/01/23 09:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59172	08/04/23 04:47	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59320	08/04/23 10:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			59636	08/08/23 12:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	59216	08/03/23 10:03	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59411	08/07/23 18:11	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31272-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31272-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31272-1	S-5 (2')	Solid	07/25/23 00:00	07/26/23 16:45

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

[illegible]

Work Order No: 272

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31272-1

SDG Number: Lea County, New Mexico

Login Number: 31272

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/8/2023 11:30:10 AM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31273-1

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
8/8/2023 11:30:10 AM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31273-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

Job ID: 880-31273-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-31273-1****Receipt**

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-5 (3') (880-31273-1).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-59172 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-59172/20).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-59110 and analytical batch 880-59172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-5 (3') (880-31273-1) and (880-31278-A-1-A). 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 880-59216 and analytical batch 880-59411 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-59411/20), (CCV 880-59411/5), (LCS 880-59216/2-A), (880-31305-A-35-C), (880-31305-A-35-D MS) and (880-31305-A-35-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-59216 and analytical batch 880-59411 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

Client Sample ID: S-5 (3')

Lab Sample ID: 880-31273-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:01	08/04/23 05:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:01	08/04/23 05:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:01	08/04/23 05:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/01/23 09:01	08/04/23 05:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/01/23 09:01	08/04/23 05:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/01/23 09:01	08/04/23 05:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	08/01/23 09:01	08/04/23 05:08	1
1,4-Difluorobenzene (Surr)	57	S1-	70 - 130	08/01/23 09:01	08/04/23 05:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/04/23 10:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			08/08/23 12:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		08/03/23 10:03	08/07/23 18:34	1
Diesel Range Organics (Over C10-C28)	<50.4	U *1	50.4		mg/Kg		08/03/23 10:03	08/07/23 18:34	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/03/23 10:03	08/07/23 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	08/03/23 10:03	08/07/23 18:34	1
o-Terphenyl	108		70 - 130	08/03/23 10:03	08/07/23 18:34	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31273-1	S-5 (3')	88	57 S1-
880-31278-A-1-B MS	Matrix Spike	121	124
880-31278-A-1-C MSD	Matrix Spike Duplicate	119	91
LCS 880-58969/1-A	Lab Control Sample	115	111
LCSD 880-58969/2-A	Lab Control Sample Dup	114	109
MB 880-58969/5-A	Method Blank	73	79
MB 880-59110/5-A	Method Blank	68 S1-	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31273-1	S-5 (3')	102	108
880-31305-A-35-D MS	Matrix Spike	144 S1+	154 S1+
880-31305-A-35-E MSD	Matrix Spike Duplicate	163 S1+	177 S1+
LCS 880-59216/2-A	Lab Control Sample	130	150 S1+
LCSD 880-59216/3-A	Lab Control Sample Dup	103	122
MB 880-59216/1-A	Method Blank	137 S1+	158 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58969/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	08/01/23 09:01	08/03/23 22:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/01/23 09:01	08/03/23 22:38	1

Lab Sample ID: LCS 880-58969/1-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09442		mg/Kg		94	70 - 130
Toluene	0.100	0.08693		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-58969/2-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08592		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08219		mg/Kg		82	70 - 130	6	35
Ethylbenzene	0.100	0.08963		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	12	35
o-Xylene	0.100	0.09268		mg/Kg		93	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0994	0.1002		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0994	0.09371		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.1030		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2125		mg/Kg		107	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1040		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	124		70 - 130

Lab Sample ID: 880-31278-A-1-C MSD

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09502		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.0998	0.09100		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0998	0.1021		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2097		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.1024		mg/Kg		103	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-59110/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	08/02/23 11:14	08/03/23 11:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/02/23 11:14	08/03/23 11:30	1

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

Lab Sample ID: MB 880-59216/1-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/23 10:03	08/07/23 07:49	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59216/1-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/23 10:03	08/07/23 07:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/23 10:03	08/07/23 07:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130				08/03/23 10:03	08/07/23 07:49	1
o-Terphenyl	158	S1+	70 - 130				08/03/23 10:03	08/07/23 07:49	1

Lab Sample ID: LCS 880-59216/2-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1053		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1214		mg/Kg		121	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	130		70 - 130				
o-Terphenyl	150	S1+	70 - 130				

Lab Sample ID: LCSD 880-59216/3-A

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59216

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	899.2		mg/Kg		90	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	1000	968.7	*1	mg/Kg		97	70 - 130	22	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	103		70 - 130						
o-Terphenyl	122		70 - 130						

Lab Sample ID: 880-31305-A-35-D MS

Matrix: Solid

Analysis Batch: 59411

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59216

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	952.4		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U *1	1010	1074		mg/Kg		102	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	144	S1+	70 - 130						
o-Terphenyl	154	S1+	70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31305-A-35-E MSD						Client Sample ID: Matrix Spike Duplicate					
Matrix: Solid						Prep Type: Total/NA					
Analysis Batch: 59411						Prep Batch: 59216					
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	1091		mg/Kg		108	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<50.3	U *1	1010	1222		mg/Kg		117	70 - 130	13	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	163	S1+	70 - 130								
o-Terphenyl	177	S1+	70 - 130								

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31273-1	S-5 (3')	Total/NA	Solid	5035	
MB 880-58969/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 59110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-59110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31273-1	S-5 (3')	Total/NA	Solid	8021B	58969
MB 880-58969/5-A	Method Blank	Total/NA	Solid	8021B	58969
MB 880-59110/5-A	Method Blank	Total/NA	Solid	8021B	59110
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	8021B	58969
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58969
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	58969
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58969

Analysis Batch: 59321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31273-1	S-5 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31273-1	S-5 (3')	Total/NA	Solid	8015NM Prep	
MB 880-59216/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59216/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59216/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31305-A-35-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31305-A-35-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31273-1	S-5 (3')	Total/NA	Solid	8015B NM	59216
MB 880-59216/1-A	Method Blank	Total/NA	Solid	8015B NM	59216
LCS 880-59216/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59216
LCSD 880-59216/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59216
880-31305-A-35-D MS	Matrix Spike	Total/NA	Solid	8015B NM	59216
880-31305-A-35-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59216

Analysis Batch: 59637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31273-1	S-5 (3')	Total/NA	Solid	8015 NM	

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

Client Sample ID: S-5 (3')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31273-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	58969	08/01/23 09:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59172	08/04/23 05:08	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59321	08/04/23 10:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			59637	08/08/23 12:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	59216	08/03/23 10:03	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59411	08/07/23 18:34	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31273-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31273-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31273-1	S-5 (3')	Solid	07/25/23 00:00	07/26/23 16:45

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

[illegible]

Work Order No: 273

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31273-1
SDG Number: Lea County, New Mexico

Login Number: 31273

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:42:00 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31283-1

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
8/7/2023 12:42:00 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31283-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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
SQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

Job ID: 880-31283-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-31283-1

Receipt

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-5 (0-1') (880-31283-1).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31283-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/01/23 09:18	08/02/23 23:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/01/23 09:18	08/02/23 23:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/01/23 09:18	08/02/23 23:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/01/23 09:18	08/02/23 23:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/01/23 09:18	08/02/23 23:52	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/01/23 09:18	08/02/23 23:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	08/01/23 09:18	08/02/23 23:52	1
1,4-Difluorobenzene (Surr)	104		70 - 130	08/01/23 09:18	08/02/23 23:52	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			08/03/23 09:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *	50.0		mg/Kg		08/04/23 17:30	08/06/23 18:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:30	08/06/23 18:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:30	08/06/23 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	08/04/23 17:30	08/06/23 18:03	1
o-Terphenyl	80		70 - 130	08/04/23 17:30	08/06/23 18:03	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31279-A-1-A MS	Matrix Spike	103	100
880-31279-A-1-B MSD	Matrix Spike Duplicate	108	104
880-31283-1	S-5 (0-1')	103	104
LCS 880-58971/1-A	Lab Control Sample	104	100
LCSD 880-58971/2-A	Lab Control Sample Dup	95	103
MB 880-58971/5-A	Method Blank	84	89
MB 880-58998/5-A	Method Blank	85	89
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31283-1	S-5 (0-1')	83	80
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58971/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	08/01/23 09:18	08/02/23 22:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 09:18	08/02/23 22:08	1

Lab Sample ID: LCS 880-58971/1-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07714		mg/Kg		77	70 - 130
Toluene	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.08911		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1753		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08985		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-58971/2-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08576		mg/Kg		86	70 - 130	11	35
Toluene	0.100	0.1000		mg/Kg		100	70 - 130	1	35
Ethylbenzene	0.100	0.08572		mg/Kg		86	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1641		mg/Kg		82	70 - 130	7	35
o-Xylene	0.100	0.08388		mg/Kg		84	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.07513		mg/Kg		75	70 - 130
Toluene	<0.00202	U	0.0996	0.08995		mg/Kg		90	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0996	0.08100		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1561		mg/Kg		78	70 - 130
o-Xylene	<0.00202	U	0.0996	0.07987		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-31279-A-1-B MSD

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0994	0.07017		mg/Kg		71	70 - 130	7	35
Toluene	<0.00202	U	0.0994	0.08738		mg/Kg		88	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0994	0.07772		mg/Kg		78	70 - 130	4	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1481		mg/Kg		75	70 - 130	5	35
o-Xylene	<0.00202	U	0.0994	0.07711		mg/Kg		78	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-58998/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	08/01/23 10:59	08/02/23 11:28	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 10:59	08/02/23 11:28	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 59409						Prep Batch: 59369						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1-Chlorooctane	128		70 - 130									
o-Terphenyl	112		70 - 130									

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31283-1	S-5 (0-1')	Total/NA	Solid	5035	
MB 880-58971/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 58998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-58998/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31283-1	S-5 (0-1')	Total/NA	Solid	8021B	58971
MB 880-58971/5-A	Method Blank	Total/NA	Solid	8021B	58971
MB 880-58998/5-A	Method Blank	Total/NA	Solid	8021B	58998
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	8021B	58971
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58971
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	58971
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58971

Analysis Batch: 59204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31283-1	S-5 (0-1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31283-1	S-5 (0-1')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31283-1	S-5 (0-1')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31283-1	S-5 (0-1')	Total/NA	Solid	8015 NM	

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Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

Client Sample ID: S-5 (0-1')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31283-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	58971	08/01/23 09:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59072	08/02/23 23:52	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59204	08/03/23 09:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			59485	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 18:03	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31283-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31283-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31283-1	S-5 (0-1')	Solid	07/25/23 00:00	07/26/23 16:45

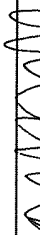

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Project Manager	Clinton Merritt	Bill to (if different)	Melodie Sanjari
Company Name	Carmona Resources	Company Name	Marathon Oil Corporation
Address	310 W Wall St Ste 500	Address	990 Town and Country Blvd
City, State ZIP	Midland, TX 79701	City, State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

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PPR <input type="checkbox"/> Brownfields <input checked="" type="checkbox"/> RC <input type="checkbox"/> perfund <input type="checkbox"/>	
State of Project	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

[illegible]

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

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	7-26-23 1045		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31283-1

SDG Number: Lea County, New Mexico

Login Number: 31283

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:33:39 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31274-1

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
8/7/2023 12:33:39 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31274-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

Job ID: 880-31274-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-31274-1****Receipt**

The sample was received on 7/26/2023 4:45 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 4.5°C

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-59172 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-59172/20).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-59110 and analytical batch 880-59172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-6 (2') (880-31274-1) and (880-31278-A-1-A). 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 laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

Client Sample ID: S-6 (2')

Lab Sample ID: 880-31274-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 05:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 05:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 05:28	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/01/23 09:01	08/04/23 05:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/04/23 05:28	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/01/23 09:01	08/04/23 05:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	08/01/23 09:01	08/04/23 05:28	1
1,4-Difluorobenzene (Surr)	59	S1-	70 - 130	08/01/23 09:01	08/04/23 05:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			08/04/23 10:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *	50.3		mg/Kg		08/04/23 17:30	08/06/23 13:43	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/04/23 17:30	08/06/23 13:43	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/04/23 17:30	08/06/23 13:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	08/04/23 17:30	08/06/23 13:43	1
o-Terphenyl	96		70 - 130	08/04/23 17:30	08/06/23 13:43	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31274-1	S-6 (2')	87	59 S1-
880-31278-A-1-B MS	Matrix Spike	121	124
880-31278-A-1-C MSD	Matrix Spike Duplicate	119	91
LCS 880-58969/1-A	Lab Control Sample	115	111
LCSD 880-58969/2-A	Lab Control Sample Dup	114	109
MB 880-58969/5-A	Method Blank	73	79
MB 880-59110/5-A	Method Blank	68 S1-	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31274-1	S-6 (2')	93	96
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58969/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:01	08/03/23 22:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:01	08/03/23 22:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	08/01/23 09:01	08/03/23 22:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/01/23 09:01	08/03/23 22:38	1

Lab Sample ID: LCS 880-58969/1-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09442		mg/Kg		94	70 - 130
Toluene	0.100	0.08693		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-58969/2-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08592		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08219		mg/Kg		82	70 - 130	6	35
Ethylbenzene	0.100	0.08963		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	12	35
o-Xylene	0.100	0.09268		mg/Kg		93	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0994	0.1002		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0994	0.09371		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31278-A-1-B MS

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.1030		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2125		mg/Kg		107	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1040		mg/Kg		105	70 - 130
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	121		70 - 130						
1,4-Difluorobenzene (Surr)	124		70 - 130						

Lab Sample ID: 880-31278-A-1-C MSD

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.09502		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.0998	0.09100		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0998	0.1021		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2097		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.1024		mg/Kg		103	70 - 130	2	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	119		70 - 130								
1,4-Difluorobenzene (Surr)	91		70 - 130								

Lab Sample ID: MB 880-59110/5-A

Matrix: Solid

Analysis Batch: 59172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/23 11:14	08/03/23 11:30	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130				08/02/23 11:14	08/03/23 11:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130				08/02/23 11:14	08/03/23 11:30	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 59409						Prep Batch: 59369						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1-Chlorooctane	128		70 - 130									
o-Terphenyl	112		70 - 130									

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31274-1	S-6 (2')	Total/NA	Solid	5035	
MB 880-58969/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 59110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-59110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31274-1	S-6 (2')	Total/NA	Solid	8021B	58969
MB 880-58969/5-A	Method Blank	Total/NA	Solid	8021B	58969
MB 880-59110/5-A	Method Blank	Total/NA	Solid	8021B	59110
LCS 880-58969/1-A	Lab Control Sample	Total/NA	Solid	8021B	58969
LCSD 880-58969/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58969
880-31278-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	58969
880-31278-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58969

Analysis Batch: 59322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31274-1	S-6 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31274-1	S-6 (2')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31274-1	S-6 (2')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31274-1	S-6 (2')	Total/NA	Solid	8015 NM	

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Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

Client Sample ID: S-6 (2')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31274-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	58969	08/01/23 09:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59172	08/04/23 05:28	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59322	08/04/23 10:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			59476	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 13:43	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31274-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31274-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31274-1	S-6 (2')	Solid	07/25/23 00:00	07/26/23 16:45

- 1
- 2
- 3
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- 5
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- 11
- 12
- 13
- 14

[illegible]

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31274-1

SDG Number: Lea County, New Mexico

Login Number: 31274

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:40:16 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31279-1

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



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8/7/2023 12:40:16 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31279-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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
SQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

Job ID: 880-31279-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-31279-1
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Receipt

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-6 (3') (880-31279-1).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

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Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

Client Sample ID: S-6 (3')

Lab Sample ID: 880-31279-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:18	08/02/23 22:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:18	08/02/23 22:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:18	08/02/23 22:30	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/01/23 09:18	08/02/23 22:30	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/01/23 09:18	08/02/23 22:30	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/01/23 09:18	08/02/23 22:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	08/01/23 09:18	08/02/23 22:30	1
1,4-Difluorobenzene (Surr)	97		70 - 130	08/01/23 09:18	08/02/23 22:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			08/03/23 09:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U *	50.5		mg/Kg		08/04/23 17:30	08/06/23 16:18	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		08/04/23 17:30	08/06/23 16:18	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/04/23 17:30	08/06/23 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	08/04/23 17:30	08/06/23 16:18	1
o-Terphenyl	95		70 - 130	08/04/23 17:30	08/06/23 16:18	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31279-1	S-6 (3')	96	97
880-31279-1 MS	S-6 (3')	103	100
880-31279-1 MSD	S-6 (3')	108	104
LCS 880-58971/1-A	Lab Control Sample	104	100
LCSD 880-58971/2-A	Lab Control Sample Dup	95	103
MB 880-58971/5-A	Method Blank	84	89
MB 880-58998/5-A	Method Blank	85	89
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31279-1	S-6 (3')	94	95
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58971/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	08/01/23 09:18	08/02/23 22:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 09:18	08/02/23 22:08	1

Lab Sample ID: LCS 880-58971/1-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07714		mg/Kg		77	70 - 130
Toluene	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.08911		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1753		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08985		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-58971/2-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.08576		mg/Kg		86	70 - 130	11	35
Toluene	0.100	0.1000		mg/Kg		100	70 - 130	1	35
Ethylbenzene	0.100	0.08572		mg/Kg		86	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1641		mg/Kg		82	70 - 130	7	35
o-Xylene	0.100	0.08388		mg/Kg		84	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-31279-1 MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: S-6 (3')

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.07513		mg/Kg		75	70 - 130
Toluene	<0.00202	U	0.0996	0.08995		mg/Kg		90	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31279-1 MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: S-6 (3')

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0996	0.08100		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1561		mg/Kg		78	70 - 130
o-Xylene	<0.00202	U	0.0996	0.07987		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-31279-1 MSD

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: S-6 (3')

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0994	0.07017		mg/Kg		71	70 - 130	7	35
Toluene	<0.00202	U	0.0994	0.08738		mg/Kg		88	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0994	0.07772		mg/Kg		78	70 - 130	4	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1481		mg/Kg		75	70 - 130	5	35
o-Xylene	<0.00202	U	0.0994	0.07711		mg/Kg		78	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-58998/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	08/01/23 10:59	08/02/23 11:28	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 10:59	08/02/23 11:28	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A
Matrix: Solid
Analysis Batch: 59409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A
Matrix: Solid
Analysis Batch: 59409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A
Matrix: Solid
Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS
Matrix: Solid
Analysis Batch: 59409

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 59409						Prep Batch: 59369						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
1-Chlorooctane	128		70 - 130									
o-Terphenyl	112		70 - 130									

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31279-1	S-6 (3')	Total/NA	Solid	5035	
MB 880-58971/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31279-1 MS	S-6 (3')	Total/NA	Solid	5035	
880-31279-1 MSD	S-6 (3')	Total/NA	Solid	5035	

Prep Batch: 58998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-58998/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31279-1	S-6 (3')	Total/NA	Solid	8021B	58971
MB 880-58971/5-A	Method Blank	Total/NA	Solid	8021B	58971
MB 880-58998/5-A	Method Blank	Total/NA	Solid	8021B	58998
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	8021B	58971
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58971
880-31279-1 MS	S-6 (3')	Total/NA	Solid	8021B	58971
880-31279-1 MSD	S-6 (3')	Total/NA	Solid	8021B	58971

Analysis Batch: 59200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31279-1	S-6 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31279-1	S-6 (3')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31279-1	S-6 (3')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31279-1	S-6 (3')	Total/NA	Solid	8015 NM	

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

Client Sample ID: S-6 (3')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31279-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	58971	08/01/23 09:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59072	08/02/23 22:30	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59200	08/03/23 09:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			59481	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 16:18	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31279-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:

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: Tonto 15 State #1

Job ID: 880-31279-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31279-1	S-6 (3')	Solid	07/25/23 00:00	07/26/23 16:45

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

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


Work Order No: 279

Page 1 of 1

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

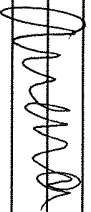

Program <input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Refund <input type="checkbox"/>	
State of Project:	
Reporting Level II <input type="checkbox"/>	Level III <input type="checkbox"/>
Deliverables EDD <input type="checkbox"/>	ADAPT <input type="checkbox"/>
Other <input type="checkbox"/>	

Project Name	Tonto 15 State #1		Turn Around		Pres. Code	ANALYSIS REQUEST												Preservative Codes				
Project Number	2089		<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush														None NO	DI Water H ₂ O			
Project Location	Lea County New Mexico		Due Date	5 day														Cool Cool	MeOH Me			
Samplers Name	CCM																		HCL HC	HNO ₃ HN		
PO #																			H ₂ SO ₄ H ₂	NaOH Na		
SAMPLE RECEIPT			Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>													H PO ₄ HP			
Received Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID													NaHSO ₄ NABIS							
Cooler Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor													Na ₂ S ₂ O ₃ NaSO ₃							
Sample Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading													Zn Acetate+NaOH Zn							
Total Containers	Corrected Temperature														NaOH+Ascorbic Acid	SAPC						
Sample Identification	Date	Time	Soil	Water	Grab/Comp	# of Cont													Sample Comments			
S-6 (3)	7 25 23		X		G	1	X	X														
														BTEX 8021B								
														TPH 8015M (GRO + DRO + MRO)								
														Chloride 300 0								



880-31279 Chain of Custody

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

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	7-26-23		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31279-1

SDG Number: Lea County, New Mexico

Login Number: 31279

List Number: 1

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/7/2023 12:42:46 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County, New Mexico

JOB NUMBER

880-31284-1

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
8/7/2023 12:42:46 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-31284-1
SDG: Lea County, New Mexico

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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
SQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

Job ID: 880-31284-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-31284-1
-----------	------------------------------

Receipt

The sample was received on 7/26/2023 4:45 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 4.5°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S-6 (0-1') (880-31284-1).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-59369 and analytical batch 880-59409 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.

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Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

Client Sample ID: S-6 (0-1')

Lab Sample ID: 880-31284-1

Date Collected: 07/25/23 00:00

Matrix: Solid

Date Received: 07/26/23 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:18	08/03/23 00:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:18	08/03/23 00:13	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:18	08/03/23 00:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/01/23 09:18	08/03/23 00:13	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/01/23 09:18	08/03/23 00:13	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/01/23 09:18	08/03/23 00:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	08/01/23 09:18	08/03/23 00:13	1
1,4-Difluorobenzene (Surr)	105		70 - 130	08/01/23 09:18	08/03/23 00:13	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/03/23 09:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			08/07/23 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *	50.3		mg/Kg		08/04/23 17:30	08/06/23 18:26	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/04/23 17:30	08/06/23 18:26	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/04/23 17:30	08/06/23 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	08/04/23 17:30	08/06/23 18:26	1
o-Terphenyl	95		70 - 130	08/04/23 17:30	08/06/23 18:26	1

Eurofins Midland

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-31279-A-1-A MS	Matrix Spike	103	100
880-31279-A-1-B MSD	Matrix Spike Duplicate	108	104
880-31284-1	S-6 (0-1')	120	105
LCS 880-58971/1-A	Lab Control Sample	104	100
LCSD 880-58971/2-A	Lab Control Sample Dup	95	103
MB 880-58971/5-A	Method Blank	84	89
MB 880-58998/5-A	Method Blank	85	89
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-31284-1	S-6 (0-1')	94	95
880-31664-A-2-F MS	Matrix Spike	123	104
880-31664-A-2-G MSD	Matrix Spike Duplicate	128	112
LCS 880-59369/2-A	Lab Control Sample	93	94
LCSD 880-59369/3-A	Lab Control Sample Dup	85	82
MB 880-59369/1-A	Method Blank	88	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58971/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 09:18	08/02/23 22:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 09:18	08/02/23 22:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	08/01/23 09:18	08/02/23 22:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 09:18	08/02/23 22:08	1

Lab Sample ID: LCS 880-58971/1-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07714		mg/Kg		77	70 - 130
Toluene	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.08911		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1753		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08985		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-58971/2-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.08576		mg/Kg		86	70 - 130	11	35
Toluene	0.100	0.1000		mg/Kg		100	70 - 130	1	35
Ethylbenzene	0.100	0.08572		mg/Kg		86	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1641		mg/Kg		82	70 - 130	7	35
o-Xylene	0.100	0.08388		mg/Kg		84	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.07513		mg/Kg		75	70 - 130
Toluene	<0.00202	U	0.0996	0.08995		mg/Kg		90	70 - 130

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31279-A-1-A MS

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0996	0.08100		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1561		mg/Kg		78	70 - 130
o-Xylene	<0.00202	U	0.0996	0.07987		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-31279-A-1-B MSD

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 58971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0994	0.07017		mg/Kg		71	70 - 130	7	35
Toluene	<0.00202	U	0.0994	0.08738		mg/Kg		88	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0994	0.07772		mg/Kg		78	70 - 130	4	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1481		mg/Kg		75	70 - 130	5	35
o-Xylene	<0.00202	U	0.0994	0.07711		mg/Kg		78	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-58998/5-A

Matrix: Solid

Analysis Batch: 59072

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 58998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/23 10:59	08/02/23 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/23 10:59	08/02/23 11:28	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	08/01/23 10:59	08/02/23 11:28	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/23 10:59	08/02/23 11:28	1

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-59369/1-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/23 17:29	08/06/23 08:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/04/23 17:29	08/06/23 08:16	1
o-Terphenyl	94		70 - 130				08/04/23 17:29	08/06/23 08:16	1

Lab Sample ID: LCS 880-59369/2-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	661.8	*-	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-59369/3-A

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	660.9	*-	mg/Kg		66	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	845.2		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-31664-A-2-F MS

Matrix: Solid

Analysis Batch: 59409

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 59369

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	993	876.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	61.5		993	1175		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	104		70 - 130						

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-31664-A-2-G MSD						Client Sample ID: Matrix Spike Duplicate					
Matrix: Solid						Prep Type: Total/NA					
Analysis Batch: 59409						Prep Batch: 59369					
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *-	992	918.4		mg/Kg		91	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	61.5		992	1254		mg/Kg		120	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	128		70 - 130								
o-Terphenyl	112		70 - 130								

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 58971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31284-1	S-6 (0-1')	Total/NA	Solid	5035	
MB 880-58971/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 58998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-58998/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 59072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31284-1	S-6 (0-1')	Total/NA	Solid	8021B	58971
MB 880-58971/5-A	Method Blank	Total/NA	Solid	8021B	58971
MB 880-58998/5-A	Method Blank	Total/NA	Solid	8021B	58998
LCS 880-58971/1-A	Lab Control Sample	Total/NA	Solid	8021B	58971
LCSD 880-58971/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58971
880-31279-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	58971
880-31279-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58971

Analysis Batch: 59205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31284-1	S-6 (0-1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31284-1	S-6 (0-1')	Total/NA	Solid	8015NM Prep	
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31284-1	S-6 (0-1')	Total/NA	Solid	8015B NM	59369
MB 880-59369/1-A	Method Blank	Total/NA	Solid	8015B NM	59369
LCS 880-59369/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59369
LCSD 880-59369/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59369
880-31664-A-2-F MS	Matrix Spike	Total/NA	Solid	8015B NM	59369
880-31664-A-2-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59369

Analysis Batch: 59486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31284-1	S-6 (0-1')	Total/NA	Solid	8015 NM	

Eurofins Midland

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

Client Sample ID: S-6 (0-1')
Date Collected: 07/25/23 00:00
Date Received: 07/26/23 16:45

Lab Sample ID: 880-31284-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	58971	08/01/23 09:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59072	08/03/23 00:13	SM	EET MID
Total/NA	Analysis	Total BTEX		1			59205	08/03/23 09:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			59486	08/07/23 10:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	59369	08/04/23 17:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59409	08/06/23 18:26	SM	EET MID

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

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-31284-1
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
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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: Tonto 15 State #1

Job ID: 880-31284-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31284-1	S-6 (0-1')	Solid	07/25/23 00:00	07/26/23 16:45

- 1
- 2
- 3
- 4
- 5
- 6
- 7
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- 14

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

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other: _____	



[illegible]

880-31284 Chain of Custody



Page 1 of 1

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

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	7-26-23 1045		

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-31284-1
SDG Number: Lea County, New Mexico

Login Number: 31284

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/13/2023 1:05:06 PM

JOB DESCRIPTION

Tonto 15 State #1
SDG NUMBER Lea County NM

JOB NUMBER

880-33030-1

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
9/13/2023 1:05:06 PM

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

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Laboratory Job ID: 880-33030-1
SDG: Lea County NM

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Definitions/Glossary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Job ID: 880-33030-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-33030-1****Receipt**

The samples were received on 9/8/2023 1:34 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 -2.7°C

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-62082 and analytical batch 880-62040 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-7 (0-1') (880-33030-1), S-7 (1.5') (880-33030-2), (890-5210-A-1-C) and (880-32833-A-8-A MB). 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: (MB 880-62041/5-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.

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-62105 and analytical batch 880-62028 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-5212-A-1-B), (890-5212-A-1-C MS) and (890-5212-A-1-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: S-7 (0-1') (880-33030-1), S-7 (1.5') (880-33030-2) and S-7 (2') (880-33030-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-62105 and analytical batch 880-62028 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-62154 and 880-62154 and analytical batch 880-62337 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Client Sample ID: S-7 (0-1')

Lab Sample ID: 880-33030-1

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 01:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 01:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 01:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/08/23 13:56	09/09/23 01:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 13:56	09/09/23 01:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/08/23 13:56	09/09/23 01:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	58	S1-	70 - 130	09/08/23 13:56	09/09/23 01:47	1
1,4-Difluorobenzene (Surr)	88		70 - 130	09/08/23 13:56	09/09/23 01:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/11/23 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			09/11/23 10:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/08/23 15:26	09/09/23 04:47	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/08/23 15:26	09/09/23 04:47	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/08/23 15:26	09/09/23 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130	09/08/23 15:26	09/09/23 04:47	1
o-Terphenyl	136	S1+	70 - 130	09/08/23 15:26	09/09/23 04:47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.0		5.02		mg/Kg			09/13/23 07:12	1

Client Sample ID: S-7 (1.5')

Lab Sample ID: 880-33030-2

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/08/23 13:56	09/09/23 02:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/08/23 13:56	09/09/23 02:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/08/23 13:56	09/09/23 02:07	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/08/23 13:56	09/09/23 02:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/08/23 13:56	09/09/23 02:07	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/08/23 13:56	09/09/23 02:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	09/08/23 13:56	09/09/23 02:07	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/08/23 13:56	09/09/23 02:07	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Client Sample ID: S-7 (1.5')

Lab Sample ID: 880-33030-2

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			09/11/23 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			09/11/23 10:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		09/08/23 15:26	09/09/23 05:08	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/08/23 15:26	09/09/23 05:08	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/08/23 15:26	09/09/23 05:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130				09/08/23 15:26	09/09/23 05:08	1
o-Terphenyl	141	S1+	70 - 130				09/08/23 15:26	09/09/23 05:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67.6		4.99		mg/Kg			09/13/23 07:18	1

Client Sample ID: S-7 (2')

Lab Sample ID: 880-33030-3

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/08/23 13:56	09/09/23 03:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/08/23 13:56	09/09/23 03:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/08/23 13:56	09/09/23 03:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/08/23 13:56	09/09/23 03:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/08/23 13:56	09/09/23 03:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/08/23 13:56	09/09/23 03:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130				09/08/23 13:56	09/09/23 03:32	1
1,4-Difluorobenzene (Surr)	97		70 - 130				09/08/23 13:56	09/09/23 03:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/11/23 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/11/23 10:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/08/23 15:26	09/09/23 05:29	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/08/23 15:26	09/09/23 05:29	1

Eurofins Midland

Client Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Client Sample ID: S-7 (2')

Lab Sample ID: 880-33030-3

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/08/23 15:26	09/09/23 05:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130				09/08/23 15:26	09/09/23 05:29	1
o-Terphenyl	131	S1+	70 - 130				09/08/23 15:26	09/09/23 05:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.4		4.99		mg/Kg			09/13/23 07:38	1

Surrogate Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-32833-A-8-A MB	Method Blank	65 S1-	101
880-33030-1	S-7 (0-1')	58 S1-	88
880-33030-2	S-7 (1.5')	68 S1-	100
880-33030-3	S-7 (2')	73	97
890-5210-A-1-A MS	Matrix Spike	113	113
890-5210-A-1-B MSD	Matrix Spike Duplicate	110	96
LCS 880-62082/1-A	Lab Control Sample	122	111
LCSD 880-62082/2-A	Lab Control Sample Dup	110	113
MB 880-62082/5-A	Method Blank	62 S1-	99
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-33030-1	S-7 (0-1')	127	136 S1+
880-33030-2	S-7 (1.5')	129	141 S1+
880-33030-3	S-7 (2')	125	131 S1+
890-5212-A-1-C MS	Matrix Spike	134 S1+	133 S1+
890-5212-A-1-D MSD	Matrix Spike Duplicate	133 S1+	130
LCS 880-62105/2-A	Lab Control Sample	91	103
LCSD 880-62105/3-A	Lab Control Sample Dup	89	101
MB 880-62105/1-A	Method Blank	145 S1+	161 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: 880-32833-A-8-A MB

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62041

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 08:55	09/08/23 17:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/08/23 08:55	09/08/23 17:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130	09/08/23 08:55	09/08/23 17:11	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/08/23 08:55	09/08/23 17:11	1

Lab Sample ID: MB 880-62082/5-A

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 11:01	09/08/23 22:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/08/23 11:01	09/08/23 22:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62	S1-	70 - 130	09/08/23 11:01	09/08/23 22:40	1
1,4-Difluorobenzene (Surr)	99		70 - 130	09/08/23 11:01	09/08/23 22:40	1

Lab Sample ID: LCS 880-62082/1-A

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09941		mg/Kg		99	70 - 130
Toluene	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.1016		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2210		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1157		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-62082/2-A

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09561		mg/Kg		96	70 - 130	4	35

Eurofins Midland

QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

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

Lab Sample ID: LCSD 880-62082/2-A

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09614		mg/Kg		96	70 - 130	5	35
Ethylbenzene	0.100	0.09614		mg/Kg		96	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2067		mg/Kg		103	70 - 130	7	35
o-Xylene	0.100	0.1039		mg/Kg		104	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-5210-A-1-A MS

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.08017		mg/Kg		80	70 - 130
Toluene	<0.00199	U	0.0998	0.08157		mg/Kg		82	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.08150		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1714		mg/Kg		86	70 - 130
o-Xylene	<0.00199	U	0.0998	0.08588		mg/Kg		86	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-5210-A-1-B MSD

Matrix: Solid

Analysis Batch: 62040

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 62082

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08514		mg/Kg		85	70 - 130	6	35
Toluene	<0.00199	U	0.100	0.08931		mg/Kg		89	70 - 130	9	35
Ethylbenzene	<0.00199	U	0.100	0.08778		mg/Kg		88	70 - 130	7	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1806		mg/Kg		90	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.09035		mg/Kg		90	70 - 130	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-62105/1-A

Matrix: Solid

Analysis Batch: 62028

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/23 15:26	09/08/23 20:37	1

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QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

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

Lab Sample ID: MB 880-62105/1-A

Matrix: Solid

Analysis Batch: 62028

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/23 15:26	09/08/23 20:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 15:26	09/08/23 20:37	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130				09/08/23 15:26	09/08/23 20:37	1
o-Terphenyl	161	S1+	70 - 130				09/08/23 15:26	09/08/23 20:37	1

Lab Sample ID: LCS 880-62105/2-A

Matrix: Solid

Analysis Batch: 62028

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 62105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1157		mg/Kg		116	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1011		mg/Kg		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	91		70 - 130				
o-Terphenyl	103		70 - 130				

Lab Sample ID: LCSD 880-62105/3-A

Matrix: Solid

Analysis Batch: 62028

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 62105

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1080		mg/Kg		108	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	947.1		mg/Kg		95	70 - 130	7	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	89		70 - 130						
o-Terphenyl	101		70 - 130						

Lab Sample ID: 890-5212-A-1-C MS

Matrix: Solid

Analysis Batch: 62028

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 62105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	971.0		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	63.7		1010	1106		mg/Kg		104	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	134	S1+	70 - 130						
o-Terphenyl	133	S1+	70 - 130						

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QC Sample Results

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

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

Lab Sample ID: 890-5212-A-1-D MSD

Matrix: Solid

Analysis Batch: 62028

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 62105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	956.7		mg/Kg		94	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	63.7		1010	1099		mg/Kg		103	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	133	S1+	70 - 130								
o-Terphenyl	130		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62154/1-A

Matrix: Solid

Analysis Batch: 62337

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/13/23 04:58	1

Lab Sample ID: LCS 880-62154/2-A

Matrix: Solid

Analysis Batch: 62337

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.0		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-62154/3-A

Matrix: Solid

Analysis Batch: 62337

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	247.1		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-33015-A-10-D MS

Matrix: Solid

Analysis Batch: 62337

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	132	F1	251	405.4		mg/Kg		109	90 - 110

Lab Sample ID: 880-33015-A-10-E MSD

Matrix: Solid

Analysis Batch: 62337

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	132	F1	251	411.0	F1	mg/Kg		112	90 - 110	1	20

Eurofins Midland

QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

GC VOA

Analysis Batch: 62040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33030-1	S-7 (0-1')	Total/NA	Solid	8021B	62082
880-33030-2	S-7 (1.5')	Total/NA	Solid	8021B	62082
880-33030-3	S-7 (2')	Total/NA	Solid	8021B	62082
880-32833-A-8-A MB	Method Blank	Total/NA	Solid	8021B	62041
MB 880-62082/5-A	Method Blank	Total/NA	Solid	8021B	62082
LCS 880-62082/1-A	Lab Control Sample	Total/NA	Solid	8021B	62082
LCSD 880-62082/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62082
890-5210-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	62082
890-5210-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	62082

Prep Batch: 62041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32833-A-8-A MB	Method Blank	Total/NA	Solid	5030B	

Prep Batch: 62082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33030-1	S-7 (0-1')	Total/NA	Solid	5035	
880-33030-2	S-7 (1.5')	Total/NA	Solid	5035	
880-33030-3	S-7 (2')	Total/NA	Solid	5035	
MB 880-62082/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62082/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62082/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5210-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-5210-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 62183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33030-1	S-7 (0-1')	Total/NA	Solid	Total BTEX	
880-33030-2	S-7 (1.5')	Total/NA	Solid	Total BTEX	
880-33030-3	S-7 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 62028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33030-1	S-7 (0-1')	Total/NA	Solid	8015B NM	62105
880-33030-2	S-7 (1.5')	Total/NA	Solid	8015B NM	62105
880-33030-3	S-7 (2')	Total/NA	Solid	8015B NM	62105
MB 880-62105/1-A	Method Blank	Total/NA	Solid	8015B NM	62105
LCS 880-62105/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62105
LCSD 880-62105/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62105
890-5212-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	62105
890-5212-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	62105

Prep Batch: 62105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33030-1	S-7 (0-1')	Total/NA	Solid	8015NM Prep	
880-33030-2	S-7 (1.5')	Total/NA	Solid	8015NM Prep	
880-33030-3	S-7 (2')	Total/NA	Solid	8015NM Prep	
MB 880-62105/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62105/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

GC Semi VOA (Continued)

Prep Batch: 62105 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-62105/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5212-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5212-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 62149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33030-1	S-7 (0-1')	Total/NA	Solid	8015 NM	
880-33030-2	S-7 (1.5')	Total/NA	Solid	8015 NM	
880-33030-3	S-7 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 62154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33030-1	S-7 (0-1')	Soluble	Solid	DI Leach	
880-33030-2	S-7 (1.5')	Soluble	Solid	DI Leach	
880-33030-3	S-7 (2')	Soluble	Solid	DI Leach	
MB 880-62154/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62154/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62154/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33015-A-10-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33015-A-10-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 62337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33030-1	S-7 (0-1')	Soluble	Solid	300.0	62154
880-33030-2	S-7 (1.5')	Soluble	Solid	300.0	62154
880-33030-3	S-7 (2')	Soluble	Solid	300.0	62154
MB 880-62154/1-A	Method Blank	Soluble	Solid	300.0	62154
LCS 880-62154/2-A	Lab Control Sample	Soluble	Solid	300.0	62154
LCSD 880-62154/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62154
880-33015-A-10-D MS	Matrix Spike	Soluble	Solid	300.0	62154
880-33015-A-10-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62154

Lab Chronicle

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Client Sample ID: S-7 (0-1')

Lab Sample ID: 880-33030-1

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	62082	09/08/23 13:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62040	09/09/23 01:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62183	09/11/23 13:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			62149	09/11/23 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	62105	09/08/23 15:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62028	09/09/23 04:47	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62154	09/11/23 10:21	AG	EET MID
Soluble	Analysis	300.0		1			62337	09/13/23 07:12	CH	EET MID

Client Sample ID: S-7 (1.5')

Lab Sample ID: 880-33030-2

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	62082	09/08/23 13:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62040	09/09/23 02:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62183	09/11/23 13:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			62149	09/11/23 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	62105	09/08/23 15:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62028	09/09/23 05:08	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	62154	09/11/23 10:21	AG	EET MID
Soluble	Analysis	300.0		1			62337	09/13/23 07:18	CH	EET MID

Client Sample ID: S-7 (2')

Lab Sample ID: 880-33030-3

Date Collected: 09/07/23 00:00

Matrix: Solid

Date Received: 09/08/23 13:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	62082	09/08/23 13:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62040	09/09/23 03:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62183	09/11/23 13:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			62149	09/11/23 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	62105	09/08/23 15:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62028	09/09/23 05:29	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	62154	09/11/23 10:21	AG	EET MID
Soluble	Analysis	300.0		1			62337	09/13/23 07:38	CH	EET MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: Carmona Resources
Project/Site: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

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: Tonto 15 State #1

Job ID: 880-33030-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-33030-1	S-7 (0-1')	Solid	09/07/23 00:00	09/08/23 13:34
880-33030-2	S-7 (1.5')	Solid	09/07/23 00:00	09/08/23 13:34
880-33030-3	S-7 (2')	Solid	09/07/23 00:00	09/08/23 13:34

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

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

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> <input type="checkbox"/> partund <input type="checkbox"/>
State of Project:	
Reporting Level II	<input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables EDD	<input type="checkbox"/> Adapt <input type="checkbox"/> Other

W/O



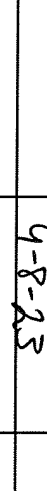


880-33030 Chain of Custody

9/13/2023

[illegible]

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

Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
	9-8-23		9/8/23
			9/8/23

Login Sample Receipt Checklist

Client: Carmona Resources

Job Number: 880-33030-1

SDG Number: Lea County NM

Login Number: 33030

List Number: 1

Creator: Kramer, Jessica

List Source: Eurofins Midland

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

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

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

CONDITIONS

Action 267580

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 267580
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Closure approved per conditions of the remediation report approved 7/25/2018.	11/6/2023