CARMONA RESOURCES

SITE INFORMATION

Closure Report
Red Hills Unit #21H
Incident ID: nAPP2302952170
Lea County, New Mexico
Unit A Sec 33 T25S R33E
32.09306°, -103.57151°

Crude Oil and Produced Water Release
Point of Release: Gasket failure on the 2" line on top of the wellhead compressor
Release Date: 01/28/2023
Volume Released: 4 Barrels of Crude Oil and 13.3 Barrels of Produced Water
Volume Recovered: 2 Barrels of Crude Oil and 13 Barrels of Produced Water

CARMONA RESOURCES

Prepared for:
Cimarex Energy Co. of Colorado
600 N. Marienfeld Street
Suite 600
Midland, Texas 79701

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

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

CARMONA RESOURCES

TABLE OF CONTENTS

FIGURES

APPENDICES

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

CARMONA RESOURCES

March 19, 2023

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

Re: Closure Report
Red Hills Unit #21H
Cimarex Energy Co. of Colorado
Site Location: Unit A, S33 T25S, R33E
(Lat 32.09306º, Long -103.57151°)
Lea County, New Mexico

To whom it may concern:

On behalf of Cimarex Energy Co. of Colorado (Cimarex), Carmona Resources, LLC has prepared this letter to document site activities for the Red Hills Unit #21H. The site is located at 32.09306º, -103.57151º within Unit A, S33, T25S, R33E, in Lea County, New Mexico (Figures 1 and 2).

1.0 Site information and Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the leak was discovered on January 28, 2023, caused by a failed gasket from a 2" line on top of the wellhead compressor. It resulted in approximately four (4) barrels of crude oil and thirteen-point-three (13.3) barrels of produced water released. Two (2) barrels of crude oil and thirteen (13) barrels of produced water were recovered. Immediately after the release was noticed, all standing fluids and impacted soil on the surface was scrapped and stockpiled on plastic. The impacted area is located on the pad. Refer to Figure 3 for spill overview. The initial C-141 form is attached in Appendix C.

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 sources are within a 0.50-mile radius of the location. The nearest groundwater determination bore is located approximately 0.74 miles West of the site in S33, T25S, R33E and was drilled in 2022.

On February 10, 2022, Scarborough Drilling, Inc drilled a groundwater determination bore to 55' below ground surface on a nearby location, 0.74 miles of the location. The bore was left open for 72 hours and tagged with a water level meter. No water was detected at 55' below the surface. The coordinates for the groundwater determination bore are 32.093649°, -103.584455°. See Appendix D for the log.

A groundwater variance was requested and granted on January 31, 2023. To use a groundwater determination bore drilled 0.74 miles West of the location.

3.0 NMAC Regulatory Criteria

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

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

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

CARMONA RESOURCES

- Chloride: 10,000 mg/kg.

4.0 Site Assessment Activities

On February 14, 2023, a third-party environmental consultant performed site assessment activities to evaluate soil impacts. To assess the vertical and horizontal extent, four (4) sample points and four (4) horizontal sample points were advanced to depths ranging from the surface to 2' bgs inside the area of concern. For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015, modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 300.0. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E. Refer to Table 1. See Figure 3 for the sample locations.

5.0 Remediation Activities

Carmona Resources personnel were onsite to supervise the remediation activities, collect confirmation samples, and document backfill activities. Before collecting composite confirmation samples, the NMOCD division office was notified via email on March 6, 2023, per Subsection D of 19.15.29.12 NMAC. See Appendix C. The area of S-4 was excavated to a depth of 0.75' below the surface to remove all the impacted soils. A total of five (5) confirmation floor samples (CS-1 through CS-5), and four (4) sidewall samples (SW-1 through SW-4) were collected every 200 square feet to ensure the proper removal of the contaminated soils. All collected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA Method 4500. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E. The excavation depths and confirmation sample locations are shown in Figure 4.

All final confirmation samples were below the regulatory requirements for TPH, BTEX, and chloride. Refer to Table 2.

Once the remediation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 40 cubic yards of material were excavated and transported offsite for proper disposal.

6.0 Conclusion

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

Sincerely,

Carmona Resources, LLC

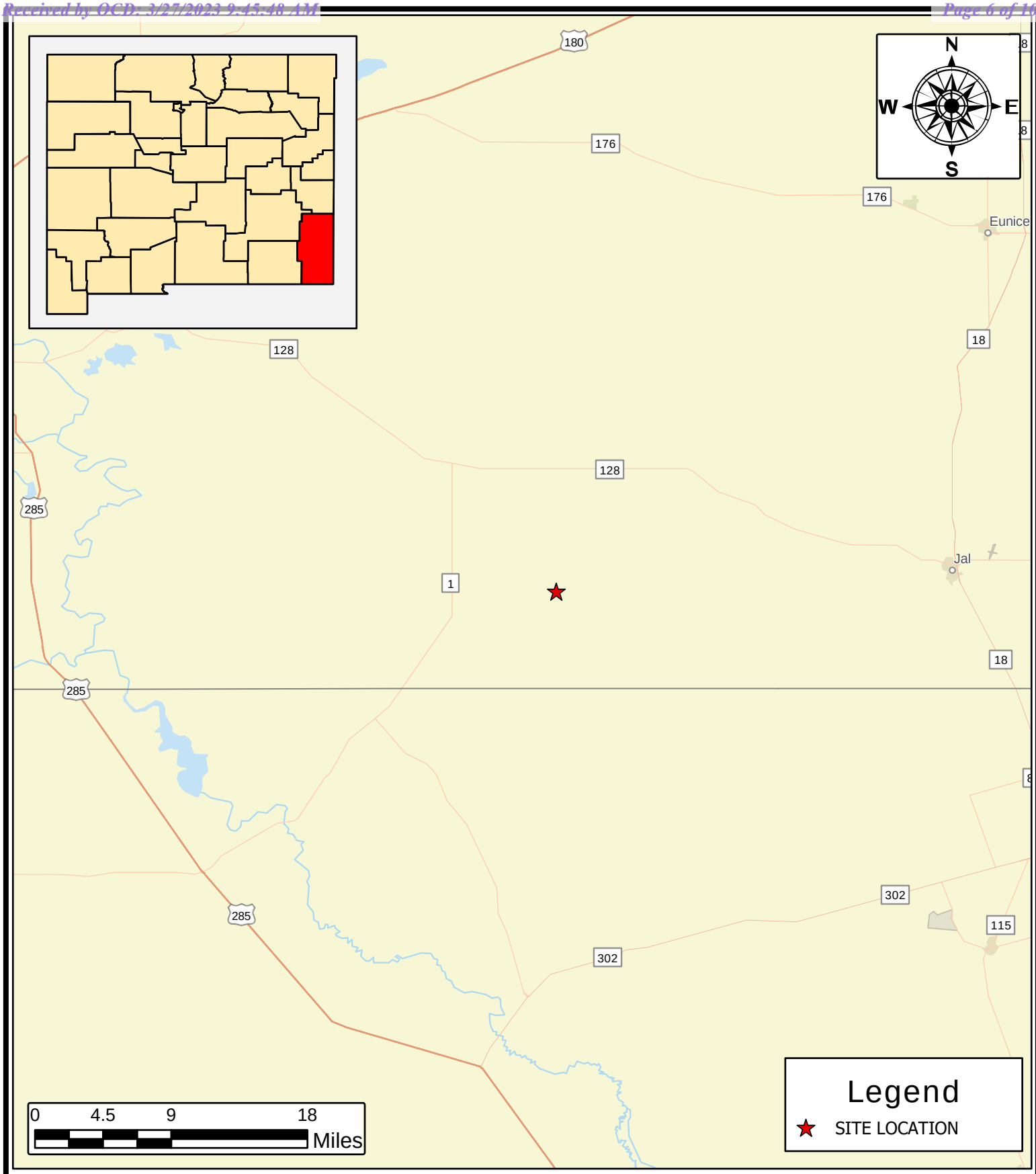
Conner Moehring
Sr. Project Manager

Ashton Thielke
Sr. Project Manager

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

FIGURES

CARMONA RESOURCES



OVERVIEW MAP
CIMAREX ENERGY CO. OF COLORADO
RED HILLS UNIT #21H
LEA COUNTY, NEW MEXICO
32.09306, -103.57151

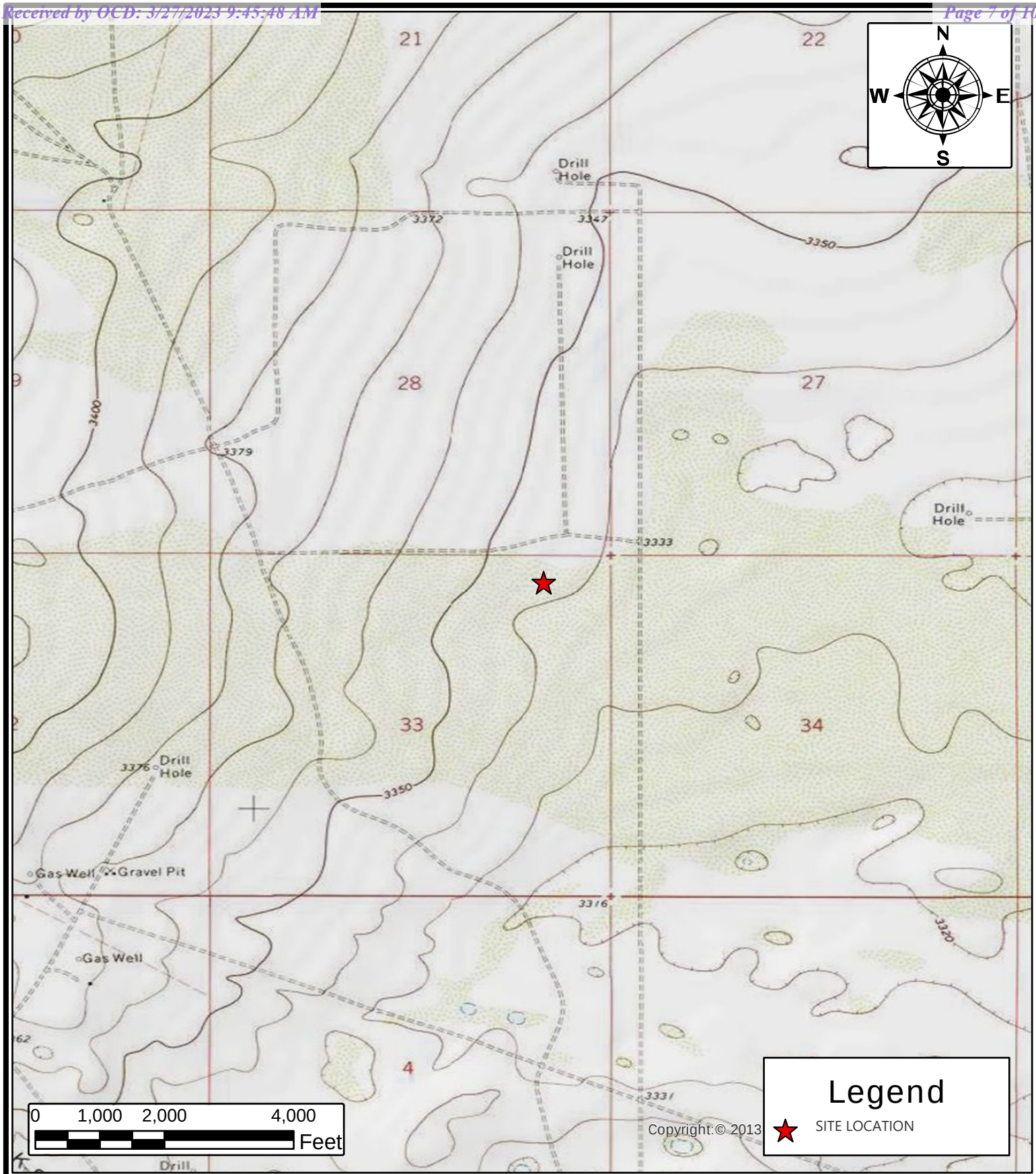
SCALE: As Shown | Date: 3/16/2023

CARMONA RESOURCES

Carmona Resources
310 West Wall Street, Suite 500
Midland, Texas 79701

NOTES:
1. Base Image: ESRI Maps & Data 2023
2. Map Projection: WGS84

DRAWING NUMBER:
FIGURE 1
SHEET NUMBER:
1 of 1



TOPOGRAPHIC MAP
CIMAREX ENERGY CO. OF COLORADO
RED HILLS UNIT #21H
LEA COUNTY, NEW MEXICO
32.09306, -103.57151

SCALE: As Shown | Date: 3/16/2023

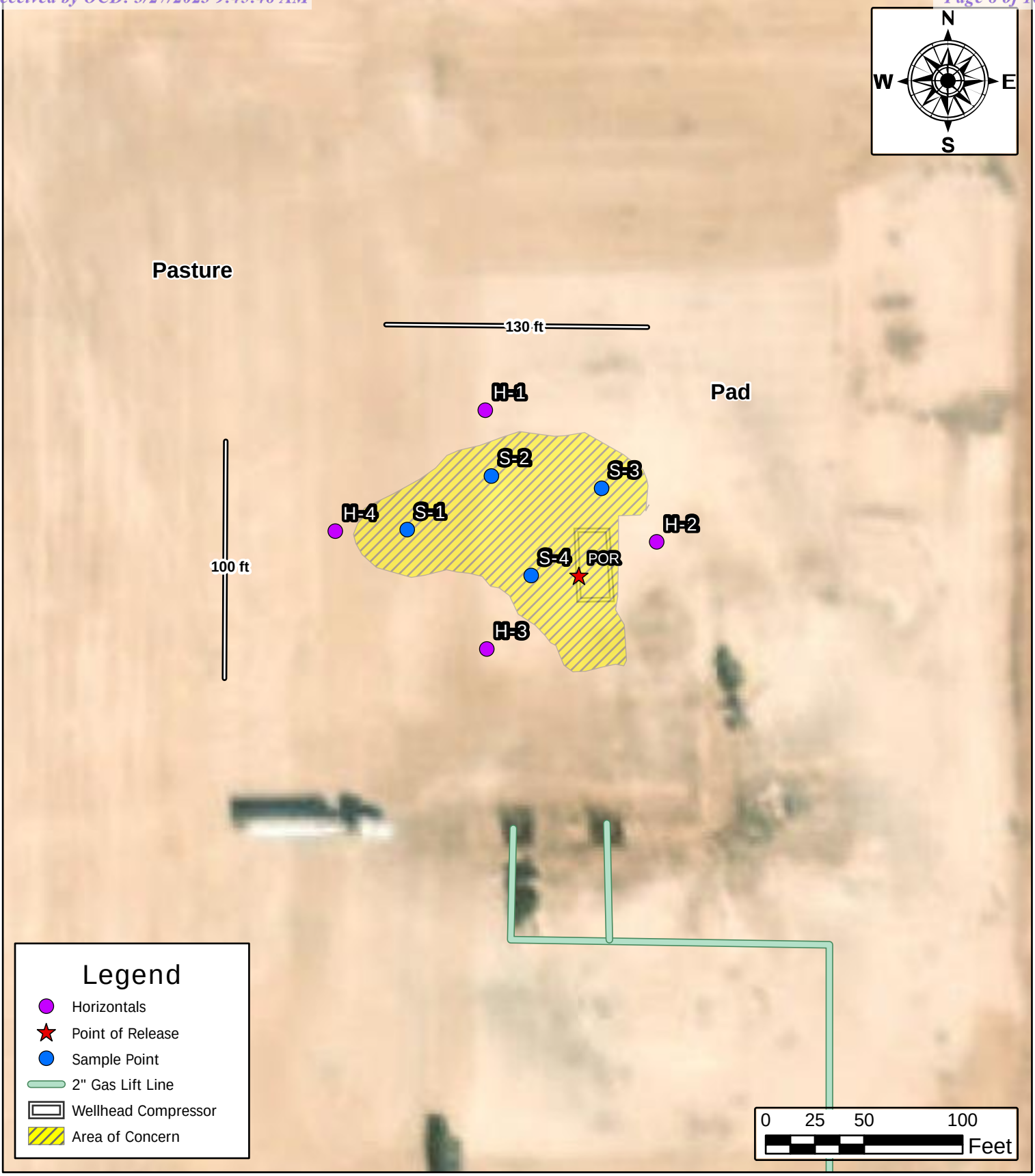
CARMONA RESOURCES

Carmona Resources
310 West Wall Street, Suite 500
Midland, Texas 79701

NOTES:

1. Base Image: ESRI Maps & Data 2023
2. Map Projection: WGS84

DRAWING NUMBER:
FIGURE 2
SHEET NUMBER:
1 of 1



SAMPLE LOCATION MAP
CIMAREX ENERGY CO. OF COLORADO
RED HILLS UNIT #21H
LEA COUNTY, NEW MEXICO
32.09306, -103.57151

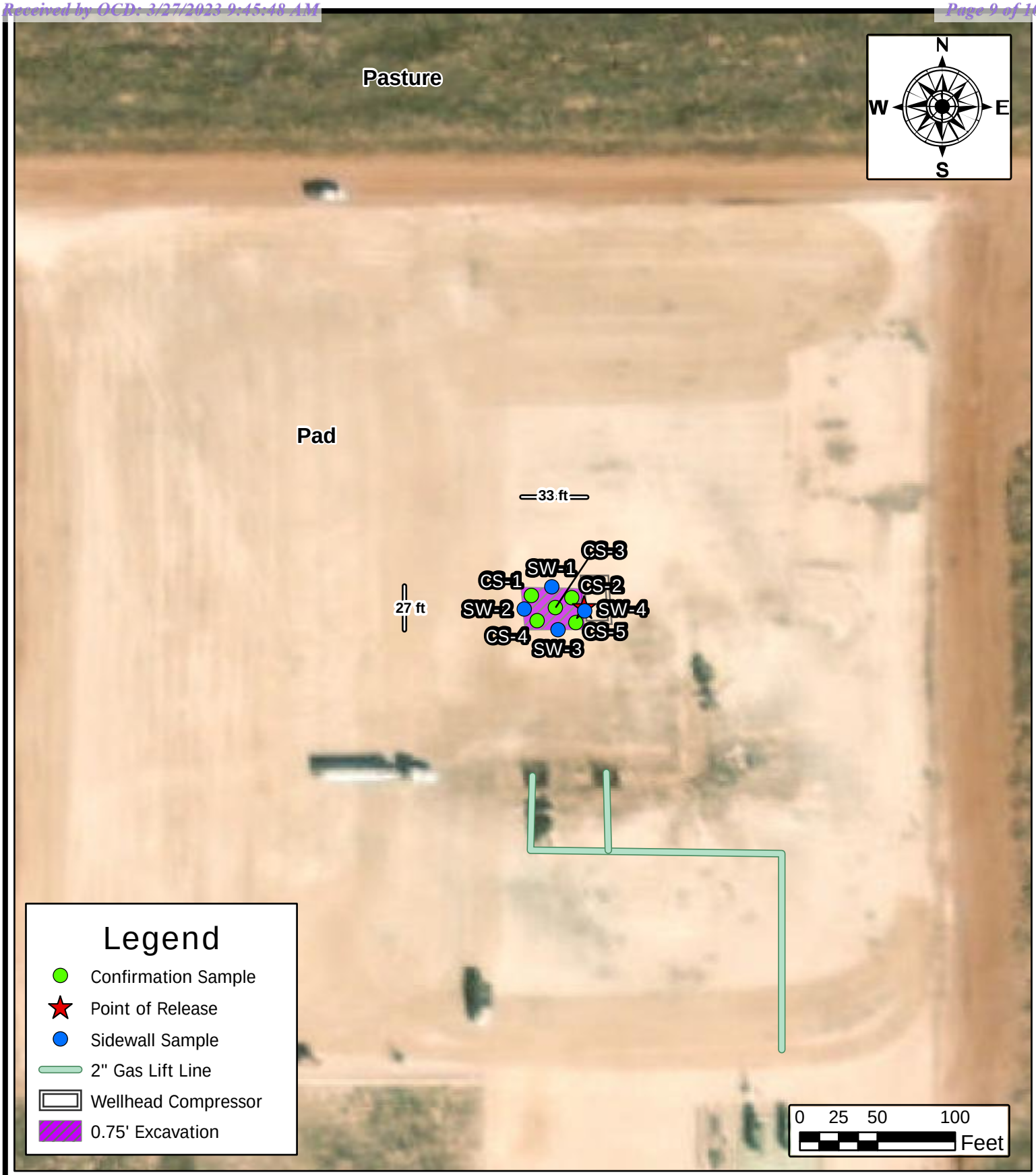
SCALE: As Shown | Date: 3/17/2023

CARMONA RESOURCES

Carmona Resources
310 West Wall Street, Suite 500
Midland, Texas 79701

NOTES:
1. Base Image: ESRI Maps & Data 2023
2. Map Projection: WGS84

DRAWING NUMBER:
FIGURE 3
SHEET NUMBER:
1 of 1



EXCAVATION DEPTH MAP
CIMAREX ENERGY CO. OF COLORADO
RED HILLS UNIT #21H
LEA COUNTY, NEW MEXICO
32.09306, -103.57151

SCALE: As Shown

Date: 3/17/2023

CARMONA RESOURCES

Carmona Resources
310 West Wall Street, Suite 500
Midland, Texas 79701

NOTES:

1. Base Image: ESRI Maps & Data 2023
2. Map Projection: WGS84

DRAWING NUMBER:

FIGURE 4

SHEET NUMBER:

1 of 1

APPENDIX A

CARMONA RESOURCES

Table 1
Cimarex
Red Hills Unit #21H
Lea County, New Mexico

Sample ID	Date	Depth (in)	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	2/14/2023	0-0.5'	<49.9	68.0	<49.9	68.0	<0.00201	<0.00201	<0.00201	0.00552	0.00552	6,900
	"	0.5-1'	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,340
	"	2'	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	223
S-2	2/14/2023	0-0.5'	<49.8	<49.8	<49.8	<49.8	<0.00000192	<0.00000192	<0.00000192	<0.0000038	<0.0000038	6,240
	"	0.5-1'	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	1,640
	"	2'	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	165
S-3	2/14/2023	0-0.5'	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	3,430
	"	0.5-1'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,330
	"	2'	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	33.6
S-4	2/14/2023	0-0.5'	242	**1,630**	164	2,040	<0.0398	0.122	<0.0398	3.21	3.33	749
	"	0.5-1'	<50.0	130	<50.0	130	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	142
	"	2'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	13.6
H-1	2/14/2023	0-1'	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	31.4
H-2	2/14/2023	0-1'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	30.9
H-3	2/14/2023	0-1'	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	37.9
H-4	2/14/2023	0-1'	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	61.1
Regulatory Criteria [A]			1,000 mg/kg			2,500 mg/kg	10 mg/kg	-	-	-	50 mg/kg	10,000 mg/kg

(-) Not Analyzed

[A] – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH - Total Petroleum Hydrocarbons

ft - feet

(S) Soil Sample

(H) Horizontal Sample

Removed

Table 2
Cimarex
Red Hills Unit #21
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						
CS-1	3/8/2023	0.75	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
CS-2	3/8/2023	0.75	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	544
CS-3	3/8/2023	0.75	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
CS-4	3/8/2023	0.75	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	896
CS-5	3/8/2023	0.75	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	224
SW-1	3/8/2023	0-0.75	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-2	3/8/2023	0-0.75	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
SW-3	3/8/2023	0-0.75	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
SW-4	3/8/2023	0-0.75	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
Regulatory Criteria [A]			1,000 mg/kg			2,500 mg/kg	10 mg/kg				50 mg/kg	10,000 mg/kg

(-) Not Analyzed
[A] – Table 1 - 19.15.29 NMAC
mg/kg - milligram per kilogram
TPH - Total Petroleum Hydrocarbons
ft-feet
(CS) Confirmation Smaple
(SW) Sidewall Sample

APPENDIX B

CARMONA RESOURCES

PHOTOGRAPHIC LOG

Cimarex Energy Co. of Colorado

Photograph No. 1

Facility: Red Hills Unit #21H

County: Lea County, New Mexico

Description:
View East, area of impact.

Photograph No. 2

Facility: Red Hills Unit #21H

County: Lea County, New Mexico

Description:
View Northeast, area of impact.

Photograph No. 3

Facility: Red Hills Unit #21H

County: Lea County, New Mexico

Description:
View Northwest, area of CS-1 through CS-5.

PHOTOGRAPHIC LOG

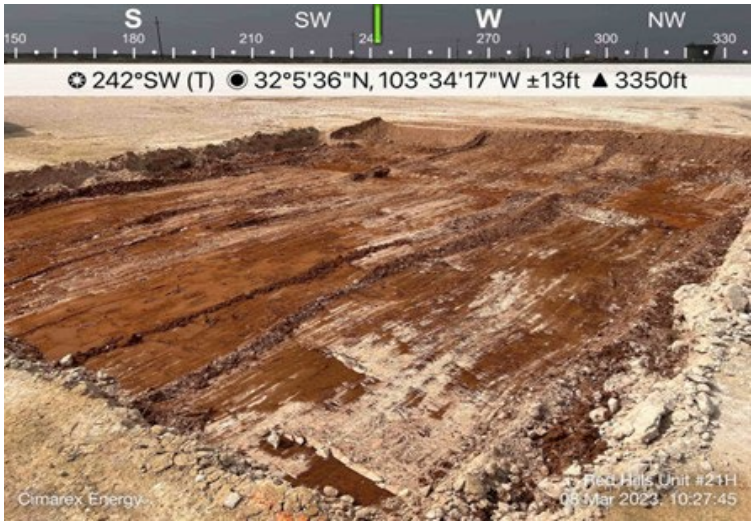
Cimarex Energy Co. of Colorado

Photograph No. 4

Facility: Red Hills Unit #21H

County: Lea County, New Mexico

Description:
View Southwest, area of CS-1 through CS-5.



APPENDIX C

CARMONA RESOURCES

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	nAPP2302952170
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Cimarex Energy Co. of Colorado	OGRID: 162683
Contact Name: Laci Luig	Contact Telephone: (432) 571-7800
Contact email: laci.luig@coterra.com	Incident # *(assigned by OCD)* nAPP2302952170
Contact mailing address: 600 N Marienfeld Street, Ste. 600 Midland, TX 79701	

Location of Release Source

Latitude 32.09306 Longitude -103.57151

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Red Hills Unit 21H	Site Type: Well Pad
Date Release Discovered: 1/28/2023	API# *(if applicable)* 30-025-48443

Unit Letter	Section	Township	Range	County
A	33	25S	33E	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)

☒ Crude Oil	Volume Released (bbls) 4	Volume Recovered (bbls) 2
☒ Produced Water	Volume Released (bbls) 13.3	Volume Recovered (bbls) 13
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Equipment Failure
The Lease Operator found the injection wellhead compressor releasing liquids from a 2" line on top of the compressor. The well was immediately shut in and the compressor shut down and isolated. The total fluid released was 17.3 barrels on the well pad with all fluids remaining on the pad. A vac truck was immediately called and recovered a total of 15 barrels from the pad and a surface scrape is scheduled to remove impacted soils. The root cause of the release is still under investigation. Any further remediation will be scheduled in the coming weeks. Spilled: 17.3 barrels water (4 barrels oil + 13.3 barrels water) Recovered: 15 barrels (2 barrels oil + 13 barrels water)

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2302952170
District RP	
Facility ID	
Application ID	

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

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Laci Luig Title: ESH Specialist

Signature: Laci Luig Date: 1/29/2023

email: laci.luig@coterra.com Telephone: (432) 208-3035

OCD Only

Received by: Jocelyn Harimon Date: 03/27/2023

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2302952170
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>55 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2302952170
District RP	
Facility ID	
Application ID	

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

Printed Name: Laci Luig_____ Title: ESH Specialist_____

Signature: _____ Date: 3/24/2023_____

email: laci.luig@coterra.com_____ Telephone: (432) 208-3035_____

OCD Only

Received by: Jocelyn Harimon_____ Date: 03/27/2023_____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2302952170
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Laci Luig Title: ESH Specialist

Signature: Laci Luig Date: 3/24/2023

email: laci.luig@coterra.com Telephone: (432) 208-3035

OCD Only

Received by: Jocelyn Harimon Date: 03/27/2023

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: Jennifer Nobui Date: 04/27/2023

Printed Name: Jennifer Nobui Title: Environmental Specialist A

Ashton Thielke

From: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Sent: Tuesday, January 31, 2023 9:56 AM
To: Ashton Thielke
Cc: Laci Luig
Subject: RE: [EXTERNAL] Incident #: nAPP2302952170 - Red Hills Unit #21H (01.28.2023) - Closure Criteria Variance Request

Hello Ashton

After reviewing the information you provided in the below emails, OCD will accept your request for a variance to use criteria where groundwater is located between 51-100' (10,000 mg/kg chloride, 2,500 mg/kg TPH, etc). Please include this entire email chain and all attachments in your remediation plan/closure report to ensure the notifications and variance approvals are documented in the project file.

Please let me know if you have any questions.

Thanks,
Jennifer Nobui

From: Ashton Thielke <Ashton.Thielke@coterra.com>
Sent: Tuesday, January 31, 2023 8:37 AM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Cc: Laci Luig <Laci.Luig@coterra.com>
Subject: RE: [EXTERNAL] Incident #: nAPP2302952170 - Red Hills Unit #21H (01.28.2023) - Closure Criteria Variance Request

Good morning,

The coordinates for this site is: 32.093711, -103.584500

Looking at the spill area and comparing it to this boring, the distance between to the is 0.74 miles.

Hope that helps!

COTERRA

Ashton Thielke | PBU - Environmental Consultant
T: 432.813.5347 | M: 281.753.5659 | ashton.thielke@coterra.com | www.coterra.com
Coterra Energy Inc. | 600 N. Marienfeld Street, Suite 600 | Midland, TX 79701

Coterra Energy Inc. is the result of the merger of Cimarex Energy Co. and Cabot Oil & Gas Corporation on October 1, 2021.

From: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Sent: Tuesday, January 31, 2023 9:16 AM
To: Ashton Thielke <Ashton.Thielke@coterra.com>
Cc: Laci Luig <Laci.Luig@coterra.com>
Subject: RE: [EXTERNAL] Incident #: nAPP2302952170 - Red Hills Unit #21H (01.28.2023) - Closure Criteria Variance Request

WARNING: This email originated from outside of Coterra Energy. Do not click links or open attachments unless you recognize the sender, are expecting the content and know it is safe.

Hi Ashton

Can you include the lat and long for the DTW boring advanced that is 0.78 miles away?

Thanks,
Jennifer Nobui

From: Ashton Thielke <Ashton.Thielke@coterra.com>
Sent: Monday, January 30, 2023 3:39 PM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Cc: Laci Luig <Laci.Luig@coterra.com>
Subject: [EXTERNAL] Incident #: nAPP2302952170 - Red Hills Unit #21H (01.28.2023) - Closure Criteria Variance Request

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good afternoon Ms. Nobui,

Per our recent phone call, I'd like to request a closure criteria variance.
We have recently had a spill at the above mentioned site over the weekend on 01.28.2023.
The spill was contained 100% on pad.
Cimarex immediately removed all free standing fluids from the pad.
Cimarex plans to fully vertically/horizontally delineate per NMAC 19.15.29

Attached is groundwater research from the area surrounding our release.
All wells found on the USGS and NMSEO websites show groundwater to be >100'.
Also included are Groundwater Determination Bores installed at nearby Cimarex facilities.
The nearest Groundwater Determination Bore is located 0.78 Miles west of our spill area. (mentioned in phone call)
It is also important to state that the NMSEO Water Well located 1.36 miles east of our spill area has a recent measured depth to water of 130' instead of the 110' that was originally reported.
This is an inactive windmill and was measured by Concho in January 2021 to have a water depth of 130'.
Information was found on page 2 of the closure report for incident #: nRM2029631183

Due to the depth of local groundwater and the site being in a low karst, Cimarex requests a closure criteria variance to reflect groundwater 51' – 100' as shown in Table 1 of 19.15.29.12 NMAC.

Please let me know if you have any questions,

Thanks!

Ashton Thielke | PBU - Environmental Consultant
T: 432.813.5347 | M: 281.753.5659 | ashton.thielke@coterra.com | www.coterra.com
Coterra Energy Inc. | 600 N. Marienfeld Street, Suite 600 | Midland, TX 79701

Coterra Energy Inc. is the result of the merger of Cimarex Energy Co. and Cabot Oil & Gas Corporation on October 1, 2021.

This message may contain confidential and/or privileged information. If you are not the addressee or authorized to receive this for the addressee, you must not use, copy, disclose or take any action based on this message or any information herein. If you have received this message in error, please advise the sender immediately by reply e-mail and delete this message.

Ashton Thielke

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Monday, March 6, 2023 4:26 PM
To: Ashton Thielke
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] nAPP2302952170 - Red Hills Unit 21H - Confirmation Sampling Notification

Ashton,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Ashton Thielke <Ashton.Thielke@coterra.com>
Sent: Monday, March 6, 2023 2:32 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Laci Luig <Laci.Luig@coterra.com>
Subject: [EXTERNAL] nAPP2302952170 - Red Hills Unit 21H - Confirmation Sampling Notification

Good morning,

This new email serves as 48 hr notification for confirmation sampling on the above mentioned site.
Sampling is now scheduled to begin as early as 9:00 (MST) March 8, 2023, weather and soil conditions permitting.
Incident ID: nAPP2302952170
Coordinates: 32.9306, -103.57151

Thank you,

Ashton Thielke | PBU - Environmental Consultant
T: 432.813.8988 | M: 281.753.5659 | ashton.thielke@coterra.com | www.coterra.com
Coterra Energy Inc. | 600 N. Marienfeld Street, Suite 600 | Midland, TX 79701

Coterra Energy Inc. is the result of the merger of Cimarex Energy Co. and Cabot Oil & Gas Corporation on October 1, 2021.

APPENDIX D

CARMONA RESOURCES

Nearest Water Well

Cimarex Energy

204.36' - Drilled 1981

Cascade 28 Fed #85 GWDB (06.14.2022) - >55'

212.97' - Drilled 1976

110' - Drilled 1925

Red Hills GWDB (02.10.2022) - >55'

Red Hills Unit #21H (01.28.2023)

232.96' - Drilled 2013

280' - Drilled 2021

189.79' - Drilled 1986

Legend

- 0.50 Mile Radius
- 0.74 Miles
- 1.03 Miles
- 1.36 Miles
- 1.36 Miles
- 1.42 Miles
- 1.92 Miles
- 1.93 Miles
- 2.05 Miles
- GWDB >55'
- NMSEO Water Well
- Red Hills Unit #21H (01.28.2023)
- USGS Water Well

Google Earth

3000 ft

N

Low Karst

Cimarex Energy Co.

Legend

- Low
- Medium
- Red Hills Unit #21H (01.28.2023)

Red Hills Unit #21H (01.28.2023)

N

5000 ft

Daily Site Visit Report

Client:	Cimarex Energy Company of Colorado	Inspection Date:	2/10/2022
Site Location Name:	Red Hills Unit 1 SWD	Report Run Date:	2/28/2022 4:17 PM
Client Contact Name:	Kyle Blevins	API #:	
Client Contact Phone #:	(575)441-6781		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	2/10/2022 9:00 AM
Departed Site	2/10/2022 11:00 AM

Field Notes

9:10 Arrived on site and met up with Laci Luig from cimarex and no Scarborough drilling to drill for a GW bore.

9:14 Signed Cimarex JSA

Next Steps & Recommendations

1 Digitize the drilling log and come back within 72 hours to see if a bailer pulls up water. Borehole was drilled to 55 feet.

Daily Site Visit Report

Site Photos

Viewing Direction: North	**Viewing Direction**: West
	
Borehole Location	30' depth
Viewing Direction: West	**Viewing Direction**: West
	
PVC Installation	35' depth

Daily Site Visit Report

Viewing Direction: West	**Viewing Direction**: West
	
45' depth	50' depth
Viewing Direction: West	**Viewing Direction**: North
	
PVC casing installation	Top 30' and goes down in 5' increments to 50'

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Mike Moffitt

Signature: 
Signature

Daily Site Visit Report

Client:	Cimarex Energy Company of Colorado	Inspection Date:	2/15/2022
Site Location Name:	Red Hills Unit 1 SWD	Report Run Date:	2/28/2022 3:56 PM
Client Contact Name:	Kyle Blevins	API #:	
Client Contact Phone #:	(575)441-6781		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	2/15/2022 11:30 AM
Departed Site	2/15/2022 11:52 AM

Field Notes

11:42 Arrived on site to put a bailer down the borehole to see if water moves through the screen and collected at depth.

11:43 Tied off the bailer with rope and a slip note around my hand for 65 feet worth of depth. this was to account for the 2 inch casing above ground.

11:44 Sent the bailer down hole from on top of my truck bed.

11:46 Pulled the bailer up, no water was found to be present.

11:49 Total depth of the well was measured with a tape and weight to be 55 feet BGS and 61 feet total. The additional footage was from the 6ft of PVC casing located above the hole. The driller did this to make the Borehole location known to the workers on the pad.

Next Steps & Recommendations

1 Water was not present at the bottom of the borehole as evidenced by the results of trying to bail the well. This location is ready for P & A. No further testing will be required. GW is not present at 55' feet BGS.

Daily Site Visit Report

Site Photos

Viewing Direction: North	**Viewing Direction**: East
	
Location of Borehole and PVC casing above ground.	Bailer post DTGW test.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Mike Moffitt

Signature: 
Signature

SOIL BORE LOG

Project:	Mesquite Vaca Draw ROW Spill	**Date:**	Jun 14, 2022
Type:	Exploratory Water Bore	**Location:**	Cascade 28 Fed #85H Pad

Depth	Soil Type	Classification	Comments
0-0.5′	Caliche	N/A	
0.5-5′	Fine Sand	N/A	
5′-10′	Caliche	N/A	
10-55′	Fine Sand	N/A	6/14/22- Dry/No Water 6/17/22- Dry/ No Water

PHOTOGRAPHIC DOCUMENTATION

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02313	2	3	3	26	25S	33E	636971	3552098*

Driller License:		**Driller Company:**			
Driller Name:	UNKNOWN				
Drill Start Date:	01/01/1925	**Drill Finish Date:**	06/30/1925	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	60 GPM
Casing Size:	6.88	**Depth Well:**	150 feet	**Depth Water:**	110 feet

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

Click to hideNews Bulletins

- See the Water Data for the Nation Blog for the latest news and updates.

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320615103352601

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

USGS 320615103352601 25S.33E.20.443331

Lea County, New Mexico
Latitude 32°06'15", Longitude 103°35'26" NAD27
Land-surface elevation 3,404 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1970-12-08		D	62610		3189.60	NGVD29	1	Z		
1970-12-08		D	62611		3191.23	NAVD88	1	Z		
1970-12-08		D	72019	212.77			1	Z		
1976-01-08		D	62610		3189.40	NGVD29	1	Z		
1976-01-08		D	62611		3191.03	NAVD88	1	Z		
1976-01-08		D	72019	212.97			1	Z		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929

Section	Code	Description
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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

Accessibility FOIA Privacy Policies and Notices

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

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2022-12-12 08:32:32 EST
0.28 0.25 nadww02

Click to hideNews Bulletins

- See the Water Data for the Nation Blog for the latest news and updates.

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320631103351401

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

USGS 320631103351401 25S.33E.20.443313

Lea County, New Mexico
Latitude 32°06'31", Longitude 103°35'14" NAD27
Land-surface elevation 3,398 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1981-03-25		D	62610		3192.01	NGVD29	1	Z		
1981-03-25		D	62611		3193.64	NAVD88	1	Z		
1981-03-25		D	72019	204.36			1	Z		

Explanation

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

Section	Code	Description
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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

Click to hideNews Bulletins

- See the Water Data for the Nation Blog for the latest news and updates.

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320504103361801

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

USGS 320504103361801 25S.33E.31.24232

Lea County, New Mexico
Latitude 32°05'21.6", Longitude 103°36'12.7" NAD83
Land-surface elevation 3,403.00 feet above NGVD29
The depth of the well is 320 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1954-07-26		D	62610		3145.45	NGVD29	1	Z		
1954-07-26		D	62611		3147.08	NAVD88	1	Z		
1954-07-26		D	72019	257.55			1	Z		
1970-12-08		D	62610		3162.86	NGVD29	P	Z		
1970-12-08		D	62611		3164.49	NAVD88	P	Z		
1970-12-08		D	72019	240.14			P	Z		
2013-01-16	19:45 UTC	m	62610		3170.04	NGVD29	1	S	USGS	
2013-01-16	19:45 UTC	m	62611		3171.67	NAVD88	1	S	USGS	
2013-01-16	19:45 UTC	m	72019	232.96			1	S	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute

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

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

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2022-12-12 08:31:10 EST
0.28 0.23 nadww02

Click to hideNews Bulletins

- See the Water Data for the Nation Blog for the latest news and updates.

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320449103360101

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

USGS 320449103360101 25S.33E.31.44424

Lea County, New Mexico
Latitude 32°04'49", Longitude 103°36'01" NAD27
Land-surface elevation 3,383 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1981-03-25		D	62610		3189.23	NGVD29	P	Z		
1981-03-25		D	62611		3190.85	NAVD88	P	Z		
1981-03-25		D	72019	192.15			P	Z		
1986-03-18		D	62610		3191.59	NGVD29	1	Z		
1986-03-18		D	62611		3193.21	NAVD88	1	Z		
1986-03-18		D	72019	189.79			1	Z		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929

Section	Code	Description
Status	1	Static
Status	P	Pumping
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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

Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2022-12-12 08:30:12 EST
0.29 0.24 nadww01

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
20E6C	C 04537 POD1	4	4	4	31	25S	33E	631847	3550243

Driller License: 1706 **Driller Company:** ELITE DRILLERS CORPORATION

Driller Name: WALLACE, BRYCE J.LEE.NER

Drill Start Date:	06/11/2021	**Drill Finish Date:**	06/12/2021	**Plug Date:**	
Log File Date:	06/21/2021	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	5 GPM
Casing Size:	4.00	**Depth Well:**	500 feet	**Depth Water:**	280 feet

Water Bearing Stratifications:	Top	Bottom	Description
	220	340	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	300	500

APPENDIX E

CARMONA RESOURCES

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ashton Thielke
Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Generated 2/22/2023 7:58:17 AM

JOB DESCRIPTION

Red Hills Unit #2H
SDG NUMBER Lea Co, NM

JOB NUMBER

880-24755-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

Eurofins Midland

Job Notes

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
2/22/2023 7:58:17 AM

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

Table of Contents

Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 880-24755-1
Project/Site: Red Hills Unit #2H SDG: Lea Co, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Tetra Tech, Inc. Job ID: 880-24755-1
Project/Site: Red Hills Unit #2H SDG: Lea Co, NM

Job ID: 880-24755-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-24755-1

Receipt
The samples were received on 2/15/2023 10:11 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (0-1') (880-24755-1), H-2 (0-1') (880-24755-2), H-3 (0-1') (880-24755-3), H-4 (0-1') (880-24755-4), S-1 (0-0.5') (880-24755-5), S-1 (0.5-1') (880-24755-6), S-1 (2') (880-24755-7), S-2 (0-0.5') (880-24755-8), S-2 (0.5-1') (880-24755-9), S-2 (2') (880-24755-10), S-3 (0-0.5') (880-24755-11), S-3 (0.5-1') (880-24755-12), S-3 (2') (880-24755-13), S-4 (0-0.5') (880-24755-14), S-4 (0.5-1') (880-24755-15) and S-4 (2') (880-24755-16).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: S-3 (0-0.5') (880-24755-11), S-3 (0.5-1') (880-24755-12), S-3 (2') (880-24755-13), (LCS 880-46606/1-A), (LCSD 880-46606/2-A), (880-24215-A-5-A MB), (880-24215-A-6-A MDLV), (880-24755-A-11-C MS) and (880-24755-A-11-D MSD). 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
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-1
Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 16:41	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 16:41	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 16:41	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/17/23 13:36	02/17/23 16:41	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 16:41	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/17/23 13:36	02/17/23 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*02/17/23 13:36*	*02/17/23 16:41*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*02/17/23 13:36*	*02/17/23 16:41*	*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			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/20/23 15:10	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		02/17/23 09:00	02/17/23 21:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/17/23 21:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/17/23 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*02/17/23 09:00*	*02/17/23 21:26*	*1*
o-Terphenyl	*112*		*70 - 130*	*02/17/23 09:00*	*02/17/23 21:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.4**		4.95		mg/Kg			02/21/23 03:34	1

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

Lab Sample ID: 880-24755-2
Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 17:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/17/23 17:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/17/23 17:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/17/23 13:36	02/17/23 17:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/17/23 17:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/17/23 13:36	02/17/23 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*02/17/23 13:36*	*02/17/23 17:07*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*02/17/23 13:36*	*02/17/23 17:07*	*1*

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-2
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/20/23 15:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/17/23 22:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/17/23 22:31	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/17/23 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/17/23 09:00*	*02/17/23 22:31*	*1*
o-Terphenyl	*96*		*70 - 130*	*02/17/23 09:00*	*02/17/23 22:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.9**		4.97		mg/Kg			02/21/23 03:39	1

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

Lab Sample ID: 880-24755-3
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 17:33	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/17/23 13:36	02/17/23 17:33	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/17/23 13:36	02/17/23 17:33	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/17/23 13:36	02/17/23 17:33	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/17/23 13:36	02/17/23 17:33	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/17/23 13:36	02/17/23 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*02/17/23 13:36*	*02/17/23 17:33*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*02/17/23 13:36*	*02/17/23 17:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			02/20/23 14:25	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			02/20/23 15:10	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		02/17/23 09:00	02/17/23 22:53	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/17/23 09:00	02/17/23 22:53	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-3
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/17/23 09:00	02/17/23 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*02/17/23 09:00*	*02/17/23 22:53*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/17/23 09:00*	*02/17/23 22:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.9**		5.05		mg/Kg			02/21/23 03:56	1

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

Lab Sample ID: 880-24755-4
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 17:59	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 17:59	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 17:59	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		02/17/23 13:36	02/17/23 17:59	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 17:59	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/17/23 13:36	02/17/23 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*02/17/23 13:36*	*02/17/23 17:59*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*02/17/23 13:36*	*02/17/23 17:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/20/23 15:10	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		02/17/23 09:00	02/17/23 23:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/17/23 23:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/17/23 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*02/17/23 09:00*	*02/17/23 23:14*	*1*
o-Terphenyl	*96*		*70 - 130*	*02/17/23 09:00*	*02/17/23 23:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**61.1**		4.97		mg/Kg			02/21/23 04:02	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-5
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 18:26	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/17/23 13:36	02/17/23 18:26	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/17/23 13:36	02/17/23 18:26	1
m-Xylene & p-Xylene	**0.00552**		0.00402		mg/Kg		02/17/23 13:36	02/17/23 18:26	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/17/23 13:36	02/17/23 18:26	1
Xylenes, Total	**0.00552**		0.00402		mg/Kg		02/17/23 13:36	02/17/23 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*02/17/23 13:36*	*02/17/23 18:26*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*02/17/23 13:36*	*02/17/23 18:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00552**		0.00402		mg/Kg			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**68.0**		49.9		mg/Kg			02/20/23 15:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/17/23 23:37	1
Diesel Range Organics (Over C10-C28)	**68.0**		49.9		mg/Kg		02/17/23 09:00	02/17/23 23:37	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/17/23 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*02/17/23 09:00*	*02/17/23 23:37*	*1*
o-Terphenyl	*112*		*70 - 130*	*02/17/23 09:00*	*02/17/23 23:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6900**		50.0		mg/Kg			02/21/23 04:08	10

Client Sample ID: S-1 (0.5-1')

Lab Sample ID: 880-24755-6
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 18:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/17/23 13:36	02/17/23 18:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/17/23 13:36	02/17/23 18:52	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/17/23 13:36	02/17/23 18:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/17/23 13:36	02/17/23 18:52	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/17/23 13:36	02/17/23 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*02/17/23 13:36*	*02/17/23 18:52*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*02/17/23 13:36*	*02/17/23 18:52*	*1*

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Client Sample ID: S-1 (0.5-1')

Lab Sample ID: 880-24755-6
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/20/23 15:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/17/23 23:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/17/23 23:59	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/17/23 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*02/17/23 09:00*	*02/17/23 23:59*	*1*
o-Terphenyl	*105*		*70 - 130*	*02/17/23 09:00*	*02/17/23 23:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1340**		24.8		mg/Kg			02/21/23 04:13	5

Client Sample ID: S-1 (2')

Lab Sample ID: 880-24755-7
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 19:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/17/23 19:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/17/23 19:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/17/23 13:36	02/17/23 19:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/17/23 19:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/17/23 13:36	02/17/23 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*02/17/23 13:36*	*02/17/23 19:18*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/17/23 13:36*	*02/17/23 19:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/20/23 15:10	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		02/17/23 09:00	02/18/23 00:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/18/23 00:21	1

Eurofins Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Client Sample ID: S-1 (2')

Lab Sample ID: 880-24755-7
Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/18/23 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*02/17/23 09:00*	*02/18/23 00:21*	*1*
o-Terphenyl	*102*		*70 - 130*	*02/17/23 09:00*	*02/18/23 00:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**223**		4.96		mg/Kg			02/21/23 04:19	1

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

Lab Sample ID: 880-24755-8
Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00000192	U	0.00000192		mg/Kg		02/17/23 13:36	02/17/23 19:44	1
Toluene	<0.00000192	U	0.00000192		mg/Kg		02/17/23 13:36	02/17/23 19:44	1
Ethylbenzene	<0.00000192	U	0.00000192		mg/Kg		02/17/23 13:36	02/17/23 19:44	1
m-Xylene & p-Xylene	<0.00000384	U	0.00000384		mg/Kg		02/17/23 13:36	02/17/23 19:44	1
o-Xylene	<0.00000192	U	0.00000192		mg/Kg		02/17/23 13:36	02/17/23 19:44	1
Xylenes, Total	<0.00000384	U	0.00000384		mg/Kg		02/17/23 13:36	02/17/23 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/17/23 13:36*	*02/17/23 19:44*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*02/17/23 13:36*	*02/17/23 19:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00000384	U	0.00000384		mg/Kg			02/20/23 14:25	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			02/20/23 15:10	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		02/17/23 09:00	02/18/23 00:43	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/17/23 09:00	02/18/23 00:43	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/17/23 09:00	02/18/23 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*02/17/23 09:00*	*02/18/23 00:43*	*1*
o-Terphenyl	*112*		*70 - 130*	*02/17/23 09:00*	*02/18/23 00:43*	*1*

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-8
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6240		49.8		mg/Kg			02/21/23 04:24	10

Client Sample ID: S-2 (0.5-1')

Lab Sample ID: 880-24755-9
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 20:10	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 20:10	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 20:10	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		02/17/23 13:36	02/17/23 20:10	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 20:10	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/17/23 13:36	02/17/23 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*02/17/23 13:36*	*02/17/23 20:10*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/17/23 13:36*	*02/17/23 20:10*	*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			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/20/23 15:10	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		02/17/23 09:00	02/18/23 01:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/18/23 01:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/18/23 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*02/17/23 09:00*	*02/18/23 01:06*	*1*
o-Terphenyl	*96*		*70 - 130*	*02/17/23 09:00*	*02/18/23 01:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1640		25.0		mg/Kg			02/21/23 04:41	5

Client Sample ID: S-2 (2')

Lab Sample ID: 880-24755-10
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 20:37	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/17/23 13:36	02/17/23 20:37	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/17/23 13:36	02/17/23 20:37	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Client Sample ID: S-2 (2')

Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

Lab Sample ID: 880-24755-10
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/17/23 13:36	02/17/23 20:37	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/17/23 13:36	02/17/23 20:37	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/17/23 13:36	02/17/23 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*02/17/23 13:36*	*02/17/23 20:37*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*02/17/23 13:36*	*02/17/23 20:37*	*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			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/20/23 15:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 01:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 01:28	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*02/17/23 09:00*	*02/18/23 01:28*	*1*
o-Terphenyl	*106*		*70 - 130*	*02/17/23 09:00*	*02/18/23 01:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**165**		4.97		mg/Kg			02/21/23 04:47	1

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

Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

Lab Sample ID: 880-24755-11
Matrix: Solid

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		02/17/23 14:40	02/18/23 02:12	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/17/23 14:40	02/18/23 02:12	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/17/23 14:40	02/18/23 02:12	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/17/23 14:40	02/18/23 02:12	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/17/23 14:40	02/18/23 02:12	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/17/23 14:40	02/18/23 02:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*02/17/23 14:40*	*02/18/23 02:12*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*02/17/23 14:40*	*02/18/23 02:12*	*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			02/20/23 14:09	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-11

Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/20/23 15:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 02:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 02:11	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*02/17/23 09:00*	*02/18/23 02:11*	*1*
o-Terphenyl	*113*		*70 - 130*	*02/17/23 09:00*	*02/18/23 02:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3430		50.4		mg/Kg			02/21/23 05:04	10

Client Sample ID: S-3 (0.5-1')

Lab Sample ID: 880-24755-12

Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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		02/17/23 14:40	02/18/23 02:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/17/23 14:40	02/18/23 02:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/17/23 14:40	02/18/23 02:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/17/23 14:40	02/18/23 02:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/17/23 14:40	02/18/23 02:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/17/23 14:40	02/18/23 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*	*02/17/23 14:40*	*02/18/23 02:32*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/17/23 14:40*	*02/18/23 02:32*	*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			02/20/23 14:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/20/23 15:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 02:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 02:33	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*02/17/23 09:00*	*02/18/23 02:33*	*1*

Eurofins Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Client Sample ID: S-3 (0.5-1')

Lab Sample ID: 880-24755-12
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*99*		*70 - 130*	*02/17/23 09:00*	*02/18/23 02:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1330**		25.0		mg/Kg			02/21/23 05:10	5

Client Sample ID: S-3 (2')

Lab Sample ID: 880-24755-13
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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		02/17/23 14:40	02/18/23 02:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/17/23 14:40	02/18/23 02:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/17/23 14:40	02/18/23 02:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/17/23 14:40	02/18/23 02:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/17/23 14:40	02/18/23 02:52	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/17/23 14:40	02/18/23 02:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*	*02/17/23 14:40*	*02/18/23 02:52*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/17/23 14:40*	*02/18/23 02:52*	*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			02/20/23 14:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/20/23 15:10	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		02/17/23 09:00	02/18/23 02:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/18/23 02:55	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/18/23 02:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*86*		*70 - 130*	*02/17/23 09:00*	*02/18/23 02:55*	*1*
o-Terphenyl	*94*		*70 - 130*	*02/17/23 09:00*	*02/18/23 02:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33.6**		4.95		mg/Kg			02/21/23 05:15	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-14
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398		mg/Kg		02/17/23 13:36	02/18/23 02:22	20
Toluene	**0.122**		0.0398		mg/Kg		02/17/23 13:36	02/18/23 02:22	20
Ethylbenzene	<0.0398	U	0.0398		mg/Kg		02/17/23 13:36	02/18/23 02:22	20
m-Xylene & p-Xylene	**2.44**		0.0795		mg/Kg		02/17/23 13:36	02/18/23 02:22	20
o-Xylene	**0.768**		0.0398		mg/Kg		02/17/23 13:36	02/18/23 02:22	20
Xylenes, Total	**3.21**		0.0795		mg/Kg		02/17/23 13:36	02/18/23 02:22	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*02/17/23 13:36*	*02/18/23 02:22*	*20*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*02/17/23 13:36*	*02/18/23 02:22*	*20*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**3.33**		0.0795		mg/Kg			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**2040**		49.8		mg/Kg			02/20/23 15:10	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	**242**		49.8		mg/Kg		02/17/23 09:00	02/18/23 03:17	1
Diesel Range Organics (Over C10-C28)	**1630**		49.8		mg/Kg		02/17/23 09:00	02/18/23 03:17	1
Oil Range Organics (Over C28-C36)	**164**		49.8		mg/Kg		02/17/23 09:00	02/18/23 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*02/17/23 09:00*	*02/18/23 03:17*	*1*
o-Terphenyl	*103*		*70 - 130*	*02/17/23 09:00*	*02/18/23 03:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**749**		5.05		mg/Kg			02/21/23 05:21	1

Client Sample ID: S-4 (0.5-1')

Lab Sample ID: 880-24755-15
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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		02/17/23 13:36	02/17/23 23:41	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 23:41	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 23:41	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/17/23 13:36	02/17/23 23:41	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/17/23 13:36	02/17/23 23:41	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/17/23 13:36	02/17/23 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*02/17/23 13:36*	*02/17/23 23:41*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/17/23 13:36*	*02/17/23 23:41*	*1*

Eurofins Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Client Sample ID: S-4 (0.5-1')

Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

Lab Sample ID: 880-24755-15
Matrix: Solid

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			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**130**		50.0		mg/Kg			02/20/23 15:10	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		02/17/23 09:00	02/18/23 03:39	1
Diesel Range Organics (Over C10-C28)	**130**		50.0		mg/Kg		02/17/23 09:00	02/18/23 03:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/18/23 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*02/17/23 09:00*	*02/18/23 03:39*	*1*
o-Terphenyl	*95*		*70 - 130*	*02/17/23 09:00*	*02/18/23 03:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**142**		4.97		mg/Kg			02/21/23 05:27	1

Client Sample ID: S-4 (2')

Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

Lab Sample ID: 880-24755-16
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/18/23 00:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/18/23 00:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/18/23 00:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/17/23 13:36	02/18/23 00:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/17/23 13:36	02/18/23 00:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/17/23 13:36	02/18/23 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/17/23 13:36*	*02/18/23 00:08*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*02/17/23 13:36*	*02/18/23 00:08*	*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			02/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/20/23 15:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 04:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 04:00	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Client Sample ID: S-4 (2')
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

Lab Sample ID: 880-24755-16
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 09:00	02/18/23 04:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*02/17/23 09:00*	*02/18/23 04:00*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/17/23 09:00*	*02/18/23 04:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.6**		4.95		mg/Kg			02/21/23 05:32	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, 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)
880-24755-1	H-1 (0-1')	117	85
880-24755-1 MS	H-1 (0-1')	109	95
880-24755-1 MSD	H-1 (0-1')	115	97
880-24755-2	H-2 (0-1')	112	81
880-24755-3	H-3 (0-1')	119	88
880-24755-4	H-4 (0-1')	116	84
880-24755-5	S-1 (0-0.5')	121	85
880-24755-6	S-1 (0.5-1')	117	83
880-24755-7	S-1 (2')	122	92
880-24755-8	S-2 (0-0.5')	120	78
880-24755-9	S-2 (0.5-1')	125	92
880-24755-10	S-2 (2')	116	88
880-24755-11	S-3 (0-0.5')	136 S1+	104
880-24755-11 MS	S-3 (0-0.5')	132 S1+	106
880-24755-11 MSD	S-3 (0-0.5')	132 S1+	97
880-24755-12	S-3 (0.5-1')	137 S1+	105
880-24755-13	S-3 (2')	140 S1+	108
880-24755-14	S-4 (0-0.5')	135 S1+	78
880-24755-15	S-4 (0.5-1')	125	90
880-24755-16	S-4 (2')	120	86
LCS 880-46604/1-A	Lab Control Sample	113	88
LCS 880-46606/1-A	Lab Control Sample	131 S1+	105
LCSD 880-46604/2-A	Lab Control Sample Dup	108	86
LCSD 880-46606/2-A	Lab Control Sample Dup	131 S1+	102
MB 880-46604/5-A	Method Blank	77	86
MB 880-46606/5-A	Method Blank	127	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)
880-24755-1	H-1 (0-1')	108	112
880-24755-1 MS	H-1 (0-1')	105	101
880-24755-1 MSD	H-1 (0-1')	110	105
880-24755-2	H-2 (0-1')	93	96
880-24755-3	H-3 (0-1')	88	92
880-24755-4	H-4 (0-1')	89	96
880-24755-5	S-1 (0-0.5')	104	112
880-24755-6	S-1 (0.5-1')	95	105
880-24755-7	S-1 (2')	92	102
880-24755-8	S-2 (0-0.5')	100	112
880-24755-9	S-2 (0.5-1')	87	96
880-24755-10	S-2 (2')	94	106
880-24755-11	S-3 (0-0.5')	105	113

Surrogate Summary

Client: Tetra Tech, Inc. Job ID: 880-24755-1
Project/Site: Red Hills Unit #2H SDG: Lea Co, NM

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
880-24755-12	S-3 (0.5-1')	89	99								
880-24755-13	S-3 (2')	86	94								
880-24755-14	S-4 (0-0.5')	103	103								
880-24755-15	S-4 (0.5-1')	85	95								
880-24755-16	S-4 (2')	83	92								
LCS 880-46578/2-A	Lab Control Sample	103	115								
LCSD 880-46578/3-A	Lab Control Sample Dup	123	136 S1+								
MB 880-46578/1-A	Method Blank	94	111								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-46604/5-A
Matrix: Solid
Analysis Batch: 46566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46604

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/17/23 13:36	02/17/23 15:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/17/23 13:36	02/17/23 15:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/17/23 13:36	02/17/23 15:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/17/23 13:36	02/17/23 15:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/17/23 13:36	02/17/23 15:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/17/23 13:36	02/17/23 15:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*02/17/23 13:36*	*02/17/23 15:57*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*02/17/23 13:36*	*02/17/23 15:57*	*1*

Lab Sample ID: LCS 880-46604/1-A
Matrix: Solid
Analysis Batch: 46566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46604

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1261		mg/Kg		126	70 - 130
Toluene	0.100	0.1249		mg/Kg		125	70 - 130
Ethylbenzene	0.100	0.1254		mg/Kg		125	70 - 130
m-Xylene & p-Xylene	0.200	0.2510		mg/Kg		126	70 - 130
o-Xylene	0.100	0.1179		mg/Kg		118	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: LCSD 880-46604/2-A
Matrix: Solid
Analysis Batch: 46566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46604

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1167		mg/Kg		117	70 - 130	8	35
Toluene	0.100	0.1127		mg/Kg		113	70 - 130	10	35
Ethylbenzene	0.100	0.1062		mg/Kg		106	70 - 130	17	35
m-Xylene & p-Xylene	0.200	0.2150		mg/Kg		107	70 - 130	15	35
o-Xylene	0.100	0.1027		mg/Kg		103	70 - 130	14	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: 880-24755-1 MS
Matrix: Solid
Analysis Batch: 46566

Client Sample ID: H-1 (0-1')
Prep Type: Total/NA
Prep Batch: 46604

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.101	0.1123		mg/Kg		111	70 - 130
Toluene	<0.00202	U	0.101	0.1062		mg/Kg		105	70 - 130

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-1 MS
Matrix: Solid
Analysis Batch: 46566

Client Sample ID: H-1 (0-1')
Prep Type: Total/NA
Prep Batch: 46604

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.101	0.1016		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.202	0.2016		mg/Kg		100	70 - 130
o-Xylene	<0.00202	U	0.101	0.09598		mg/Kg		95	70 - 130

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

Lab Sample ID: 880-24755-1 MSD
Matrix: Solid
Analysis Batch: 46566

Client Sample ID: H-1 (0-1')
Prep Type: Total/NA
Prep Batch: 46604

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0996	0.1164		mg/Kg		117	70 - 130	4	35
Toluene	<0.00202	U	0.0996	0.1051		mg/Kg		106	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.0996	0.1059		mg/Kg		106	70 - 130	4	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2096		mg/Kg		105	70 - 130	4	35
o-Xylene	<0.00202	U	0.0996	0.1008		mg/Kg		101	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 880-46606/5-A
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46606

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/17/23 14:40	02/18/23 01:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/17/23 14:40	02/18/23 01:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/17/23 14:40	02/18/23 01:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/17/23 14:40	02/18/23 01:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/17/23 14:40	02/18/23 01:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/17/23 14:40	02/18/23 01:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*02/17/23 14:40*	*02/18/23 01:43*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/17/23 14:40*	*02/18/23 01:43*	*1*

Lab Sample ID: LCS 880-46606/1-A
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46606

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1185		mg/Kg		118	70 - 130
Toluene	0.100	0.1111		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1141		mg/Kg		114	70 - 130
m-Xylene & p-Xylene	0.200	0.2420		mg/Kg		121	70 - 130

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-46606/1-A
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46606

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1184		mg/Kg		118	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-46606/2-A
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46606

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1254		mg/Kg		125	70 - 130	6	35
Toluene			0.100	0.1195		mg/Kg		120	70 - 130	7	35
Ethylbenzene			0.100	0.1190		mg/Kg		119	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2526		mg/Kg		126	70 - 130	4	35
o-Xylene			0.100	0.1229		mg/Kg		123	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-24755-11 MS
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: S-3 (0-0.5')
Prep Type: Total/NA
Prep Batch: 46606

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U	0.101	0.1268		mg/Kg		126	70 - 130		
Toluene	<0.00202	U	0.101	0.1202		mg/Kg		119	70 - 130		
Ethylbenzene	<0.00202	U	0.101	0.1192		mg/Kg		118	70 - 130		
m-Xylene & p-Xylene	<0.00403	U	0.202	0.2517		mg/Kg		125	70 - 130		
o-Xylene	<0.00202	U	0.101	0.1232		mg/Kg		122	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 880-24755-11 MSD
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: S-3 (0-0.5')
Prep Type: Total/NA
Prep Batch: 46606

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0996	0.1080		mg/Kg		108	70 - 130	16	35
Toluene	<0.00202	U	0.0996	0.1133		mg/Kg		114	70 - 130	6	35
Ethylbenzene	<0.00202	U	0.0996	0.1146		mg/Kg		115	70 - 130	4	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2433		mg/Kg		122	70 - 130	3	35
o-Xylene	<0.00202	U	0.0996	0.1194		mg/Kg		119	70 - 130	3	35

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-11 MSD
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: S-3 (0-0.5')
Prep Type: Total/NA
Prep Batch: 46606

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-46578/1-A
Matrix: Solid
Analysis Batch: 46558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46578

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		02/17/23 09:00	02/17/23 20:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/17/23 20:20	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 09:00	02/17/23 20:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	02/17/23 09:00	02/17/23 20:20	1
o-Terphenyl	111		70 - 130	02/17/23 09:00	02/17/23 20:20	1

Lab Sample ID: LCS 880-46578/2-A
Matrix: Solid
Analysis Batch: 46558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46578

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	820.1		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	1000	884.2		mg/Kg		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: LCSD 880-46578/3-A
Matrix: Solid
Analysis Batch: 46558

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46578

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	979.3		mg/Kg		98	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	1000	1072		mg/Kg		107	70 - 130	19	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	136	S1+	70 - 130

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-1 MS
Matrix: Solid
Analysis Batch: 46558

Client Sample ID: H-1 (0-1')
Prep Type: Total/NA
Prep Batch: 46578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1021		mg/Kg		100	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1042		mg/Kg		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Lab Sample ID: 880-24755-1 MSD
Matrix: Solid
Analysis Batch: 46558

Client Sample ID: H-1 (0-1')
Prep Type: Total/NA
Prep Batch: 46578

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	<50.0	U	1000	1040		mg/Kg		102	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1084		mg/Kg		104	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-46407/1-A
Matrix: Solid
Analysis Batch: 46810

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			02/21/23 02:49	1

Lab Sample ID: LCS 880-46407/2-A
Matrix: Solid
Analysis Batch: 46810

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	245.0		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-46407/3-A
Matrix: Solid
Analysis Batch: 46810

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	245.5		mg/Kg		98	90 - 110	0	20

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-24755-8 MS
Matrix: Solid
Analysis Batch: 46810

Client Sample ID: S-2 (0-0.5')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	6240		2490	8890		mg/Kg		107	90 - 110		

Lab Sample ID: 880-24755-8 MSD
Matrix: Solid
Analysis Batch: 46810

Client Sample ID: S-2 (0-0.5')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	6240		2490	8899		mg/Kg		107	90 - 110	0	20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

GC VOA

Analysis Batch: 46566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-1	H-1 (0-1')	Total/NA	Solid	8021B	46604
880-24755-2	H-2 (0-1')	Total/NA	Solid	8021B	46604
880-24755-3	H-3 (0-1')	Total/NA	Solid	8021B	46604
880-24755-4	H-4 (0-1')	Total/NA	Solid	8021B	46604
880-24755-5	S-1 (0-0.5')	Total/NA	Solid	8021B	46604
880-24755-6	S-1 (0.5-1')	Total/NA	Solid	8021B	46604
880-24755-7	S-1 (2')	Total/NA	Solid	8021B	46604
880-24755-8	S-2 (0-0.5')	Total/NA	Solid	8021B	46604
880-24755-9	S-2 (0.5-1')	Total/NA	Solid	8021B	46604
880-24755-10	S-2 (2')	Total/NA	Solid	8021B	46604
880-24755-14	S-4 (0-0.5')	Total/NA	Solid	8021B	46604
880-24755-15	S-4 (0.5-1')	Total/NA	Solid	8021B	46604
880-24755-16	S-4 (2')	Total/NA	Solid	8021B	46604
MB 880-46604/5-A	Method Blank	Total/NA	Solid	8021B	46604
LCS 880-46604/1-A	Lab Control Sample	Total/NA	Solid	8021B	46604
LCSD 880-46604/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46604
880-24755-1 MS	H-1 (0-1')	Total/NA	Solid	8021B	46604
880-24755-1 MSD	H-1 (0-1')	Total/NA	Solid	8021B	46604

Analysis Batch: 46567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-11	S-3 (0-0.5')	Total/NA	Solid	8021B	46606
880-24755-12	S-3 (0.5-1')	Total/NA	Solid	8021B	46606
880-24755-13	S-3 (2')	Total/NA	Solid	8021B	46606
MB 880-46606/5-A	Method Blank	Total/NA	Solid	8021B	46606
LCS 880-46606/1-A	Lab Control Sample	Total/NA	Solid	8021B	46606
LCSD 880-46606/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46606
880-24755-11 MS	S-3 (0-0.5')	Total/NA	Solid	8021B	46606
880-24755-11 MSD	S-3 (0-0.5')	Total/NA	Solid	8021B	46606

Prep Batch: 46604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-1	H-1 (0-1')	Total/NA	Solid	5035	
880-24755-2	H-2 (0-1')	Total/NA	Solid	5035	
880-24755-3	H-3 (0-1')	Total/NA	Solid	5035	
880-24755-4	H-4 (0-1')	Total/NA	Solid	5035	
880-24755-5	S-1 (0-0.5')	Total/NA	Solid	5035	
880-24755-6	S-1 (0.5-1')	Total/NA	Solid	5035	
880-24755-7	S-1 (2')	Total/NA	Solid	5035	
880-24755-8	S-2 (0-0.5')	Total/NA	Solid	5035	
880-24755-9	S-2 (0.5-1')	Total/NA	Solid	5035	
880-24755-10	S-2 (2')	Total/NA	Solid	5035	
880-24755-14	S-4 (0-0.5')	Total/NA	Solid	5035	
880-24755-15	S-4 (0.5-1')	Total/NA	Solid	5035	
880-24755-16	S-4 (2')	Total/NA	Solid	5035	
MB 880-46604/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46604/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46604/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-24755-1 MS	H-1 (0-1')	Total/NA	Solid	5035	
880-24755-1 MSD	H-1 (0-1')	Total/NA	Solid	5035	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

GC VOA

Prep Batch: 46606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-11	S-3 (0-0.5')	Total/NA	Solid	5035	
880-24755-12	S-3 (0.5-1')	Total/NA	Solid	5035	
880-24755-13	S-3 (2')	Total/NA	Solid	5035	
MB 880-46606/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46606/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46606/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-24755-11 MS	S-3 (0-0.5')	Total/NA	Solid	5035	
880-24755-11 MSD	S-3 (0-0.5')	Total/NA	Solid	5035	

Analysis Batch: 46737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-1	H-1 (0-1')	Total/NA	Solid	Total BTEX	
880-24755-2	H-2 (0-1')	Total/NA	Solid	Total BTEX	
880-24755-3	H-3 (0-1')	Total/NA	Solid	Total BTEX	
880-24755-4	H-4 (0-1')	Total/NA	Solid	Total BTEX	
880-24755-5	S-1 (0-0.5')	Total/NA	Solid	Total BTEX	
880-24755-6	S-1 (0.5-1')	Total/NA	Solid	Total BTEX	
880-24755-7	S-1 (2')	Total/NA	Solid	Total BTEX	
880-24755-8	S-2 (0-0.5')	Total/NA	Solid	Total BTEX	
880-24755-9	S-2 (0.5-1')	Total/NA	Solid	Total BTEX	
880-24755-10	S-2 (2')	Total/NA	Solid	Total BTEX	
880-24755-11	S-3 (0-0.5')	Total/NA	Solid	Total BTEX	
880-24755-12	S-3 (0.5-1')	Total/NA	Solid	Total BTEX	
880-24755-13	S-3 (2')	Total/NA	Solid	Total BTEX	
880-24755-14	S-4 (0-0.5')	Total/NA	Solid	Total BTEX	
880-24755-15	S-4 (0.5-1')	Total/NA	Solid	Total BTEX	
880-24755-16	S-4 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 46558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-1	H-1 (0-1')	Total/NA	Solid	8015B NM	46578
880-24755-2	H-2 (0-1')	Total/NA	Solid	8015B NM	46578
880-24755-3	H-3 (0-1')	Total/NA	Solid	8015B NM	46578
880-24755-4	H-4 (0-1')	Total/NA	Solid	8015B NM	46578
880-24755-5	S-1 (0-0.5')	Total/NA	Solid	8015B NM	46578
880-24755-6	S-1 (0.5-1')	Total/NA	Solid	8015B NM	46578
880-24755-7	S-1 (2')	Total/NA	Solid	8015B NM	46578
880-24755-8	S-2 (0-0.5')	Total/NA	Solid	8015B NM	46578
880-24755-9	S-2 (0.5-1')	Total/NA	Solid	8015B NM	46578
880-24755-10	S-2 (2')	Total/NA	Solid	8015B NM	46578
880-24755-11	S-3 (0-0.5')	Total/NA	Solid	8015B NM	46578
880-24755-12	S-3 (0.5-1')	Total/NA	Solid	8015B NM	46578
880-24755-13	S-3 (2')	Total/NA	Solid	8015B NM	46578
880-24755-14	S-4 (0-0.5')	Total/NA	Solid	8015B NM	46578
880-24755-15	S-4 (0.5-1')	Total/NA	Solid	8015B NM	46578
880-24755-16	S-4 (2')	Total/NA	Solid	8015B NM	46578
MB 880-46578/1-A	Method Blank	Total/NA	Solid	8015B NM	46578
LCS 880-46578/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	46578
LCSD 880-46578/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	46578

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

GC Semi VOA (Continued)

Analysis Batch: 46558 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-1 MS	H-1 (0-1')	Total/NA	Solid	8015B NM	46578
880-24755-1 MSD	H-1 (0-1')	Total/NA	Solid	8015B NM	46578

Prep Batch: 46578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-1	H-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-24755-2	H-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-24755-3	H-3 (0-1')	Total/NA	Solid	8015NM Prep	
880-24755-4	H-4 (0-1')	Total/NA	Solid	8015NM Prep	
880-24755-5	S-1 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-24755-6	S-1 (0.5-1')	Total/NA	Solid	8015NM Prep	
880-24755-7	S-1 (2')	Total/NA	Solid	8015NM Prep	
880-24755-8	S-2 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-24755-9	S-2 (0.5-1')	Total/NA	Solid	8015NM Prep	
880-24755-10	S-2 (2')	Total/NA	Solid	8015NM Prep	
880-24755-11	S-3 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-24755-12	S-3 (0.5-1')	Total/NA	Solid	8015NM Prep	
880-24755-13	S-3 (2')	Total/NA	Solid	8015NM Prep	
880-24755-14	S-4 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-24755-15	S-4 (0.5-1')	Total/NA	Solid	8015NM Prep	
880-24755-16	S-4 (2')	Total/NA	Solid	8015NM Prep	
MB 880-46578/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-46578/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-46578/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-24755-1 MS	H-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-24755-1 MSD	H-1 (0-1')	Total/NA	Solid	8015NM Prep	

Analysis Batch: 46788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-1	H-1 (0-1')	Total/NA	Solid	8015 NM	
880-24755-2	H-2 (0-1')	Total/NA	Solid	8015 NM	
880-24755-3	H-3 (0-1')	Total/NA	Solid	8015 NM	
880-24755-4	H-4 (0-1')	Total/NA	Solid	8015 NM	
880-24755-5	S-1 (0-0.5')	Total/NA	Solid	8015 NM	
880-24755-6	S-1 (0.5-1')	Total/NA	Solid	8015 NM	
880-24755-7	S-1 (2')	Total/NA	Solid	8015 NM	
880-24755-8	S-2 (0-0.5')	Total/NA	Solid	8015 NM	
880-24755-9	S-2 (0.5-1')	Total/NA	Solid	8015 NM	
880-24755-10	S-2 (2')	Total/NA	Solid	8015 NM	
880-24755-11	S-3 (0-0.5')	Total/NA	Solid	8015 NM	
880-24755-12	S-3 (0.5-1')	Total/NA	Solid	8015 NM	
880-24755-13	S-3 (2')	Total/NA	Solid	8015 NM	
880-24755-14	S-4 (0-0.5')	Total/NA	Solid	8015 NM	
880-24755-15	S-4 (0.5-1')	Total/NA	Solid	8015 NM	
880-24755-16	S-4 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 46407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-1	H-1 (0-1')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

HPLC/IC (Continued)

Leach Batch: 46407 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-2	H-2 (0-1')	Soluble	Solid	DI Leach	
880-24755-3	H-3 (0-1')	Soluble	Solid	DI Leach	
880-24755-4	H-4 (0-1')	Soluble	Solid	DI Leach	
880-24755-5	S-1 (0-0.5')	Soluble	Solid	DI Leach	
880-24755-6	S-1 (0.5-1')	Soluble	Solid	DI Leach	
880-24755-7	S-1 (2')	Soluble	Solid	DI Leach	
880-24755-8	S-2 (0-0.5')	Soluble	Solid	DI Leach	
880-24755-9	S-2 (0.5-1')	Soluble	Solid	DI Leach	
880-24755-10	S-2 (2')	Soluble	Solid	DI Leach	
880-24755-11	S-3 (0-0.5')	Soluble	Solid	DI Leach	
880-24755-12	S-3 (0.5-1')	Soluble	Solid	DI Leach	
880-24755-13	S-3 (2')	Soluble	Solid	DI Leach	
880-24755-14	S-4 (0-0.5')	Soluble	Solid	DI Leach	
880-24755-15	S-4 (0.5-1')	Soluble	Solid	DI Leach	
880-24755-16	S-4 (2')	Soluble	Solid	DI Leach	
MB 880-46407/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-46407/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-46407/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-24755-8 MS	S-2 (0-0.5')	Soluble	Solid	DI Leach	
880-24755-8 MSD	S-2 (0-0.5')	Soluble	Solid	DI Leach	

Analysis Batch: 46810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-24755-1	H-1 (0-1')	Soluble	Solid	300.0	46407
880-24755-2	H-2 (0-1')	Soluble	Solid	300.0	46407
880-24755-3	H-3 (0-1')	Soluble	Solid	300.0	46407
880-24755-4	H-4 (0-1')	Soluble	Solid	300.0	46407
880-24755-5	S-1 (0-0.5')	Soluble	Solid	300.0	46407
880-24755-6	S-1 (0.5-1')	Soluble	Solid	300.0	46407
880-24755-7	S-1 (2')	Soluble	Solid	300.0	46407
880-24755-8	S-2 (0-0.5')	Soluble	Solid	300.0	46407
880-24755-9	S-2 (0.5-1')	Soluble	Solid	300.0	46407
880-24755-10	S-2 (2')	Soluble	Solid	300.0	46407
880-24755-11	S-3 (0-0.5')	Soluble	Solid	300.0	46407
880-24755-12	S-3 (0.5-1')	Soluble	Solid	300.0	46407
880-24755-13	S-3 (2')	Soluble	Solid	300.0	46407
880-24755-14	S-4 (0-0.5')	Soluble	Solid	300.0	46407
880-24755-15	S-4 (0.5-1')	Soluble	Solid	300.0	46407
880-24755-16	S-4 (2')	Soluble	Solid	300.0	46407
MB 880-46407/1-A	Method Blank	Soluble	Solid	300.0	46407
LCS 880-46407/2-A	Lab Control Sample	Soluble	Solid	300.0	46407
LCSD 880-46407/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	46407
880-24755-8 MS	S-2 (0-0.5')	Soluble	Solid	300.0	46407
880-24755-8 MSD	S-2 (0-0.5')	Soluble	Solid	300.0	46407

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-1
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 16:41	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/17/23 21:26	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 03:34	CH	EET MID

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

Lab Sample ID: 880-24755-2
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 17:07	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/17/23 22:31	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 03:39	CH	EET MID

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

Lab Sample ID: 880-24755-3
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 17:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/17/23 22:53	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 03:56	CH	EET MID

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

Lab Sample ID: 880-24755-4
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 17:59	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-4

Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/17/23 23:14	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 04:02	CH	EET MID

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

Lab Sample ID: 880-24755-5

Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 18:26	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/17/23 23:37	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		10			46810	02/21/23 04:08	CH	EET MID

Client Sample ID: S-1 (0.5-1')

Lab Sample ID: 880-24755-6

Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 18:52	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/17/23 23:59	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		5			46810	02/21/23 04:13	CH	EET MID

Client Sample ID: S-1 (2')

Lab Sample ID: 880-24755-7

Date Collected: 02/14/23 00:00
Matrix: Solid
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 19:18	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 00:21	AJ	EET MID

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Client Sample ID: S-1 (2')

Lab Sample ID: 880-24755-7
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 04:19	CH	EET MID

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

Lab Sample ID: 880-24755-8
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5205 g	5 mL	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 19:44	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 00:43	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		10			46810	02/21/23 04:24	CH	EET MID

Client Sample ID: S-2 (0.5-1')

Lab Sample ID: 880-24755-9
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 20:10	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 01:06	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		5			46810	02/21/23 04:41	CH	EET MID

Client Sample ID: S-2 (2')

Lab Sample ID: 880-24755-10
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 20:37	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 01:28	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 04:47	CH	EET MID

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-11
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46606	02/17/23 14:40	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/18/23 02:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 02:11	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		10			46810	02/21/23 05:04	CH	EET MID

Client Sample ID: S-3 (0.5-1')

Lab Sample ID: 880-24755-12
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46606	02/17/23 14:40	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/18/23 02:32	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 02:33	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		5			46810	02/21/23 05:10	CH	EET MID

Client Sample ID: S-3 (2')

Lab Sample ID: 880-24755-13
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46606	02/17/23 14:40	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/18/23 02:52	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 02:55	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 05:15	CH	EET MID

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

Lab Sample ID: 880-24755-14
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	46566	02/18/23 02:22	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-24755-14
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 03:17	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 05:21	CH	EET MID

Client Sample ID: S-4 (0.5-1')

Lab Sample ID: 880-24755-15
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/17/23 23:41	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 03:39	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 05:27	CH	EET MID

Client Sample ID: S-4 (2')

Lab Sample ID: 880-24755-16
Matrix: Solid
Date Collected: 02/14/23 00:00
Date Received: 02/15/23 10:11

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	46604	02/17/23 13:36	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46566	02/18/23 00:08	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46737	02/20/23 14:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46788	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46578	02/17/23 09:00	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/18/23 04:00	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	46407	02/15/23 11:00	KS	EET MID
Soluble	Analysis	300.0		1			46810	02/21/23 05:32	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, 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	T104704400-22-25	06-30-23

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

Analysis Method	Prep Method	Matrix	Analyte
300.0		Solid	Chloride
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	OII Range Organics (Over C28-C36)
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	m-Xylene & p-Xylene
8021B	5035	Solid	o-Xylene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total
Total BTEX		Solid	Total BTEX

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, 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: Tetra Tech, Inc.
Project/Site: Red Hills Unit #2H

Job ID: 880-24755-1
SDG: Lea Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-24755-1	H-1 (0-1')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-2	H-2 (0-1')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-3	H-3 (0-1')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-4	H-4 (0-1')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-5	S-1 (0-0.5')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-6	S-1 (0.5-1')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-7	S-1 (2')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-8	S-2 (0-0.5')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-9	S-2 (0.5-1')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-10	S-2 (2')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-11	S-3 (0-0.5')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-12	S-3 (0.5-1')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-13	S-3 (2')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-14	S-4 (0-0.5')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-15	S-4 (0.5-1')	Solid	02/14/23 00:00	02/15/23 10:11
880-24755-16	S-4 (2')	Solid	02/14/23 00:00	02/15/23 10:11

Chain of Custody

Work Order No: 24755

Page _____ of _____

Project Manager	Ashton Thielke	Bill to: (if different)	Laci Luig
Company Name	Tetra Tech	Company Name	Cimarex Energy
Address	901 West Wall Street Ste 100	Address	600 N Marienfield St Suite 600
City, State ZIP	Midland, Texas 79701	City, State ZIP	Midland TX 79701
Phone	Ashton Thielke@tetratech com		laci luig@coterra com & ashton thielke@coterra com

Work Order Comments

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

State of Project:

Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables EDD ☐ ADaPT ☐ Other

Project Name	Red Hills Unit #21H	Turn Around	
Project Number		☑ Routine ☐ Rush	
Project Location	Lea Co, NM	Due Date	
Sampler's Name:	AT	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank	Yes No	Wet Ice	Yes No
Received Intact:	Yes No	Thermometer ID	IR8
Cooler Custody Seals	Yes No N/A	Correction Factor	-.30
Sample Custody Seals	Yes No N/A	Temperature Reading	3.9
Total Containers		Corrected Temperature	3.6

Preservative Codes

None NO; DI Water H_2O; Cool Cool; MeOH Me; HCL HC; HNO_3 HN; H_2SO_4 H_2; NaOH Na; H_3PO_4 HP; $NaHSO_4$ NABIS; $Na_2S_2O_3$ $NaSO_3$; Zn Acetate+NaOH Zn; NaOH+Ascorbic Acid SAPC

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300 0	HOLD	Sample Comments
H-1 (0-1')	2/14/2023		X		Grab/	1	X	X	X		
H-2 (0-1')	2/14/2023		X		Grab/	1	X	X	X		
H-3 (0-1')	2/14/2023		X		Grab/	1	X	X	X		
H-4 (0-1')	2/14/2023		X		Grab/	1	X	X	X		
S-1 (0-0 5')	2/14/2023		X		Grab/	1	X	X	X		
S-1 (0 5-1')	2/14/2023		X		Grab/	1	X	X	X		
S-1 (2')	2/14/2023		X		Grab/	1	X	X	X		
S-2 (0-0 5')	2/14/2023		X		Grab/	1	X	X	X		
S-2 (0 5-1')	2/14/2023		X		Grab/	1	X	X	X		
S-1 (2')	2/14/2023		X		Grab/	1	X	X	X		

880-24755 Chain of Custody

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 Gladdi Green		2/15/23 1011	2		
3			4		
5			6		

Revised Date 05012020 Rev 2020 1

Chain of Custody

Work Order No: 24755

Page _____ of _____

Project Manager	Ashton Thielke	Bill to (if different)	Laci Luig
Company Name	Tetra Tech	Company Name:	Cimarex Energy
Address.	901 West Wall Street Ste 100	Address	600 N Marienfield St Suite 600
City, State ZIP	Midland, Texas 79701	City, State ZIP	Midland TX 79701
Phone.	2817535659		laci luig@coterra com & ashton thielke@coterra com

Work Order Comments

Program. UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ uperfund ☐

State of Project

Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables EDD ☐ ADaPT ☐ Other

Project Name:	Red Hills Unit #21H	Turn Around	
Project Number		☑ Routine ☐ Rush	
Project Location	Lea Co, NM	Due Date	
Sampler's Name	AT	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

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

Preservative Codes

None NO DI Water H_2O

Cool Cool MeOH Me

HCL. HC HNO_3 HN

H_2S0_4 H_2 NaOH Na

H_3PO_4 HP

$NaHSO_4$ NABIS

$Na_2S_2O_3$ $NaSO_3$

Zn Acetate+NaOH Zn

NaOH+Ascorbic Acid SAPC

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300 0	HOLD	Sample Comments
S-3 (0-0 5')	2/14/2023		X		Grab/	1		X	X	X		
S-3 (0 5-1')	2/14/2023		X		Grab/	1		X	X	X		
S-3 (2')	2/14/2023		X		Grab/	1		X	X	X		
S-4 (0-0 5')	2/14/2023		X		Grab/	1		X	X	X		
S-4 (0 5-1')	2/14/2023		X		Grab/	1		X	X	X		
S-4 (2')	2/14/2023		X		Grab/	1		X	X	X		

Loc: 880
24755

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 Madi Green		2/15/23 1011	2		
3			4		
5			6		

Revised Date 05012020 Rev 2020 1

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-24755-1
SDG Number: Lea Co, NM

Login Number: 24755
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	

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

March 09, 2023

ASHTON THIELKE

CARMONA RESOURCES

310 W WALL ST SUITE 415

MIDLAND, TX 79701

RE: RED HILLS 21

Enclosed are the results of analyses for samples received by the laboratory on 03/08/23 15:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	03/08/2023	Sampling Date:	03/08/2023
Reported:	03/09/2023	Sampling Type:	Soil
Project Name:	RED HILLS 21	Sampling Condition:	Cool & Intact
Project Number:	1245	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO., NM		

Sample ID: CS - 1 (0.75') (H231053-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/08/2023	ND	2.07	103	2.00	2.26	
Toluene*	<0.050	0.050	03/08/2023	ND	2.05	102	2.00	2.67	
Ethylbenzene*	<0.050	0.050	03/08/2023	ND	2.03	102	2.00	2.53	
Total Xylenes*	<0.150	0.150	03/08/2023	ND	6.26	104	6.00	2.11	
Total BTEX	<0.300	0.300	03/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	03/09/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/09/2023	ND	169	84.3	200	1.30	
DRO >C10-C28*	<10.0	10.0	03/09/2023	ND	182	91.2	200	3.85	
EXT DRO >C28-C36	<10.0	10.0	03/09/2023	ND					

Surrogate: 1-Chlorooctane *92.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *111 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	03/08/2023	Sampling Date:	03/08/2023
Reported:	03/09/2023	Sampling Type:	Soil
Project Name:	RED HILLS 21	Sampling Condition:	Cool & Intact
Project Number:	1245	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO., NM		

Sample ID: CS - 2 (0.75') (H231053-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/09/2023	ND	2.07	103	2.00	2.26	
Toluene*	<0.050	0.050	03/09/2023	ND	2.05	102	2.00	2.67	
Ethylbenzene*	<0.050	0.050	03/09/2023	ND	2.03	102	2.00	2.53	
Total Xylenes*	<0.150	0.150	03/09/2023	ND	6.26	104	6.00	2.11	
Total BTEX	<0.300	0.300	03/09/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**544**	16.0	03/09/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/09/2023	ND	169	84.3	200	1.30	
DRO >C10-C28*	<10.0	10.0	03/09/2023	ND	182	91.2	200	3.85	
EXT DRO >C28-C36	<10.0	10.0	03/09/2023	ND					

Surrogate: 1-Chlorooctane *95.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	03/08/2023	Sampling Date:	03/08/2023
Reported:	03/09/2023	Sampling Type:	Soil
Project Name:	RED HILLS 21	Sampling Condition:	Cool & Intact
Project Number:	1245	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO., NM		

Sample ID: CS - 3 (0.75') (H231053-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/09/2023	ND	2.07	103	2.00	2.26	
Toluene*	<0.050	0.050	03/09/2023	ND	2.05	102	2.00	2.67	
Ethylbenzene*	<0.050	0.050	03/09/2023	ND	2.03	102	2.00	2.53	
Total Xylenes*	<0.150	0.150	03/09/2023	ND	6.26	104	6.00	2.11	
Total BTEX	<0.300	0.300	03/09/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	03/09/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/09/2023	ND	169	84.3	200	1.30	
DRO >C10-C28*	<10.0	10.0	03/09/2023	ND	182	91.2	200	3.85	
EXT DRO >C28-C36	<10.0	10.0	03/09/2023	ND					

Surrogate: 1-Chlorooctane *95.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *113 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	03/08/2023	Sampling Date:	03/08/2023
Reported:	03/09/2023	Sampling Type:	Soil
Project Name:	RED HILLS 21	Sampling Condition:	Cool & Intact
Project Number:	1245	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO., NM		

Sample ID: CS - 4 (0.75') (H231053-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/09/2023	ND	2.07	103	2.00	2.26	
Toluene*	<0.050	0.050	03/09/2023	ND	2.05	102	2.00	2.67	
Ethylbenzene*	<0.050	0.050	03/09/2023	ND	2.03	102	2.00	2.53	
Total Xylenes*	<0.150	0.150	03/09/2023	ND	6.26	104	6.00	2.11	
Total BTEX	<0.300	0.300	03/09/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**896**	16.0	03/09/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/09/2023	ND	169	84.3	200	1.30	
DRO >C10-C28*	<10.0	10.0	03/09/2023	ND	182	91.2	200	3.85	
EXT DRO >C28-C36	<10.0	10.0	03/09/2023	ND					

Surrogate: 1-Chlorooctane *93.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *111 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	03/08/2023	Sampling Date:	03/08/2023
Reported:	03/09/2023	Sampling Type:	Soil
Project Name:	RED HILLS 21	Sampling Condition:	Cool & Intact
Project Number:	1245	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO., NM		

Sample ID: CS - 5 (0.75') (H231053-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/09/2023	ND	2.07	103	2.00	2.26	
Toluene*	<0.050	0.050	03/09/2023	ND	2.05	102	2.00	2.67	
Ethylbenzene*	<0.050	0.050	03/09/2023	ND	2.03	102	2.00	2.53	
Total Xylenes*	<0.150	0.150	03/09/2023	ND	6.26	104	6.00	2.11	
Total BTEX	<0.300	0.300	03/09/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	03/09/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/09/2023	ND	169	84.3	200	1.30	
DRO >C10-C28*	<10.0	10.0	03/09/2023	ND	182	91.2	200	3.85	
EXT DRO >C28-C36	<10.0	10.0	03/09/2023	ND					

Surrogate: 1-Chlorooctane *88.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *104 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	03/08/2023	Sampling Date:	03/08/2023
Reported:	03/09/2023	Sampling Type:	Soil
Project Name:	RED HILLS 21	Sampling Condition:	Cool & Intact
Project Number:	1245	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO., NM		

Sample ID: SW - 1 (0-0.75') (H231053-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/09/2023	ND	2.07	103	2.00	2.26	
Toluene*	<0.050	0.050	03/09/2023	ND	2.05	102	2.00	2.67	
Ethylbenzene*	<0.050	0.050	03/09/2023	ND	2.03	102	2.00	2.53	
Total Xylenes*	<0.150	0.150	03/09/2023	ND	6.26	104	6.00	2.11	
Total BTEX	<0.300	0.300	03/09/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	03/09/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/09/2023	ND	169	84.3	200	1.30	
DRO >C10-C28*	<10.0	10.0	03/09/2023	ND	182	91.2	200	3.85	
EXT DRO >C28-C36	<10.0	10.0	03/09/2023	ND					

Surrogate: 1-Chlorooctane *87.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	03/08/2023	Sampling Date:	03/08/2023
Reported:	03/09/2023	Sampling Type:	Soil
Project Name:	RED HILLS 21	Sampling Condition:	Cool & Intact
Project Number:	1245	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO., NM		

Sample ID: SW - 2 (0-0.75') (H231053-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/09/2023	ND	2.07	103	2.00	2.26	
Toluene*	<0.050	0.050	03/09/2023	ND	2.05	102	2.00	2.67	
Ethylbenzene*	<0.050	0.050	03/09/2023	ND	2.03	102	2.00	2.53	
Total Xylenes*	<0.150	0.150	03/09/2023	ND	6.26	104	6.00	2.11	
Total BTEX	<0.300	0.300	03/09/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/09/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/09/2023	ND	169	84.3	200	1.30	
DRO >C10-C28*	<10.0	10.0	03/09/2023	ND	182	91.2	200	3.85	
EXT DRO >C28-C36	<10.0	10.0	03/09/2023	ND					

Surrogate: 1-Chlorooctane *92.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *109 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	03/08/2023	Sampling Date:	03/08/2023
Reported:	03/09/2023	Sampling Type:	Soil
Project Name:	RED HILLS 21	Sampling Condition:	Cool & Intact
Project Number:	1245	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO., NM		

Sample ID: SW - 3 (0-0.75') (H231053-08)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/09/2023	ND	2.07	103	2.00	2.26	
Toluene*	<0.050	0.050	03/09/2023	ND	2.05	102	2.00	2.67	
Ethylbenzene*	<0.050	0.050	03/09/2023	ND	2.03	102	2.00	2.53	
Total Xylenes*	<0.150	0.150	03/09/2023	ND	6.26	104	6.00	2.11	
Total BTEX	<0.300	0.300	03/09/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/09/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/09/2023	ND	169	84.3	200	1.30	
DRO >C10-C28*	<10.0	10.0	03/09/2023	ND	182	91.2	200	3.85	
EXT DRO >C28-C36	<10.0	10.0	03/09/2023	ND					

Surrogate: 1-Chlorooctane *86.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CARMONA RESOURCES
ASHTON THIELKE
310 W WALL ST SUITE 415
MIDLAND TX, 79701
Fax To:

Received:	03/08/2023	Sampling Date:	03/08/2023
Reported:	03/09/2023	Sampling Type:	Soil
Project Name:	RED HILLS 21	Sampling Condition:	Cool & Intact
Project Number:	1245	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO., NM		

Sample ID: SW - 4 (0-0.75') (H231053-09)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/09/2023	ND	2.07	103	2.00	2.26	
Toluene*	<0.050	0.050	03/09/2023	ND	2.05	102	2.00	2.67	
Ethylbenzene*	<0.050	0.050	03/09/2023	ND	2.03	102	2.00	2.53	
Total Xylenes*	<0.150	0.150	03/09/2023	ND	6.26	104	6.00	2.11	
Total BTEX	<0.300	0.300	03/09/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	03/09/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/09/2023	ND	169	84.3	200	1.30	
DRO >C10-C28*	<10.0	10.0	03/09/2023	ND	182	91.2	200	3.85	
EXT DRO >C28-C36	<10.0	10.0	03/09/2023	ND					

Surrogate: 1-Chlorooctane *92.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *109 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Chain of Custody

Work Order No: H231053

Page 1 of 1

Project Manager:	Ashton Thielke	Bill to: (if different)	Laci Luig
Company Name:	Carmona Resources	Company Name:	Cimarex Energy
Address:	310 West Wall Ste. 415	Address:	600 N Marienfield St, Suite 600
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	432-813-5347	Email:	laci.luig@coterra.com & ashton.thielke@coterra.com

Work Order Comments

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

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Red Hills 21	Turn Around	
Project Number:	1245	☐ Routine	☑ Rush
Project Location	Lea Co, NM	Due Date:	24 hr
Sampler's Name:	AT & KB	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Received Intact:	(Yes) No	Thermometer ID:	113
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.6 °C
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	4.9 °C
Total Containers:		Corrected Temperature:	4.3 °C

Preservative Codes

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

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500	HOLD	Sample Comments
CS-1 (0.75')	3/8/2023		X		Comp.	1		X	X	X		
CS-2 (0.75')	3/8/2023		X		Comp.	1		X	X	X		
CS-3 (0.75')	3/8/2023		X		Comp.	1		X	X	X		
CS-4 (0.75')	3/8/2023		X		Comp.	1		X	X	X		
CS-5 (0.75')	3/8/2023		X		Comp.	1		X	X	X		
SW-1 (0-0.75')	3/8/2023		X		Comp.	1		X	X	X		
SW-2 (0-0.75')	3/8/2023		X		Comp.	1		X	X	X		
SW-3 (0-0.75')	3/8/2023		X		Comp.	1		X	X	X		
SW-4 (0-0.75')	3/8/2023		X		Comp.	1		X	X	X		

Please send results to cmoehring@carmonaresources.com and mcarmona@carmonaresources.com

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		3-8-23 1515	2		
3			4		
5			6		

Revised Date 05012020 Rev. 2020.1

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 200953

CONDITIONS

Operator: CIMAREX ENERGY CO. OF COLORADO 600 N. Marienfeld Street Midland, TX 79701	OGRID: 162683
	Action Number: 200953
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Please implement 19.15.29.13 NMAC when completing P&A.	4/27/2023