

MCollier@H-R Enterprises.com 575-909-0326

Remediation and Closure Report

Red Hills Unit #016H API# 30-025-42324 Incident# nAPP2202655097 Lea County, New Mexico

Prepared For:

Cimarex Energy Co. of Colorado 600 Marienfeld St. Midland, TX 79701

Prepared By:

H&R Enterprises, LLC 5120 W. Kansas St. Hobbs, New Mexico 88242

February 14, 2022

H&R Enterprises, LLC (575) 909-0326 / (575) 605-3471 Released to Imaging: 4/27/2022 10:16:16 AM

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Mr. Mike Bratcher **NMOCD District I** 1625 N. French Dr. Hobbs, NM 88240

Subject: Remediation and Closure Report Red Hills Unit #016H API# 30-025-42324 Incident# nAPP2202655097 Lea County, NM

Dear Mr. Bratcher,

Cimarex Energy Co. of Colorado has contracted H&R Enterprises (H&R) to perform site assessment and remediation services at the above-referenced location. The results of our site assessment and reclamation activities are contained herein.

Site Information

The Red Hills Unit #016H is located approximately 33.6 miles West of Jal, New Mexico. The legal location for this release is Unit Letter C, Section 33, Township 25 South and Range 33 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.0911154 North and -103.5808688 West. Site plans are presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Pyote and Maljamar fine sands, 0 to 3 percent slopes. The referenced soil data is attached in Appendix II. Drainage courses in this area are typically dry. The project site is not located in a high Karst potential area (Karst Map, Appendix I).

Groundwater and Site Characterization

The New Mexico Office of the Sate Engineer web site indicates that the nearest reported depth to groundwater is 280-feet below ground surface (BGS). See Appendix II for the referenced groundwater data.

If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater in Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29, NMAC.

Approximate Depth to Groundwater

280 Feet/BGS

Yes	No	Within 300 feet of any continuously flowing watercourse or any other significant watercourse
Yes	No	Within 200 feet of any lakebed, sinkhole, or a playa lake
Yes	No	Within 300 feet from an occupied permanent residence, school, hospital, institution, or church
Yes	No	Within 500 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	Within 1000 feet of any freshwater well or spring
Yes	No	Within incorporated municipal boundaries or within a defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978
Yes	No	Within 300 feet of a wetland
Yes	No	Within the area overlying a subsurface mine
Yes	No	Within an unstable area
Yes	No	Within a 100-year floodplain

As this is location is in an area with a depth to groundwater of greater than 100-feet BGS, the closure criteria for this site are as follows:

Table I								
Closure Criteria for Soils Impacted by a Release								
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/I TDS	Constituent	Method*	Limit**					
>100 feet	Chloride ** TPH (GRO+DRO+MRO)	EPA 300.0 or SM4500 CIB EPA SW-846 Method 8015M	20,000 mg/kg 2500 mg/kg					
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg					
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg					
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg					

Incident Description

On January 25, 2022, Cimarex personnel discovered that illegal dumping of an unknown fluid had taken place on the Northeast corner of the location. According to spill calculation measurements, it is believed that 23 barrels (bbls) of fluid were dumped on the location. An initial C-141 was submitted on January 26, 2022 and is provided in Appendix III. The incident number assigned to this release by NMOCD is nAPP2202655097.

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Site Assessment

On January 26, 2022, H&R mobilized personnel to perform site assessment and sampling activities of the impacted area. Grab samples were obtained by way of hand trowel and transported to Cardinal Laboratories for testing. Analytical results from that assessment are presented in the following data table. Initial site assessment sample locations are illustrated on the Site Assessment Map, Appendix I. Photo documentation of the spill area is attached in Appendix IV. Complete laboratory reports can be found in Appendix V.

Commissio	Comula Data	Depth	BTEX	Benzene	GRO	DRO	MRO	Total TPH	Cl
Sample ID	Sample Date	(BGS)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NMOCD Table 1 Closure Criteria 19.15.29			50 mg/kg 10 mg/kg		1000 mg/kg		2500 mg/kg	2500 mg/kg	mg/kg
	NMAC								8/8
S-1	1/26/2022	0'	ND	ND	ND	153	ND	153	64
S-2	1/26/2022	0'	ND	ND	ND	864	82.8	946.8	144
S-3	1/26/2022	0'	ND	ND	ND	50.7	ND	50.7	64
BG	1/26/2022	0'	ND	ND	ND	ND	ND	0	16
			ND - /	nalyte Not Dete	octod BG - Back	ground			

Table 1:	Initial Soi	l Samnles	Δnalvsis
Table T:	initiai 201	i Samples	Analysis

ND = Analyte Not Detected BG = Background

Based on the results of our site assessment and upon client authorization, further excavation activities of the impacted area commenced on February 10, 2022. Confirmation samples were obtained from the bottom and sidewalls every 200sqft. to confirm that NMOCD closure criteria had been met, the results of which can be found in the following data table. Photo documentation of the excavation and completed backfill are attached in Appendix IV. Confirmation sample locations and excavation dimensions can be found on the Confirmation Sample Map in Appendix I. Complete laboratory reports are attached in Appendix V.

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Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC		eria 19.15.29	50 mg/kg	10 mg/kg		100 mg/kg		100 mg/kg	600 mg/kg
S-1	2/10/2022	1'	ND	ND	ND	ND	ND	0	32
S-2	2/10/2022	1'	ND	ND	ND	ND	ND	0	32
S-3	2/10/2022	1'	ND	ND	ND	ND	ND	0	32
S-4	2/10/2022	1'	ND	ND	ND	ND	ND	0	48
S-5	2/10/2022	1'	ND	ND	ND	ND	ND	0	48
S-6	2/10/2022	1'	ND	ND	ND	ND	ND	0	64
N.SW	2/10/2022	1'	ND	ND	ND	ND	ND	0	48
S.SW	2/10/2022	1'	ND	ND	ND	ND	ND	0	48
E.SW	2/10/2022	1'	ND	ND	ND	ND	ND	0	32
W.SW	2/10/2022	1'	ND	ND	ND	ND	ND	0	48

Table 2: Confirmation Soil Sample Analysis

Remedial Actions

- The impacted areas in the vicinity of sample points S-1 and S-2 were excavated to a total depth of 1 feet BGS.
- Composite confirmation samples were obtained from the sidewalls and bottoms of the excavated areas to verify that all contaminants above closure criteria had been removed. The results are shown on Table 2 and the corresponding lab reports may be found in Appendix V.
- All the excavated material (80yds) was hauled to Lea Land, a NMOCD approved solid waste disposal facility.
- The excavated areas on the well pad were backfilled with new caliche at depth and brought to grade, machine compacted and contoured to match the surrounding location.
- The Final C-141 formally documenting the remedial actions is attached in Appendix III.

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Closure

Based on the site assessment, remedial actions and confirmation sampling results completed for this project, on behalf of Cimarex Energy Co. of Colorado we request that no further actions be required, and that closure of this incident be granted.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-909-0326.

Respectfully submitted,

H&R Enterprises, LLC

Michael Collier Environmental Project Manager

Attachments:

Appendix I Site Maps Appendix II Soil Survey, Groundwater Data, FEMA Flood Zone Appendix III Initial and Final C-141 Appendix IV Photographic Documentation Appendix V Laboratory Data

APPENDIX I

SITE/SAMPLE MAPS

KARST MAP

TOPOGRAPHIC MAP

LOCATOR MAP

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Received by OCD: 3/18/2022 10:29:54 AM Red Hills Unit #016H

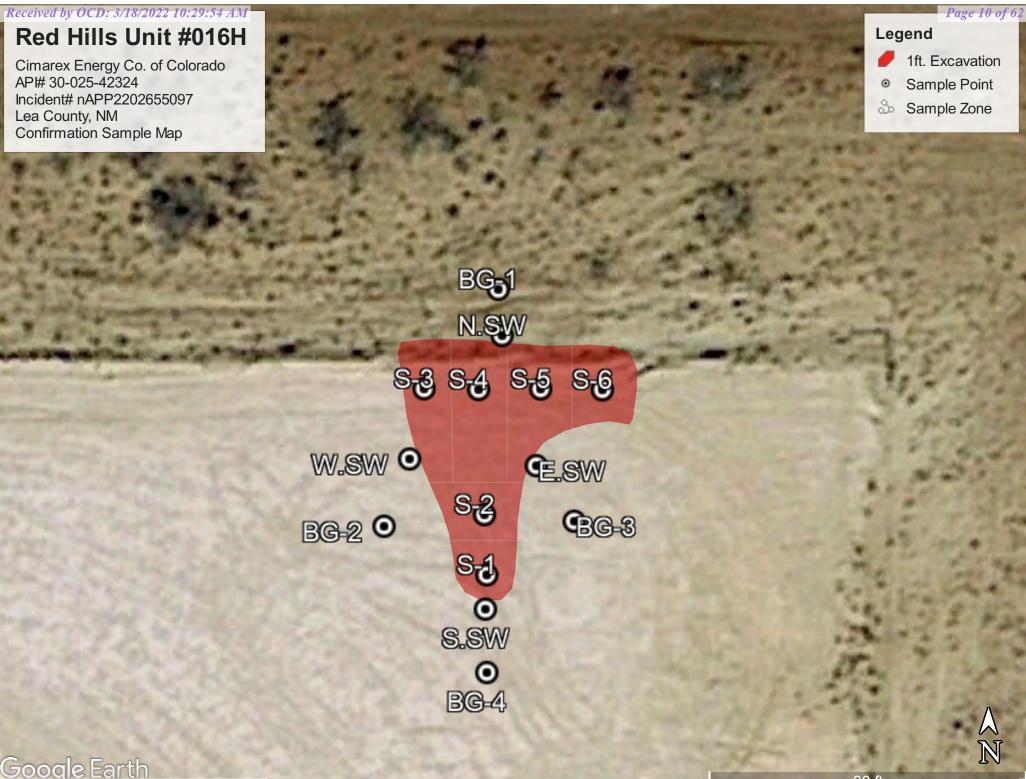
Cimarex Energy Co. of Colorado AP# 30-025-42324 Incident# nAPP2202655097 Lea County, NM Site Assessment Map



Red Hills Unit #016H

Cimarex Energy Co. of Colorado API# 30-025-42324 Incident# nAPP2202655097 Lea County, NM Confirmation Sample Map

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Cimarex Energy Co. of Colorado AP# 30-025-42324 Lea County, NM Karst Map Page 11 of 62

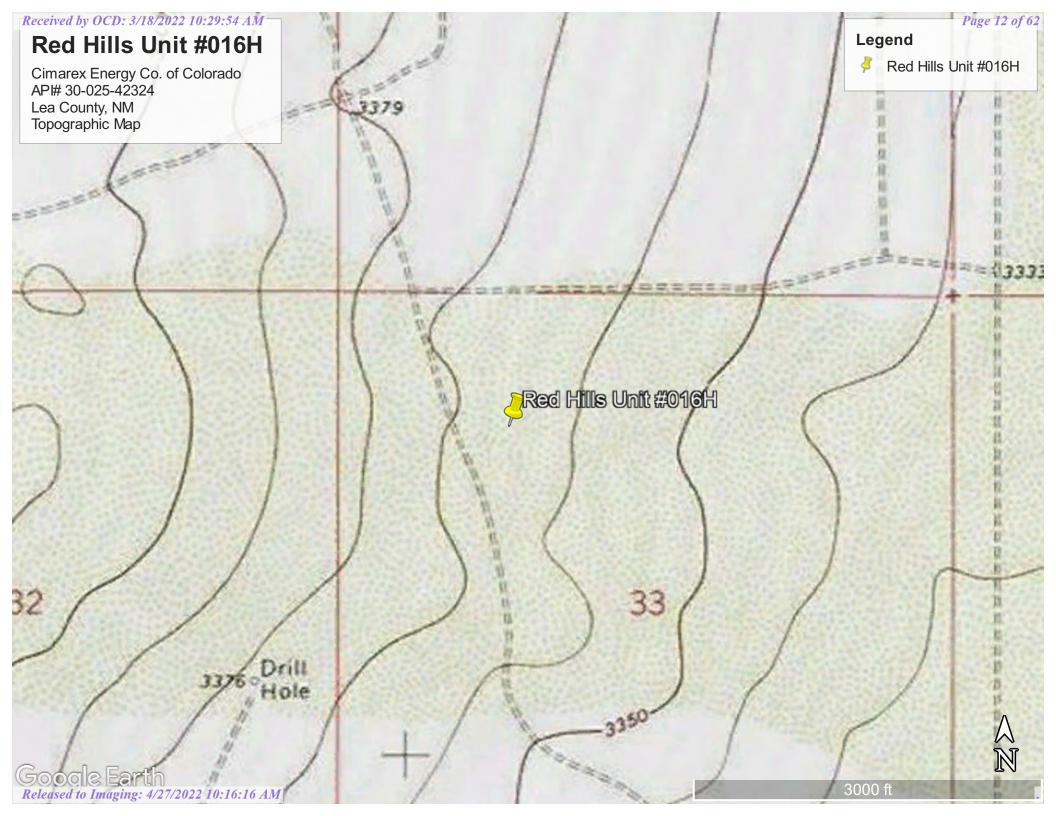
MediumRed Hills Unit #016H

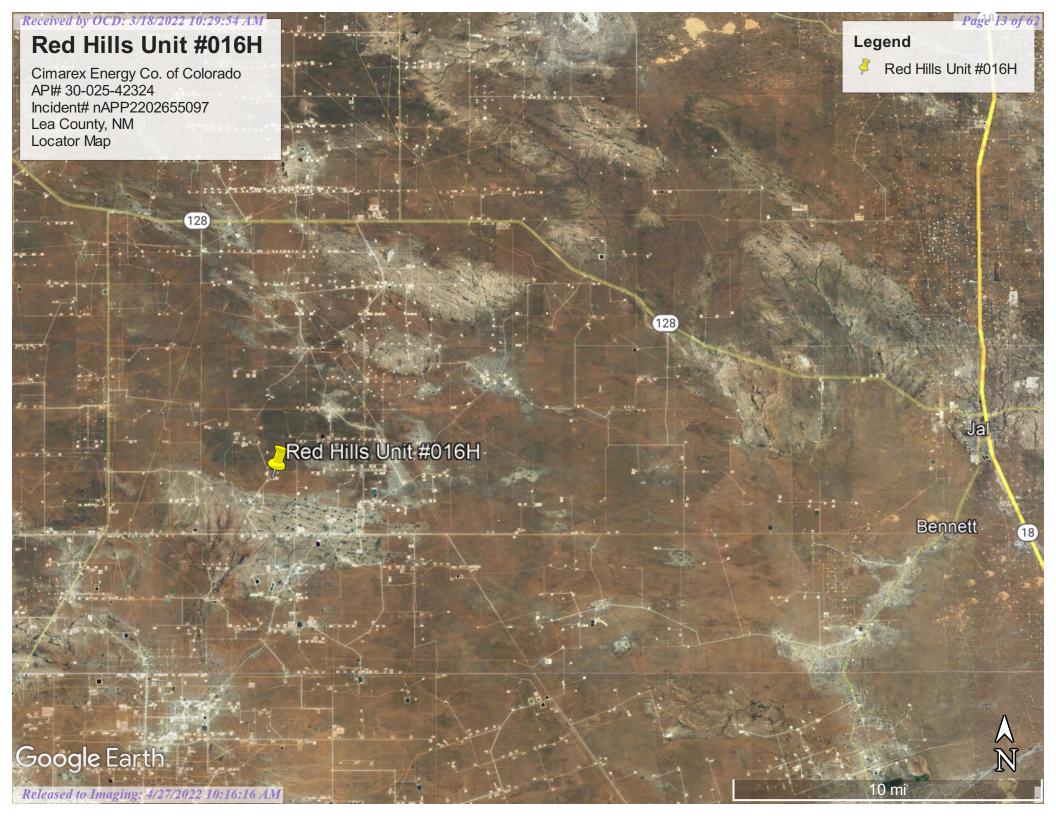
Red Hills Unit #016H

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APPENDIX II

GROUNDWATER DATA

SOIL SURVEY

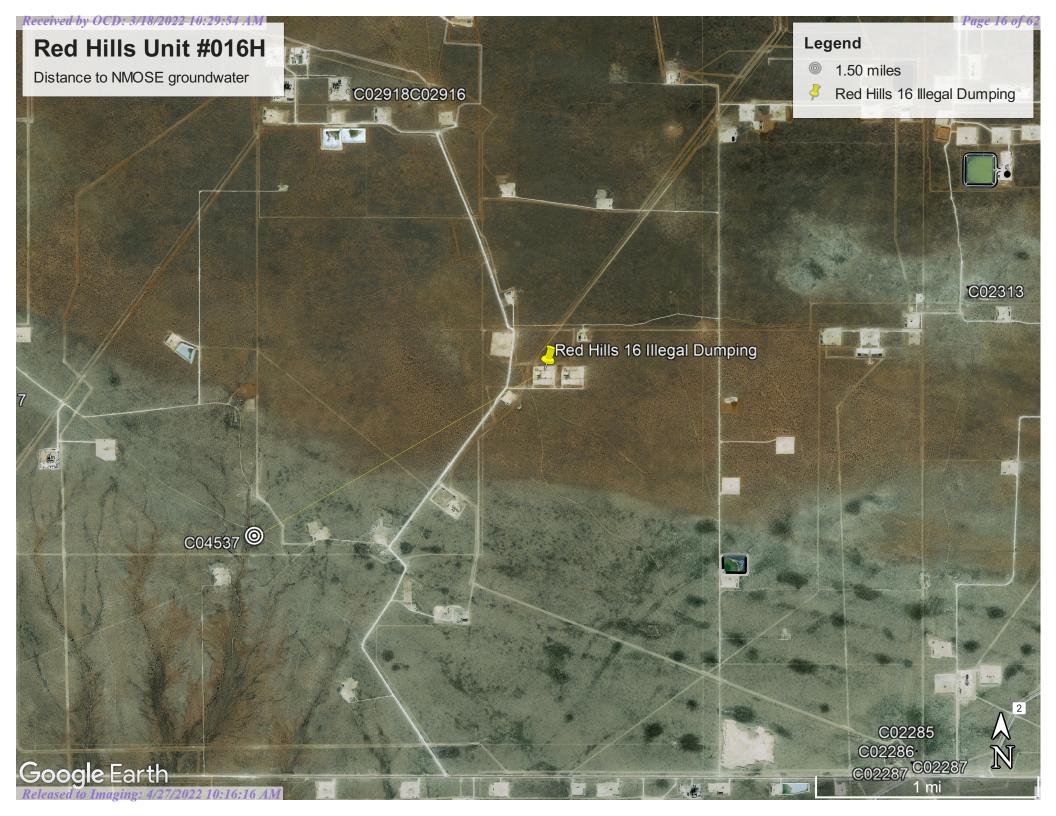
FEMA FLOOD ZONE

	W	/ate					00	v			e Engine pth to		ater	
(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD replaced, O=orpha C=the file closed)	ned,	1	· 1			7 2=NE est to la	E 3=SW 4= irgest)	SE) (NAD83 U	TM in r	neters)	(In	feet)	
		POD		0.0.0										
POD Number	Code	Sub- basin	County	QQQ 64 16 4	-	Tws	Rng		x	Y	DistanceDept	hWellDei		Vater
<u>C 04537 POD1</u>	couc	C	LE	4 4 4		25S	33E	63184		_	2378	500	280	220
										Avera	age Depth to Water Minimum Dept Maximum Deptl	h:	280 fe 280 fe 280 fe	et
Record Count: 1														
Basin/County Sear	ch:													
County: Lea														
UTMNAD83 Radiu	us Search (in	meters	<u>):</u>											
Easting (X): 63	33910.66		North	ning (Y):	3551	424.91			Radius:	3000				
The data is furnished by the the accuracy, completeness,			1 2	*					ing that the C	DSE/ISC	make no warranties,	*	* ·	

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WATER COLUMN/ AVERAGE DEPTH TO WATER

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Lea County, New Mexico

PU—Pyote and Maljamar fine sands

Map Unit Setting

National map unit symbol: dmqq Elevation: 3,000 to 3,900 feet Mean annual precipitation: 10 to 12 inches Mean annual air temperature: 60 to 62 degrees F Frost-free period: 190 to 205 days Farmland classification: Not prime farmland

Map Unit Composition

Pyote and similar soils: 46 percent Maljamar and similar soils: 44 percent Minor components: 10 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pyote

Setting

Landform: Plains Landform position (three-dimensional): Rise Down-slope shape: Linear Across-slope shape: Linear Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 30 inches: fine sand Bt - 30 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Land capability classification (nonirrigated): 7s Hydrologic Soil Group: A Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

Description of Maljamar

Setting

Landform: Plains Landform position (three-dimensional): Rise Down-slope shape: Linear Across-slope shape: Linear Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 24 inches: fine sand Bt - 24 to 50 inches: sandy clay loam Bkm - 50 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 60 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e Land capability classification (nonirrigated): 7e Hydrologic Soil Group: B Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

Minor Components

Kermit

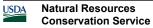
Percent of map unit: 10 percent *Ecological site:* R042XC022NM - Sandhills



Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico Survey Area Data: Version 18, Sep 10, 2021

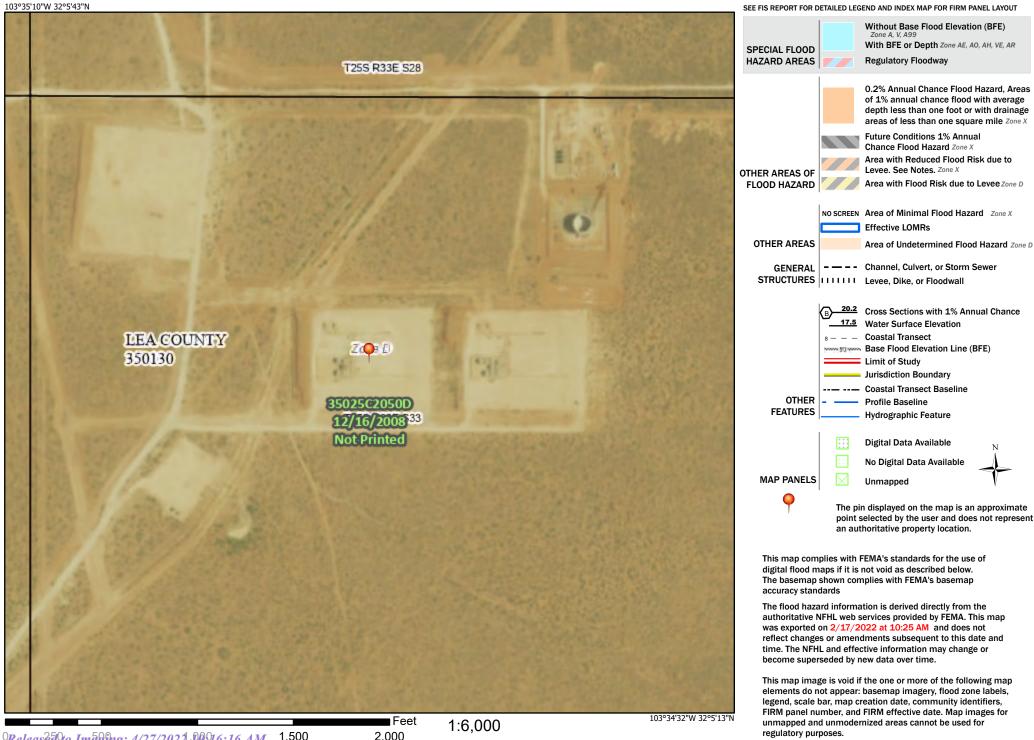


Received by OCD: 3/18/2022 10:29:54 AM National Flood Hazard Layer FIRMette



Legend

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Releasea to Imaging: 4/27/2022 90916:16 AM 1,500

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



INITIAL C-141

FINAL C-141

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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

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Incident ID	nAPP2202655097
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) nAPP2202655097
Contact mailing address: 600 N Marienfeld Street, Ste. 600 Midland, TX 79701	

Location of Release Source

Latitude 32.0911154_

Longitude -103.5808688_ (NAD 83 in decimal degrees to 5 decimal places)

Site Name: Red Hills Unit 16H	Site Type: Battery
Date Release Discovered: 1/25/2022	API# (if applicable)

Unit Letter	Section	Township	Range	County
С	33	258	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)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	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) 23 bbls	Volume/Weight Recovered (provide units) 0 bbls

Cause of Release: Vandalism – Illegal Dumping

We found an illegal dumping at the Red Hills Unit 16H tank battery pad. According to spill measurement calculations, the release is \sim 23 barrels. Unsure at this time of what the product is, but the fluid is gray with a chemical odor. The fluid dumped did not leave a salt or hydrocarbon stain on the ground. An environmental company will be contacted and the release will be remediated.

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

 \square 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: <u>A C</u>	_ Date: 1/26/2022
email: laci.luig@coterra.com	Telephone: (432) 208-3035
OCD Only	
Received by:	Date:

Received by OCD: 3/18/2022 10:29:54 AM Form C-141 State of New Mexico

Page 3

Site Assessment/Characterization

Oil Conservation Division

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>280</u> (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 ¹/₂-mile of the lateral extents of the release
- Boring or excavation logs
- \boxtimes 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.

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Received by OCD: 3/18/2	2022 10:29:54 AM State of New Mexico			Page 25 of 62
			Incident ID	nAPP2202655097
Page 4	Oil Conservation Division	l	District RP	
			Facility ID	
			Application ID	
regulations all operators ar public health or the enviro failed to adequately invest		otifications and perform co OCD does not relieve the ireat to groundwater, surfa	prrective actions for rele e operator of liability sh ice water, human health liance with any other fe	eases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only				
Received by:		Date:		

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.

<u>Closure Report Attachment Checklist</u>: Each of the following i	tems must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certai may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rer human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regula restore, reclaim, and re-vegetate the impacted surface area to the co accordance with 19.15.29.13 NMAC including notification to the O	ations. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.
Printed Name: Laci Luig	Title: ESH Specialist
Signature: <u>A</u> <u>A</u> <u>C</u> <u>A</u>	Date: 1/3/2022
email: laci.luig@coterra.com	Telephone: (432) 208-3035
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date: 04/27/2022
Printed Name: Jennifer Nobui	Title: Environmental Specialist A

From:	Hensley, Chad, EMNRD
То:	Laci Luig; BLM NM CFO Spill
Subject:	RE: [EXTERNAL] nAPP2202655097 - Red Hills 16H Battery sample notification
Date:	Thursday, February 10, 2022 9:20:36 AM
Attachments:	image001.jpg
	image002.jpg
	0.jpg

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Luci,

OCD has received you notice. Please ensure that all communications with the OCD is included in your reports.

Cheers,

Chad Hensley • Environmental Science & Specialist Environmental Bureau EMNRD - Oil Conservation Division 811 First St. | Artesia, NM 88210 Office: 575.748.1283 | Cell: 575-703-1723 chad.hensley@state.nm.us http://www.emnrd.state.nm.us/OCD/



From: Laci Luig <Laci.Luig@coterra.com>
Sent: Wednesday, February 9, 2022 1:44 PM
To: Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>; BLM NM CFO Spill
<BLM_NM_CFO_Spill@blm.gov>
Subject: [EXTERNAL] nAPP2202655097 - Red Hills 16H Battery sample notification

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

Good afternoon,

This email serves as notification for excavation and confirmation sampling on the Red Hills Unit 16H Battery. Excavation and sampling is scheduled to begin February 10th, 2022. H&R Enterprises will be onsite for field and confirmation sampling.

Thank you,



Laci Luig | Environmental Safety & Health Specialist T: 432.571.7810 | M: 432.208.3035 | laci.luig@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.

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PHOTOGRAPHIC DOCUMENTATION

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PHOTOGRAPHIC DOCUMENTATION





LABORATORY DATA

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February 01, 2022

MICHAEL COLLIER

H & R ENTERPRISES

1010 GAMBLIN ROAD

HOBBS, NM 88240

RE: RED HILLS UNIT #16

Enclosed are the results of analyses for samples received by the laboratory on 01/26/22 14:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

H & R ENTERPRISES 1010 GAMBLIN ROAD HOBBS NM, 88240	Project Number:	MICHAEL COLLIER	Reported: 01-Feb-22 14:24

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	
S-1 0'	H220307-01	Soil	26-Jan-22 12:50	26-Jan-22 14:45	
S-2 0'	H220307-02	Soil	26-Jan-22 13:00	26-Jan-22 14:45	
S-3 0'	H220307-03	Soil	26-Jan-22 13:10	26-Jan-22 14:45	
BG 0'	H220307-04	Soil	26-Jan-22 13:20	26-Jan-22 14:45	

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Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

H & R ENTERPRISES 1010 GAMBLIN ROAD HOBBS NM, 88240	Project: RED HILLS UNIT #16 Project Number: NONE GIVEN Project Manager: MICHAEL COLLIER Fax To: NONE					C	Reported: 01-Feb-22 14:24			
			~	5 - 1 0' 307-01 (So	il)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2012707	AC	27-Jan-22	4500-Cl-B	
pH*	7.96		0.100	pH Units	1	2012642	GM	26-Jan-22	9045	
Temperature °C	20.5			pH Units	1	2012642	GM	26-Jan-22	9045	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	69.9-	140	2012612	MS/	26-Jan-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
DRO >C10-C28*	153		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
Surrogate: 1-Chlorooctane			85.9 %	66.9-	136	2012630	MS	27-Jan-22	8015B	
Surrogate: 1-Chlorooctadecane			108 %	59.5-	142	2012630	MS	27-Jan-22	8015B	
Total Metals by ICP			Green Anal	ytical Labo	oratories					

Total Mictals Dy ICI									
Aluminum	5170	5.00	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	
Calcium	122000	1000	mg/kg dry	1000	B220285	AES	31-Jan-22	6010B	
Iron	3220	10.0	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	

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Analytical Results For:

H & R ENTERPRISES 1010 GAMBLIN ROAD HOBBS NM, 88240								Reported: 1-Feb-22 14:	24	
				5 - 2 0' 307 02 (Se	:1)					
				307-02 (So	11)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	144		16.0	mg/kg	4	2012707	AC	27-Jan-22	4500-Cl-B	
pH*	8.07		0.100	pH Units	1	2012642	GM	26-Jan-22	9045	
Temperature °C	20.5			pH Units	1	2012642	GM	26-Jan-22	9045	
Volatile Organic Compounds b	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			100 %	69.9-	140	2012612	MS/	26-Jan-22	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
DRO >C10-C28*	864		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
EXT DRO >C28-C36	82.8		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
Surrogate: 1-Chlorooctane			79.4 %	66.9-	136	2012630	MS	27-Jan-22	8015B	
Surrogate: 1-Chlorooctadecane			126 %	59.5-142		2012630	MS	27-Jan-22	8015B	

Green Analytical Laboratories

Total Metals by ICP									
Aluminum	5890	5.00	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	
Calcium	95100	1000	mg/kg dry	1000	B220285	AES	31-Jan-22	6010B	
Iron	3740	10.0	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	

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Analytical Results For:

H & R ENTERPRISES 1010 GAMBLIN ROAD HOBBS NM, 88240	Project:RED HILLS UNIT #16Reported:Project Number:NONE GIVEN01-Feb-22 14:24Project Manager:MICHAEL COLLIERFax To:NONE								24	
			~	5-3 0'						
			H220	307-03 (So	il)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2012707	AC	27-Jan-22	4500-Cl-B	
pH*	8.26		0.100	pH Units	1	2012642	GM	26-Jan-22	9045	
Temperature °C	20.5			pH Units	1	2012642	GM	26-Jan-22	9045	
Volatile Organic Compounds h	oy EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	69.9-	140	2012612	MS/	26-Jan-22	8021B	
Petroleum Hydrocarbons by G	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
DRO >C10-C28*	50.7		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
Surrogate: 1-Chlorooctane			73.8 %	66.9-	136	2012630	MS	27-Jan-22	8015B	
Surrogate: 1-Chlorooctadecane			77.2 %	59.5-142		2012630	MS	27-Jan-22	8015B	

Green Analytical Laboratories

Total Metals by ICP									
Aluminum	4610	5.00	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	
Calcium	22200	100	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	
Iron	3580	10.0	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

H & R ENTERPRISES 1010 GAMBLIN ROAD HOBBS NM, 88240			Project Nun Project Mana		ie given Hael coli			0	Reported: 11-Feb-22 14:	24
				BG 0'	:1)					
			H220	307-04 (So	11)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	2012707	AC	27-Jan-22	4500-Cl-B	
pH*	8.34		0.100	pH Units	1	2012642	GM	26-Jan-22	9045	
Temperature °C	20.5			pH Units	1	2012642	GM	26-Jan-22	9045	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2012612	MS/	26-Jan-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		100 %	69.9-	140	2012612	MS/	26-Jan-22	8021B	
Petroleum Hydrocarbons by (GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2012630	MS	27-Jan-22	8015B	
Surrogate: 1-Chlorooctane			80.1 %	66.9-	136	2012630	MS	27-Jan-22	8015B	
Surrogate: 1-Chlorooctadecane			78.7%	59.5-	142	2012630	MS	27-Jan-22	8015B	

Green Analytical Laboratories

Total Metals by ICP									
Aluminum	4500	5.00	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	
Calcium	12900	100	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	
Iron	3700	10.0	mg/kg dry	100	B220285	AES	31-Jan-22	6010B	

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Celey D. Keene, Lab Director/Quality Manager



H & R ENTERPRISES 1010 GAMBLIN ROAD HOBBS NM, 88240	Project: RED HILLS UNIT Project Number: NONE GIVEN Project Manager: MICHAEL COLLIE Fax To: NONE	01-Feb-22 14:24	
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Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2012642 - General Prep - Wet Chem										
LCS (2012642-BS1)				Prepared &	Analyzed:	26-Jan-22				
pH	7.04		pH Units	7.00		101	90-110			
Duplicate (2012642-DUP1)	Sou	rce: H220303	-01	Prepared &	Analyzed:	26-Jan-22				
pH	8.05	0.100	pH Units		8.02			0.373	20	
Temperature °C	20.3		pH Units		20.3			0.00	200	
Batch 2012707 - 1:4 DI Water										
Blank (2012707-BLK1)				Prepared &	Analyzed:	27-Jan-22				
Chloride	ND	16.0	mg/kg							
LCS (2012707-BS1)				Prepared &	Analyzed:	27-Jan-22				
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (2012707-BSD1)				Prepared &	Analyzed:	27-Jan-22				
Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	

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H & R ENTERPRISES 1010 GAMBLIN ROAD HOBBS NM, 88240	Project Number:	MICHAEL COLLIER	Reported: 01-Feb-22 14:24	
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2012612 - Volatiles										
Blank (2012612-BLK1)				Prepared &	z Analyzed:	26-Jan-22				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0504		mg/kg	0.0500		101	69.9-140			
LCS (2012612-BS1)				Prepared &	Analyzed:	26-Jan-22				
Benzene	2.10	0.050	mg/kg	2.00		105	85.1-114			
Toluene	2.01	0.050	mg/kg	2.00		100	88.6-116			
Ethylbenzene	2.02	0.050	mg/kg	2.00		101	84.4-115			
m,p-Xylene	4.11	0.100	mg/kg	4.00		103	85.5-116			
o-Xylene	2.00	0.050	mg/kg	2.00		99.9	85.2-111			
Total Xylenes	6.11	0.150	mg/kg	6.00		102	86.2-113			
Surrogate: 4-Bromofluorobenzene (PID)	0.0494		mg/kg	0.0500		98.8	69.9-140			
LCS Dup (2012612-BSD1)				Prepared &	Analyzed:	26-Jan-22				
Benzene	2.17	0.050	mg/kg	2.00		109	85.1-114	3.67	12.6	
Toluene	2.08	0.050	mg/kg	2.00		104	88.6-116	3.55	13.3	
Ethylbenzene	2.11	0.050	mg/kg	2.00		105	84.4-115	3.98	13.9	
m,p-Xylene	4.28	0.100	mg/kg	4.00		107	85.5-116	4.02	13.6	
o-Xylene	2.08	0.050	mg/kg	2.00		104	85.2-111	4.19	14.1	
Total Xylenes	6.36	0.150	mg/kg	6.00		106	86.2-113	4.08	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0494		mg/kg	0.0500		98.8	69.9-140			

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



H & R ENTERPRISES 1010 GAMBLIN ROAD HOBBS NM, 88240	Project: RED Project Number: NON Project Manager: MIC Fax To: NON	HAEL COLLIER	Reported: 01-Feb-22 14:24
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2012630 - General Prep - Organics										
Blank (2012630-BLK1)				Prepared: 2	26-Jan-22 A	nalyzed: 27	7-Jan-22			
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	41.7		mg/kg	50.0		83.4	66.9-136			
Surrogate: 1-Chlorooctadecane	40.8		mg/kg	50.0		81.5	59.5-142			
LCS (2012630-BS1)				Prepared: 2	26-Jan-22 A	nalyzed: 27	7-Jan-22			
GRO C6-C10	214	10.0	mg/kg	200		107	81.6-129			
DRO >C10-C28	213	10.0	mg/kg	200		106	83-129			
Total TPH C6-C28	426	10.0	mg/kg	400		107	84.5-127			
Surrogate: 1-Chlorooctane	50.1		mg/kg	50.0		100	66.9-136			
Surrogate: 1-Chlorooctadecane	55.6		mg/kg	50.0		111	59.5-142			
LCS Dup (2012630-BSD1)				Prepared: 2	26-Jan-22 A	nalyzed: 27	7-Jan-22			
GRO C6-C10	215	10.0	mg/kg	200		108	81.6-129	0.671	21.4	
DRO >C10-C28	202	10.0	mg/kg	200		101	83-129	4.86	17.9	
Total TPH C6-C28	418	10.0	mg/kg	400		104	84.5-127	2.05	17.6	
Surrogate: 1-Chlorooctane	51.5		mg/kg	50.0		103	66.9-136			
Surrogate: 1-Chlorooctadecane	55.4		mg/kg	50.0		111	59.5-142			

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



H & R ENTERPRISES 1010 GAMBLIN ROAD HOBBS NM, 88240	Project Number:	MICHAEL COLLIER	Reported: 01-Feb-22 14:24	
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Total Metals by ICP - Quality Control

Green Analytical Laboratories

		D (G 1	q		0/DEC		DDD	
Amolyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Result	Limit	Units	Level	Result	70KEU	Limits	KPD	LIIIII	Inotes
Batch B220285 - EPA 3050										
Blank (B220285-BLK1)				Prepared &	Analyzed:	31-Jan-22				
Aluminum	ND	5.00	mg/kg dry							
Calcium	ND	100	mg/kg dry							
Iron	ND	10.0	mg/kg dry							
LCS (B220285-BS1)				Prepared &	Analyzed:	31-Jan-22				
Aluminum	370	5.00	mg/kg dry	400		92.4	80-120			
Calcium	359	100	mg/kg dry	400		89.7	80-120			
Iron	344	10.0	mg/kg dry	400		86.1	80-120			
LCS Dup (B220285-BSD1)				Prepared &	Analyzed:	31-Jan-22				
Iron	347	10.0	mg/kg dry	400		86.8	80-120	0.807	20	
Aluminum	380	5.00	mg/kg dry	400		95.0	80-120	2.77	20	
Calcium	360	100	mg/kg dry	400		90.0	80-120	0.365	20	

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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

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

	H&R Enterprises	BILL TO	ANALYSIS REQUEST
Project Manager: Michael Collier	Collier	P.O. #:	
Address: 5120 W. Kansas St	St.	Company: Cimarex	
City: Hobbs	State: NM Zip: 88242	Attn: Laci Luig	
Phone #: 575.909.0326/ 575.605.3471	Fax #:	Address:	
Project #:	Project Owner: Cimarex Energy	City:	
Project Name: Red Hills Unit #16		State: Zip:	
Project Location: Lea County, NM	nty, NM	*	
Sampler Name: M.Collier			
_		1	
	IP. MATRIX	PRESERV. SAMPLING	
Lab I.D. Sa	-	OTHER : ACID/BASE: ICE / COOL OTHER : DATE	BTEX TPH CHLORIDES PH ALUMINUM CALCIUM TRON
1510	2 V	J 1-26-22 1	~~~~~~
25.26			
4 35 0	,		
PLEASE NOTE: Liability and Damages, Cardinali analyses. All claims including those for negligence service. In no event shall Cardinal be laste for incl affiliates or successors arising out of or related to the affiliates of successors arising out of or related to the	PLEASE NOTE: Labley and Damages. Cardinal's labley and client's exclusive remery for any data making whether based to contract or for, shall be timbed to the annount paid by the client for the nanityses. All claims including those for negligence and any other cause whatevers what be deemed valved unless made in writing and received by Cardinal within 30 days after completion of the applicable tender. In no event shall Cardinal be lable for incidential or consequential damages, including whool timberon, business interruptions, loss of profits incurred by clarch, the subclassive, affliates or successors arising out or related to the performance of tenders the incidential regardless of whether such claims have during on the status reasons or minutes affliates or successors arising out or related to the performance of tenders the resolution to the status of the status or minutes affliates or successors arising out or related to the performance of tenders the relation of the status of the status or minutes affliates or successors arising out or related to the performance of tenders the relation of the status of the status or minutes affliates or successors arising out or related to the performance of tenders the relation of the status of the status or the notes or minutes affliates or successors arising out or related to the tenders of tenders the tenders of the status of the status of the status or minutes affliates or successors arising out or related to the tenders of tenders the tenders of tenders or tenders or the tenders of tenders or tenders of the status of tenders or tenders of tenders of tenders of tenders or tenders of tenders of tenders or tenders of tenders or tenders of tenders of tenders of tenders of tenders of tenders of tenders or tenders of	arking whether based in contract or tart, shall be finited to the amount paid by the client for the wahed unless made in writing and received by Cardinal within 30 days after completion of the age inclution, business interruptions, loss of runs, or loss of profits incurred by client, its subadiaries, regardless of whether such client is based upon any of the above state resorce or otherwest regardless of whether such clients in based upon any of the above state resorce or otherwest	e client for the lefelon of the upplicable bubbledites, v offende
NW Cul	Time: 445 Allung u	Alla Lee AII	Verbal Result: □ Yes □ No Add'l Phone #: All Results are emailed. Please províde Email address:
relariduished By:	Date: Rečelived By: Time:	RE	REMARKS: RUS H
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. "C 211 Sample Condition Corrected Temp."C 1.LC Cool Intact Corrected Temp."C 1.LC Pres Yes	n CHECKED BY:	Turnaround Time: Standard Bacteria (only) Sample Condition Rush Cool Intact Observed Temp. °C Themometer ID #113 U Cool Intact

Laboratories

Page 12 of 12

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



February 15, 2022

MICHAEL COLLIER

H & R ENTERPRISES

1010 GAMBLIN ROAD

HOBBS, NM 88240

RE: RED HILLS UNIT #16

Enclosed are the results of analyses for samples received by the laboratory on 02/11/22 12:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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/ga/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. Keine

Celey D. Keene Lab Director/Quality Manager



	H & R ENTERPRISES MICHAEL COLLIER 1010 GAMBLIN ROAD HOBBS NM, 88240 Fax To: NONE		
Received:	02/11/2022	Sampling Date:	02/10/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	RHU #16	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM		

Sample ID: S - 1 1' (H220547-01)

BTEX 8021B	mg,	'kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2022	ND	2.11	105	2.00	2.41	
Toluene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.95	
Ethylbenzene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.87	
Total Xylenes*	<0.150	0.150	02/12/2022	ND	6.50	108	6.00	2.74	
Total BTEX	<0.300	0.300	02/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	69.9-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	128	66.9-13	6						
Surrogate: 1-Chlorooctadecane	139	% 59.5-14	-						

Cardinal Laboratories

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENTERPRI MICHAEL COLLIE 1010 GAMBLIN F HOBBS NM, 8824 Fax To: NOI	R OAD HO	
Received:	02/11/2022	Sampling Date:	02/10/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	RHU #16	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM		

Sample ID: S - 2 1' (H220547-02)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	02/12/2022	ND	2.11	105	2.00	2.41	
Toluene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.95	
Ethylbenzene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.87	
Total Xylenes*	<0.150	0.150	02/12/2022	ND	6.50	108	6.00	2.74	
Total BTEX	<0.300	0.300	02/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	114 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	123	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	MICH 1010	BBS NM, 8	LLIER IN ROAD		
Received:	02/11/2022			Sampling Date:	02/10/2022
Reported:	02/15/2022			Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16			Sampling Condition:	Cool & Intact
Project Number:	RHU #16			Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM				

Sample ID: S - 3 1' (H220547-03)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2022	ND	2.11	105	2.00	2.41	
Toluene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.95	
Ethylbenzene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.87	
Total Xylenes*	<0.150	0.150	02/12/2022	ND	6.50	108	6.00	2.74	
Total BTEX	<0.300	0.300	02/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	119 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	129	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	MI 10 HO	& R ENTE CHAEL CO 10 GAMBI DBBS NM, x To:	DLLIER LIN ROAD		
Received:	02/11/2022			Sampling Date:	02/10/2022
Reported:	02/15/2022			Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16			Sampling Condition:	Cool & Intact
Project Number:	RHU #16			Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM				

Sample ID: S - 4 1' (H220547-04)

BTEX 8021B	mg,	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	02/12/2022	ND	2.11	105	2.00	2.41	
Toluene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.95	
Ethylbenzene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.87	
Total Xylenes*	<0.150	0.150	02/12/2022	ND	6.50	108	6.00	2.74	
Total BTEX	<0.300	0.300	02/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	121	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	132	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	MICH 1010	BBS NM, 8	LLIER IN ROAD		
Received:	02/11/2022			Sampling Date:	02/10/2022
Reported:	02/15/2022			Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16			Sampling Condition:	Cool & Intact
Project Number:	RHU #16			Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM				

Sample ID: S - 5 1' (H220547-05)

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2022	ND	2.11	105	2.00	2.41	
Toluene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.95	
Ethylbenzene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.87	
Total Xylenes*	<0.150	0.150	02/12/2022	ND	6.50	108	6.00	2.74	
Total BTEX	<0.300	0.300	02/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	119 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	130	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENTER MICHAEL COL 1010 GAMBLI HOBBS NM, 8 Fax To:	LIER N ROAD		
Received:	02/11/2022		Sampling Date:	02/10/2022
Reported:	02/15/2022		Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16		Sampling Condition:	Cool & Intact
Project Number:	RHU #16		Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM			

Sample ID: S - 6 1' (H220547-06)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	02/12/2022	ND	2.11	105	2.00	2.41	
Toluene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.95	
Ethylbenzene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.87	
Total Xylenes*	<0.150	0.150	02/12/2022	ND	6.50	108	6.00	2.74	
Total BTEX	<0.300	0.300	02/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	119 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	130	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENTERPRI MICHAEL COLLIE 1010 GAMBLIN F HOBBS NM, 8824 Fax To: NOI	R OAD HO	
Received:	02/11/2022	Sampling Date:	02/10/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	RHU #16	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM		

Sample ID: N. SW 1' (H220547-07)

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2022	ND	2.11	105	2.00	2.41	
Toluene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.95	
Ethylbenzene*	<0.050	0.050	02/12/2022	ND	2.08	104	2.00	2.87	
Total Xylenes*	<0.150	0.150	02/12/2022	ND	6.50	108	6.00	2.74	
Total BTEX	<0.300	0.300	02/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	119 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	130 9	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENTERPRI MICHAEL COLLIE 1010 GAMBLIN F HOBBS NM, 8824 Fax To: NOI	R OAD HO	
Received:	02/11/2022	Sampling Date:	02/10/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	RHU #16	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM		

Sample ID: S. SW 1' (H220547-08)

BTEX 8021B	mg/	′kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/13/2022	ND	1.84	91.8	2.00	7.05	
Toluene*	<0.050	0.050	02/13/2022	ND	1.86	93.0	2.00	6.57	
Ethylbenzene*	<0.050	0.050	02/13/2022	ND	1.81	90.6	2.00	6.06	
Total Xylenes*	<0.150	0.150	02/13/2022	ND	5.67	94.5	6.00	5.02	
Total BTEX	<0.300	0.300	02/13/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	′kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	112 9	66.9-13	6						
Surrogate: 1-Chlorooctadecane	122	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENTERPRI MICHAEL COLLIE 1010 GAMBLIN F HOBBS NM, 8824 Fax To: NOI	R OAD HO	
Received:	02/11/2022	Sampling Date:	02/10/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	RHU #16	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM		

Sample ID: E. SW 1' (H220547-09)

BTEX 8021B	mg/	′kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/13/2022	ND	1.84	91.8	2.00	7.05	
Toluene*	<0.050	0.050	02/13/2022	ND	1.86	93.0	2.00	6.57	
Ethylbenzene*	<0.050	0.050	02/13/2022	ND	1.81	90.6	2.00	6.06	
Total Xylenes*	<0.150	0.150	02/13/2022	ND	5.67	94.5	6.00	5.02	
Total BTEX	<0.300	0.300	02/13/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	119 9	66.9-13	6						
Surrogate: 1-Chlorooctadecane	130	% 59.5-14	2						

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*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENT MICHAEL C 1010 GAME HOBBS NM Fax To:	COLLIER BLIN ROAD		
Received:	02/11/2022		Sampling Date:	02/10/2022
Reported:	02/15/2022		Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16		Sampling Condition:	Cool & Intact
Project Number:	RHU #16		Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM			

Sample ID: W. SW 1' (H220547-10)

BTEX 8021B	mg/	/kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/13/2022	ND	1.84	91.8	2.00	7.05	
Toluene*	<0.050	0.050	02/13/2022	ND	1.86	93.0	2.00	6.57	
Ethylbenzene*	<0.050	0.050	02/13/2022	ND	1.81	90.6	2.00	6.06	
Total Xylenes*	<0.150	0.150	02/13/2022	ND	5.67	94.5	6.00	5.02	
Total BTEX	<0.300	0.300	02/13/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	122	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	131	% 59.5-14	2						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENTERPRISES MICHAEL COLLIER 1010 GAMBLIN ROAD HOBBS NM, 88240 Fax To: NONE		
Received:	02/11/2022	Sampling Date:	02/10/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	RHU #16	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM		

Sample ID: BG - 1 (H220547-11)

BTEX 8021B	mg/	kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/13/2022	ND	1.84	91.8	2.00	7.05	
Toluene*	<0.050	0.050	02/13/2022	ND	1.86	93.0	2.00	6.57	
Ethylbenzene*	<0.050	0.050	02/13/2022	ND	1.81	90.6	2.00	6.06	
Total Xylenes*	<0.150	0.150	02/13/2022	ND	5.67	94.5	6.00	5.02	
Total BTEX	<0.300	0.300	02/13/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	127 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	138 9	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENTERPRISES MICHAEL COLLIER 1010 GAMBLIN ROAD HOBBS NM, 88240 Fax To: NONE		
Received:	02/11/2022	Sampling Date:	02/10/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	RHU #16	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM		

Sample ID: BG - 2 (H220547-12)

BTEX 8021B	mg/	kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/13/2022	ND	1.84	91.8	2.00	7.05	
Toluene*	<0.050	0.050	02/13/2022	ND	1.86	93.0	2.00	6.57	
Ethylbenzene*	<0.050	0.050	02/13/2022	ND	1.81	90.6	2.00	6.06	
Total Xylenes*	<0.150	0.150	02/13/2022	ND	5.67	94.5	6.00	5.02	
Total BTEX	<0.300	0.300	02/13/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	125 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	135 9	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENTERPRISES MICHAEL COLLIER 1010 GAMBLIN ROA HOBBS NM, 88240 Fax To: NONE	-	
Received:	02/11/2022	Sampling Date:	02/10/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	RHU #16	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM		

Sample ID: BG - 3 (H220547-13)

BTEX 8021B	mg,	′kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/13/2022	ND	1.84	91.8	2.00	7.05	
Toluene*	<0.050	0.050	02/13/2022	ND	1.86	93.0	2.00	6.57	
Ethylbenzene*	<0.050	0.050	02/13/2022	ND	1.81	90.6	2.00	6.06	
Total Xylenes*	<0.150	0.150	02/13/2022	ND	5.67	94.5	6.00	5.02	
Total BTEX	<0.300	0.300	02/13/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	′kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	202	101	200	0.705	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	218	109	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	126	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	136	59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	H & R ENTERPRISE MICHAEL COLLIER 1010 GAMBLIN ROA HOBBS NM, 88240 Fax To: NONE	AD	
Received:	02/11/2022	Sampling Date:	02/10/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RED HILLS UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	RHU #16	Sample Received By:	Tamara Oldaker
Project Location:	CIMAREX - LEA CO NM		

Sample ID: BG - 4 (H220547-14)

BTEX 8021B	mg/	′kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/13/2022	ND	1.84	91.8	2.00	7.05	
Toluene*	<0.050	0.050	02/13/2022	ND	1.86	93.0	2.00	6.57	
Ethylbenzene*	<0.050	0.050	02/13/2022	ND	1.81	90.6	2.00	6.06	
Total Xylenes*	<0.150	0.150	02/13/2022	ND	5.67	94.5	6.00	5.02	
Total BTEX	<0.300	0.300	02/13/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/14/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	231	116	200	2.45	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	206	103	200	3.66	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	103 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	115 9	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

101 East Marland Hohes MM 2000

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 Company Name: H&R Enterprises

rivject manager: Michael Collier	Of White	ANAI VOIC DECLIPCT
Allicidei Colliel	PO #	ANDE DIO REQUES
Address: 5120 W. Kansas St.		
City: Hobbs State: NM Zin: 88242		
- 1		
Project Name: Red Hills Unit #16 (RHU #16)	City:	
Project Location: Lea County, NM	State: Zip:	
Sampler Name: M. Collier	Phone #:	
FOR LAB USE ONLY	Fax #:	
	ESERV. SAMPLING	
AB OR (C)OM	GE R: BASE: COOL R: - - - - - - - - - - - - -	ORIDES
- #	W SC OI SL OT ACCE TIME T	4
1 2-2 1	V V 2-1022 1:30 VVL	
3 S-3 1	1:33 1 1	
4 5-4 1	1.36	
5-5-5 11	1:39	
65.61	Ch.1	
7 N.SW 1'	1:45	
1	8h; 1	
7 E.SW 1'	1.51	
NEASE NOTE: LIANA AND SIN 1"	1.54	
analyses. All claims including these for negligence and any other carefulative remedy for any claim arising whether based in contract or test, shall be initiad to the amount paid by the clear for the service. In no event shall Cardinal be labele for includence whatever whatever initian decimed whether based in contract or test, shall be initiad to the amount paid by the clear for the arisen to an any other careful damages, includence whether the decimed whether based in contract or test, shall be initiad to the amount paid by the clear for the arisen to an any other careful damages, includence whether the decimed whether the and the contract or test, shall be initiad to the amount paid by the clear for the arisen to an any other careful damages, includence whether the arisen to an any other careful damages, includence whether the arisen to an any other careful damages, includence whether the arisen to an any other careful damages. Includence whether the arisen to an arisen to an arisen to an any other careful damages, includence whether the arisen to an arriver to any other careful damages. Includence whether the arisen to an arriver to an arrive	her based in contract or tort, shall be limited to the amount paid by the distribution of the second state	
Relinquished By: D Date: U Determine of territers the resurders of white the control of the cont		
SOS	11040 All Results are emailed.	s <u> </u>
Time:	VY: REMARKS:	
Delivered By: (Circle One) Observed Temp. °C Contract Contrat Contract Contra	n CHECKED BY: Turnaround Time: Si	land
TORM-000 R S.Z. TUTUTIZI	No Thermometer ID #113 Correstion Factor -0.5°C	Ves Ves

Company Name:	H&R Enterprises		RILL TO	
Project Manager:	1.1		P.O. #:	ANALYSIS REQUEST
Address: 5120 V	5120 W. Kansas St.		Company: Cimerex Energy	
	State: NM	Zip: 88242	Attn: Laci Luig	
	5/5.909.0326/575.605.3471 Fax #:		Address:	
Project #:		Project Owner: Cimarex Energy	City:	
Project Name: Red Hills Unit #16	(RHU:			
Project Location: Lea County, NM	Lea County, NM		Phone #	
Sampler Name: M. Collier	Collier		FIIOIR#:	
FOR ABUSEDING	. Collier		Fax #:	
FUR LAB USE ONLY		MATRIX	PRESERV. SAMPLING	LING
Lab I.D.	Sample I.D.	(G)RAB OR (C)OM # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :	ACID/BASE: CE / COOL DTHER :	T PH BTEX CHLORIDES
12 0	BG-1		V 210-22	VV
13	B6-3		2	7: =
	P: 40		-	
PLEASE NOTE: Lability and Da analyses. All daims including the	PLEASE NOTE: Liability and Damages. Cardinal's liability and dien'ts exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the claim by the claim by the claim base for negligence and any other cause whatsoever shall be deemed varied unless made in writing and reschuted to the amount paid by the claim by the c	ry claim artie rg whether based in contract or fort, shall be limited to the an deemed united and an made in writing and received by Caudiou to the an	C shall be limited to the amount pad by P	
Relinquished By:	Date: 11-22	Received By:	Verbal Res	
Relinquished By:	Date:		Alder A	veroai Kesuit: □ Yes □ No Add' Phone #: All Results are emailed. Please provide Email address: REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Oti	- Other: Corrected Tamp. °C	A:D Sample Condition Cool_Intact	CHECKED BY: Tur (Initials)	Turnaround Time: Standard LP Bacteria (only) Sample Condition Thermometer ID #113 Cool Intact Observed Temp. *C

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

RDINAL Joratories

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Operator:	OGRID:
CIMAREX ENERGY CO. OF COLORADO	162683
600 N. Marienfeld Street	Action Number:
Midland, TX 79701	91264
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	4/27/2022

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Action 91264