



MCollier@H-R_Enterprises.com 575-909-0326

Site Assessment and Closure Report

Vaca Draw 20-17 Federal #075H
Incident# nAPP2232827658
Lea County, New Mexico

Prepared For:

Cimarex Energy Co.
6001 Deauville Blvd. Suite 300N
Midland, TX 79706

Prepared By:

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

August 23, 2023

Mr. Mike Bratcher
NMOCD
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Subject: **Site Assessment and Closure Report**
Vaca Draw 20-17 Federal #075H
Lea County, NM

Dear Mr. Bratcher,

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

Site Information

The Vaca Draw 20-17 Federal #075H is located approximately 32 miles West of Jal, New Mexico. The legal location for this release is Unit Letter P, Section 20, Township 25 South and Range 33 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.109729 North and -103.586641 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 soils and Dune land, 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 State 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
---	---------------------

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Within 300 feet of any continuously flowing watercourse or any other significant watercourse
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Within 200 feet of any lakebed, sinkhole, or a playa lake
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Within 300 feet from an occupied permanent residence, school, hospital, institution, or church
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Within 1000 feet of any freshwater well or spring
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Within 300 feet of a wetland
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Within the area overlying a subsurface mine
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Within an unstable area
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Within a 100-year floodplain

Due to groundwater data not being within the recommended 0.5-mile radius, an exploratory water bore was drilled on Vaca Draw 20-17 Federal #012H well pad 0.5-miles to the west of the release area to a total depth of 55-feet BGS. No groundwater was present the day of drilling nor after 72-hours after drilling took place. Therefore, 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/l TDS	Constituent	Method*	Limit**
≤ 50 feet	Chloride **	EPA 300.0 or SM4500 CIB	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 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 November 22, 2022, while pumping cut brine drilling fluid, mud started bubbling over the shaker. The flow was then diverted into a separator. The return line from the separator to the flow line was plugged, allowing 20 barrels (bbls) of brine based drilling mud to pump out through the flare line and onto the well pad. All fluids remained on the well pad. A total of 10bbls were recovered with a vac-truck. The pad was immediately scrapped to remove all surface staining during drill operations.

Site Assessment Activities

H&R mobilized personnel to begin site assessment and sampling activities of the release area. Grab samples were obtained by way of hand auger, transported to Cardinal Laboratory for analysis, and the results of that analysis are presented in the following data table. Initial site assessment sampling locations are illustrated on Site Assessment Map, [Appendix I](#). Photographic documentation is attached in [Appendix IV](#). Complete laboratory reports can be found in [Appendix V](#).

Table 1: Initial Soil Samples Analysis

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	CI mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	1,000 mg/kg		2,500 mg/kg	2,500 mg/kg	10,000 mg/kg
S-1	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	432
		2'	ND	ND	ND	ND	ND	0	64
		3'	ND	ND	ND	ND	ND	0	48
		4'	ND	ND	ND	ND	ND	0	64
S-2	8/10/2023	0-1'	ND	ND	ND	199	42.1	241.1	928
		2'	ND	ND	ND	ND	ND	0	80
		3'	ND	ND	ND	ND	ND	0	48
		4'	ND	ND	ND	ND	ND	0	48
S-3	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	1340
		2'	ND	ND	ND	ND	ND	0	96
		3'	ND	ND	ND	ND	ND	0	48
		4'	ND	ND	ND	ND	ND	0	48
S-4	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	368
		2'	ND	ND	ND	ND	ND	0	48
		3'	ND	ND	ND	ND	ND	0	32
		4'	ND	ND	ND	ND	ND	0	80
S-5	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	272
		2'	ND	ND	ND	ND	ND	0	48
		3'	ND	ND	ND	ND	ND	0	48
		4'	ND	ND	ND	ND	ND	0	48
H-1	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	32
H-2	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	32
H-3	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	32
H-4	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	32
H-5	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	32
H-6	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	48
H-7	8/10/2023	0-1'	ND	ND	ND	ND	ND	0	32

ND = Analyte Not Detected S = Vertical Delineation Sample H = Horizontal Delineation Sample

Closure

Based on the site assessment sampling results completed for this project, on behalf of Cimarex Energy Co. 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

Michael Collier
Environmental Project Manager

Attachments:

Appendix I Site Maps

Appendix II Soil Survey, Groundwater Data, FEMA Flood Zone, Water Bore Map, Bore Log

Appendix III Initial and Final C-141

Appendix IV Photographic Documentation

Appendix V Laboratory Reports

APPENDIX I

SITE MAPS

KARST MAP

TOPOGRAPHIC MAP

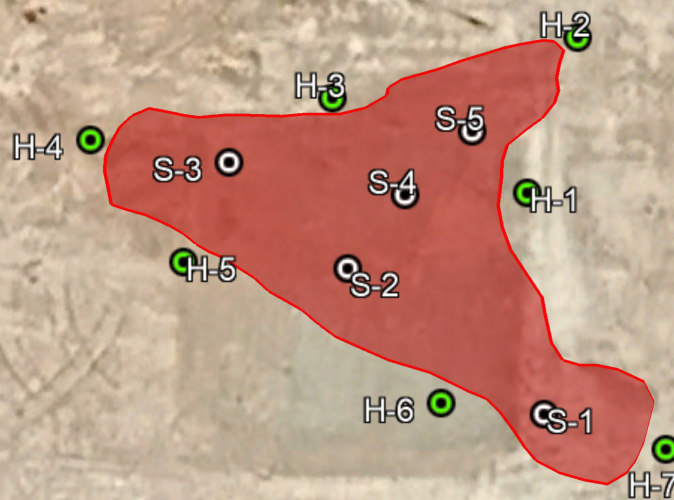
LOCATOR MAP

Vaca Draw 20-17 Federal #075H

Cimarex Energy Co.
Incident #: nAPP2232827658
Lea County, NM
Site Assessment Map

Legend

- Horizontal Sample
- Initial Release Area
- Soil Sample



Google Earth

Image © 2023 Airbus







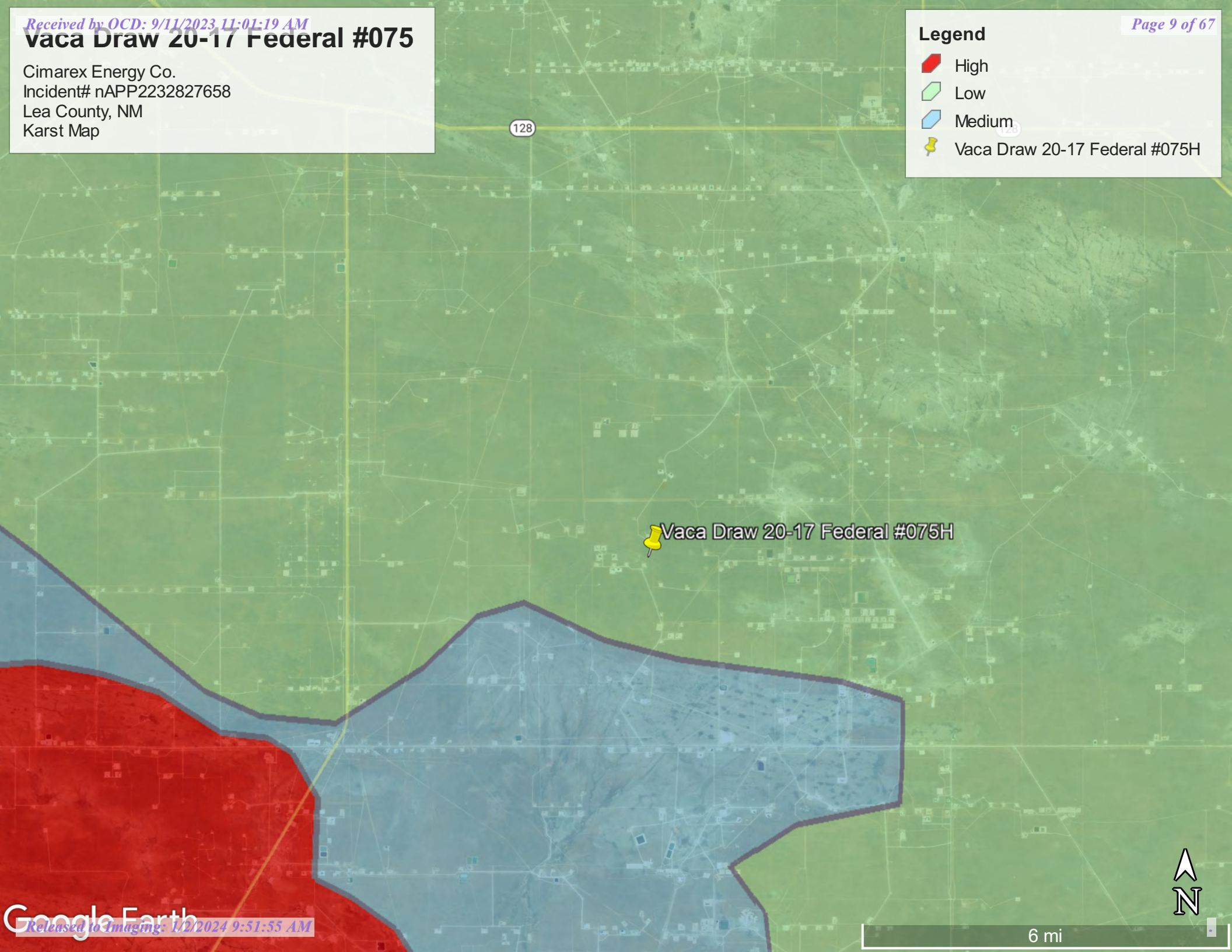
200 ft

Vaca Draw 20-17 Federal #075

Cimarex Energy Co.
Incident# nAPP2232827658
Lea County, NM
Karst Map

Legend

-  High
-  Low
-  Medium
-  Vaca Draw 20-17 Federal #075H




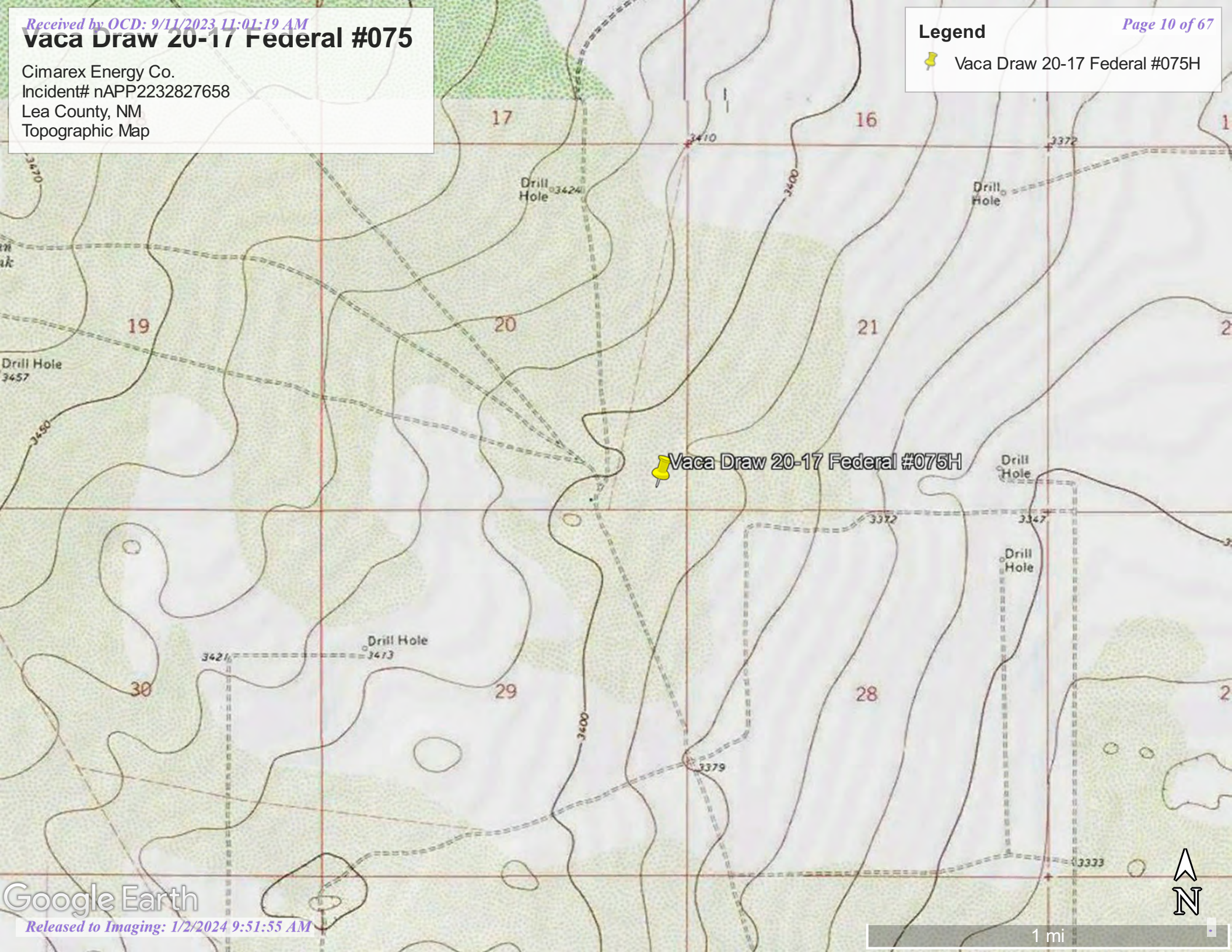
Vaca Draw 20-17 Federal #075H

Vaca Draw 20-17 Federal #075

Cimarex Energy Co.
Incident# nAPP2232827658
Lea County, NM
Topographic Map

Legend

 Vaca Draw 20-17 Federal #075H



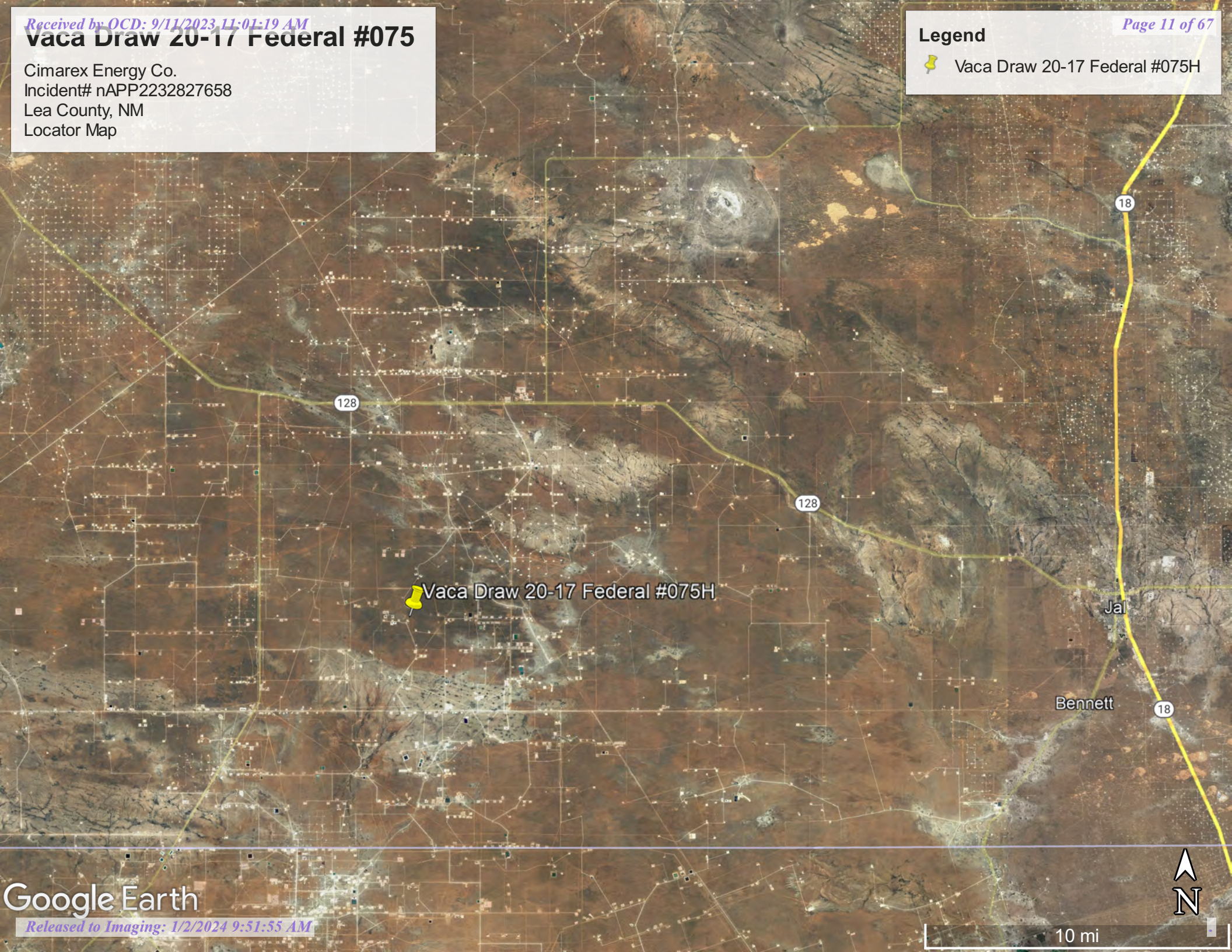
Vaca Draw 20-17 Federal #075

Cimarex Energy Co.
Incident# nAPP2232827658
Lea County, NM
Locator Map

Legend



Vaca Draw 20-17 Federal #075H



Vaca Draw 20-17 Federal #075H

Jalisco

Bennett



APPENDIX II

GROUNDWATER DATA

SOIL SURVEY

FEMA FLOOD ZONE

WATER BORE MAP

SOIL BORE LOG



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
C 04537 POD1		C	LE	4	4	4	31	25S	33E	631847	3550243	2378	500	280	220

Average Depth to Water: **280 feet**

Minimum Depth: **280 feet**

Maximum Depth: **280 feet**

Record Count: 1

Basin/County Search:

County: Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 633910.66

Northing (Y): 3551424.91

Radius: 3000

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

2/14/22 10:01 AM

WATER COLUMN/ AVERAGE DEPTH TO
WATER

Map Unit Description: Pyote soils and Dune land---Lea County, New Mexico

Lea County, New Mexico

PY—Pyote soils and Dune land

Map Unit Setting

National map unit symbol: dmqr

Elevation: 3,000 to 4,400 feet

Mean annual precipitation: 10 to 15 inches

Mean annual air temperature: 60 to 64 degrees F

Frost-free period: 190 to 220 days

Farmland classification: Not prime farmland

Map Unit Composition

Pyote and similar soils: 46 percent

Dune land: 44 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pyote

Setting

Landform: Depressions

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

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)

Map Unit Description: Pyote soils and Dune land---Lea County, New Mexico

Interpretive groups

Land capability classification (irrigated): 6e

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

Description of Dune Land**Setting**

Landform: Dunes

Landform position (two-dimensional): Backslope, shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Linear, convex

Across-slope shape: Convex

Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 6 inches: fine sand

C - 6 to 60 inches: fine sand

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components**Kermi**

Percent of map unit: 5 percent

Ecological site: R070BC022NM - Sandhills

Hydric soil rating: No

Maljamar, fine sand

Percent of map unit: 3 percent

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

Wink

Percent of map unit: 2 percent

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 19, Sep 8, 2022

Vaca Draw 20-17 Federal #075H

Cimarex Energy Co.
Incident# nAPP2232827658
Lea County, NM
Exploratory Water Bore Map

Legend

- 0.5 miles
- Vaca Draw 20-17 Federal #012H Water Bore
- Vaca Draw 20-17 Federal #075H



SOIL BORE LOG

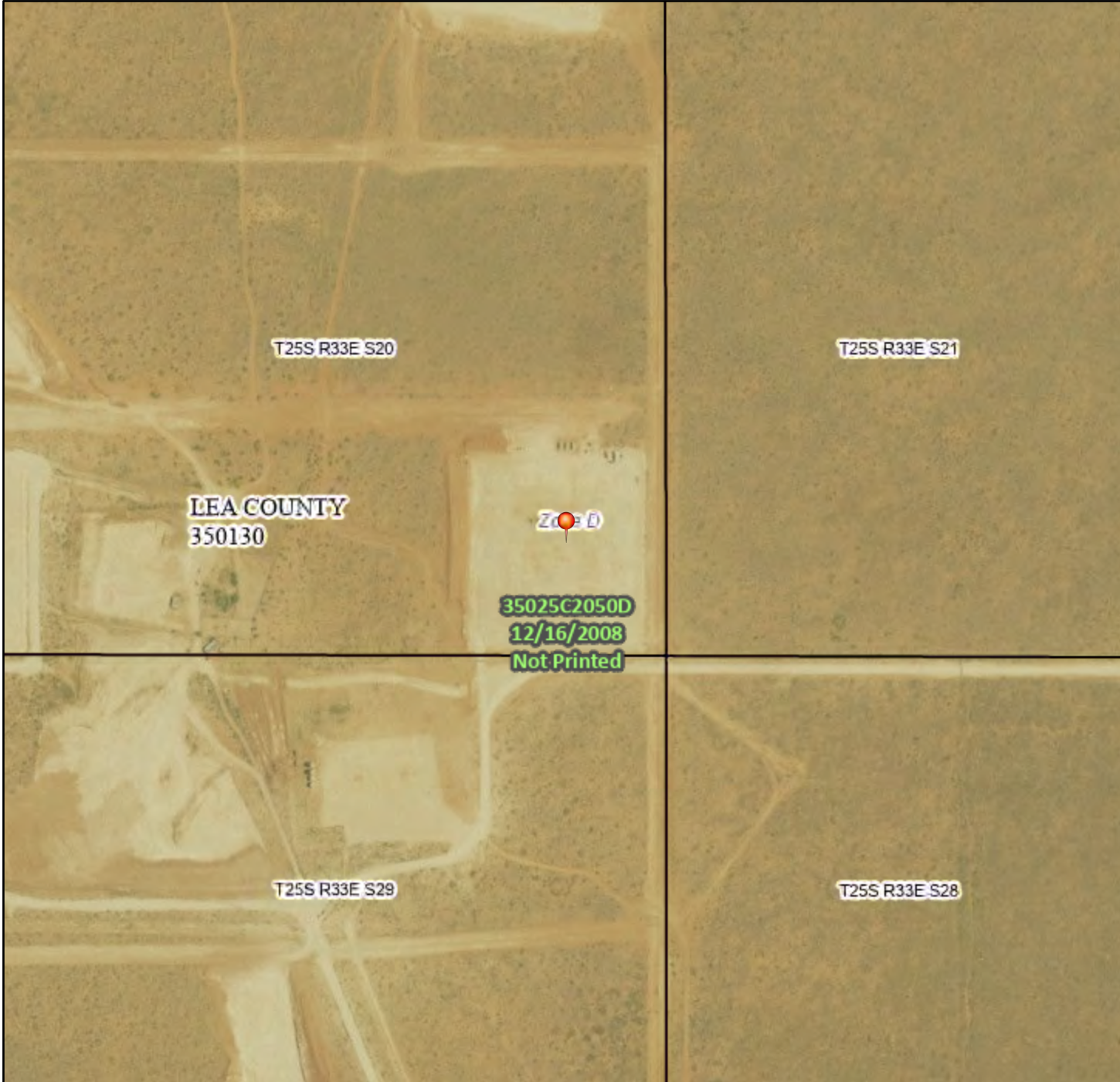
Project:	Vaca Draw 20-17 Federal #012 H	Date:	September 21, 2022
Type:	Exploratory Water Bore	Location:	Vaca Draw 20-17 Fed #12H

Depth	Soil Type	Classification	Comments
0-5'	Caliche	N/A	
5-10'	Fine Red Sand	N/A	
10-15'	Fine Red Sand	N/A	
15-20'	Fine Red Sand	N/A	
20-25'	Caliche	N/A	
25-30'	Caliche	N/A	
30-35'	Caliche	N/A	
35-40'	Caliche	N/A	
40-45'	Caliche	N/A	
45-50'	Caliche	N/A	
50-55'	Caliche	N/A	
Total Depth 55'			No groundwater 9/21/2022 No groundwater 9/26/2022
			GPS: 32.10898,-103.59566

National Flood Hazard Layer FIRMette



103°35'31"W 32°6'50"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/23/2023 at 2:12 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX III

INITIAL C-141

FINAL C-141

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	nAPP2232827658
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Cimarex Energy Co.	OGRID: 215099
Contact Name: Laci Luig	Contact Telephone: (432) 571-7800
Contact email: laci.luig@coterra.com	Incident # (assigned by OCD) nAPP2232827658
Contact mailing address: 600 N Marienfeld Street, Ste. 600 Midland, TX 79701	

Location of Release Source

Latitude 32.109729 Longitude -103.586641
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Vaca Draw 20-17 Federal 75H	Site Type: Well Pad
Date Release Discovered: 11/22/2022	API# (if applicable) 30-025-50180

Unit Letter	Section	Township	Range	County
P	20	25S	33E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Deep River Resources (fka Hughes Properties))

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 20	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Equipment Failure

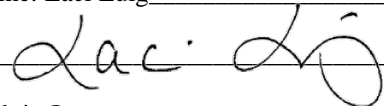
While pumping cut brine drilling fluid, mud started bubbling over the shaker. The flow was then diverted to a separator. The return line from separator to flow line was plugged, allowing 20 barrels brine based drilling mud to pump out through the flare line and onto the well pad. All fluids remained on the well pad. A total of 10 barrels were recovered. An environmental company will remediate the impacted area once drilling and completion operations are completed.

Incident ID	nAPP2232827658
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: Tell Montoya To: OCD Enviro 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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: Laci Luig	Title: ESH Specialist
Signature: 	Date: 11/24/2022
email: laci.luig@coterra.com	Telephone: (432) 208-3035
<u>OCD Only</u>	
Received by: _____	Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:  Date: _____

email: _____ Telephone: _____

OCD OnlyReceived by: Shelly Wells Date: 9/11/2023

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature:  Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Shelly Wells Date: 9/11/2023

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:  Date: 01/02/2024

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

1. Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling ops.
2. Operator did not meet 19.15.29.12D (1a) NMAC. Forbearance given to HR Enterprise on 11/06/2023. Release resolved.

APPENDIX IV

PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPHIC DOCUMENTATION

INITIAL PHOTOGRAPHS



PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



S-1



S-2

PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



S-4



S-5

PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



H-1



H-2

PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



H-3



H-4

PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



H-5



H-6

PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



H-7

PHOTOGRAPHIC DOCUMENTATION

WATER BORE PHOTOGRAPHS



APPENDIX V

LABORATORY REPORTS



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

August 16, 2023

MICHAEL COLLIER

H & R ENTERPRISES

1010 GAMBLIN ROAD

HOBBS, NM 88240

RE: VACA DRAW 20-17 75H (VACA)

Enclosed are the results of analyses for samples received by the laboratory on 08/10/23 12:56.

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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received:	08/10/2023	Sampling Date:	08/10/2023
Reported:	08/16/2023	Sampling Type:	Soil
Project Name:	VACA DRAW 20-17 75H (VACA)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S - 1 0-1' (H234307-01)

BTX 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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	432	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 96.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 1 2' (H234307-02)

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	08/15/2023	ND	2.05	103	2.00	4.51		
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90		
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34		
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51		
Total BTEX	<0.300	0.300	08/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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	64.0	16.0	08/14/2023	ND	416	104	400	0.00	

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 99.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 1 3' (H234307-03)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEx	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 1 4' (H234307-04)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	64.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 99.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 2 0-1' (H234307-05)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	928	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	199	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	42.1	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 2 2' (H234307-06)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	80.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 99.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 2 3' (H234307-07)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 2 4' (H234307-08)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 98.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 3 0-1' (H234307-09)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	1340	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 3 2' (H234307-10)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	96.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 3 3' (H234307-11)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 96.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 3 4' (H234307-12)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 97.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 4 0-1' (H234307-13)

BTX 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	08/15/2023	ND	2.05	103	2.00	4.51		
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90		
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34		
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51		
Total BTX	<0.300	0.300	08/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	08/14/2023	ND	416	104	400	0.00	QM-07	

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 4 2' (H234307-14)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 4 3' (H234307-15)

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	08/15/2023	ND	2.05	103	2.00	4.51		
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90		
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34		
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51		
Total BTEX	<0.300	0.300	08/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	32.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 4 4' (H234307-16)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEx	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 5 0-1' (H234307-17)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	272	16.0	08/14/2023	ND	416	104	400	0.00	

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 5 2' (H234307-18)

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	08/15/2023	ND	2.05	103	2.00	4.51	
Toluene*	<0.050	0.050	08/15/2023	ND	1.90	94.9	2.00	1.90	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	1.88	93.9	2.00	2.34	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	5.49	91.6	6.00	2.51	
Total BTEx	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 5 3' (H234307-19)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/14/2023	ND	2.05	102	2.00	2.79		
Toluene*	<0.050	0.050	08/14/2023	ND	1.99	99.4	2.00	2.93		
Ethylbenzene*	<0.050	0.050	08/14/2023	ND	1.99	99.6	2.00	0.407		
Total Xylenes*	<0.150	0.150	08/14/2023	ND	6.01	100	6.00	0.966		
Total BTEx	<0.300	0.300	08/14/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	166	83.1	200	2.61	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	185	92.3	200	0.458	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 5 4' (H234307-20)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/14/2023	ND	2.05	102	2.00	2.79		
Toluene*	<0.050	0.050	08/14/2023	ND	1.99	99.4	2.00	2.93		
Ethylbenzene*	<0.050	0.050	08/14/2023	ND	1.99	99.6	2.00	0.407		
Total Xylenes*	<0.150	0.150	08/14/2023	ND	6.01	100	6.00	0.966		
Total BTEx	<0.300	0.300	08/14/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	176	87.8	200	1.37	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	170	85.1	200	0.0464	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 95.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 1 0-1' (H234307-21)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/14/2023	ND	2.05	102	2.00	2.79	
Toluene*	<0.050	0.050	08/14/2023	ND	1.99	99.4	2.00	2.93	
Ethylbenzene*	<0.050	0.050	08/14/2023	ND	1.99	99.6	2.00	0.407	
Total Xylenes*	<0.150	0.150	08/14/2023	ND	6.01	100	6.00	0.966	
Total BTX	<0.300	0.300	08/14/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/14/2023	ND	416	104	400	0.00	

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	08/14/2023	ND	176	87.8	200	1.37	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	170	85.1	200	0.0464	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 82.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 2 0-1' (H234307-22)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/14/2023	ND	2.05	102	2.00	2.79	
Toluene*	<0.050	0.050	08/14/2023	ND	1.99	99.4	2.00	2.93	
Ethylbenzene*	<0.050	0.050	08/14/2023	ND	1.99	99.6	2.00	0.407	
Total Xylenes*	<0.150	0.150	08/14/2023	ND	6.01	100	6.00	0.966	
Total BTEX	<0.300	0.300	08/14/2023	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	32.0	16.0	08/14/2023	ND	416	104	400	0.00	

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	08/14/2023	ND	176	87.8	200	1.37	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	170	85.1	200	0.0464	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 87.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 3 0-1' (H234307-23)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/14/2023	ND	2.05	102	2.00	2.79		
Toluene*	<0.050	0.050	08/14/2023	ND	1.99	99.4	2.00	2.93		
Ethylbenzene*	<0.050	0.050	08/14/2023	ND	1.99	99.6	2.00	0.407		
Total Xylenes*	<0.150	0.150	08/14/2023	ND	6.01	100	6.00	0.966		
Total BTEx	<0.300	0.300	08/14/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	176	87.8	200	1.37	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	170	85.1	200	0.0464	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 86.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 4 0-1' (H234307-24)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/14/2023	ND	2.05	102	2.00	2.79		
Toluene*	<0.050	0.050	08/14/2023	ND	1.99	99.4	2.00	2.93		
Ethylbenzene*	<0.050	0.050	08/14/2023	ND	1.99	99.6	2.00	0.407		
Total Xylenes*	<0.150	0.150	08/14/2023	ND	6.01	100	6.00	0.966		
Total BTEx	<0.300	0.300	08/14/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	176	87.8	200	1.37	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	170	85.1	200	0.0464	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 94.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 5 0-1' (H234307-25)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/14/2023	ND	2.05	102	2.00	2.79		
Toluene*	<0.050	0.050	08/14/2023	ND	1.99	99.4	2.00	2.93		
Ethylbenzene*	<0.050	0.050	08/14/2023	ND	1.99	99.6	2.00	0.407		
Total Xylenes*	<0.150	0.150	08/14/2023	ND	6.01	100	6.00	0.966		
Total BTEx	<0.300	0.300	08/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	32.0	16.0	08/14/2023	ND	416	104	400	0.00	

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	08/14/2023	ND	176	87.8	200	1.37	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	170	85.1	200	0.0464	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 91.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 6 0-1' (H234307-26)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/14/2023	ND	2.05	102	2.00	2.79		
Toluene*	<0.050	0.050	08/14/2023	ND	1.99	99.4	2.00	2.93		
Ethylbenzene*	<0.050	0.050	08/14/2023	ND	1.99	99.6	2.00	0.407		
Total Xylenes*	<0.150	0.150	08/14/2023	ND	6.01	100	6.00	0.966		
Total BTEx	<0.300	0.300	08/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/14/2023	ND	416	104	400	0.00		

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	08/14/2023	ND	176	87.8	200	1.37	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	170	85.1	200	0.0464	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 88.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

H & R ENTERPRISES
 MICHAEL COLLIER
 1010 GAMBLIN ROAD
 HOBBS NM, 88240
 Fax To: NONE

Received: 08/10/2023
 Reported: 08/16/2023
 Project Name: VACA DRAW 20-17 75H (VACA)
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 08/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 7 0-1' (H234307-27)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/14/2023	ND	2.05	102	2.00	2.79		
Toluene*	<0.050	0.050	08/14/2023	ND	1.99	99.4	2.00	2.93		
Ethylbenzene*	<0.050	0.050	08/14/2023	ND	1.99	99.6	2.00	0.407		
Total Xylenes*	<0.150	0.150	08/14/2023	ND	6.01	100	6.00	0.966		
Total BTEx	<0.300	0.300	08/14/2023	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	32.0	16.0	08/14/2023	ND	416	104	400	0.00	

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	08/14/2023	ND	176	87.8	200	1.37	
DRO >C10-C28*	<10.0	10.0	08/14/2023	ND	170	85.1	200	0.0464	
EXT DRO >C28-C36	<10.0	10.0	08/14/2023	ND					

Surrogate: 1-Chlorooctane 89.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>H&R Enterprises</u>				BILL TO				ANALYSIS REQUEST													
Project Manager: <u>M. Collier</u>				P.O. #:																	
Address:				Company: <u>Cimarex</u>																	
City:				Attn: <u>Laci Luig</u>																	
State: Zip:				Address:																	
Phone #: Fax #:				City:																	
Project #: Project Owner:				State: Zip:																	
Project Name: <u>Vaca Draw 20-17 75H (Vaca) RS 8/10/23</u>				Phone #:																	
Project Location: <u>Vaca Draw 20-17 75H (Vaca)</u>				Fax #:																	
Sampler Name: <u>R. Bell</u>																					
FOR LAB USE ONLY																					
Lab I.D.		Sample I.D.				MATRIX		PRESERV.		SAMPLING											
<u>H234307</u>																					
<u>1</u>		<u>5-1</u>		<u>0-1</u>																	
<u>2</u>		<u>1</u>		<u>2</u>																	
<u>3</u>		<u>1</u>		<u>3</u>																	
<u>4</u>		<u>1</u>		<u>4</u>																	
<u>5</u>		<u>5-2</u>		<u>0-1</u>																	
<u>6</u>		<u>1</u>		<u>2</u>																	
<u>7</u>		<u>1</u>		<u>3</u>																	
<u>8</u>		<u>1</u>		<u>4</u>																	
<u>9</u>		<u>5-3</u>		<u>0-1</u>																	
<u>10</u>		<u>1</u>		<u>2</u>																	

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Relinquished By: <u>[Signature]</u>		Date: <u>8-10-23</u>		Received By: <u>[Signature]</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Time: <u>1256</u>		Time: <u>1256</u>		Time: <u>1256</u>		All Results are emailed. Please provide Email address:	
Relinquished By: <u>[Signature]</u>		Date: <u>8-10-23</u>		Received By: <u>[Signature]</u>		REMARKS: <u>Pg 1 of 3</u>	
Time: <u>1256</u>		Time: <u>1256</u>		Time: <u>1256</u>			
Delivered By: (Circle One)		Observed Temp. °C <u>4.1</u>		Sample Condition		Turnaround Time: <u>Standard</u> <input checked="" type="checkbox"/> <u>Rush</u> <input type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		Bacteria (only) Sample Condition	
				Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	
				Thermometer ID <u>#113</u> <u>#140</u>		Observed Temp. °C	
				Correction Factor <u>-0.5°C</u> <u>40</u> <u>8/10/23</u>		Corrected Temp. °C	

FORM-006 R 3.3 07/16/22

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:				BILL TO				ANALYSIS REQUEST																			
Project Manager:				P.O. #:																							
Address:				Company:																							
City:				Attn:																							
Phone #:				Address:																							
Project #:				City:																							
Project Name: <i>Vaca (Casa) RB Vaca</i>				State: Zip:																							
Project Location:				Phone #:																							
Sampler Name:				Fax #:																							
FOR LAB USE ONLY				MATRIX				PRESERV.				SAMPLING															
Lab I.D.		Sample I.D.		(GRAB OR (C)OMP. # CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME	
<i>H234307</i>				<i>5</i>						<i>X</i>								<i>X</i>		<i>X</i>				<i>8/10/23</i>			
<i>11</i>		<i>5-3</i>		<i>3</i>																							
<i>12</i>		<i>1</i>		<i>4</i>																							
<i>13</i>		<i>5-4</i>		<i>0-1</i>																							
<i>14</i>		<i>1</i>		<i>2</i>																							
<i>15</i>		<i>1</i>		<i>3</i>																							
<i>16</i>		<i>1</i>		<i>4</i>																							
<i>17</i>		<i>5-5</i>		<i>0-1</i>																							
<i>18</i>		<i>1</i>		<i>3</i>																							
<i>19</i>		<i>1</i>		<i>3</i>																							
<i>20</i>		<i>1</i>		<i>4</i>																							

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Relinquished By: <i>[Signature]</i>		Date: <i>8-10-23</i>		Received By: <i>[Signature]</i>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Time: <i>1256</i>		Time: <i>1256</i>		Time: <i>1256</i>		All Results are emailed. Please provide Email address:	
Relinquished By:		Date:		Received By:		REMARKS: <i>pg 2 of 3</i>	
Time:		Time:		Time:		Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	
Delivered By: (Circle One)		Observed Temp. °C <i>4.1</i>		Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		Bacteria (only) Sample Condition Cool <input type="checkbox"/> Intact <input type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		CHECKED BY: (Initials) <i>go</i>		Thermometer ID #113 <i>#140</i>	
						Correction Factor <i>-0.6</i> <i>8/10/23</i>	
						Observed Temp. °C	
						Corrected Temp. °C	

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:				BILL TO				ANALYSIS REQUEST											
Project Manager:				P.O. #:															
Address:				Company:															
City:				Attn:															
Phone #:				Address:															
Project #:				City:															
Project Name:				State: Zip:															
Project Location:				Phone #:															
Sampler Name:				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.		Sample I.D.		(GRAB OR (C)OMP. # CONTAINERS		MATRIX		PRESERV.		SAMPLING									
						GROUNDWATER													
						WASTEWATER													
						SOIL													
						OIL													
						SLUDGE													
						OTHER:													
						ACID/BASE:													
						ICE / COOL													
						OTHER:													
						DATE		TIME											
H234307		0-1		5		X		X		8/10/23		BTX							
21 H-1												TPH							
22 H-2												Chlorides							
23 H-3																			
24 H-4																			
25 H-5																			
26 H-6																			
27 H-7																			

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Relinquished By:		Date: 8-10-23		Received By:		Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Add'l Phone #:	
Time: 1256		Time: 1256		Time: 1256		All Results are emailed. Please provide Email address:			
Relinquished By:		Date:		Received By:		REMARKS:		pg 3 of 3	
Time:		Time:		Time:					
Delivered By: (Circle One)		Observed Temp. °C 4.1		Sample Condition		CHECKED BY: (Initials)		Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		Thermometer ID #443 #140		Bacteria (only) Sample Condition	
						Correction Factor -0.6°C		Cool <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	
						8/10/23		Observed Temp. °C	
								Corrected Temp. °C	

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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 263768

CONDITIONS

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 263768
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	1. Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling ops. 2. Operator did not meet 19.15.29.12D (1a) NMAC. Forbearance given to HR Enterprise on 11/06/2023. Release resolved.	1/2/2024