



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

Site Assessment and Closure Report

Dos Equis 12-13 Federal Com #047H
Incident# nAPP2300971099
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

June 22, 2023

Mrs. Jennifer Nobui
NMOCD
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Subject: **Site Assessment and Closure Report**
Dos Equis 12-13 Federal Com #047H
Lea County, NM

Dear Mrs. Nobui,

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 Dos Equis 12-13 Federal Com #047H is located approximately 30.8 miles West of Jal, New Mexico. The legal location for this release is Unit Letter C, Section 12, Township 24 South and Range 32 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.239439 North and -103.631043 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 State Engineer web site indicates that the nearest reported depth to groundwater is 113-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	113 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 being outside the recommended 0.5-mile distance from the release, an exploratory water bore was drilled approximately 349-feet away from the release on the Dos Equis 12 Federal Com #003 well pad to a total depth of 105-feet BGS. No groundwater was encountered on the day of drilling nor 72-hours later when gauging was performed. 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**
>100 feet	Chloride **	EPA 300.0 or SM4500 CIB	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 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 09, 2023, while transferring fluid from the frac tank, the farm hose was improperly hooked up to an Oil Based Mud (OBM) tank causing the tank to run over into the lined containment and onto the well pad. All fluid remained on the well pad. A total of 65 barrels (bbls) of OBM was released with 38 bbls inside the containment and 25 bbls on the well pad being recovered via vac truck. 2 bbls of OBM was unable to be recovered.

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 inside and outside the release area in order to vertically and horizontally delineate the release. Samples collected were 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 of the release area and sample points are 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	1000 mg/kg		2500 mg/kg	2500 mg/kg	20,000mg/kg
S-1	4/10/2023	0-1'	ND	ND	ND	164	ND	164	144
		2' R	ND	ND	ND	ND	ND	0	16
S-2	4/10/2023	0-1'	ND	ND	ND	37.9	ND	37.9	80
		2'	ND	ND	ND	ND	ND	0	80
		3' R	ND	ND	ND	ND	ND	0	16
S-3	4/10/2023	0-1'	ND	ND	ND	ND	ND	0	64
		2' R	ND	ND	ND	ND	ND	0	32
S-4	4/10/2023	0-1'	ND	ND	ND	21.8	ND	21.8	128
		2'	ND	ND	ND	ND	ND	0	16
		3' R	ND	ND	ND	ND	ND	0	16
H-1	4/10/2023	0-1'	0.322	ND	ND	248	ND	248	144
H-1A	4/18/2023	0-1'	ND	ND	ND	10.2	ND	10.2	ND
H-2	4/10/2023	0-1'	ND	ND	ND	24.2	ND	24.2	48
H-3	4/10/2023	0-1'	ND	ND	ND	ND	ND	0	80
H-4	4/10/2023	0-1'	ND	ND	ND	14.7	ND	14.7	96
H-5	4/10/2023	0-1'	ND	ND	ND	19.5	ND	19.5	64
H-6	4/10/2023	0-1'	1.45	ND	ND	ND	ND	0	ND
ND = Analyte Not Detected S = Vertical Sample H = Horizontal Sample									

Based on the results of our site assessment, it was determined that no further actions are needed as closure criteria was not exceeded.

Closure

Based on the site assessment 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, Soil 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

Dos Equis 12-13 Fed Com #047H

Cimarex Energy Co.
Lea County, NM
Site Assessment Map

Legend





- Horizontal Sample
- Initial Spill Boundary
- Vertical Sample

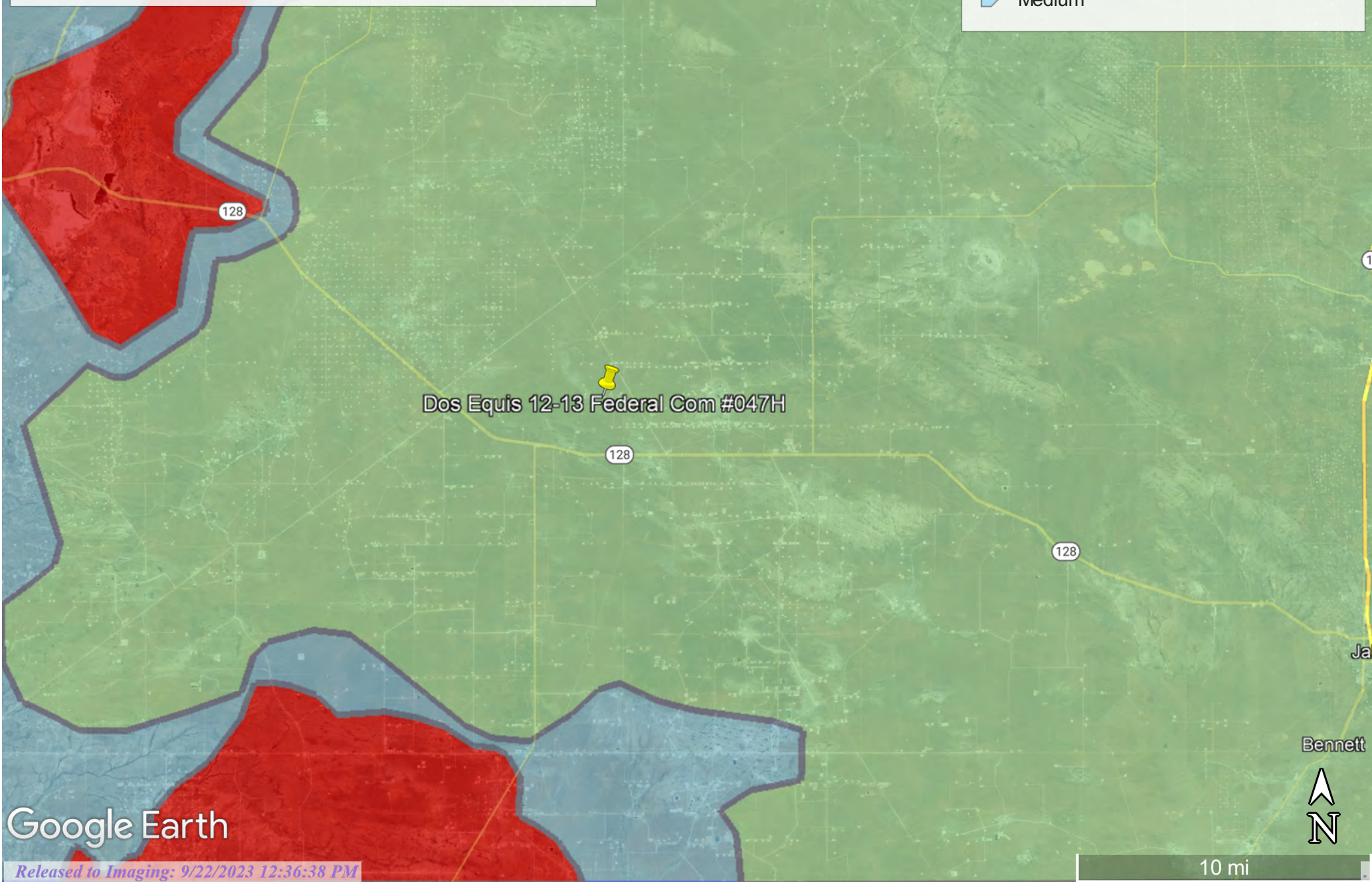


Dos Equis 12-13 Federal Com #047H

Cimarex Energy Co.
Incident# nAPP2300971099
Lea County, NM
Karst Map

Legend

-  Dos Equis 12-13 Federal Com #047H
-  High
-  Low
-  Medium




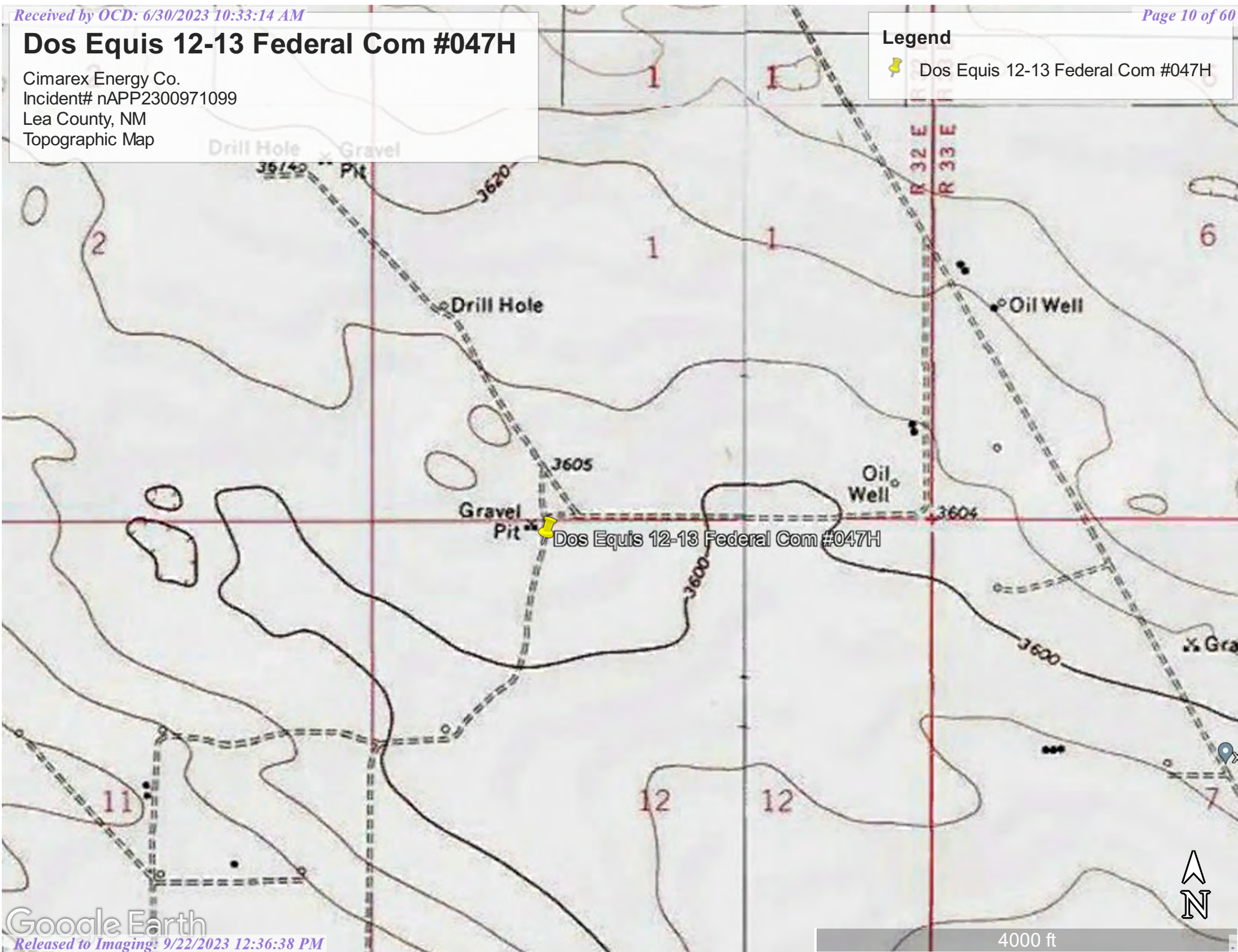
Google Earth

Dos Equis 12-13 Federal Com #047H

Cimarex Energy Co.
Incident# nAPP2300971099
Lea County, NM
Topographic Map

Legend

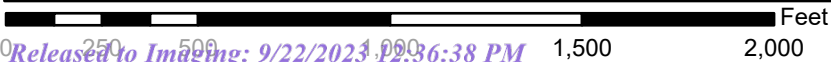
 Dos Equis 12-13 Federal Com #047H



National Flood Hazard Layer FIRMette



103°38'13"W 32°14'35"N



1:6,000

103°37'35"W 32°14'4"N

Released to Imaging: 9/22/2023 12:36:38 PM

Basemap Imagery Source: USGS National Map 2023

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 6/22/2023 at 11:24 AM 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.

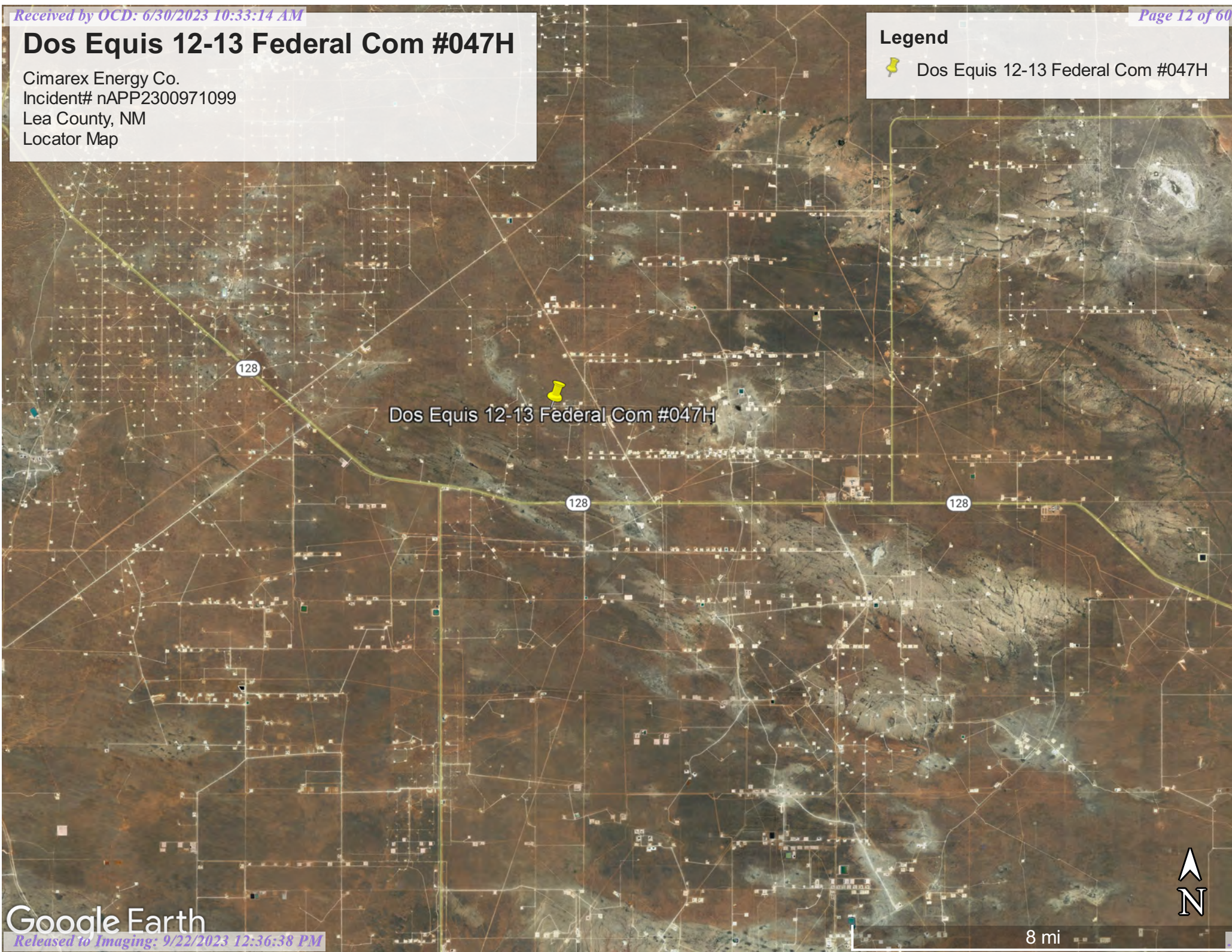
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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

Dos Equis 12-13 Federal Com #047H

Cimarex Energy Co.
Incident# nAPP2300971099
Lea County, NM
Locator Map

Legend

 Dos Equis 12-13 Federal Com #047H



APPENDIX II

GROUNDWATER DATA

SOIL SURVEY

FEMA FLOOD ZONE

WATER BORE MAP

SOIL 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 6	Q 4	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
C_04551 POD1		CUB	LE	4	4	3	31	23S	33E	630671	3569556	<input type="checkbox"/>	2537		
C_03527 POD1		C	LE	1	2	3	03	24S	32E	625770	3568487	<input type="checkbox"/>	3240	500	
C_03528 POD1		C	LE	1	1	2	15	24S	32E	626040	3566129	<input type="checkbox"/>	3288	541	133 408
C_03591 POD1		CUB	LE	2	1	4	05	24S	33E	632731	3568518	<input type="checkbox"/>	3895		
C_03565 POD3		CUB	LE		3	4	08	24S	33E	632763	3566546	<input type="checkbox"/>	4020		1533
C_04622 POD1		CUB	LE	3	3	4	24	24S	32E	629436	3563006	<input type="checkbox"/>	4743		
C_04707 POD1		CUB	LE	4	3	3	33	23S	33E	633413	3569469	<input type="checkbox"/>	4822	101	

Average Depth to Water: **833 feet**

Minimum Depth: **133 feet**

Maximum Depth: **1533 feet**

Record Count: 7

Basin/County Search:

County: Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 628918

Northing (Y): 3567721.58

Radius: 5000

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.

6/22/23 9:21 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Map Unit Description: Pyote and Maljamar fine sands---Lea County, New Mexico

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



Map Unit Description: Pyote and Maljamar fine sands---Lea County, New Mexico

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Ecological site: R070BD003NM - 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: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Kermit

Percent of map unit: 10 percent
Ecological site: R070BC022NM - Sandhills

Map Unit Description: Pyote and Maljamar fine sands---Lea County, New Mexico

Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 19, Sep 8, 2022

Dos Equis 12-13 Federal Com #047H

Cimarex Energy Co.
Incident# nAPP2300971099
Lea County, NM
Exploratory Water Bore Map

Legend

- 349ft.
- Dos Equis 12-13 Federal Com #047H
- Dos Equis 47 spill boundary
- Exploratory Water Bore

Dos Equis 12-13 Federal Com #047H

Exploratory Water Bore

Dos Equis 12 Federal Com #003



SOIL BORE LOG

Project:	Dos Equis 12-13 Fed Com #047H	Date:	April 06, 2023
Type:	Exploratory Water Bore	Location:	Dos Equis Fed Com #003

Depth	Soil Type	Classification	Comments
0-5'	Caliche		
10'	Fine Red Sand		
15'	Fine Red Sand		
20'	Fine Red Sand		
25'	Fine Red Sand		
30'	Fine Red Sand		
35'	Fine Red Sand		
40'	Fine Red Sand		
45'	Fine Red Sand		
50'	Fine Red Sand		
55'	Fine Red Sand		
60'	Fine Red Sand		
65'	Fine Red Sand		
70'	Fine Red Sand		
75'	Fine Red Sand		
80'	Fine Red Sand		
85'	Fine Red Sand		
90'	Fine Red Sand		
95'	Fine Red Sand		

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	nAPP2300971099
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) nAPP2300971099
Contact mailing address: 600 N Marienfeld Street, Ste. 600 Midland, TX 79701	

Location of Release Source

Latitude 32.238754 Longitude -103.631642
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Dos Equis 12-13 Federal Com 47H	Site Type: Well Pad
Date Release Discovered: 1/9/2023	API# (if applicable) 30-025-46322

Unit Letter	Section	Township	Range	County
C	12	24S	32E	Lea

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input 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 checked="" type="checkbox"/> Other (describe) Oil Based Mud	Volume/Weight Released (provide units) 65 bbls	Volume/Weight Recovered (provide units) 63 bbls

Cause of Release: Human Error

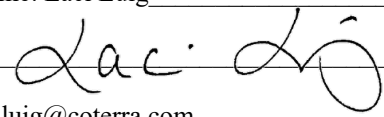
While transferring fluid from frac tank, the farm hose was improperly hooked up to an Oil Based Mud (OBM) tank, causing the tank to run over into the lined containment and onto the well pad. All fluid remained on the well pad. A total of 65 barrels OBM was released, 38 barrels inside lined containment and 27 barrels on the pad. A vac truck recovered 38 barrels from the containment and 25 barrels from the well pad. Once fluid was recovered, impacted soil was scraped up and hauled to disposal. An environmental company will remediate impacted area once drilling and completion operations are completed.

Incident ID	nAPP2300971099
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Total is greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? By: Laci Luig To: OCD Enviro, BLM By: Email	

Initial Response

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

<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: 1/9/2023
email: laci.luig@coterra.com	Telephone: (432) 208-3035
<u>OCD Only</u> Received by: _____ Date: _____	

Incident ID	nAPP2300971099
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?	>105 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2300971099
District RP	
Facility ID	
Application ID	

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

Printed Name: Laci Luig _____ Title: ESH Specialist _____

Signature:  _____ Date: 6/30/2023 _____

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

OCD Only

Received by: Shelly Wells _____ Date: 6/30/2023 _____

Incident ID	nAPP2300971099
District RP	
Facility ID	
Application ID	

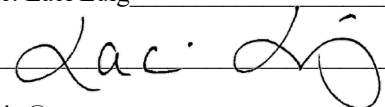
Closure

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

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

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

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

Printed Name: Laci Luig Title: ESH Specialist
Signature:  Date: 6/30/2023
email: laci.luig@coterra.com Telephone: (432) 208-3035

OCD Only

Received by: Shelly Wells Date: 6/30/2023

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.

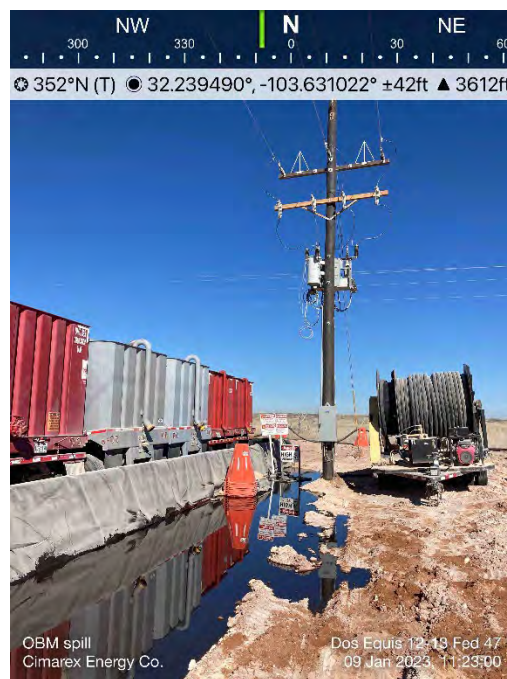
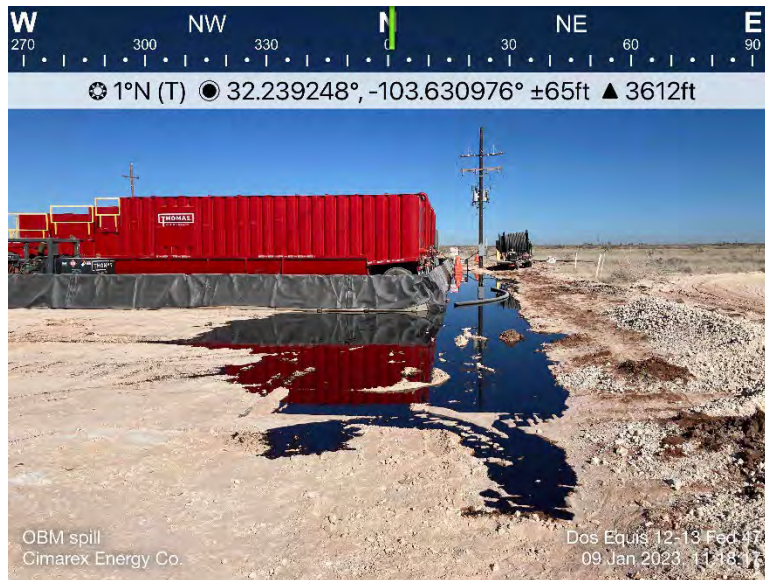
Closure Approved by:  Date: 09/22/2023
Printed Name: Nelson Velez Title: Environmental Specialist - Adv

APPENDIX IV

PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPHIC DOCUMENTATION

INITIAL PHOTOGRAPHS



PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



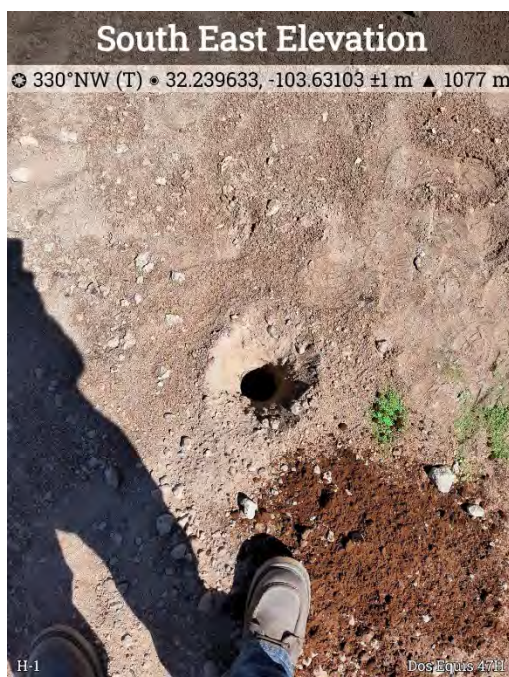
PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



PHOTOGRAPHIC DOCUMENTATION

ASSESSMENT PHOTOGRAPHS



PHOTOGRAPHIC DOCUMENTATION

EXPLORATORY WATER BORE PHOTOGRAPHS



APPENDIX V

LABORATORY REPORTS



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

April 14, 2023

MICHAEL COLLIER
H & R ENTERPRISES
1010 GAMBLIN ROAD
HOBBS, NM 88240

RE: DOS EQUIS 12-13 FED COM 47TH

Enclosed are the results of analyses for samples received by the laboratory on 04/10/23 12:34.

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 written in a cursive, flowing style.

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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 1 0-1' (H231670-01)

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	04/13/2023	ND	1.88	94.0	2.00	3.24	
Toluene*	0.108	0.050	04/13/2023	ND	1.95	97.5	2.00	2.87	
Ethylbenzene*	<0.050	0.050	04/13/2023	ND	2.10	105	2.00	2.28	
Total Xylenes*	<0.150	0.150	04/13/2023	ND	6.38	106	6.00	1.69	
Total BTX	<0.300	0.300	04/13/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	04/13/2023	ND	432	108	400	3.77	

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	04/14/2023	ND	192	96.1	200	7.44	
DRO >C10-C28*	164	10.0	04/14/2023	ND	198	99.0	200	7.25	QR-03
EXT DRO >C28-C36	<10.0	10.0	04/14/2023	ND					

Surrogate: 1-Chlorooctane 82.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.9 % 49.1-148

Cardinal Laboratories

*=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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 1 2' R (H231670-02)

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	04/14/2023	ND	2.02	101	2.00	10.5		
Toluene*	0.109	0.050	04/14/2023	ND	2.17	108	2.00	9.37		
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1		
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3		
Total BTEx	<0.300	0.300	04/14/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	04/13/2023	ND	432	108	400	3.77		

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	04/14/2023	ND	192	96.1	200	7.44	
DRO >C10-C28*	<10.0	10.0	04/14/2023	ND	198	99.0	200	7.25	
EXT DRO >C28-C36	<10.0	10.0	04/14/2023	ND					

Surrogate: 1-Chlorooctane 79.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.2 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 2 0-1' (H231670-03)

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	04/14/2023	ND	2.02	101	2.00	10.5	
Toluene*	0.187	0.050	04/14/2023	ND	2.17	108	2.00	9.37	
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1	
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3	
Total BTEX	<0.300	0.300	04/14/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	04/13/2023	ND	432	108	400	3.77		

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	04/13/2023	ND	192	96.1	200	7.44	
DRO >C10-C28*	37.9	10.0	04/13/2023	ND	198	99.0	200	7.25	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 48.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 55.1 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 2 2' (H231670-04)

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	04/14/2023	ND	2.02	101	2.00	10.5		
Toluene*	0.123	0.050	04/14/2023	ND	2.17	108	2.00	9.37		
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1		
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3		
Total BTEx	<0.300	0.300	04/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	04/13/2023	ND	432	108	400	3.77		

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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 99.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 2 3' R (H231670-05)

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	04/14/2023	ND	2.02	101	2.00	10.5		
Toluene*	<0.050	0.050	04/14/2023	ND	2.17	108	2.00	9.37		
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1		
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3		
Total BTX	<0.300	0.300	04/14/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	04/13/2023	ND	432	108	400	3.77		

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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 3 0-1' (H231670-06)

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	04/14/2023	ND	2.02	101	2.00	10.5	
Toluene*	0.166	0.050	04/14/2023	ND	2.17	108	2.00	9.37	
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1	
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3	
Total BTEx	<0.300	0.300	04/14/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	04/13/2023	ND	432	108	400	3.77		

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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

Cardinal Laboratories

*=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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 3 2' R (H231670-07)

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	04/14/2023	ND	2.02	101	2.00	10.5		
Toluene*	0.206	0.050	04/14/2023	ND	2.17	108	2.00	9.37		
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1		
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3		
Total BTEx	<0.300	0.300	04/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/13/2023	ND	432	108	400	3.77		

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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 105 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 4 0-1' (H231670-08)

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	04/14/2023	ND	2.02	101	2.00	10.5	
Toluene*	0.245	0.050	04/14/2023	ND	2.17	108	2.00	9.37	
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1	
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3	
Total BTEX	<0.300	0.300	04/14/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	04/13/2023	ND	432	108	400	3.77		

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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	21.8	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 4 2' (H231670-09)

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	04/14/2023	ND	2.02	101	2.00	10.5	
Toluene*	0.095	0.050	04/14/2023	ND	2.17	108	2.00	9.37	
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1	
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3	
Total BTEx	<0.300	0.300	04/14/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	16.0	16.0	04/13/2023	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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 103 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S - 4 3' R (H231670-10)

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	04/14/2023	ND	2.02	101	2.00	10.5		
Toluene*	0.231	0.050	04/14/2023	ND	2.17	108	2.00	9.37		
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1		
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3		
Total BTEx	<0.300	0.300	04/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	16.0	16.0	04/13/2023	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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 98.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 1 0-1' (H231670-11)

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	04/14/2023	ND	2.02	101	2.00	10.5	
Toluene*	0.322	0.050	04/14/2023	ND	2.17	108	2.00	9.37	
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1	
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3	
Total BTEX	0.322	0.300	04/14/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	144	16.0	04/13/2023	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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	248	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 99.1 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 2 0-1' (H231670-12)

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	04/14/2023	ND	2.02	101	2.00	10.5		
Toluene*	<0.050	0.050	04/14/2023	ND	2.17	108	2.00	9.37		
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1		
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3		
Total BTEx	<0.300	0.300	04/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	04/13/2023	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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	24.2	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 130 % 48.2-134

Surrogate: 1-Chlorooctadecane 141 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 3 0-1' (H231670-13)

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	04/14/2023	ND	2.02	101	2.00	10.5		
Toluene*	0.088	0.050	04/14/2023	ND	2.17	108	2.00	9.37		
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1		
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3		
Total BTEx	<0.300	0.300	04/14/2023	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	80.0	16.0	04/13/2023	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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 105 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 4 0-1' (H231670-14)

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	04/14/2023	ND	2.02	101	2.00	10.5	
Toluene*	0.129	0.050	04/14/2023	ND	2.17	108	2.00	9.37	
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1	
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3	
Total BTEX	<0.300	0.300	04/14/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	04/13/2023	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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	14.7	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 114 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 5 0-1' (H231670-15)

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	04/14/2023	ND	2.02	101	2.00	10.5		
Toluene*	0.126	0.050	04/14/2023	ND	2.17	108	2.00	9.37		
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1		
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3		
Total BTEx	<0.300	0.300	04/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	64.0	16.0	04/13/2023	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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	19.5	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 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: 04/10/2023
 Reported: 04/14/2023
 Project Name: DOS EQUIS 12-13 FED COM 47TH
 Project Number: NOT GIVEN
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/10/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 6 0-1' (H231670-16)

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	04/14/2023	ND	2.02	101	2.00	10.5		
Toluene*	1.45	0.050	04/14/2023	ND	2.17	108	2.00	9.37		
Ethylbenzene*	<0.050	0.050	04/14/2023	ND	2.21	110	2.00	10.1		
Total Xylenes*	<0.150	0.150	04/14/2023	ND	6.91	115	6.00	10.3		
Total BTEX	1.45	0.300	04/14/2023	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/13/2023	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	04/13/2023	ND	183	91.7	200	3.48	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	182	90.9	200	3.35	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	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

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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: **H&R ENTERPRISES**
Project Manager: **M. COLLIER**

Address: _____
City: _____ State: _____ Zip: _____
Phone #: _____ Fax #: _____

Project #: _____ Project Owner: **CIMAREX**

Project Name: **DOS EQUIS 12-13 FED COM 4TH (DOS)**

Project Location: **LEA COUNTY, NM**

Sampler Name: **M. COLLIER**

BILL TO

P.O. #: _____
Company: **CIMAREX**
Attn: **LACI LUIG**
Address: _____
City: _____
State: _____ Zip: _____
Phone #: _____
Fax #: _____

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

MATRIX

PRESERV.

SAMPLING

H8311670

S-1 0-1'
S-1 2' R
S-2 0-1'
1 2'
1 3' R
S-3 0-1'
S-3 2' R
S-4 0-1'
1 2'
1 3' R * See 4/10/23

(G/RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

TPH

BTEX

CHLORIDES

X

X

X

X

X

X

X

X

X

X

X

X

X

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Relinquished By:

M. H. Cole

Relinquished By:

M. H. Cole

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

FORM-006 R 5.3 07/16/22

Date: **4-10-23**

Time: **1234**

Date:

Time:

Received By:

Amara D. D. D.

Received By:

Amara D. D. D.

Observed Temp. °C **5.1**

Corrected Temp. °C **4.5**

Sample Condition

Cool Intact

☒ Yes ☐ No

☐ Yes ☐ No

CHECKED BY:

(Initials)

Y.O.

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address:

REMARKS:

PG 1 of 2 * customer requested sample I.D. change

Turnaround Time: **Standard**

Thermometer ID #113

Correction Factor -0.6°C

☒ Bacteria (only)

Cool Intact

☐ Yes ☐ No

Sample Condition

Observed Temp. °C

Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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(575) 393-2326 FAX (575) 393-2476

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.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX				PRESERV.		SAMPLING		TPH		BTX		CHLORIDES																	
H231070		H-1 0-1'		6		1		GROUNDWATER				WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME		X		X		X	
11		H-2		1		1																															
12		H-3		1		1																															
13		H-4		1		1																															
14		H-5		1		1																															
15		H-6		1		1																															
16																																					

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Relinquished By:		Date:		Received By:		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
[Signature]		4-10-23		[Signature]		All Results are emailed. Please provide Email address:	
Relinquished By:		Time:		Received By:		REMARKS:	
[Signature]		1234		[Signature]		PG 2 of 2	
Delivered By: (Circle One)		Observed Temp. °C		Sample Condition		Turnaround Time:	
Sampler - UPS - Bus - Other:		5.1		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	
FORM-006 R 3.3 07/16/22		Corrected Temp. °C		CHECKED BY: (Initials)		Thermometer ID #113	
		4.5		[Signature]		Correction Factor -0.6°C	
						Bacteria (only) Sample Condition	
						Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	
						Observed Temp. °C	
						Corrected Temp. °C	

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

April 21, 2023

MICHAEL COLLIER
H & R ENTERPRISES
1010 GAMBLIN ROAD
HOBBS, NM 88240

RE: DOS EQUIS 12-13 FED COM 47H

Enclosed are the results of analyses for samples received by the laboratory on 04/18/23 12:22.

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 written in a cursive, flowing style.

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: 04/18/2023
 Reported: 04/21/2023
 Project Name: DOS EQUIS 12-13 FED COM 47H
 Project Number: (DOS)
 Project Location: CIMAREX - LEA COUNTY, NM

Sampling Date: 04/18/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H - 1A 0-1' (H231854-01)

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/20/2023	ND	1.74	87.2	2.00	4.25	
Toluene*	<0.050	0.050	04/20/2023	ND	1.84	92.1	2.00	2.10	
Ethylbenzene*	<0.050	0.050	04/20/2023	ND	1.88	94.2	2.00	1.99	
Total Xylenes*	<0.150	0.150	04/20/2023	ND	5.74	95.7	6.00	1.31	
Total BTEx	<0.300	0.300	04/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/20/2023	ND	416	104	400	3.77		

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	04/21/2023	ND	174	86.8	200	0.936	
DRO >C10-C28*	10.2	10.0	04/21/2023	ND	164	82.1	200	0.839	
EXT DRO >C28-C36	<10.0	10.0	04/21/2023	ND					

Surrogate: 1-Chlorooctane 95.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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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. Keene, Lab Director/Quality Manager

[illegible]

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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 234896

CONDITIONS

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 234896
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	9/22/2023