



[MCollier@H-R\\_Enterprises.com](mailto:MCollier@H-R_Enterprises.com) 575-909-0326

## Remediation and Closure Report

Superior Federal #009  
Incident# nAPP2322634457  
Eddy County, New Mexico

### Prepared For:

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

### Prepared By:

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

**September 28, 2023**



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

Subject: **Remediation and Closure Report**  
Superior Federal #009  
Eddy County, NM

Dear Mr. Bratcher,

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

### Site Information

The Superior Federal #009 is located approximately 20.6 miles Northwest of Carlsbad, New Mexico. The legal location for this release is Unit Letter G, Section 1, Township 20 South and Range 29 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.60445 North and -104.02572 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 Reeves-Gypsum land complex, 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 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 115-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	115 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Within an unstable area
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Within a 100-year floodplain



As this is a remediation in an area of high karst potential, 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 August 13, 2023, Cimarex Energy received a call from the Eddy County Emergency Department reporting the Superior Federal #009 location had a production tank of fire. It is believed that the tank was struck by lightning. This fire resulted in the release of 15 barrels (bbls) of produced water inside the earthen berm. A total of 20 bbls were recovered.



## Remediation Activities

H&R mobilized personnel to begin remediation and sampling activities of the release area. Composite samples were obtained from the bottom and sidewalls of the excavated area and transported to Cardinal Laboratory for analysis. The results of that analysis are presented in Table 1 below. Confirmation sampling locations and excavation dimensions can be found on Confirmation Sample Map, [Appendix I](#). Before, during, and after photographs of the location 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	100 mg/kg			100 mg/kg	600 mg/kg
S-1	9/8/2023	4'	ND	ND	ND	120	66.1	186.1	448
	9/14/2023	4.5'	ND	ND	ND	32.1	19.5	51.6	640
	9/19/2023	5'	ND	ND	ND	ND	ND	0	48
S-2	9/8/2023	4'	ND	ND	ND	60.7	63.4	124.1	496
	9/14/2023	4.5'	ND	ND	ND	52.5	46.8	99.3	624
	9/19/2023	5'	ND	ND	ND	ND	ND	0	48
S-3	9/8/2023	4'	ND	ND	ND	52.6	53.4	106	512
	9/14/2023	4.5'	ND	ND	ND	32	21.6	53.6	592
S-4	9/8/2023	4'	ND	ND	ND	48	49.9	97.9	512
S-5	9/8/2023	5'	ND	ND	ND	34.3	32	66.3	576
SW-1	9/8/2023	4'	ND	ND	ND	17.2	11.7	28.9	432
SW-2	9/8/2023	4'	ND	ND	ND	20.1	17.2	37.3	496
SW-3	9/8/2023	4'	ND	ND	ND	ND	ND	0	512
SW-4	9/8/2023	4'	ND	ND	ND	26.6	16.8	43.4	544

ND = Analyte Not Detected S = Bottom Composite Sample SW = Sidewall Composite Sample



## Remedial Actions

- The impacted areas in the vicinity of sample points S-1 and S-2 were excavated to a total depth of 5-feet BGS.
- The impacted area in the vicinity of sample point S-3 was excavated to a total depth of 4.5-feet BGS.
- The impacted areas in the vicinity of sample points S-4 and S-5 were excavated to a total depth of 4-feet BGS.
- Composite confirmation samples were obtained from the bottom and sidewalls of the excavated areas to verify that all contaminants above closure criteria had been removed.
- All the excavated material (86yds) was hauled to Lea Land, a NMOCD approved solid waste disposal facility.
- The excavated areas inside the earthen containment were backfilled with new caliche at depth and brought to grade, machine compacted and contoured to match the surrounding location. New berms were installed as well.
- The Final C-141 formally documenting the remedial actions is attached in [Appendix III](#).



## Closure

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

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

Respectfully submitted,

H&R Enterprises, LLC



Michael Collier  
Environmental Project Manager

### Attachments:

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



# **APPENDIX I**

## **SITE MAPS**

### **KARST MAP**

### **TOPOGRAPHIC MAP**



### **LOCATOR MAP**

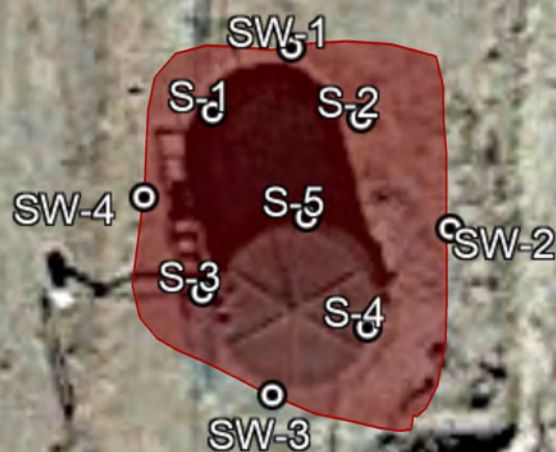


# Superior Federal #009

Cimarex Energy Co. of Colorado  
Incident# nAPP2322634457  
Eddy County, NM  
Confirmation Sample Map

## Legend

-  4-5ft. Excavation
-  Composite Confirmation Sample



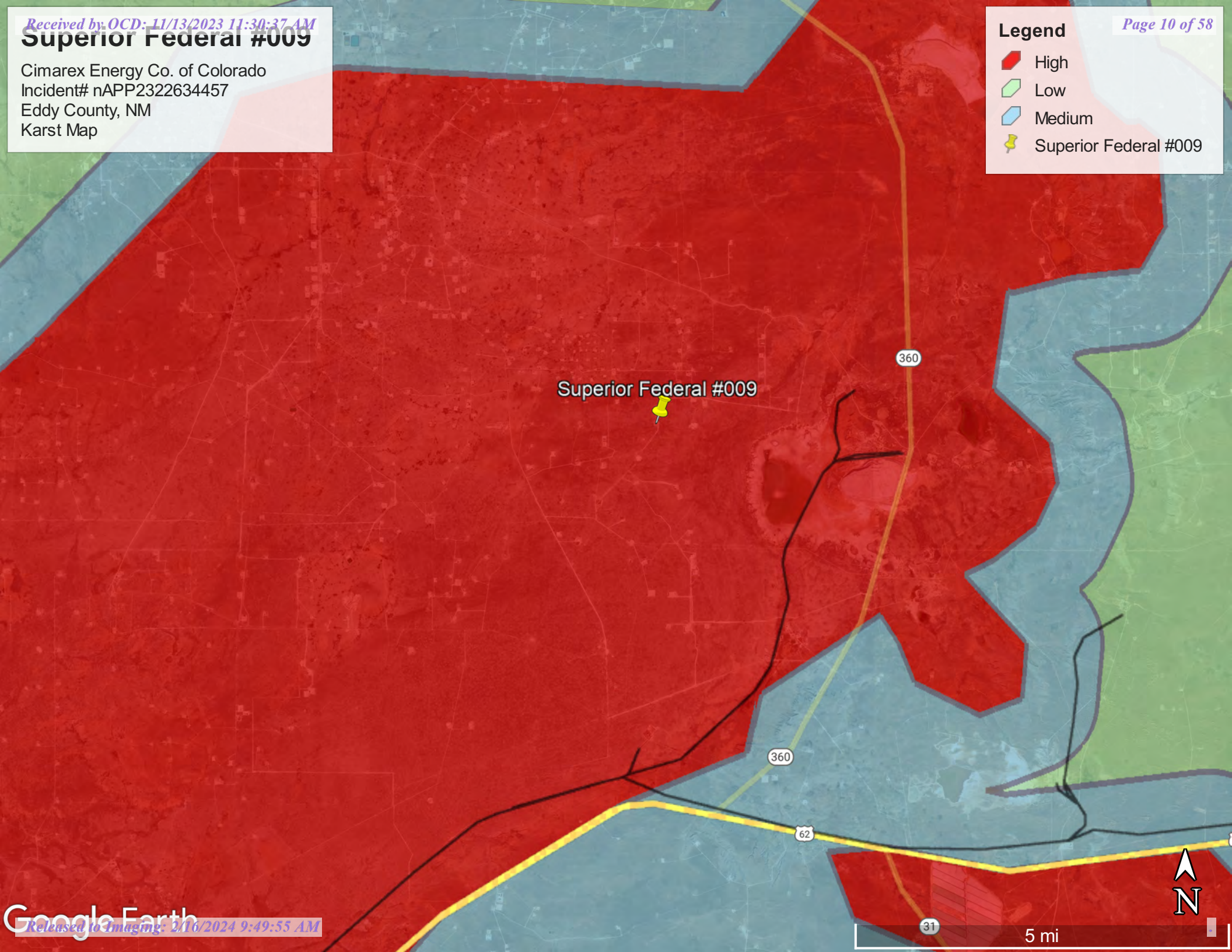


# Superior Federal #009

Cimarex Energy Co. of Colorado  
Incident# nAPP2322634457  
Eddy County, NM  
Karst Map

## Legend

- High
- Low
- Medium
- Superior Federal #009



Superior Federal #009

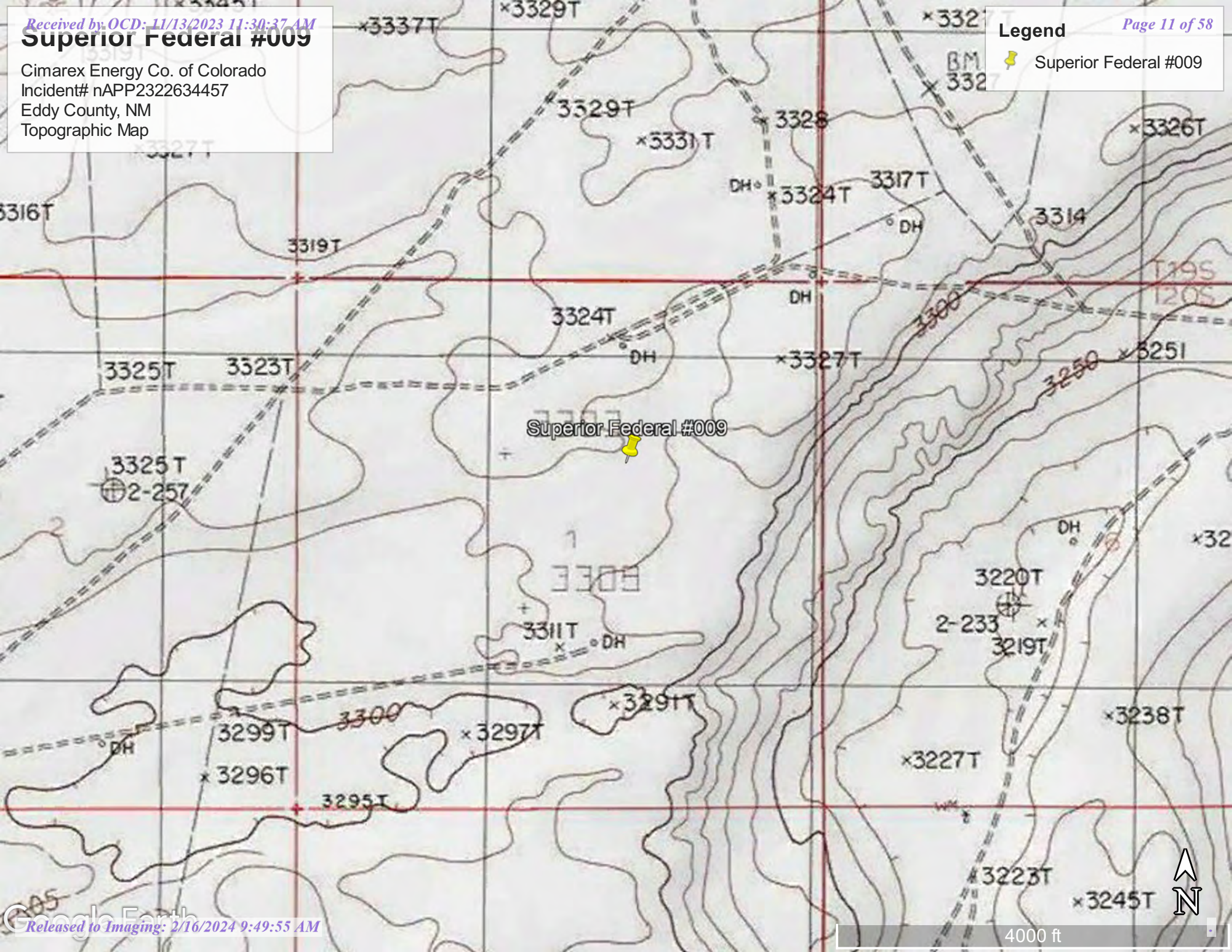


**Superior Federal #009**

Cimarex Energy Co. of Colorado  
Incident# nAPP2322634457  
Eddy County, NM  
Topographic Map

**Legend**

 Superior Federal #009






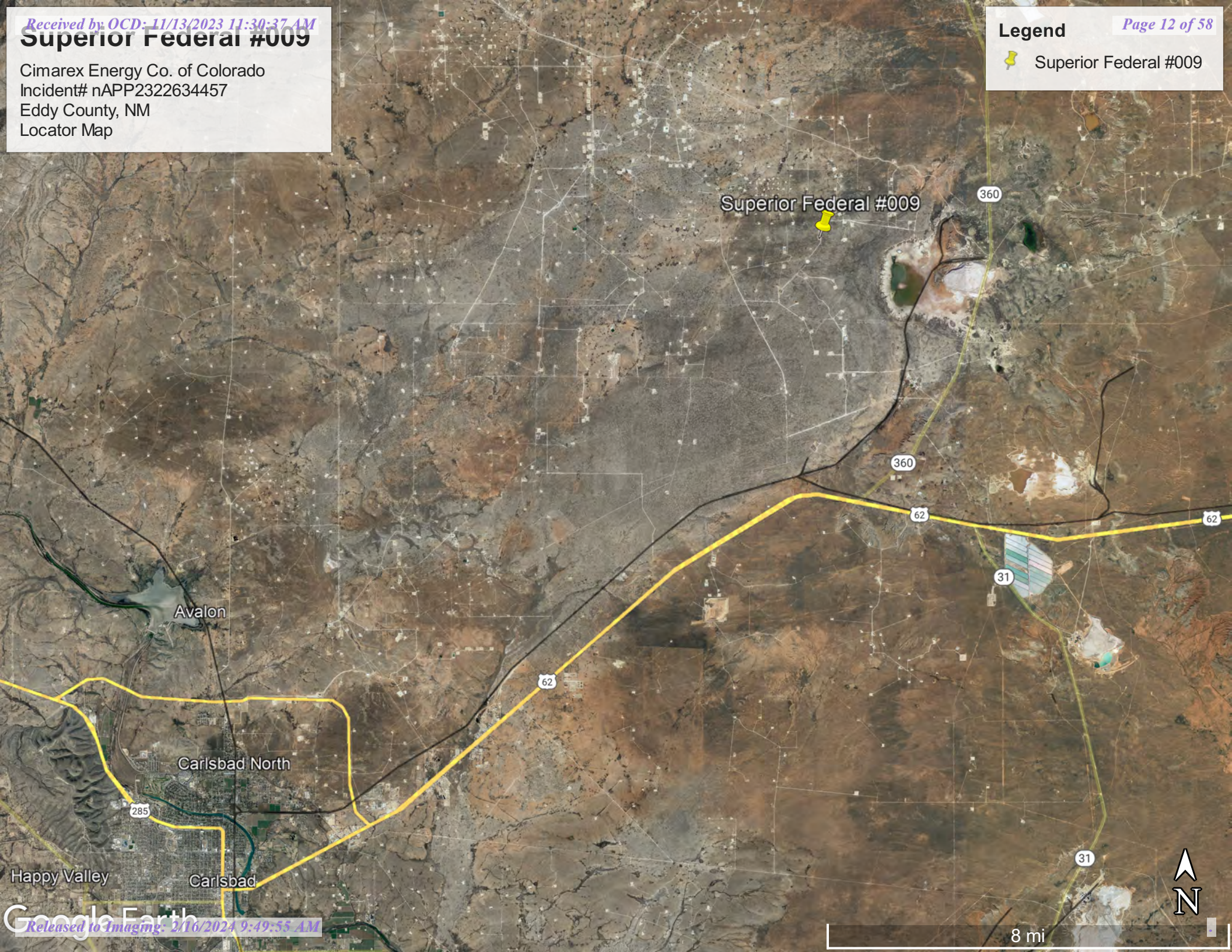
# Superior Federal #009

Cimarex Energy Co. of Colorado  
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Locator Map

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Legend

 Superior Federal #009





## **APPENDIX II**

### **GROUNDWATER DATA**

### **SOIL SURVEY**

### **FEMA FLOOD ZONE**





# 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 Q Q						X	Y	Distance	Depth	Well	Depth	Water	Water Column
				64	16	4	Sec	Tws	Rng								
<a href="#">CP 00742</a>		CP	ED	3	3	31	19S	30E	592208	3608940	<input type="checkbox"/>	1349	223	115		108	
<a href="#">CP 00739 POD1</a>		CP	ED	3	4	4	35	19S	29E	590068	3608622	<input type="checkbox"/>	1496	200	110	90	
<a href="#">CP 00703 POD1</a>		CP	ED	4	1	36	19S	29E	591050	3609382	<input type="checkbox"/>	1532	225	115	110		
<a href="#">CP 00745 POD1</a>		CP	ED	4	1	3	12	20S	29E	590653	3605782	<input type="checkbox"/>	2219	232			
<a href="#">CP 00740</a>		CP	ED	2	3	3	12	20S	29E	590669	3605509*	<input type="checkbox"/>	2475	150			
<a href="#">CP 00522</a>		CP	ED		3	30	19S	30E	592347	3610451*	<input type="checkbox"/>	2747	120	90	30		

Average Depth to Water: **107 feet**

Minimum Depth: **90 feet**

Maximum Depth: **115 feet**

**Record Count:** 6

### Basin/County Search:

**County:** Eddy

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 591369.22

**Northing (Y):** 3607883.65

**Radius:** 3000

\*UTM location was derived from PLSS - see Help

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

9/28/23 2:20 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



Map Unit Description: Reeves-Gypsum land complex, 0 to 3 percent slopes---Eddy Area, New Mexico

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## Eddy Area, New Mexico

### RG—Reeves-Gypsum land complex, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1w5f

*Elevation:* 1,250 to 5,000 feet

*Mean annual precipitation:* 10 to 25 inches

*Mean annual air temperature:* 57 to 70 degrees F

*Frost-free period:* 190 to 235 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Reeves and similar soils:* 55 percent

*Gypsum land:* 30 percent

*Minor components:* 15 percent

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

#### Description of Reeves

##### Setting

*Landform:* Ridges, plains, hills

*Landform position (two-dimensional):* Shoulder, backslope, footslope, toeslope

*Landform position (three-dimensional):* Side slope, head slope, nose slope, crest

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Residuum weathered from gypsum

##### Typical profile

*H1 - 0 to 8 inches:* loam

*H2 - 8 to 32 inches:* clay loam

*H3 - 32 to 60 inches:* gypsiferous material

##### Properties and qualities

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* High

*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:* 25 percent

*Gypsum, maximum content:* 80 percent

*Maximum salinity:* Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 4.0

*Available water supply, 0 to 60 inches:* Low (about 4.3 inches)



Map Unit Description: Reeves-Gypsum land complex, 0 to 3 percent slopes---Eddy Area, New Mexico

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**Interpretive groups**

*Land capability classification (irrigated): 3s*

*Land capability classification (nonirrigated): 7s*

*Hydrologic Soil Group: B*

*Ecological site: R070BC007NM - Loamy*

*Hydric soil rating: No*

**Description of Gypsum Land****Setting**

*Landform: Ridges, plains, hills*

*Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope*

*Landform position (three-dimensional): Side slope, head slope, nose slope, crest*

*Down-slope shape: Convex*

*Across-slope shape: Linear*

*Parent material: Residuum weathered from gypsum*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8s*

*Hydric soil rating: No*

**Minor Components****Largo**

*Percent of map unit: 5 percent*

*Ecological site: R070BC007NM - Loamy*

*Hydric soil rating: No*

**Reagan**

*Percent of map unit: 5 percent*

*Ecological site: R070BC007NM - Loamy*

*Hydric soil rating: No*

**Cottonwood**

*Percent of map unit: 5 percent*

*Ecological site: R070BC033NM - Salty Bottomland*

*Hydric soil rating: No*

**Data Source Information**

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 18, Sep 8, 2022



# National Flood Hazard Layer FIRMMette



104°1'54"W 32°36'32"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

104°1'16"W 32°36'12"N

Released to Imaging: 2/16/2024 9:49:55 AM

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 9/28/2023 at 4:16 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	nAPP2322634457
District RP	
Facility ID	fAPP2202651395
Application ID	

## Release Notification

### Responsible Party

Responsible Party: Cimarex Energy Co. of Colorado	OGRID: 162683
Contact Name: Laci Luig	Contact Telephone: (432) 571-7800
Contact email: laci.luig@coterra.com	Incident # (assigned by OCD) nAPP2322634457
Contact mailing address: 6001 Deauville Blvd., Suite 300N Midland, TX 79706	

### Location of Release Source

Latitude 32.60445 \_\_\_\_\_ Longitude -104.02572 \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Superior Federal 9	Site Type: Battery
Date Release Discovered: 8/13/2023	API# (if applicable)

Unit Letter	Section	Township	Range	County
G	1	20S	29E	Eddy

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 checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 15	Volume Recovered (bbls) 20
	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: Lightning

Our Control Room received a call Sunday morning from Eddy County Emergency Dispatch reporting the Superior Federal 9H location had a production tank on fire. Upon the Lease Operator's arrival, the Loco Hills VFD had extinguished the fire. Storms were in the area the night before and the information we currently have leads us to believe lightning struck the fiberglass produced water tank. An estimated 15 barrels were calculated to have been released in the earthen berm. A vac truck recovered a total of 20 barrels from the berm and tank remnants. No injuries resulted in the fire and all fluids remained on pad. An environmental company has been contacted and remediation will be scheduled in the coming weeks.

Released: 15 barrels, Recovered: 20 barrels



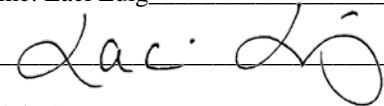
State of New Mexico  
Oil Conservation Division

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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: 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: 8/14/2023
email: laci.luig@coterra.com	Telephone: (432) 208-3035
<b><u>OCD Only</u></b>  Received by: _____ Date: _____	



< SVC-Pro

### Standing Liquid Calculation

Superior Fed 9

L(Ft)

W(Ft)

D(In)

Oil %

15

5

13

0



H2O Spill Total: 14.47 Bbls

Oil Spill Total: 0.00 Bbls

Total Spilled: 14.47 Bbls

Total Spilled: 607.75 Gals

Screenshot for future reference!





CIMAREX ENERGY  
SUPERIOR FEDERAL 9  
EDDY, NM







CIMAREX ENERGY  
SUPERIOR FEDERAL 9  
EDDY, NM







CIMAREX ENERGY  
SUPERIOR FEDERAL 9  
EDDY, NM





Incident ID	nAPP2322634457
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Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>115</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input checked="" type="checkbox"/> Yes <input 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 <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

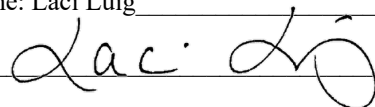
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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



State of New Mexico  
Oil Conservation Division

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Facility ID	fAPP2202651395
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: 11/7/2023 \_\_\_\_\_  
email: laci.luig@coterra.com \_\_\_\_\_ Telephone: (432) 208-3035 \_\_\_\_\_

**OCD Only**

Received by: Shelly Wells \_\_\_\_\_ Date: 11/13/2023 \_\_\_\_\_



Incident ID	nAPP2322634457
District RP	
Facility ID	fAPP2202651395
Application ID	

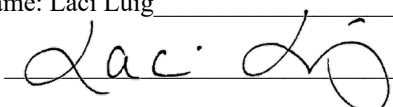
## Closure

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: 11/7/2023 \_\_\_\_\_  
email: laci.luig@coterra.com \_\_\_\_\_ Telephone: (432) 208-3035 \_\_\_\_\_

**OCD Only**

Received by: Shelly Wells \_\_\_\_\_ Date: 11/13/2023 \_\_\_\_\_

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: 2/16/2024 \_\_\_\_\_  
Printed Name: Brittany Hall \_\_\_\_\_ Title: Environmental Specialist \_\_\_\_\_



**From:** [Wells, Shelly, EMNRD](#)  
**To:** [Laci Luig](#)  
**Cc:** [Bratcher, Michael, EMNRD](#); [Hamlet, Robert, EMNRD](#)  
**Subject:** RE: [EXTERNAL] nAPP2322634457 Superior Federal 9 sample notification  
**Date:** Friday, September 1, 2023 10:37:26 AM  
**Attachments:** [image001.jpg](#)  
[0.jpg](#)

---

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



Good morning Laci,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file. Thank you,

Shelly

[Shelly Wells](#) \* Environmental Specialist-Advanced  
Environmental Bureau  
EMNRD-Oil Conservation Division  
1220 S. St. Francis Drive | Santa Fe, NM 87505  
(505)469-7520 | [Shelly.Wells@emnrd.nm.gov](mailto:Shelly.Wells@emnrd.nm.gov)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Laci Luig <Laci.Luig@coterra.com>  
**Sent:** Friday, September 1, 2023 9:22 AM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; BLM Spill Notifications <BLM\_NM\_CFO\_Spill@blm.gov>  
**Cc:** Jim Hawley <JHawley@H-R-Enterprises.com>; Michael Collier <mcollier@H-R-Enterprises.com>  
**Subject:** [EXTERNAL] nAPP2322634457 Superior Federal 9 sample notification

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

Good afternoon,

This email serves as notification for confirmation sampling on the Superior Federal 9. Sampling is scheduled to begin as early as Thursday, September 7<sup>th</sup>, weather and soil conditions permitting. H&R Enterprises will be onsite to collect the confirmation samples.



Thank you,



**Laci Luig** | Environmental, Health & Safety Specialist  
T: 432.571.7810 | M: 432.208.3035 | [laci.luig@coterra.com](mailto:laci.luig@coterra.com) | [www.coterra.com](http://www.coterra.com)  
Coterra Energy Inc. | 6001 Deauville Blvd., Suite 300N | Midland, TX 79706

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

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# **APPENDIX IV**

## **PHOTOGRAPHIC DOCUMENTATION**



PHOTOGRAPHIC DOCUMENTATION

INITIAL PHOTOGRAPHS





PHOTOGRAPHIC DOCUMENTATION

EXCAVATION PHOTOGRAPHS





PHOTOGRAPHIC DOCUMENTATION

FINAL PHOTOGRAPHS





# **APPENDIX V**

## **LABORATORY REPORTS**





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

September 13, 2023

MICHAEL COLLIER

H & R ENTERPRISES

1010 GAMBLIN ROAD

HOBBS, NM 88240

RE: SUPERIOR FED #009

Enclosed are the results of analyses for samples received by the laboratory on 09/08/23 12:38.

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](http://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 style with a large, stylized 'C' and 'K'.

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: 09/08/2023  
 Reported: 09/13/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: S -1 4' (H234878-01)**

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	09/11/2023	ND	1.75	87.7	2.00	7.51	
Toluene*	<0.050	0.050	09/11/2023	ND	1.81	90.4	2.00	6.80	
Ethylbenzene*	<0.050	0.050	09/11/2023	ND	1.79	89.7	2.00	6.91	
Total Xylenes*	<0.150	0.150	09/11/2023	ND	5.46	91.0	6.00	6.42	
Total BTEX	<0.300	0.300	09/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 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	448	16.0	09/11/2023	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	09/11/2023	ND	195	97.3	200	5.54	
DRO >C10-C28*	120	10.0	09/11/2023	ND	187	93.4	200	12.1	
EXT DRO >C28-C36	66.1	10.0	09/11/2023	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 138 % 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: 09/08/2023  
 Reported: 09/13/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: S -2 4' (H234878-02)**

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	09/11/2023	ND	1.75	87.7	2.00	7.51		
Toluene*	<0.050	0.050	09/11/2023	ND	1.81	90.4	2.00	6.80		
Ethylbenzene*	<0.050	0.050	09/11/2023	ND	1.79	89.7	2.00	6.91		
Total Xylenes*	<0.150	0.150	09/11/2023	ND	5.46	91.0	6.00	6.42		
Total BTEx	<0.300	0.300	09/11/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 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	496	16.0	09/11/2023	ND	416	104	400	7.41	

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	09/11/2023	ND	195	97.3	200	5.54	
DRO >C10-C28*	60.7	10.0	09/11/2023	ND	187	93.4	200	12.1	
EXT DRO >C28-C36	63.4	10.0	09/11/2023	ND					

Surrogate: 1-Chlorooctane 96.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 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: 09/08/2023  
 Reported: 09/13/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: S -3 4' (H234878-03)**

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	09/11/2023	ND	1.75	87.7	2.00	7.51		
Toluene*	<0.050	0.050	09/11/2023	ND	1.81	90.4	2.00	6.80		
Ethylbenzene*	<0.050	0.050	09/11/2023	ND	1.79	89.7	2.00	6.91		
Total Xylenes*	<0.150	0.150	09/11/2023	ND	5.46	91.0	6.00	6.42		
Total BTEx	<0.300	0.300	09/11/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 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	512	16.0	09/11/2023	ND	416	104	400	7.41	

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	09/11/2023	ND	195	97.3	200	5.54	
DRO >C10-C28*	52.6	10.0	09/11/2023	ND	187	93.4	200	12.1	
EXT DRO >C28-C36	53.4	10.0	09/11/2023	ND					

Surrogate: 1-Chlorooctane 98.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 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: 09/08/2023  
 Reported: 09/13/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: S -4 4' (H234878-04)**

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	09/11/2023	ND	1.75	87.7	2.00	7.51		
Toluene*	<0.050	0.050	09/11/2023	ND	1.81	90.4	2.00	6.80		
Ethylbenzene*	<0.050	0.050	09/11/2023	ND	1.79	89.7	2.00	6.91		
Total Xylenes*	<0.150	0.150	09/11/2023	ND	5.46	91.0	6.00	6.42		
Total BTEx	<0.300	0.300	09/11/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 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	512	16.0	09/11/2023	ND	416	104	400	7.41	

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	09/11/2023	ND	195	97.3	200	5.54	
DRO >C10-C28*	48.0	10.0	09/11/2023	ND	187	93.4	200	12.1	
EXT DRO >C28-C36	49.9	10.0	09/11/2023	ND					

Surrogate: 1-Chlorooctane 97.7 % 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: 09/08/2023  
 Reported: 09/13/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: S -5 4' (H234878-05)**

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	09/11/2023	ND	1.75	87.7	2.00	7.51	
Toluene*	<0.050	0.050	09/11/2023	ND	1.81	90.4	2.00	6.80	
Ethylbenzene*	<0.050	0.050	09/11/2023	ND	1.79	89.7	2.00	6.91	
Total Xylenes*	<0.150	0.150	09/11/2023	ND	5.46	91.0	6.00	6.42	
Total BTEX	<0.300	0.300	09/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 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	576	16.0	09/11/2023	ND	416	104	400	7.41	

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	09/11/2023	ND	195	97.3	200	5.54	
DRO >C10-C28*	34.3	10.0	09/11/2023	ND	187	93.4	200	12.1	
EXT DRO >C28-C36	32.0	10.0	09/11/2023	ND					

Surrogate: 1-Chlorooctane 97.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 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: 09/08/2023  
 Reported: 09/13/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SW -1 4' (H234878-06)**

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	09/11/2023	ND	1.75	87.7	2.00	7.51		
Toluene*	<0.050	0.050	09/11/2023	ND	1.81	90.4	2.00	6.80		
Ethylbenzene*	<0.050	0.050	09/11/2023	ND	1.79	89.7	2.00	6.91		
Total Xylenes*	<0.150	0.150	09/11/2023	ND	5.46	91.0	6.00	6.42		
Total BTEx	<0.300	0.300	09/11/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 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	432	16.0	09/11/2023	ND	416	104	400	7.41		

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	09/11/2023	ND	195	97.3	200	5.54	
DRO >C10-C28*	17.2	10.0	09/11/2023	ND	187	93.4	200	12.1	
EXT DRO >C28-C36	11.7	10.0	09/11/2023	ND					

Surrogate: 1-Chlorooctane 99.2 % 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: 09/08/2023  
 Reported: 09/13/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SW -2 4' (H234878-07)**

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	09/11/2023	ND	1.75	87.7	2.00	7.51		
Toluene*	<0.050	0.050	09/11/2023	ND	1.81	90.4	2.00	6.80		
Ethylbenzene*	<0.050	0.050	09/11/2023	ND	1.79	89.7	2.00	6.91		
Total Xylenes*	<0.150	0.150	09/11/2023	ND	5.46	91.0	6.00	6.42		
Total BTEX	<0.300	0.300	09/11/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 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	496	16.0	09/11/2023	ND	416	104	400	7.41		

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	09/13/2023	ND	195	97.3	200	5.54	
DRO >C10-C28*	20.1	10.0	09/13/2023	ND	187	93.4	200	12.1	
EXT DRO >C28-C36	17.2	10.0	09/13/2023	ND					

Surrogate: 1-Chlorooctane 82.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.9 % 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: 09/08/2023  
 Reported: 09/13/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SW -3 4' (H234878-08)**

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	09/11/2023	ND	1.75	87.7	2.00	7.51		
Toluene*	<0.050	0.050	09/11/2023	ND	1.81	90.4	2.00	6.80		
Ethylbenzene*	<0.050	0.050	09/11/2023	ND	1.79	89.7	2.00	6.91		
Total Xylenes*	<0.150	0.150	09/11/2023	ND	5.46	91.0	6.00	6.42		
Total BTEx	<0.300	0.300	09/11/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 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	512	16.0	09/11/2023	ND	416	104	400	7.41	

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	09/13/2023	ND	195	97.3	200	5.54	
DRO >C10-C28*	<10.0	10.0	09/13/2023	ND	187	93.4	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	09/13/2023	ND					

Surrogate: 1-Chlorooctane 78.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.5 % 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: 09/08/2023  
 Reported: 09/13/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SW -4 4' (H234878-09)**

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	09/11/2023	ND	1.75	87.7	2.00	7.51		
Toluene*	<0.050	0.050	09/11/2023	ND	1.81	90.4	2.00	6.80		
Ethylbenzene*	<0.050	0.050	09/11/2023	ND	1.79	89.7	2.00	6.91		
Total Xylenes*	<0.150	0.150	09/11/2023	ND	5.46	91.0	6.00	6.42		
Total BTEx	<0.300	0.300	09/11/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 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	544	16.0	09/11/2023	ND	416	104	400	7.41	

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	09/13/2023	ND	195	97.3	200	5.54	
DRO >C10-C28*	26.6	10.0	09/13/2023	ND	187	93.4	200	12.1	
EXT DRO >C28-C36	16.8	10.0	09/13/2023	ND					

Surrogate: 1-Chlorooctane 77.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.4 % 49.1-148

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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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

---

Celey D. Keene, Lab Director/Quality Manager





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

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)





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

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September 18, 2023

MICHAEL COLLIER

H & R ENTERPRISES

1010 GAMBLIN ROAD

HOBBS, NM 88240

RE: SUPERIOR FED #009

Enclosed are the results of analyses for samples received by the laboratory on 09/14/23 9:42.

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](http://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: 09/14/2023  
 Reported: 09/18/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/14/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: S -1 4.5' (H234961-01)**

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	09/15/2023	ND	1.81	90.7	2.00	0.347	
Toluene*	<0.050	0.050	09/15/2023	ND	1.90	95.2	2.00	1.41	
Ethylbenzene*	<0.050	0.050	09/15/2023	ND	1.92	96.1	2.00	0.237	
Total Xylenes*	<0.150	0.150	09/15/2023	ND	5.58	93.0	6.00	0.631	
Total BTX	<0.300	0.300	09/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	640	16.0	09/14/2023	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	09/14/2023	ND	199	99.3	200	0.410	
DRO >C10-C28*	32.1	10.0	09/14/2023	ND	136	68.2	200	40.0	
EXT DRO >C28-C36	19.5	10.0	09/14/2023	ND					

Surrogate: 1-Chlorooctane 84.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.1 % 49.1-148

Cardinal Laboratories

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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: 09/14/2023  
 Reported: 09/18/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/14/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: S -2 4.5' (H234961-02)**

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	09/15/2023	ND	1.81	90.7	2.00	0.347	
Toluene*	<0.050	0.050	09/15/2023	ND	1.90	95.2	2.00	1.41	
Ethylbenzene*	<0.050	0.050	09/15/2023	ND	1.92	96.1	2.00	0.237	
Total Xylenes*	<0.150	0.150	09/15/2023	ND	5.58	93.0	6.00	0.631	
Total BTX	<0.300	0.300	09/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	624	16.0	09/14/2023	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	09/14/2023	ND	199	99.3	200	0.410	
DRO >C10-C28*	52.5	10.0	09/14/2023	ND	136	68.2	200	40.0	
EXT DRO >C28-C36	46.8	10.0	09/14/2023	ND					

Surrogate: 1-Chlorooctane 93.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 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: 09/14/2023  
 Reported: 09/18/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/14/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: S -3 4.5' (H234961-03)**

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	09/15/2023	ND	1.81	90.7	2.00	0.347		
Toluene*	<0.050	0.050	09/15/2023	ND	1.90	95.2	2.00	1.41		
Ethylbenzene*	<0.050	0.050	09/15/2023	ND	1.92	96.1	2.00	0.237		
Total Xylenes*	<0.150	0.150	09/15/2023	ND	5.58	93.0	6.00	0.631		
Total BTEx	<0.300	0.300	09/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 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	592	16.0	09/14/2023	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	09/14/2023	ND	199	99.3	200	0.410	
DRO >C10-C28*	32.0	10.0	09/14/2023	ND	136	68.2	200	40.0	
EXT DRO >C28-C36	21.6	10.0	09/14/2023	ND					

Surrogate: 1-Chlorooctane 88.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.2 % 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

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### 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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Cardinal Laboratories

\*=Accredited Analyte

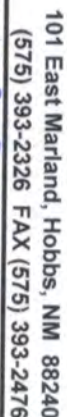
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



**BILL TO**

FOR LAB USE ONLY		
H3461		
Lab I.D.		
Sample I.D.		
DR (C)OMP.		
CONTAINERS		
DWATER		
WATER		
MATRIX		
PRESERV.		
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analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client. Its subsidiaries, affiliates or successors are not liable for or related to the performance of services interrupted by Cardinal, regardless of whether such claim is based upon a negligent or otherwise stated reasons or otherwise.

Relinquished By: \_\_\_\_\_ Date: 7/7/2010 Received By: \_\_\_\_\_ Verbal Result: ☐ Yes ☐ No Adm'l Phone #: \_\_\_\_\_

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)





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

---

September 20, 2023

MICHAEL COLLIER

H & R ENTERPRISES

1010 GAMBLIN ROAD

HOBBS, NM 88240

RE: SUPERIOR FED #009

Enclosed are the results of analyses for samples received by the laboratory on 09/19/23 8:41.

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](http://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: 09/19/2023  
 Reported: 09/20/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/19/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: S - 1 5' (H235047-01)**

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	09/19/2023	ND	2.06	103	2.00	0.351	
Toluene*	<0.050	0.050	09/19/2023	ND	2.05	103	2.00	0.622	
Ethylbenzene*	<0.050	0.050	09/19/2023	ND	2.18	109	2.00	0.403	
Total Xylenes*	<0.150	0.150	09/19/2023	ND	6.54	109	6.00	0.755	
Total BTX	<0.300	0.300	09/19/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	09/19/2023	ND	400	100	400	3.92		

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	09/19/2023	ND	202	101	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/19/2023	ND	209	104	200	12.8	
EXT DRO >C28-C36	<10.0	10.0	09/19/2023	ND					

Surrogate: 1-Chlorooctane 71.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.5 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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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: 09/19/2023  
 Reported: 09/20/2023  
 Project Name: SUPERIOR FED #009  
 Project Number: (FED 9)  
 Project Location: CIMAREX- EDDY COUNTY NM

Sampling Date: 09/19/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: S - 2 5' (H235047-02)**

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	09/19/2023	ND	2.06	103	2.00	0.351		
Toluene*	<0.050	0.050	09/19/2023	ND	2.05	103	2.00	0.622		
Ethylbenzene*	<0.050	0.050	09/19/2023	ND	2.18	109	2.00	0.403		
Total Xylenes*	<0.150	0.150	09/19/2023	ND	6.54	109	6.00	0.755		
Total BTX	<0.300	0.300	09/19/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	09/19/2023	ND	400	100	400	3.92		

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	09/19/2023	ND	202	101	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/19/2023	ND	209	104	200	12.8	
EXT DRO >C28-C36	<10.0	10.0	09/19/2023	ND					

Surrogate: 1-Chlorooctane 98.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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".

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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

[illegible]



**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 284883

**CONDITIONS**

Operator: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd, Ste 300N Midland, TX 79706	OGRID: 162683
	Action Number: 284883
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
bhall	Remediation Closure approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. The reclamation report will need to address all the requirements of 19.15.29.13 NMAC including pictures of the reclaimed area, and a proposed revegetation plan. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	2/16/2024
bhall	The reclamation report will need to include: • Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	2/16/2024
bhall	The revegetation report will need to include: Executive Summary of the revegetation activities including: o Seed mix; o Method of seeding; o Dates of when the release area was reseeded; o Information pertinent to inspections; o Information about any amendments added to the soil; o Information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC; o and any additional information. • Scaled Site Map including area that was revegetated in square feet; • Pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	2/16/2024
bhall	Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	2/16/2024