

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	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

### Location of Release Source

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

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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 type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input 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)?	

### Initial Response

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

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input 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: _____ Title: _____ Signature: <u>Patricia Zapanta</u> _____ Date: _____ email: _____ Telephone: _____
<b><u>OCD Only</u></b> Received by: _____ Date: _____

Spill Calculation - Subsurface Spill - Rectangle

Remediation Recommendation

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Average Depth (in.)	On/Off Pad (dropdown)	Soil Spilled-Fluid Saturation (%)	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture (%)	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)	Total Estimated Contaminated Soil, uncompacted, 25% (yd <sup>3</sup> .)	Current Rule of Thumb - RMR Handover Volume, (yd <sup>3</sup> .)
Rectangle A	105.0	50.0	0.1	Off-Pad	15.02%	7.79	1.17	5%	0.06	1.11	2.03	750
Rectangle B				On-Pad	10.50%	0.00	0.00		0.00	0.00	0.00	
Rectangle C				On-Pad	10.50%	0.00	0.00		0.00	0.00	0.00	
Rectangle D				On-Pad	10.50%	0.00	0.00		0.00	0.00	0.00	
Rectangle E						0.00					0.00	
Rectangle F						0.00					0.00	
Rectangle G						0.00					0.00	
Rectangle H						0.00					0.00	
Rectangle I						0.00					0.00	
Rectangle J						0.00					0.00	
Total Subsurface Volume Released:							1.1697			0.0585	1.1112	



December 19, 2023

District Supervisor  
Oil Conservation Division, District 1  
1625 North French Drive  
Hobbs, New Mexico 88240

**Re: Release Characterization, Remediation and Closure Report  
ConocoPhillips  
Airacuda 31 Federal #002H Flare Fire Release  
Unit Letter B, Section 31, Township 25 South, Range 33 East  
DOR: 10/18/2023  
Approximate Release Point 32.093131, -103.609394  
Lea County, New Mexico  
Incident ID: NAPP2329636934**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a release that occurred as a result of a flare fire at the Airacuda 31 Federal #002H (API # 30-025-40407) well. The release footprint is located within Public Land Survey System (PLSS) Unit Letter B, Section 31, Township 25 South, Range 33 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.093131, -103.609394, as shown on Figures 1 and 2.

## BACKGROUND

According to the C-141 Initial Report, the release occurred on October 18, 2023, and was caused by a free water knockout (FWKO) overflowing causing fluid to be released out of the flare leading to a fire off pad. Approximately 0.06 bbls of oil and 1.11 bbls of produced water were reported and no fluids were recovered due to the fire. The provided spill calculator indicates an irregular release area of approximately 5,250 square feet. This release extent was identified based on information provided by ConocoPhillips representatives and a review of photographs collected at the release area. The approximate release extent is shown in Figure 3. The New Mexico Oil Conservation Division (NMOCD) approved the initial C-141 on October 23, 2023, and assigned the release Incident ID NAPP2329636934. The C-141 is included as Appendix A.

## LAND OWNERSHIP

According to the NMOCD Oil and Gas Map, the site is located on land owned by the Bureau of Land Management (BLM). Tetra Tech requested BLM clearance to remediate via email on November 14, 2023. The BLM cleared the Site for remediation activities via verbal notification from Shelly Tucker, BLM.

## SITE CHARACTERIZATION

A site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, stream bodies, springs, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances

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specified in 19.15.29 New Mexico Administrative Code (NMAC). The Site is in an area of medium karst potential.

According to the NMOSE, there is one well within 0.93 miles (1497 meters) with a total depth to water of 280 feet. According to the United States Geological Survey (USGS) groundwater well search through the New Mexico Oil Conservation Division (NMOCD) mapping system, there are one (1) active water wells within a ½-mile (800-meter) radius of the Site. COP will use the USGS historical groundwater well (Site # 320504103361801) measured on January 16, 2013, with a well depth of 320 feet. The site characterization data is included in Appendix C.

## REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Based on the site characterization and in accordance with Table I of 19.15.29.12 NMAC, the remediation RRALs for the Site are as follows:

Constituent	Remediation RRAL
Chloride	20,000 mg/kg
TPH (GRO+DRO+ORO)	2,500 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

Additionally, in accordance with the NMOCD guidance *Procedures for Implementation of the Spill Rule (19.15.29 NMAC)* (September 6, 2019), the following reclamation requirements for surface soils (0-4 feet bgs) outside of active oil and gas operations are as follows:

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg

## SITE ASSESSMENT AND SAMPLING RESULTS

Tetra Tech personnel mobilized to the site on October 30, 2023, to conduct assessment activities. A total of seven (7) borings (AH-1 through AH-7) were installed within and around the release footprint. Three (3) borings (AH-1 through AH-3) were installed to a depth of 2 feet bgs and four (4) borings (AH-4 through AH-7) were installed to 1-foot bgs. Boring locations from the October 2023 sampling event are presented in Figure 3.

A total of ten (10) samples were collected from the seven (7) boring locations and submitted to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico to be analyzed for chlorides via EPA Method 4500.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. All analytical results were below the applicable Site RRALs for all constituents. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix D. Photographic documentation of Site conditions at the time of the assessment is presented in Appendix E.

## INITIAL RESPONSE AND REMEDIAL ACTIVITIES

In accordance with 19.15.29.8. B. (4) NMAC that states “the responsible party may commence remediation immediately after discovery of a release,” ConocoPhillips elected to begin remediation of the impacted area on November 14, 2023. The entire release extent was excavated by scraping the surface to a depth of approximately 6 inches bgs, resulting in approximately 93 cubic yards of contaminated soil being removed.

Photographic documentation of the release extent before and after the scrape is included in Appendix E. Waste manifests are not currently available however, the initial response area is indicated in Figure 4.

## SITE CONFIRMATION SAMPLING RESULTS

Post initial response, Tetra Tech personnel re-mobilized to the site to conduct confirmation sampling on November 16, 2023, for verification of initial response activities. Prior to confirmation sampling, in accordance with Subsection D of 19.15.29.12 NMAC, the NMOCD district office was notified via email on November 14, 2023. Copies of the regulatory correspondence are included in Appendix B.

The observed release extent consisted of approximately 3,476 square feet; however, the surface scrape was conducted over an area of approximately 5,000 square feet. As shown, in Appendix E, the release was limited to the shallow surface and was not consistent in shape. Samples were collected such that each discrete sample (horizontal and vertical) was representative of approximately 200 square feet of remediated area. A total of eight (8) floor sample locations and eight (8) sidewall sample locations were used during the sampling activities. Confirmation sidewall sample locations were labeled with "SW"-#, and confirmation floor sample locations were labeled with "FS"-#. Analytical results for all confirmation soil samples (floor and sidewall) were below the applicable Site RRALs for chloride, BTEX, and TPH. The results of the 2023 confirmation sampling events are summarized in Table 2. Laboratory analytical data is included in Appendix D. The initial response remedial action was successful in removing the contaminant mass to meet the standards of Table I of 19.15.29.12 NMAC.

## CONCLUSION

Based on the results of the site assessment, initial response actions, and confirmation sampling, ConocoPhillips respectfully requests closure of the incident. The analytical results from the assessment indicated that observable impacts were limited to the upper foot of soils. The release footprint was fully delineated.

All analytical results associated with the on-pad site confirmation sampling events were below applicable Site RRALs. Therefore, remediation of the release footprint is complete. All confirmation sampling analytical results associated with the off-pad pasture area were below the reclamation requirements. The impacted surface area was remediated to meet the standards of Table I of 19.15.29.12 NMAC during the initial response remedial activities.

This final closure report has been submitted within 90 days of discovery of the release. This final closure report details the release characterization, remediation activities and the results of the assessment sampling. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the soil assessment activities for the Site, please call me at (512) 596-8201.

Sincerely,

**Tetra Tech, Inc.**



Lisbeth Chavira  
Staff Geoscientist



Christian M. Llull, P.G.  
Program Manager

cc:

Mr. Jacob Laird, GPBU – ConocoPhillips

## LIST OF ATTACHMENTS

### Figures:

- Figure 1 – Overview Map
- Figure 2 – Site Location/Topographic Map
- Figure 3 – Approximate Release Extent Site Assessment
- Figure 4 – Site Assessment and Initial Response
- Figure 5 – Initial Response and Confirmation Sampling Locations

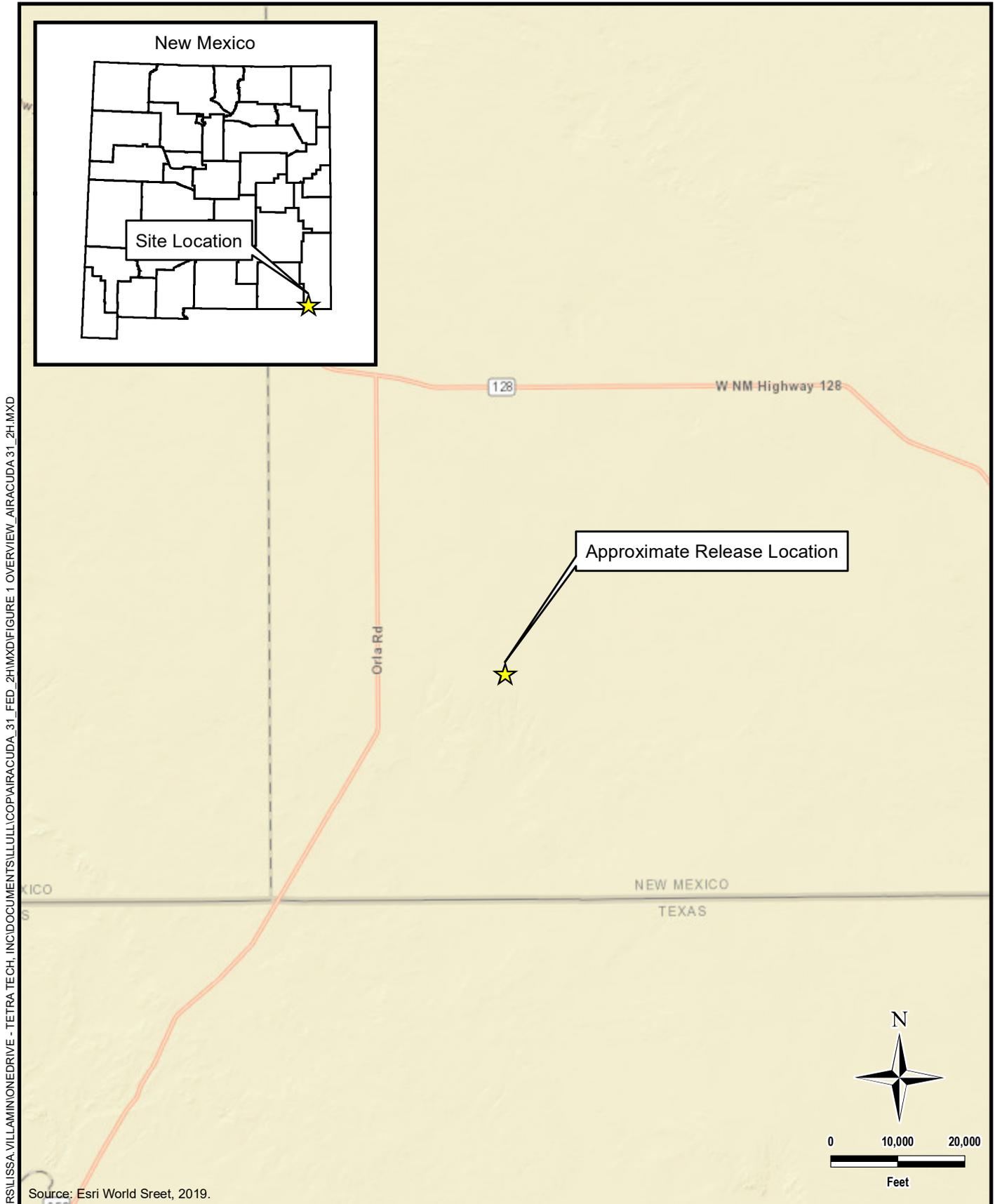
### Tables:

- Table 1 – Summary of Analytical Results – 2023 Soil Assessment
- Table 2 – Summary of Analytical Results – 2023 Soil Remediation

### Appendices:

- Appendix A – C-141 Forms
- Appendix B – Regulatory Correspondence
- Appendix C – Site Characterization Data
- Appendix D – Laboratory Analytical Data
- Appendix E – Photographic Documentation

# **FIGURES**



DOCUMENT PATH: C:\USERS\LISSA.VILLAMINIONEDRIVE - TETRA TECH\INCIDENTS\ILLULLI\COPIRACUDA\_31\_FED\_2H\FED\_2H\MXD\FIGURE 1 OVERVIEW\_AIRACUDA\_31\_2H.MXD

Source: Esri World Sreet, 2019.



**TETRA TECH**

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**CONOCOPHILLIPS**

NAPP2329636934  
LEA COUNTY, NEW MEXICO  
(32.093132°, -103.609404°)

**AIRACUDA 31 FED 2H FLARE FIRE RELEASE  
OVERVIEW MAP**

PROJECT NO.: 212C-MD-03266

DATE: NOVEMBER 07, 2023

DESIGNED BY: LMV

Figure No.

**1**

DOCUMENT PATH: C:\USERS\LISSA.VILLAMINONEDRIVE - TETRA TECH\INCIDENTS\ILLULLI COPAIRACUDA\_31\_FED\_2H\FED\_2H\MXD\FIGURE 2 TOPO\_AIRACUDA 31\_2H.MXD

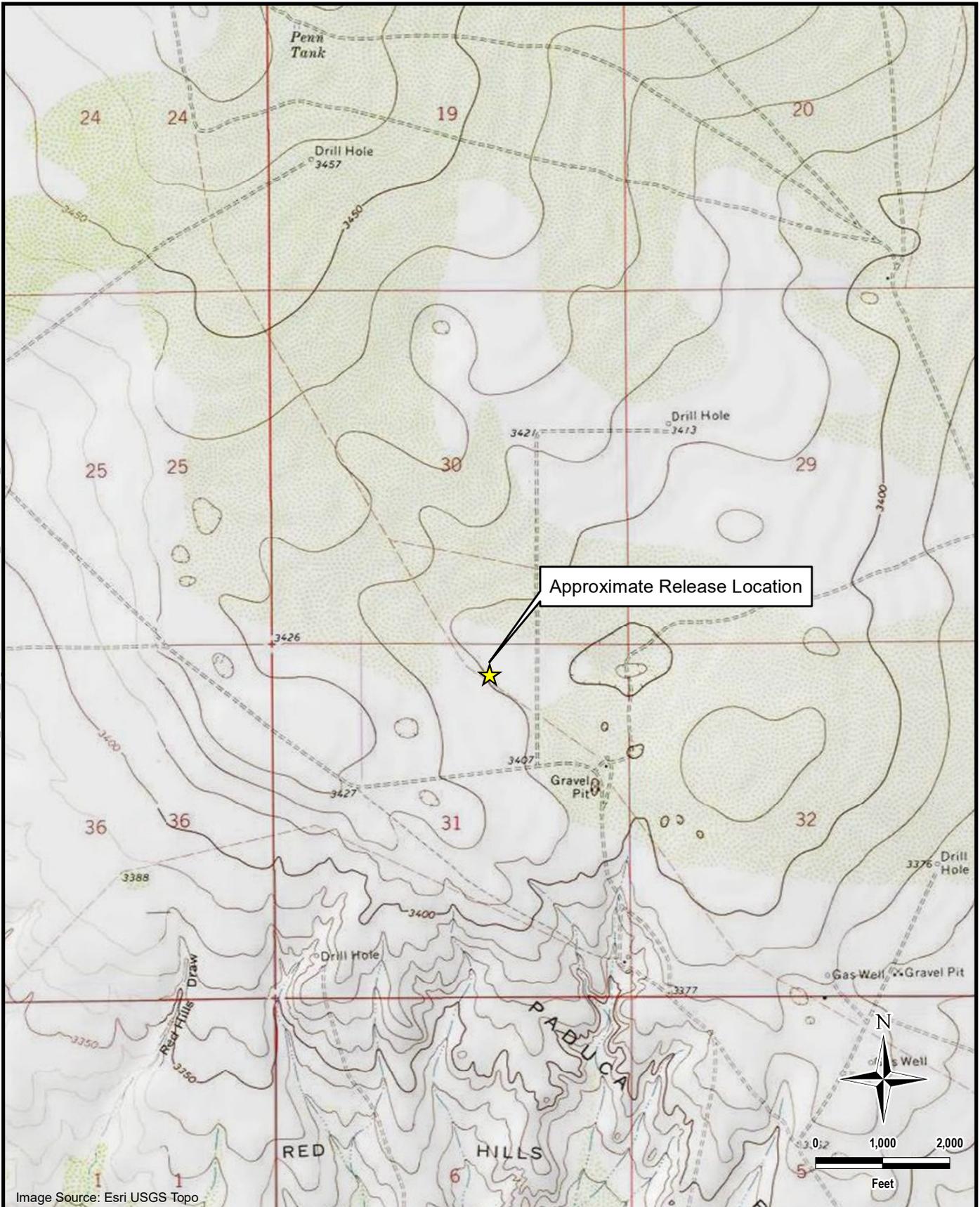


Image Source: Esri USGS Topo



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CONOCOPHILLIPS

NAPP2329636934  
LEA COUNTY, NEW MEXICO  
(32.093132°, -103.609404°)

**AIRACUDA 31 FED 2H FLARE FIRE RELEASE  
TOPOGRAPHIC MAP**

PROJECT NO.: 212C-MD-03266

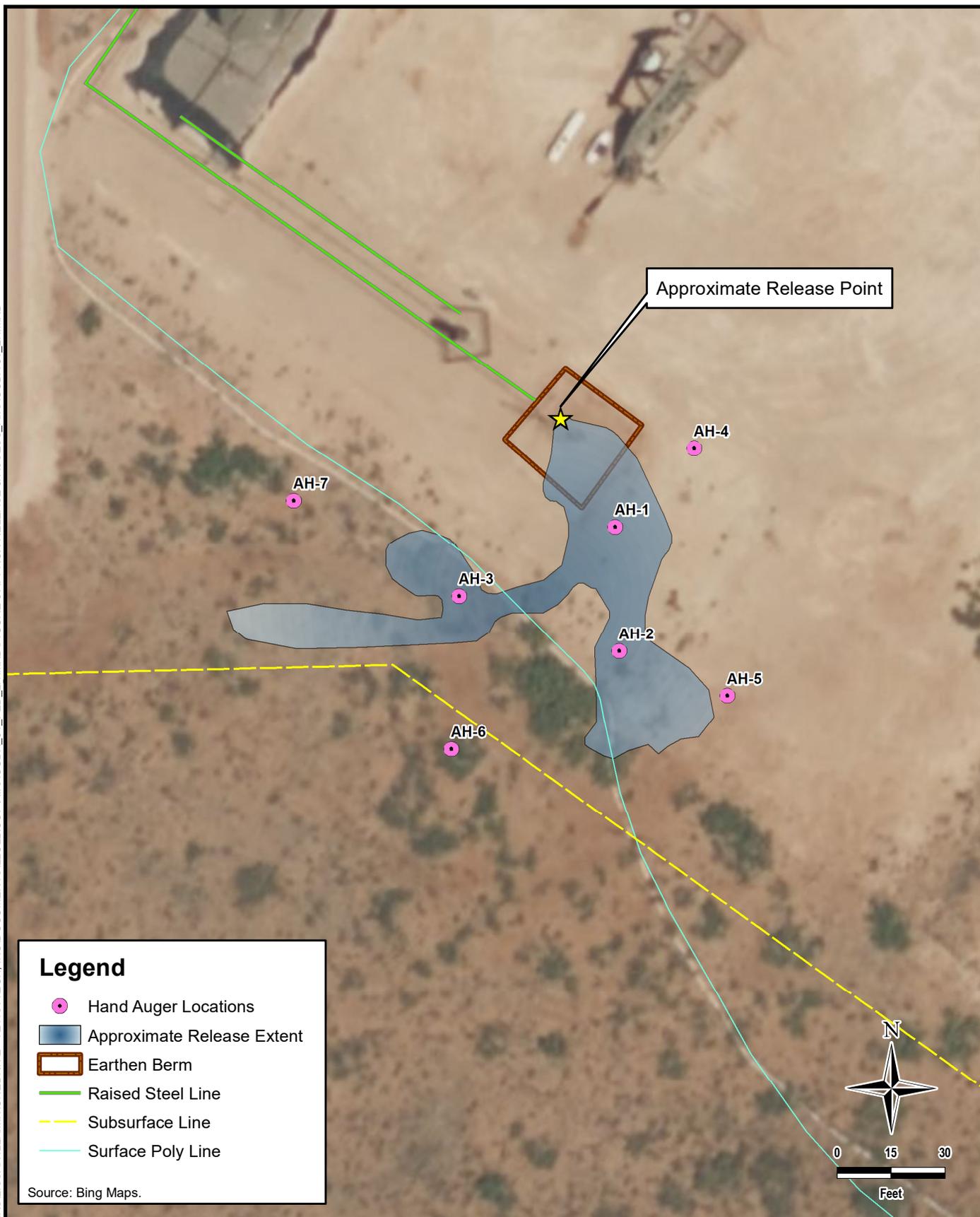
DATE: NOVEMBER 07, 2023

DESIGNED BY: LMV

Figure No.

**2**

DOCUMENT PATH: C:\USERS\LISSA.VILLAMINIONEDRIVE - TETRA TECH\INCIDENTS\ILLULLI\COPIRACUDA\_31\_FED\_2H\MXD\FIGURE 3 APPROX RELEASE & ASSES\_AIRACUDA 31\_2H.MXD



**Legend**

- Hand Auger Locations
- Approximate Release Extent
- Earthen Berm
- Raised Steel Line
- Subsurface Line
- Surface Poly Line

Source: Bing Maps.



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**CONOCOPHILLIPS**

NAPP2329636934  
LEA COUNTY, NEW MEXICO  
(32.093132°, -103.609404°)

**AIRACUDA 31 FED 2H FLARE FIRE RELEASE  
APPROXIMATE RELEASE EXTENT AND SITE ASSESSMENT**

PROJECT NO.: 212C-MD-03266

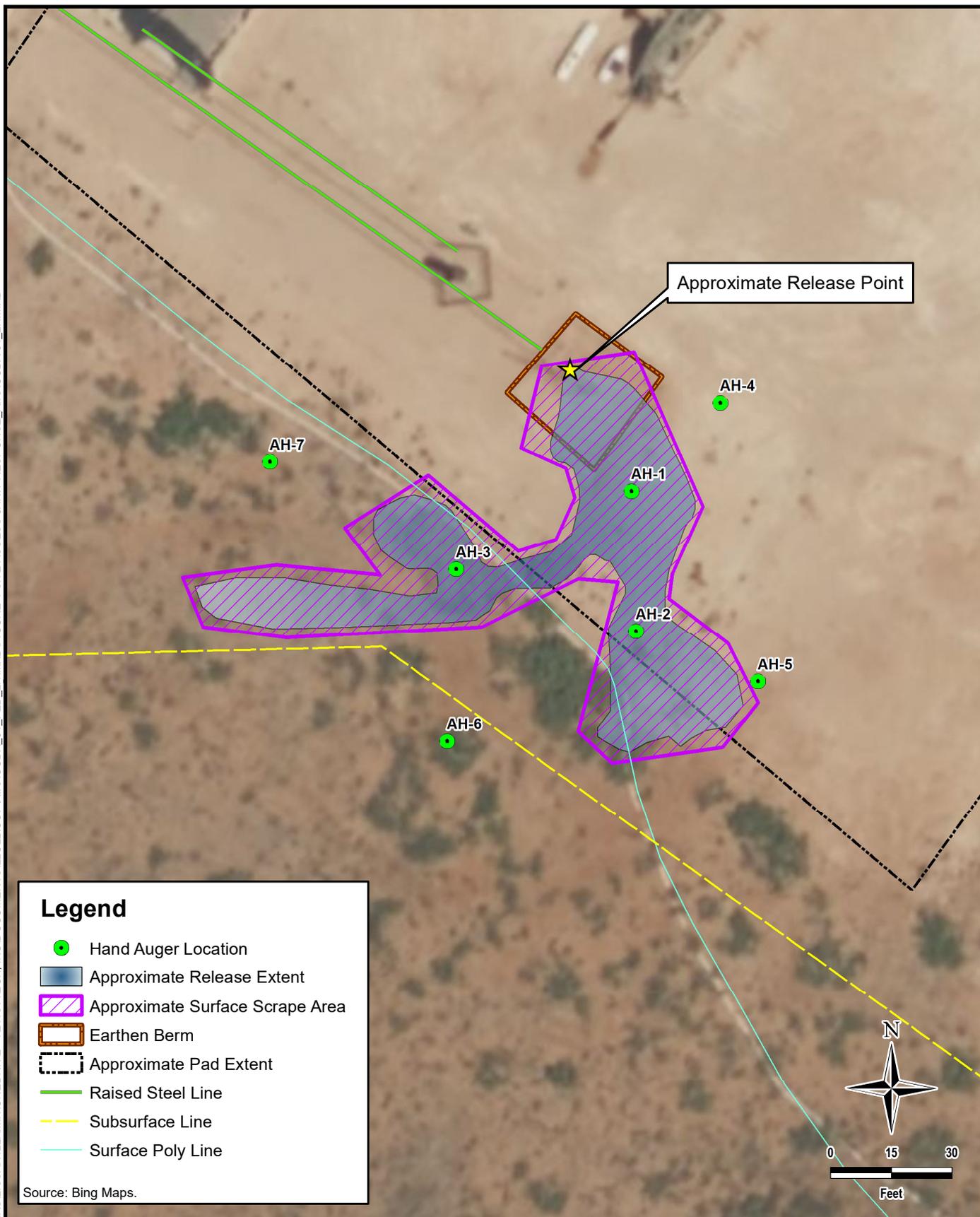
DATE: NOVEMBER 07, 2023

DESIGNED BY: LMV

Figure No.

**3**

DOCUMENT PATH: C:\USERS\LISSA.VILLAMINIONEDRIVE - TETRA TECH\INCIDENTS\ILLULLICOPAIRACUDA\_31\_FED\_2H\FED\_2H\MXD\FIGURE 4 SITE ASSESS & INIT RESPONSE\_AIRACUDA 31\_2H.MXD



**Legend**

- Hand Auger Location
- Approximate Release Extent
- Approximate Surface Scrape Area
- Earthen Berm
- Approximate Pad Extent
- Raised Steel Line
- Subsurface Line
- Surface Poly Line

Source: Bing Maps.

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**CONOCOPHILLIPS**  
 NAPP2329636934  
 LEA COUNTY, NEW MEXICO  
 (32.093132°, -103.609404°)

**AIRACUDA 31 FED 2H FLARE FIRE RELEASE  
 SITE ASSESSMENT AND INITIAL RESPONSE**

PROJECT NO.:	212C-MD-03266
DATE:	DECEMBER 15, 2023
DESIGNED BY:	LMV
Figure No.	<b>4</b>



# **TABLES**

TABLE 1  
 SUMMARY OF ANALYTICAL RESULTS  
 SOIL ASSESSMENT- NAPP2329636934  
 CONOCOPHILLIPS  
 AIRACUDA 31 FED 2H FLARE FIRE RELEASE  
 LEA COUNTY, NM

19.15.29.12 NMAC Closure Criteria for Soils Impacted by a Release (≤ 50 ft):					Chlorides <sup>1</sup>		BTEX <sup>2</sup>								TPH <sup>3</sup>											
					< 600 mg/kg		< 10 mg/kg		Toluene		Ethylbenzene		Total Xylenes		< 50 mg/kg		GRO		DRO		EXT DRO		< 100 mg/kg		-	
Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		Chloride		Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		C <sub>6</sub> - C <sub>10</sub>		> C <sub>10</sub> - C <sub>28</sub>		> C <sub>28</sub> - C <sub>36</sub>		Total TPH (GRO+DRO+EXT DRO)		GRO+DRO	
			Chlorides	PID	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
		ft. bgs	ppm		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
AH-1	10/30/2023	0-1	-		32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-		-	
		1-2	42.6		<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-		-	
AH-2	10/30/2023	0-1	-		<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-		-	
		1-2	39.6		<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-		-	
AH-3	10/30/2023	0-1	-		<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-		-	
		1-2	48.1		<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-		-	
AH-4	10/30/2023	0-1	191		176		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-		-	
AH-5	10/30/2023	0-1	70.1		16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		22.2		<10.0		22.2		22.2	
AH-6	10/30/2023	0-1	51.7		<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-		-	
AH-7	10/30/2023	0-1	44.1		<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-		-	

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

*Bold and italicized values indicate exceedance of proposed RRALs and/or Reclamation Requirements.*

**TABLE 2**  
**SUMMARY OF ANALYTICAL RESULTS**  
**SOIL REMEDIATION - NAPP2329636934**  
**CONOCOPHILLIPS**  
**AIRACUDA 31 FED 2H FLARE FIRE RELEASE**  
**LEA COUNTY, NM**

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup>		BTEX <sup>2</sup>								TPH <sup>3</sup>								
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	
FS-1	11/16/2023	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		93		44.1		<b>137.1</b>
FS-2	11/16/2023	-	496		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-3	11/16/2023	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-4	11/16/2023	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-5	11/16/2023	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-6	11/16/2023	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-7	11/16/2023	-	128		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-8	11/16/2023	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
NSW-1	11/16/2023	-	112		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
NSW-2	11/16/2023	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
ESW-1	11/16/2023	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
ESW-2	11/16/2023	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
SSW-1	11/16/2023	-	144		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
WSW-1	11/16/2023	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
WSW-2	11/16/2023	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
WSW-3	11/16/2023	-	448		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		22.8		<10.0		22.8

- NOTES:
- ft. Feet
  - bgs Below ground surface
  - mg/kg Milligrams per kilogram
  - TPH Total Petroleum Hydrocarbons
  - GRO Gasoline range organics
  - DRO Diesel range organics
  - 1 Method SM4500Cl-B
  - 2 Method 8021B
  - 3 Method 8015M

# **APPENDIX A C-141 Forms**

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	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

### Location of Release Source

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

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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 type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input 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)?	

### Initial Response

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

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input 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: _____ Title: _____ Signature: <u>Patricia Zapanta</u> _____ Date: _____ email: _____ Telephone: _____
<b><u>OCD Only</u></b>  Received by: <u>Shelly Wells</u> _____ Date: <u>10/23/2023</u> _____

Spill Calculation - Subsurface Spill - Rectangle

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Average Depth (in.)	On/Off Pad (dropdown)	Soil Spilled-Fluid Saturation (%)	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture (%)	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)	Total Estimated Contaminated Soil, uncompacted, 25% (yd <sup>3</sup> .)	Current Rule of Thumb - RMR Handover Volume, (yd <sup>3</sup> .)
Rectangle A	105.0	50.0	0.1	Off-Pad	15.02%	7.79	1.17	5%	0.06	1.11	2.03	750
Rectangle B				On-Pad	10.50%	0.00	0.00		0.00	0.00	0.00	
Rectangle C				On-Pad	10.50%	0.00	0.00		0.00	0.00	0.00	
Rectangle D				On-Pad	10.50%	0.00	0.00		0.00	0.00	0.00	
Rectangle E						0.00					0.00	
Rectangle F						0.00					0.00	
Rectangle G						0.00					0.00	
Rectangle H						0.00					0.00	
Rectangle I						0.00					0.00	
Rectangle J						0.00					0.00	
Total Subsurface Volume Released:							1.1697		0.0585	1.1112	2.03	BU

**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 278272

**CONDITIONS**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 278272
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
scwells	None	10/23/2023

Incident ID	
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: Jacob Laird Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: Jacob Laird Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

# **APPENDIX B**

## **Regulatory Correspondence**

**Chavira, Lisbeth**

---

**From:** Llull, Christian  
**Sent:** Friday, October 27, 2023 1:14 PM  
**To:** Taylor, Shelly J  
**Cc:** Chavira, Lisbeth  
**Subject:** Request for Approval - Assessment/Remediation (Airacuda 31 Fed 2H Flare Fire Release)  
**Attachments:** Airacuda 31 Fed 2H Flare Fire\_.kmz

Hey Shelly,

Good afternoon! Another small assessment/remediation for ConocoPhillips.

Tetra Tech is conducting a soil assessment and is assisting with remedial action associated with a previously reported unplanned release that occurred on October 18, 2023.

The **Airacuda 31 Fed 2H Flare Fire Release** was caused by a FWKO overflowing causing fluid to be released out of the flare leading to a fire off pad. The release extent is predominantly on-pad but does have a small pasture component in ROW. Assessment activities to begin October 30<sup>th</sup>.

We are requesting verbal approval to proceed with any assessment and cleanup activities at the location listed below. KMZ file attached and screengrab below.

Please let me know if you require any other permitting or compliance items in addition to this email approval before we begin work.

**Name of Release: Airacuda 31 Fed 2H Flare Fire Release**  
**Unit Letter B, Section 31, Township 25 South, Range 33 East**  
**Lea County, New Mexico**  
**Incident Identification (ID) nAPP2329636934**  
**Approximate Release Location: 32.093131, -103.609394**  
**Date Release Discovered: October 18, 2023**  
**Volume Released: Approximately 0.06 barrels (bbls) of crude oil and 1.11 bbls of produced water were released.**  
**Release in Pasture and On-Pad**



Thank you,

Christian

**From:** [Wells, Shelly, EMNRD](#)  
**To:** [Chavira, Lisbeth](#)  
**Cc:** [Llull, Christian](#); [Velez, Nelson, EMNRD](#); [Bratcher, Michael, EMNRD](#)  
**Subject:** RE: [EXTERNAL] Incident ID: nAPP2329636934- Confirmation Sampling  
**Date:** Tuesday, November 14, 2023 2:21:12 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)

You don't often get email from shelly.wells@emnrd.nm.gov. [Learn why this is important](#)

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Good afternoon Lisbeth,

The OCD has received your notification. Notification requirements are **two full business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to ensure inclusion 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:** Chavira, Lisbeth <LISBETH.CHAVIRA@tetrattech.com>  
**Sent:** Tuesday, November 14, 2023 11:52 AM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Cc:** Llull, Christian <Christian.Llull@tetrattech.com>  
**Subject:** [EXTERNAL] Incident ID: nAPP2329636934- Confirmation Sampling

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

Incident ID (n#) **nAPP2329636934** (Airacuda 31 Fed 2H Flare Fire Release)

To whom it may concern,

In accordance with Subsection D of 19.15.29.12 NMAC, the responsible party must verbally notify the appropriate division district office prior to conducting confirmation sampling.

Remediation activities are beginning at the site today, Tuesday November 14, 2023.

Thus, on behalf of ConocoPhillips for the above referenced incident, Tetra Tech is duly providing this communication which serves as notification that final confirmation sampling will be conducted at this site Wednesday, November 15, 2023.

**NOTE:** If you have any questions regarding this sampling schedule, please contact me.

Thank you,

**Lisbeth Chavira** | Staff Geoscientist  
Direct Mobile +1 (512) 596-8201 | [Lisbeth.chavira@tetrattech.com](mailto:Lisbeth.chavira@tetrattech.com)

**Tetra Tech** | *Leading with Science*<sup>®</sup> | OGA  
8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | [tetrattech.com](http://tetrattech.com)

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Please consider the environment before printing. [Read more](#)

Adobe Systems



**Chavira, Lisbeth**

---

**From:** OCDOnline@state.nm.us  
**Sent:** Tuesday, December 19, 2023 9:58 AM  
**To:** Llull, Christian  
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 296054

**⚠ CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. **⚠**

To whom it may concern (c/o Christian Llull for COG OPERATING LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nAPP2329636934.

The sampling event is expected to take place:

**When:** 11/16/2023 @ 10:00  
**Where:** B-31-25S-33E 0 FNL 0 FEL (32.09311,-103.60931)

**Additional Information:** Airacuda 31 Fed 2H Flare Fire Release  
ConocoPhillips  
Lea County, New Mexico  
DOR: 10/18/2023  
INCIDENT ID nAPP2329636934  
Approximate Release Point 32.093131, -103.609394  
BLM Land

**Additional Instructions:** Sampling notification was provided to the NMOCD via email on Tuesday, November 14, 2023, prior to the C-141 submittal changes.

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505

# APPENDIX C

## Site Characterization Data

# OCD - Land Ownership



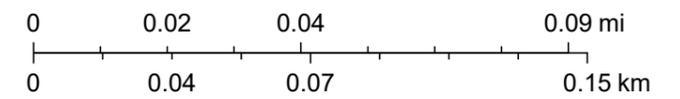
11/2/2023, 10:20:29 AM

Land Ownership

BLM

P

1:2,257

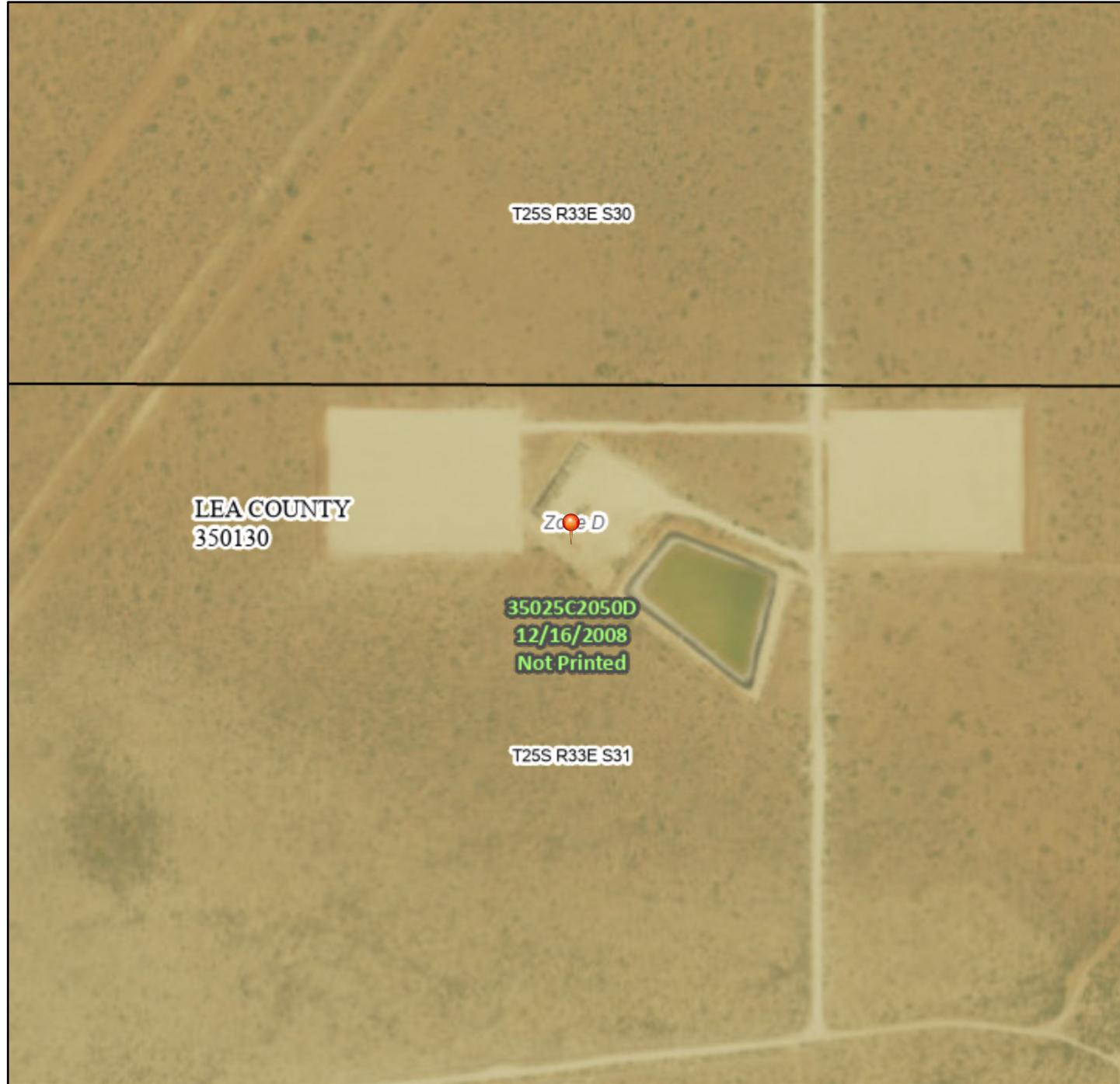


U.S. BLM, Maxar, Microsoft, Esri, HERE, Garmin, iPC

# National Flood Hazard Layer FIRMette



103°36'53"W 32°5'51"N



## Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		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 <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>

OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs

GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature

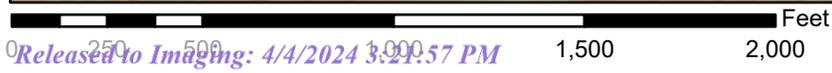
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

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 **11/2/2023 at 11:50 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.



1:6,000

103°36'15"W 32°5'20"N

# OCD - Karst Potential Map

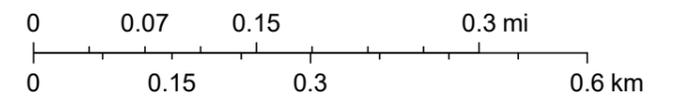


11/2/2023, 10:43:53 AM

Karst Occurrence Potential

- Medium
- Low

1:9,028



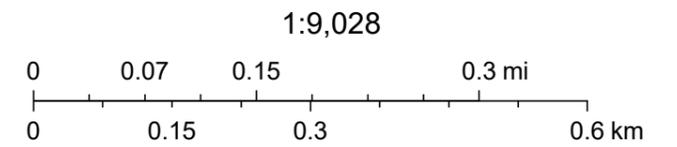
BLM, OCD, New Mexico Tech, Esri, HERE, Garmin, iPC, Maxar

# OCD - USGS Groundwater Wells

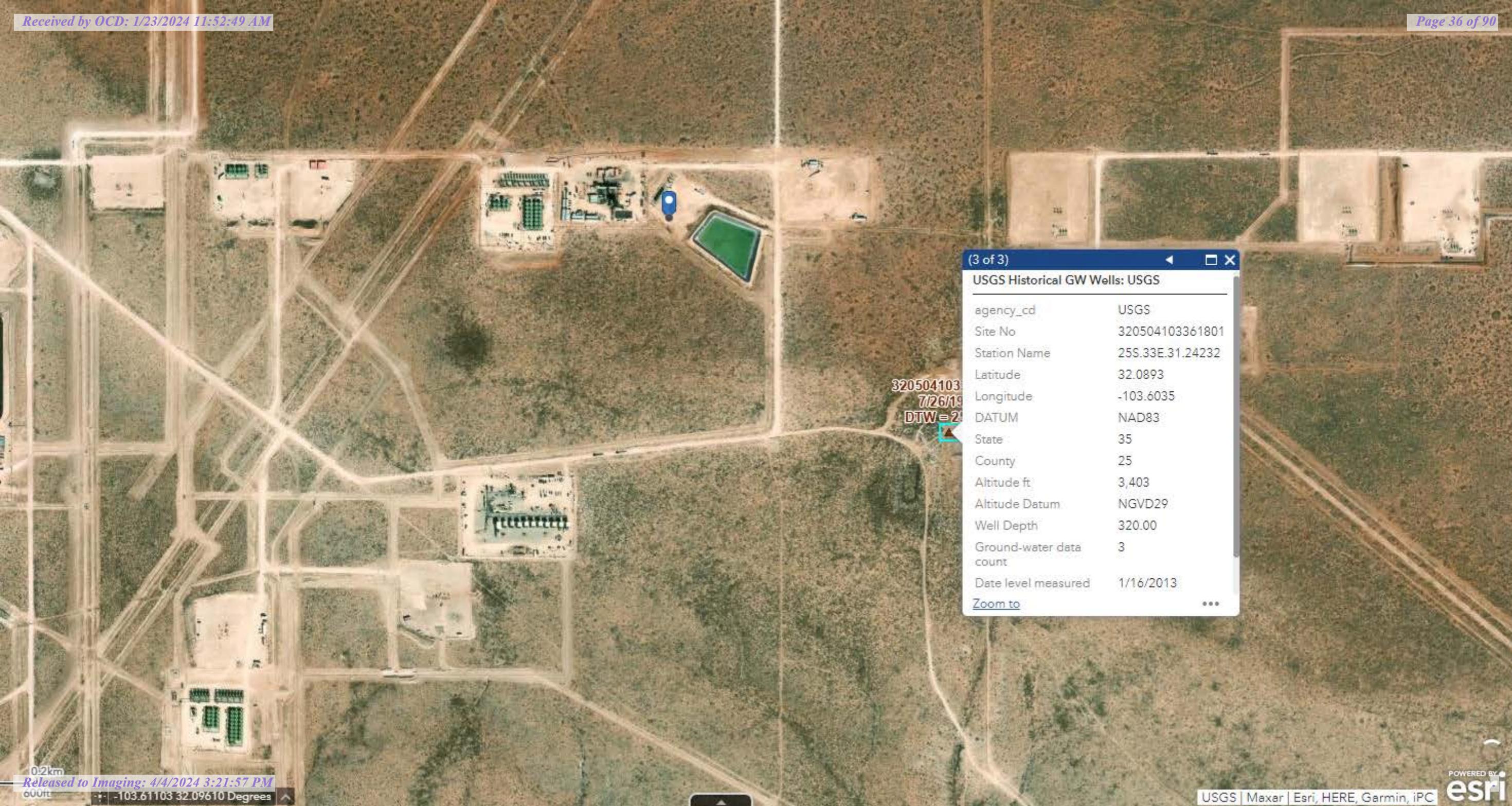


11/2/2023, 10:23:03 AM

▲ USGS Historical GW Wells



USGS, Esri, HERE, Garmin, iPC, Maxar



320504103  
7/26/19  
DTW=2

(3 of 3) ◀ □ ✕

**USGS Historical GW Wells: USGS**

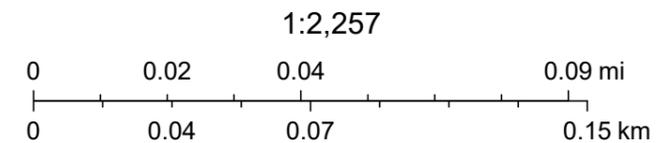
agency_cd	USGS
Site No	320504103361801
Station Name	25S.33E.31.24232
Latitude	32.0893
Longitude	-103.6035
DATUM	NAD83
State	35
County	25
Altitude ft	3,403
Altitude Datum	NGVD29
Well Depth	320.00
Ground-water data count	3
Date level measured	1/16/2013

[Zoom to](#) ⋮

# OCD - Waterbodies Map



11/2/2023, 10:45:41 AM



Maxar, Microsoft, Esri, HERE, Garmin, IPC, NM OSE



# 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	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">C 04537 POD1</a>	C	LE		4	4	4	31	25S	33E	631847	3550243	1497	500	280	220

Average Depth to Water: **280 feet**

Minimum Depth: **280 feet**

Maximum Depth: **280 feet**

**Record Count: 1**

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 631222.88

**Northing (Y):** 3551604.79

**Radius:** 1600

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.

# **APPENDIX D**

## **Laboratory Analytical Data**



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

---

November 06, 2023

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: AIRACUDA 31 FED 2H FLARE FIRE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 10/30/23 12:00.

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".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 1 (0-1') (H235927-01)**

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	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 87.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.1 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 1 (1'-2') (H235927-02)**

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	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 89.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.6 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 2 (0-1') (H235927-03)**

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	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	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	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 81.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.8 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 2 (1'-2') (H235927-04)**

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	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.7 % 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	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 96.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 3 (0-1') (H235927-05)**

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 91.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 3 (1'-2') (H235927-06)**

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	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.7 % 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	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 86.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 4 (0-1') (H235927-07)**

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	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 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
<b>Chloride</b>	<b>176</b>	16.0	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 87.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 5 (0-1') (H235927-08)**

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	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 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
<b>Chloride</b>	<b>16.0</b>	16.0	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
<b>DRO &gt;C10-C28*</b>	<b>22.2</b>	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 86.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 6 (0-1') (H235927-09)**

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	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 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	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 90.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.6 % 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:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	10/30/2023	Sampling Date:	10/30/2023
Reported:	11/06/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: AH - 7 (0-1') (H235927-10)**

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	11/03/2023	ND	2.07	103	2.00	2.11	
Toluene*	<0.050	0.050	11/03/2023	ND	1.87	93.3	2.00	3.15	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.91	95.6	2.00	3.01	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.70	95.0	6.00	3.06	
Total BTEX	<0.300	0.300	11/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 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	11/06/2023	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	11/02/2023	ND	207	103	200	1.00	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	207	103	200	1.48	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane 94.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.4 % 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*

Celey D. Keene, Lab Director/Quality Manager





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November 21, 2023

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: AIRACUDA 31 FED 2H FLARE FIRE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 11/16/23 16:50.

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 "Mike Snyder". The signature is fluid and cursive.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: FS - 1 (H236289-01)**

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	11/18/2023	ND	2.06	103	2.00	0.823	
Toluene*	<0.050	0.050	11/18/2023	ND	2.14	107	2.00	1.44	
Ethylbenzene*	<0.050	0.050	11/18/2023	ND	2.18	109	2.00	0.504	
Total Xylenes*	<0.150	0.150	11/18/2023	ND	6.64	111	6.00	0.0806	
Total BTEX	<0.300	0.300	11/18/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 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	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	93.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	44.1	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 79.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.7 % 49.1-148

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: FS - 2 (H236289-02)**

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	11/17/2023	ND	2.18	109	2.00	2.63		
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18		
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19		
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88		
Total BTEX	<0.300	0.300	11/17/2023	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	496	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69		
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73		
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND						

Surrogate: 1-Chlorooctane 88.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.1 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: FS - 3 (H236289-03)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	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	16.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 83.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.6 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: FS - 4 (H236289-04)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 69.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 70.0 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: FS - 5 (H236289-05)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	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	16.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 81.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.3 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: FS - 6 (H236289-06)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 74.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.8 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: FS - 7 (H236289-07)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 57.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 61.2 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: FS - 8 (H236289-08)**

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	11/17/2023	ND	2.18	109	2.00	2.63		
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18		
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19		
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88		
Total BTEX	<0.300	0.300	11/17/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69		
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73		
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND						

Surrogate: 1-Chlorooctane 79.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.0 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: NSW - 1 (H236289-09)**

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	11/17/2023	ND	2.18	109	2.00	2.63		
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18		
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19		
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88		
Total BTEX	<0.300	0.300	11/17/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69		
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73		
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND						

Surrogate: 1-Chlorooctane 73.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 75.2 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: NSW - 2 (H236289-10)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 70.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 72.4 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: ESW - 1 (H236289-11)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 64.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 70.0 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: ESW - 2 (H236289-12)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 78.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.8 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: SSW - 1 (H236289-13)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 74.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 75.4 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: WSW - 1 (H236289-14)**

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	11/17/2023	ND	2.18	109	2.00	2.63		
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18		
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19		
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88		
Total BTEX	<0.300	0.300	11/17/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69		
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73		
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND						

Surrogate: 1-Chlorooctane 87.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.5 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: WSW - 2 (H236289-15)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	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	16.0	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
DRO >C10-C28*	<10.0	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 79.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.7 % 49.1-148

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**Analytical Results For:**

TETRA TECH  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	11/16/2023	Sampling Date:	11/16/2023
Reported:	11/21/2023	Sampling Type:	Soil
Project Name:	AIRACUDA 31 FED 2H FLARE FIRE RELE/	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03266	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

**Sample ID: WSW - 3 (H236289-16)**

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	11/17/2023	ND	2.18	109	2.00	2.63	
Toluene*	<0.050	0.050	11/17/2023	ND	2.15	108	2.00	3.18	
Ethylbenzene*	<0.050	0.050	11/17/2023	ND	2.14	107	2.00	3.19	
Total Xylenes*	<0.150	0.150	11/17/2023	ND	6.66	111	6.00	2.88	
Total BTEX	<0.300	0.300	11/17/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>448</b>	16.0	11/20/2023	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	11/17/2023	ND	181	90.7	200	2.69	
<b>DRO &gt;C10-C28*</b>	<b>22.8</b>	10.0	11/17/2023	ND	180	89.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	11/17/2023	ND					

Surrogate: 1-Chlorooctane 70.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 70.8 % 49.1-148

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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Page 2 of 2

<b>Company Name:</b> Tetric Tech for Conoco Phillips <b>Project Manager:</b> Christian Loll Christian.Loll@tetrictech.com <b>Address:</b> 811 N. Capital of Texas Hwy <b>City:</b> Austin <b>State:</b> TX <b>Zip:</b> 78759 <b>Phone #:</b> (512) 565-0190 <b>Fax #:</b> N/A <b>Project #:</b> 2122-MD-03266 <b>Project Owner:</b> Conoco Phillips <b>Project Name:</b> Airacuda 31 Fed 2H Flare Fire <b>Project Location:</b> Lee County, TX <b>Sampler Name:</b> Davis Brown		<b>BILL TO</b> <b>P.O. #:</b> <b>Company:</b> Tetric Tech <b>Attn:</b> Christian Loll <b>Address:</b> 811 N. Capital of Texas Hwy <b>City:</b> Austin <b>State:</b> TX <b>Zip:</b> 78759 <b>Phone #:</b> (512) 565-0190 <b>Fax #:</b> N/A	
--	--	---	--

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
H236289			1			X				11-16-23	1230	BTEX 8021B
	11 ESU-1		1			X				11-16-23	1247	Chloride SA450061-B
	12 ESU-2		1			X				11-16-23	1237	TPH 8015M
	13 SSU-1		1			X				11-16-23	1414	
	14 USU-1		1			X				11-16-23	1412	
	15 USU-2		1			X				11-16-23	1252	
	16 USU-3		1			X				11-16-23	1252	

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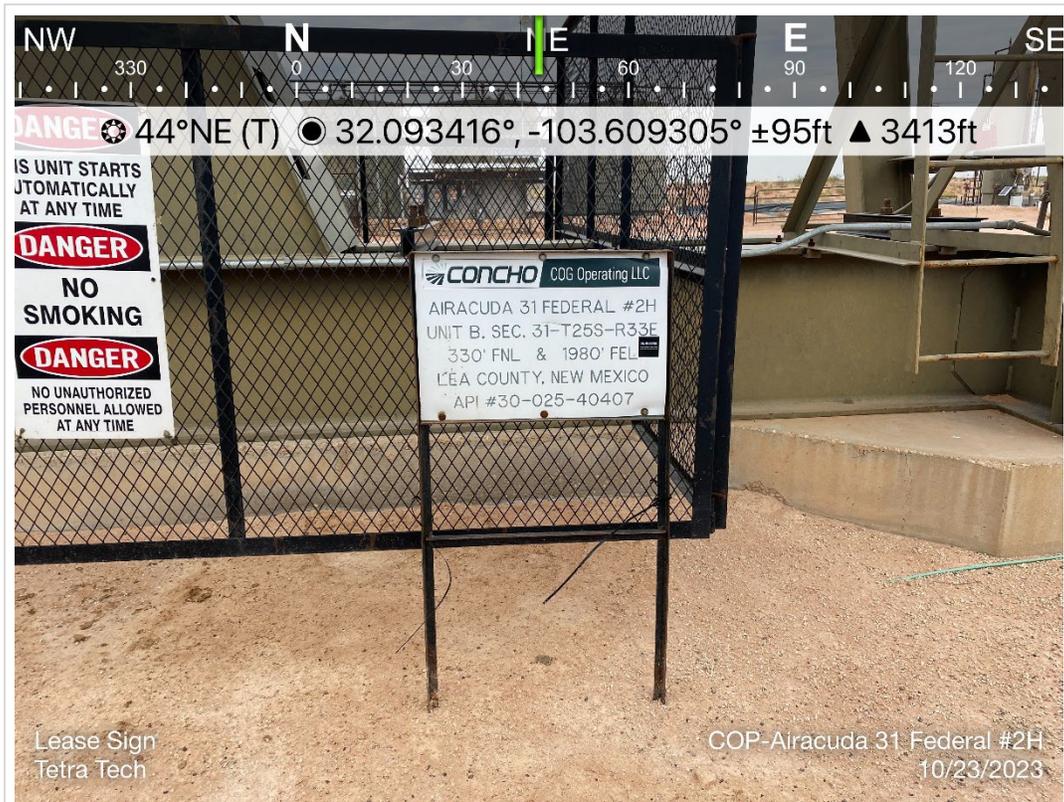
<b>Relinquished By:</b> [Signature] <b>Date:</b> 11-16-23 <b>Time:</b> 1650	<b>Received By:</b> [Signature] <b>Date:</b> 11-16-23 <b>Time:</b>
---	--

<b>Delivered By:</b> (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 1.4 Corrected Temp. °C:	Sample Condition: Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Bacteria (only): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: [Signature] Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Bacteria (only) Sample Condition: Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C:
---	---	---	--

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

# **APPENDIX E**

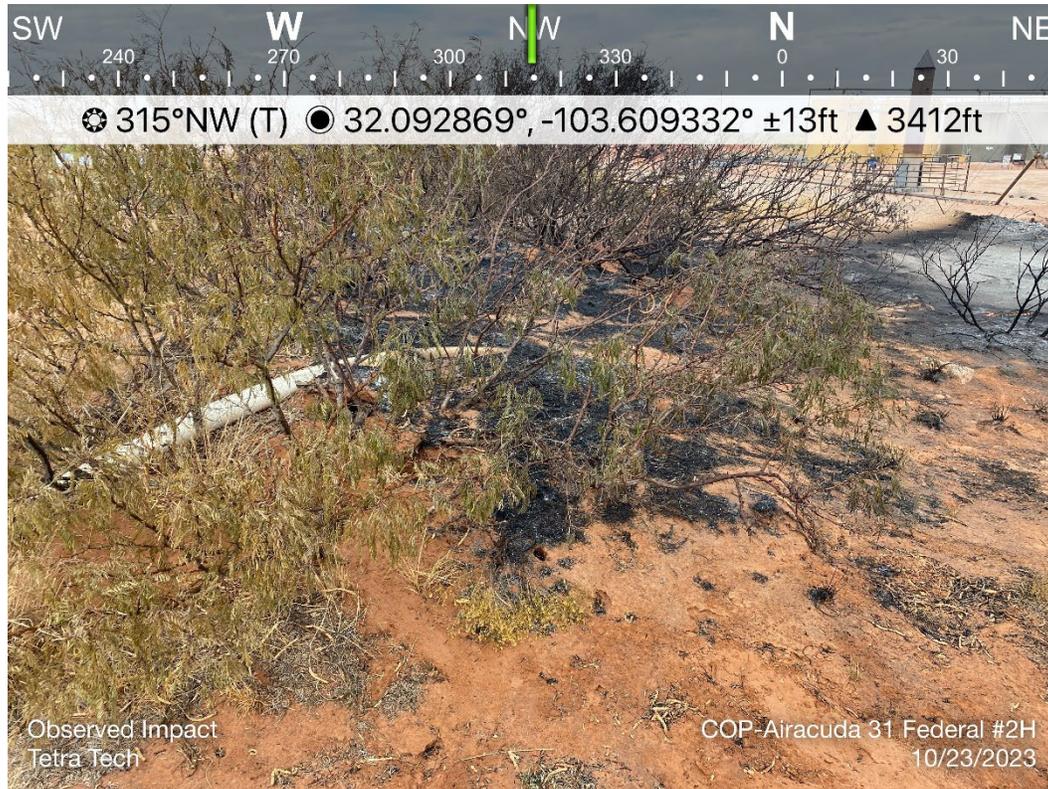
## **Photographic Documentation**



Lease Sign  
Tetra Tech

COP-Airacuda 31 Federal #2H  
10/23/2023

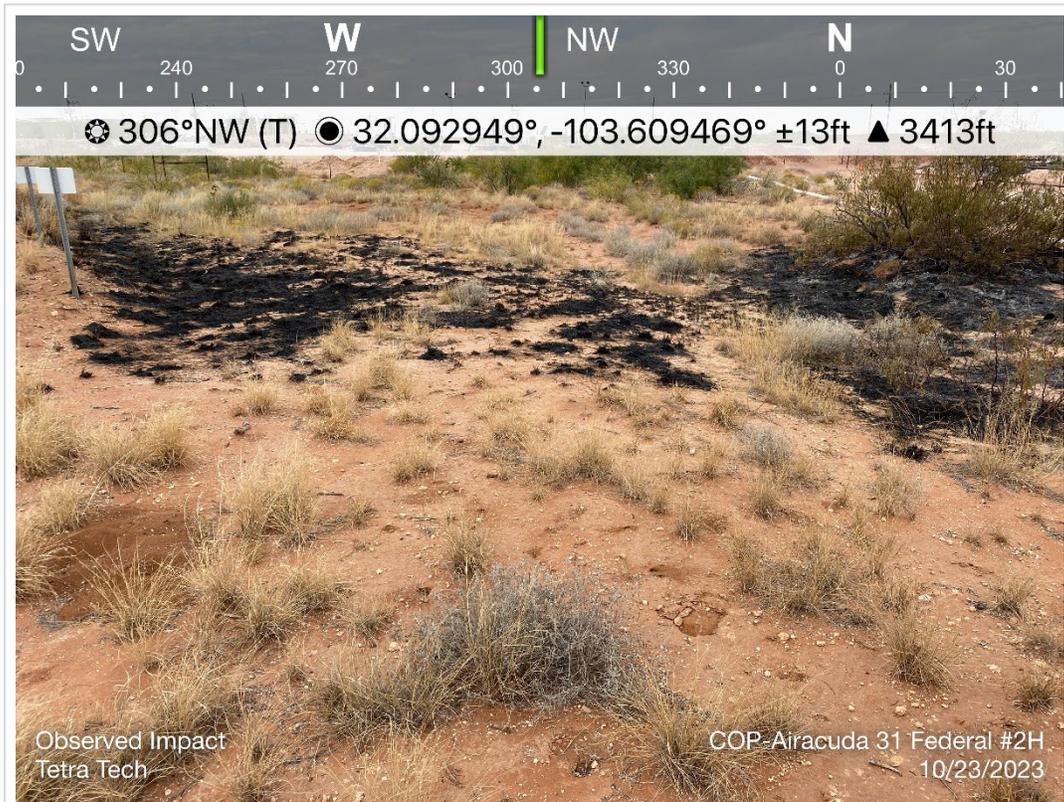
TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View northeast of site signage. Airacuda 31 Federal #2H.	1
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	10/23/2023



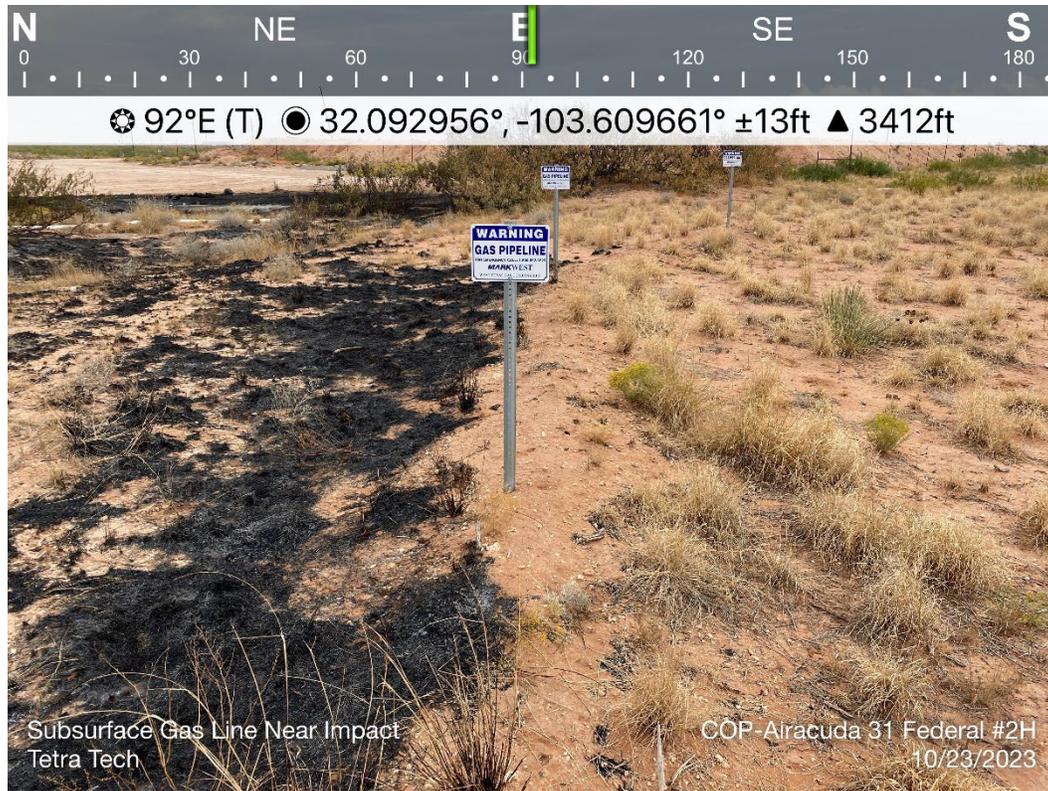
Observed Impact  
Tetra Tech

COP-Airacuda 31 Federal #2H  
10/23/2023

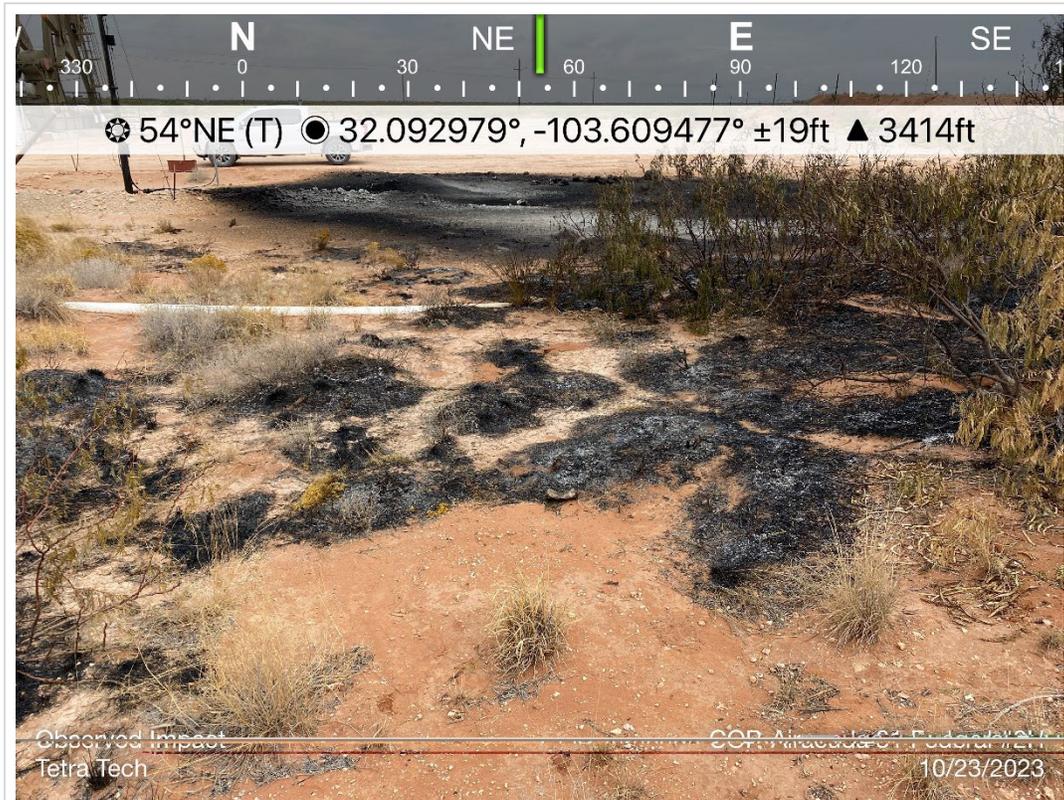
TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View northwest of approximate release extent and surface polyline. Scorched surface and burnt vegetation observed.	2
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	10/23/2023



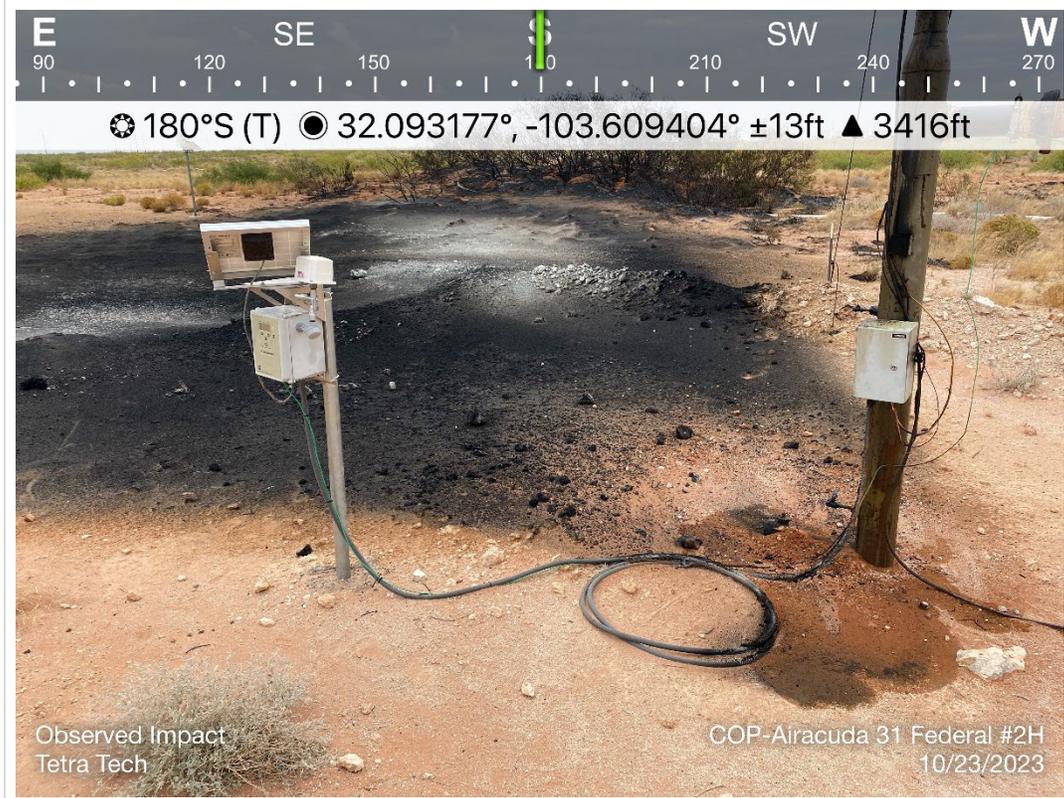
TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View west-northwest of approximate release extent and subsurface gas pipeline. Scorched surface and burnt vegetation observed.	3
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	10/23/2023



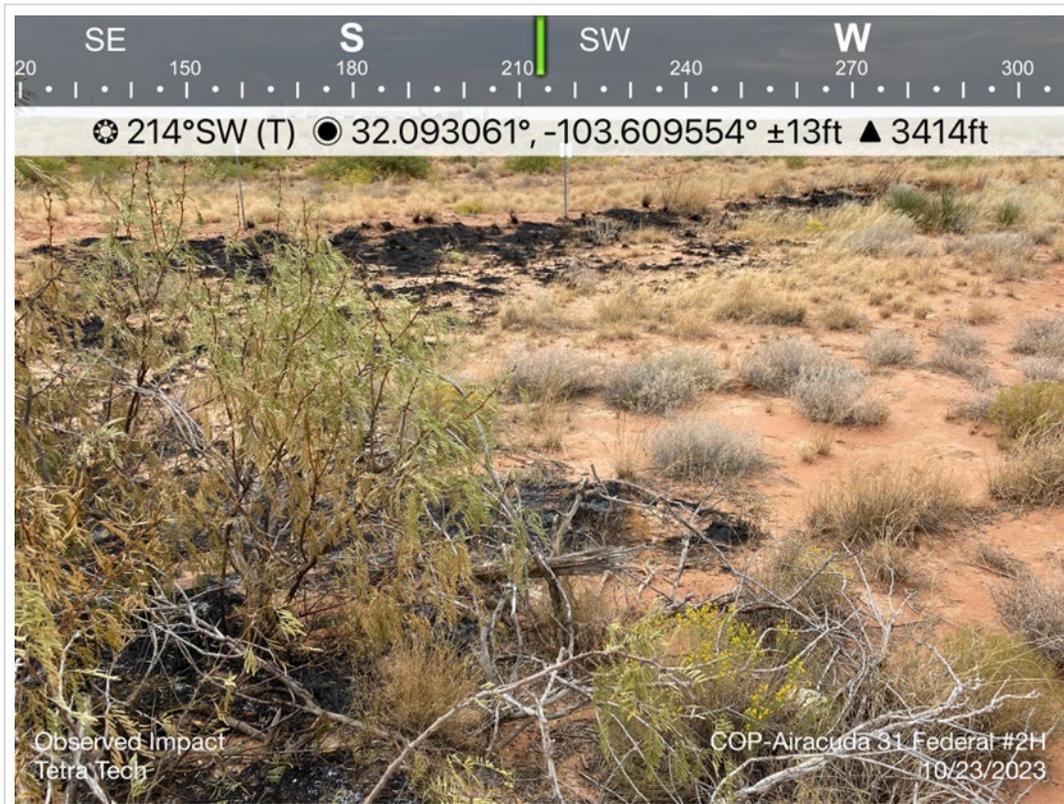
TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View east of approximate release extent and subsurface gas pipeline. Scorched surface and burnt vegetation observed.	4
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	10/23/2023



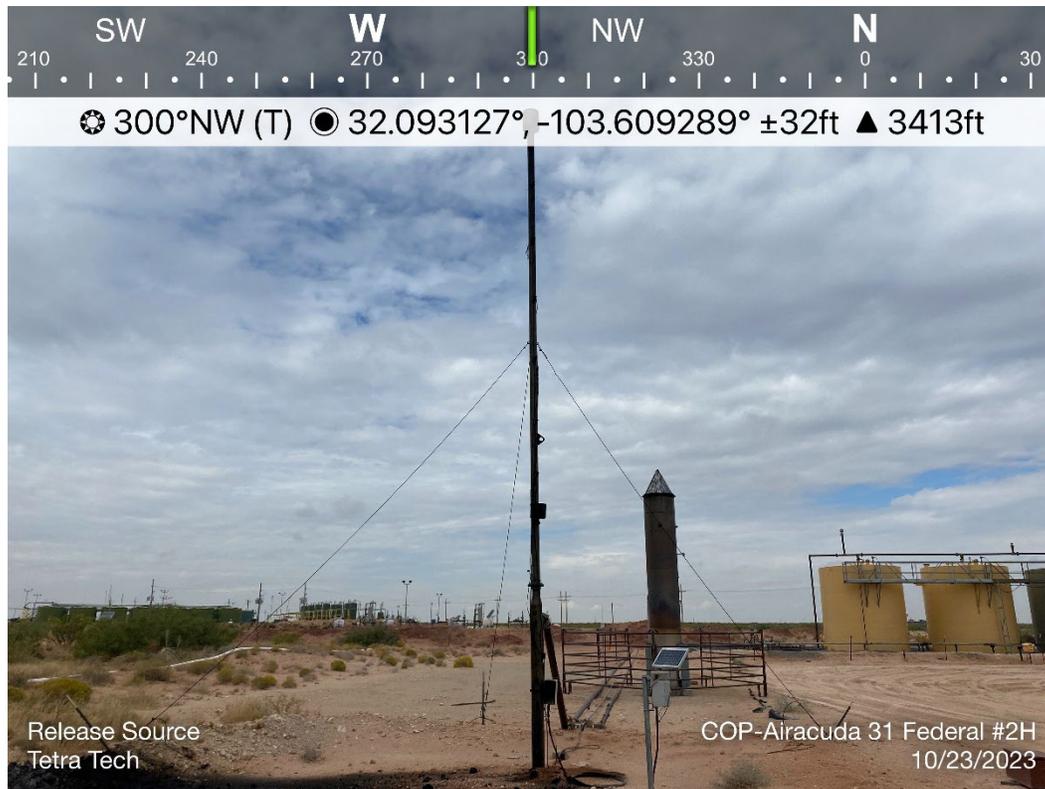
TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View northeast of approximate release extent and surface polyline. Scorched surface and burnt vegetation observed.	5
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	10/23/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View south of approximate release point and observed impact. Scorched surface and burnt vegetation observed.	6
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	10/23/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View south-southwest. View of release extent before surface scrape of approximate release area.	7
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	10/23/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View west-northwest of approximate release point and observed impact. Scorched surface and burnt vegetation observed.	8
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	10/23/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View south-southwest. View of approximate release point. View of release before surface scrape.	9
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/14/2023



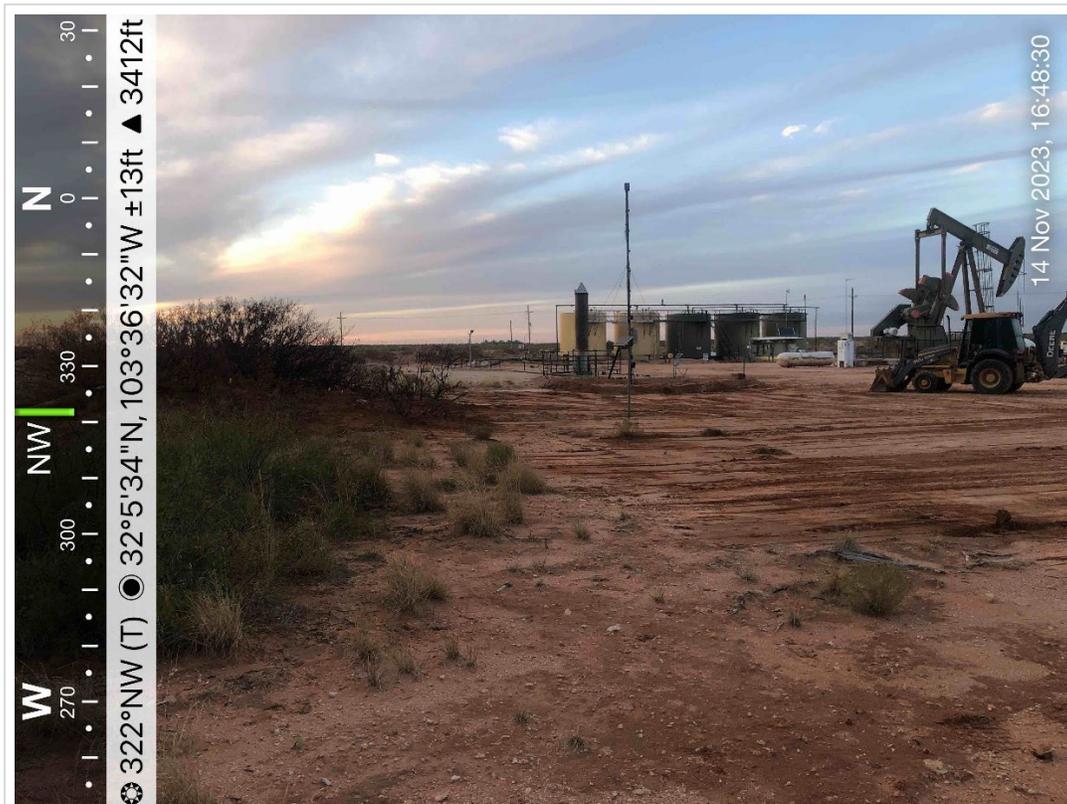
TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View northwest of site conditions before surface scrape.	10
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/16/2023



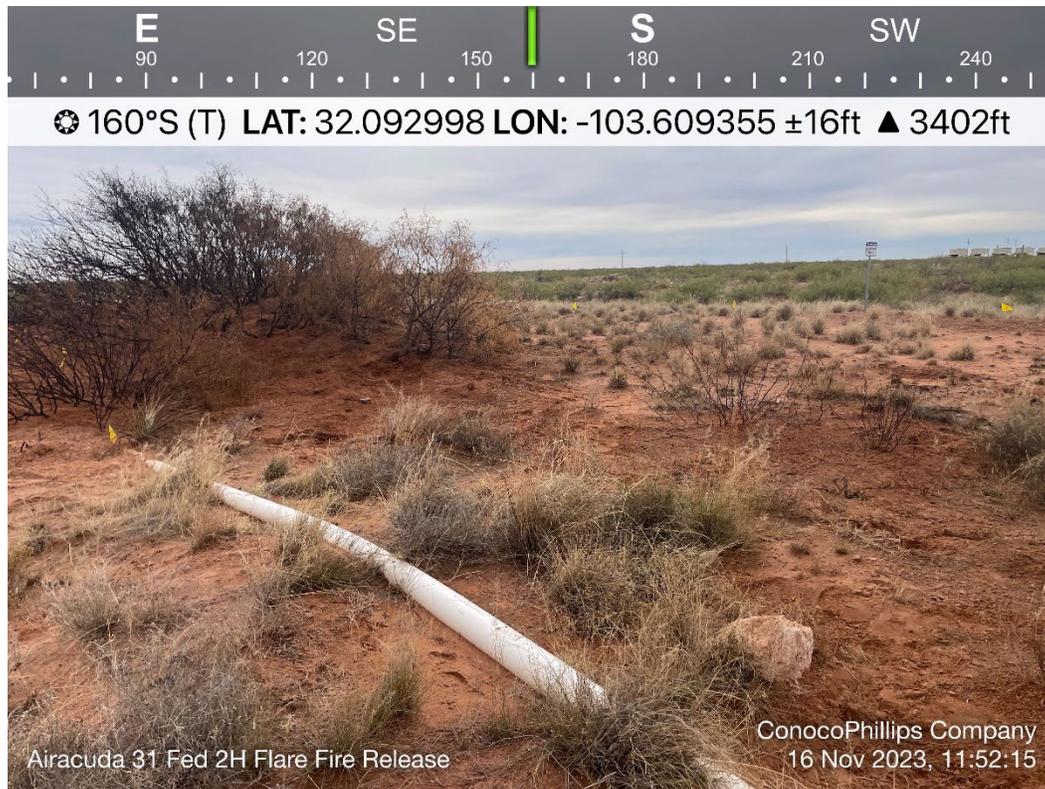
TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View northeast. View site conditions before surface scrape of approximate release area.	9
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/14/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View south of site conditions following surface scrape. View of release point.	10
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/16/2023



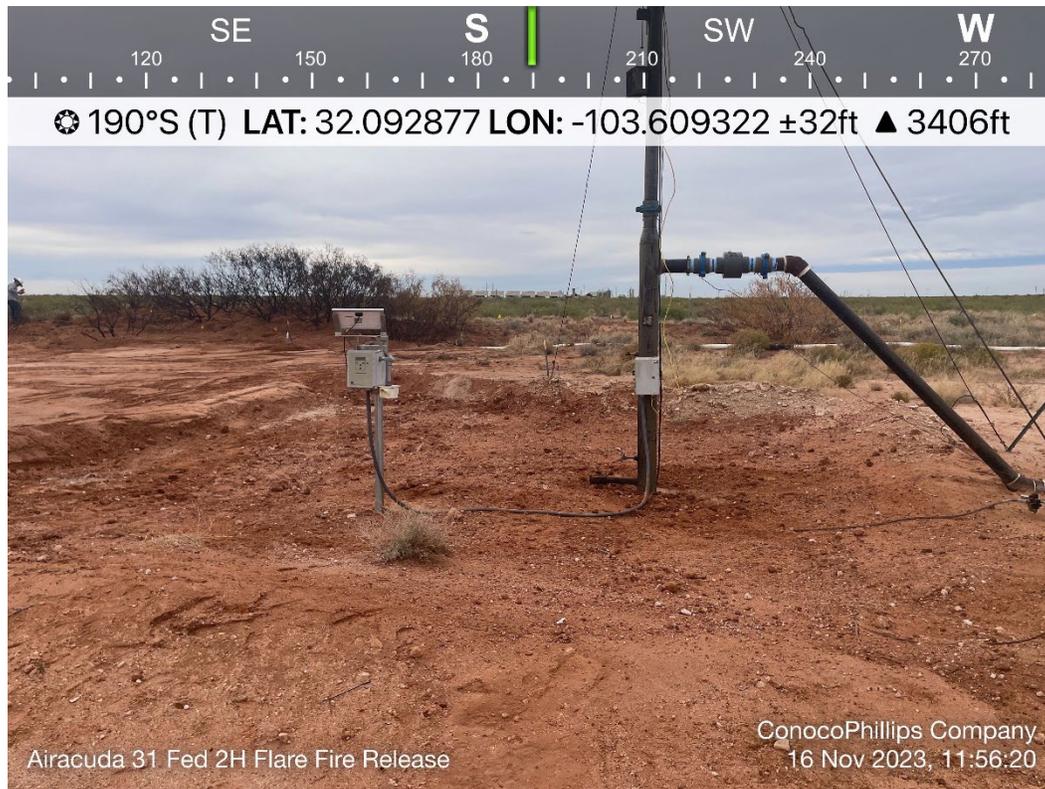
TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View northwest. View following surface scrape of approximate release area.	9
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/14/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View south-southeast of site conditions following surface scrape.	10
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/16/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View east of site conditions following surface scrape.	11
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/16/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View south of site conditions following surface scrape near approximate release point.	12
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/16/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View west-northwest of site conditions following surface scrape near approximate release point.	13
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/16/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03266	DESCRIPTION	View west of site conditions following surface scrape.	14
	SITE NAME	AIRACUDA 31 FEDERAL 2H FLARE FIRE Release	11/16/2023

**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**

QUESTIONS  
 Action 306768

**QUESTIONS**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 306768
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2329636934
Incident Name	NAPP2329636934 AIRACUDA FEDERAL 002H @ 0
Incident Type	Fire
Incident Status	Remediation Closure Report Received
Incident Facility	[fAPP2202553078] Airacuda 31 Fed 2H Rt Btty

<b>Location of Release Source</b>	
<i>Please answer all the questions in this group.</i>	
Site Name	AIRACUDA FEDERAL 002H
Date Release Discovered	10/18/2023
Surface Owner	Federal

<b>Incident Details</b>	
<i>Please answer all the questions in this group.</i>	
Incident Type	Fire
Did this release result in a fire or is the result of a fire	Yes
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

<b>Nature and Volume of Release</b>	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Cause: Equipment Failure   Other (Specify)   Crude Oil   Released: 0 BBL   Recovered: 0 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Other (Specify)   Produced Water   Released: 1 BBL   Recovered: 0 BBL   Lost: 1 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	The release was caused by a FWKO overfilling causing fluid to be released out of the flare leading to a fire off pad.

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

QUESTIONS, Page 2

Action 306768

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 306768
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>More info needed to determine if this will be treated as a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>Yes</b>
Reasons why this would be considered a submission for a notification of a major release	<b>From paragraph A. "Major release" determine using: (2) an unauthorized release of a volume that: (a) results in a fire or is the result of a fire.</b>
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

**Initial Response**

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

The source of the release has been stopped	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

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.

I hereby agree and sign off to the above statement	Name: Brittany Esparza Title: Environmental Technician Email: brittany.Esparza@ConocoPhillips.com Date: 01/23/2024
--	---

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1625 N. French Dr., Hobbs, NM 88240  
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**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**

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 306768
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	U.S. Geological Survey
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1/2 and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	0
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	01/23/2024
On what date will (or did) the final sampling or liner inspection occur	01/23/2024
On what date will (or was) the remediation complete(d)	01/24/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	0

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 306768

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 306768
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Remediation Plan (continued)**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	No
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	Yes
Other Non-listed Remedial Process. Please specify	The entire release extent was excavated by scraping the surface to a depth of approximately 6 inches bgs.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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.

I hereby agree and sign off to the above statement	Name: Brittany Esparza Title: Environmental Technician Email: brittany.Esparza@ConocoPhillips.com Date: 01/23/2024
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 306768

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 306768
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Deferral Requests Only**

*Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*

Requesting a deferral of the remediation closure due date with the approval of this submission	No
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Action 306768

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 306768
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>296054</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>11/16/2023</b>
What was the (estimated) number of samples that were to be gathered	<b>16</b>
What was the sampling surface area in square feet	<b>3476</b>

**Remediation Closure Request**

*Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.*

Requesting a remediation closure approval with this submission	<b>Yes</b>
Have the lateral and vertical extents of contamination been fully delineated	<b>Yes</b>
Was this release entirely contained within a lined containment area	<b>No</b>
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	<b>Yes</b>
What was the total surface area (in square feet) remediated	<b>5000</b>
What was the total volume (cubic yards) remediated	<b>93</b>
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	<b>Yes</b>
What was the total surface area (in square feet) reclaimed	<b>5000</b>
What was the total volume (in cubic yards) reclaimed	<b>93</b>
Summarize any additional remediation activities not included by answers (above)	<b>The entire release extent was excavated by scraping the surface to a depth of approximately 6 inches bgs.</b>

*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 (in .pdf format) 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.*

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.

I hereby agree and sign off to the above statement	Name: Brittany Esparza Title: Environmental Technician Email: brittany.Esparza@ConocoPhillips.com Date: 01/23/2024
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Action 306768

**QUESTIONS (continued)**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 306768
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Reclamation Report</b>	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 306768

**CONDITIONS**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 306768
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**CONDITIONS**

Created By	Condition	Condition Date
scott.rodgers	This Remediation Closure Report is 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. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	4/4/2024