

## SITE INFORMATION

**Report Type: Addendum Report 1RP5627 NDHR1921448574**

### General Site Information:

Site:	Windward Federal #2H					
Company:	COG Operating, LLC					
Section, Township and Range	Unit I	Sec. 12	T 24S	R 31E		
Lease Number:						
County:	Lea County					
GPS:	32.23074			-103.7233		
Surface Owner:	Federal					

### Release Data:

<b>Date Released:</b>	7/10/2019
<b>Type Release:</b>	Produced Water
<b>Source of Contamination:</b>	Flowline
<b>Fluid Released:</b>	30 bbl water
<b>Fluids Recovered:</b>	0 bbls water

### Official Communication:

<b>Name:</b>	Ike Tavaréz		Clair Gonzales
<b>Company:</b>	COG Operating, LLC		Tetra Tech
<b>Address:</b>	One Concho Center		901 West Wall Street
	600 W. Illinois Ave.		Suite 100
<b>City:</b>	Midland Texas, 79701		Midland, Texas
<b>Phone number:</b>	(432) 686-3023		432-687-8634
<b>Fax:</b>	(432) 684-7137		
<b>Email:</b>	<a href="mailto:itavarez@concho.com">itavarez@concho.com</a>		<a href="mailto:clair.gonzales@tetrattech.com">clair.gonzales@tetrattech.com</a>

### Site Characterization

<b>Depth to Groundwater:</b>	160' Below Surface
<b>Karst Potential:</b>	Low

### Recommended Remedial Action Levels (RRALs)

<b>Benzene</b>	<b>Total BTEX</b>	<b>TPH (GRO+DRO)</b>	<b>TPH (GRO+DRO+MRO)</b>	<b>Chlorides</b>
10 mg/kg	50 mg/kg	1000 mg/kg	2,500 mg/kg	10,000 mg/kg



March 23, 2021

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

**Re: Addendum – Closure Report  
Windward Federal #2H, 1RP-5627, NDHR1921448574  
COG Operating, LLC  
Unit I, Section 12, Township 24 South, Range 31 East Lea  
County, New Mexico.**

To whom it may concern:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating, LLC (COG) to evaluate a release that occurred at the Windward Federal #2H. The release footprint is located in the Public Land Survey System (PLSS) Unit I, Section 12, Township 24 South, Range 31 East, Lea County, New Mexico (Site). The spill site coordinates are 32.23074°, -103.72330°. The site location is shown on Figures 1 and 2.

## **BACKGROUND INFORMATION**

According to the State of New Mexico C-141 Initial Report, the leak was discovered on July 10, 2019 due to a ruptured flowline. The release consisted of approximately 30 barrels (bbls.) of produced water affecting the pasture area measuring approximately 205' x 100'. No produced water was recovered. The initial C-141 Form is included in Appendix A.

## **PREVIOUS CLOSURE REPORT**

Tetra Tech previously submitted a closure report, dated July 7, 2020. The closure report included the description of the several site assessments that Tetra Tech performed from October 15, 2019 to April 9, 2020. During the site assessments, Tetra Tech advanced, sampled and monitored seven (7) auger holes (AH-1 through AH-7) to depths ranging from 2-2.5' to 6-6.5' below ground surface. During the multiple soil sampling of the release footprint, all analyzed samples showed benzene, total BTEX, and TPH concentrations below the laboratory reporting limits. However, some sample locations exceeded the RRAL concentrations for chloride in the upper four (4) ft.

Based on the area having a heavy rainfall events, Tetra Tech performed monitoring during 2019 and 2020 of the sample locations which exceeded the RRAL for chloride evidencing that the rain significantly helped dilute or help migrate the chloride concentrations during those events. Finally, after the multiple sampling events, one (1) sample location (AH-3) was still showing high concentrations of chloride, therefore Tetra Tech personnel were onsite June 25, 2020, to supervise the remediation activities and remediate the site using a hydro-vac due to all the lines in the area. The area of auger hole (AH-3) was excavated to depths a of 2 ft. bgs. and bottom hole and confirmation samples (sidewall) were collected. All confirmation sample showed benzene, total BTEX, chloride, or TPH concentrations

**Tetra Tech**

901 West Wall St, Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 [www.tetrattech.com](http://www.tetrattech.com)



below the RRALs. Once the reclamation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 8 cubic yards of material was hauled for proper disposal.

On February 15, 2021, COG received the denial from the OCD of the submitted closure request C-141 incident # nDHR1921448574 for the following reason:

- a) The depth to groundwater has not been determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than 0.5 mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. The responsible party may choose to remediate to the most stringent levels listed in Table 1 in lieu of drilling to determine the depth to groundwater.
- b) Horizontal delineation has not been completed. The values for determination of horizontal impact are derived by either "background" value as determined appropriate to Rule 29, or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. This is especially important for "on-pad" releases to ensure the release did not extend to the "off-pad"/pasture area. A visual footprint on the surface is not sufficient to assess the horizontal extent of the release. Lab data must be provided as evidence of delineation efforts.
- c) The surface and vertical samples of AH1, AH2, & AH3 exceeded 600 mg/kg chloride, thus requiring additional samples (horizontal delineation samples will need to be tested for all constituents in Table I Closure Criteria) beyond these points and spill must be fully delineated.
- d) AH6 & AH7 were only sampled to a depth of 2.5ft bgm and indicated high levels of contaminant above closure criteria, thus requiring additional samples (vertical and horizontal delineation samples will need to be tested for all constituents in Table I Closure Criteria) beyond these points and spill must be fully delineated.
- e) All areas disturbed by remediation/closure must meet reclamation requirements per 19.15.29.13 NMAC.

## **SITE CHARACTERIZATION**

A Site characterization was performed for the site, and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. Additionally, the site is located in a low karst potential area.

No water wells were listed within Section 12 on the New Mexico Office of the State Engineer's (NMOSE) database, the Geology and Groundwater Resources of Eddy County (Report 3), or the USGS National Water Information Database. The nearest well is listed in Township 24 South, Range 31 East, Section 2, on the USGS National Water Information Database website, approximately 1.96 miles Northwest of the Site, and has a reported depth to groundwater of 160' below surface. The groundwater data is shown in Appendix B.

On August 5, 2020, Scarborough Drilling, Inc was onsite to drill a groundwater determination bore to 55' below ground surface, and within a ½ mile radius of the location. The bore was left open for 72 hours and tagged with a water level meter. No water was detected at 55' below surface. The



coordinates for the groundwater determination bore are 32.233386 -103.719410. See Appendix B for the driller's log.

## REGULATORY

A risk-based evaluation was performed for the site following the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based on the site characterization, the proposed RRAL for TPH is 2,500 mg/kg (GRO + DRO + MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 10,000 mg/kg.

## ADDITIONAL SITE ASSESSMENT

As requested by the NMOCD, Tetra Tech returned to the site on March 12, 2021, to perform further soil investigation and re-sample the areas of auger holes (AH-6 and AH-7) and advanced horizontal samples. The two (2) auger holes were advanced from top to 5 feet (ft.) below ground surface (bgs.), and nine (9) horizontal samples were advanced to a depth from top to 1-foot bgs. In addition, a total of eighteen (18) samples were collected from the two (2) auger holes and the horizontals and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The sample locations are shown on Figure 3. Photographic documentation is included.

Referring to Table 1, the sample locations (AH-6 and AH-7) showed chloride concentrations above the 600 mg/kg threshold at the upper four (4) ft. In addition, all horizontal samples showed chlorides/TPH/BTEX concentrations below the reclamation standards. Therefore, the release footprint has been successfully delineated.

## PROPOSED WORK PLAN

Based on the laboratory results, the chloride concentrations detected, COG proposes to hydroexcavate the areas around the sample locations (AH-6 and AH-7) as shown on Figure 4 and highlighted (green) on Table 1. The area of AH-6 and AH-7 will be excavated to a depth of 4 ft. below ground surface and backfilled with clean material to grade. In addition, while performing the site investigation it appears that there have been some channeling of the release causing limited areas of impact.

### Sampling Plan and Backfilling

Five-point composite bottom and sidewall confirmation samples will be collected to ensure proper removal of the impacted areas. Once completed, the excavated areas will then be backfilled with clean material to surface grade. All the excavated material will be transported offsite for proper disposal. COG estimates approximately 34 cubic yards will be excavated and will be implemented within ninety (90) days of the work plan being approved.



### Safety Concerns

The release migrated along a pipeline right-of-way impacting the areas along flowlines, DCP line and Mequite water line. The proposed excavation depths may not be reached due to wall cave-ins and safety concerns for onsite personnel. Also, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safety concerns for onsite personnel. As such, COG will excavate the impacted soils to the maximum extent practicable.

### **CONCLUSION**

Upon completion, a final report detailing the remediation activities will be submitted to the NMOCD. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted,  
TETRA TECH

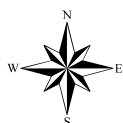
A handwritten signature in blue ink that reads 'Clair Gonzales'.

Clair Gonzales, P.G.  
Senior Project Manager  
Tetra Tech, Inc.

## Figures



 SITE LOCATION



0 10,416.5 20,833

Approximate Scale in Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



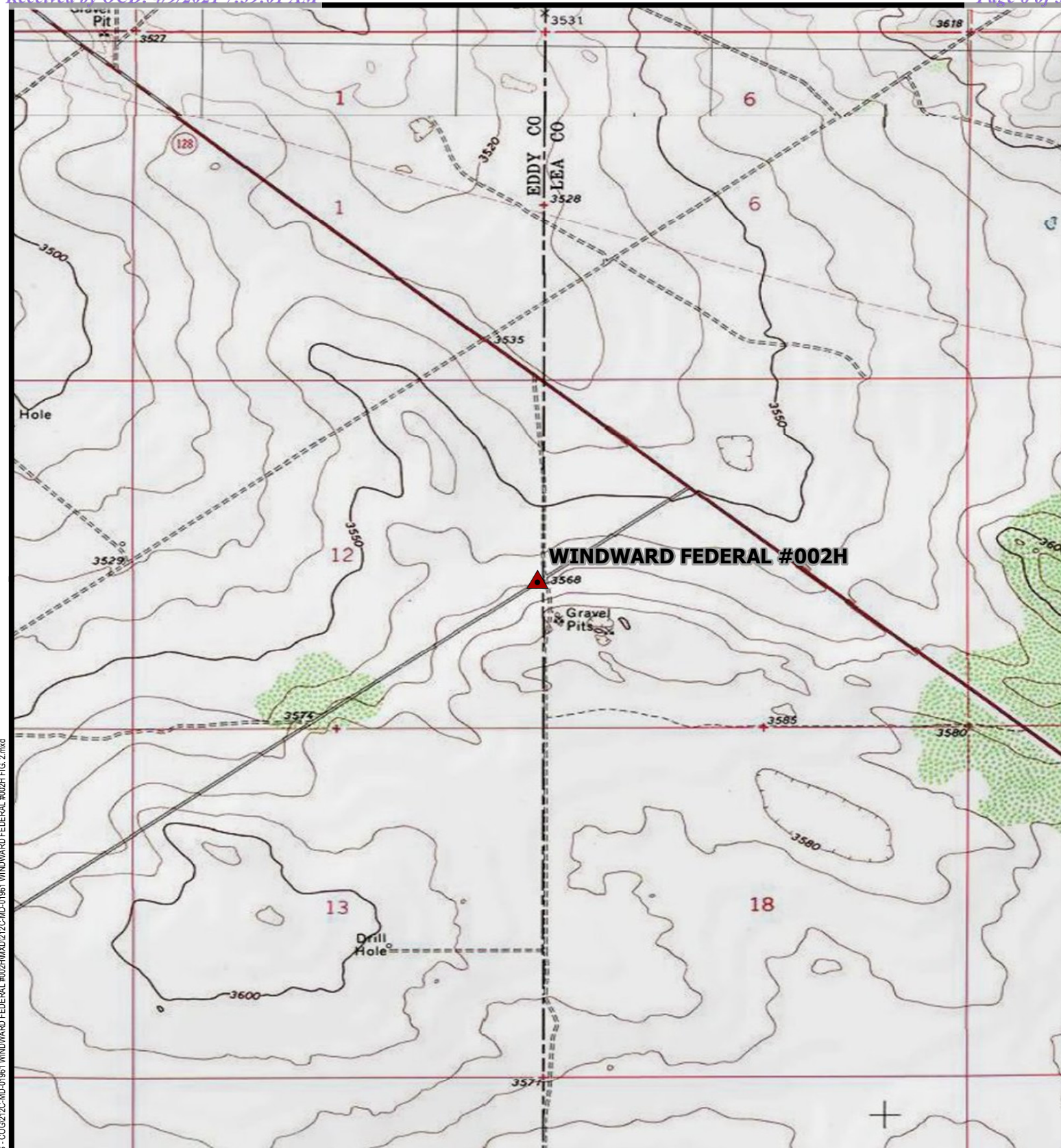
OVERVIEW MAP  
WINDWARD FEDERAL #002H  
Property Located at coordinates 32.23074°,-103.72330°  
LEA COUNTY, NEW MEXICO



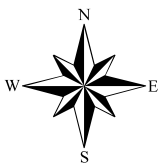
Project #:  
212C-MD-01961  
Date: 12-16-2019

FIGURE  
1





SITE LOCATION



0 1,000 2,000  
Approximate Scale in Feet

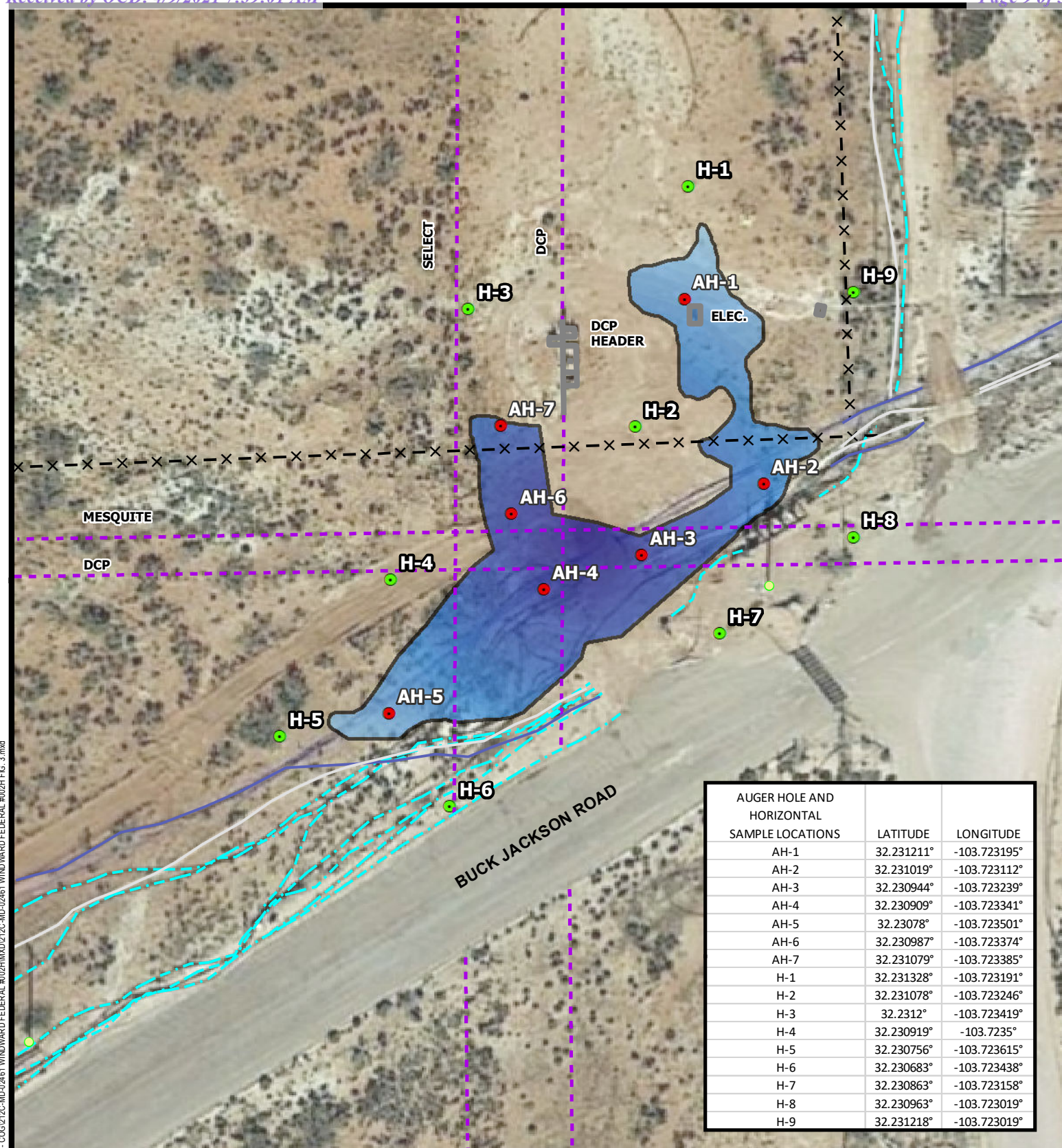
TOPOGRAPHIC MAP  
WINDWARD FEDERAL #002H  
Property Located at coordinates 32.23074°,-103.72330°  
LEA COUNTY, NEW MEXICO



Project #:  
212C-MD-01961  
Date: 12-16-2019

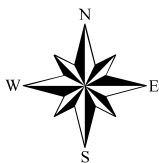
FIGURE  
2





AUGER HOLE AND HORIZONTAL SAMPLE LOCATIONS	LATITUDE	LONGITUDE
AH-1	32.231211°	-103.723195°
AH-2	32.231019°	-103.723112°
AH-3	32.230944°	-103.723239°
AH-4	32.230909°	-103.723341°
AH-5	32.23078°	-103.723501°
AH-6	32.230987°	-103.723374°
AH-7	32.231079°	-103.723385°
H-1	32.231328°	-103.723191°
H-2	32.231078°	-103.723246°
H-3	32.2312°	-103.723419°
H-4	32.230919°	-103.7235°
H-5	32.230756°	-103.723615°
H-6	32.230683°	-103.723438°
H-7	32.230863°	-103.723158°
H-8	32.230963°	-103.723019°
H-9	32.231218°	-103.723019°

- AUGERHOLE SAMPLE LOCATIONS
- HORIZONTAL SAMPLE LOCATIONS
- POWERPOLE
- EQUIPMENT
- FENCE
- FLOWLINES
- BURIED PIPELINE
- AFFECTED SPILL AREA



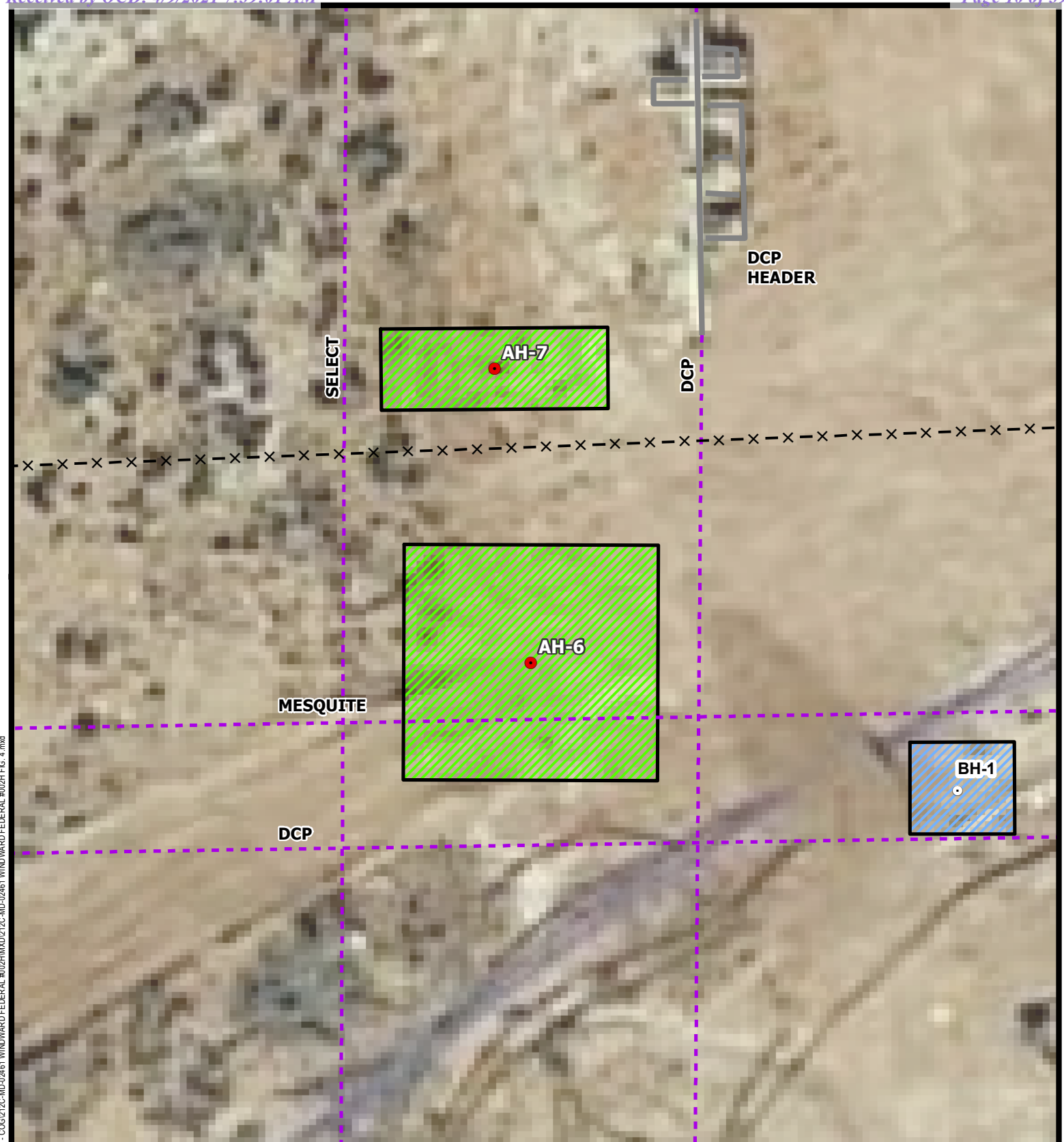
0 25 50  
Approximate Scale in Feet

SPILL ASSESSMENT MAP  
WINDWARD FEDERAL #002H  
Property Located at coordinates 32.23074°,-103.72330°  
LEA COUNTY, NEW MEXICO



Project #:  
212C-MD-02461  
Date: 03-22-2021

FIGURE  
3



● AUGERHOLE SAMPLE LOCATIONS

BH BOTTOMHOLE

○ BH-1 (10' x 10')

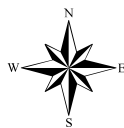
— FENCE

— BURIED PIPELINE

— EQUIPMENT

2.0' HYDROVAC EXCAVATION DEPTH AREA

4.0' HYDROVAC EXCAVATION DEPTH AREA



0 7.5 15  
Approximate Scale in Feet

# EXCAVATION AREA & DEPTH MAP

WINDWARD FEDERAL #002H

Property Located at coordinates 32.23074°,-103.72330°  
LEA COUNTY, NEW MEXICO



Project #:  
212C-MD-02461  
Date: 03-22-2021

FIGURE  
4

## Tables

**Table 1**  
**Concho**  
**Windward Federal 2H Battery**  
**Lea County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
<b>AH-6</b>	3/12/2021	0-1	X		-	-	-	-	-	-	-	-	-	<b>2,830</b>
	"	1-2	X		-	-	-	-	-	-	-	-	-	<b>5,290</b>
	"	2-3	X		-	-	-	-	-	-	-	-	-	<b>8,740</b>
	"	3-4	X		-	-	-	-	-	-	-	-	-	<b>5,000</b>
	"	4-5	X		-	-	-	-	-	-	-	-	-	<b>4,670</b>
<b>AH-7</b>	3/12/2021	0-1	X		-	-	-	-	-	-	-	-	-	<b>265</b>
	"	1-2	X		-	-	-	-	-	-	-	-	-	<b>227</b>
	"	2-3	X		-	-	-	-	-	-	-	-	-	<b>864</b>
	"	4-5	X		-	-	-	-	-	-	-	-	-	<b>707</b>
<b>H-1</b>	3/12/2021	0-1	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	13.5
<b>H-2</b>	3/12/2021	0-1	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	202
<b>H-3</b>	3/12/2021	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	7.05
<b>H-4</b>	3/12/2021	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	79.4
<b>H-5</b>	3/12/2021	0-1	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	11.4
<b>H-6</b>	3/12/2021	0-1	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	15.1
<b>H-7</b>	3/12/2021	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	316
<b>H-8</b>	3/12/2021	0-1	X		<50.1	<50.1	<50.1	<50.1	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	6.11
<b>H-9</b>	3/12/2021	0-1	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	111

(-)

Not Analyzed



Exceeding RRALs

## Photos



Concho Windward Federal #002H

Lea County, New Mexico



View North of the release area (AH-7)

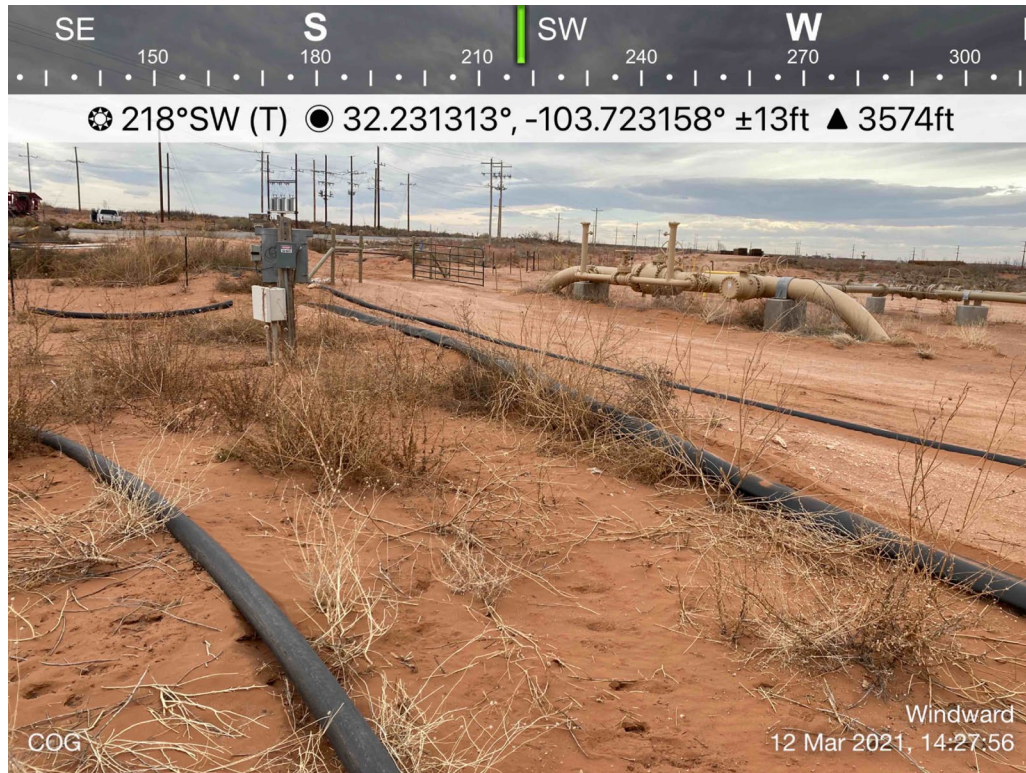


View South of the release area (AH—6)



Concho Windward Federal #002H

Lea County, New Mexico



View South-Southwest of the release area



View South of the release area

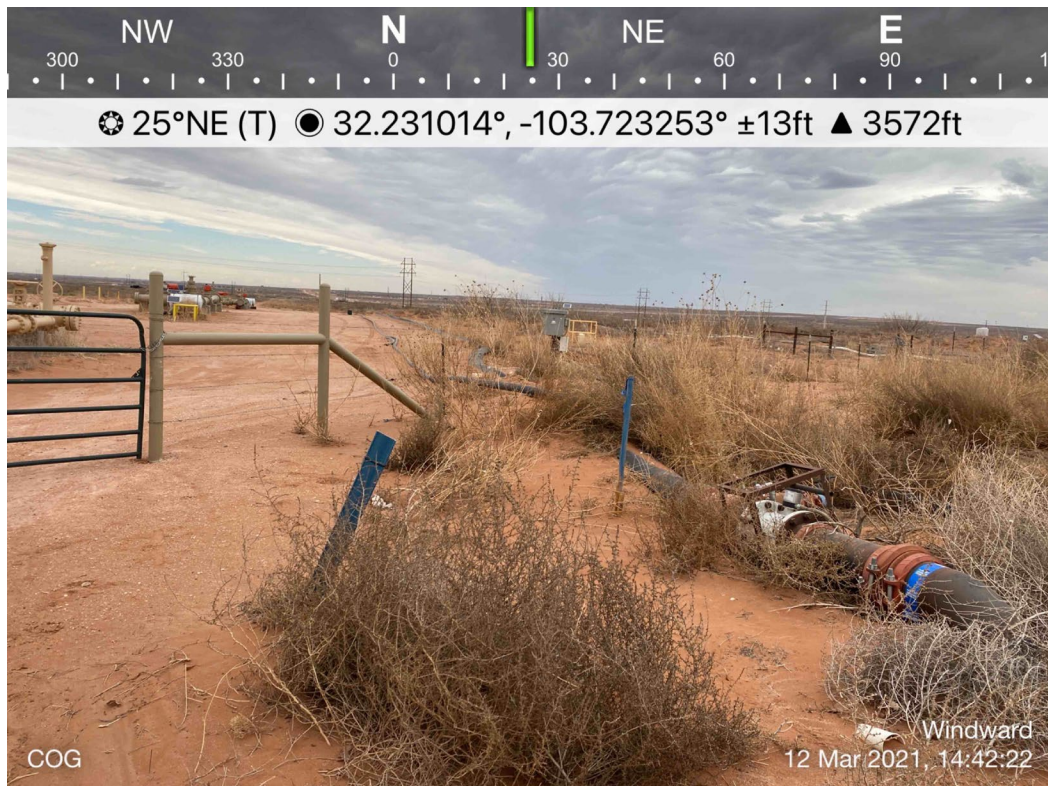


Concho Windward Federal #002H

Lea County, New Mexico



View Northeast of the release area



View North of the release area

## Appendix A

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		



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>Delann Opreant</u>	Date: _____
email: _____	Telephone: _____
<b><u>OCD Only</u></b>	
Received by: _____	Date: _____

## \*\*\*\*\* LIQUID SPILLS - VOLUME CALCULATIONS \*\*\*\*\*

Location of spill: Windward Federal #002H

Date of Spill: 10-Jul-2019

If the leak/spill is associated with production equipment, i.e. - wellhead, stuffing box, flowline, tank battery, production vessel, transfer pump, or storage tank place an "X" here: ☒

## Input Data:

If spill volumes from measurement, i.e. metering, tank volumes, etc. are known enter the volumes here: OIL: 0.0 BBL WATER: 0.0 BBL

If "known" spill volumes are given, input data for the following "Area Calculations" is optional. The above will override the calculated volumes.

Total Area Calculations							Standing Liquid Calculations							
Total Surface Area		width	length	wet soil			Standing Liquid Area		width	length	liquid depth		oil (%)	
				depth	oil (%)									
	Rectangle Area #1	34 ft	95 ft	X	1.25 in	0%	Rectangle Area #1	0 ft	X	0 ft	X	0 in	0%	
	Rectangle Area #2	16 ft	X	36 ft	X	1.50 in	0%	Rectangle Area #2	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #3	32 ft	X	39 ft	X	1.50 in	0%	Rectangle Area #3	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #4	55 ft	X	90 ft	X	1.50 in	0%	Rectangle Area #4	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #5	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #5	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%

okay

## production system leak - DAILY PRODUCTION DATA REQUIRED

Average Daily Production: Oil 0 BBL Water 0 BBL 0 Gas (MCFD)

Total Hydrocarbon Content in gas: 0% (percentage)

Did leak occur before the separator?: ☒ YES ☒ N/A (place an "X")

H2S Content in Produced Gas: 0 PPM

H2S Content in Tank Vapors: 0 PPM

Amount of Free Liquid Recovered: 0 BBL okay

Percentage of Oil in Free Liquid Recovered: 0% (percentage)

Liquid holding factor \*: 0.14 gal per gal

Use the following when the spill wets the grains of the soil.

\* Sand = 0.08 gallon (gal.) liquid per gal. volume of soil.

\* Gravelly (caliche) loam = 0.14 gal. liquid per gal. volume of soil.

\* Sandy clay loam soil = 0.14 gal liquid per gal. volume of soil.

\* Clay loam = 0.16 gal. liquid per gal. volume of soil.

Use the following when the liquid completely fills the pore space of the soil:

Occurs when the spill soaked soil is contained by barriers, natural (or not).

\* Clay loam = 0.20 gal. liquid per gal. volume of soil.

\* Gravelly (caliche) loam = 0.25 gal. liquid per gal. volume of soil.

\* Sandy loam = 0.5 gal. liquid per gal. volume of soil.

Total Solid/Liquid Volume: 10,004 sq. ft.			1,183 cu. ft.	cu. ft.	Total Free Liquid Volume: sq. ft.			cu. ft.	cu. ft.			
<u>Estimated Volumes Spilled</u>					<u>Estimated Production Volumes Lost</u>							
		H2O	OIL				H2O	OIL				
Liquid in Soil:	29.5	BBL	0.0	BBL	Estimated Production Spilled:		0.0	BBL	0.0	BBL		
Free Liquid:	0.0	BBL	0.0	BBL								
Totals:	29.5	BBL	0.0	BBL	<u>Estimated Surface Damage</u>							
					Surface Area:	10,004	sq. ft.					
					Surface Area:	.2297	acre					
Total Liquid Spill Liquid: 29.5 BBL 0.00 BBL												
<u>Recovered Volumes</u>					<u>Estimated Weights, and Volumes</u>							
Estimated oil recovered:	BBL	check - okay				Saturated Soil =	132,519	lbs	1,183	cu. ft.	44	cu. yds.
Estimated water recovered:	BBL	check - okay				Total Liquid =	30	BBL	1,239	gallon	10,309	lbs

## Air Emission from flowline leaks:

Volume of oil spill: - BBL  
 Separator gas calculated: - MCF  
 Separator gas released: - MCF  
 Gas released from oil: - lb  
 H2S released: - lb  
 Total HC gas released: - lb  
 Total HC gas released: - MCF

## Air Emission of Reporting Requirements:

New Mexico  
 HC gas release reportable? NO  
 H2S release reportable? NO  
 Texas  
 NO  
 NO

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

Incident ID	
District RP	
Facility ID	
Application ID	

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

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

Signature:  \_\_\_\_\_ Date: 04/09/2021

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

**OCD Only**

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

## Appendix B



**Water Well Data**  
**Average Depth to Groundwater (ft)**  
**Windward Federal #2H**  
**Lea County, New Mexico**

23 South			30 East		
6	5	4	3	2	1
110				250	
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
			440		

23 South			31 East		
6	5	4	3	2	1
85	354	168			
140					
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
				430	

23 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	400	22	23
		478		24	
30	29	28	27	26	25
31	32	33	34	35	36

24 South			30 East		
6	5	4	3	2	1
7	8	9	10	11	12
	186				
18	17	16	15	14	13
19	231	20	21	22	23
150				400	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South			31 East		
6	5	4	3	2	1
				160	
7	8	9	10	11	12 Site
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South			32 East		
6	5	4	3	454	2
					1
7	8	9	10	11	12
			34		
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
		290			

25 South			30 East		
6	5	4	3	2	295
					1
7	264	8	9	295	10
					11
18	17	16	15	14	13
19	20	21	265	22	23
		268		24	
30	29	28	27	26	25
31	32	33	34	35	36

25 South			31 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	390	22	23
		290		24	
30	29	28	27	26	25
31	32	33	34	35	36

25 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
	290				

**88** New Mexico State Engineers Well Reports

**105** USGS Well Reports

**90** Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)  
 Geology and Groundwater Resources of Eddy County, NM (Report 3)

**34** NMOCD - Groundwater Data

**123** Tetra Tech installed temporary wells and field water level

**143** NMOCD Groundwater map well location

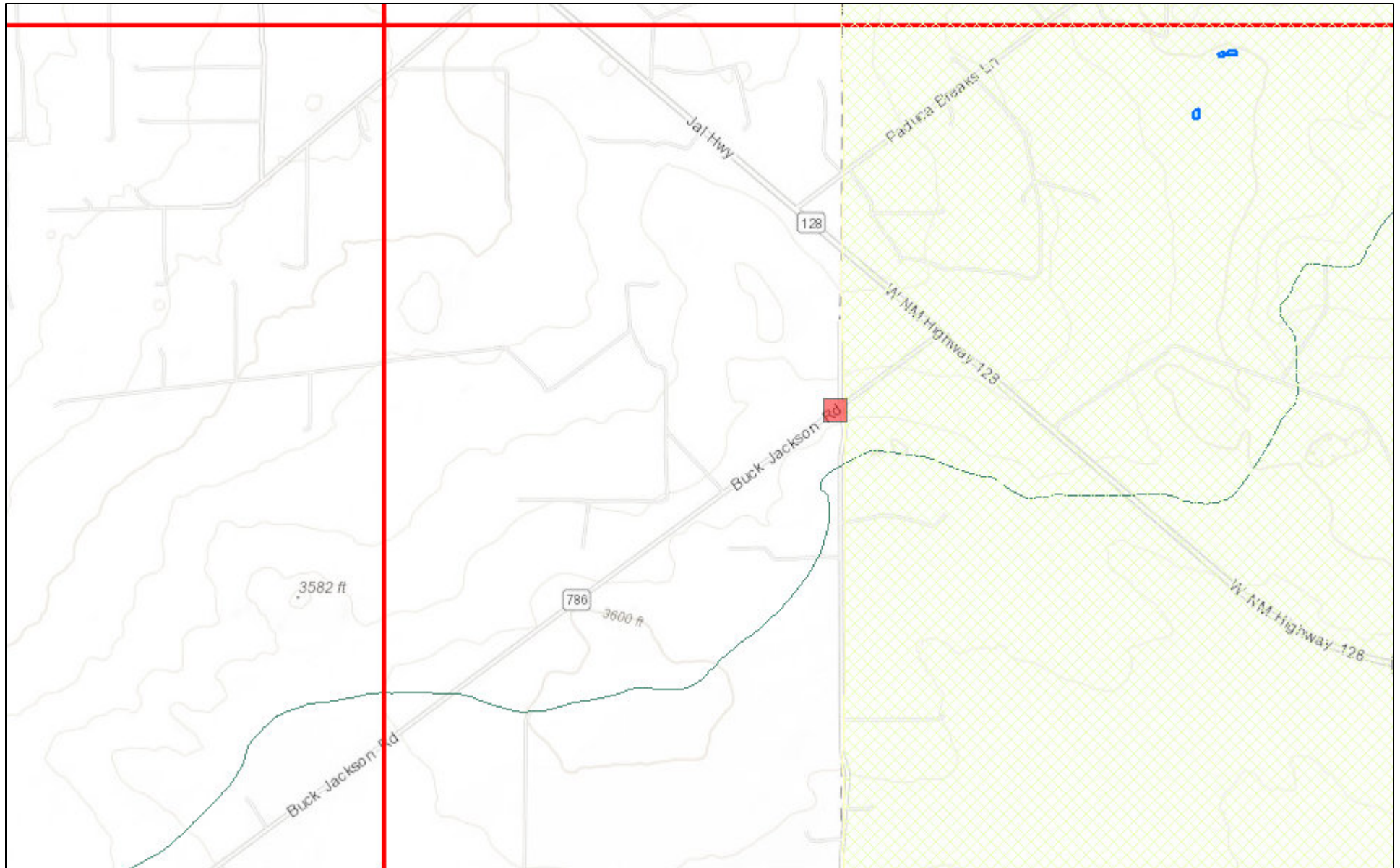


National Water Information System: Mapper

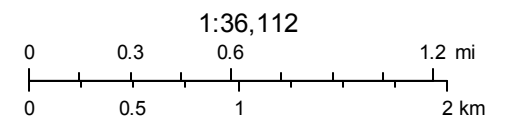


Site Information

# New Mexico NFHL Data



July 7, 2020



FEMA  
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,





## New Mexico Office of the State Engineer

# Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
<a href="#">C 02258</a>		C	ED	3	2	26	23S	31E		618055	3571853*	<input type="checkbox"/>	662	
<a href="#">C 02348</a>		C	ED	1	4	3	26	23S	31E	617648	3571068	<input type="checkbox"/>	700	430 270
<a href="#">C 02492</a>		CUB	ED	4	4	4	06	23S	31E	612056	3577320*	<input type="checkbox"/>	135	85 50
<a href="#">C 02492 POD2</a>		C	ED	3	2	2	07	23S	31E	611767	3576996	<input type="checkbox"/>	400	125 275
<a href="#">C 02664</a>		CUB	ED	3	3	2	05	23S	31E	613049	3578138*	<input type="checkbox"/>	4291	354 3937
<a href="#">C 02725</a>		CUB	ED	1	1	1	05	23S	31E	612240	3578731*	<input type="checkbox"/>	532	
<a href="#">C 02773</a>		CUB	ED	4	1	3	03	23S	31E	615668	3577762*	<input type="checkbox"/>	880	
<a href="#">C 02774</a>		CUB	ED	3	1	3	04	23S	31E	613857	3577745*	<input type="checkbox"/>	1660	
<a href="#">C 02775</a>		CUB	ED	1	1	1	05	23S	31E	612240	3578731*	<input type="checkbox"/>	529	
<a href="#">C 02776</a>		CUB	ED	2	1	1	05	23S	31E	612440	3578731*	<input type="checkbox"/>	661	
<a href="#">C 02777</a>		CUB	ED	4	4	4	10	23S	31E	616974	3575662	<input type="checkbox"/>	890	
<a href="#">C 02865</a>		CUB	ED	4	4	4	06	23S	31E	612056	3577320*	<input type="checkbox"/>	174	
<a href="#">C 02954 E PL</a>		CUB	ED	3	1	4	20	23S	31E	613114	3572906*	<input type="checkbox"/>	905	
<a href="#">C 03140</a>		CUB	ED	4	2	4	04	23S	31E	615266	3577758*	<input type="checkbox"/>	684	
<a href="#">C 03351</a>		C	ED	4	1	4	04	23S	31E	614917	3577861	<input type="checkbox"/>	320	168 152
<a href="#">C 03520 POD1</a>		C	ED	3	1	1	07	23S	31E	610733	3576905	<input type="checkbox"/>	500	
<a href="#">C 03749 POD1</a>		CUB	ED	2	2	15	23S	31E		616974	3575662	<input type="checkbox"/>	865	639 226

Average Depth to Water: **00 feet**

Minimum Depth: **85 feet**

Maximum Depth: **6 feet**

Record Count: 17

PLSS Search:

Township: 23S Range: 31E

\*UTM location was derived from PLSS - see Help

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

10/30/19 :09 AM

WATER COLUMN/ AVERAGE DEPTH  
TO WATER



## New Mexico Office of the State Engineer

### Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
<a href="#">C 02405</a>		CUB	ED	4	1	02	24S	31E		617690	3568631*	<input type="text"/>	275	160 115
<a href="#">C 02440</a>		C	ED	2	3	10	24S	31E		616103	3566599*	<input type="text"/>	350	
<a href="#">C 02460</a>		C	ED		3	02	24S	31E		617496	3568022*	<input type="text"/>	320	
<a href="#">C 02460 POD2</a>		C	ED		3	02	24S	31E		617496	3568022*	<input type="text"/>	320	
<a href="#">C 02464</a>		C	ED	3	4	1	02	24S	31E	617589	3568530*	<input type="text"/>	320	205 115
<a href="#">C 02661</a>		CUB	ED	3	3	1	04	24S	31E	613969	3568485*	<input type="text"/>	708	
<a href="#">C 02783</a>		CUB	ED	3	3	1	04	24S	31E	613911	3568461	<input type="text"/>	708	
<a href="#">C 02783 POD2</a>		CUB	ED	3	3	1	04	24S	31E	613911	3568461	<input type="text"/>	672	
<a href="#">C 02784</a>		C	ED	4	2	4	04	24S	31E	613911	3568461	<input type="text"/>	584	
<a href="#">C 02785</a>		CUB	ED	3	3	1	04	24S	31E	613969	3568485*	<input type="text"/>	692	

Average Depth to Water: **182 feet**

Minimum Depth: **160 feet**

Maximum Depth: **205 feet**

Record Count: 10

PLSS Search:

Township: 24S Range: 31E

\*UTM location was derived from PLSS - see Help

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





10/30/19 7:56 AM

WATER COLUMN/ AVERAGE DEPTH  
TO WATER


**Low Karst**  
OG Production, LLC  
Windward Federal #2H

Released to Imaging: 6/9/2021 2:29:30 PM

**Legend**

-  High
-  Low
-  Medium
-  Windward Federal #2H

Received by OCD: 4/9/2021 7:39:01 AM

 Windward Federal #2H

**SCARBOROUGH DRILLING, INC.**

TEST HOLES • WATER WELLS

P.O. Box 305 - Ph. 806-872-3285 or 872-9349

LAMESA, TEXAS 79331

2001 South Hwy. 87

## WELL LOG

From	To	FORMATION
0	4	Brown Top Soil
4	5	Caliche
5	12	Red Sand
12	20	Red Sand w/ Caliche layers
20	30	Caliche w Red Sand
30	55	Red Shale w/ Caliche
		BH1
		LOG - Seabiscuit
		Federal Com 2H & 4H
		Plugged w/ Hole Plug
		32.233386 -103.719410

Date 8-5-20 DrillerLee Seay

GIBBS PRINTING CO. LAMESA, TX

## Appendix C



Environment Testing  
America

## ANALYTICAL REPORT

Job Number: 880-401-1

SDG Number: 212C-MD-02461

Job Description: COG - Windward

For:

Tetra Tech, Inc.

901 W Wall

Ste 100

Midland, TX 79701

Attention: Clair Gonzales

A handwritten signature in black ink that reads "JKRAMER".

Approved for release.  
Jessica Kramer  
Project Manager  
3/19/2021 10:30 AM

---

Jessica Kramer, Project Manager  
1211 W. Florida Ave, Midland, TX, 79701  
jessica.kramer@eurofinset.com  
03/19/2021

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

**Eurofins Xenco, Midland**

1211 W. Florida Ave, Midland, TX 79701

Tel (432) 704-5440 [www.EurofinsUS.com](http://www.EurofinsUS.com)



Client Sample Result Summary

Client: Tetra Tech, Inc.  
Project/Site: COG - Windward

Job ID: 880-401-1  
SDG: 212C-MD-02461

Lab Sample ID:	880-401-1	880-401-2	880-401-3	880-401-4	880-401-5
Client Sample ID:	AH 6 (0'-1')	AH 6 (1'-2')	AH 6 (2'-3')	AH 6 (3'-4')	AH 6 (4'-5')
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	03/12/2021 13:00	03/12/2021 13:30	03/12/2021 14:00	03/12/2021 14:30	03/12/2021 15:00

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:									
Analyzed:		03/18/2021 14:36		03/18/2021 14:41		03/18/2021 14:56		03/18/2021 15:01	
Analyte	Unit/RL:	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
	Chloride	2830	25.1	5290	49.9	8740	49.6	5000	25.2



## Client Sample Result Summary

Client: Tetra Tech, Inc.  
Project/Site: COG - Windward

Job ID: 880-401-1  
SDG: 212C-MD-02461

<b>Lab Sample ID:</b> 880-401-6	880-401-7	880-401-8	880-401-9	880-401-10
<b>Client Sample ID:</b> AH 7 (0'-1')	AH 7 (1'-2')	AH 7 (2'-3')	AH 7 (4'-5')	H1 (0'-1')
<b>Matrix:</b> Solid	Solid	Solid	Solid	Solid
<b>Date Collected:</b> 03/12/2021 15:30	03/12/2021 15:45	03/12/2021 16:00	03/12/2021 16:15	03/12/2021 16:30

## Method: 8021B - Volatile Organic Compounds (GC)

<b>Prepared:</b>	03/17/2021 15:42						
<b>Analyzed:</b>	03/18/2021 04:37						
<b>Analyte</b>	<b>Unit/RL:</b>	<b>RL</b>	<b>RL</b>	<b>RL</b>	<b>RL</b>	<b>mg/Kg</b>	<b>RL</b>
Benzene	N/A	RL	N/A	RL	N/A	<0.00200 U	0.00200
Ethylbenzene	N/A	RL	N/A	RL	N/A	<0.00200 U	0.00200
Toluene	N/A	RL	N/A	RL	N/A	<0.00200 U	0.00200
Total BTEX	N/A	RL	N/A	RL	N/A	<0.00200 U	0.00200
Xylenes, Total	N/A	RL	N/A	RL	N/A	<0.00401 U	0.00401
m-Xylene & p-Xylene	N/A	RL	N/A	RL	N/A	<0.00401 U	0.00401
o-Xylene	N/A	RL	N/A	RL	N/A	<0.00200 U	0.00200

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

<b>Prepared:</b>	03/16/2021 14:07						
<b>Analyzed:</b>	03/17/2021 23:48						
<b>Analyte</b>	<b>Unit/RL:</b>	<b>RL</b>	<b>RL</b>	<b>RL</b>	<b>RL</b>	<b>mg/Kg</b>	<b>RL</b>
Gasoline Range Organics (GRO)-C6-C10	N/A	RL	N/A	RL	N/A	<49.9 U	49.9
Diesel Range Organics (Over C10-C28)	N/A	RL	N/A	RL	N/A	<49.9 U	49.9
Oil Range Organics (Over C28-C36)	N/A	RL	N/A	RL	N/A	<49.9 U	49.9
Total TPH	N/A	RL	N/A	RL	N/A	<49.9 U	49.9

## Method: 300.0 - Anions, Ion Chromatography - Soluble

<b>Prepared:</b>										
<b>Analyzed:</b>	03/18/2021 15:21    03/18/2021 16:03    03/18/2021 16:21    03/18/2021 16:26    03/18/2021 16:48									
<b>Analyte</b>	<b>Unit/RL:</b>	<b>mg/Kg</b>	<b>RL</b>	<b>mg/Kg</b>	<b>RL</b>	<b>mg/Kg</b>	<b>RL</b>	<b>mg/Kg</b>	<b>RL</b>	
Chloride	<b>265</b>	4.99	<b>227</b>	4.97	<b>864</b>	4.96	<b>707 F1</b>	5.04	<b>13.5</b>	4.98

## Client Sample Result Summary

Client: Tetra Tech, Inc.  
Project/Site: COG - Windward

Job ID: 880-401-1  
SDG: 212C-MD-02461

<b>Lab Sample ID:</b> 880-401-11	880-401-12	880-401-13	880-401-14	880-401-15
<b>Client Sample ID:</b> H2 (0'-1')	H3 (0'-1')	H4 (0'-1')	H5 (0'-1')	H6 (0'-1')
<b>Matrix:</b> Solid	Solid	Solid	Solid	Solid
<b>Date Collected:</b> 03/12/2021 16:45	03/12/2021 17:15	03/12/2021 17:00	03/12/2021 17:15	03/12/2021 17:30

## Method: 8021B - Volatile Organic Compounds (GC)

<b>Prepared:</b> 03/16/2021 15:47	03/15/2021 13:54	03/17/2021 15:42	03/15/2021 13:54	03/17/2021 15:42
<b>Analyzed:</b> 03/18/2021 18:39	03/15/2021 23:41	03/18/2021 05:18	03/16/2021 00:31	03/18/2021 05:38
<b>Analyte</b>	<b>Unit/RL:</b> mg/Kg RL	mg/Kg RL	mg/Kg RL	mg/Kg RL
Benzene	<0.00200 U 0.00200	<0.00200 U 0.00200	<0.00198 U 0.00198	<0.00200 U 0.00200
Ethylbenzene	<0.00200 U 0.00200	<0.00200 U 0.00200	<0.00198 U 0.00198	<0.00200 U 0.00200
Toluene	<0.00200 U 0.00200	<0.00200 U 0.00200	<0.00198 U 0.00198	<0.00200 U 0.00200
Total BTEX	<0.00200 U 0.00200	<0.00200 U 0.00200	<0.00198 U 0.00198	<0.00200 U 0.00200
Xylenes, Total	<0.00401 U 0.00401	<0.00401 U 0.00401	<0.00396 U 0.00396	<0.00400 U 0.00400
m-Xylene & p-Xylene	<0.00401 U 0.00401	<0.00401 U 0.00401	<0.00396 U 0.00396	<0.00400 U 0.00400
o-Xylene	<0.00200 U 0.00200	<0.00200 U 0.00200	<0.00198 U 0.00198	<0.00200 U 0.00200

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

<b>Prepared:</b> 03/16/2021 14:07	03/16/2021 14:07	03/16/2021 14:07	03/16/2021 14:07	03/16/2021 14:07
<b>Analyzed:</b> 03/18/2021 00:09	03/18/2021 00:29	03/18/2021 00:50	03/18/2021 01:11	03/18/2021 01:32
<b>Analyte</b>	<b>Unit/RL:</b> mg/Kg RL	mg/Kg RL	mg/Kg RL	mg/Kg RL
Gasoline Range Organics (GRO)-C6-C10	<49.8 U 49.8	<50.0 U 50.0	<50.0 U 50.0	<50.1 U 50.1
Diesel Range Organics (Over C10-C28)	<49.8 U 49.8	<50.0 U 50.0	<50.0 U 50.0	<50.1 U 50.1
Oil Range Organics (Over C28-C36)	<49.8 U 49.8	<50.0 U 50.0	<50.0 U 50.0	<50.1 U 50.1
Total TPH	<49.8 U 49.8	<50.0 U 50.0	<50.0 U 50.0	<50.1 U 50.1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

<b>Prepared:</b>				
<b>Analyzed:</b> 03/18/2021 16:53	03/18/2021 17:13	03/18/2021 17:18	03/18/2021 17:23	03/18/2021 17:29
<b>Analyte</b>	<b>Unit/RL:</b> mg/Kg RL	mg/Kg RL	mg/Kg RL	mg/Kg RL
Chloride	202 4.99	7.05 4.99	79.4 4.97	11.4 5.05
				15.1 4.95

## Client Sample Result Summary

Client: Tetra Tech, Inc.  
Project/Site: COG - Windward

Job ID: 880-401-1  
SDG: 212C-MD-02461

<b>Lab Sample ID:</b> 880-401-16	880-401-17	880-401-18
<b>Client Sample ID:</b> H7 (0'-1')	H8 (0'-1')	H9(0'-1')
<b>Matrix:</b> Solid	Solid	Solid
<b>Date Collected:</b> 03/12/2021 17:45	03/12/2021 18:00	03/12/2021 18:15

## Method: 8021B - Volatile Organic Compounds (GC)

<b>Prepared:</b> 03/17/2021 15:42	03/15/2021 13:54	03/17/2021 15:42
<b>Analyzed:</b> 03/18/2021 06:19	03/16/2021 01:47	03/18/2021 06:40
<b>Analyte</b>	<b>Unit/RL:</b> mg/Kg RL	mg/Kg RL
Benzene	<0.00201 U 0.00201	<0.00200 U 0.00200
Ethylbenzene	<0.00201 U 0.00201	<0.00200 U 0.00200
Toluene	<0.00201 U 0.00201	<0.00200 U 0.00200
Total BTEX	<0.00201 U 0.00201	<0.00200 U 0.00200
Xylenes, Total	<0.00402 U 0.00402	<0.00400 U 0.00400
m-Xylene & p-Xylene	<0.00402 U 0.00402	<0.00400 U 0.00400
o-Xylene	<0.00201 U 0.00201	<0.00200 U 0.00200

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

<b>Prepared:</b> 03/16/2021 14:07	03/16/2021 14:07	03/16/2021 14:07
<b>Analyzed:</b> 03/18/2021 01:53	03/18/2021 02:14	03/17/2021 22:45
<b>Analyte</b>	<b>Unit/RL:</b> mg/Kg RL	mg/Kg RL
Gasoline Range Organics (GRO)-C6-C10	<50.0 U 50.0	<50.1 U 50.1
Diesel Range Organics (Over C10-C28)	<50.0 U 50.0	<50.1 U 50.1
Oil Range Organics (Over C28-C36)	<50.0 U 50.0	<50.1 U 50.1
Total TPH	<50.0 U 50.0	<50.1 U 50.1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

<b>Prepared:</b>		
<b>Analyzed:</b> 03/18/2021 17:34	03/18/2021 17:39	03/18/2021 17:45
<b>Analyte</b>	<b>Unit/RL:</b> mg/Kg RL	mg/Kg RL
Chloride	<b>316</b> 5.02	<b>6.11</b> 4.95
		<b>111</b> 5.04

Incident ID	
District RP	
Facility ID	
Application ID	


## Closure

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

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

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

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature:  Date: \_\_\_\_\_  
email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

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

**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 23558

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 23558
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	6/7/2021