

CO2%	80.94%		
HC%	19.06%		
Flare Volume	120 mscfd	CO2 %'s	
HC Volume	22.872 mscfd	NHU CTB	80.94
CO2 Volume	97.128 mscfd	SHU CTB	81.28
		NHU WIB	93.595
		NHU NIB	94.461
		SHU RCF	87.31
		NHU RCF	88.02
		South Indian Basin CMPR STA	0.446



Executive Summary

The flaring event was caused by the sudden, unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen or avoided, and could not have been avoided by good design, operation, and maintenance practices. The flaring event was caused by the Toromont compressor at the battery shutting down on low gas outlet discharge due to a psi transmitter fault.

Scaled Site Map

North Hobbs CTB

OCD Facility ID: fJXK1521644806

n Dr

W Mahan Dr

W Mahan Dr

W Mahan Dr

Google Earth

Released to Imaging: 1/17/2025 11:04:34 AM

Image © 2024 Airbus



400 ft

Soil Characteristics

Lea County, New Mexico

KN—Kimbrough loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2qmyr

Elevation: 2,500 to 4,800 feet

Mean annual precipitation: 14 to 16 inches

Mean annual air temperature: 57 to 63 degrees F

Frost-free period: 180 to 220 days

Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough and similar soils: 85 percent

Minor components: 15 percent

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

Description of Kimbrough

Setting

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 3 inches: loam

Bw - 3 to 10 inches: loam

Bkkm1 - 10 to 16 inches: cemented material

Bkkm2 - 16 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 4 to 18 inches to petrocalcic

Drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 95 percent

Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Map Unit Description: Kimbrough loam, 0 to 3 percent slopes---Lea County, New Mexico

Soil_NHCTB.1

Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Minor Components

Eunice

Percent of map unit: 6 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Spraberry

Percent of map unit: 5 percent
Landform: Playa rims, plains
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Kenhill

Percent of map unit: 4 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY038TX - Clay Loam 12-17" PZ
Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 21, Sep 3, 2024



Map Unit Description: Lovington-Delphos fine sandy loams, 0 to 3 percent slopes---Lea County, New Mexico

Soil_NHCTB.2

Lea County, New Mexico

PG—Lovington-Delphos fine sandy loams, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 308qm

Elevation: 2,500 to 4,800 feet

Mean annual precipitation: 14 to 16 inches

Mean annual air temperature: 57 to 63 degrees F

Frost-free period: 180 to 220 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Lovington and similar soils: 45 percent

Delphos and similar soils: 40 percent

Minor components: 15 percent

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

Description of Lovington

Setting

Landform: Playa floors, playa steps

Down-slope shape: Concave, convex

Across-slope shape: Concave, linear

Parent material: Calcareous loamy lacustrine deposits of quaternary age

Typical profile

A - 0 to 10 inches: fine sandy loam

Bw - 10 to 19 inches: clay loam

Bk1 - 19 to 60 inches: sandy clay loam

2Bk2 - 60 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 60 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.5

Available water supply, 0 to 60 inches: High (about 10.2 inches)

Map Unit Description: Lovington-Delphos fine sandy loams, 0 to 3 percent slopes---Lea County, New Mexico

Soil_NHCTB.2

Interpretive groups

Land capability classification (irrigated): 2s

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: B

Ecological site: R077DY041TX - Lakebed 12-17" PZ

Hydric soil rating: No

Description of Delphos

Setting

Landform: Playa steps, plains

Landform position (two-dimensional): Backslope, footslope

Down-slope shape: Concave, linear

Across-slope shape: Linear

Parent material: Calcareous loamy eolian deposits from the blackwater draw formation of pleistocene age

Typical profile

A - 0 to 6 inches: fine sandy loam

Bw - 6 to 12 inches: loamy fine sand

2Bk1 - 12 to 29 inches: sandy clay loam

2Bk2 - 29 to 61 inches: fine sandy loam

3Btk - 61 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B

Ecological site: R077DY046TX - Sandy 12-17" PZ

Hydric soil rating: No

Minor Components

Amarose

Percent of map unit: 7 percent

Landform: Playa slopes, plains

Map Unit Description: Lovington-Delphos fine sandy loams, 0 to 3 percent slopes---Lea County, New Mexico

Soil_NHCTB.2

Landform position (two-dimensional): Backslope, footslope
Down-slope shape: Concave, linear
Across-slope shape: Linear
Ecological site: R077DY047TX - Sandy Loam 12-17" PZ
Hydric soil rating: No

Lea

Percent of map unit: 5 percent
Landform: Plains, playa slopes
Landform position (two-dimensional): Backslope, footslope
Down-slope shape: Convex, concave, linear
Across-slope shape: Linear
Ecological site: R077DY047TX - Sandy Loam 12-17" PZ
Hydric soil rating: No

Douro

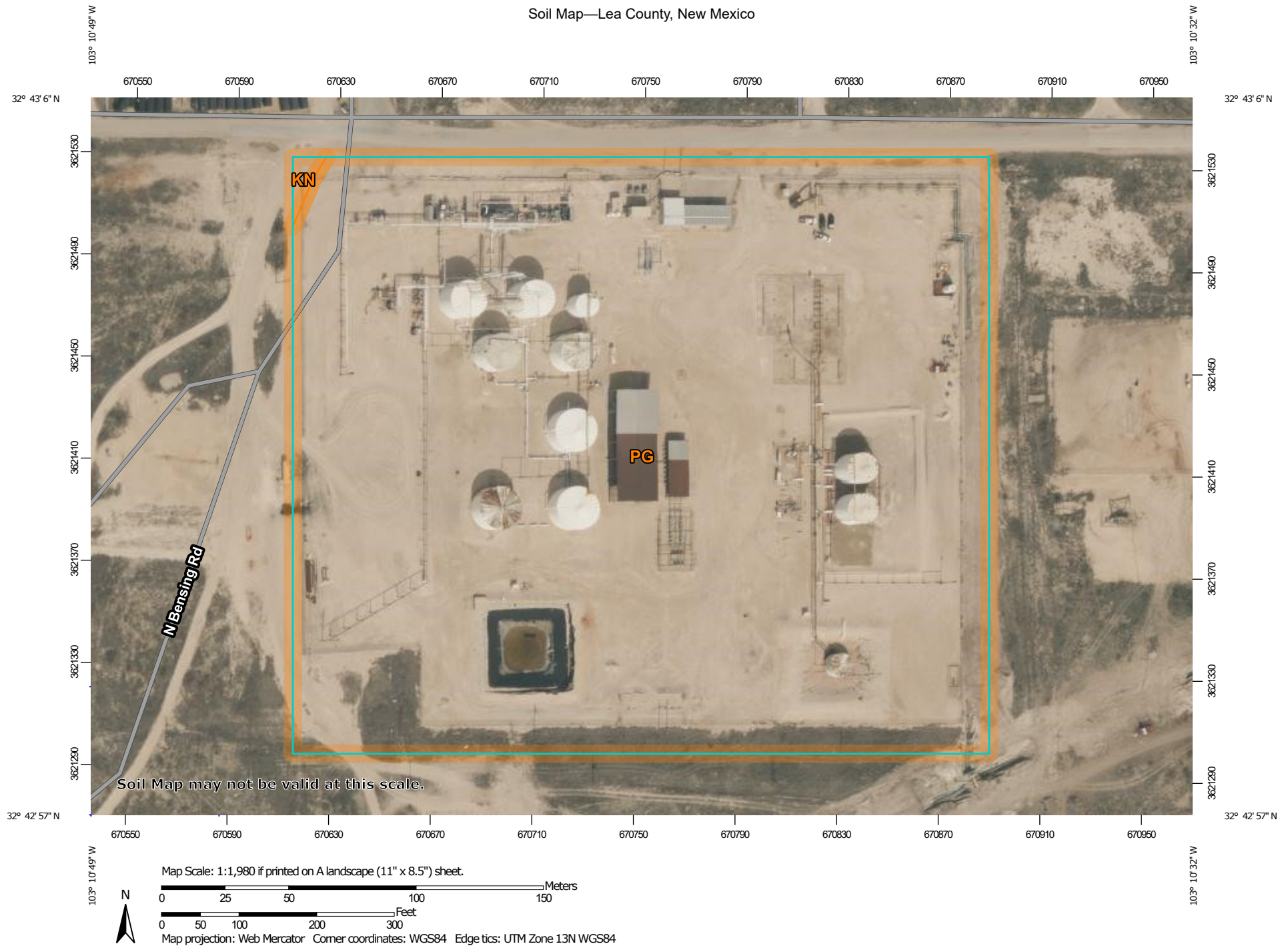
Percent of map unit: 3 percent
Landform: Plains, playa slopes
Landform position (two-dimensional): Backslope, footslope
Down-slope shape: Linear, concave
Across-slope shape: Linear
Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 21, Sep 3, 2024



Soil Map—Lea County, New Mexico



Soil Map—Lea County, New Mexico

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 21, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KN	Kimbrough loam, 0 to 3 percent slopes	0.0	0.3%
PG	Lovington-Delphos fine sandy loams, 0 to 3 percent slopes	15.9	99.7%
Totals for Area of Interest		15.9	100.0%

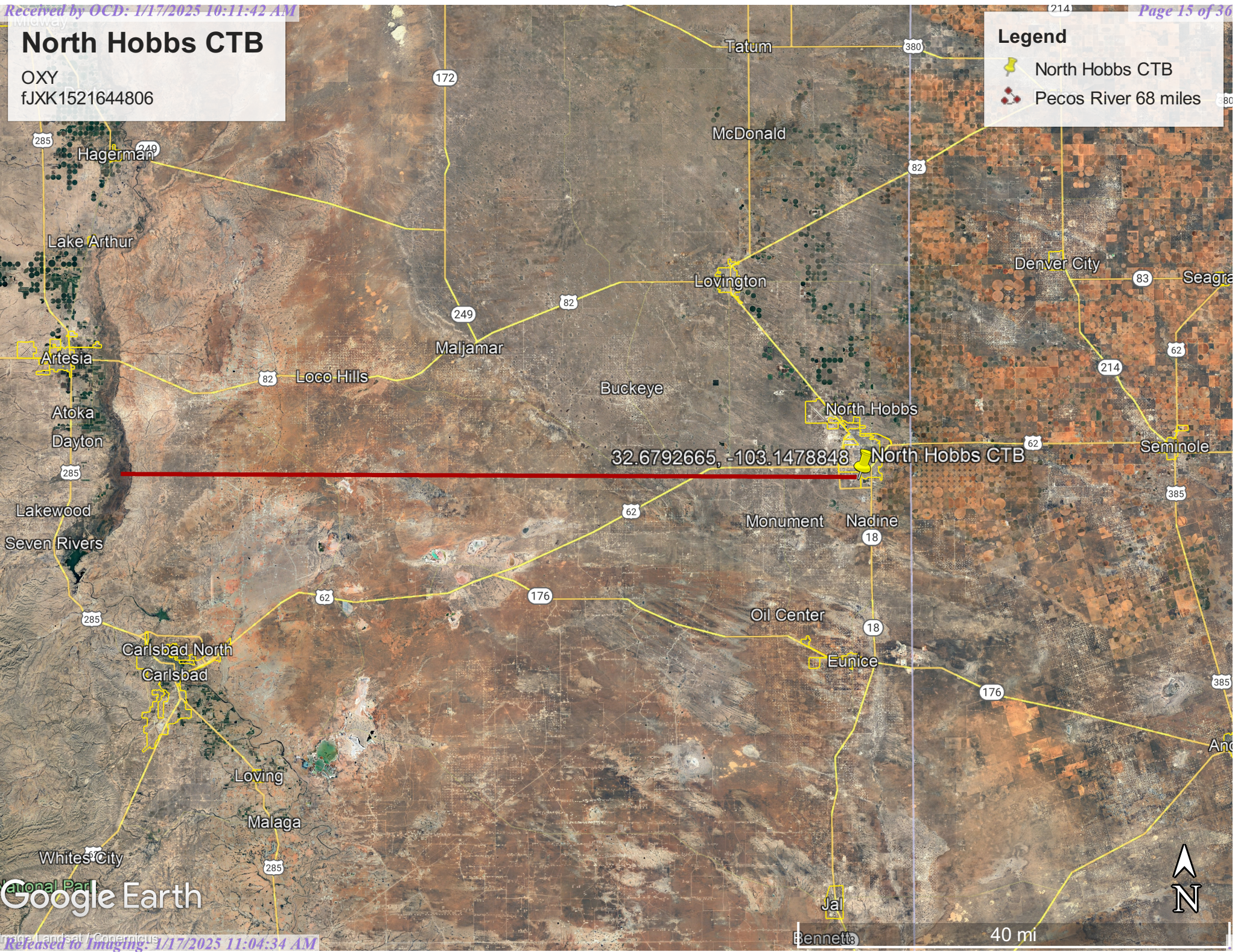
Water Course Map

North Hobbs CTB

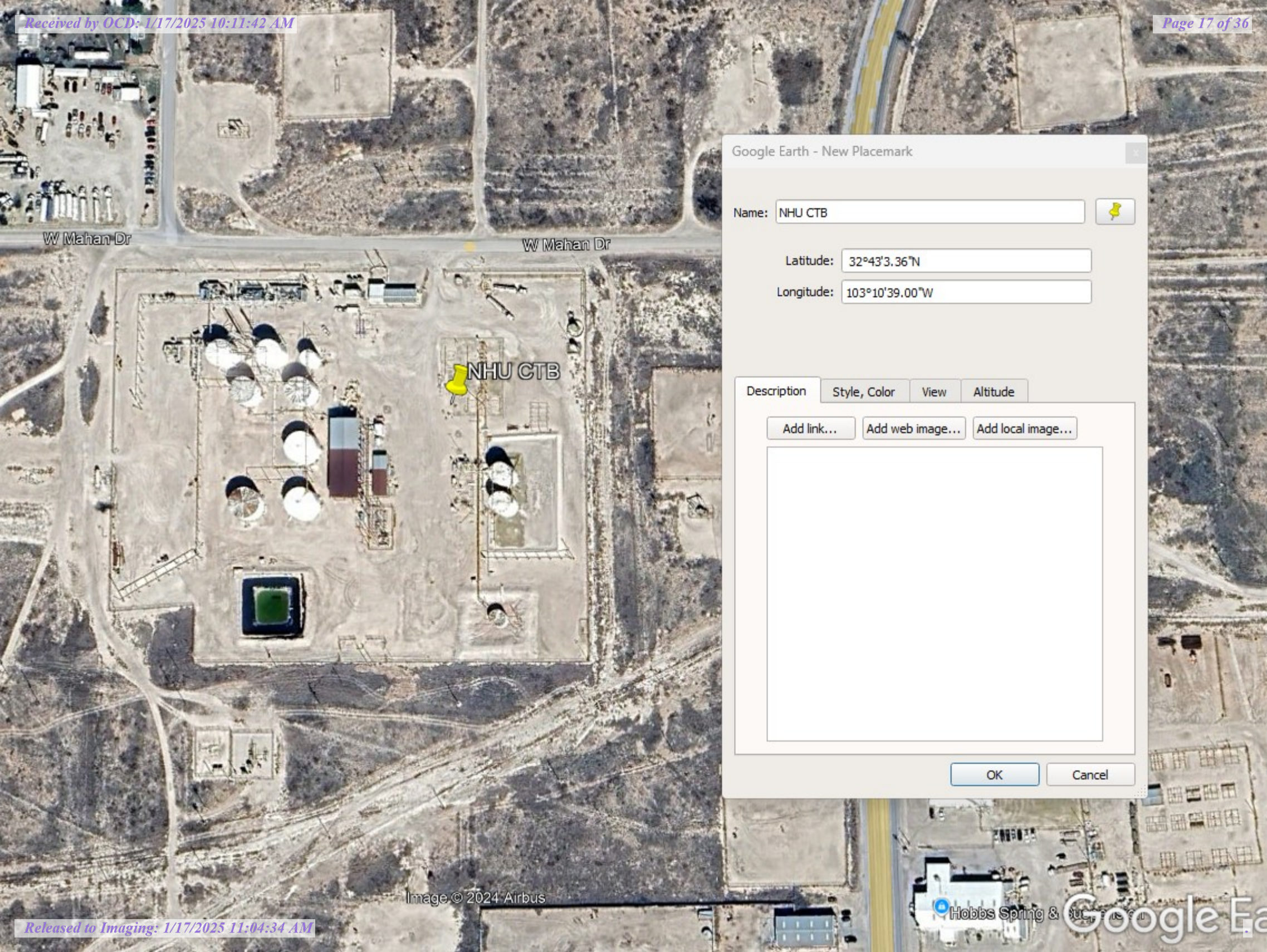
OXY
fJXK1521644806

Legend

- North Hobbs CTB
- Pecos River 68 miles



Depth to Groundwater



W Mahan Dr

W Mahan Dr

NHU CTB

Google Earth - New Placemark

Name: NHU CTB

Latitude: 32°43'3.36"N

Longitude: 103°10'39.00"W

Description

Style, Color

View

Altitude

Add link...

Add web image...

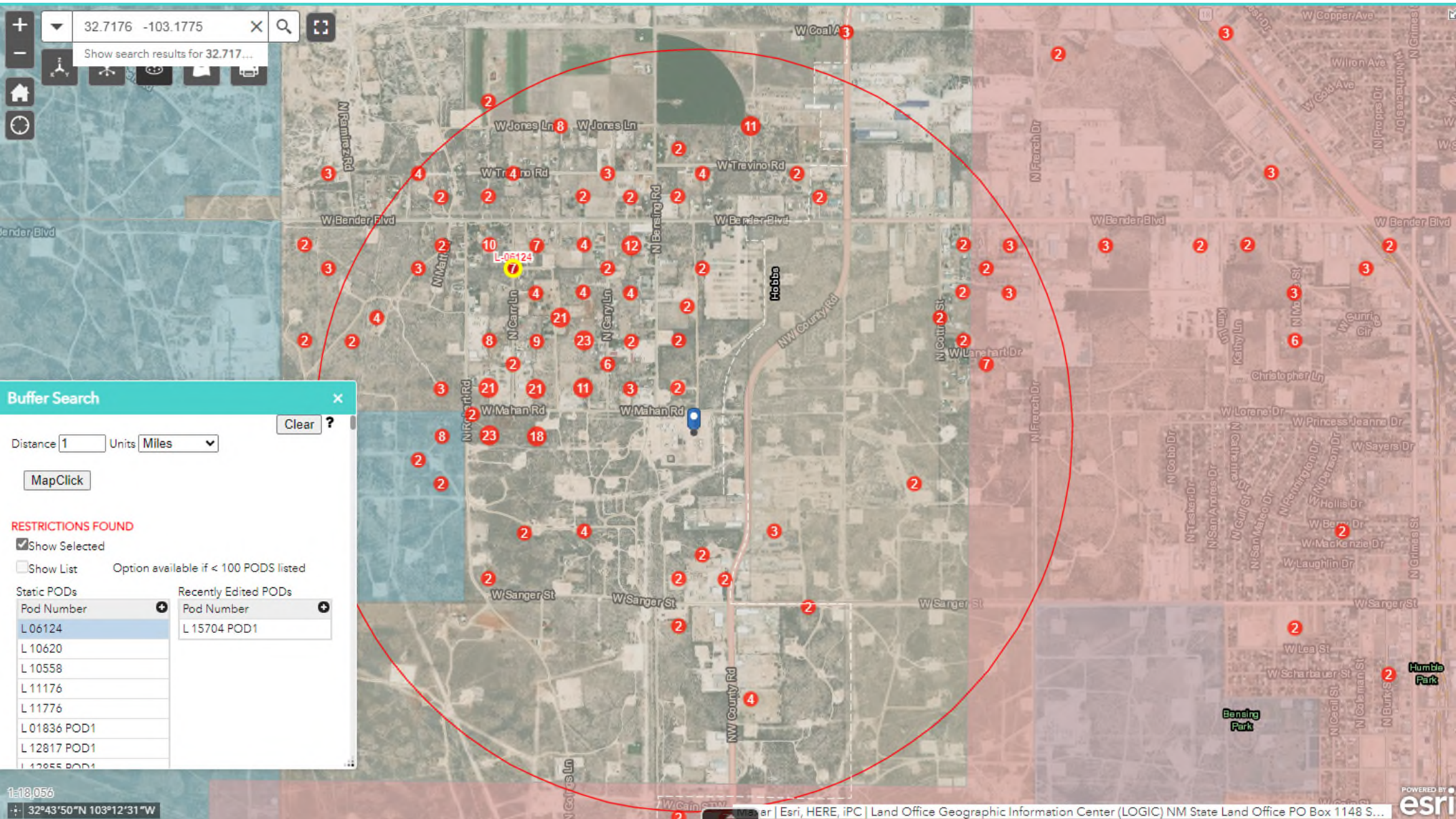
Add local image...

OK

Cancel

Image © 2024 Airbus

North Hobbs Unit CTB water wells within 1 mile



https://gis.ose.state.nm.us/gisapps/ose_pod_locations/



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 smallest to largest)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Well Depth	Depth Water	Water Column
L 01086		L	LE	NE	NE	NE	29	18S	38E	672136.0	3622259.0 *		61	33	28
L 04547		L	LE	SW	SW	NW	29	18S	38E	670734.0	3621635.0 *		110	70	40
L 06444		L	LE				29	18S	38E	671453.0	3621534.0 *		141	45	96
L 06570		L	LE	SW	SW	SW	29	18S	38E	670749.0	3620830.0 *		112	54	58
L 06717		L	LE		SE	NE	29	18S	38E	672044.0	3621757.0 *		130	55	75
L 06745		L	LE	NW	SW	NW	29	18S	38E	670734.0	3621835.0 *		120	49	71
L 07005		L	LE	NW	SW	SW	29	18S	38E	670749.0	3621030.0 *		150	50	100
L 07017		L	LE		SW	SW	29	18S	38E	670850.0	3620931.0 *		150	60	90
L 07068		L	LE	SW	SW	SW	29	18S	38E	670749.0	3620830.0 *		183	50	133
L 07163		L	LE		NE	NW	29	18S	38E	671231.0	3622146.0 *		110	67	43
L 07427		L	LE		SE	NE	29	18S	38E	672044.0	3621757.0 *		130	60	70
L 07432 POD1		L	LE		SE	NE	29	18S	38E	672044.0	3621757.0 *		125	55	70
L 07434		L	LE	SE	SE	NE	29	18S	38E	672143.0	3621656.0 *		125	55	70
L 07528		L	LE	SE	NW	SE	29	18S	38E	671747.0	3621246.0 *		380		
L 07530		L	LE	SE	NE	NW	29	18S	38E	671330.0	3622045.0 *		370		
L 07531		L	LE	NW	SW	NW	29	18S	38E	670734.0	3621835.0 *		370		
L 07570		L	LE		SW	SW	29	18S	38E	670850.0	3620931.0 *		122	48	74
L 07628		L	LE	NW	NE	NE	29	18S	38E	671936.0	3622259.0 *		135	70	65
L 07673		L	LE	NE	NE	NE	29	18S	38E	672136.0	3622259.0 *		125	50	75
L 07754		L	LE	SE	NE	NE	29	18S	38E	672136.0	3622059.0 *		207	50	157
L 07825		L	LE	NW	NE	NE	29	18S	38E	671936.0	3622259.0 *		105	45	60
L 07825 POD2		L	LE	NW	NE	NE	29	18S	38E	671918.2	3622279.2		220	90	130
L 07826		L	LE	SW	NE	NE	29	18S	38E	671936.0	3622059.0 *		110	45	65
L 07839		L	LE		SE	NE	29	18S	38E	672044.0	3621757.0 *		120	60	60
L 08131		L	LE			SW	29	18S	38E	671051.0	3621132.0 *		110	60	50
L 08135		L	LE		SE	NE	29	18S	38E	672044.0	3621757.0 *		130	62	68

(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 smallest
to largest)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Well Depth	Depth Water	Water Column
L 08191		L	LE	NE	NE	NE	29	18S	38E	672136.0	3622259.0 *		120	120	0
L 08228		L	LE	SE	NE	NE	29	18S	38E	672136.0	3622059.0 *		115	68	47
L 08229		L	LE	NW	SE	NE	29	18S	38E	671943.0	3621856.0 *		115	68	47
L 08362		L	LE		NW	SW	29	18S	38E	670842.0	3621334.0 *		187	48	139
L 08370		L	LE	SE	NE	NE	29	18S	38E	672136.0	3622059.0 *		120	60	60
L 08429		L	LE	NE	NW	SE	29	18S	38E	671747.0	3621446.0 *		120	62	58
L 08448		L	LE	NW	SE	NE	29	18S	38E	671943.0	3621856.0 *		130	38	92
L 08737		L	LE		SE	NE	29	18S	38E	672044.0	3621757.0 *		132	60	72
L 08860		L	LE			NE	29	18S	38E	671842.0	3621951.0 *		130	39	91
L 08867		L	LE		NE	NE	29	18S	38E	672037.0	3622160.0 *		120	52	68
L 09586		L	LE		SE	NE	29	18S	38E	672044.0	3621757.0 *		120	78	42
L 09682		L	LE	SW	NE	NE	29	18S	38E	671936.0	3622059.0 *		120	45	75
L 09705		L	LE	SE	SW	SW	29	18S	38E	670949.0	3620830.0 *		135	65	70
L 09777		L	LE			NW	29	18S	38E	671036.0	3621937.0 *		150	84	66
L 09792		L	LE		NW	NW	29	18S	38E	670828.0	3622139.0 *		150	42	108
L 10860		L	LE		NW	NW	29	18S	38E	670828.0	3622139.0 *		160	39	121
L 11171		L	LE	NW	SE	SW	29	18S	38E	671152.0	3621037.0 *		206		
L 11176		L	LE	SE	NW	SE	29	18S	38E	671747.0	3621246.0 *		220	65	155
L 11365		L	LE	SE	SE	NW	29	18S	38E	671337.0	3621642.0 *		120	55	65
L 11886 POD1		L	LE	SE	SW	SW	29	18S	38E	670949.0	3620830.0 *		172		
L 12052 POD1		L	LE	NE	SE	NE	29	18S	38E	672150.5	3621825.1		218		
L 12068 POD1		L	LE	NE	SE	NE	29	18S	38E	672190.1	3621798.0		160		
L 12161 POD1		L	LE	NW	NE	NE	29	18S	38E	671848.5	3622272.7		195		
L 12304 POD1		L	LE	NE	SE	NE	29	18S	38E	672140.2	3621821.8		155		
L 12874 POD1		L	LE	NE	SW	SW	29	18S	38E	671030.7	3621066.3		175		
L 13750 POD2		L	LE	SW	SW	NE	29	18S	38E	671526.4	3621651.9		300		
L 13997 POD1		L	LE	NE	SE	SW	29	18S	38E	671343.3	3621125.0		109	62	47
L 14213 POD1		L	LE	SW	SW	NE	29	18S	38E	671610.3	3621586.8		215	63	152
L 14492 POD1		L	LE	NE	SW	SW	29	18S	38E	670985.4	3621126.5		203	100	103

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water right file.)

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

(quarters are smallest
to largest)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Well Map	Depth	Water	Water Column
L 14714 POD1		L	LE	SW	NW	NW	29	18S	38E	670765.5	3621979.8		180	120	60

Average Depth to Water: 60 feet

Minimum Depth: 33 feet

Maximum Depth: 120 feet

Record Count: 56

Basin/County Search:
County: LE

PLSS Search:
Range: 38E
Township: 18S
Section: 29

* 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.



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Analytical Report

2/10/2023

Customer:	Occidental Permian Ltd.	Order:	503-4218
Location:	North Hobbs Unit	Received:	2/9/2023
Description:	Samples from Central Tank, North, and West Batteries for Hydrocarbon Analyses	Primary Contact:	Chris Poe

REPORT DISTRIBUTION:

Chris Poe , Richard Sanders

All data reported in this Analytical Report is in compliance with the test method(s) performed as of the date noted above. The validity and integrity of this report will remain intact as long as it is accompanied by this page and reproduced in full. Any datafile (e.g. txt, csv, etc.) produced which is associated with the results in this report shall be considered for convenience only and does not supersede this report as the official test results. We reserve the right to return to you any unused samples received if we consider so necessary (e.g. samples identified as hazardous waste).

We appreciate you choosing Pantechs Laboratories. If you have any questions concerning this report, please feel free to contact us at any time.

Pantechs Laboratories, Inc.**Order: 503-4218 Order Date: 2/9/2023****Order Description: North Hobbs Unit, Samples from Central Tank, North, and West Batteries for Hydrocarbon Analyses****Sample List**

Fluid	Operator	Location	Site	Sample Point	Date	Time
Gas	Occidental Permian Ltd.	North Hobbs Unit	Central Tank Battery	Gas Leg of Production Separator	2/9/2023	3:41 PM
Gas	Occidental Permian Ltd.	North Hobbs Unit	North Injection Battery	Gas Leg of Production Separator	2/9/2023	3:31 PM
Gas	Occidental Permian Ltd.	North Hobbs Unit	West Injection Battery	Gas Leg of Production Separator	2/9/2023	4:04 PM
Gas	Occidental Permian Ltd.	South Hobbs Unit	Central Tank Battery	Gas Leg of Production Separator	2/9/2023	3:11 PM

No Sample List

Operator	Location	Site	Sample Point	Comment
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Pantechs Laboratories, Inc. - Order: 503-4218 - Order Date: 2/9/2023

Order Description: North Hobbs Unit, Samples from Central Tank, North, and West Batteries for Hydrocarbon Analyses

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	26 psig
Location	North Hobbs Unit	Sample Temp	N/A
Site	Central Tank Battery	Atm Temp	45 F
Site Type	Battery	Collection Date	02/09/2023
Sample Point	Gas Leg of Production Separator	Collection Time	3:41 PM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL2344

GPA 2261 Gas Fractional Analysis with Water Vapor

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	0.056	0.033	0.006
CARBON DIOXIDE	CO2	80.489	74.605	13.780
HYDROGEN SULFIDE	H2S	1.281	0.919	0.173
WATER VAPOR	H2O	0.555	0.211	0.032
METHANE	C1	0.484	0.164	0.082
ETHANE	C2	0.391	0.248	0.105
PROPANE	C3	2.653	2.464	0.734
I-BUTANE	iC4	1.657	2.028	0.545
N-BUTANE	nC4	4.715	5.772	1.493
I-PENTANE	iC5	2.289	3.478	0.842
N-PENTANE	nC5	1.769	2.688	0.644
HEXANES PLUS	C6+	3.661	7.390	1.579
TOTALS:		100.000	100.000	20.015

Value of "0.000" in fractional interpreted as below detectable limit.

If Onsite H2S testing is performed, its resulting value is used in fractional table

GPA 2172/ASTM D3588 CALCULATED PROPERTIES

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	652.96	1.652	0.990	47.381	508.07
MEASURED WATER	653.42	1.656	0.990	47.481	

Water Vapor

GPM	PPMM	LBS/MMSCF	SAMPLE SATURATED
0.032	5,550.000	264.286	No

Onsite Testing by Stain Tube

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	1.20 vol%	1.2810	813.46	12,934.0

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

Pantechs Laboratories, Inc. Order: 503-4218 - Order Date: 2/9/2023

Order Description: North Hobbs Unit, Samples from Central Tank, North, and West Batteries for Hydrocarbon Analyses

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	34 psig
Location	North Hobbs Unit	Sample Temp	N/A
Site	North Injection Battery	Atm Temp	45 F
Site Type	Battery	Collection Date	02/09/2023
Sample Point	Gas Leg of Production Separator	Collection Time	3:31 PM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL1003

GPA 2261 Gas Fractional Analysis with Water Vapor

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	0.065	0.041	0.007
CARBON DIOXIDE	CO2	94.461	92.516	16.121
HYDROGEN SULFIDE	H2S	0.214	0.162	0.029
WATER VAPOR	H2O	0.540	0.216	0.031
METHANE	C1	0.083	0.030	0.014
ETHANE	C2	0.132	0.088	0.035
PROPANE	C3	0.839	0.823	0.231
I-BUTANE	iC4	0.397	0.514	0.130
N-BUTANE	nC4	1.096	1.418	0.346
I-PENTANE	iC5	0.452	0.726	0.166
N-PENTANE	nC5	0.388	0.623	0.141
HEXANES PLUS	C6+	1.333	2.843	0.573
TOTALS:		100.000	100.000	17.824

Value of "0.000" in fractional interpreted as below detectable limit.

If Onsite H2S testing is performed, its resulting value is used in fractional table

GPA 2172/ASTM D3588 CALCULATED PROPERTIES

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	178.36	1.558	0.993	44.838	142.89
MEASURED WATER	178.67	1.562	0.993	44.935	

Water Vapor

GPM	PPMM	LBS/MMSCF	SAMPLE SATURATED
0.031	5,400.000	257.143	No

Onsite Testing by Stain Tube

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.20 vol%	0.2135	135.58	2,155.7

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

Pantechs Laboratories, Inc. Order: 503-4218 - Order Date: 2/9/2023

Order Description: North Hobbs Unit, Samples from Central Tank, North, and West Batteries for Hydrocarbon Analyses

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	28 psig
Location	North Hobbs Unit	Sample Temp	N/A
Site	West Injection Battery	Atm Temp	40 F
Site Type	Battery	Collection Date	02/09/2023
Sample Point	Gas Leg of Production Separator	Collection Time	4:04 PM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL0245

GPA 2261 Gas Fractional Analysis with Water Vapor

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	0.048	0.030	0.005
CARBON DIOXIDE	CO2	93.595	92.306	15.972
HYDROGEN SULFIDE	H2S	1.480	1.130	0.200
WATER VAPOR	H2O	0.511	0.206	0.029
METHANE	C1	0.487	0.175	0.083
ETHANE	C2	0.185	0.125	0.050
PROPANE	C3	0.623	0.616	0.172
I-BUTANE	iC4	0.219	0.285	0.072
N-BUTANE	nC4	0.645	0.840	0.204
I-PENTANE	iC5	0.435	0.703	0.159
N-PENTANE	nC5	0.417	0.674	0.151
HEXANES PLUS	C6+	1.355	2.910	0.582
TOTALS:		100.000	100.000	17.679

Value of "0.000" in fractional interpreted as below detectable limit.

If Onsite H2S testing is performed, its resulting value is used in fractional table

GPA 2172/ASTM D3588 CALCULATED PROPERTIES

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	167.09	1.547	0.993	44.533	134.32
MEASURED WATER	167.38	1.551	0.993	44.625	

Water Vapor

GPM	PPMM	LBS/MMSCF	SAMPLE SATURATED
0.029	5,110.000	243.333	No

Onsite Testing by Stain Tube

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	1.40 vol%	1.4797	939.64	14,940.3

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

Pantechs Laboratories, Inc. Order: 503-4218 - Order Date: 2/9/2023

Order Description: North Hobbs Unit, Samples from Central Tank, North, and West Batteries for Hydrocarbon Analyses

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	27 psig
Location	South Hobbs Unit	Sample Temp	N/A
Site	Central Tank Battery	Atm Temp	50 F
Site Type	Battery	Collection Date	02/09/2023
Sample Point	Gas Leg of Production Separator	Collection Time	3:11 PM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL2332

GPA 2261 Gas Fractional Analysis with Water Vapor

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	0.056	0.033	0.006
CARBON DIOXIDE	CO2	80.302	74.480	13.748
HYDROGEN SULFIDE	H2S	1.509	1.084	0.204
WATER VAPOR	H2O	0.553	0.210	0.032
METHANE	C1	0.483	0.163	0.082
ETHANE	C2	0.390	0.247	0.105
PROPANE	C3	2.647	2.460	0.733
I-BUTANE	iC4	1.653	2.025	0.543
N-BUTANE	nC4	4.705	5.763	1.490
I-PENTANE	iC5	2.284	3.473	0.840
N-PENTANE	nC5	1.765	2.684	0.642
HEXANES PLUS	C6+	3.653	7.378	1.575
TOTALS:		100.000	100.000	20.000

Value of "0.000" in fractional interpreted as below detectable limit.

If Onsite H2S testing is performed, its resulting value is used in fractional table

GPA 2172/ASTM D3588 CALCULATED PROPERTIES

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	653.00	1.651	0.990	47.351	508.26
MEASURED WATER	653.46	1.655	0.990	47.450	

Water Vapor

GPM	PPMM	LBS/MMSCF	SAMPLE SATURATED
0.032	5,530.000	263.333	No

Onsite Testing by Stain Tube

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	1.40 vol%	1.5093	958.43	15,239.0

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 421826

QUESTIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 421826
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2501658748
Incident Name	NAPP2501658748 NORTH HOBBS CTB @ 0
Incident Type	Flare
Incident Status	Remediation Closure Report Received
Incident Facility	[fJXK1521644806] North Hobbs Unit CTB

Location of Release Source

Please answer all the questions in this group.

Site Name	North Hobbs CTB
Date Release Discovered	01/06/2025
Surface Owner	Private

Incident Details

Please answer all the questions in this group.

Incident Type	Flare
Did this release result in a fire or is the result of a fire	No
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

Nature and Volume of Release

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.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Equipment Failure Producing Well Natural Gas Flared Released: 23 MCF Recovered: 0 MCF Lost: 23 MCF.
Other Released Details	Cause: Equipment Failure Producing Well Carbon Dioxide Released: 97 MCF Recovered: 0 MCF Lost: 97 MCF.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 421826

QUESTIONS (continued)

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 421826
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
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: Shaina Rojas Title: Specialist Environmental Email: Shaina_rojas@oxy.com Date: 01/16/2025
--	--

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QUESTIONS, Page 3

Action 421826

QUESTIONS (continued)

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 421826
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (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	Between 1000 (ft.) and ½ (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (mi.)
Any other fresh water well or spring	Zero feet, overlying, or within area
Incorporated municipal boundaries or a defined municipal fresh water well field	Zero feet, overlying, or within area
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	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<i>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.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>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.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
<i>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>	
On what estimated date will the remediation commence	01/06/2025
On what date will (or did) the final sampling or liner inspection occur	01/06/2025
On what date will (or was) the remediation complete(d)	01/06/2025
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
<i>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.</i>	
<i>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.</i>	

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QUESTIONS, Page 4

Action 421826

QUESTIONS (continued)

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 421826
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>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.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
Is (or was) there affected material present needing to be removed	Not answered.
Is (or was) there a power wash of the lined containment area (to be) performed	Not answered.
OTHER (Non-listed remedial process)	Yes
Other Non-listed Remedial Process. Please specify	This is a CO2 gas release only and no spills occurred.
<i>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>	
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: Shaina Rojas Title: Specialist Environmental Email: Shaina_rojas@oxy.com Date: 01/16/2025
<i>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.</i>	

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QUESTIONS, Page 6

Action 421826

QUESTIONS (continued)

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 421826
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Liner Inspection Information	
Last liner inspection notification (C-141L) recorded	421825
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	01/06/2025
Was all the impacted materials removed from the liner	No
What was the liner inspection surface area in square feet	0

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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
What was the total surface area (in square feet) remediated	0
What was the total volume (cubic yards) remediated	0
Summarize any additional remediation activities not included by answers (above)	This is a CO2 gas release only and no spills occurred.

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: Shaina Rojas Title: Specialist Environmental Email: Shaina_rojas@oxy.com Date: 01/16/2025
--	--

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CONDITIONS

Action 421826

CONDITIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 421826
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	CO2 Release, Closure Approved	1/17/2025