NSL

Initial

Application

P.O. No. URHOY-210125-NSL000

NSL-8131

Revised March 23, 2017

RECEIVED: 01/25/21	REVIEWER: LRL	TYPE: NSL	APP NO: pLEL2102628772

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Geological & Engineering Bureau –
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: OCCIDENTAL PERMIAN LTD. **OGRID Number:** 157984
Well Name: LUSK 28 WEST FEDERAL COM 1H **API:** 30-025-41257
Pool: LUSK; BONE SPRING, SOUTH **Pool Code:** 41460

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

1) **TYPE OF APPLICATION:** Check those which apply for [A]
A. Location – Spacing Unit – Simultaneous Dedication
☒ NSL ☐ NSP(PROJECT AREA) ☐ NSP(PRORATION UNIT) ☐ SD

B. Check one only for [I] or [II]
[I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

2) **NOTIFICATION REQUIRED TO:** Check those which apply.
A. ☒ Offset operators or lease holders
B. ☐ Royalty, overriding royalty owners, revenue owners
C. ☐ Application requires published notice
D. ☐ Notification and/or concurrent approval by SLO
E. ☒ Notification and/or concurrent approval by BLM
F. ☐ Surface owner
G. ☐ For all of the above, proof of notification or publication is attached, and/or,
H. ☐ No notice required

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

JANA MENDIOLA
Print or Type Name


Signature

1/25/2021
Date

432-685-5936
Phone Number

janalyn_mendiola@oxy.com
e-mail Address

Occidental Permian Ltd.

5 Greenway Plaza, Suite 110
Houston, TX 77046-0521

January 25, 2021

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Attention: Leonard Lowe

Re: ***Application for Administrative Approval of Non-Standard Location***
Lusk 28 West Federal Com 1H – Lusk; Bone Spring, South
Surface – 652' FSL 2425' FEL Unit O Sec 28 T19S R32E
First Take Point – 796' FSL 2342' FEL Unit O Sec 28 T19S R32E
Last Take Point – 533' FNL 2242' FEL Unit B Sec 28 T19S R32E
Bottom Hole –397' FNL 2235' FEL Unit B Sec 28 T19S R32E
Lea County, New Mexico

Dear Mr. Lowe:

Occidental Permian Ltd. respectfully requests administrative approval of a non-standard location on the Lusk 28 West Federal Com 1H well, API Number-30-025-41257, Property Code 40005. The #1H well is proposed to be completed in the Lusk Bone Spring South pool, Pool Code 41460. The proposed completed interval is projected as follows:

Surface – 652' FSL 2425' FEL Unit O Sec 28 T19S R32E
First Take Point – 796' FSL 2342' FEL Unit O Sec 28 T19S R32E
Last Take Point – 533' FNL 2242' FEL Unit B Sec 28 T19S R32E
Bottom Hole –397' FNL 2235' FEL Unit B Sec 28 T19S R32E

The adjoining units towards which the unorthodox location encroaches are located in T19S R32E, Section 28 - Units C, F, K, N.

Approval of the unorthodox completed interval will allow for efficient spacing of horizontal wells and thereby prevent waste.

To support this request, the following information has been submitted for your review:

1. C-102 Plat for the proposed well and additional plats with offsetting well and affected spacing units.
2. List of affected offset parties in each adjoining spacing unit in the same pool or formation located closer to the unorthodox well location than the minimum distance prescribed by applicable rule or order, copies of the signed certified return receipts will be furnished upon request.
3. Statement from Oxy Production Engineer

If you need any additional information, please call me at 432-685-5936.

Sincerely,

Jana Mendiola
Regulatory Specialist

Attachments
CC: Service List

Occidental Permian Ltd.

5 Greenway Plaza, Suite 110
Houston, TX 77046-0521

January 25, 2021

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Re: ***Application for Administrative Approval of Non-Standard Location***
Lusk 28 West Federal Com 1H – Lusk; Bone Spring, South
Surface – 652' FSL 2425' FEL Unit O Sec 28 T19S R32E
First Take Point – 796' FSL 2342' FEL Unit O Sec 28 T19S R32E
Last Take Point – 533' FNL 2242' FEL Unit B Sec 28 T19S R32E
Bottom Hole – 397' FNL 2235' FEL Unit B Sec 28 T19S R32E
Lea County, New Mexico

To Whom it May Concern:

Enclosed is a copy of an application, filed with the New Mexico Oil Conservation Division by Occidental Permian Ltd., requesting administrative approval for a non-standard location. As an affected party, notice is being provided to you pursuant to Rule 19.15.4.12(A)(2)(a), 19.15.15.9(A) and 19.15.16.15(B). The well is located as follows:

Surface – 652' FSL 2425' FEL Unit O Sec 28 T19S R32E
First Take Point – 796' FSL 2342' FEL Unit O Sec 28 T19S R32E
Last Take Point – 533' FNL 2242' FEL Unit B Sec 28 T19S R32E
Bottom Hole – 397' FNL 2235' FEL Unit B Sec 28 T19S R32E

If you object to the well's location, you must notify the Division in writing no later than 20 days from the date the application is received by the NMOCD (1220 South St. Francis Drive, Santa Fe, NM 87505; Attention: Leonard Lowe).

If you need any additional information, you can contact Clay Carroll at 713-366-5281 or myself at 432-685-5936.

Thank you,

Jana Mendiola
Regulatory Specialist
Occidental Permian Ltd.

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-41257	41460	LUSK; BONE SPRING, SOUTH

Property Code	Property Name	Well Number
40005	LUSK "28" WEST FED. COM	1H

OGRID No.	Operator Name	Elevation
157984	OCCIDENTAL PERMIAN LTD.	3560.8'

Surface Location

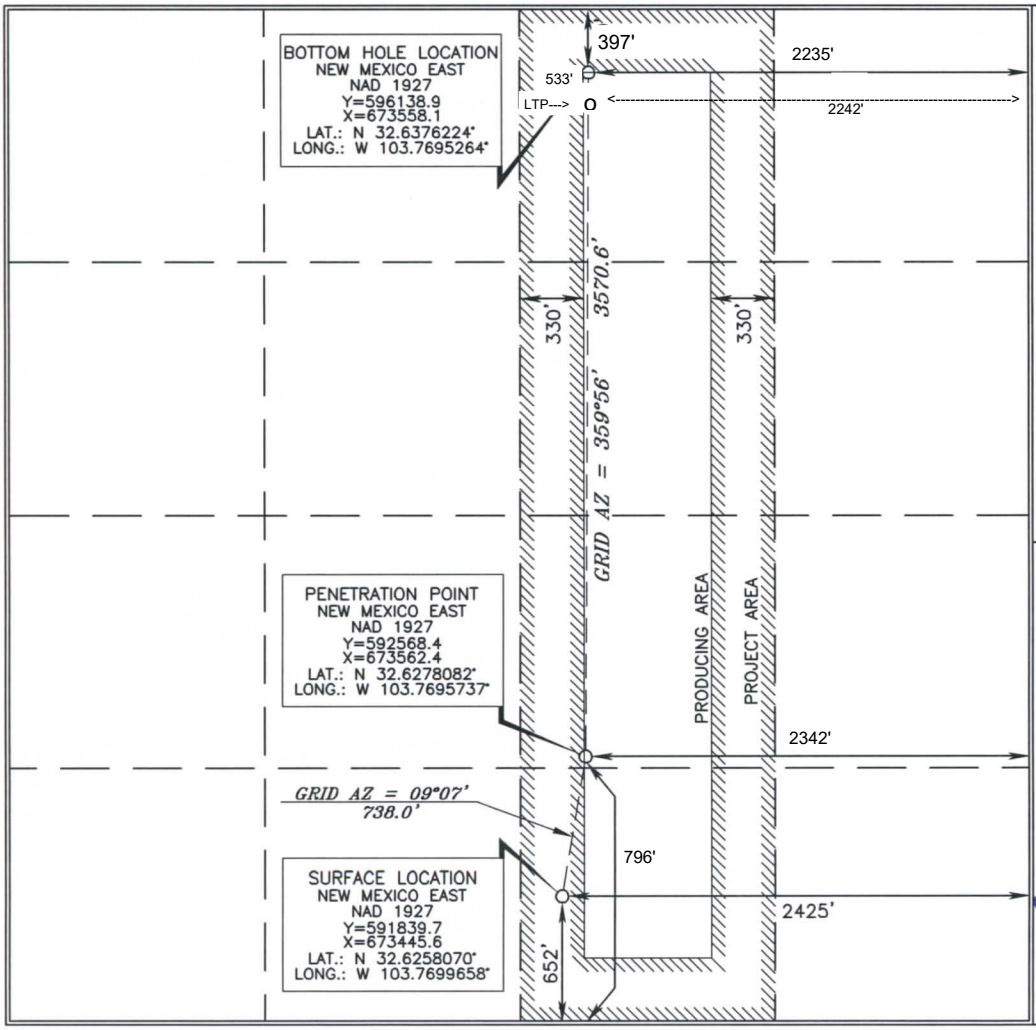
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	28	19 SOUTH	32 EAST, N.M.P.M.		652'	SOUTH	2425'	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	28	19 SOUTH	32 EAST, N.M.P.M.		397'	NORTH	2235'	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	
160			FTP- 796' FSL 2342' FEL, Unit O Sec 28 T19S R32E LTP- 533' FNL 2242' FEL, Unit B Sec 28 T19S R32E

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 01/25/2021

JANA MENDIOLA
Printed Name

janalyn_mendiola@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JUNE 14, 2012
Date of Survey

Signature and Seal of Professional Surveyor:

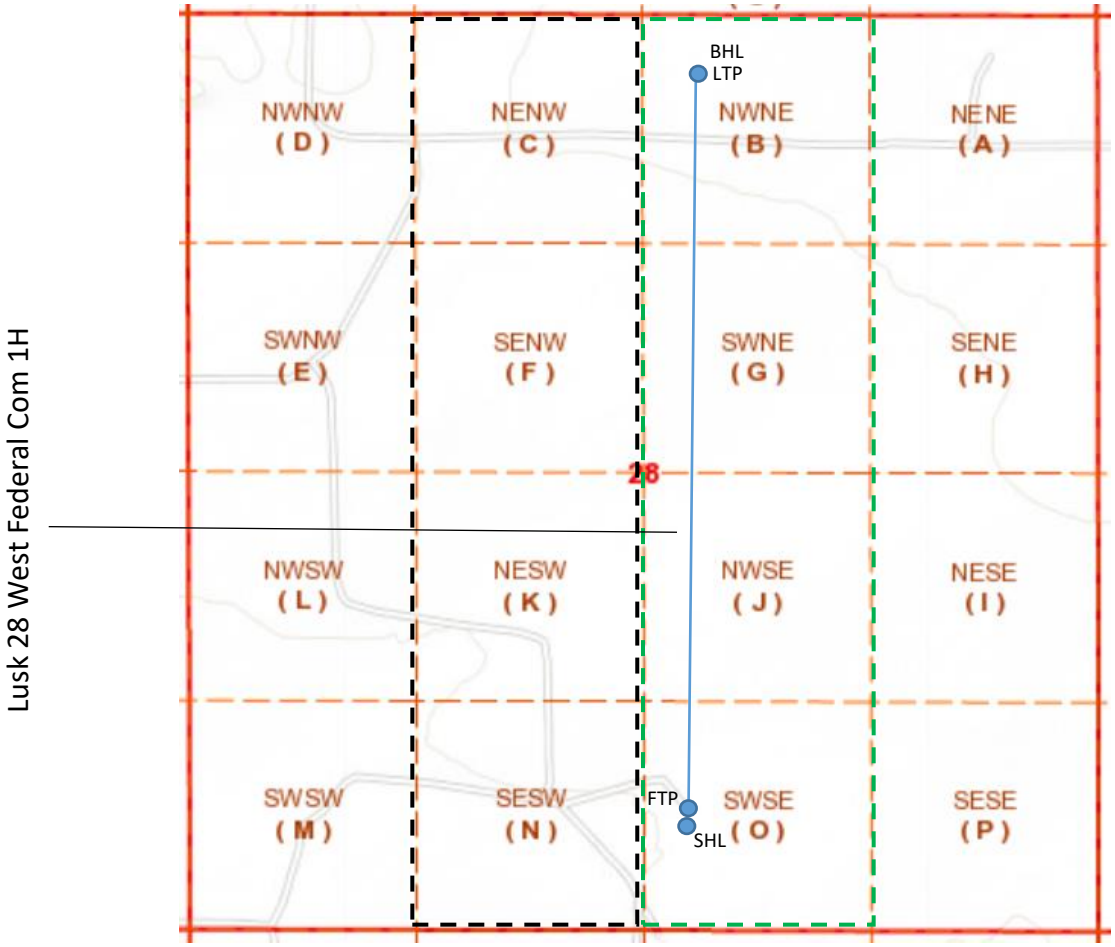
GARY JASON RICHARDSON
15079
PROFESSIONAL LAND SURVEYOR

9/7/2012

Certificate Number 15079

WO# 120614WL-a (KA)

Occidental Permian Ltd.
Lusk 28 West Federal Com 1H (API# 30-025-41257)
Section 28 Township 19 South, Range 32 East, N.M.P.M.
Lea County, New Mexico



Occidental Oil and Gas Corporation
ATTN: Zethais Mujica
5 Greenway Plaza, Suite 110
Houston, TX 77046
832-641-6447
Zethais.mujica@oxy.com

January 25, 2021

Mr. Leonard Lowe
New Mexico Oil Conservation Division
1220 South Francis Drive
Santa Fe, New Mexico 87505

RE: ***Application for Nonstandard Location—Engineering Justification***
Occidental Permian Ltd.
Lusk 28 West Federal Com 1H (API# 30-025-41257)
T19S R32E, Section 28 – Units B, G, J, and O, Lea County

Dear Mr. Lowe:

Occidental Permian Ltd. respectfully seeks approval for a non-standard location, decreasing the first take point for Lusk 28 West Federal Com #1H (API# 30-025-41257) in the Lusk Spring South pool, Pool code 41460. It is Oxy's responsibility as a prudent operator to maximize lateral length and minimize reserves left in the ground. Decreasing the first take point will increase this well's effective lateral length by 619 feet and increase the estimated ultimate recovery of the well by approximately 5%. Any increase in first or last take point would result in untapped reserves left in the reservoir, and waste of a resource that would otherwise go undeveloped.

Sincerely,

Zethais Mujica

Zethais Mujica
Production Engineer

Application Non-Standard Location - Service List
Occidental Permian Ltd.
Lusk 28 West Federal Com #1H
API# 30-025-41257

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
Online Submission

Bureau of Land Management Hobbs
414 West Taylor St.
Hobbs, NM 88240
7011 3500 0002 4940 1126

Existing Horizontal Spacing Unit Section 28 (T19S-R32E) - Units C, F, K, N

Occidental Permian Ltd.
P.O. Box 50250
Midland, TX 79710

XTO Holdings, LLC
22777 Springwoods Village Pkwy
Spring, TX 77389
7011 3500 0002 4940 1133

Copies of this application were mailed to the following individuals, companies and organizations on or before January 25, 2021.

Jana Mendiola, Regulatory Specialist
Occidental Permian Ltd.

Results of Directional Survey

API number:	30-025-41257			
OGRID:		Operator:	OCCIDENTAL PERMIAN LTD	
		Property:	LUSK 28 WEST FEDERAL COM	# 1H

surface	ULSTR:	O	28	T	19S	R	32E
				652	FSL	2425	FEL
BH Loc	ULSTR:	B	28	T	19S	R	32E
13366 MD		9385.7	TVD	397	FNL	2235	FEL
				4883	FSL		
Top Perf/OH	ULSTR:	O	28	T	19S	R	32E
9780 MD		9432.7	TVD	1301	FSL	2305	FEL
Bot Perf/OH	ULSTR:	B	28	T	19S	R	32E
13230 MD		9381.7	TVD	533	FNL	2242	FEL
				4747	FSL		

	MD	N/S	E/W	VD
	9770	639.70	119.70	9430.3
TOP PERFS/OH	**9780**	649.41	119.93	9432.65
	9801	669.80	120.40	9437.60
	13228	4092.80	183.10	9381.60
BOT PERFS/OH	**13230**	4094.80	183.19	9381.66
	13366	4230.50	189.60	9385.70

NEXT TO LAST	13228	4092.80	183.10	9381.60
LAST READING	13366	4230.50	189.60	9385.70
TD	**13366**	4230.50	189.60	9385.70

Surface Location	652	FS	2425	FE
Projected BHL	4883	FS	2235	FE
Location of				
Top Perfs/OH	1301	FS	2305	FE
Bottom Perfs/OH	4747	FS	2242	FE

SUMMARY of Subsurface Locations

Surface Location	O-28-19S-32E	652	FS	2425	FE	Vert. Depth
Top Perfs/OH	O-28-19S-32E	1301	FS	2305	FE	9432.65
Bottom Perfs/OH	B-28-19S-32E	4747	FS	2242	FE	9381.66
Projected TD	B-28-19S-32E	4883	FS	2235	FE	9385.70

E-mail attachment 01/27/21

OCCIDENTAL PERMIAN LTD.

Lusk Bone Spring
Lea County, NM (Grid North)
Lusk "28" West Federal Com #1H
VH - Job #321213-MPH-M-1319

HOBBS OCD

MAR 25 2014

RECEIVED

Survey: MWD - Tie-In @ 939' by MS

SDI Survey Report

This survey is correct to the best of my knowledge and is supported by actual field data.

Notarized this date 13th of March, 2014.

Notary Signature
County of Midland
State of Texas

NOTARY PUBLIC STATE OF TEXAS

CARRIE REED
My Commission Expires
October 4, 2015

E-mail attachment 01/27/21

SDI

SDI Survey Report

Company:	OCCIDENTAL PERMIAN LTD.	Local Co-ordinate Reference:	Well Lusk "28" West Federal Com #1H
Project:	Lusk Bone Spring	TVD Reference:	Mean Sea Level (System)
Site:	Lea County, NM (Grid North)	MD Reference:	Mean Sea Level (System)
Well:	Lusk "28" West Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #321213-MPH-M-1319	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #321213-MPH-M-1319	Database:	EDM-Regulatory

Project Lusk Bone Spring

Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Lea County, NM (Grid North)

Site Position:		Northing:	590,853.87 usft	Latitude:	32° 37' 23.247 N
From:	Lat/Long	Easting:	671,588.95 usft	Longitude:	103° 46' 33.646 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.30 °

Well Lusk "28" West Federal Com #1H, Horizontal

Well Position	+N/-S	0.0 usft	Northing:	592,568.40 usft	Latitude:	32° 37' 40.110 N
	+E/-W	0.0 usft	Easting:	673,562.45 usft	Longitude:	103° 46' 10.465 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	0.0 usft

Wellbore VH - Job #321213-MPH-M-1319

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/25/2013	7.40	60.46	48,610

Design VH - Job #321213-MPH-M-1319

Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	1.50

Survey Program Date 3/13/2014

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
1,114.0	13,366.0	MWD - Tie-In @ 939' by MS (VH - Job #32	Keeper	Keeper Surface Readout

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Azimuth (°)	Closure Distance (usft)
939.0	1.53	171.10	938.9	-11.2	0.8	175.97	11.2
1,114.0	1.85	157.48	1,113.8	-16.1	2.2	172.12	16.3
1,145.0	1.58	144.21	1,144.8	-16.9	2.7	171.03	17.2
1,239.0	0.88	122.58	1,238.8	-18.4	4.0	167.60	18.8
1,333.0	1.06	127.77	1,332.8	-19.3	5.3	164.55	20.0
1,428.0	0.62	131.37	1,427.8	-20.2	6.4	162.36	21.2
1,522.0	0.97	132.43	1,521.8	-21.1	7.4	160.67	22.3
1,616.0	0.70	132.08	1,615.8	-22.0	8.4	159.09	23.5
1,710.0	0.35	89.54	1,709.8	-22.4	9.1	157.83	24.1
1,805.0	0.44	79.52	1,804.7	-22.3	9.8	156.35	24.3
1,899.0	0.62	90.06	1,898.7	-22.2	10.6	154.45	24.6
1,993.0	0.62	102.46	1,992.7	-22.3	11.6	152.50	25.2

SDI

SDI Survey Report

Company:	OCCIDENTAL PERMIAN LTD.	Local Co-ordinate Reference:	Well Lusk "28" West Federal Com #1H
Project:	Lusk Bone Spring	TVD Reference:	Mean Sea Level (System)
Site:	Lea County, NM (Grid North)	MD Reference:	Mean Sea Level (System)
Well:	Lusk "28" West Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #321213-MPH-M-1319	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #321213-MPH-M-1319	Database:	EDM-Regulatory

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Azimuth (°)	Closure Distance (usft)
2,087.0	0.88	81.54	2,086.7	-22.3	12.8	150.11	25.8
2,182.0	0.97	77.41	2,181.7	-22.1	14.3	146.96	26.3
2,276.0	0.70	88.04	2,275.7	-21.9	15.7	144.33	26.9
2,370.0	0.79	67.92	2,369.7	-21.6	16.9	142.01	27.4
2,465.0	0.62	74.42	2,464.7	-21.2	18.0	139.73	27.8
2,559.0	0.79	101.23	2,558.7	-21.2	19.1	138.00	28.5
2,653.0	0.35	85.41	2,652.7	-21.3	20.0	136.79	29.2
2,748.0	0.44	109.05	2,747.7	-21.4	20.7	136.03	29.7
2,842.0	0.79	104.39	2,841.7	-21.7	21.6	135.08	30.6
2,897.0	0.79	103.07	2,896.7	-21.9	22.4	134.36	31.3
3,033.0	0.79	102.63	3,032.7	-22.3	24.2	132.65	32.9
3,128.0	0.88	106.94	3,127.6	-22.6	25.5	131.57	34.1
3,222.0	0.97	102.19	3,221.6	-23.0	27.0	130.45	35.5
3,316.0	0.79	107.03	3,315.6	-23.4	28.4	129.47	36.8
3,410.0	1.41	99.91	3,409.6	-23.8	30.2	128.25	38.4
3,505.0	0.97	25.20	3,504.6	-23.2	31.6	126.29	39.3
3,662.0	0.88	3.76	3,661.6	-20.8	32.3	122.83	38.4
3,788.0	1.03	358.88	3,787.6	-18.7	32.3	120.09	37.4
3,882.0	1.08	335.89	3,881.5	-17.1	32.0	118.13	36.2
3,976.0	1.06	341.87	3,975.5	-15.4	31.3	116.25	34.9
4,086.0	1.41	324.82	4,085.5	-13.4	30.2	113.87	33.0
4,165.0	0.43	314.11	4,164.5	-12.4	29.5	112.79	31.9
4,259.0	0.70	169.52	4,258.5	-12.7	29.3	113.42	31.9
4,352.0	0.97	168.38	4,351.5	-14.0	29.6	115.37	32.7
4,446.0	0.79	159.76	4,445.5	-15.4	29.9	117.23	33.7
4,540.0	0.70	162.22	4,539.5	-16.6	30.3	118.63	34.6
4,635.0	0.62	161.96	4,634.4	-17.6	30.7	119.85	35.4
4,729.0	0.53	169.34	4,728.4	-18.5	30.9	120.91	36.0
4,824.0	0.35	173.12	4,823.4	-19.2	31.0	121.79	36.5
4,918.0	0.35	175.41	4,917.4	-19.8	31.1	122.50	36.9
5,012.0	0.26	180.33	5,011.4	-20.3	31.1	123.13	37.2
5,106.0	0.62	148.86	5,105.4	-21.0	31.4	123.74	37.7
5,200.0	0.53	129.35	5,199.4	-21.7	32.0	124.12	38.6
5,295.0	0.53	123.99	5,294.4	-22.2	32.7	124.18	39.5
5,389.0	0.53	128.39	5,388.4	-22.7	33.4	124.22	40.4
5,484.0	0.44	133.83	5,483.4	-23.2	34.0	124.35	41.2
5,578.0	0.62	297.40	5,577.4	-23.2	33.8	124.52	41.0
5,672.0	0.97	271.47	5,671.4	-23.0	32.6	125.23	39.9
5,767.0	1.23	256.79	5,766.4	-23.2	30.8	127.03	38.5
5,861.0	1.76	253.28	5,860.4	-23.8	28.4	130.03	37.1
5,955.0	0.88	269.36	5,954.3	-24.3	26.3	132.72	35.8
6,049.0	1.06	284.30	6,048.3	-24.1	24.7	134.23	34.5
6,144.0	0.97	284.04	6,143.3	-23.7	23.1	135.69	33.1
6,238.0	0.88	274.72	6,237.3	-23.4	21.6	137.29	31.8

E-mail attachment 01/27/21

SDI

SDI Survey Report

Company:	OCCIDENTAL PERMIAN LTD.	Local Co-ordinate Reference:	Well Lusk "28" West Federal Com #1H
Project:	Lusk Bone Spring	TVD Reference:	Mean Sea Level (System)
Site:	Lea County, NM (Grid North)	MD Reference:	Mean Sea Level (System)
Well:	Lusk "28" West Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #321213-MPH-M-1319	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #321213-MPH-M-1319	Database:	EDM-Regulatory

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Azimuth (°)	Closure Distance (usft)
6,332.0	1.06	279.03	6,331.3	-23.2	20.0	139.21	30.6
6,426.0	1.06	275.34	6,425.3	-23.0	18.3	141.48	29.4
6,520.0	0.97	261.98	6,519.2	-23.0	16.6	144.13	28.4
6,615.0	1.14	271.21	6,614.2	-23.1	14.9	147.18	27.5
6,709.0	1.14	257.32	6,708.2	-23.3	13.1	150.73	26.7
6,804.0	1.14	264.79	6,803.2	-23.6	11.2	154.62	26.1
6,898.0	1.14	248.27	6,897.2	-24.0	9.4	158.64	25.8
6,992.0	1.23	255.04	6,991.2	-24.6	7.5	162.96	25.8
7,086.0	1.23	243.70	7,085.1	-25.3	5.7	167.38	26.0
7,180.0	1.49	251.70	7,179.1	-26.2	3.6	172.15	26.4
7,275.0	1.76	250.11	7,274.1	-27.0	1.1	177.75	27.1
7,369.0	0.44	225.24	7,368.0	-27.8	-0.6	181.14	27.8
7,463.0	0.53	213.99	7,462.0	-28.4	-1.1	182.12	28.4
7,557.0	0.97	216.28	7,556.0	-29.4	-1.8	183.44	29.5
7,652.0	1.14	237.37	7,651.0	-30.6	-3.0	185.68	30.7
7,746.0	1.85	255.83	7,745.0	-31.4	-5.3	189.56	31.9
7,840.0	0.35	337.92	7,839.0	-31.5	-6.9	192.30	32.3
7,935.0	1.41	316.56	7,934.0	-30.4	-7.8	194.36	31.4
8,060.0	2.02	304.61	8,058.9	-28.1	-10.7	200.80	30.0
8,123.0	2.02	313.22	8,121.9	-26.7	-12.4	204.90	29.4
8,218.0	1.76	323.33	8,216.8	-24.4	-14.5	210.72	28.3
8,312.0	1.85	315.42	8,310.8	-22.1	-16.4	216.56	27.5
8,407.0	0.88	355.32	8,405.7	-20.3	-17.5	220.83	26.8
8,501.0	1.14	33.55	8,499.7	-18.8	-17.1	222.25	25.4
8,596.0	1.06	28.19	8,594.7	-17.2	-16.1	223.12	23.6
8,645.0	0.79	17.03	8,643.7	-16.5	-15.8	223.78	22.9
8,671.0	4.22	80.75	8,669.7	-16.2	-14.8	222.49	22.0
8,702.0	9.23	80.75	8,700.5	-15.6	-11.2	215.79	19.2
8,733.0	10.64	81.28	8,731.0	-14.8	-6.0	201.99	15.9
8,764.0	10.99	77.23	8,761.4	-13.7	-0.3	181.07	13.7
8,796.0	15.48	67.21	8,792.6	-11.4	6.7	149.61	13.2
8,827.0	19.79	62.73	8,822.1	-7.3	15.1	115.88	16.8
8,859.0	23.39	59.39	8,851.9	-1.6	25.4	93.66	25.5
8,890.0	26.20	54.21	8,880.0	5.5	36.3	81.36	36.7
8,922.0	27.61	45.77	8,908.6	14.8	47.3	72.62	49.6
8,953.0	28.84	38.12	8,935.9	25.7	57.1	65.75	62.6
8,984.0	30.16	30.04	8,962.9	38.3	65.6	59.70	76.0
9,016.0	31.48	21.07	8,990.4	53.1	72.6	53.83	90.0
9,047.0	33.41	12.98	9,016.5	69.0	77.5	48.32	103.7
9,078.0	35.14	7.01	9,042.2	86.2	80.5	43.05	117.9
9,110.0	36.93	2.61	9,068.0	104.9	82.0	38.03	133.2
9,141.0	39.04	0.59	9,092.5	124.0	82.6	33.66	149.0
9,172.0	41.86	359.80	9,116.1	144.1	82.6	29.83	166.1
9,204.0	44.05	0.59	9,139.5	165.9	82.7	26.50	185.4

SDI

SDI Survey Report

Company:	OCCIDENTAL PERMIAN LTD.	Local Co-ordinate Reference:	Well Lusk "28" West Federal Com #1H
Project:	Lusk Bone Spring	TVD Reference:	Mean Sea Level (System)
Site:	Lea County, NM (Grid North)	MD Reference:	Mean Sea Level (System)
Well:	Lusk "28" West Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #321213-MRH-M-1319	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #321213-MRH-M-1319	Database:	EDM-Regulatory

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Azimuth (°)	Closure Distance (usft)
9,235.0	45.11	1.65	9,161.6	187.6	83.1	23.90	205.2
9,267.0	45.64	1.73	9,184.0	210.4	83.8	21.72	226.5
9,298.0	47.48	2.35	9,205.4	232.9	84.6	19.97	247.8
9,329.0	48.98	2.70	9,226.0	256.0	85.6	18.49	269.9
9,361.0	50.01	4.07	9,246.8	280.3	87.1	17.26	293.5
9,392.0	50.46	8.43	9,266.6	304.0	89.7	16.44	316.9
9,424.0	52.14	9.73	9,286.6	328.6	93.6	15.90	341.7
9,455.0	55.40	7.98	9,305.0	353.3	97.4	15.42	366.5
9,487.0	58.74	6.83	9,322.4	380.0	100.9	14.87	393.1
9,518.0	60.59	6.22	9,338.0	406.5	103.9	14.34	419.6
9,550.0	62.52	6.22	9,353.2	434.5	107.0	13.83	447.5
9,581.0	64.89	5.60	9,367.0	462.2	109.9	13.37	475.0
9,612.0	67.27	5.07	9,379.5	490.4	112.5	12.92	503.1
9,644.0	68.94	3.76	9,391.5	520.0	114.8	12.45	532.5
9,676.0	70.52	2.53	9,402.6	549.9	116.4	11.95	562.1
9,707.0	72.11	2.26	9,412.5	579.3	117.6	11.48	591.1
9,739.0	73.42	2.09	9,422.0	609.8	118.8	11.02	621.3
9,770.0	75.40	1.51	9,430.3	639.7	119.7	10.60	650.8
9,801.0	77.27	1.00	9,437.6	669.8	120.4	10.19	680.5
9,833.0	80.20	0.94	9,443.9	701.2	120.9	9.79	711.5
9,853.0	82.04	0.33	9,447.0	720.9	121.1	9.54	731.0
9,884.0	85.12	358.92	9,450.4	751.7	120.9	9.14	761.4
9,916.0	87.49	359.27	9,452.5	783.6	120.4	8.74	792.8
9,947.0	88.81	359.01	9,453.5	814.6	120.0	8.38	823.4
9,979.0	90.04	359.45	9,453.8	846.6	119.5	8.04	855.0
10,010.0	91.10	0.15	9,453.5	877.6	119.4	7.75	885.7
10,104.0	94.97	1.21	9,448.5	971.5	120.5	7.07	978.9
10,199.0	94.70	0.59	9,440.5	1,066.1	122.0	6.53	1,073.1
10,293.0	92.42	1.10	9,434.7	1,159.9	123.4	6.07	1,166.5
10,387.0	93.21	0.94	9,430.1	1,253.8	125.1	5.70	1,260.0
10,482.0	91.28	1.47	9,426.4	1,348.7	127.1	5.38	1,354.7
10,576.0	92.68	1.03	9,423.1	1,442.6	129.1	5.12	1,448.4
10,670.0	91.19	2.09	9,419.9	1,536.5	131.7	4.90	1,542.1
10,766.0	92.68	1.56	9,416.7	1,632.4	134.8	4.72	1,637.9
10,861.0	91.28	1.56	9,413.4	1,727.3	137.3	4.55	1,732.8
10,956.0	91.54	2.61	9,411.1	1,822.2	140.8	4.42	1,827.6
11,052.0	91.54	2.61	9,408.5	1,918.1	145.2	4.33	1,923.6
11,148.0	93.39	0.68	9,404.4	2,013.9	147.9	4.20	2,019.4
11,242.0	92.59	0.42	9,399.5	2,107.8	148.8	4.04	2,113.1
11,336.0	91.36	0.59	9,396.2	2,201.7	149.6	3.89	2,206.8
11,430.0	91.10	0.33	9,394.2	2,295.7	150.4	3.75	2,300.6
11,525.0	92.42	0.15	9,391.3	2,390.7	150.8	3.61	2,395.4
11,619.0	91.10	0.77	9,388.4	2,484.6	151.6	3.49	2,489.2
11,714.0	91.19	1.03	9,386.5	2,579.6	153.0	3.40	2,584.1
11,809.0	92.68	1.91	9,383.3	2,674.5	155.5	3.33	2,679.0

SDI

SDI Survey Report

Company:	OCCIDENTAL PERMIAN LTD	Local Co-ordinate Reference:	Well Lusk "28" West Federal Com #1H
Project:	Lusk Bone Spring	TVD Reference:	Mean Sea Level (System)
Site:	Lea County, NM (Grid North)	MD Reference:	Mean Sea Level (System)
Well:	Lusk "28" West Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #321213-MPH-M-1319	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #321213-MPH-M-1319	Database:	EDM-Regulatory

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Azimuth (°)	Closure Distance (usft)
11,905.0	91.19	2.35	9,380.1	2,770.4	159.0	3.29	2,774.9
12,000.0	91.19	2.36	9,378.1	2,865.3	162.9	3.25	2,869.9
12,096.0	90.75	1.47	9,376.5	2,961.2	166.2	3.21	2,965.9
12,190.0	90.84	359.89	9,375.1	3,055.2	167.3	3.13	3,059.8
12,284.0	90.84	0.24	9,373.8	3,149.2	167.4	3.04	3,153.6
12,379.0	91.89	0.15	9,371.5	3,244.2	167.7	2.96	3,248.5
12,473.0	91.36	0.33	9,368.8	3,338.1	168.1	2.88	3,342.3
12,567.0	89.60	0.15	9,368.1	3,432.1	168.5	2.81	3,436.2
12,662.0	89.16	0.42	9,369.1	3,527.1	169.0	2.74	3,531.1
12,756.0	88.72	1.03	9,370.8	3,621.1	170.1	2.69	3,625.1
12,850.0	89.34	1.21	9,372.4	3,715.0	172.0	2.65	3,719.0
12,944.0	88.37	1.73	9,374.3	3,809.0	174.4	2.62	3,813.0
13,039.0	88.81	1.73	9,376.6	3,903.9	177.3	2.60	3,907.9
13,133.0	88.46	1.30	9,378.9	3,997.9	179.7	2.57	4,001.9
13,228.0	88.29	2.70	9,381.6	4,092.8	183.1	2.56	4,096.9
Last MWD Survey							
13,366.0	88.29	2.70	9,385.7	4,230.5	189.6	2.57	4,234.8
Projection to Bit							

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
13,228.0	9,381.6	4,092.8	183.1	Last MWD Survey
13,366.0	9,385.7	4,230.5	189.6	Projection to Bit

OXY Permian

E-mail attachment 01/27/21

Scientific Drilling

Azimuths to Grid North
True North: -0.30°
Magnetic North: 7.08°

Magnetic Field
Strength: 48576.5snT
Dip Angle: 60.46°
Date: 1/15/2014
Model: IGRF2010

To convert a Magnetic Direction to a Grid Direction, Add 7.09°
To convert a True Direction to a Grid Direction, Subtract 0.30°

KB @ 3585.80usft
Gr @ 3560.80

L28WFC 1H
Lea County, New Mexico
Northing: 591839.70
Easting: 673445.60
Side Track #1

WELL DETAILS L28WFC 1H
Ground Level: 3560.80

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	591839.70	673445.60	32.626	-103.770

SECTION DETAILS

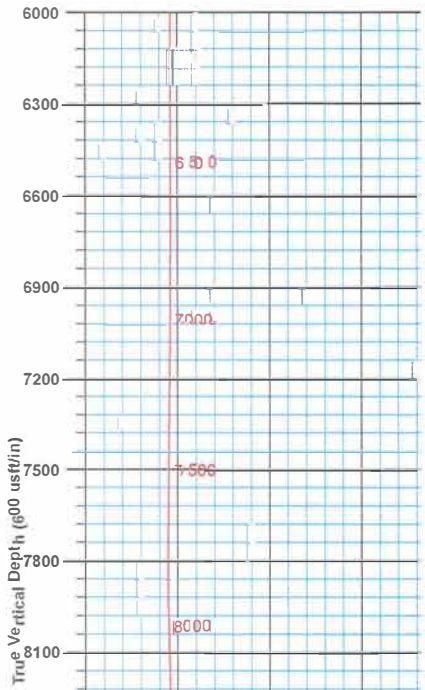
MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect	Target
9833.00	80.20	0.94	9443.89	701.16	120.92	0.00	0.00	705.35	
9888.00	86.06	0.94	9450.46	755.73	121.82	10.65	0.00	759.91	
9958.36	91.58	359.84	9451.91	826.05	122.30	8.00	-11.30	830.19	
10004.41	91.58	0.76	9450.64	872.08	122.54	2.00	89.88	876.20	
13433.14	91.58	0.76	9356.00	4299.20	168.00	0.00	0.00	4302.48	Rev BHL

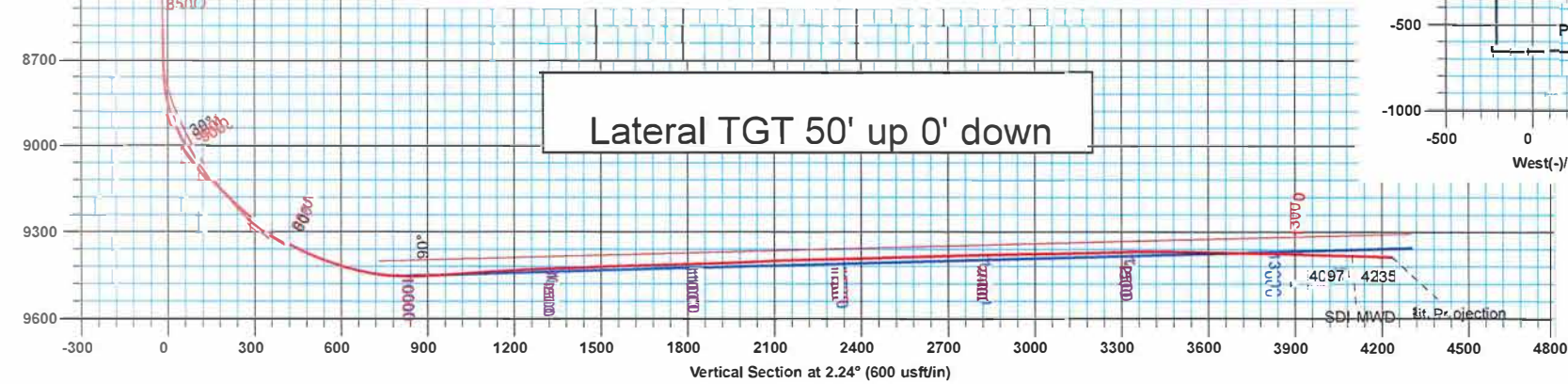
DESIGN TARGET DETAILS

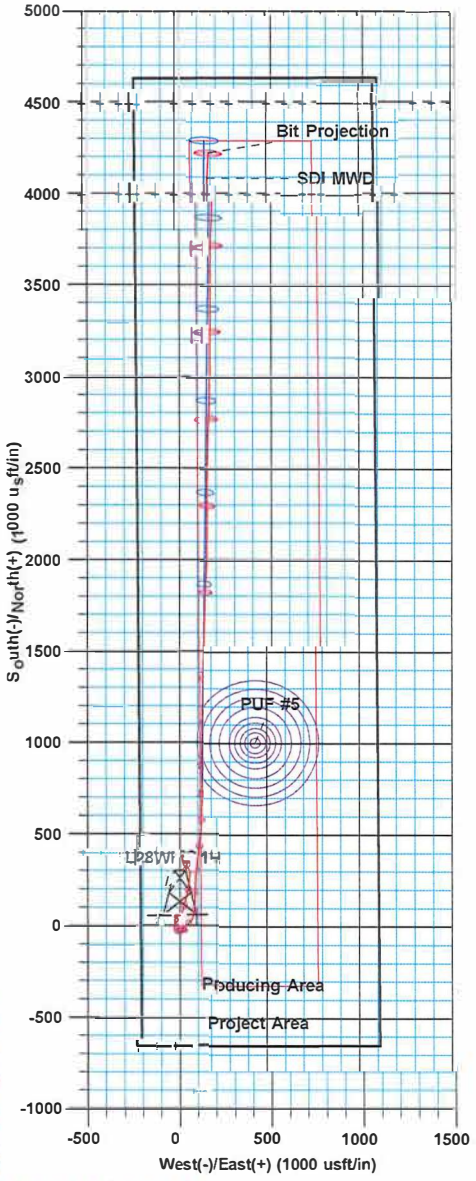
Name	TVD	+N/-S	+E/-W	Northing	Easting
Rev BHL	9356.00	4299.20	168.00	596138.90	673613.60

SITE DETAILS:
Lusk 28 West Fed Com 1H
Site Centre Northing: 591839.70
Easting: 673445.60
Positional Uncertainty: 0.00
Convergence: 0.30
Local North: Grid

PROJECT DETAILS:
Lea County, New Mexico
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level







Jody Barclay
6:49, January 27 2014

Scientific Drilling
2740 N. Highway 287
Decatur, TX 76234

E-mail attachment 01/27/21

Oper.: OXY USA, INC

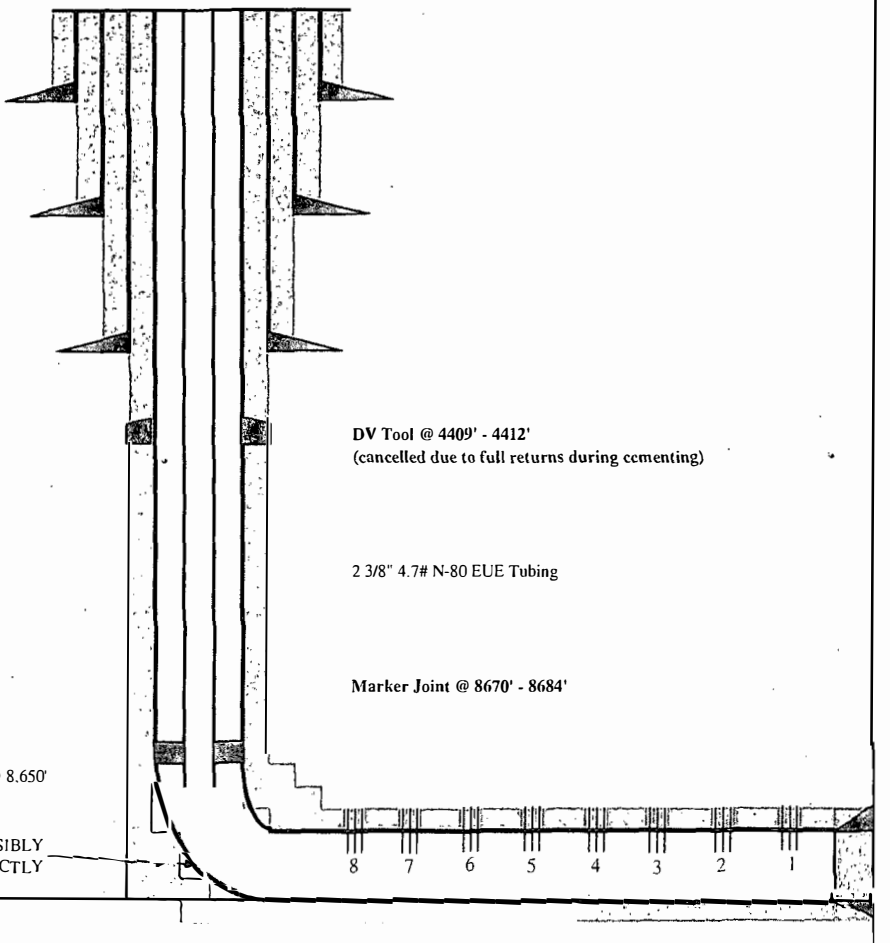
Well: Lusk 28 West FED COM #1H

API # 30-025-41257

Loc: 652' FSL 2425' FEL SEC 28, T19S, R32E

County/State: Lea County, NM

GL: 3560' KB =+25'



Formation Tops	
RUSTLER	861
TANSILL	2512
YATES	2640
7 RIVERS	2963
CHERRY CANYON	4379
SAN ANDRES	4575
DELAWARE	4785
BRUSHY CANYON	5816
BSGL	7332
1BSPG SS	8492
2BSPG Carb	8763
2BSPG SS	9010

TD = 13,366'

TVD = 9410'

PBTD = 13,291'

Perforations

9780, 9930, 10080, 10230, 10380, 10530, 10680, 10830, ,10980, 11130, 11280, 11430, 11580, 11730, 11880, 12030, 12180, 12330, 12480, 12630, 12780, 12930, 13080, 13230 (Total 240 holes, 6 spf, 60 deg phase, 0.42" hole diameter)

Fluid 29,106 gals 15# linear gel pre-pad; 248,472 gals 15# crosslinked gel pad; 998508 gals 15# crosslinked gel; 24,000 gals 15% HCl; 115,878 gals treated water

Proppant 198,370 lbs Ottawa 30/50 sand; 1,261,040 lbs Ottawa 20/40 sand; 983,280 lbs Hexion SiberPro p20/40

Lowe, Leonard, EMNRD

From: Mendiola, Jana Lyn A <Janalyn_Mendiola@oxy.com>
Sent: Wednesday, January 27, 2021 5:50 PM
To: Lowe, Leonard, EMNRD
Subject: [EXT] RE: NSL for Lusk 28 West Federal Com Well No. 1H - C-102 FTP
Attachments: Lusk28WestFedCom1H_Final Directional Survey.pdf

Here you go.

If you need anything else please let me know.

Thanks,
Jana Mendiola
Regulatory | Permian Resources-New Mexico
1600 Gehrig Dr. Midland, TX 79706 | P.O. Box 50250 Midland, TX 79710
Direct: 432.685.5936

From: Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Sent: Wednesday, January 27, 2021 4:29 PM
To: Mendiola, Jana Lyn A <Janalyn_Mendiola@oxy.com>
Subject: [EXTERNAL] RE: NSL for Lusk 28 West Federal Com Well No. 1H - C-102 FTP

Thank you

Leonard R. Lowe
Engineering Bureau
OCD - EMNRD
5200 Oakland Ave. NE
Albuquerque, N.M. 87113
C: 505-930-6717
http://www.emnrd.state.nm.us/ocd/

From: Mendiola, Jana Lyn A <Janalyn_Mendiola@oxy.com>
Sent: Wednesday, January 27, 2021 3:28 PM
To: Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Subject: [EXT] Re: NSL for Lusk 28 West Federal Com Well No. 1H - C-102 FTP

Ok will send your way as soon as I get home.

Get Outlook for iOS

From: Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Sent: Wednesday, January 27, 2021 5:26:06 PM
To: Mendiola, Jana Lyn A <Janalyn_Mendiola@oxy.com>
Subject: [EXTERNAL] RE: NSL for Lusk 28 West Federal Com Well No. 1H - C-102 FTP

WARNING - This message is from an EXTERNAL SENDER - be CAUTIOUS, particularly with links and attachments.

No, you don't need to call. I'll wait for that survey. Thank you.

Leonard R. Lowe
Engineering Bureau
OCD - EMNRD
5200 Oakland Ave. NE
Albuquerque, N.M. 87113
C: 505-930-6717
http://www.emnrd.state.nm.us/ocd/

From: Mendiola, Jana Lyn A <Janalyn_Mendiola@oxy.com>
Sent: Wednesday, January 27, 2021 3:21 PM
To: Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Subject: [EXT] Re: NSL for Lusk 28 West Federal Com Well No. 1H - C-102 FTP

Hi Leonard,

I'm not at my computer right now but will send you a copy of the final directional survey and plot if you need it. Did you still need me to call you?

Get Outlook for iOS

From: Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Sent: Wednesday, January 27, 2021 4:37:58 PM
To: Mendiola, Jana Lyn A <Janalyn_Mendiola@oxy.com>
Subject: [EXTERNAL] RE: NSL for Lusk 28 West Federal Com Well No. 1H - C-102 FTP

WARNING - This message is from an EXTERNAL SENDER - be CAUTIOUS, particularly with links and attachments.

Can you submit a Geographical drill survey for this well?

Leonard R. Lowe
Engineering Bureau
OCD - EMNRD
5200 Oakland Ave. NE
Albuquerque, N.M. 87113
C: 505-930-6717
http://www.emnrd.state.nm.us/ocd/

From: Mendiola, Jana Lyn A <Janalyn_Mendiola@oxy.com>
Sent: Wednesday, January 27, 2021 10:39 AM
To: Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Subject: [EXT] RE: NSL for Lusk 28 West Federal Com Well No. 1H - C-102 FTP

Hi Leonard,

My apologies for not showing the FTP footages within the correct Unit on the C-102 plat. Attached above is the revised C-102 showing the FTP footages at 796' FSL 2342' FEL, Unit O Sec 28 T19S R32E.

This well is currently producing in the same pool (Lusk; Bone Spring, South).

We are planning on adding perfs around the heel of this well and we'd be encroaching on the FTP portion.

If you need any other additional information please let me know.

Thanks,
Jana Mendiola
Regulatory | Permian Resources-New Mexico
1600 Gehrig Dr. Midland, TX 79706 | P.O. Box 50250 Midland, TX 79710
Direct: 432.685.5936

From: Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Sent: Wednesday, January 27, 2021 10:51 AM
To: Mendiola, Jana Lyn A <Janalyn_Mendiola@oxy.com>
Subject: [EXTERNAL] NSL for Lusk 28 West Federal Com Well No. 1H - C-102 FTP
Importance: High

Jana Mendiola,

Good morning.

In review of your submitted NSL for the above subjected Well.

There appears to be some confusing information pertaining to your stated First Take Point (FTP)

FTP is 796 feet FSL & 2342 FEL

The submitted C-102 shows that the FTP is located in Unit "J" and NOT in Unit "O" as stated within your letter.

The distance of the FTP show it to be in Unit O.

Is this well already producing from this pool?

Please clarify.

Leonard R. Lowe
Engineering Bureau
OCD - EMNRD
5200 Oakland Ave. NE
Albuquerque, N.M. 87113
C: 505-930-6717
http://www.emnrd.state.nm.us/ocd/