

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

APR 28 2014

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

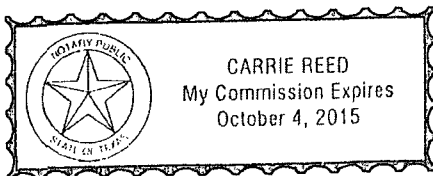
This survey is correct to the best of my knowledge and is supported by actual field data.

[Signature]

Notarized this date 13th of March, 2014.

[Signature]

Notary Signature
County of Midland
State of Texas



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

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	1.06	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	

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 Bore 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 (azi/muth) (°)	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

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
12,098.0	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		Comment
		+N-S (usft)	+E-W (usft)	
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



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

+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	Dleg	TFace	VSec	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	10.55	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

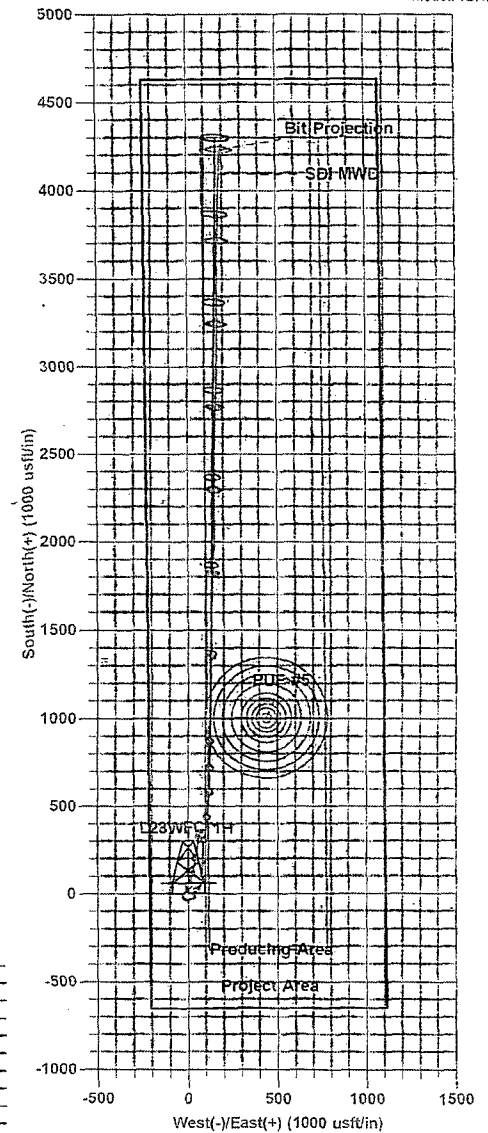
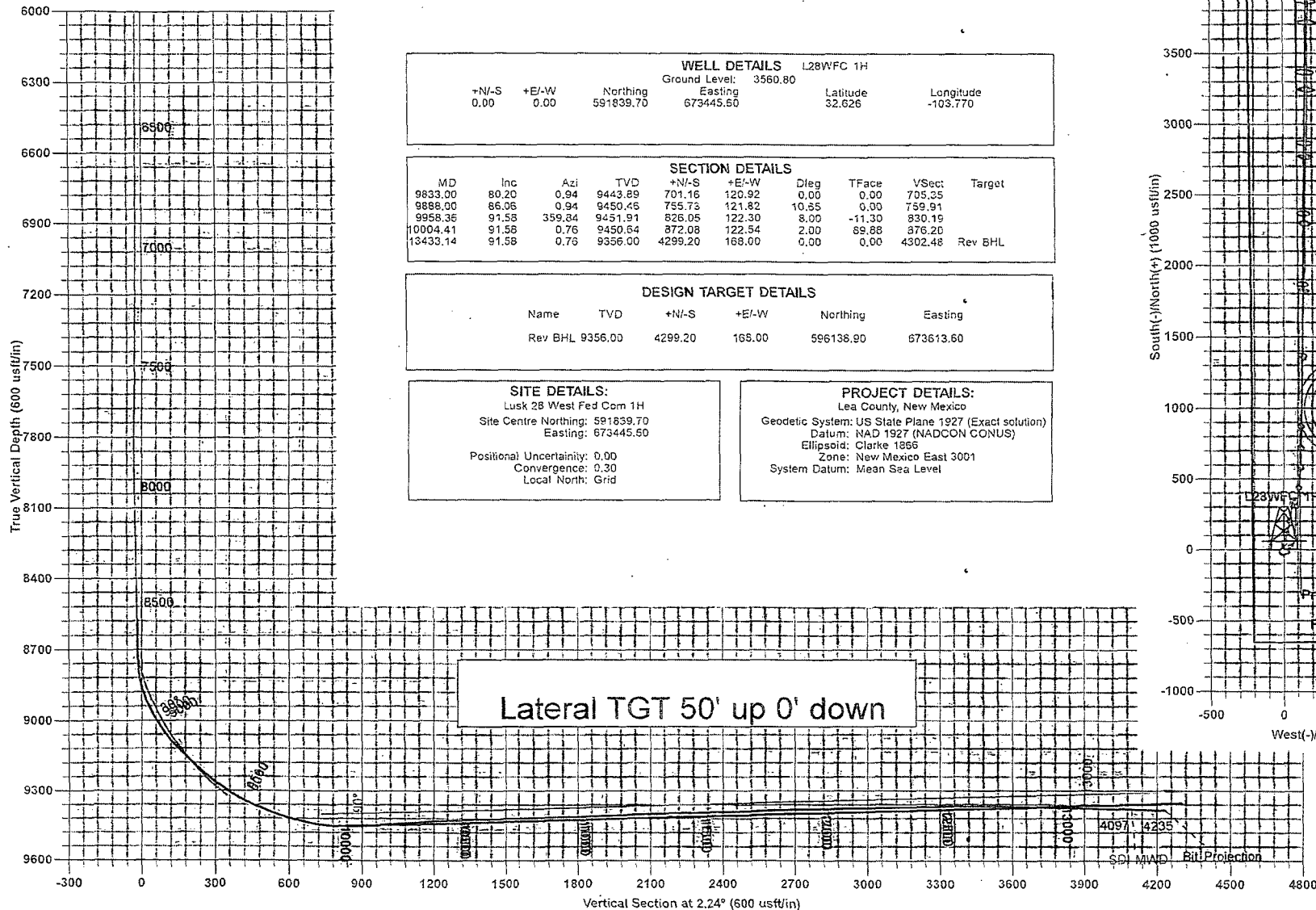
Name	TVD	+N/-S	+E/-W	Northing	Easting
Rev BHL 9356.00	4299.20	168.00	596138.90	673613.60	

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



Magnetic Field
Strength: 48576.55nT
Dip Angle: 50.48°
Date: 1/15/2014
Model: IGRF2010

Jody Barclay
6:49, January 27 2014

Scientific Drilling
2740 N. Highway 287
Decatur, TX 76234



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'

16" 75# J-55 BTC @
1006 W/ CMT CIRC

11 3/4" 47# J-55 BTC
CSG @ 2963' W/
CMT CIRC

8 5/8" 32# J-55 LTC CSG @ 4306', TOC = 88'

DV Tool @ 4409' - 4412'
(cancelled due to full returns during cementing)

2 3/8" 4.7# N-80 EUE Tubing

Marker Joint @ 8670' - 8684'

KOP @ 8,650'

CMT IN CURVE POSSIBLY
NOT SHOWN CORRECTLY

5.5" 17# P-110 BTC CSG @ 13,357'

ID = 4.892" - DID = 4.767" - BURST = 10640 PSI - COLAPSE = 7460 PSI

Formation Tops

RUSTLER	851
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 SiberProp 20/40