



30-015-41924

COG Operating, LLC

Eddy County, NM (NAD 27)

Sec 17, T26S, R28E

MYOX 8 State #4H

Wellbore #1

Design: Wellbore #1

NM OIL CONSERVATION

ARTESIA DISTRICT

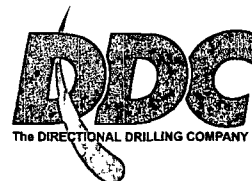
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Survey Report - Geographic

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Survey Report - Geographic



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well MYOX 8 State #4H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	Well @ 3140.0usft
Site:	Sec 17, T26S, R28E	MD Reference:	Well @ 3140.0usft
Well:	MYOX 8 State #4H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM Compass

Project	Eddy County, NM (NAD 27)		
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	Sec 17, T26S, R28E		
Site Position:		Northing:	381,689.10 usft
From:	Map	Easting:	570,092.60 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 2' 57.035 N
		Longitude:	104° 6' 25.573 W
		Grid Convergence:	0.12 °

Well	MYOX 8 State #4H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty:	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 2' 56.901 N
		Longitude:	104° 6' 52.602 W
		Ground Level:	3,114.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	8/1/2014	7.44
			Dip Angle
			(°)
			59.85
			Field Strength
			(nT)
			48,141

Design	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			356.95

Survey Program	Date 9/3/2014		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
158.0	12,898.0	MWD (Wellbore #1)	MWD default
			MWD - Standard

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map			
Depth	(°)	(°)	Depth	(usft)	(usft)	Northing	Easting	Latitude	Longitude	
(usft)			(usft)			(usft)	(usft)			
0.0	0.00	0.00	0.0	0.0	0.0	381,670.80	567,766.40	32° 2' 56.901 N	104° 6' 52.602 W	
158.0	0.50	312.00	158.0	0.5	-0.5	381,671.26	567,765.89	32° 2' 56.906 N	104° 6' 52.608 W	
FIRST MWD SURVEY @ 158' MD / 158' TVD										
252.0	1.00	262.50	252.0	0.6	-1.6	381,671.43	567,764.77	32° 2' 56.908 N	104° 6' 52.621 W	
296.0	0.80	246.90	296.0	0.5	-2.3	381,671.26	567,764.11	32° 2' 56.906 N	104° 6' 52.629 W	
439.0	1.30	244.80	439.0	-0.6	-4.7	381,670.17	567,761.72	32° 2' 56.895 N	104° 6' 52.657 W	
621.0	0.80	229.20	620.9	-2.3	-7.5	381,668.46	567,758.89	32° 2' 56.878 N	104° 6' 52.690 W	
804.0	0.70	217.90	803.9	-4.1	-9.2	381,666.75	567,757.24	32° 2' 56.862 N	104° 6' 52.709 W	
985.0	1.10	217.60	984.9	-6.3	-10.9	381,664.50	567,755.50	32° 2' 56.839 N	104° 6' 52.729 W	
1,166.0	2.50	106.10	1,165.8	-8.8	-8.2	381,662.03	567,758.23	32° 2' 56.815 N	104° 6' 52.698 W	
1,351.0	1.80	128.60	1,350.7	-11.7	-2.0	381,659.10	567,764.38	32° 2' 56.786 N	104° 6' 52.626 W	
1,540.0	0.30	219.00	1,539.7	-13.9	0.0	381,656.86	567,766.39	32° 2' 56.763 N	104° 6' 52.603 W	



Survey Report - Geographic



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Site:	Sec 17, T26S, R28E	MD Reference:	Well @ 3140.0usft
Well:	MYOX 8 State #4H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM Compass

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,728.0	1.00	151.30	1,727.7	-15.8	0.5	381,655.04	567,766.87	32° 2' 56.745 N	104° 6' 52.597 W
1,917.0	0.50	90.10	1,916.6	-17.2	2.1	381,653.59	567,768.48	32° 2' 56.731 N	104° 6' 52.579 W
2,106.0	1.20	80.10	2,105.6	-16.9	4.9	381,653.93	567,771.26	32° 2' 56.734 N	104° 6' 52.546 W
2,294.0	0.30	287.20	2,293.6	-16.4	6.3	381,654.41	567,772.73	32° 2' 56.739 N	104° 6' 52.529 W
2,384.0	0.80	310.50	2,383.6	-15.9	5.6	381,654.89	567,772.02	32° 2' 56.744 N	104° 6' 52.538 W
2,555.0	1.00	309.50	2,554.6	-14.2	3.6	381,656.61	567,769.97	32° 2' 56.761 N	104° 6' 52.561 W
2,744.0	0.90	299.10	2,743.6	-12.4	1.0	381,658.39	567,767.40	32° 2' 56.779 N	104° 6' 52.591 W
2,932.0	0.90	308.40	2,931.5	-10.8	-1.5	381,660.02	567,764.95	32° 2' 56.795 N	104° 6' 52.620 W
3,121.0	1.10	300.00	3,120.5	-8.9	-4.2	381,661.85	567,762.21	32° 2' 56.813 N	104° 6' 52.651 W
3,310.0	1.00	286.50	3,309.5	-7.6	-7.3	381,663.23	567,759.06	32° 2' 56.827 N	104° 6' 52.688 W
3,499.0	1.00	281.50	3,498.4	-6.8	-10.5	381,664.02	567,755.86	32° 2' 56.835 N	104° 6' 52.725 W
3,689.0	0.80	290.50	3,688.4	-6.0	-13.4	381,664.82	567,753.00	32° 2' 56.842 N	104° 6' 52.758 W
3,878.0	1.00	289.60	3,877.4	-5.0	-16.2	381,665.83	567,750.21	32° 2' 56.853 N	104° 6' 52.791 W
4,067.0	0.90	280.70	4,066.4	-4.1	-19.2	381,666.66	567,747.20	32° 2' 56.861 N	104° 6' 52.826 W
4,256.0	0.70	269.10	4,255.4	-3.9	-21.8	381,666.92	567,744.58	32° 2' 56.863 N	104° 6' 52.856 W
4,445.0	1.10	269.40	4,444.3	-3.9	-24.8	381,666.88	567,741.61	32° 2' 56.863 N	104° 6' 52.891 W
4,635.0	0.30	320.60	4,634.3	-3.6	-26.9	381,667.25	567,739.47	32° 2' 56.867 N	104° 6' 52.915 W
4,824.0	0.30	219.30	4,823.3	-3.6	-27.6	381,667.25	567,738.85	32° 2' 56.867 N	104° 6' 52.923 W
5,013.0	0.50	200.90	5,012.3	-4.7	-28.2	381,666.09	567,738.24	32° 2' 56.855 N	104° 6' 52.930 W
5,202.0	0.90	135.30	5,201.3	-6.5	-27.4	381,664.27	567,738.99	32° 2' 56.837 N	104° 6' 52.921 W
5,391.0	0.70	106.30	5,390.3	-7.9	-25.3	381,662.89	567,741.14	32° 2' 56.824 N	104° 6' 52.896 W
5,581.0	0.80	107.30	5,580.3	-8.6	-22.9	381,662.17	567,743.52	32° 2' 56.816 N	104° 6' 52.869 W
5,770.0	0.90	142.90	5,769.2	-10.2	-20.7	381,660.59	567,745.68	32° 2' 56.801 N	104° 6' 52.844 W
5,960.0	0.90	166.80	5,959.2	-12.8	-19.5	381,657.95	567,746.92	32° 2' 56.775 N	104° 6' 52.829 W
6,149.0	0.80	177.30	6,148.2	-15.6	-19.1	381,655.19	567,747.32	32° 2' 56.747 N	104° 6' 52.825 W
6,339.0	0.30	292.80	6,338.2	-16.7	-19.5	381,654.05	567,746.92	32° 2' 56.736 N	104° 6' 52.829 W
6,528.0	1.00	252.50	6,527.2	-17.0	-21.5	381,653.75	567,744.89	32° 2' 56.733 N	104° 6' 52.853 W
6,718.0	1.60	266.10	6,717.1	-17.7	-25.7	381,653.07	567,740.67	32° 2' 56.726 N	104° 6' 52.902 W
6,906.0	1.90	322.00	6,905.1	-15.5	-30.3	381,655.35	567,736.13	32° 2' 56.749 N	104° 6' 52.955 W
7,095.0	1.60	346.90	7,094.0	-10.4	-32.8	381,660.39	567,733.60	32° 2' 56.799 N	104° 6' 52.984 W
7,284.0	0.80	341.70	7,282.9	-6.6	-33.8	381,664.21	567,732.59	32° 2' 56.837 N	104° 6' 52.996 W
7,375.0	0.60	284.20	7,373.9	-5.9	-34.5	381,664.93	567,731.93	32° 2' 56.844 N	104° 6' 53.003 W
7,411.0	1.10	289.10	7,409.9	-5.7	-35.0	381,665.09	567,731.42	32° 2' 56.846 N	104° 6' 53.009 W
7,442.0	3.30	319.90	7,440.9	-4.9	-35.8	381,665.87	567,730.56	32° 2' 56.853 N	104° 6' 53.019 W
7,474.0	6.90	329.00	7,472.8	-2.6	-37.4	381,668.22	567,728.98	32° 2' 56.877 N	104° 6' 53.037 W
7,505.0	10.00	340.30	7,503.4	1.6	-39.3	381,672.35	567,727.11	32° 2' 56.918 N	104° 6' 53.059 W
7,536.0	13.20	346.60	7,533.8	7.5	-41.0	381,678.33	567,725.38	32° 2' 56.977 N	104° 6' 53.079 W
7,568.0	16.50	349.20	7,564.7	15.6	-42.7	381,686.35	567,723.69	32° 2' 57.056 N	104° 6' 53.098 W
7,599.0	20.70	350.40	7,594.1	25.3	-44.5	381,696.08	567,721.95	32° 2' 57.153 N	104° 6' 53.118 W
7,630.0	24.00	350.60	7,622.8	36.9	-46.4	381,707.71	567,720.00	32° 2' 57.268 N	104° 6' 53.141 W
7,662.0	27.60	353.10	7,651.6	50.7	-48.4	381,721.49	567,718.05	32° 2' 57.404 N	104° 6' 53.163 W
7,693.0	30.90	354.70	7,678.6	65.8	-50.0	381,736.55	567,716.45	32° 2' 57.553 N	104° 6' 53.181 W
7,724.0	34.20	355.20	7,704.7	82.4	-51.4	381,753.16	567,714.98	32° 2' 57.718 N	104° 6' 53.198 W
7,756.0	37.40	355.70	7,730.7	101.0	-52.9	381,771.82	567,713.50	32° 2' 57.902 N	104° 6' 53.215 W
7,787.0	41.30	355.50	7,754.7	120.6	-54.4	381,791.42	567,711.99	32° 2' 58.096 N	104° 6' 53.232 W
7,819.0	44.10	355.70	7,778.2	142.3	-56.1	381,813.05	567,710.33	32° 2' 58.310 N	104° 6' 53.251 W
7,850.0	46.50	355.70	7,800.0	164.2	-57.7	381,835.02	567,708.68	32° 2' 58.528 N	104° 6' 53.269 W
7,881.0	48.90	355.90	7,820.8	187.1	-59.4	381,857.89	567,707.00	32° 2' 58.754 N	104° 6' 53.288 W
7,884.1	49.15	355.92	7,822.9	189.4	-59.6	381,860.22	567,706.83	32° 2' 58.777 N	104° 6' 53.290 W
CROSSED LEASE LINE @ 7884' MD / 7823' TVD									
7,913.0	51.50	356.10	7,841.3	211.6	-61.1	381,882.41	567,705.29	32° 2' 58.997 N	104° 6' 53.308 W
7,944.0	53.50	356.30	7,860.2	236.2	-62.7	381,906.95	567,703.66	32° 2' 59.240 N	104° 6' 53.326 W
7,975.0	56.70	355.90	7,877.9	261.5	-64.5	381,932.31	567,701.93	32° 2' 59.491 N	104° 6' 53.345 W
8,007.0	60.90	355.40	7,894.5	288.8	-66.6	381,959.60	567,699.85	32° 2' 59.761 N	104° 6' 53.369 W
8,038.0	64.00	355.20	7,908.8	316.2	-68.8	381,986.99	567,697.60	32° 3' 0.032 N	104° 6' 53.395 W



Survey Report - Geographic



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well MYOX 8 State #4H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	Well @ 3140.0usft
Site:	Sec 17, T26S, R28E	MD Reference:	Well @ 3140.0usft
Well:	MYOX 8 State #4H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM Compass

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,069.0	66.30	355.20	7,921.9	344.2	-71.2	382,015.02	567,695.24	32° 3' 0.309 N	104° 6' 53.421 W
8,101.0	67.50	355.20	7,934.4	373.5	-73.6	382,044.35	567,692.78	32° 3' 0.600 N	104° 6' 53.449 W
8,132.0	68.90	355.40	7,945.9	402.2	-76.0	382,073.03	567,690.42	32° 3' 0.884 N	104° 6' 53.476 W
8,163.0	70.60	355.90	7,956.7	431.2	-78.2	382,102.03	567,688.22	32° 3' 1.171 N	104° 6' 53.501 W
8,195.0	72.90	356.80	7,966.7	461.6	-80.1	382,132.36	567,686.28	32° 3' 1.471 N	104° 6' 53.523 W
8,226.0	75.10	357.50	7,975.2	491.3	-81.6	382,162.12	567,684.80	32° 3' 1.765 N	104° 6' 53.539 W
8,254.9	77.71	357.97	7,982.0	519.4	-82.7	382,190.18	567,683.69	32° 3' 2.043 N	104° 6' 53.551 W
CROSSED 330° HARD LINE @ 8255' MD / 7982' TVD									
8,257.0	77.90	358.00	7,982.5	521.4	-82.8	382,192.24	567,683.62	32° 3' 2.064 N	104° 6' 53.552 W
8,289.0	80.30	358.20	7,988.5	552.8	-83.8	382,223.64	567,682.58	32° 3' 2.374 N	104° 6' 53.563 W
8,320.0	82.00	357.60	7,993.3	583.4	-84.9	382,254.25	567,681.45	32° 3' 2.677 N	104° 6' 53.576 W
8,351.0	84.20	357.10	7,997.0	614.2	-86.4	382,284.99	567,680.03	32° 3' 2.982 N	104° 6' 53.592 W
8,414.0	88.60	357.10	8,001.0	677.0	-89.6	382,347.77	567,676.85	32° 3' 3.603 N	104° 6' 53.627 W
8,448.0	89.20	357.00	8,001.6	710.9	-91.3	382,381.72	567,675.10	32° 3' 3.939 N	104° 6' 53.647 W
8,542.0	90.00	356.60	8,002.3	804.8	-96.5	382,475.57	567,669.85	32° 3' 4.868 N	104° 6' 53.705 W
8,636.0	89.20	357.60	8,002.9	898.6	-101.3	382,569.44	567,665.10	32° 3' 5.797 N	104° 6' 53.758 W
8,730.0	90.50	357.50	8,003.2	992.6	-105.3	382,663.35	567,661.08	32° 3' 6.726 N	104° 6' 53.803 W
8,825.0	89.50	357.60	8,003.2	1,087.5	-109.4	382,758.27	567,657.02	32° 3' 7.666 N	104° 6' 53.848 W
8,919.0	90.90	358.20	8,002.8	1,181.4	-112.8	382,852.20	567,653.58	32° 3' 8.596 N	104° 6' 53.886 W
9,013.0	90.00	358.00	8,002.1	1,275.3	-115.9	382,946.14	567,650.46	32° 3' 9.525 N	104° 6' 53.920 W
9,107.0	91.40	358.40	8,001.0	1,369.3	-118.9	383,040.09	567,647.51	32° 3' 10.455 N	104° 6' 53.952 W
9,201.0	90.40	358.50	7,999.5	1,463.2	-121.4	383,134.04	567,644.96	32° 3' 11.385 N	104° 6' 53.979 W
9,296.0	89.30	357.50	7,999.7	1,558.2	-124.8	383,228.98	567,641.65	32° 3' 12.325 N	104° 6' 54.015 W
9,390.0	90.80	358.40	7,999.6	1,652.1	-128.1	383,322.92	567,638.29	32° 3' 13.254 N	104° 6' 54.052 W
9,483.0	90.00	358.40	7,999.0	1,745.1	-130.7	383,415.88	567,635.69	32° 3' 14.174 N	104° 6' 54.080 W
9,578.0	89.00	358.20	7,999.8	1,840.0	-133.5	383,510.83	567,632.87	32° 3' 15.114 N	104° 6' 54.111 W
9,671.0	89.10	358.00	8,001.4	1,933.0	-136.6	383,603.77	567,629.79	32° 3' 16.034 N	104° 6' 54.144 W
9,766.0	88.50	357.50	8,003.4	2,027.9	-140.3	383,698.67	567,626.06	32° 3' 16.973 N	104° 6' 54.186 W
9,860.0	89.70	357.50	8,004.8	2,121.8	-144.4	383,792.57	567,621.96	32° 3' 17.903 N	104° 6' 54.231 W
9,954.0	91.00	357.30	8,004.3	2,215.7	-148.7	383,886.47	567,617.70	32° 3' 18.832 N	104° 6' 54.278 W
10,048.0	90.00	358.00	8,003.4	2,309.6	-152.6	383,980.38	567,613.84	32° 3' 19.761 N	104° 6' 54.321 W
10,142.0	89.30	358.00	8,004.0	2,403.5	-155.8	384,074.32	567,610.56	32° 3' 20.691 N	104° 6' 54.357 W
10,236.0	90.30	359.20	8,004.3	2,497.5	-158.1	384,168.29	567,608.27	32° 3' 21.621 N	104° 6' 54.381 W
10,330.0	89.00	359.80	8,004.9	2,591.5	-159.0	384,262.28	567,607.45	32° 3' 22.551 N	104° 6' 54.389 W
10,424.0	90.00	0.10	8,005.7	2,685.5	-159.0	384,356.28	567,607.36	32° 3' 23.482 N	104° 6' 54.387 W
10,518.0	89.30	359.60	8,006.3	2,779.5	-159.3	384,450.28	567,607.12	32° 3' 24.412 N	104° 6' 54.388 W
10,612.0	89.70	359.40	8,007.1	2,873.5	-160.1	384,544.27	567,606.30	32° 3' 25.342 N	104° 6' 54.395 W
10,707.0	90.70	359.40	8,006.8	2,968.5	-161.1	384,639.26	567,605.30	32° 3' 26.282 N	104° 6' 54.405 W
10,801.0	90.40	358.00	8,005.9	3,062.4	-163.2	384,733.23	567,603.17	32° 3' 27.212 N	104° 6' 54.427 W
10,895.0	89.80	357.80	8,005.7	3,156.4	-166.7	384,827.17	567,599.73	32° 3' 28.142 N	104° 6' 54.465 W
10,989.0	89.00	357.10	8,006.7	3,250.3	-170.9	384,921.07	567,595.54	32° 3' 29.071 N	104° 6' 54.511 W
11,083.0	89.80	357.50	8,007.7	3,344.2	-175.3	385,014.96	567,591.12	32° 3' 30.001 N	104° 6' 54.561 W
11,177.0	88.80	358.00	8,008.8	3,438.1	-179.0	385,108.88	567,587.43	32° 3' 30.930 N	104° 6' 54.601 W
11,271.0	90.00	358.00	8,009.8	3,532.0	-182.3	385,202.81	567,584.15	32° 3' 31.860 N	104° 6' 54.637 W
11,365.0	89.10	357.30	8,010.6	3,625.9	-186.1	385,296.73	567,580.29	32° 3' 32.789 N	104° 6' 54.680 W
11,459.0	90.10	357.00	8,011.2	3,719.8	-190.8	385,390.61	567,575.62	32° 3' 33.719 N	104° 6' 54.732 W
11,553.0	89.40	356.40	8,011.6	3,813.7	-196.2	385,484.45	567,570.21	32° 3' 34.647 N	104° 6' 54.793 W
11,647.0	91.00	356.10	8,011.3	3,907.4	-202.3	385,578.25	567,564.06	32° 3' 35.576 N	104° 6' 54.862 W
11,742.0	90.50	356.60	8,010.1	4,002.2	-208.4	385,673.04	567,558.01	32° 3' 36.514 N	104° 6' 54.930 W
11,836.0	90.40	358.00	8,009.3	4,096.1	-212.8	385,766.94	567,553.58	32° 3' 37.443 N	104° 6' 54.979 W
11,930.0	89.90	357.50	8,009.1	4,190.1	-216.5	385,860.86	567,549.89	32° 3' 38.373 N	104° 6' 55.020 W
12,025.0	89.30	357.10	8,009.7	4,285.0	-221.0	385,955.75	567,545.42	32° 3' 39.312 N	104° 6' 55.070 W
12,119.0	88.90	357.00	8,011.2	4,378.8	-225.8	386,049.62	567,540.58	32° 3' 40.241 N	104° 6' 55.124 W
12,213.0	89.40	356.80	8,012.6	4,472.7	-230.9	386,143.47	567,535.50	32° 3' 41.170 N	104° 6' 55.180 W
12,307.0	89.70	356.40	8,013.4	4,566.5	-236.5	386,237.30	567,529.92	32° 3' 42.099 N	104° 6' 55.243 W

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well MYOX 8 State #4H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	Well @ 3140.0usft
Site:	Sec 17, T26S, R28E	MD Reference:	Well @ 3140.0usft
Well:	MYOX 8 State #4H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM Compass

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
12,401.0	89.00	356.30	8,014.4	4,660.3	-242.5	386,331.10	567,523.94	32° 3' 43.027 N	104° 6' 55.310 W
12,495.0	89.30	355.50	8,015.8	4,754.1	-249.2	386,424.85	567,517.22	32° 3' 43.955 N	104° 6' 55.386 W
12,589.0	90.50	355.70	8,016.0	4,847.8	-256.4	386,518.57	567,510.01	32° 3' 44.883 N	104° 6' 55.468 W
12,683.0	89.90	355.90	8,015.6	4,941.5	-263.3	386,612.32	567,503.12	32° 3' 45.811 N	104° 6' 55.546 W
12,777.0	90.50	355.70	8,015.3	5,035.3	-270.2	386,706.07	567,496.24	32° 3' 46.739 N	104° 6' 55.623 W
12,854.0	91.40	355.40	8,014.0	5,112.0	-276.1	386,782.82	567,490.27	32° 3' 47.498 N	104° 6' 55.691 W
12,898.0	91.40	355.40	8,013.0	5,155.9	-279.7	386,826.67	567,486.74	32° 3' 47.932 N	104° 6' 55.731 W
TD @ 12898' MD / 8013' TVD									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
158.0	158.0	0.5	-0.5	FIRST MWD SURVEY @ 158' MD / 158' TVD
7,884.1	7,822.9	189.4	-59.6	CROSSED LEASE LINE @ 7884' MD / 7823' TVD
8,254.9	7,982.0	519.4	-82.7	CROSSED 330' HARD LINE @ 8255' MD / 7982' TVD
12,898.0	8,013.0	5,155.9	-279.7	TD @ 12898' MD / 8013' TVD

Checked By: _____	Approved By: _____	Date: _____
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