

30-615-41923



NM OIL CONSERVATION
ARTESIA DISTRICT

FEB 23 2015

RECEIVED

COG Operating, LLC

Eddy County, NM (NAD 27)

Sec 17, T26S, R28E

MYOX 8 State #3H

Wellbore #1

Design: Wellbore #1

Survey Report - Geographic

17 November, 2014



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well MYOX 8 State #3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	Well @ 3126.0usft (Scandril Freedom)
Site:	Sec 17, T26S, R28E	MD Reference:	Well @ 3126.0usft (Scandril Freedom)
Well:	MYOX 8 State #3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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 #3H		
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' 56.973 N
		Longitude:	104° 6' 38.311 W
		Ground Level:	3,100.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	10/28/2014	7.41
			Dip Angle
			(°)
			Field Strength
			(nT)
			59.85
			48,118

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
			(°)
			357.94

Survey Program	Date 11/17/2014		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
80.0	12,894.0	MWD (Wellbore #1)	MWD default
			Description
			MWD - Standard

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map	Latitude	Longitude
Depth	(°)	(°)	Depth	(usft)	(usft)	Northing	Easting		
(usft)			(usft)			(usft)	(usft)		
0.0	0.00	0.00	0.0	0.0	0.0	381,680.50	568,996.40	32° 2' 56.973 N	104° 6' 38.311 W
80.0	0.00	0.00	80.0	0.0	0.0	381,680.50	568,996.40	32° 2' 56.973 N	104° 6' 38.311 W
First MWD Survey @ 80' MD / 80' TVD									
218.0	0.90	67.60	218.0	0.4	1.0	381,680.91	568,997.40	32° 2' 56.977 N	104° 6' 38.299 W
273.0	1.10	90.80	273.0	0.6	1.9	381,681.07	568,998.33	32° 2' 56.978 N	104° 6' 38.288 W
303.0	1.10	73.20	303.0	0.6	2.5	381,681.15	568,998.90	32° 2' 56.979 N	104° 6' 38.282 W
427.0	1.10	78.30	427.0	1.2	4.8	381,681.73	569,001.20	32° 2' 56.985 N	104° 6' 38.255 W
608.0	0.60	352.90	607.9	2.5	6.4	381,683.03	569,002.78	32° 2' 56.997 N	104° 6' 38.236 W
790.0	2.40	316.70	789.9	6.2	3.7	381,686.75	569,000.05	32° 2' 57.034 N	104° 6' 38.268 W
973.0	2.40	248.80	972.7	7.7	-2.6	381,688.15	568,993.85	32° 2' 57.048 N	104° 6' 38.340 W
1,064.0	2.60	202.10	1,063.7	5.0	-5.1	381,685.55	568,991.30	32° 2' 57.023 N	104° 6' 38.370 W
1,157.0	2.50	178.30	1,156.6	1.1	-5.8	381,681.57	568,990.57	32° 2' 56.983 N	104° 6' 38.378 W

Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well MYOX 8 State #3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	Well @ 3126.0usft (Scandrift Freedom)
Site:	Sec 17, T26S, R28E	MD Reference:	Well @ 3126.0usft (Scandrift Freedom)
Well:	MYOX 8 State #3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,248.0	1.70	138.10	1,247.5	-1.9	-4.9	381,678.58	568,991.53	32° 2' 56.954 N	104° 6' 38.367 W
1,342.0	1.90	90.10	1,341.5	-3.0	-2.4	381,677.54	568,994.02	32° 2' 56.943 N	104° 6' 38.338 W
1,437.0	1.10	69.00	1,436.5	-2.6	0.0	381,677.86	568,996.44	32° 2' 56.946 N	104° 6' 38.310 W
1,531.0	1.00	52.80	1,530.4	-1.8	1.5	381,678.68	568,997.94	32° 2' 56.954 N	104° 6' 38.293 W
1,626.0	0.60	53.50	1,625.4	-1.0	2.6	381,679.48	568,999.00	32° 2' 56.962 N	104° 6' 38.280 W
1,721.0	1.50	65.10	1,720.4	-0.2	4.1	381,680.30	569,000.53	32° 2' 56.970 N	104° 6' 38.263 W
1,816.0	2.40	85.50	1,815.4	0.5	7.2	381,680.98	569,003.64	32° 2' 56.977 N	104° 6' 38.227 W
1,910.0	1.10	86.20	1,909.3	0.7	10.1	381,681.19	569,006.50	32° 2' 56.979 N	104° 6' 38.193 W
2,005.0	1.70	73.70	2,004.3	1.1	12.4	381,681.65	569,008.76	32° 2' 56.984 N	104° 6' 38.167 W
2,100.0	1.60	82.30	2,099.2	1.7	15.0	381,682.22	569,011.43	32° 2' 56.989 N	104° 6' 38.136 W
2,194.0	1.10	89.70	2,193.2	1.9	17.2	381,682.40	569,013.63	32° 2' 56.991 N	104° 6' 38.110 W
2,289.0	0.40	261.80	2,288.2	1.9	17.8	381,682.36	569,014.21	32° 2' 56.991 N	104° 6' 38.104 W
2,382.0	1.10	260.60	2,381.2	1.7	16.6	381,682.16	569,013.01	32° 2' 56.989 N	104° 6' 38.118 W
2,466.0	1.20	258.50	2,465.2	1.4	15.0	381,681.86	569,011.35	32° 2' 56.986 N	104° 6' 38.137 W
2,654.0	1.20	255.10	2,653.1	0.5	11.1	381,680.96	569,007.52	32° 2' 56.977 N	104° 6' 38.181 W
2,844.0	1.30	264.80	2,843.1	-0.2	7.1	381,680.25	569,003.45	32° 2' 56.970 N	104° 6' 38.229 W
3,033.0	1.20	259.00	3,032.1	-0.8	3.0	381,679.68	568,999.38	32° 2' 56.964 N	104° 6' 38.276 W
3,222.0	0.30	106.60	3,221.0	-1.3	1.5	381,679.16	568,997.91	32° 2' 56.959 N	104° 6' 38.293 W
3,411.0	0.10	166.40	3,410.0	-1.6	2.0	381,678.86	568,998.42	32° 2' 56.956 N	104° 6' 38.287 W
3,600.0	0.30	136.80	3,599.0	-2.2	2.4	381,678.34	568,998.80	32° 2' 56.951 N	104° 6' 38.283 W
3,789.0	0.30	130.20	3,788.0	-2.8	3.1	381,677.66	568,999.52	32° 2' 56.944 N	104° 6' 38.275 W
3,979.0	0.30	87.30	3,978.0	-3.1	4.0	381,677.36	569,000.39	32° 2' 56.941 N	104° 6' 38.264 W
4,168.0	0.30	139.30	4,167.0	-3.5	4.8	381,677.01	569,001.21	32° 2' 56.938 N	104° 6' 38.255 W
4,356.0	0.40	146.70	4,355.0	-4.4	5.5	381,676.09	569,001.89	32° 2' 56.929 N	104° 6' 38.247 W
4,544.0	0.30	148.10	4,543.0	-5.4	6.1	381,675.12	569,002.51	32° 2' 56.919 N	104° 6' 38.240 W
4,734.0	0.40	170.90	4,733.0	-6.5	6.5	381,674.04	569,002.88	32° 2' 56.909 N	104° 6' 38.236 W
4,923.0	1.10	183.40	4,922.0	-8.9	6.5	381,671.58	569,002.87	32° 2' 56.884 N	104° 6' 38.236 W
5,111.0	0.80	321.90	5,110.0	-9.7	5.6	381,670.81	569,001.96	32° 2' 56.877 N	104° 6' 38.246 W
5,300.0	0.60	284.70	5,299.0	-8.4	3.8	381,672.10	569,000.19	32° 2' 56.889 N	104° 6' 38.267 W
5,489.0	0.50	259.90	5,488.0	-8.3	2.0	381,672.21	568,998.42	32° 2' 56.890 N	104° 6' 38.287 W
5,678.0	0.60	197.80	5,677.0	-9.4	0.9	381,671.12	568,997.30	32° 2' 56.880 N	104° 6' 38.300 W
5,868.0	1.00	178.00	5,866.9	-12.0	0.7	381,668.52	568,997.06	32° 2' 56.854 N	104° 6' 38.303 W
6,056.0	0.80	220.00	6,054.9	-14.6	-0.1	381,665.87	568,996.27	32° 2' 56.828 N	104° 6' 38.312 W
6,245.0	1.50	292.40	6,243.9	-14.7	-3.3	381,665.80	568,993.14	32° 2' 56.827 N	104° 6' 38.349 W
6,435.0	0.60	315.80	6,433.9	-13.0	-6.3	381,667.47	568,990.14	32° 2' 56.844 N	104° 6' 38.384 W
6,624.0	0.40	45.40	6,622.9	-11.9	-6.5	381,668.64	568,989.92	32° 2' 56.855 N	104° 6' 38.386 W
6,814.0	0.90	284.90	6,812.8	-11.0	-7.5	381,669.49	568,988.95	32° 2' 56.864 N	104° 6' 38.397 W
7,004.0	0.70	312.30	7,002.8	-9.8	-9.8	381,670.65	568,986.65	32° 2' 56.875 N	104° 6' 38.424 W
7,156.0	1.30	305.80	7,154.8	-8.2	-11.8	381,672.29	568,984.57	32° 2' 56.891 N	104° 6' 38.448 W
7,251.0	1.00	307.90	7,249.8	-7.1	-13.4	381,673.43	568,983.04	32° 2' 56.903 N	104° 6' 38.466 W
7,315.0	1.00	320.40	7,313.8	-6.3	-14.2	381,674.20	568,982.24	32° 2' 56.910 N	104° 6' 38.475 W
7,346.0	1.50	324.80	7,344.8	-5.8	-14.6	381,674.74	568,981.84	32° 2' 56.916 N	104° 6' 38.480 W
7,378.0	3.40	350.10	7,376.7	-4.5	-15.0	381,676.02	568,981.43	32° 2' 56.928 N	104° 6' 38.485 W
7,409.0	6.10	1.80	7,407.6	-1.9	-15.1	381,678.57	568,981.32	32° 2' 56.954 N	104° 6' 38.486 W
7,440.0	9.00	4.80	7,438.4	2.1	-14.8	381,682.63	568,981.58	32° 2' 56.994 N	104° 6' 38.483 W
7,472.0	11.90	7.50	7,469.8	7.9	-14.2	381,688.40	568,982.22	32° 2' 57.051 N	104° 6' 38.475 W
7,503.0	14.70	7.30	7,500.0	15.0	-13.3	381,695.47	568,983.14	32° 2' 57.121 N	104° 6' 38.464 W
7,535.0	17.20	7.30	7,530.8	23.7	-12.1	381,704.19	568,984.25	32° 2' 57.207 N	104° 6' 38.451 W
7,567.0	20.00	5.20	7,561.1	33.8	-11.1	381,714.34	568,985.35	32° 2' 57.308 N	104° 6' 38.438 W
7,598.0	22.50	1.80	7,590.0	45.0	-10.4	381,725.55	568,986.02	32° 2' 57.419 N	104° 6' 38.430 W
7,630.0	24.80	357.80	7,619.3	57.9	-10.4	381,738.38	568,985.95	32° 2' 57.546 N	104° 6' 38.431 W
7,662.0	28.00	352.90	7,647.9	72.0	-11.6	381,752.54	568,984.77	32° 2' 57.686 N	104° 6' 38.444 W
7,693.0	30.00	353.00	7,675.1	87.0	-13.5	381,767.46	568,982.92	32° 2' 57.833 N	104° 6' 38.465 W
7,725.0	31.70	351.30	7,702.5	103.2	-15.7	381,783.71	568,980.68	32° 2' 57.994 N	104° 6' 38.491 W
7,756.0	33.70	354.50	7,728.6	119.8	-17.8	381,800.32	568,978.62	32° 2' 58.159 N	104° 6' 38.514 W



Survey Report - Geographic



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well MYOX 8 State #3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	Well @ 3126.0usft (Scandrell Freedom)
Site:	Sec 17, T26S, R28E	MD Reference:	Well @ 3126.0usft (Scandrell Freedom)
Well:	MYOX 8 State #3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
7,788.0	35.90	355.00	7,754.9	138.0	-19.5	381,818.51	568,976.95	32° 2' 58.339 N	104° 6' 38.533 W
7,820.0	37.60	356.40	7,780.5	157.1	-20.9	381,837.60	568,975.52	32° 2' 58.528 N	104° 6' 38.549 W
7,852.0	39.70	359.90	7,805.5	177.1	-21.5	381,857.57	568,974.89	32° 2' 58.725 N	104° 6' 38.556 W
7,871.6	41.41	0.22	7,820.4	189.8	-21.5	381,870.31	568,974.90	32° 2' 58.851 N	104° 6' 38.556 W
Crossed Section Line @ 7872' MD / 7820' TVD									
7,883.0	42.40	0.40	7,828.9	197.4	-21.5	381,877.92	568,974.94	32° 2' 58.927 N	104° 6' 38.555 W
7,915.0	46.00	359.60	7,851.8	219.7	-21.5	381,900.23	568,974.94	32° 2' 59.148 N	104° 6' 38.555 W
7,946.0	50.10	358.00	7,872.6	242.8	-22.0	381,923.27	568,974.45	32° 2' 59.376 N	104° 6' 38.560 W
7,978.0	54.70	356.20	7,892.1	268.1	-23.3	381,948.58	568,973.15	32° 2' 59.626 N	104° 6' 38.574 W
8,010.0	58.50	357.30	7,909.7	294.8	-24.8	381,975.25	568,971.64	32° 2' 59.890 N	104° 6' 38.591 W
8,041.0	62.00	357.10	7,925.1	321.6	-26.1	382,002.13	568,970.33	32° 3' 0.156 N	104° 6' 38.606 W
8,073.0	65.10	356.00	7,939.3	350.2	-27.8	382,030.72	568,968.60	32° 3' 0.439 N	104° 6' 38.625 W
8,104.0	66.70	356.60	7,952.0	378.5	-29.6	382,058.96	568,966.77	32° 3' 0.719 N	104° 6' 38.646 W
8,136.0	68.80	358.90	7,964.1	408.1	-30.8	382,088.55	568,965.62	32° 3' 1.011 N	104° 6' 38.659 W
8,167.0	71.40	358.00	7,974.7	437.2	-31.6	382,117.69	568,964.83	32° 3' 1.300 N	104° 6' 38.667 W
8,199.0	74.50	359.60	7,984.0	467.8	-32.2	382,148.27	568,964.19	32° 3' 1.603 N	104° 6' 38.674 W
8,230.0	77.10	0.30	7,991.6	497.8	-32.2	382,178.32	568,964.16	32° 3' 1.900 N	104° 6' 38.673 W
8,252.5	78.79	0.37	7,996.3	519.8	-32.1	382,200.32	568,964.29	32° 3' 2.118 N	104° 6' 38.671 W
Crossed 330' Hardline @ 8253' MD / 7996' TVD									
8,262.0	79.50	0.40	7,998.1	529.2	-32.0	382,209.65	568,964.36	32° 3' 2.210 N	104° 6' 38.670 W
8,293.0	83.10	358.50	8,002.8	559.8	-32.3	382,240.29	568,964.06	32° 3' 2.513 N	104° 6' 38.673 W
8,325.0	85.80	0.30	8,005.9	591.6	-32.7	382,272.13	568,963.73	32° 3' 2.828 N	104° 6' 38.676 W
8,357.0	85.80	0.60	8,008.3	623.5	-32.4	382,304.04	568,963.98	32° 3' 3.144 N	104° 6' 38.672 W
8,388.0	87.50	0.40	8,010.1	654.5	-32.2	382,334.99	568,964.25	32° 3' 3.450 N	104° 6' 38.669 W
8,423.0	91.00	359.90	8,010.5	689.5	-32.1	382,369.98	568,964.34	32° 3' 3.797 N	104° 6' 38.667 W
8,455.0	91.30	0.40	8,009.9	721.5	-32.0	382,401.97	568,964.42	32° 3' 4.113 N	104° 6' 38.665 W
8,486.0	91.10	0.80	8,009.2	752.5	-31.7	382,432.96	568,964.75	32° 3' 4.420 N	104° 6' 38.660 W
8,580.0	90.20	1.00	8,008.2	846.4	-30.2	382,526.95	568,966.22	32° 3' 5.350 N	104° 6' 38.641 W
8,675.0	89.60	0.10	8,008.3	941.4	-29.3	382,621.94	568,967.14	32° 3' 6.290 N	104° 6' 38.628 W
8,770.0	89.30	358.50	8,009.2	1,036.4	-30.4	382,716.92	568,965.97	32° 3' 7.230 N	104° 6' 38.639 W
8,864.0	90.20	358.10	8,009.7	1,130.4	-33.2	382,810.88	568,963.19	32° 3' 8.160 N	104° 6' 38.669 W
8,959.0	91.00	357.30	8,008.7	1,225.3	-37.0	382,905.80	568,959.37	32° 3' 9.100 N	104° 6' 38.712 W
9,054.0	90.70	358.30	8,007.2	1,320.2	-40.7	383,000.72	568,955.73	32° 3' 10.039 N	104° 6' 38.752 W
9,148.0	90.60	359.60	8,006.2	1,414.2	-42.4	383,094.69	568,954.01	32° 3' 10.969 N	104° 6' 38.769 W
9,243.0	89.90	355.90	8,005.8	1,509.1	-46.1	383,189.60	568,950.28	32° 3' 11.908 N	104° 6' 38.810 W
9,338.0	89.30	356.90	8,006.4	1,603.9	-52.1	383,284.41	568,944.31	32° 3' 12.847 N	104° 6' 38.877 W
9,432.0	89.30	355.90	8,007.6	1,697.7	-58.0	383,378.22	568,938.41	32° 3' 13.775 N	104° 6' 38.944 W
9,527.0	88.60	356.90	8,009.3	1,792.5	-64.0	383,473.01	568,932.45	32° 3' 14.714 N	104° 6' 39.011 W
9,622.0	89.30	357.10	8,011.1	1,887.4	-68.9	383,567.86	568,927.47	32° 3' 15.652 N	104° 6' 39.066 W
9,717.0	89.90	359.20	8,011.7	1,982.3	-72.0	383,662.81	568,924.41	32° 3' 16.592 N	104° 6' 39.100 W
9,811.0	89.40	359.40	8,012.3	2,076.3	-73.1	383,756.80	568,923.26	32° 3' 17.522 N	104° 6' 39.111 W
9,905.0	90.10	357.10	8,012.7	2,170.2	-76.0	383,850.75	568,920.39	32° 3' 18.452 N	104° 6' 39.142 W
10,000.0	90.00	357.50	8,012.6	2,265.1	-80.5	383,945.64	568,915.91	32° 3' 19.391 N	104° 6' 39.192 W
10,094.0	89.70	358.70	8,012.9	2,359.1	-83.6	384,039.59	568,912.80	32° 3' 20.321 N	104° 6' 39.226 W
10,188.0	90.90	358.30	8,012.4	2,453.1	-86.1	384,133.55	568,910.34	32° 3' 21.251 N	104° 6' 39.252 W
10,282.0	91.00	358.70	8,010.8	2,547.0	-88.5	384,227.51	568,907.88	32° 3' 22.181 N	104° 6' 39.278 W
10,377.0	89.70	359.40	8,010.2	2,642.0	-90.1	384,322.49	568,906.30	32° 3' 23.121 N	104° 6' 39.294 W
10,471.0	90.50	356.90	8,010.1	2,735.9	-93.1	384,416.43	568,903.27	32° 3' 24.051 N	104° 6' 39.327 W
10,566.0	90.10	357.50	8,009.6	2,830.8	-97.8	384,511.32	568,898.63	32° 3' 24.990 N	104° 6' 39.379 W
10,660.0	90.00	358.10	8,009.5	2,924.7	-101.4	384,605.25	568,895.02	32° 3' 25.920 N	104° 6' 39.419 W
10,754.0	89.70	358.50	8,009.7	3,018.7	-104.2	384,699.20	568,892.23	32° 3' 26.850 N	104° 6' 39.449 W
10,849.0	90.00	357.30	8,010.0	3,113.6	-107.7	384,794.14	568,888.75	32° 3' 27.789 N	104° 6' 39.487 W
10,944.0	89.90	358.50	8,010.1	3,208.6	-111.1	384,889.07	568,885.27	32° 3' 28.729 N	104° 6' 39.525 W
11,039.0	89.90	356.40	8,010.2	3,303.5	-115.4	384,983.97	568,881.04	32° 3' 29.668 N	104° 6' 39.572 W
11,133.0	89.40	357.10	8,010.8	3,397.3	-120.7	385,077.82	568,875.71	32° 3' 30.597 N	104° 6' 39.632 W



Survey Report - Geographic



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well MYOX 8 State #3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	Well @ 3126.0usft (Scandril Freedom)
Site:	Sec 17, T26S, R28E	MD Reference:	Well @ 3126.0usft (Scandril Freedom)
Well:	MYOX 8 State #3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,228.0	89.80	356.00	8,011.5	3,492.1	-126.4	385,172.64	568,870.00	32° 3' 31.535 N	104° 6' 39.696 W
11,322.0	89.20	357.50	8,012.3	3,586.0	-131.7	385,266.48	568,864.67	32° 3' 32.464 N	104° 6' 39.755 W
11,417.0	90.00	357.60	8,013.0	3,680.9	-135.8	385,361.39	568,860.61	32° 3' 33.404 N	104° 6' 39.800 W
11,511.0	90.60	357.60	8,012.5	3,774.8	-139.7	385,455.31	568,856.67	32° 3' 34.333 N	104° 6' 39.844 W
11,605.0	90.30	359.40	8,011.7	3,868.8	-142.2	385,549.27	568,854.21	32° 3' 35.263 N	104° 6' 39.870 W
11,699.0	90.40	359.00	8,011.2	3,962.8	-143.5	385,643.26	568,852.90	32° 3' 36.193 N	104° 6' 39.883 W
11,793.0	90.20	358.70	8,010.7	4,056.7	-145.4	385,737.24	568,851.01	32° 3' 37.123 N	104° 6' 39.903 W
11,887.0	90.00	359.90	8,010.5	4,150.7	-146.5	385,831.23	568,849.86	32° 3' 38.054 N	104° 6' 39.914 W
11,981.0	88.60	358.30	8,011.6	4,244.7	-148.0	385,925.21	568,848.39	32° 3' 38.984 N	104° 6' 39.929 W
12,075.0	89.30	357.30	8,013.4	4,338.6	-151.6	386,019.12	568,844.78	32° 3' 39.913 N	104° 6' 39.969 W
12,168.0	89.80	356.40	8,014.1	4,431.5	-156.7	386,111.98	568,839.67	32° 3' 40.832 N	104° 6' 40.026 W
12,262.0	89.60	356.70	8,014.6	4,525.3	-162.4	386,205.80	568,834.01	32° 3' 41.761 N	104° 6' 40.089 W
12,357.0	90.50	357.30	8,014.5	4,620.2	-167.4	386,300.67	568,829.04	32° 3' 42.700 N	104° 6' 40.145 W
12,451.0	90.60	357.30	8,013.6	4,714.1	-171.8	386,394.56	568,824.61	32° 3' 43.629 N	104° 6' 40.194 W
12,545.0	90.80	356.90	8,012.5	4,807.9	-176.5	386,488.44	568,819.86	32° 3' 44.558 N	104° 6' 40.247 W
12,639.0	89.40	358.00	8,012.3	4,901.8	-180.7	386,582.34	568,815.67	32° 3' 45.488 N	104° 6' 40.293 W
12,733.0	89.50	357.50	8,013.2	4,995.8	-184.4	386,676.26	568,811.98	32° 3' 46.417 N	104° 6' 40.334 W
12,827.0	89.50	359.40	8,014.0	5,089.7	-187.0	386,770.22	568,809.44	32° 3' 47.347 N	104° 6' 40.361 W
12,894.0	89.50	359.40	8,014.6	5,156.7	-187.7	386,837.21	568,808.74	32° 3' 48.010 N	104° 6' 40.368 W

TD @ 12894' MD / 8015' TVD

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
80.0	80.0	0.0	0.0	First MWD Survey @ 80' MD / 80' TVD
7,871.6	7,820.4	189.8	-21.5	Crossed Section Line @ 7872' MD / 7820' TVD
8,252.5	7,996.3	519.8	-32.1	Crossed 330' Hardline @ 8253' MD / 7996' TVD
12,894.0	8,014.6	5,156.7	-187.7	TD @ 12894' MD / 8015' TVD

Checked By: _____ Approved By: _____ Date: _____