

RM

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MAR 31 2010

NMOCD ARTESIA

Directional Survey

Well ID: 625704

Field: South Eddy

Chesapeake Operating, Inc.

Well Name: PLU Pierce Canyon 5 State 1H

Sect: 5 Town: 25S Rng: 30E County: Eddy State: NM

Survey	Measured				Coordinates			Vertical	Dog Leg
Type	Depth	Inclination	Azimuth	TVD	N-S	E-W	Closure	Section	Severity
Wellbore:	Original Well Bore			Plane of Vertical Section:		359.7			
** Tieln	0.0	0.00	0.0	0.0	N 0.0	E 0.0		0.0	
GMS	200.0	0.56	346.5	200.0	N 1.0	W 0.2	1.0	1.0	0.280
GMS	400.0	0.23	82.3	400.0	N 2.0	W 0.1	2.0	2.0	0.313
GMS	606.2	0.68	165.9	606.2	N 0.8	E 0.6	1.0	0.8	0.336
GMS	796.9	0.87	174.5	796.9	S 1.7	E 1.1	2.0	-1.7	0.116
GMS	987.4	10.70	194.5	986.2	S 20.3	W 3.2	20.6	-20.3	5.190
GMS	1,178.1	1.42	194.9	1,175.6	S 39.8	W 8.3	40.6	-39.8	4.868
GMS	1,368.6	1.62	197.9	1,366.0	S 44.6	W 9.7	45.7	-44.6	0.113
GMS	1,559.6	1.59	212.0	1,556.9	S 49.5	W 11.9	50.9	-49.4	0.207
GMS	1,749.8	1.33	211.4	1,747.1	S 53.6	W 14.5	55.5	-53.5	0.137
GMS	1,940.7	1.20	212.4	1,938.0	S 57.2	W 16.7	59.5	-57.1	0.069
GMS	2,131.4	1.29	193.0	2,128.6	S 60.9	W 18.3	63.6	-60.8	0.225
GMS	2,322.5	2.11	238.0	2,319.7	S 64.9	W 21.7	68.4	-64.8	0.787
GMS	2,513.6	2.54	258.8	2,510.5	S 67.6	W 28.9	73.5	-67.5	0.491
GMS	2,704.0	1.84	273.6	2,700.9	S 68.2	W 36.0	77.2	-68.0	0.470
GMS	2,894.7	0.82	355.8	2,891.4	S 66.7	W 39.2	77.3	-66.5	1.002
GMS	3,086.0	1.17	37.5	3,082.8	S 63.7	W 38.1	74.3	-63.6	0.408
GMS	3,276.9	2.54	79.9	3,273.5	S 61.5	W 32.8	69.6	-61.3	0.971
GMS	3,467.7	1.75	109.9	3,464.2	S 61.7	W 25.9	66.9	-61.6	0.706
GMS	3,658.6	1.03	119.3	3,655.1	S 63.5	W 21.6	67.1	-63.4	0.394
GMS	3,849.1	0.73	100.1	3,845.5	S 64.6	W 18.9	67.3	-64.5	0.219
GMS	4,039.8	0.55	87.9	4,036.3	S 64.8	W 16.8	66.9	-64.7	0.118
GMS	4,230.3	0.47	64.2	4,226.7	S 64.4	W 15.2	66.2	-64.3	0.117
GMS	4,420.8	0.42	58.9	4,417.2	S 63.7	W 13.9	65.2	-63.6	0.034
GMS	4,611.7	0.16	20.7	4,608.1	S 63.1	W 13.2	64.4	-63.0	0.163
GMS	4,803.0	0.09	19.6	4,799.5	S 62.7	W 13.1	64.0	-62.6	0.037
GMS	4,994.8	0.09	333.8	4,991.2	S 62.4	W 13.1	63.8	-62.3	0.037
GMS	5,186.1	0.17	330.7	5,182.6	S 62.0	W 13.3	63.4	-62.0	0.042
GMS	5,377.7	0.15	283.3	5,374.1	S 61.7	W 13.7	63.2	-61.7	0.068
GMS	5,568.3	0.13	160.1	5,564.7	S 61.9	W 13.8	63.4	-61.8	0.129
GMS	5,759.4	0.49	133.8	5,755.8	S 62.6	W 13.2	64.0	-62.6	0.198
GMS	5,948.9	0.24	113.2	5,945.3	S 63.3	W 12.2	64.5	-63.3	0.147
GMS	6,140.1	0.65	118.8	6,136.5	S 64.0	W 10.9	64.9	-64.0	0.215
GMS	6,329.3	1.22	105.7	6,325.7	S 65.1	W 8.0	65.6	-65.0	0.320
GMS	6,519.6	1.22	114.1	6,516.0	S 66.5	W 4.2	66.6	-66.4	0.094
GMS	6,709.8	1.12	118.5	6,706.1	S 68.2	W 0.7	68.2	-68.2	0.070
GMS	6,898.3	1.06	130.3	6,894.5	S 70.2	E 2.2	70.2	-70.2	0.124
GMS	7,086.0	0.75	137.6	7,082.2	S 72.2	E 4.3	72.3	-72.2	0.176
GMS	7,273.6	1.11	167.5	7,269.8	S 74.9	E 5.6	75.1	-74.9	0.316
GMS	7,305.0	1.00	177.7	7,301.3	S 75.5	E 5.6	75.7	-75.5	0.690
GMS	7,327.0	1.04	184.9	7,323.2	S 75.9	E 5.6	76.1	-75.9	0.610

MWD	7,384.0	1.20	201.7	7,380.2	S 76.9	E 5.4	77.1	-76.9	0.639
MWD	7,415.0	0.70	252.6	7,411.2	S 77.3	E 5.1	77.4	-77.3	3.010
MWD	7,446.0	1.60	315.4	7,442.2	S 77.0	E 4.6	77.2	-77.1	4.592
MWD	7,478.0	3.50	337.7	7,474.2	S 75.8	E 3.9	75.9	-75.8	6.590
MWD	7,509.0	5.40	347.7	7,505.1	S 73.5	E 3.2	73.6	-73.5	6.598
MWD	7,541.0	7.50	351.9	7,536.9	S 70.0	E 2.6	70.0	-70.0	6.722
MWD	7,572.0	11.30	346.0	7,567.4	S 65.0	E 1.6	65.0	-65.0	12.630
MWD	7,603.0	16.20	342.2	7,597.5	S 57.9	W 0.5	57.9	-57.9	16.064
MWD	7,635.0	21.30	340.8	7,627.8	S 48.2	W 3.7	48.3	-48.2	15.998
MWD	7,666.0	26.20	340.3	7,656.2	S 36.4	W 7.9	37.3	-36.4	15.820
MWD	7,697.0	30.80	339.4	7,683.4	S 22.6	W 13.0	26.0	-22.5	14.903
MWD	7,729.0	35.20	339.3	7,710.3	S 6.3	W 19.1	20.1	-6.2	13.751
MWD	7,760.0	38.50	340.8	7,735.1	N 11.2	W 25.5	27.8	11.3	11.033
MWD	7,792.0	41.50	341.5	7,759.6	N 30.7	W 32.1	44.4	30.8	9.480
MWD	7,823.0	44.80	341.7	7,782.2	N 50.8	W 38.8	63.9	51.0	10.654
MWD	7,854.0	48.00	342.8	7,803.6	N 72.2	W 45.6	85.4	72.4	10.637
MWD	7,886.0	50.80	344.9	7,824.4	N 95.5	W 52.4	108.9	95.8	10.068
MWD	7,917.0	54.00	345.0	7,843.3	N 119.2	W 58.8	132.9	119.5	10.326
MWD	7,948.0	57.20	345.5	7,860.8	N 144.0	W 65.3	158.1	144.3	10.408
MWD	7,979.0	60.20	345.6	7,876.9	N 169.6	W 71.9	184.2	169.9	9.681
MWD	8,011.0	64.00	345.9	7,891.9	N 197.0	W 78.8	212.2	197.4	11.904
MWD	8,042.0	67.80	346.0	7,904.6	N 224.5	W 85.7	240.3	224.9	12.262
MWD	8,074.0	71.50	347.0	7,915.7	N 253.6	W 92.7	270.1	254.1	11.928
MWD	8,105.0	75.80	348.6	7,924.4	N 282.7	W 99.0	299.5	283.1	14.728
MWD	8,136.0	79.50	350.0	7,931.0	N 312.5	W 104.6	329.5	312.9	12.724
MWD	8,168.0	82.30	351.3	7,936.1	N 343.6	W 109.7	360.7	344.1	9.625
MWD	8,199.0	86.50	351.9	7,939.1	N 374.1	W 114.3	391.2	374.7	13.685
MWD	8,262.0	88.40	354.8	7,941.9	N 436.6	W 121.5	453.2	437.2	5.499
MWD	8,293.0	90.70	356.0	7,942.2	N 467.5	W 124.0	483.7	468.1	8.368
MWD	8,325.0	91.60	356.6	7,941.5	N 499.5	W 126.1	515.1	500.0	3.380
MWD	8,356.0	92.00	356.6	7,940.6	N 530.4	W 127.9	545.6	531.0	1.290
MWD	8,451.0	92.50	356.1	7,936.8	N 625.1	W 134.0	639.3	625.7	0.744
MWD	8,544.0	90.00	357.1	7,934.8	N 717.9	W 139.5	731.4	718.6	2.895
MWD	8,638.0	90.90	356.1	7,934.1	N 811.8	W 145.1	824.6	812.4	1.431
MWD	8,732.0	90.60	356.5	7,932.8	N 905.6	W 151.1	918.1	906.2	0.532
MWD	8,826.0	89.80	358.0	7,932.5	N 999.5	W 155.6	1,011.5	1,000.1	1.808
MWD	8,921.0	89.00	358.5	7,933.5	N 1,094.4	W 158.5	1,105.8	1,095.1	0.993
MWD	9,014.0	90.00	359.4	7,934.3	N 1,187.4	W 160.2	1,198.1	1,188.1	1.447
MWD	9,108.0	90.90	359.3	7,933.6	N 1,281.4	W 161.3	1,291.5	1,282.1	0.963
MWD	9,202.0	90.50	359.2	7,932.4	N 1,375.4	W 162.5	1,384.9	1,376.1	0.439
MWD	9,296.0	90.90	1.5	7,931.3	N 1,469.3	W 162.0	1,478.2	1,470.1	2.483
MWD	9,390.0	90.80	3.8	7,929.9	N 1,563.2	W 157.6	1,571.1	1,563.9	2.449
MWD	9,484.0	89.60	3.9	7,929.5	N 1,657.0	W 151.3	1,663.9	1,657.7	1.281
MWD	9,578.0	89.70	3.3	7,930.1	N 1,750.8	W 145.4	1,756.8	1,751.5	0.647
MWD	9,672.0	89.30	3.0	7,930.9	N 1,844.7	W 140.2	1,850.0	1,845.3	0.532
MWD	9,798.0	91.10	3.1	7,930.5	N 1,970.5	W 133.5	1,975.0	1,971.1	1.431
MWD	9,860.0	93.50	3.2	7,928.0	N 2,032.3	W 130.1	2,036.5	2,032.9	3.874
MWD	9,954.0	94.30	3.0	7,921.6	N 2,126.0	W 125.1	2,129.7	2,126.5	0.877

MWD	10,048.0	90.50	2.7	7,917.7	N 2,219.8	W 120.4	2,223.0	2,220.3	4.055
MWD	10,142.0	88.10	1.1	7,918.8	N 2,313.7	W 117.3	2,316.7	2,314.2	3.068
MWD	10,236.0	88.10	1.1	7,921.9	N 2,407.6	W 115.5	2,410.4	2,408.1	0.000
MWD	10,330.0	88.50	1.1	7,924.7	N 2,501.6	W 113.7	2,504.2	2,502.1	0.426
MWD	10,424.0	89.80	1.0	7,926.1	N 2,595.5	W 111.9	2,598.0	2,596.0	1.387
MWD	10,518.0	90.40	0.8	7,926.0	N 2,689.5	W 110.5	2,691.8	2,690.0	0.673
MWD	10,612.0	90.60	1.0	7,925.1	N 2,783.5	W 109.0	2,785.7	2,784.0	0.301
MWD	10,706.0	90.50	359.5	7,924.2	N 2,877.5	W 108.6	2,879.6	2,878.0	1.599
MWD	10,800.0	89.80	357.3	7,924.0	N 2,971.5	W 111.2	2,973.5	2,971.9	2.456
MWD	10,894.0	90.70	356.7	7,923.6	N 3,065.3	W 116.1	3,067.5	3,065.8	1.151
MWD	10,988.0	90.70	357.8	7,922.4	N 3,159.2	W 120.6	3,161.5	3,159.7	1.170
MWD	11,082.0	90.90	358.8	7,921.1	N 3,253.2	W 123.4	3,255.5	3,253.7	1.085
MWD	11,176.0	89.50	359.0	7,920.8	N 3,347.1	W 125.2	3,349.5	3,347.7	1.504
MWD	11,270.0	90.80	0.3	7,920.6	N 3,441.1	W 125.8	3,443.4	3,441.7	1.956
MWD	11,364.0	91.20	359.8	7,918.9	N 3,535.1	W 125.7	3,537.4	3,535.7	0.681
MWD	11,427.0	91.70	358.7	7,917.3	N 3,598.1	W 126.5	3,600.3	3,598.6	1.917
MWD	11,490.0	91.80	357.8	7,915.4	N 3,661.0	W 128.5	3,663.3	3,661.6	1.437
MWD	11,553.0	91.80	357.2	7,913.4	N 3,723.9	W 131.2	3,726.3	3,724.5	0.952
MWD	11,615.0	92.10	356.9	7,911.3	N 3,785.8	W 134.4	3,788.2	3,786.4	0.684
MWD	11,678.0	92.10	357.6	7,909.0	N 3,848.7	W 137.4	3,851.2	3,849.3	1.110
MWD	11,741.0	91.90	357.8	7,906.8	N 3,911.6	W 139.9	3,914.1	3,912.2	0.449
MWD	11,803.0	91.90	357.7	7,904.7	N 3,973.5	W 142.4	3,976.1	3,974.1	0.161
MWD	11,866.0	90.70	356.8	7,903.3	N 4,036.5	W 145.4	4,039.1	4,037.1	2.381
MWD	11,928.0	89.90	356.0	7,903.0	N 4,098.3	W 149.3	4,101.0	4,099.0	1.825
MWD	11,991.0	90.10	355.8	7,903.0	N 4,161.2	W 153.8	4,164.0	4,161.8	0.449
MWD	12,054.0	90.20	355.6	7,902.8	N 4,224.0	W 158.5	4,227.0	4,224.7	0.355
MWD	12,116.0	92.20	355.7	7,901.5	N 4,285.8	W 163.2	4,288.9	4,286.5	3.230
MWD	12,179.0	91.20	355.3	7,899.7	N 4,348.6	W 168.2	4,351.8	4,349.3	1.709
MWD	12,179.0	91.20	355.3	7,899.7	N 4,348.6	W 168.2	4,351.8	4,349.3	0.000
PROJ	12,304.0	91.20	355.9	7,897.0	N 4,473.2	W 177.8	4,476.7	4,473.9	0.480

Calculations use Minimum Curvature Method.