

30-015-37805

Directional Survey Chesapeake Operating, Inc.
 Well ID: 632177 Well Name: Skeen 34 State Com 1H
 Field: South Eddy Sect: 34 Town: 26S Rng: 28E County: Eddy State: NM

Survey Type	Measured		Coordinates				Vertical Section	Dog Leg Severity	
	Depth	Inclination	Azimuth	TVD	N-S	E-W			Closure
Wellbore:	Original Well Bore		Plane of Vertical Section:				354.5		
** Tieln	0.0	0.00	0.0	0.0	N 0.0	E 0.0	0.0		
INC	227.0	1.25			N 0.0	E 0.0			
INC	420.0	3.00			N 0.0	E 0.0			
INC	620.0	3.00			N 0.0	E 0.0			
INC-D	840.0	2.00			N 0.0	E 0.0			
INC-D	959.0	2.50			N 0.0	E 0.0			
INC-D	1,151.0	2.75			N 0.0	E 0.0			
INC-D	1,290.0	3.25			N 0.0	E 0.0			
INC-D	1,479.0	3.50	23.3	1,478.1	N 41.5	E 17.9	45.2	39.6	0.237
MWD	1,520.0	1.90	20.6	1,519.0	N 43.3	E 18.6	47.1	41.3	3.914
MWD	1,616.0	1.50	29.8	1,615.0	N 45.8	E 19.8	49.9	43.7	0.503
MWD	1,711.0	1.10	52.8	1,710.0	N 47.5	E 21.1	52.0	45.2	0.684
MWD	1,806.0	1.10	56.3	1,804.9	N 48.5	E 22.6	53.5	46.1	0.071
MWD	1,901.0	1.50	69.4	1,899.9	N 49.5	E 24.5	55.2	46.9	0.522
MWD	1,996.0	2.10	63.5	1,994.9	N 50.7	E 27.3	57.6	47.8	0.660
MWD	2,091.0	1.40	78.6	2,089.8	N 51.7	E 30.0	59.7	48.6	0.876
MWD	2,186.0	2.00	73.9	2,184.8	N 52.4	E 32.7	61.7	49.0	0.648
MWD	2,281.0	2.10	77.9	2,279.7	N 53.2	E 36.0	64.2	49.5	0.184
MWD	2,376.0	1.70	78.7	2,374.7	N 53.8	E 39.1	66.5	49.9	0.422
MWD	2,471.0	0.70	65.6	2,469.7	N 54.4	E 41.0	68.1	50.2	1.085
MWD	2,551.0	0.20	87.6	2,549.7	N 54.6	E 41.6	68.6	50.3	0.650
MWD	2,607.0	0.20	87.6	2,605.7	N 54.6	E 41.7	68.7	50.3	0.000
INC	3,050.0	0.25			N 0.0	E 0.0			
INC	3,304.0	0.50			N 0.0	E 0.0			
INC	3,556.0	0.50			N 0.0	E 0.0			
INC	3,683.0	0.75			N 0.0	E 0.0			
INC	3,810.0	0.75			N 0.0	E 0.0			
INC	3,937.0	0.75			N 0.0	E 0.0			
INC	4,066.0	0.75			N 0.0	E 0.0			
INC	4,255.0	0.75			N 0.0	E 0.0			
INC	4,445.0	0.75			N 0.0	E 0.0			
INC	4,647.0	0.75			N 0.0	E 0.0			
INC	4,824.0	0.75			N 0.0	E 0.0			
INC	4,983.0	1.00			N 0.0	E 0.0			
INC	5,173.0	1.25			N 0.0	E 0.0			
INC	5,364.0	1.25			N 0.0	E 0.0			
INC	5,586.0	1.00			N 0.0	E 0.0			
INC	5,735.0	1.00			N 0.0	E 0.0			
INC	5,966.0	1.50			N 0.0	E 0.0			
INC	6,061.0	1.25			N 0.0	E 0.0			
INC	6,156.0	1.50			N 0.0	E 0.0			

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INC	6,348.0	1.00			N 0.0	E 0.0		
INC	6,537.0	1.25			N 0.0	E 0.0		
INC	6,727.0	1.75			N 0.0	E 0.0		
INC	6,918.0	2.00			N 0.0	E 0.0		
INC	7,107.0	2.00			N 0.0	E 0.0		
INC	7,295.0	1.50			N 0.0	E 0.0		
INC	7,482.0	0.25			N 0.0	E 0.0		
INC	7,670.0	1.25			N 0.0	E 0.0		
INC	7,858.0	1.00			N 0.0	E 0.0		
INC	8,045.0	0.25			N 0.0	E 0.0		
INC	8,419.0	1.50			N 0.0	E 0.0		
INC	8,607.0	2.75			N 0.0	E 0.0		
INC	8,795.0	1.75			N 0.0	E 0.0		
INC	8,982.0	1.75			N 0.0	E 0.0		
INC	9,164.0	1.75			N 0.0	E 0.0		
INC	9,349.0	1.75			N 0.0	E 0.0		

Calculations use Minimum Curvature Method.

Directional Survey

Chesapeake Operating, Inc.

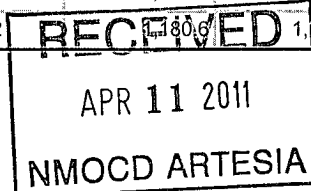
Well ID: 632177

Well Name: Skeen 34 State Com 1H

Field: South Eddy

Sect: 34 Town: 26S Rng: 28E County: Eddy State: NM

Survey Type	Measured		Coordinates					Closure	Vertical Section	Dog Leg Severity
	Depth	Inclination	Azimuth	TVD	N-S	E-W				
Wellbore:	Lateral			Plane of Vertical Section:			355.0			
** Tieln	6,200.0	1.42	210.3	6,197.5	N 46.0	W 20.4			-46.0	0.000
MWD	6,266.0	1.70	207.5	6,263.5	N 44.4	W 21.3	49.3		46.1	0.440
MWD	6,361.0	9.80	356.4	6,358.1	N 51.3	W 22.4	56.0		53.0	11.884
MWD	6,393.0	15.50	359.1	6,389.3	N 58.3	W 22.7	62.5		60.0	17.903
MWD	6,425.0	20.20	357.7	6,419.7	N 68.1	W 23.0	71.8		69.8	14.748
MWD	6,456.0	23.20	357.7	6,448.5	N 79.5	W 23.4	82.9		81.3	9.677
MWD	6,487.0	25.90	355.4	6,476.7	N 92.4	W 24.2	95.5		94.1	9.238
MWD	6,519.0	29.50	356.1	6,505.1	N 107.2	W 25.3	110.1		109.0	11.296
MWD	6,550.0	33.90	357.1	6,531.4	N 123.5	W 26.3	126.2		125.3	14.294
MWD	6,581.0	38.20	356.0	6,556.5	N 141.7	W 27.4	144.3		143.5	14.027
MWD	6,613.0	40.80	352.5	6,581.2	N 161.9	W 29.4	164.6		163.9	10.694
MWD	6,644.0	44.80	351.6	6,603.9	N 182.8	W 32.3	185.6		184.9	13.053
MWD	6,675.0	48.80	353.0	6,625.2	N 205.2	W 35.4	208.2		207.5	13.316
MWD	6,707.0	51.70	354.6	6,645.6	N 229.6	W 38.0	232.7		232.0	9.844
MWD	6,738.0	56.40	355.4	6,663.8	N 254.6	W 40.2	257.8		257.1	15.304
MWD	6,770.0	60.60	355.3	6,680.5	N 281.8	W 42.4	285.0		284.4	13.128
MWD	6,801.0	64.90	354.3	6,694.7	N 309.2	W 44.9	312.5		312.0	14.164
MWD	6,832.0	69.10	352.9	6,706.8	N 337.6	W 48.1	341.0		340.5	14.171
MWD	6,863.0	74.60	352.6	6,716.5	N 366.8	W 51.8	370.4		369.9	17.766
MWD	6,895.0	79.60	353.3	6,723.6	N 397.7	W 55.6	401.6		401.1	15.770
MWD	6,927.0	84.80	355.0	6,728.0	N 429.3	W 58.9	433.3		432.8	17.081
MWD	6,958.0	85.20	355.6	6,730.7	N 460.0	W 61.4	464.1		463.6	2.320
MWD	6,989.0	85.00	355.6	6,733.3	N 490.8	W 63.8	495.0		494.5	0.645
MWD	7,020.0	87.20	354.9	6,735.4	N 521.7	W 66.3	525.9		525.4	7.446
MWD	7,052.0	88.10	354.9	6,736.7	N 553.5	W 69.2	557.8		557.4	2.813
MWD	7,083.0	88.10	354.9	6,737.8	N 584.4	W 71.9	588.8		588.4	0.000
MWD	7,114.0	88.30	353.8	6,738.7	N 615.2	W 75.0	619.7		619.4	3.605
MWD	7,145.0	89.40	353.9	6,739.4	N 646.0	W 78.3	650.7		650.4	3.563
MWD	7,176.0	88.80	353.3	6,739.8	N 676.8	W 81.7	681.7		681.4	2.737
MWD	7,207.0	90.40	352.5	6,740.1	N 707.6	W 85.6	712.7		712.3	5.770
MWD	7,239.0	90.70	352.7	6,739.8	N 739.3	W 89.7	744.7		744.3	1.127
MWD	7,270.0	90.80	352.5	6,739.3	N 770.0	W 93.7	775.7		775.3	0.721
MWD	7,301.0	90.70	352.6	6,738.9	N 800.8	W 97.7	806.7		806.2	0.456
MWD	7,333.0	90.80	352.6	6,738.5	N 832.5	W 101.8	838.7		838.2	0.313
MWD	7,364.0	90.70	352.5	6,738.1	N 863.2	W 105.8	869.7		869.2	0.456
MWD	7,395.0	90.80	351.8	6,737.7	N 894.0	W 110.1	900.7		900.1	2.281
MWD	7,426.0	90.80	351.0	6,737.3	N 924.6	W 114.7	931.7		931.1	2.580
MWD	7,457.0	90.70	352.5	6,736.9	N 955.3	W 119.2	962.7		962.0	4.849
MWD	7,489.0	90.70	353.1	6,736.5	N 987.0	W 123.2	994.7		994.0	1.875
MWD	7,583.0	90.00	353.4	6,735.9	N 1,080.4	W 134.2	1,088.7		1,088.0	0.810
MWD	7,675.0	90.30	355.4	6,735.7	N 1,171.9	W 143.2	1,180.6		1,179.9	2.198



MWD	7,770.0	89.90	355.0	6,735.5	N 1,266.6	W 151.1	1,275.6	1,274.9	0.595
MWD	7,863.0	90.50	356.4	6,735.2	N 1,359.3	W 158.1	1,368.5	1,367.9	1.638
MWD	7,957.0	91.00	356.5	6,733.9	N 1,453.1	W 163.9	1,462.4	1,461.9	0.542
MWD	8,050.0	90.30	356.8	6,732.9	N 1,546.0	W 169.4	1,555.2	1,554.8	0.819
MWD	8,144.0	90.30	356.3	6,732.4	N 1,639.8	W 175.0	1,649.1	1,648.8	0.532
MWD	8,238.0	88.90	354.4	6,733.1	N 1,733.5	W 182.6	1,743.1	1,742.8	2.511
MWD	8,332.0	89.50	355.3	6,734.4	N 1,827.1	W 191.1	1,837.1	1,836.8	1.151
MWD	8,427.0	90.80	355.6	6,734.1	N 1,921.8	W 198.6	1,932.0	1,931.8	1.404
MWD	8,476.0	90.80	355.6	6,733.4	N 1,970.6	W 202.4	1,981.0	1,980.8	0.000
MWD	8,520.0	91.70	355.9	6,732.5	N 2,014.5	W 205.6	2,025.0	2,024.8	2.156
MWD	8,614.0	90.40	354.9	6,730.7	N 2,108.2	W 213.2	2,118.9	2,118.7	1.745
MWD	8,708.0	90.00	354.0	6,730.4	N 2,201.7	W 222.3	2,212.9	2,212.7	1.048
MWD	8,802.0	90.10	354.0	6,730.3	N 2,295.2	W 232.1	2,306.9	2,306.7	0.106
MWD	8,896.0	89.60	353.3	6,730.6	N 2,388.7	W 242.5	2,400.9	2,400.7	0.915
MWD	8,990.0	88.00	352.5	6,732.6	N 2,481.9	W 254.1	2,494.9	2,494.6	1.903
MWD	9,084.0	89.20	352.8	6,734.9	N 2,575.1	W 266.1	2,588.8	2,588.5	1.316
MWD	9,178.0	90.90	354.1	6,734.8	N 2,668.5	W 276.8	2,682.8	2,682.5	2.277
MWD	9,273.0	90.60	354.3	6,733.5	N 2,763.0	W 286.4	2,777.8	2,777.4	0.380
MWD	9,367.0	90.40	355.8	6,732.7	N 2,856.6	W 294.6	2,871.8	2,871.4	1.610
MWD	9,460.0	90.10	355.9	6,732.3	N 2,949.4	W 301.3	2,964.7	2,964.4	0.340
MWD	9,554.0	90.00	355.6	6,732.2	N 3,043.1	W 308.3	3,058.7	3,058.4	0.336
MWD	9,648.0	90.00	355.5	6,732.2	N 3,136.8	W 315.5	3,152.7	3,152.4	0.106
MWD	9,742.0	88.80	353.9	6,733.2	N 3,230.4	W 324.2	3,246.7	3,246.4	2.128
MWD	9,836.0	88.50	354.9	6,735.4	N 3,324.0	W 333.4	3,340.6	3,340.4	1.110
MWD	9,930.0	92.80	356.7	6,734.3	N 3,417.7	W 340.3	3,434.6	3,434.3	4.959
MWD	10,024.0	90.40	355.6	6,731.7	N 3,511.4	W 346.6	3,528.5	3,528.3	2.808
MWD	10,118.0	90.00	356.4	6,731.4	N 3,605.2	W 353.1	3,622.4	3,622.2	0.952
MWD	10,212.0	89.10	355.5	6,732.1	N 3,698.9	W 359.8	3,716.4	3,716.2	1.354
MWD	10,306.0	88.80	353.9	6,733.9	N 3,792.5	W 368.5	3,810.4	3,810.2	1.732
MWD	10,399.0	88.80	353.9	6,735.8	N 3,885.0	W 378.3	3,903.4	3,903.2	0.000
MWD	10,493.0	88.40	353.6	6,738.1	N 3,978.4	W 388.6	3,997.3	3,997.1	0.532
MWD	10,587.0	90.50	354.1	6,739.0	N 4,071.8	W 398.6	4,091.3	4,091.1	2.296
MWD	10,681.0	90.40	353.3	6,738.3	N 4,165.3	W 409.0	4,185.3	4,185.1	0.858
MWD	10,775.0	90.00	353.6	6,737.9	N 4,258.7	W 419.7	4,279.3	4,279.0	0.532
MWD	10,869.0	89.20	352.9	6,738.6	N 4,352.0	W 430.7	4,373.3	4,373.0	1.131
MWD	10,962.0	88.80	352.7	6,740.2	N 4,444.3	W 442.4	4,466.2	4,465.9	0.481
MWD	11,056.0	87.50	351.6	6,743.3	N 4,537.3	W 455.2	4,560.1	4,559.7	1.811
MWD	11,150.0	86.60	352.0	6,748.1	N 4,630.2	W 468.6	4,653.9	4,653.5	1.048
MWD	11,244.0	86.80	352.4	6,753.5	N 4,723.2	W 481.3	4,747.7	4,747.2	0.475
MWD	11,339.0	86.10	352.2	6,759.4	N 4,817.2	W 494.0	4,842.4	4,841.9	0.766
MWD	11,433.0	85.10	351.8	6,766.6	N 4,910.0	W 507.1	4,936.1	4,935.5	1.145
MWD	11,518.0	84.90	351.3	6,774.0	N 4,993.7	W 519.5	5,020.7	5,020.0	0.631
MWD	11,612.0	83.70	350.6	6,783.3	N 5,086.1	W 534.2	5,114.1	5,113.3	1.476
MWD	11,729.0	82.40	350.9	6,797.5	N 5,200.7	W 552.9	5,230.0	5,229.1	1.140
MWD	11,800.0	82.30	350.7	6,806.9	N 5,270.2	W 564.2	5,300.3	5,299.3	0.313
MWD	11,894.0	83.70	351.3	6,818.4	N 5,362.3	W 578.8	5,393.5	5,392.4	1.618
MWD	11,988.0	85.00	351.7	6,827.7	N 5,454.9	W 592.6	5,487.0	5,485.7	1.446
MWD	12,082.0	89.60	351.8	6,832.1	N 5,547.8	W 606.1	5,580.8	5,579.5	4.895

MWD	12,176.0	91.00	352.7	6,831.6	N 5,640.9	W 618.7	5,674.7	5,673.4	1.771
MWD	12,270.0	91.40	353.9	6,829.6	N 5,734.2	W 629.7	5,768.7	5,767.3	1.345
MWD	12,364.0	91.10	354.9	6,827.6	N 5,827.8	W 638.9	5,862.7	5,861.3	1.110
MWD	12,458.0	89.80	357.1	6,826.8	N 5,921.5	W 645.4	5,956.6	5,955.2	2.718
MWD	12,552.0	88.00	358.5	6,828.6	N 6,015.4	W 649.0	6,050.3	6,049.1	2.426
MWD	12,646.0	87.30	359.3	6,832.5	N 6,109.3	W 650.8	6,143.9	6,142.8	1.130
MWD	12,740.0	88.20	359.9	6,836.2	N 6,203.3	W 651.5	6,237.4	6,236.4	1.150
MWD	12,834.0	88.60	0.5	6,838.8	N 6,297.2	W 651.2	6,330.8	6,330.0	0.767
MWD	12,929.0	88.60	359.9	6,841.1	N 6,392.2	W 650.8	6,425.2	6,424.6	0.631
MWD	13,022.0	88.80	359.7	6,843.2	N 6,485.2	W 651.2	6,517.8	6,517.2	0.304
MWD	13,116.0	88.50	359.2	6,845.5	N 6,579.1	W 652.1	6,611.4	6,610.9	0.620
MWD	13,210.0	88.80	359.0	6,847.7	N 6,673.1	W 653.5	6,705.0	6,704.7	0.384
MWD	13,274.0	89.10	359.0	6,848.8	N 6,737.1	W 654.6	6,768.8	6,768.5	0.469
PROJ	13,334.0	89.10	359.0	6,849.8	N 6,797.1	W 655.7	6,828.6	6,828.3	0.000

Calculations use Minimum Curvature Method.