

30.015.36657

Directional Survey**Chesapeake Operating, Inc.**

Well ID: 624839

Well Name: PLU Pierce Canyon 32 State 1H

Field: Delaware Shale

Sect: Town: Rng: County: Eddy State: NM

Survey	Measured	Coordinates					Vertical	Dog Leg	
Type	Depth	Inclination	Azimuth	TVD	N-S	E-W	Closure	Section	Severity
Wellbore:	Lateral 1	Plane of Vertical Section:				0.0			
** Tieln	7,200.0	1 50	183.5	7,199.2	S 21.8	W 7.6		-21.8	0.000
MWD	7,267.0	1 80	192.6	7,266.2	S 23.7	W 7.9	24.9	-23.7	0.593
MWD	7,331.0	0.20	277.6	7,330.1	S 24.6	W 8.2	25.9	-24.6	2.803
MWD	7,363.0	3 50	9.6	7,362.1	S 23.6	W 8.1	25.0	-23.6	10.977
MWD	7,394.0	8 30	13.3	7,392.9	S 20.5	W 7.4	21.8	-20.5	15.524
MWD	7,426.0	13 10	8.6	7,424.4	S 14.7	W 6.3	16.0	-14.7	15.234
MWD	7,458.0	17 90	5.7	7,455.2	S 6.2	W 5.3	8.2	-6.2	15.190
MWD	7,490.0	22.90	4.9	7,485.2	N 4.9	W 4.3	6.5	4.9	15.649
MWD	7,522.0	27.80	5.2	7,514.1	N 18.5	W 3.1	18.8	18.5	15.318
MWD	7,554.0	32.20	4.3	7,541.8	N 34.5	W 1.8	34.5	34.5	13.821
MWD	7,586.0	36.60	3.4	7,568.2	N 52.5	W 0.6	52.5	52.5	13.841
MWD	7,618.0	40.10	3.3	7,593.3	N 72.3	E 0.6	72.3	72.3	10.939
MWD	7,650.0	42.20	2.9	7,617.4	N 93.4	E 1.7	93.4	93.4	6.614
MWD	7,682.0	45.10	2.4	7,640.5	N 115.4	E 2.7	115.4	115.4	9.126
MWD	7,713.0	48.70	1.9	7,661.7	N 138.0	E 3.6	138.1	138.0	11.672
MWD	7,745.0	52.50	0.7	7,682.0	N 162.7	E 4.1	162.8	162.7	12.223
MWD	7,777.0	54.00	358.3	7,701.2	N 188.4	E 3.9	188.4	188.4	7.621
MWD	7,809.0	55.30	356.9	7,719.7	N 214.5	E 2.8	214.5	214.5	5.407
MWD	7,841.0	57.40	356.3	7,737.4	N 241.0	E 1.2	241.0	241.0	6.746
MWD	7,873.0	60.20	355.3	7,754.0	N 268.3	W 0.8	268.3	268.3	9.149
MWD	7,904.0	62.80	355.6	7,768.8	N 295.5	W 2.9	295.5	295.5	8.430
MWD	7,936.0	64.40	356.6	7,783.0	N 324.1	W 4.9	324.1	324.1	5.730
MWD	7,968.0	66.90	357.7	7,796.2	N 353.2	W 6.3	353.3	353.2	8.417
MWD	7,999.0	69.90	358.4	7,807.6	N 382.0	W 7.3	382.1	382.0	9.902
MWD	8,031.0	73.40	359.2	7,817.7	N 412.4	W 7.9	412.4	412.4	11.192
MWD	8,062.0	75.90	359.8	7,825.9	N 442.3	W 8.2	442.3	442.3	8.278
MWD	8,094.0	78.50	359.9	7,833.0	N 473.5	W 8.3	473.5	473.5	8.131
MWD	8,126.0	81.50	0.5	7,838.5	N 505.0	W 8.2	505.0	505.0	9.555
MWD	8,158.0	83.90	0.7	7,842.6	N 536.7	W 7.8	536.8	536.7	7.526
MWD	8,189.0	87.00	1.3	7,845.1	N 567.6	W 7.3	567.6	567.6	10.184
MWD	8,223.0	90.50	2.2	7,845.8	N 601.6	W 6.3	601.6	601.6	10.629
MWD	8,255.0	90.60	1.6	7,845.5	N 633.6	W 5.2	633.6	633.6	1.901
MWD	8,286.0	88.80	0.8	7,845.7	N 664.5	W 4.5	664.6	664.5	6.354
MWD	8,381.0	88.70	359.9	7,847.7	N 759.5	W 4.0	759.5	759.5	0.953
MWD	8,471.0	89.50	359.9	7,849.2	N 849.5	W 4.1	849.5	849.5	0.889
MWD	8,572.0	90.40	359.3	7,849.2	N 950.5	W 4.8	950.5	950.5	1.071
MWD	8,667.0	90.20	359.3	7,848.7	N 1,045.5	W 6.0	1,045.5	1,045.5	0.211
MWD	8,763.0	90.10	0.3	7,848.5	N 1,141.5	W 6.3	1,141.5	1,141.5	1.047
MWD	8,858.0	89.40	359.9	7,848.9	N 1,236.5	W 6.2	1,236.5	1,236.5	0.849
MWD	8,954.0	88.90	0.3	7,850.3	N 1,332.5	W 6.0	1,332.5	1,332.5	0.667
MWD	9,049.0	87.60	0.2	7,853.2	N 1,427.4	W 5.6	1,427.4	1,427.4	1.372

MWD	9,145.0	88.40	358.5	7,856.6	N 1,523.4	W 6.7	1,523.4	1,523.4	1.956
MWD	9,241.0	89.00	359.7	7,858.8	N 1,619.3	W 8.2	1,619.3	1,619.3	1.397
MWD	9,337.0	88.30	0.0	7,861.0	N 1,715.3	W 8.4	1,715.3	1,715.3	0.793
MWD	9,433.0	88.70	0.1	7,863.5	N 1,811.3	W 8.3	1,811.3	1,811.3	0.429
MWD	9,529.0	90.10	359.3	7,864.5	N 1,907.3	W 8.8	1,907.3	1,907.3	1.680
MWD	9,626.0	88.20	359.7	7,866.0	N 2,004.2	W 9.7	2,004.3	2,004.2	2.002
MWD	9,721.0	89.10	359.2	7,868.2	N 2,099.2	W 10.6	2,099.2	2,099.2	1.084
MWD	9,817.0	90.60	359.3	7,868.5	N 2,195.2	W 11.9	2,195.2	2,195.2	1.566
MWD	9,912.0	90.00	359.9	7,868.0	N 2,290.2	W 12.5	2,290.2	2,290.2	0.893
MWD	10,036.0	91.40	359.9	7,866.5	N 2,414.2	W 12.7	2,414.2	2,414.2	1.129
MWD	10,130.0	89.50	0.5	7,865.7	N 2,508.2	W 12.4	2,508.2	2,508.2	2.120
MWD	10,225.0	89.80	359.8	7,866.3	N 2,603.2	W 12.2	2,603.2	2,603.2	0.802
MWD	10,321.0	89.70	359.1	7,866.7	N 2,699.2	W 13.1	2,699.2	2,699.2	0.737
MWD	10,416.0	89.50	358.3	7,867.4	N 2,794.1	W 15.2	2,794.2	2,794.1	0.868
MWD	10,512.0	90.60	358.4	7,867.3	N 2,890.1	W 18.0	2,890.1	2,890.1	1.151
MWD	10,608.0	91.10	357.7	7,865.9	N 2,986.0	W 21.3	2,986.1	2,986.0	0.896
MWD	10,704.0	92.10	359.1	7,863.2	N 3,081.9	W 23.9	3,082.0	3,081.9	1.792
MWD	10,799.0	91.00	0.0	7,860.6	N 3,176.9	W 24.7	3,177.0	3,176.9	1.496
MWD	10,895.0	90.40	0.3	7,859.5	N 3,272.9	W 24.4	3,273.0	3,272.9	0.699
MWD	10,991.0	88.90	1.3	7,860.0	N 3,368.9	W 23.1	3,369.0	3,368.9	1.878
MWD	11,086.0	88.80	1.6	7,861.9	N 3,463.8	W 20.7	3,463.9	3,463.8	0.333
MWD	11,182.0	89.50	0.1	7,863.4	N 3,559.8	W 19.3	3,559.9	3,559.8	1.724
MWD	11,278.0	89.60	0.3	7,864.1	N 3,655.8	W 18.9	3,655.8	3,655.8	0.233
MWD	11,374.0	89.40	1.1	7,865.0	N 3,751.8	W 17.8	3,751.8	3,751.8	0.859
MWD	11,470.0	91.20	0.9	7,864.5	N 3,847.8	W 16.1	3,847.8	3,847.8	1.887
MWD	11,564.0	92.30	0.0	7,861.6	N 3,941.7	W 15.3	3,941.7	3,941.7	1.512
MWD	11,659.0	90.80	0.7	7,859.0	N 4,036.7	W 14.8	4,036.7	4,036.7	1.742
MWD	11,755.0	90.30	0.5	7,858.1	N 4,132.7	W 13.8	4,132.7	4,132.7	0.561
MWD	11,851.0	88.60	0.4	7,859.0	N 4,228.7	W 13.0	4,228.7	4,228.7	1.774
MWD	11,946.0	89.60	0.0	7,860.5	N 4,323.6	W 12.7	4,323.7	4,323.6	1.134
MWD	12,042.0	89.90	359.8	7,860.9	N 4,419.6	W 12.8	4,419.7	4,419.6	0.376
MWD	12,133.0	89.90	359.2	7,861.1	N 4,510.6	W 13.6	4,510.7	4,510.6	0.659

Calculations use Minimum Curvature Method.