

Directional Survey Report

Well ID: 819446

Well Bore: Original Well Bore

30-025-36139
Chesapeake Operating

Well Name: Russell State 15
Unit I - 5 - 153 - 352
Plane of Vertical Section: 0.0 degrees
1980/5 4 990/E

Survey Type	Meas. Depth	Inc.	Azimuth	TVD	Coordinates		Closure	Vertical Section	Dog Leg Severity
					N-S	E-W			
** INC	265.0	1.00	0.0	0.0					
MWD	440.0	1.00							
MWD	964.0	0.50							
MWD	1405.0	0.50							
MWD	1880.0	0.25							
MWD	2386.0	1.00							
MWD	2861.0	0.25							
MWD	3397.0	0.75							
	3904.0	0.25							
** Tieln	4370.0	0.43	309.4	4369.9	N 9.0	E 11.0	47.1	9.0	
MSS	4875.0	0.25	261.0	4874.9	N 10.0	E 8.4	13.1	10.0	0.064
MSS	5476.0	0.75	343.0	5475.9	N 13.5	E 6.0	14.8	13.5	0.126
MSS	6012.0	0.50	244.0	6011.9	N 15.9	E 2.9	16.1	15.9	0.180
MSS	6582.0	0.25	284.0	6581.9	N 15.1	W 0.6	15.1	15.1	0.061
MSS	7086.0	0.50	308.5	7085.9	N 16.7	W 3.4	17.1	16.7	0.058
MSS	7487.0	0.50	319.0	7486.9	N 19.1	W 5.9	20.0	19.1	0.023
MSS	7960.0	0.75	284.0	7959.8	N 21.4	W 10.2	23.8	21.4	0.094
MSS	8433.0	0.75	4.0	8432.8	N 25.3	W 13.0	28.4	25.3	0.204
MSS	8906.0	1.00	353.0	8905.8	N 32.5	W 13.3	35.1	32.5	0.063
MSS	9315.0	0.75	298.5	9314.7	N 37.3	W 16.1	40.6	37.3	0.203
MSS	9786.0	0.50	339.0	9785.7	N 40.7	W 19.5	45.1	40.7	0.104
MSS	10156.0	0.75	309.0	10155.7	N 43.7	W 22.0	48.9	43.7	0.109
MSS	10377.0	1.75	294.0	10376.6	N 46.0	W 26.2	52.9	46.0	0.472
MSS	10472.0	2.00	284.0	10471.6	N 47.0	W 29.1	55.3	47.0	0.432
MSS	10566.0	2.00	289.0	10565.5	N 47.9	W 32.3	57.8	47.9	0.186
MSS	10757.0	3.00	289.0	10756.3	N 50.6	W 40.2	64.6	50.6	0.524
MSS	10851.0	3.00	282.0	10850.2	N 51.9	W 44.9	68.6	51.9	0.389
MSS	10946.0	3.25	254.0	10945.1	N 51.7	W 49.9	71.9	51.7	1.611
MSS	11040.0	3.75	264.0	11038.9	N 50.6	W 55.5	75.2	50.6	0.838



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Survey Type	Meas. Depth	Inc.	Azimuth	TVD	Coordinates		Closure	Vertical Section	Dog Leg Severity
					N-S	E-W			
MSS	11134.0	3.50	269.0	11132.7	N 50.3	W 61.5	79.4	50.3	0.429
MSS	11263.0	2.50	269.0	11261.5	N 50.2	W 68.2	84.7	50.2	0.775
MWD	11270.0	2.30	272.0	11268.5	N 50.2	W 68.5	84.9	50.2	3.373
MWD	11302.0	2.30	278.7	11300.5	N 50.3	W 69.8	86.0	50.3	0.840
MWD	11365.0	1.10	306.8	11363.5	N 50.8	W 71.5	87.7	50.8	2.265
MWD	11428.0	0.40	16.7	11426.4	N 51.4	W 71.9	88.4	51.4	1.640
MWD	11491.0	0.60	147.9	11489.4	N 51.3	W 71.7	88.2	51.3	1.451
MWD	11554.0	1.50	161.2	11552.4	N 50.3	W 71.3	87.2	50.3	1.471
MWD	11649.0	1.10	157.4	11647.4	N 48.3	W 70.5	85.4	48.3	0.430
MWD	11711.0	1.20	106.4	11709.4	N 47.5	W 69.6	84.3	47.5	1.604
MWD	11742.0	2.30	94.4	11740.4	N 47.4	W 68.7	83.5	47.4	3.721
MWD	11774.0	2.70	91.2	11772.4	N 47.3	W 67.3	82.3	47.3	1.323
MWD	11836.0	2.10	110.9	11834.3	N 46.9	W 64.8	80.0	46.9	1.632
MWD	11898.0	2.00	118.7	11896.3	N 46.0	W 62.8	77.8	46.0	0.478
MWD	11961.0	1.70	126.0	11959.2	N 44.9	W 61.1	75.8	44.9	0.605
MWD	12024.0	2.10	122.5	12022.2	N 43.7	W 59.3	73.7	43.7	0.661
MWD	12086.0	1.50	137.3	12084.2	N 42.5	W 57.8	71.8	42.5	1.217
MWD	12148.0	1.80	118.0	12146.1	N 41.5	W 56.4	70.0	41.5	1.012
MWD	12211.0	2.40	128.9	12209.1	N 40.2	W 54.5	67.7	40.2	1.140
MWD	12273.0	2.50	132.0	12271.0	N 38.4	W 52.5	65.1	38.4	0.268
MWD	12336.0	2.20	134.2	12334.0	N 36.7	W 50.6	62.5	36.7	0.497
MWD	12399.0	2.00	139.8	12396.9	N 35.0	W 49.0	60.2	35.0	0.454
MWD	12493.0	2.20	148.8	12490.9	N 32.2	W 47.0	57.0	32.2	0.410
MWD	12556.0	2.20	133.1	12553.8	N 30.3	W 45.5	54.7	30.3	0.954
MSS	12876.0	1.00	207.0	12873.7	N 23.7	W 42.3	48.5	23.7	0.672
MSS	13317.0	1.00	145.0	13314.7	N 17.1	W 41.9	45.2	17.1	0.234
INC	13610.0	1.25							
INC	13800.0	1.75							