

Directional Survey Report

Chesapeake Operating

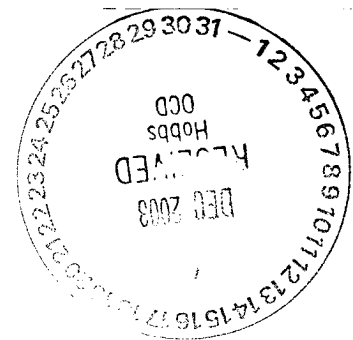
Well ID: 819473

Well Name: Berry 1-1

Well Bore: Original Well Bore

Plane of Vertical Section: 0.0 degrees

Survey Type	Meas. Depth	Inc.	Azimuth	TVD	Coordinates N-S	E-W	Closure	Vertical Section	Dog Leg Severity
** Tieln	0.0	0.00	0.0	0.0					
INC	207.0	0.50							
INC	534.0	1.00							
INC	1029.0	0.25							
INC	1505.0	0.50							
INC	1917.0	0.75							
INC	2395.0	0.75							
INC	2872.0	0.50							
INC	3349.0	0.75							
INC	3575.0	0.25							
INC	4081.0	0.75							
** Tieln	4390.0	0.66	350.0	4389.8	N 10.0	W 1.0		10.0	
INC	4932.0	0.75							
MSS	5429.0	1.50	357.0	5428.6	N 29.5	W 2.8	29.6	29.5	0.082
MMS	5925.0	1.50	5.5	5924.4	N 42.4	W 2.5	42.5	42.4	0.045
MMS	6435.0	1.50	5.5	6434.3	N 55.7	W 1.2	55.7	55.7	0.000
MMS	6920.0	2.00	355.0	6919.0	N 70.5	W 1.3	70.5	70.5	0.122
MMS	7427.0	2.00	350.0	7425.7	N 88.0	W 3.6	88.1	88.0	0.034
MWD	7661.0	2.00	6.7	7659.6	N 96.1	W 3.9	96.1	96.1	0.248
MWD	7789.0	3.30	116.0	7787.5	N 96.7	W 0.3	96.7	96.7	3.428
MWD	7884.0	6.30	131.6	7882.2	N 92.0	E 6.1	92.2	92.0	3.416
MWD	7980.0	6.60	126.9	7977.6	N 85.2	E 14.4	86.4	85.2	0.632
MWD	8075.0	7.50	141.3	8071.8	N 77.1	E 22.7	80.3	77.1	2.080
MWD	8175.0	7.20	139.2	8171.0	N 67.2	E 30.8	74.0	67.2	0.403
MWD	8258.0	8.30	137.8	8253.3	N 58.9	E 38.3	70.2	58.9	1.345
MWD	8362.0	7.90	130.4	8356.2	N 48.7	E 48.7	68.9	48.7	1.073
MWD	8457.0	8.60	137.1	8450.2	N 39.2	E 58.6	70.5	39.2	1.251
MWD	8553.0	8.00	141.3	8545.2	N 28.8	E 67.6	73.5	28.8	0.888
MWD	8649.0	8.00	142.4	8640.3	N 18.3	E 75.9	78.0	18.3	0.159



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MWD	8744.0	7.70	132.8	8734.4	N 8.7	E 84.6	85.0	8.7	1.414
MWD	8839.0	8.50	149.8	8828.5	S 1.7	E 92.8	92.8	-1.7	2.647
MWD	8934.0	8.60	144.2	8922.4	S 13.5	E 100.5	101.4	-13.5	0.882
MWD	9030.0	8.30	147.0	9017.4	S 25.2	E 108.4	111.3	-25.2	0.530
MWD	9125.0	7.10	141.3	9111.5	S 35.5	E 115.8	121.2	-35.5	1.496
MWD	9220.0	8.20	132.9	9205.7	S 44.7	E 124.5	132.3	-44.7	1.648
MWD	9314.0	8.50	131.5	9298.7	S 53.9	E 134.6	145.0	-53.9	0.386
MWD	9405.0	7.30	144.2	9388.8	S 63.0	E 143.0	156.3	-63.0	2.320
MWD	9504.0	5.20	157.2	9487.2	S 72.2	E 148.4	165.1	-72.2	2.545
MWD	9573.0	5.20	141.3	9556.0	S 77.6	E 151.6	170.3	-77.6	2.082
MWD	9669.0	6.50	130.8	9651.5	S 84.5	E 158.4	179.6	-84.5	1.749
MWD	9763.0	8.40	130.1	9744.7	S 92.4	E 167.7	191.5	-92.4	2.024
MWD	9859.0	8.10	137.5	9839.7	S 101.9	E 177.6	204.8	-101.9	1.148
MWD	9953.0	8.80	130.4	9932.7	S 111.5	E 187.6	218.2	-111.5	1.335
MWD	10049.0	9.30	140.3	10027.5	S 122.2	E 198.1	232.8	-122.2	1.701
MWD	10144.0	8.90	141.0	10121.3	S 133.8	E 207.7	247.0	-133.8	0.437
MWD	10239.0	8.40	141.0	10215.2	S 144.9	E 216.7	260.7	-144.9	0.526
MWD	10335.0	9.40	137.8	10310.0	S 156.2	E 226.3	275.0	-156.2	1.162
MWD	10429.0	8.50	141.0	10402.9	S 167.2	E 235.9	289.1	-167.2	1.094
MWD	10524.0	9.80	147.3	10496.7	S 179.5	E 244.7	303.4	-179.5	1.726
MWD	10619.0	9.80	141.0	10590.3	S 192.6	E 254.1	318.9	-192.6	1.128
MWD	10714.0	9.20	144.5	10684.0	S 205.1	E 263.6	334.0	-205.1	0.876
MWD	10874.0	9.20	142.7	10841.9	S 225.6	E 278.8	358.7	-225.6	0.180
MWD	10969.0	9.20	134.7	10935.7	S 237.0	E 288.8	373.6	-237.0	1.345
MWD	11032.0	9.00	134.3	10997.9	S 244.0	E 295.9	383.5	-244.0	0.333
MWD	11096.0	9.00	136.4	11061.1	S 251.1	E 302.9	393.5	-251.1	0.513
MWD	11189.0	9.00	135.4	11153.0	S 261.6	E 313.1	408.0	-261.6	0.168
MWD	11284.0	7.20	140.3	11247.0	S 271.5	E 322.1	421.2	-271.5	2.028
MWD	11378.0	6.60	141.3	11340.4	S 280.2	E 329.2	432.3	-280.2	0.651

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					N-S	E-W			
MWD	11472.0	6.80	142.0	11433.7	S 288.8	E 336.0	443.1	-288.8	0.230
MWD	11535.0	6.40	150.8	11496.3	S 294.8	E 340.0	450.0	-294.8	1.724
MWD	11565.0	5.80	151.2	11526.1	S 297.6	E 341.6	453.0	-297.6	2.005
MWD	11658.0	7.10	144.9	11618.5	S 306.4	E 347.1	463.0	-306.4	1.590
MWD	11751.0	7.10	141.0	11710.8	S 315.6	E 354.1	474.3	-315.6	0.518
MWD	11845.0	6.60	142.0	11804.2	S 324.4	E 361.0	485.4	-324.4	0.547
MWD	11886.0	6.30	142.0	11844.9	S 328.0	E 363.9	489.9	-328.0	0.732

Calculations using Minimum Curvature Method