

Directional Survey Report

Well ID: 819462

Well Bore: Original Well Bore

Chesapeake Operating

Well Name: Merchant Federal 1-8 #1 - N

8-225-33e

Plane of Vertical Section: 0.0 degrees

880/s & 1760/W 30-025-36318

Survey Type	Meas. Depth	Inc.	Azimuth	TVD	Coordinates		Closure	Vertical Section	Dog Leg Severity
					N-S	E-W			
** Tieln	250.0	0.50	0.0	0.0					
INC	482.0	0.75							
INC	751.0	1.00							
INC	1110.0	1.00							
INC	1635.0	0.75							
INC	2170.0	1.00							
INC	2735.0	1.50							
INC	3051.0	1.25							
INC	3587.0	3.00							
INC	3744.0	3.00							
INC	3922.0	3.75							
INC	4159.0	2.25							
INC	4600.0	1.75							
INC	4887.0	1.00							
INC	5479.0	2.00							
INC	5928.0	2.00							
INC	6339.0	2.00							
INC	6903.0	2.00							
INC	7280.0	1.00							
INC	7627.0	1.00							
INC	7912.0	2.00							
INC	8035.0	1.25							
INC	8497.0	2.00							
INC	8845.0	2.00							
INC	9097.0	2.00							
INC	9350.0	2.00							
INC	9699.0	2.00							
INC	9889.0	2.00							
INC	10108.0	2.00							



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					N-S	E-W			
INC	10329.0	2.00							
INC	10406.0	0.25							
INC	10896.0	1.00							
INC	11304.0	1.00							
INC	11821.0	2.00							
** Tieln	12060.0	1.76	228.9	11808.3	S 67.7	W 136.7	152.5	-67.7	
MSS	12625.0	1.00	355.0	12373.3	S 68.4	W 143.7	159.2	-68.4	0.440
MSS	13213.0	1.50	332.0	12961.1	S 56.5	W 147.8	158.2	-56.5	0.119
MSS	13695.0	1.75	275.0	13442.9	S 50.3	W 158.0	165.9	-50.3	0.325
MSS	14095.0	1.00	241.0	13842.8	S 51.5	W 167.2	174.9	-51.5	0.269
MSS	14338.0	1.50	29.0	14085.8	S 49.7	W 167.5	174.7	-49.7	0.991
MSS	14531.0	1.25	251.0	14278.8	S 48.2	W 168.3	175.0	-48.2	1.331
INC	14778.0	1.25							
INC	15000.0	1.75							
INC	15130.0	2.00							
INC	15382.0	1.50							

Calculations using Minimum Curvature Method

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Page 2

