



**Weatherford**<sup>®</sup>

### SURVEY REPORT

Report Date: 11/13/2014  
Customer: Chesapeake  
Job Name: 10508923  
Well Name: Rayle Coal 1H

Field: Marcellus Shale  
Rig: Nomac 337  
Rig Loc: Ohio County, WV

Survey Calculation Method: Minimum Curvature						
Magnetic Reference	Target Direction	Total Magnetic Field	Magnetic Dip Angle	Magnetic Declination	Grid Convergence	Total Correction
Grid North	342.31 deg	52885 nT	67.87 deg	-8.74 deg	-0.72 deg	-8.02 deg
Survey Tie-On	Depth	INC	AZ	TVD	NS	EW
	5015.00 ft	0.83 deg	316.75 deg	5006.62 ft	-47.73 ft	-124.87 ft

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head			Dogleg (deg/100ft)
				NS (ft)	EW (ft)	Vsect (ft)	
5092.00	1.18	298.75	5083.61	-46.94	-125.95	-6.45	0.61
5123.00	3.73	281.89	5114.58	-46.58	-127.21	-5.72	8.46
5155.00	6.24	279.51	5146.45	-46.08	-129.95	-4.41	7.87
5186.00	8.29	281.67	5177.20	-45.35	-133.80	-2.55	6.67
5218.00	10.73	281.97	5208.76	-44.26	-138.97	0.06	7.63
5249.00	13.70	282.23	5239.06	-42.89	-145.39	3.32	9.58
5281.00	15.55	281.90	5270.02	-41.20	-153.29	7.33	5.79
5311.00	17.31	281.77	5298.79	-39.46	-161.59	11.51	5.87
5342.00	20.39	280.10	5328.13	-37.57	-171.43	16.29	10.09
5374.00	23.74	278.32	5357.78	-35.66	-183.29	21.72	10.67
5405.00	27.12	275.80	5385.77	-34.04	-196.50	27.27	11.45
5437.00	29.93	273.62	5413.88	-32.80	-211.73	33.08	9.36
5468.00	31.91	272.96	5440.48	-31.89	-227.63	38.78	6.48
5500.00	33.74	273.07	5467.37	-30.98	-244.95	44.92	5.72
5531.00	34.53	272.95	5493.03	-30.07	-262.32	51.07	2.56
5562.00	35.68	271.50	5518.39	-29.38	-280.13	57.14	4.58
5593.00	38.14	271.61	5543.17	-28.87	-298.74	63.27	7.94
5625.00	41.41	271.57	5567.76	-28.30	-319.20	70.03	10.22
5657.00	44.98	271.17	5591.09	-27.78	-341.10	77.18	11.19
5688.00	49.02	271.52	5612.23	-27.25	-363.76	84.57	13.06
5720.00	51.38	272.99	5632.71	-26.28	-388.32	92.97	8.18
5751.00	53.93	274.91	5651.51	-24.57	-412.90	102.06	9.59
5782.00	57.30	276.48	5669.02	-22.03	-438.35	112.22	11.65
5812.00	60.70	278.06	5684.47	-18.77	-463.86	123.07	12.20
5843.00	64.74	278.13	5698.67	-14.89	-491.13	135.05	13.03
5875.00	69.31	278.21	5711.16	-10.70	-520.28	147.90	14.28
5906.00	74.09	277.98	5720.89	-6.56	-549.41	160.70	15.44
5938.00	78.02	277.22	5728.60	-2.45	-580.19	173.86	12.50
5970.00	80.05	276.50	5734.69	1.30	-611.38	187.02	6.72
6001.00	79.89	276.30	5740.09	4.70	-641.72	199.48	0.82
6032.00	80.63	276.13	5745.33	8.01	-672.09	211.86	2.45
6064.00	83.82	275.66	5749.66	11.26	-703.62	224.54	10.07
6096.00	84.31	275.58	5752.97	14.38	-735.30	237.13	1.55
6127.00	84.45	275.51	5756.01	17.36	-766.01	249.31	0.50
6158.00	84.72	276.48	5758.93	20.59	-796.70	261.70	3.23
6190.00	83.87	278.70	5762.11	24.79	-828.26	275.30	7.40
6221.00	82.28	281.33	5765.85	30.14	-858.56	289.60	9.86
6252.00	81.80	285.06	5770.15	37.15	-888.45	305.38	12.02
6284.00	81.59	288.31	5774.77	46.24	-918.77	323.23	10.07

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Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		VSect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
6315.00	81.98	291.95	5779.20	56.79	-947.58	342.05	11.69
6347.00	81.64	295.64	5783.76	69.57	-976.55	363.02	11.46
6379.00	81.97	298.80	5788.32	84.06	-1004.71	385.38	9.83
6410.00	82.82	302.32	5792.43	99.68	-1031.17	408.30	11.58
6441.00	84.24	306.06	5795.92	116.98	-1056.64	432.53	12.83
6471.00	85.49	309.27	5798.61	135.24	-1080.29	457.11	11.44
6503.00	87.59	312.26	5800.54	156.09	-1104.48	484.33	11.40
6534.00	87.13	316.42	5801.97	177.73	-1126.62	511.67	13.49
6564.00	86.12	319.71	5803.73	200.01	-1146.63	538.97	11.45
6595.00	87.10	323.82	5805.57	224.31	-1165.78	567.94	13.61
6626.00	86.24	327.35	5807.37	249.83	-1183.27	597.58	11.70
6658.00	86.79	331.53	5809.31	277.33	-1199.50	628.71	13.15
6689.00	88.17	335.18	5810.68	305.01	-1213.39	659.29	12.58
6721.00	88.92	339.45	5811.49	334.52	-1225.72	691.16	13.54
6752.00	90.12	343.40	5811.75	363.89	-1235.60	722.14	13.32
6784.00	90.58	343.37	5811.55	394.56	-1244.75	754.14	1.44
6878.00	89.95	342.42	5811.12	484.40	-1272.39	848.13	1.21
6973.00	90.10	341.97	5811.08	574.85	-1301.44	943.13	0.50
7067.00	90.51	343.86	5810.58	664.69	-1329.06	1037.12	2.06
7161.00	88.99	343.37	5810.99	754.87	-1355.57	1131.09	1.70
7255.00	88.04	342.26	5813.42	844.64	-1383.33	1225.05	1.55
7350.00	90.02	342.15	5815.03	935.08	-1412.36	1320.03	2.09
7444.00	89.98	343.79	5815.03	1024.96	-1439.89	1414.02	1.75
7538.00	90.14	344.84	5814.93	1115.45	-1465.30	1507.97	1.13
7632.00	91.47	345.10	5813.61	1206.23	-1489.68	1601.85	1.44
7727.00	90.93	342.36	5811.62	1297.39	-1516.28	1696.79	2.94
7821.00	90.58	342.98	5810.38	1387.12	-1544.28	1790.78	0.76
7915.00	91.05	343.89	5809.05	1477.21	-1571.08	1884.75	1.09
8009.00	90.30	341.34	5807.94	1566.90	-1599.16	1978.74	2.83
8104.00	89.76	340.60	5807.89	1656.70	-1630.14	2073.71	0.96
8199.00	89.83	340.34	5808.23	1746.24	-1661.89	2168.66	0.28
8294.00	90.49	340.44	5807.97	1835.73	-1693.78	2263.61	0.70
8388.00	91.52	340.01	5806.32	1924.17	-1725.57	2357.53	1.19
8482.00	91.26	340.03	5804.04	2012.49	-1757.68	2451.43	0.28
8577.00	90.79	339.37	5802.34	2101.57	-1790.64	2546.31	0.85
8671.00	89.83	340.71	5801.83	2189.92	-1822.72	2640.23	1.75
8765.00	90.35	341.66	5801.68	2278.89	-1853.04	2734.21	1.15
8859.00	89.65	341.73	5801.68	2368.14	-1882.56	2828.21	0.75
8953.00	89.46	342.56	5802.41	2457.61	-1911.38	2922.20	0.91
9047.00	90.68	342.46	5802.30	2547.26	-1939.63	3016.20	1.30
9142.00	91.64	342.22	5800.37	2637.76	-1968.45	3111.18	1.04
9236.00	90.63	340.52	5798.51	2726.82	-1998.47	3205.14	2.10
9331.00	89.09	341.84	5798.74	2816.73	-2029.11	3300.12	2.14
9426.00	91.76	343.60	5798.04	2907.43	-2057.33	3395.10	3.37
9521.00	92.03	343.05	5794.90	2998.38	-2084.57	3490.04	0.64
9615.00	88.48	341.33	5794.48	3087.86	-2113.32	3584.02	4.20
9709.00	90.35	342.63	5795.44	3177.24	-2142.39	3678.00	2.42
9801.00	89.69	341.85	5795.41	3264.85	-2170.46	3770.00	1.11
9896.00	91.12	343.07	5794.73	3355.43	-2199.08	3865.00	1.98
9990.00	91.36	342.97	5792.70	3445.31	-2226.53	3958.97	0.28
10083.00	91.49	343.04	5790.39	3534.22	-2253.70	4051.93	0.16
10178.00	90.21	341.94	5788.98	3624.81	-2282.28	4146.92	1.78
10272.00	89.77	342.44	5788.99	3714.30	-2311.03	4240.92	0.71

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Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head		VSect (ft)	Dogleg (deg/100ft)
				NS (ft)	EW (ft)		
10367.00	89.37	342.12	5789.71	3804.79	-2339.95	4335.91	0.54
10462.00	89.07	341.66	5791.00	3895.08	-2369.47	4430.90	0.58
10556.00	89.81	342.61	5791.92	3984.54	-2398.31	4524.89	1.28
10650.00	90.00	342.29	5792.08	4074.16	-2426.65	4618.89	0.40
10744.00	92.22	342.40	5790.25	4163.71	-2455.15	4712.87	2.36
10838.00	92.06	341.94	5786.74	4253.14	-2483.92	4806.80	0.52
10933.00	90.52	341.63	5784.61	4343.35	-2513.60	4901.77	1.65
11027.00	89.65	340.53	5784.47	4432.27	-2544.08	4995.75	1.49
11117.00	89.63	342.74	5785.03	4517.68	-2572.44	5085.73	2.46
11211.00	91.00	344.92	5784.51	4607.95	-2598.61	5179.69	2.74
11306.00	91.42	345.74	5782.51	4699.83	-2622.67	5274.54	0.97
11400.00	90.98	344.20	5780.54	4790.59	-2647.04	5368.41	1.70
11495.00	89.35	342.55	5780.27	4881.61	-2674.21	5463.39	2.44
11589.00	89.69	342.32	5781.05	4971.23	-2702.58	5557.39	0.44
11698.00	89.28	342.47	5782.03	5075.12	-2735.55	5666.38	0.40
Projected to Total Depth:							
11766.00	89.28	342.47	5782.89	5139.96	-2756.03	5734.38	0.00

Vertical Section is 5734.38 ft along the target direction of 342.31 deg at a measured depth of 11766.00 ft.  
Horizontal Displacement is 5832.22 ft along the well bore azimuth of 331.80 deg.  
The total correction is -8.02 deg relative to Grid North.

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### Directional Survey

Well Name: RAYLE COAL OHI 1H

Well API Number 47069001820000	Well RC Number 4001161886	Operator SWN PRODUCTION COMPANY L	Ground Elevation (ft) 1,065.00	KB Elev - Ground Distance (ft) 22.00	KB Elev History Link 1,087.00 KB1,10/29/2014 11:00	Spud Date 11/4/2014 02:15
Country US	State/Province WV	County OHIO	Field PANHANDLE FIELD	Area PANHANDLE AREA	Prospect PANHANDLE	Operations Status Producing

Wellbore Name RAYLE COAL OHI 1H	Parent Wellbore RAYLE COAL OHI 1H	Kick Off Depth (KB1) 1,554.5	Vertical Section Direction (°) 342.31
Date 11/9/2014	Definitive? No	Description Actual Survey	Proposed? No

Actual Deviation Survey Definitive, Proposed? No		Proposed Deviation Survey	
MD Tie In (ftKB1)	TVD Tie In (ftKB1)	Inclination Tie In (°)	Azimuth Tie In (°)
			NS Tie In (ft)
			EW Tie In (ft)

Survey Data													
Date	MD (ftKB1)	Incl (°)	Azm (°)	TVD (ftKB1)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Budd (°/100ft)	Turn (°/100ft)	Unwrap Displace (ft)	Method	Survey Company
11/9/2014	11.80	0.44	349.31									Gyro MS	Vaughn Energy
11/9/2014	106.20	0.91	311.82									Gyro MS	Vaughn Energy
11/9/2014	200.60	1.16	337.80									Gyro MS	Vaughn Energy
11/9/2014	295.00	0.51	343.91									Gyro MS	Vaughn Energy
11/9/2014	389.40	0.51	325.11									Gyro MS	Vaughn Energy
11/9/2014	483.80	0.47	275.56									Gyro MS	Vaughn Energy
11/9/2014	578.20	0.68	265.10									Gyro MS	Vaughn Energy
11/9/2014	672.60	5.12	246.50									Gyro MS	Vaughn Energy
11/9/2014	767.00	9.70	238.79									Gyro MS	Vaughn Energy
11/9/2014	861.40	11.77	237.63									Gyro MS	Vaughn Energy
11/9/2014	955.80	8.44	232.92									Gyro MS	Vaughn Energy
11/9/2014	1,050.20	7.62	241.02									Gyro MS	Vaughn Energy
11/9/2014	1,144.60	7.14	242.10									Gyro MS	Vaughn Energy
11/9/2014	1,239.00	6.97	245.56									Gyro MS	Vaughn Energy
11/9/2014	1,333.40	7.06	246.94									Gyro MS	Vaughn Energy
11/9/2014	1,427.80	6.17	240.20									Gyro MS	Vaughn Energy
11/9/2014	1,522.20	3.76	227.85									Gyro MS	Vaughn Energy
11/9/2014	1,616.60	0.16	221.22									Gyro MS	Vaughn Energy
11/9/2014	1,711.00	0.39	219.77									Gyro MS	Vaughn Energy
11/9/2014	1,805.40	0.14	253.21									Gyro MS	Vaughn Energy
11/9/2014	1,899.80	0.20	260.37									Gyro MS	Vaughn Energy
11/9/2014	1,994.20	0.30	261.21									Gyro MS	Vaughn Energy
11/9/2014	2,088.60	0.25	256.65									Gyro MS	Vaughn Energy
11/9/2014	2,183.00	0.14	306.19									Gyro MS	Vaughn Energy
11/9/2014	2,277.40	0.29	302.08									Gyro MS	Vaughn Energy
11/9/2014	2,371.80	0.49	288.45									Gyro MS	Vaughn Energy

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Directional Survey

Well Name: RAYLE COAL OHI 1H

Well API Number 47069001820000	Well RC Number 4001161886	Operator SWN PRODUCTION COMPANY L	Ground Elevation (ft) 1,065.00	KB Elev - Ground Distance (ft) 22.00	KB Elev History Link 1,067.00 KB1,1028/2014 11:00	Spud Date 11/4/2014 02:15
Country US	State/Province WV	County OHIO	Field PANHANDLE FIELD	Area PANHANDLE AREA	Prospect PANHANDLE	Operations Status Producing

Survey Data													
Date	MD (ftKB1)	Incl (°)	Azin (°)	TVD (ftKB1)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Buid (°/100ft)	Turn (°/100ft)	Unwrap Displace (ft)	Method	Survey Company
11/9/2014	2,466.20	0.37	303.47									Gyro MS	Vaughn Energy
11/9/2014	2,560.60	0.26	300.84									Gyro MS	Vaughn Energy
11/9/2014	2,655.00	0.13	304.63									Gyro MS	Vaughn Energy
11/9/2014	2,749.40	0.05	291.73									Gyro MS	Vaughn Energy
11/9/2014	2,843.80	0.13	303.48									Gyro MS	Vaughn Energy
11/9/2014	2,938.20	0.14	302.56									Gyro MS	Vaughn Energy
11/9/2014	3,127.00	0.29	297.74									Gyro MS	Vaughn Energy
11/9/2014	3,221.40	0.25	303.68									Gyro MS	Vaughn Energy
11/9/2014	3,315.80	0.36	291.82									Gyro MS	Vaughn Energy
11/9/2014	3,410.20	0.38	274.56									Gyro MS	Vaughn Energy
11/9/2014	3,504.60	0.32	282.93									Gyro MS	Vaughn Energy
11/9/2014	3,599.00	0.15	277.33									Gyro MS	Vaughn Energy
11/9/2014	3,693.40	0.19	279.82									Gyro MS	Vaughn Energy
11/9/2014	3,787.80	0.30	304.95									Gyro MS	Vaughn Energy
11/9/2014	3,882.20	0.21	324.54									Gyro MS	Vaughn Energy
11/9/2014	3,976.60	0.22	337.46									Gyro MS	Vaughn Energy
11/9/2014	4,071.00	0.23	329.43									Gyro MS	Vaughn Energy
11/9/2014	4,165.40	0.20	332.40									Gyro MS	Vaughn Energy
11/9/2014	4,259.80	0.45	311.87									Gyro MS	Vaughn Energy
11/9/2014	4,354.20	0.56	291.02									Gyro MS	Vaughn Energy
11/9/2014	4,448.60	0.62	291.47									Gyro MS	Vaughn Energy
11/9/2014	4,543.00	0.66	296.81									Gyro MS	Vaughn Energy
11/9/2014	4,637.40	0.67	315.40									Gyro MS	Vaughn Energy
11/9/2014	4,731.80	0.59	315.95									Gyro MS	Vaughn Energy
11/9/2014	4,826.20	0.51	314.60									Gyro MS	Vaughn Energy
11/9/2014	4,920.60	0.70	319.74									Gyro MS	Vaughn Energy
11/9/2014	5,015.00	0.83	316.75									Gyro MS	Weatherford
11/9/2014	5,092.00	1.18	298.75									MWD	Weatherford
11/9/2014	5,123.00	3.73	281.89									MWD	Weatherford
11/9/2014	5,155.00	6.24	279.51									MWD	Weatherford
11/9/2014	5,186.00	8.29	281.67									MWD	Weatherford
11/9/2014	5,218.00	10.73	281.97									MWD	Weatherford

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Country US	State/Province WV	County OHIO	Field PANHANDLE FIELD	Area PANHANDLE AREA	Prospect PANHANDLE	Operations Status Producing

Survey Data													
Date	MD (ft)	Incl (°)	Azm (°)	TVD (ft)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)	Unwrap Displace (ft)	Method	Survey Company
11/9/2014	5,249.00	13.70	282.23									MWD	Weatherford
11/9/2014	5,281.00	15.55	281.90									MWD	Weatherford
11/9/2014	5,311.00	17.31	281.77									MWD	Weatherford
11/9/2014	5,342.00	20.39	280.10									MWD	Weatherford
11/9/2014	5,405.00	27.12	275.80									MWD	Weatherford
11/9/2014	5,437.00	29.93	273.62									MWD	Weatherford
11/9/2014	5,468.00	31.91	272.96									MWD	Weatherford
11/9/2014	5,500.00	33.74	273.07									MWD	Weatherford
11/9/2014	5,531.00	34.53	272.95									MWD	Weatherford
11/9/2014	5,562.00	35.68	271.50									MWD	Weatherford
11/9/2014	5,593.00	38.14	271.81									MWD	Weatherford
11/9/2014	5,625.00	41.41	271.57									MWD	Weatherford
11/9/2014	5,657.00	44.98	271.17									MWD	Weatherford
11/9/2014	5,688.00	49.02	271.52									MWD	Weatherford
11/9/2014	5,720.00	51.38	272.99									MWD	Weatherford
11/9/2014	5,751.00	53.93	274.91									MWD	Weatherford
11/9/2014	5,782.00	57.30	276.48									MWD	Weatherford
11/9/2014	5,812.00	60.70	278.06									MWD	Weatherford
11/9/2014	5,843.00	64.74	278.13									MWD	Weatherford
11/9/2014	5,875.00	69.31	278.21									MWD	Weatherford
11/9/2014	5,906.00	74.09	277.98									MWD	Weatherford
11/9/2014	5,938.00	78.02	277.22									MWD	Weatherford
11/9/2014	5,970.00	80.05	276.50									MWD	Weatherford
11/9/2014	6,001.00	79.89	276.30									MWD	Weatherford
11/9/2014	6,032.00	80.63	276.13									MWD	Weatherford
11/9/2014	6,064.00	83.82	275.66									MWD	Weatherford
11/9/2014	6,096.00	84.31	275.58									MWD	Weatherford
11/9/2014	6,127.00	84.45	275.51									MWD	Weatherford
11/9/2014	6,158.00	84.72	276.48									MWD	Weatherford
11/9/2014	6,190.00	83.87	278.70									MWD	Weatherford
11/9/2014	6,221.00	82.28	281.33									MWD	Weatherford
11/9/2014	6,252.00	81.80	285.06									MWD	Weatherford
11/9/2014	6,284.00	81.59	288.31									MWD	Weatherford
11/9/2014	6,315.00	81.98	291.95									MWD	Weatherford
11/9/2014	6,347.00	81.64	295.64									MWD	Weatherford
11/9/2014	6,379.00	81.97	298.80									MWD	Weatherford
11/9/2014	6,410.00	82.82	302.32									MWD	Weatherford
11/9/2014	6,441.00	84.24	306.06									MWD	Weatherford
11/9/2014	6,471.00	85.49	309.27									MWD	Weatherford
11/9/2014	6,503.00	87.59	312.26									MWD	Weatherford
11/9/2014	6,534.00	87.13	316.42									MWD	Weatherford
11/9/2014	6,564.00	86.12	319.71									MWD	Weatherford
11/9/2014	6,595.00	87.10	323.82									MWD	Weatherford
11/9/2014	6,626.00	86.24	327.35									MWD	Weatherford
11/9/2014	6,658.00	86.79	331.53									MWD	Weatherford
11/9/2014	6,689.00	88.17	335.18									MWD	Weatherford
11/9/2014	6,721.00	88.92	339.45									MWD	Weatherford
11/9/2014	6,752.00	90.12	343.40									MWD	Weatherford
11/11/2014	6,784.00	90.58	343.37									MWD	Weatherford
11/11/2014	6,878.00	89.95	342.42									MWD	Weatherford
11/11/2014	6,973.00	90.10	341.97									MWD	Weatherford
11/11/2014	7,067.00	90.51	343.86									MWD	Weatherford
11/11/2014	7,161.00	88.99	343.37									MWD	Weatherford

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### Directional Survey

Well Name: RAYLE COAL OHI 1H

Well API Number 47059001820000	Well RC Number 4001161886	Operator SWN PRODUCTION COMPANY L	Ground Elevation (ft) 1,065.00	KB Elev - Ground Distance (ft) 22.00	KB Elev History Link 1,087.00 KB1,1029/2014 11:00	Spud Date 11/4/2014 02:15
Country US	State/Province WV	County OHIO	Field PANHANDLE FIELD	Area PANHANDLE AREA	Prospect PANHANDLE	Operations Status Producing

Survey Data													
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)	Unwrap Displace (ft)	Method	Survey Company
11/11/2014	7,255.00	88.04	342.26									MWD	Weatherford
11/11/2014	7,350.00	90.02	342.15									MWD	Weatherford
11/11/2014	7,444.00	89.98	343.79									MWD	Weatherford
11/11/2014	7,538.00	90.14	344.84									MWD	Weatherford
11/11/2014	7,632.00	91.47	345.10									MWD	Weatherford
11/11/2014	7,727.00	90.93	342.36									MWD	Weatherford
11/11/2014	7,821.00	90.58	342.98									MWD	Weatherford
11/11/2014	7,915.00	91.05	343.89									MWD	Weatherford
11/11/2014	8,009.00	90.30	341.34									MWD	Weatherford
11/11/2014	8,104.00	89.76	340.80									MWD	Weatherford
11/11/2014	8,199.00	89.83	340.34									MWD	Weatherford
11/11/2014	8,294.00	90.49	340.44									MWD	Weatherford
11/11/2014	8,388.00	91.52	340.01									MWD	Weatherford
11/11/2014	8,482.00	91.26	340.03									MWD	Weatherford
11/11/2014	8,577.00	90.79	339.37									MWD	Weatherford
11/11/2014	8,671.00	89.83	340.71									MWD	Weatherford
11/11/2014	8,765.00	90.35	341.66									MWD	Weatherford
11/11/2014	8,859.00	89.65	341.73									MWD	Weatherford
11/11/2014	8,953.00	89.46	342.56									MWD	Weatherford
11/11/2014	9,047.00	90.68	342.46									MWD	Weatherford
11/11/2014	9,142.00	91.64	342.22									MWD	Weatherford
11/11/2014	9,236.00	90.63	340.52									MWD	Weatherford
11/11/2014	9,331.00	89.09	341.84									MWD	Weatherford
11/11/2014	9,426.00	91.76	343.60									MWD	Weatherford
11/11/2014	9,521.00	92.03	343.05									MWD	Weatherford
11/11/2014	9,615.00	88.48	341.33									MWD	Weatherford
11/11/2014	9,709.00	90.35	342.63									MWD	Weatherford
11/11/2014	9,801.00	89.69	341.85									MWD	Weatherford
11/11/2014	9,896.00	91.12	343.07									MWD	Weatherford
11/11/2014	9,990.00	91.36	342.97									MWD	Weatherford
11/11/2014	10,083.00	91.49	343.04									MWD	Weatherford
11/11/2014	10,178.00	90.21	341.94									MWD	Weatherford
11/11/2014	10,272.00	89.77	342.44									MWD	Weatherford
11/11/2014	10,367.00	89.37	342.12									MWD	Weatherford
11/11/2014	10,462.00	89.07	341.66									MWD	Weatherford
11/11/2014	10,556.00	89.81	342.61									MWD	Weatherford
11/11/2014	10,650.00	90.00	342.29									MWD	Weatherford
11/11/2014	10,744.00	92.22	342.40									MWD	Weatherford
11/11/2014	10,838.00	92.06	341.94									MWD	Weatherford
11/11/2014	10,933.00	90.52	341.63									MWD	Weatherford
11/11/2014	11,027.00	89.65	340.53									MWD	Weatherford
11/11/2014	11,117.00	89.63	342.74									MWD	Weatherford

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**Directional Survey**

**Well Name: RAYLE COAL OHI 1H**

Well API Number 47069001820000	Well RC Number 4001161886	Operator SWN PRODUCTION COMPANY L	Ground Elevation (ft) 1,065.00	KB Elev - Ground Distance (ft) 22.00	KB Elev History Link 1,067.00 KB1,1029/2014 11:00	Spud Date 11/4/2014 02:15
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11/11/2014	11,211.00	91.00	344.92									MWD	Weatherford
11/11/2014	11,306.00	91.42	345.74									MWD	Weatherford
11/11/2014	11,400.00	90.98	344.20									MWD	Weatherford
11/11/2014	11,495.00	89.35	342.55									MWD	Weatherford
11/11/2014	11,589.00	89.69	342.32									MWD	Weatherford
11/11/2014	11,698.00	89.28	342.47									MWD	Weatherford
11/11/2014	11,766.00	89.28	342.47									Projection	Weatherford

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