

Job Number: 23D0512099
Company: Stone Energy
Lease/Well: Mills Wetzel 6H
Location: Jacksonburg
Rig Name: Saxon 141
RKB: 18
G.L. or M.S.L.: 1331

State/Country: West Virginia *103-02722*
Declination: -8.52
Grid: -7.77
File name: D:\WINSERVE\STONEJ~1\MW#6H.SVY
Date/Time: 20-May-12 / 22:28
Curve Name: MW#6H As Drilled

Scientific Drilling

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 145.35
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
108.00	.81	108.85	108.00	-.25	.72	.61	.76	108.85	.75
208.00	.46	109.62	207.99	-.61	1.77	1.51	1.87	109.01	.35
308.00	.11	112.89	307.99	-.78	2.24	1.91	2.37	109.27	.35
408.00	.17	141.62	407.99	-.94	2.42	2.14	2.59	111.16	.09
508.00	.24	163.88	507.99	-1.25	2.57	2.49	2.86	116.02	.10
608.00	.50	57.43	607.99	-1.22	2.99	2.70	3.23	112.17	.61
708.00	.34	11.12	707.98	-.69	3.42	2.51	3.49	101.47	.36
808.00	.23	112.45	807.98	-.48	3.66	2.48	3.69	97.45	.45
908.00	.22	93.47	907.98	-.57	4.04	2.76	4.08	98.00	.07
1008.00	.13	41.02	1007.98	-.49	4.30	2.85	4.33	96.54	.17
1108.00	.18	33.73	1107.98	-.28	4.47	2.77	4.47	93.55	.05
1208.00	.09	323.91	1207.98	-.08	4.51	2.63	4.51	91.05	.17
1308.00	.06	142.30	1307.98	-.06	4.49	2.60	4.49	90.78	.15
1408.00	.17	117.12	1407.98	-.17	4.66	2.79	4.66	92.09	.12
1508.00	.19	143.48	1507.98	-.37	4.89	3.08	4.90	94.34	.08
1608.00	.22	121.81	1607.98	-.61	5.15	3.43	5.18	96.70	.08
1708.00	.07	78.87	1707.98	-.69	5.37	3.63	5.42	97.37	.18
1808.00	.12	302.56	1807.98	-.63	5.34	3.55	5.38	96.69	.18
1908.00	.08	259.01	1907.98	-.58	5.19	3.43	5.22	96.42	.08
2008.00	.16	9.05	2007.98	-.46	5.14	3.30	5.16	95.10	.20
2108.00	.28	61.67	2107.98	-.20	5.38	3.23	5.38	92.18	.22
2208.00	.29	62.10	2207.98	.03	5.82	3.28	5.82	89.71	.01
2308.00	.41	112.49	2307.98	.01	6.37	3.61	6.37	89.90	.32
2408.00	.52	79.58	2407.97	-.04	7.15	4.10	7.15	90.35	.28
2508.00	.54	109.10	2507.97	-.12	8.04	4.67	8.04	90.83	.27
2608.00	.52	107.25	2607.96	-.40	8.92	5.40	8.93	92.60	.93
2708.00	.80	116.83	2707.96	-.85	9.97	6.37	10.01	94.90	.30
2808.00	.89	121.12	2807.95	-1.57	11.26	7.69	11.37	97.94	.11
2908.00	0.01	257.10	2907.95	-1.17	11.26	7.69	11.37	97.94	.11

01/10/2014

103-02722

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
3008.00	4.06	303.83	3007.76	-1.00	4.49	3.38	4.60	102.61	2.94
3108.00	6.90	335.34	3107.31	6.43	-.96	-5.83	6.50	351.50	4.04
3208.00	7.10	357.95	3206.59	18.07	-3.69	-16.96	18.44	348.46	2.74
3308.00	6.69	20.10	3305.88	29.71	-1.91	-25.53	29.78	356.33	2.67
3408.00	8.66	30.40	3404.98	41.68	3.90	-32.07	41.86	5.35	2.40
3508.00	10.18	36.22	3503.64	55.30	12.94	-38.14	56.80	13.17	1.79
3608.00	9.96	34.53	3602.10	69.56	23.06	-44.11	73.28	18.34	.37
3708.00	10.79	33.88	3700.46	84.45	33.18	-50.61	90.74	21.45	.84
3808.00	10.98	40.53	3798.66	99.46	44.59	-56.47	109.00	24.15	1.27
3908.00	10.66	40.57	3896.89	113.73	56.79	-61.27	127.12	26.54	.32
4008.00	11.03	40.30	3995.10	128.05	68.99	-66.11	145.45	28.32	.37
4108.00	10.67	39.67	4093.31	142.47	81.09	-71.10	163.93	29.65	.38
4208.00	10.87	33.71	4191.55	157.44	92.24	-77.08	182.47	30.36	1.13
4308.00	10.40	32.40	4289.84	172.91	102.30	-84.07	200.90	30.61	.53
4408.00	9.39	33.18	4388.35	187.35	111.61	-90.67	218.08	30.78	1.02
4508.00	8.96	32.86	4487.07	200.72	120.30	-96.73	234.01	30.93	.43
4608.00	9.37	32.35	4585.79	214.14	128.88	-102.89	249.93	31.04	.42
4708.00	6.74	32.49	4684.80	225.97	136.39	-108.35	263.94	31.11	2.63
4808.00	5.69	33.38	4784.21	235.06	142.27	-112.48	274.76	31.18	1.05
4908.00	5.21	32.47	4883.75	243.03	147.43	-116.10	284.25	31.24	.49
5008.00	4.04	25.55	4983.43	250.04	151.39	-119.62	292.30	31.19	1.29
5108.00	3.24	8.80	5083.23	256.01	153.34	-123.42	298.42	30.92	1.32
5208.00	.50	35.52	5183.17	259.16	154.03	-125.62	301.47	30.72	2.80
5308.00	.61	151.32	5283.16	259.05	154.53	-125.24	301.64	30.82	.94
5408.00	.41	114.08	5383.16	258.43	155.12	-124.40	301.41	30.97	.38
5508.00	.51	117.38	5483.16	258.08	155.84	-123.71	301.48	31.12	.10
5608.00	.20	116.51	5583.15	257.80	156.39	-123.16	301.53	31.24	.31
5708.00	.42	140.90	5683.15	257.44	156.78	-122.64	301.42	31.34	.25
5808.00	.91	134.49	5783.15	256.60	157.57	-121.50	301.12	31.55	.49
5908.00	1.23	135.31	5883.13	255.28	158.90	-119.66	300.69	31.90	.32
6008.00	1.54	142.62	5983.10	253.45	160.47	-117.26	299.97	32.34	.36
6050.62	1.86	143.11	6025.70	252.44	161.23	-116.00	299.53	32.57	.75
6110.00	1.88	142.03	6085.05	250.90	162.41	-114.06	298.88	32.91	.07
6173.00	1.58	144.36	6148.02	249.38	163.55	-112.16	298.23	33.26	.49
6205.00	1.25	141.10	6180.01	248.75	164.03	-111.37	297.96	33.40	1.06
6237.00	2.37	139.45	6211.99	247.97	164.67	-110.37	297.67	33.59	3.50
6269.00	4.51	137.55	6243.93	246.54	165.95	-108.46	297.19	33.95	6.70
6300.00	6.25	136.86	6274.80	244.41	167.93	-105.58	296.54	34.49	5.62
6331.00	7.67	138.34	6305.57	241.64	170.46	-101.86	295.71	35.20	4.62
6363.00	8.72	139.68	6337.24	238.19	173.45	-97.33	294.65	36.06	3.88
6395.00	9.90	139.88	6368.82	234.24	176.79	-92.18	293.47	37.04	3.69
6427.00	11.39	141.37	6400.27	229.67	180.54	-86.29	292.13	38.17	4.73
Bottom Line CK.									
6459.00	13.10	146.22	6431.54	224.18	184.53	-79.51	290.36	39.46	6.23
6491.00	14.61	148.92	6462.61	217.71	188.63	-71.85	288.06	40.91	5.13
6522.00	16.13	149.03	6492.50	210.67	192.86	-63.65	285.62	42.47	4.90
6554.00	17.52	150.19	6523.13	202.68	197.54	-54.42	283.02	44.26	4.74
6585.00	18.97	152.98	6552.57	194.14	202.15	-44.77	280.28	46.16	5.46
6617.00	19.85	154.58	6582.75	184.60	206.85	-34.25	277.24	48.25	3.21
6649.00	22.13	156.39	6612.62	174.17	211.50	-22.07	274.06	50.54	7.44

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
6681.00	24.70	157.39	6641.99	162.47	216.58	-10.52	270.75	53.12	8.13
6712.00	27.31	157.87	6669.84	149.90	221.75	2.76	267.66	55.94	8.45
6744.00	27.86	157.51	6698.21	136.19	227.37	17.24	265.04	59.08	1.80
6776.00	28.42	157.58	6726.42	122.25	233.14	31.99	263.25	62.33	1.75
Bottom Line CK.									
6808.00	30.16	158.76	6754.33	107.71	238.96	47.25	262.11	65.74	5.73
6839.00	32.22	159.69	6780.85	92.70	244.65	62.83	261.62	69.25	6.82
6870.00	33.49	160.23	6806.89	76.90	250.41	79.11	261.95	72.93	4.20
6902.00	35.02	161.16	6833.34	59.90	256.36	96.48	263.27	76.85	5.05
6934.00	36.59	161.02	6859.29	42.19	262.43	114.49	265.80	80.87	4.91
6966.00	38.49	160.50	6884.66	23.79	268.85	133.29	269.90	84.94	6.02
6997.00	40.38	159.66	6908.61	5.28	275.56	152.34	275.62	88.90	6.33
7029.00	42.03	159.93	6932.68	-14.51	282.84	172.75	283.22	92.94	5.19
7061.00	43.63	159.08	6956.15	-34.88	290.46	193.84	292.55	96.85	5.32
7093.00	45.64	158.82	6978.92	-55.86	298.54	215.69	303.72	100.60	6.31
7124.00	47.43	157.78	7000.24	-76.77	306.86	237.62	316.32	104.05	6.27
7155.00	49.07	157.15	7020.88	-98.13	315.72	260.23	330.62	107.27	5.50
Bottom Line CK.									
7187.00	50.70	157.03	7041.50	-120.67	325.25	284.19	346.91	110.35	5.10
7219.00	52.28	156.98	7061.43	-143.72	335.03	308.71	364.56	113.22	4.94
7251.00	53.80	156.94	7080.67	-167.25	345.04	333.76	383.44	115.86	4.75
7282.00	55.70	157.06	7098.56	-190.55	354.93	358.55	402.85	118.23	6.14
7314.00	57.60	157.28	7116.15	-215.18	365.30	384.72	423.97	120.50	5.97
7346.00	58.92	157.40	7132.98	-240.30	375.79	411.34	446.05	122.60	4.14
7378.00	60.67	158.09	7149.08	-265.89	386.26	438.34	468.93	124.54	5.78
7410.00	62.67	158.07	7164.27	-292.02	396.77	465.82	492.65	126.35	6.25
7442.00	64.42	157.47	7178.52	-318.54	407.61	493.80	517.31	128.01	5.72
7474.00	64.87	157.57	7192.22	-345.26	418.67	522.06	542.67	129.51	1.43
7505.00	66.36	158.13	7205.02	-371.41	429.31	549.63	567.67	130.86	5.08
7537.00	68.69	157.42	7217.25	-398.78	440.50	578.50	594.19	132.15	7.56
7569.00	71.23	156.62	7228.22	-426.45	452.24	607.94	621.59	133.32	8.28
7601.00	73.08	156.47	7238.03	-454.39	464.36	637.82	649.70	134.38	5.80
7633.00	74.87	156.12	7246.86	-482.56	476.72	668.02	678.33	135.35	5.69
7665.00	76.39	155.18	7254.80	-510.79	489.51	698.51	707.48	136.22	5.54
7697.00	77.16	154.68	7262.12	-539.01	502.70	729.23	737.05	137.00	2.85
Checked Bottom Line									
7729.00	78.71	154.21	7268.81	-567.24	516.20	760.13	766.96	137.70	5.05
7760.00	80.92	154.35	7274.29	-594.73	529.44	790.27	796.25	138.32	7.14
7792.00	81.69	153.09	7279.13	-623.09	543.45	821.56	826.79	138.91	4.58
7824.00	83.24	152.73	7283.32	-651.33	557.90	853.01	857.60	139.42	4.97
7856.00	84.89	152.81	7286.63	-679.63	572.46	884.57	888.60	139.89	5.16
7888.00	86.57	152.52	7289.02	-707.98	587.11	916.22	919.75	140.33	5.33
7920.00	87.55	151.55	7290.66	-736.21	602.10	947.96	951.06	140.72	4.31
7951.00	87.82	151.80	7291.91	-763.47	616.79	978.75	981.49	141.07	1.19
7983.00	88.15	152.35	7293.03	-791.73	631.77	1010.51	1012.90	141.41	2.00
8015.00	88.15	151.52	7294.07	-819.95	646.82	1042.28	1044.36	141.73	2.59
8079.00	88.02	147.62	7296.21	-875.09	679.21	1106.06	1107.75	142.18	6.09
8142.00	87.65	146.94	7298.59	-928.06	713.24	1168.98	1170.47	142.46	1.23
8206.00	87.55	145.88	7301.27	-981.32	748.61	1232.91	1234.27	142.66	1.66
8269.00	87.35	146.54	7304.07	-1033.63	783.62	1295.84	1297.99	142.82	1.00

103.02722

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
8333.00	88.73	146.00	7306.26	-1086.82	819.13	1359.79	1360.94	142.99	2.32
8397.00	89.40	146.15	7307.30	-1139.92	854.85	1423.78	1424.84	143.13	1.07
8460.00	90.13	145.74	7307.56	-1192.12	890.13	1486.77	1487.77	143.25	1.33
8524.00	90.37	146.54	7307.28	-1245.26	925.78	1550.77	1551.69	143.37	1.31
8588.00	89.50	145.39	7307.36	-1298.30	961.60	1614.76	1615.63	143.47	2.25
Bottom Line CK.									
8651.00	88.99	145.69	7308.19	-1350.24	997.25	1677.75	1678.58	143.55	.94
8715.00	88.62	146.43	7309.52	-1403.32	1032.97	1741.74	1742.51	143.64	1.29
8779.00	89.00	146.37	7310.85	-1456.61	1068.38	1805.71	1806.42	143.74	.60
8842.00	89.60	145.94	7311.62	-1508.93	1103.47	1868.70	1869.36	143.82	1.17
8906.00	87.75	145.76	7313.10	-1561.88	1139.38	1932.68	1933.31	143.89	2.90
8969.00	88.45	146.08	7315.19	-1614.03	1174.66	1995.64	1996.23	143.95	1.22
9032.00	89.46	147.94	7316.34	-1666.86	1208.96	2058.60	2059.13	144.05	3.36
9095.00	90.10	149.70	7316.58	-1720.76	1241.57	2121.48	2121.92	144.19	2.97
9159.00	90.13	148.71	7316.45	-1775.74	1274.34	2185.33	2185.68	144.34	1.55
9223.00	90.97	147.56	7315.84	-1830.09	1308.12	2249.25	2249.54	144.44	2.23
9286.00	91.24	148.47	7314.62	-1883.51	1341.49	2312.17	2312.40	144.54	1.51
9350.00	90.70	148.69	7313.54	-1938.12	1374.85	2376.06	2376.24	144.65	.91
9414.00	90.47	148.61	7312.88	-1992.77	1408.14	2439.95	2440.08	144.75	.38
9477.00	88.59	148.04	7313.40	-2046.38	1441.22	2502.86	2502.96	144.84	3.12
9540.00	87.95	147.43	7315.30	-2099.63	1474.84	2565.78	2565.85	144.91	1.40
9604.00	88.49	147.48	7317.29	-2153.56	1509.25	2629.70	2629.76	144.98	.85
9667.00	89.09	146.72	7318.62	-2206.44	1543.46	2692.66	2692.70	145.03	1.54
9731.00	89.97	146.41	7319.15	-2259.85	1578.72	2756.64	2756.68	145.06	1.46
9795.00	90.20	146.21	7319.05	-2313.10	1614.22	2820.63	2820.66	145.09	.48
9858.00	89.70	145.38	7319.11	-2365.20	1649.64	2883.63	2883.66	145.11	1.54
9922.00	90.27	145.32	7319.12	-2417.85	1686.03	2947.63	2947.66	145.11	.90
9986.00	90.13	145.20	7318.90	-2470.44	1722.50	3011.63	3011.66	145.11	.29
10049.00	89.93	145.07	7318.87	-2522.13	1758.51	3074.63	3074.66	145.11	.38
10113.00	90.30	144.99	7318.74	-2574.58	1795.19	3138.63	3138.66	145.11	.59
10177.00	90.07	144.33	7318.53	-2626.78	1832.21	3202.62	3202.65	145.10	1.09
10240.00	89.77	146.36	7318.62	-2678.60	1868.03	3265.62	3265.65	145.11	3.26
10304.00	90.50	147.45	7318.47	-2732.22	1902.98	3329.59	3329.62	145.14	2.05
10368.00	90.54	147.38	7317.89	-2786.14	1937.44	3393.55	3393.56	145.19	.13
10431.00	89.77	147.33	7317.72	-2839.19	1971.43	3456.51	3456.52	145.23	1.22
10494.00	90.20	147.69	7317.73	-2892.33	2005.27	3519.47	3519.47	145.27	.89
10558.00	90.03	148.39	7317.61	-2946.63	2039.15	3583.39	3583.40	145.32	1.13
10622.00	90.34	149.28	7317.40	-3001.39	2072.27	3647.28	3647.28	145.38	1.47
Bottom Line CK.									
10686.00	90.00	147.40	7317.21	-3055.86	2105.86	3711.19	3711.19	145.43	2.99
10750.00	89.26	146.96	7317.62	-3109.64	2140.54	3775.15	3775.16	145.46	1.35
10813.00	89.90	147.36	7318.08	-3162.57	2174.71	3838.12	3838.13	145.49	1.20
10877.00	90.54	147.52	7317.84	-3216.51	2209.15	3902.07	3902.09	145.52	1.03
10941.00	89.13	147.64	7318.02	-3270.54	2243.46	3966.02	3966.05	145.55	2.21
11004.00	89.63	147.63	7318.70	-3323.75	2277.18	4028.97	4029.00	145.58	1.39
11068.00	89.09	147.37	7319.42	-3377.72	2311.57	4092.92	4092.96	145.61	.94
11132.00	89.83	147.94	7320.02	-3431.79	2345.81	4156.86	4156.92	145.65	1.46
11195.00	89.46	148.20	7320.41	-3485.26	2379.13	4219.79	4219.86	145.68	1.72
11259.00	90.23	148.57	7320.59	-3539.76	2412.67	4283.70	4283.79	145.72	1.33
11323.00	89.90	148.58	7320.51	-3594.37	2446.04	4347.60	4347.71	145.76	.50

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 145.52
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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
11385.00	89.66	147.48	7320.75	-3646.96	2478.87	4409.53	4409.66	145.80	1.82
11449.00	89.87	147.54	7321.01	-3700.95	2513.25	4473.48	4473.64	145.82	.34
11513.00	88.42	148.55	7321.97	-3755.24	2547.11	4537.40	4537.58	145.85	2.76
11576.00	87.82	148.45	7324.04	-3808.93	2580.01	4600.28	4600.48	145.89	.97
Bottom Line									
11640.00	88.22	148.23	7326.25	-3863.37	2613.59	4664.15	4664.38	145.92	.71
Proj. to Bit									
11699.00	88.22	148.23	7328.08	-3913.51	2644.63	4723.05	4723.31	145.95	.00