

Job Number: 23D1211254	State/Country: West Virginia
Company: Stone Energy	Declination: -8.43
Lease/Well: Maury et al Unit 1 # 2H	Grid: 0.82
Location: Maury Pad	File name: D:\WINSERVE\JOBS\M1#2H.SVY
Rig Name: Saxon 141	Date/Time: 24-Dec-11 / 23:45
RKB: 18	Curve Name: Maury et al 1 #2H As Drilled
G.L. or M.S.L.: 734	

Scientific Drilling

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 155.11
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
100.00	.27	237.96	100.00	-.12	-.20	.03	.24	237.96	.27
200.00	.28	250.47	200.00	-.33	-.63	.04	.71	242.22	.06
300.00	.08	299.41	300.00	-.38	-.92	-.04	1.00	247.62	.24
400.00	.18	4.49	400.00	-.19	-.97	-.24	.99	259.01	.16
500.00	.10	289.81	500.00	.00	-1.04	-.44	1.04	269.89	.18
600.00	.17	214.31	600.00	-.09	-1.20	-.42	1.21	265.49	.17
700.00	.24	72.13	700.00	-.15	-1.09	-.32	1.10	261.99	.39
800.00	.57	73.78	799.99	.05	-.41	-.22	.42	276.91	.33
900.00	.72	71.55	899.99	.39	.66	-.07	.77	59.62	.15
1000.00	.47	14.43	999.98	.98	1.36	-.32	1.68	54.11	.61
1100.00	.47	33.45	1099.98	1.72	1.69	-.85	2.41	44.41	.16
1200.00	.56	33.32	1199.98	2.47	2.18	-1.33	3.30	41.42	.09
1300.00	.60	51.40	1299.97	3.21	2.86	-1.71	4.30	41.71	.19
1400.00	.47	49.12	1399.97	3.80	3.58	-1.94	5.22	43.26	.13
1500.00	.58	48.69	1499.96	4.41	4.27	-2.20	6.14	44.10	.11
1600.00	.66	71.28	1599.96	4.93	5.20	-2.28	7.16	46.53	.26
1700.00	.86	67.02	1699.95	5.40	6.43	-2.19	8.40	49.97	.21
1800.00	.89	51.80	1799.94	6.18	7.73	-2.35	9.90	51.38	.23
1900.00	1.09	31.08	1899.92	7.47	8.83	-3.06	11.57	49.78	.41
2000.00	.85	13.12	1999.91	9.01	9.49	-4.18	13.09	46.50	.38
2100.00	1.08	335.38	2099.89	10.59	9.27	-5.70	14.07	41.20	.66
2126.01	.98	334.51	2125.90	11.01	9.07	-6.17	14.27	39.48	.39
2139.90	.99	334.01	2139.79	11.23	8.97	-6.41	14.37	38.62	.09
MWD Surveys									
2202.00	1.81	328.93	2201.87	12.55	8.23	-7.92	15.00	33.25	1.33

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical			CLOSURE		Dogleg Severity Deg/100
				N-S FT	E-W FT	Section FT	Distance FT	Direction Deg	
2266.00	1.62	326.15	2265.84	14.17	7.20	-9.82	15.89	26.95	.32
2330.00	1.11	322.48	2329.82	15.41	6.32	-11.32	16.65	22.30	.81
2394.00	.46	138.25	2393.82	15.71	6.11	-11.68	16.86	21.26	2.45
2457.00	2.15	146.50	2456.80	14.53	6.93	-10.27	16.10	25.50	2.69
2521.00	2.95	144.74	2520.74	12.19	8.55	-7.46	14.89	35.04	1.26
2584.00	2.86	135.77	2583.66	9.74	10.58	-4.38	14.38	47.37	.73
2648.00	3.14	123.17	2647.57	7.64	13.16	-1.39	15.21	59.88	1.12
2712.00	3.22	114.36	2711.47	5.94	16.27	1.46	17.31	69.95	.77
2775.00	3.76	105.70	2774.35	4.65	19.87	4.15	20.40	76.84	1.20
2839.00	4.42	110.19	2838.19	3.23	24.20	7.26	24.41	82.40	1.15
2902.00	4.89	114.35	2900.98	1.28	28.93	11.01	28.95	87.46	.92
2966.00	5.52	113.11	2964.72	-1.05	34.24	15.36	34.26	91.76	1.00
3030.00	6.07	104.98	3028.39	-3.13	40.34	19.82	40.46	94.44	1.54
3094.00	6.55	103.65	3092.00	-4.87	47.16	24.26	47.41	95.90	.78
3157.00	6.84	103.68	3154.57	-6.60	54.29	28.84	54.69	96.94	.46
3221.00	7.34	105.94	3218.09	-8.63	61.93	33.89	62.53	97.93	.89
Bottom Line Check									
3284.00	8.10	106.74	3280.51	-11.01	70.05	39.47	70.91	98.93	1.22
3348.00	8.45	105.89	3343.85	-13.60	78.89	45.54	80.05	99.78	.58
3411.00	8.74	105.06	3406.14	-16.11	87.96	51.64	89.43	100.38	.50
3475.00	8.92	105.51	3469.38	-18.70	97.44	57.97	99.22	100.86	.30
3538.00	8.32	104.86	3531.67	-21.17	106.55	64.05	108.64	101.24	.96
3602.00	8.03	102.92	3595.02	-23.36	115.38	69.75	117.73	101.45	.63
3665.00	8.71	104.41	3657.35	-25.53	124.29	75.47	126.89	101.61	1.13
3729.00	8.62	103.08	3720.62	-27.82	133.66	81.49	136.52	101.76	.34
3793.00	8.56	102.84	3783.90	-29.97	142.97	87.36	146.08	101.84	.11
3857.00	9.43	104.53	3847.11	-32.34	152.69	93.60	156.08	101.96	1.42
3920.00	10.05	105.14	3909.20	-35.07	163.00	100.42	166.73	102.14	1.00
3984.00	9.06	103.20	3972.32	-37.68	173.29	107.12	177.34	102.27	1.63
4047.00	8.46	103.42	4034.58	-39.89	182.63	113.05	186.94	102.32	.95
4111.00	9.02	106.79	4097.84	-42.43	192.01	119.30	196.64	102.46	1.19
Bottom Line Check									
4175.00	8.97	108.67	4161.05	-45.48	201.54	126.08	206.61	102.72	.47
4238.00	8.70	107.44	4223.30	-48.48	210.74	132.67	216.24	102.95	.52
4302.00	8.81	106.80	4286.56	-51.35	220.05	139.19	225.96	103.13	.23
4365.00	8.98	107.82	4348.80	-54.25	229.35	145.73	235.68	103.31	.37
4428.00	9.34	108.86	4411.00	-57.40	238.87	152.60	245.67	103.51	.63
4492.00	9.31	107.54	4474.15	-60.64	248.72	159.69	256.00	103.70	.34
4555.00	9.06	108.74	4536.34	-63.77	258.28	166.55	266.03	103.87	.50
4619.00	9.18	106.84	4599.53	-66.87	267.93	173.42	276.15	104.01	.51
4682.00	9.30	104.89	4661.72	-69.63	277.66	180.03	286.26	104.08	.53
4746.00	9.37	106.70	4724.87	-72.46	287.65	186.79	296.64	104.14	.47
4808.00	8.92	108.71	4786.08	-75.45	297.04	193.46	306.47	104.25	.89
4872.00	8.63	108.74	4849.33	-78.59	306.28	200.19	316.21	104.39	.45
4935.00	8.79	109.49	4911.60	-81.71	315.30	206.82	325.71	104.53	.31
4999.00	9.04	109.06	4974.83	-84.98	324.66	213.73	335.60	104.67	.40
5062.00	8.89	106.26	5037.06	-87.96	334.01	220.37	345.40	104.75	.73

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth			Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
				N-S FT	E-W FT		Distance FT	Direction Deg	
5126.00	9.02	104.01	5100.28	-90.56	343.63	226.77	355.36	104.76	.58
Bottom Line Check									
5189.00	9.08	104.86	5162.50	-93.03	353.22	233.05	365.27	104.76	.23
5252.00	9.12	107.06	5224.71	-95.77	362.80	239.57	375.23	104.79	.56
5316.00	9.25	106.75	5287.88	-98.74	372.58	246.38	385.44	104.84	.22
5380.00	9.17	105.58	5351.06	-101.59	382.41	253.11	395.68	104.88	.32
5443.00	9.05	105.03	5413.26	-104.23	392.03	259.55	405.65	104.89	.24
5475.00	8.80	106.06	5444.88	-105.56	396.82	262.76	410.62	104.90	.93
5488.00	8.74	107.49	5457.73	-106.13	398.72	264.08	412.60	104.91	1.74
5520.00	8.77	109.74	5489.35	-107.68	403.33	267.43	417.46	104.95	1.07
5552.00	9.94	109.15	5520.93	-109.41	408.24	271.07	422.64	105.00	3.67
5584.00	11.32	109.44	5552.38	-111.37	413.81	275.18	428.53	105.06	4.32
5616.00	12.88	109.70	5583.66	-113.61	420.13	279.88	435.22	105.13	4.88
5647.00	15.13	110.14	5613.74	-116.17	427.18	285.17	442.69	105.21	7.27
Bottom Line									
5679.00	17.36	110.31	5644.46	-119.27	435.58	291.51	451.61	105.31	6.97
5711.00	19.00	109.39	5674.86	-122.65	444.97	298.54	461.56	105.41	5.20
5743.00	20.90	109.23	5704.94	-126.26	455.27	306.15	472.46	105.50	5.94
5774.00	22.26	109.53	5733.77	-130.05	466.03	314.11	483.83	105.59	4.40
5806.00	24.31	108.89	5763.16	-134.21	477.97	322.91	496.46	105.68	6.45
5838.00	26.75	106.73	5792.03	-138.41	491.10	332.25	510.24	105.74	8.16
5870.00	29.69	106.97	5820.23	-142.80	505.58	342.32	525.36	105.77	9.19
5902.00	31.88	108.50	5847.72	-147.79	521.18	353.42	541.73	105.83	7.27
5932.00	33.76	107.92	5872.93	-152.87	536.63	364.53	557.98	105.90	6.35
5964.00	35.90	107.78	5899.19	-158.47	554.02	376.93	576.24	105.96	6.69
5994.00	37.66	108.85	5923.22	-164.12	571.07	389.23	594.19	106.03	6.24
6025.00	39.25	107.13	5947.50	-170.07	589.41	402.34	613.45	106.10	6.18
Bottom Line Check									
6056.00	40.77	107.02	5971.24	-175.92	608.46	415.67	633.38	106.13	4.91
6086.00	42.96	105.06	5993.58	-181.45	627.70	428.78	653.40	106.12	8.50
6117.00	44.30	103.72	6016.02	-186.76	648.42	442.32	674.78	106.07	5.25
6148.00	46.77	102.47	6037.73	-191.77	669.97	455.93	696.87	105.97	8.47
6178.00	48.69	101.18	6057.91	-196.31	691.69	469.20	719.01	105.84	7.15
6209.00	50.45	102.16	6078.01	-201.09	714.80	483.25	742.55	105.71	6.17
6239.00	52.35	103.30	6096.73	-206.26	737.67	497.57	765.96	105.62	6.99
6270.00	53.49	104.38	6115.42	-212.17	761.68	513.04	790.68	105.57	4.61
6301.00	55.98	103.81	6133.32	-218.33	786.23	528.96	815.98	105.52	8.17
6331.00	57.84	104.13	6149.70	-224.40	810.62	544.73	841.10	105.47	6.26
6362.00	59.46	104.94	6165.82	-231.05	836.24	561.54	867.57	105.45	5.68
6393.00	61.54	105.48	6181.09	-238.13	862.28	578.92	894.55	105.44	6.88
6424.00	64.07	106.95	6195.26	-245.83	888.75	597.05	922.12	105.46	9.19
6454.00	66.77	107.50	6207.73	-253.91	914.80	615.35	949.39	105.51	9.15
6485.00	68.62	108.46	6219.50	-262.76	942.08	634.86	978.04	105.58	6.62
6516.00	70.09	110.55	6230.43	-272.45	969.42	655.15	1006.98	105.70	7.89
Bottom Line									
6547.00	71.53	112.33	6240.62	-283.15	996.67	676.33	1036.11	105.86	7.14
6578.00	72.77	114.40	6250.12	-294.86	1023.75	698.35	1065.37	106.07	7.51

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S		E-W		C L O S U R E		Dogleg Severity Deg/100
				FT	FT	FT	FT	Distance FT	Direction Deg	
6609.00	73.34	116.80	6259.16	-307.67	1050.50	721.22	1094.62	106.32	7.63	
6640.00	74.08	118.99	6267.86	-321.59	1076.79	744.92	1123.79	106.63	7.19	
6670.00	74.49	122.40	6275.98	-336.33	1101.62	768.74	1151.82	106.98	11.03	
6701.00	74.68	125.07	6284.22	-352.93	1126.47	794.25	1180.46	107.40	8.33	
6732.00	74.55	126.97	6292.45	-370.50	1150.64	820.37	1208.82	107.85	5.92	
6763.00	74.83	129.57	6300.64	-389.02	1174.11	847.04	1236.88	108.33	8.14	
6794.00	75.10	132.01	6308.68	-408.58	1196.78	874.32	1264.60	108.85	7.65	
6824.00	75.78	134.95	6316.22	-428.55	1217.84	901.31	1291.05	109.39	9.75	
6854.00	76.26	136.95	6323.47	-449.48	1238.08	928.81	1317.15	109.95	6.66	
6885.00	75.85	139.56	6330.94	-471.92	1258.11	957.60	1343.71	110.56	8.28	
6915.00	75.97	142.14	6338.25	-494.49	1276.48	985.80	1368.91	111.18	8.35	
6946.00	76.77	143.49	6345.55	-518.49	1294.69	1015.23	1394.65	111.82	4.96	
6978.00	77.91	145.99	6352.57	-543.98	1312.71	1045.94	1420.96	112.51	8.41	
7010.00	78.64	148.88	6359.07	-570.38	1329.57	1076.99	1446.76	113.22	9.13	
7041.00	79.55	150.95	6364.94	-596.72	1344.83	1107.30	1471.27	113.93	7.18	
7073.00	80.10	153.08	6370.59	-624.53	1359.61	1138.75	1496.19	114.67	6.77	
Bottom Line										
7104.00	80.86	156.02	6375.72	-652.14	1372.74	1169.32	1519.77	115.41	9.67	
7136.00	81.52	156.73	6380.62	-681.11	1385.42	1200.94	1543.79	116.18	3.01	
7167.00	81.62	158.00	6385.16	-709.41	1397.22	1231.58	1567.00	116.92	4.07	
7199.00	81.82	160.16	6389.77	-738.99	1408.52	1263.16	1590.61	117.68	6.71	
7231.00	82.33	162.67	6394.19	-769.03	1418.62	1294.66	1613.66	118.46	7.93	
7263.00	83.51	164.41	6398.13	-799.48	1427.62	1326.08	1636.24	119.25	6.54	
7295.00	85.59	164.53	6401.17	-830.17	1436.15	1357.51	1658.83	120.03	6.51	
7326.00	87.05	164.52	6403.16	-859.98	1444.40	1388.02	1681.03	120.77	4.71	
7358.00	87.38	164.20	6404.71	-890.76	1453.02	1419.57	1704.33	121.51	1.44	
7390.00	87.75	164.13	6406.07	-921.52	1461.74	1451.14	1727.97	122.23	1.18	
7453.00	87.38	164.87	6408.75	-982.17	1478.56	1513.24	1775.05	123.60	1.31	
7517.00	87.48	165.18	6411.62	-1043.94	1495.09	1576.22	1823.48	124.92	.51	
7581.00	87.58	166.16	6414.38	-1105.89	1510.91	1639.08	1872.39	126.20	1.54	
7644.00	87.79	166.23	6416.92	-1167.02	1525.93	1700.85	1921.04	127.41	.35	
7708.00	88.02	166.13	6419.26	-1229.12	1541.21	1763.62	1971.31	128.57	.39	
7771.00	88.56	166.91	6421.14	-1290.36	1555.89	1825.35	2021.34	129.67	1.51	
7835.00	89.13	167.62	6422.43	-1352.77	1569.99	1887.90	2072.41	130.75	1.42	
7898.00	89.50	168.46	6423.18	-1414.40	1583.05	1949.30	2122.87	131.78	1.46	
7961.00	89.93	169.63	6423.50	-1476.25	1595.02	2010.44	2173.34	132.79	1.98	
8025.00	89.43	168.58	6423.86	-1539.10	1607.12	2072.54	2225.23	133.76	1.82	
8089.00	89.03	167.22	6424.72	-1601.67	1620.53	2134.94	2278.48	134.66	2.21	
bottom line check										
8152.00	87.99	165.89	6426.35	-1662.92	1635.17	2196.67	2332.18	135.48	2.68	
8216.00	87.78	166.00	6428.72	-1724.96	1650.70	2259.48	2387.53	136.26	.37	
8279.00	88.02	166.38	6431.02	-1786.10	1665.73	2321.27	2442.29	137.00	.71	
8342.00	88.26	166.01	6433.07	-1847.24	1680.76	2383.06	2497.45	137.70	.70	
8406.00	88.39	165.65	6434.94	-1909.27	1696.42	2445.92	2554.04	138.38	.60	
8469.00	88.05	165.31	6436.90	-1970.23	1712.21	2507.86	2610.26	139.01	.76	
8533.00	88.09	164.87	6439.05	-2032.04	1728.66	2570.85	2667.86	139.61	.69	
8596.00	87.82	165.68	6441.30	-2092.93	1744.67	2632.82	2724.74	140.19	1.35	

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth			Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
				N-S FT	E-W FT		Distance FT	Direction Deg	
8660.00	88.39	165.63	6443.42	-2154.90	1760.51	2695.71	2782.63	140.75	.89
8724.00	88.99	166.73	6444.88	-2217.03	1775.80	2758.50	2840.54	141.31	1.96
8788.00	89.77	167.38	6445.57	-2279.40	1790.13	2821.11	2898.32	141.86	1.59
8851.00	90.54	167.53	6445.40	-2340.89	1803.82	2882.65	2955.26	142.38	1.25
Bottom Line									
8915.00	90.17	167.52	6445.01	-2403.38	1817.64	2945.15	3013.31	142.90	.58
8978.00	90.34	167.83	6444.73	-2464.93	1831.09	3006.64	3070.63	143.39	.56
9042.00	89.60	167.99	6444.76	-2527.51	1844.49	3069.05	3128.97	143.88	1.18
9106.00	88.83	169.37	6445.64	-2590.26	1857.06	3131.26	3187.17	144.36	2.47
9170.00	88.36	168.66	6447.20	-2653.06	1869.25	3193.36	3245.43	144.83	1.33
9233.00	88.62	168.13	6448.87	-2714.75	1881.92	3254.66	3303.26	145.27	.94
9296.00	87.35	167.92	6451.08	-2776.34	1894.98	3316.02	3361.40	145.68	2.04
9360.00	87.05	168.09	6454.21	-2838.87	1908.26	3378.34	3420.62	146.09	.54
9423.00	87.48	168.89	6457.21	-2900.53	1920.82	3439.55	3478.89	146.49	1.44
9487.00	88.42	170.21	6459.50	-2963.43	1932.42	3501.49	3537.82	146.89	2.53
9551.00	90.30	171.83	6460.22	-3026.64	1942.41	3563.03	3596.31	147.31	3.88
bottom line check									
9614.00	89.43	171.18	6460.37	-3088.94	1951.72	3623.47	3653.87	147.71	1.72
9677.00	88.96	170.16	6461.25	-3151.10	1961.93	3684.15	3711.96	148.09	1.78
9741.00	89.36	169.36	6462.19	-3214.08	1973.30	3746.06	3771.50	148.45	1.40
9805.00	90.03	168.60	6462.53	-3276.89	1985.54	3808.20	3831.50	148.79	1.58
9868.00	90.54	168.52	6462.22	-3338.64	1998.03	3869.47	3890.84	149.10	.82
9932.00	90.27	168.36	6461.76	-3401.34	2010.86	3931.74	3951.29	149.41	.49
9996.00	90.64	168.52	6461.26	-3464.04	2023.68	3994.02	4011.84	149.71	.63
10060.00	89.66	167.83	6461.09	-3526.68	2036.80	4056.36	4072.60	149.99	1.87
10123.00	89.26	167.35	6461.68	-3588.21	2050.34	4117.87	4132.69	150.26	.99
10187.00	89.53	166.51	6462.36	-3650.55	2064.81	4180.50	4194.03	150.51	1.38
10251.00	90.00	166.30	6462.62	-3712.75	2079.85	4243.26	4255.62	150.74	.80
10315.00	89.46	166.34	6462.92	-3774.94	2094.99	4306.04	4317.30	150.97	.85
10378.00	89.66	166.67	6463.41	-3836.19	2109.69	4367.80	4378.03	151.19	.61
10442.00	90.20	167.23	6463.48	-3898.54	2124.14	4430.44	4439.66	151.42	1.22
Bottom Line CK.									
10506.00	90.44	166.85	6463.13	-3960.91	2138.49	4493.05	4501.33	151.64	.70
10570.00	89.80	166.29	6462.99	-4023.16	2153.36	4555.78	4563.19	151.84	1.33
10633.00	89.56	165.75	6463.34	-4084.29	2168.58	4617.64	4624.30	152.03	.94
10697.00	89.97	165.27	6463.61	-4146.25	2184.59	4680.58	4686.56	152.22	.99
10760.00	90.37	164.56	6463.42	-4207.08	2200.98	4742.66	4748.04	152.38	1.29
10824.00	89.70	164.47	6463.38	-4268.76	2218.07	4805.80	4810.63	152.54	1.06
10887.00	89.56	165.10	6463.79	-4329.55	2234.61	4867.90	4872.21	152.70	1.02
10951.00	90.13	165.31	6463.96	-4391.43	2250.95	4930.91	4934.71	152.86	.95
11015.00	90.13	166.84	6463.82	-4453.54	2266.35	4993.74	4997.04	153.03	2.39
11079.00	90.40	167.57	6463.52	-4515.95	2280.52	5056.32	5059.11	153.21	1.22
11142.00	89.46	166.95	6463.60	-4577.40	2294.42	5117.91	5120.25	153.38	1.79
Bottom Line Check									
11206.00	89.16	167.38	6464.37	-4639.80	2308.63	5180.49	5182.42	153.55	.82
11269.00	90.13	167.55	6464.76	-4701.29	2322.30	5242.03	5243.59	153.71	1.56
11333.00	89.70	168.70	6464.85	-4763.92	2335.47	5304.39	5305.60	153.88	1.92

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	
11396.00	89.20	170.11	6465.46	-4825.84	2347.06	5365.43	5366.33	154.06	2.37
11460.00	89.83	169.22	6466.00	-4888.80	2358.54	5427.37	5427.99	154.25	1.70
11523.00	90.27	169.00	6465.94	-4950.67	2370.44	5488.50	5488.91	154.41	.78
11587.00	89.46	168.39	6466.09	-5013.43	2382.99	5550.71	5550.95	154.58	1.58
11650.00	89.09	168.31	6466.89	-5075.12	2395.71	5612.03	5612.15	154.73	.60
11714.00	89.73	167.95	6467.55	-5137.75	2408.87	5674.38	5674.43	154.88	1.15
Bottom Line CK.									
11737.00	89.97	167.71	6467.61	-5160.23	2413.72	5696.82	5696.85	154.93	1.48
Proj To Bit									
11795.00	89.97	167.71	6467.64	-5216.90	2426.06	5753.42	5753.42	155.06	.00