

Job Number: 23D0511075

State/Country: West Virginia

Company: Stone Energy

Declination: -8.4

Lease/Well: Nice et al Unit B2H

Grid: .85

Location: Wetzel County

File name: D:\WINSERVENICEB2H.SVY

Rig Name: Saxon 141

Date/Time: 14-May-11 / 00:20

RKB: 18

Curve Name: Nice et al Unit B2H

G.L. or M.S.L.: 1344

## Scientific Drilling

WINSERVE SURVEY CALCULATIONS  
 Minimum Curvature Method  
 Vertical Section Plane 178.43  
 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	.09	116.26	108.00	-.04	.08	.04	.08	116.25	.08
208.00	.14	183.31	208.00	-.19	.14	.20	.24	144.32	.13
308.00	.17	198.97	308.00	-.46	.08	.46	.46	169.55	.05
408.00	.18	196.67	408.00	-.75	-.01	.75	.75	180.70	.01
508.00	.06	264.11	508.00	-.90	-.11	.90	.91	186.71	.17
608.00	.06	319.51	608.00	-.87	-.19	.86	.89	192.49	.06
708.00	.09	342.07	708.00	-.75	-.25	.75	.79	198.38	.04
808.00	.13	331.74	808.00	-.58	-.33	.57	.67	209.55	.04
908.00	.16	47.58	908.00	-.39	-.28	.38	.48	215.91	.18
1008.00	.25	82.64	1008.00	-.26	.04	.26	.27	171.29	.15
1108.00	.33	79.52	1108.00	-.18	.54	.20	.57	108.72	.08
1208.00	.40	81.62	1207.99	-.08	1.17	.11	1.17	93.90	.07
1308.00	.50	88.06	1307.99	-.01	1.95	.07	1.95	90.41	.11
1408.00	.56	76.80	1407.99	.11	2.86	-.03	2.86	87.75	.12
1508.00	.58	64.61	1507.98	.44	3.79	-.34	3.82	83.37	.12
1608.00	.46	27.26	1607.98	1.01	4.44	-.89	4.55	77.12	.35
1708.00	.27	3.93	1707.98	1.61	4.64	-1.48	4.91	70.89	.24
1808.00	.21	337.11	1807.98	2.01	4.58	-1.88	5.00	66.30	.13
1908.00	.14	186.20	1907.98	2.06	4.50	-1.93	4.94	65.41	.34
2008.00	.50	187.95	2007.97	1.50	4.42	-1.38	4.67	71.22	.36
2108.00	.62	170.54	2107.97	.54	4.45	-.42	4.48	83.10	.21
2208.00	.61	164.90	2207.96	-.51	4.68	.64	4.71	96.21	.06
2308.00	.55	151.95	2307.96	-1.45	5.04	1.58	5.25	106.01	.14
2408.00	.64	120.65	2407.95	-2.16	5.75	2.31	6.14	110.55	.33

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	
2508.00	.71	115.66	2507.95	-2.71	6.79	2.89	7.31	111.75	.09
2608.00	.79	121.40	2607.94	-3.34	7.94	3.55	8.61	112.80	.11
2708.00	1.79	183.06	2707.91	-5.25	8.44	5.48	9.94	121.91	1.58
2808.00	3.13	202.42	2807.82	-9.34	7.32	9.53	11.86	141.93	1.56
2908.00	4.04	210.48	2907.63	-14.90	4.49	15.01	15.56	163.24	1.04
3008.00	4.55	214.42	3007.34	-21.21	.46	21.21	21.21	178.76	.59
3108.00	5.07	229.84	3107.00	-27.33	-5.16	27.18	27.81	190.70	1.39
3208.00	5.57	232.66	3206.57	-33.12	-12.40	32.77	35.36	200.52	.56
3308.00	4.78	219.28	3306.16	-39.29	-18.89	38.76	43.60	205.68	1.44
3408.00	4.45	218.46	3405.84	-45.55	-23.95	44.88	51.46	207.73	.34
3508.00	3.92	236.03	3505.57	-50.50	-29.19	49.68	58.33	210.03	1.38
3608.00	3.88	237.71	3605.34	-54.22	-34.89	53.24	64.47	212.76	.12
3708.00	3.56	242.19	3705.13	-57.47	-40.50	56.34	70.31	215.17	.43
3808.00	2.54	277.43	3805.00	-58.63	-45.44	57.37	74.18	217.78	2.09
3908.00	1.08	292.25	3904.94	-57.99	-48.51	56.64	75.60	219.91	1.52
4008.00	.45	174.90	4004.94	-58.02	-49.35	56.65	76.17	220.38	1.35
4108.00	.29	146.98	4104.94	-58.63	-49.17	57.26	76.52	219.99	.24
4208.00	.12	97.37	4204.94	-58.85	-48.93	57.49	76.54	219.74	.23
4308.00	.32	71.14	4304.94	-58.78	-48.56	57.42	76.24	219.57	.22
4408.00	.55	71.07	4404.93	-58.53	-47.85	57.20	75.60	219.26	.23
4508.00	.67	65.05	4504.93	-58.13	-46.86	56.82	74.66	218.88	.14
4608.00	.73	54.54	4604.92	-57.51	-45.81	56.23	73.53	218.54	.14
4708.00	.87	68.67	4704.91	-56.87	-44.59	55.62	72.26	218.10	.24
4808.00	1.15	68.93	4804.89	-56.23	-42.94	55.03	70.75	217.37	.28
4908.00	1.06	57.88	4904.88	-55.38	-41.22	54.23	69.04	216.66	.23
5008.00	1.12	66.80	5004.86	-54.50	-39.54	53.40	67.33	215.96	.18
5108.00	1.11	52.69	5104.84	-53.53	-37.87	52.47	65.57	215.28	.27
5208.00	.87	48.50	5204.82	-52.44	-36.53	51.42	63.91	214.87	.25
5308.00	1.16	31.49	5304.81	-51.07	-35.44	50.08	62.16	214.76	.42
5332.00	1.18	37.68	5328.80	-50.67	-35.16	49.69	61.67	214.76	.53
5393.00	1.18	26.69	5389.79	-49.61	-34.49	48.65	60.42	214.81	.37
5457.00	1.13	36.38	5453.78	-48.51	-33.82	47.57	59.14	214.88	.31
5520.00	1.17	29.11	5516.76	-47.45	-33.14	46.53	57.88	214.93	.24
5552.00	1.07	274.63	5548.76	-47.14	-33.28	46.21	57.71	215.22	5.89
5584.00	4.62	239.92	5580.72	-47.76	-34.69	46.80	59.03	215.99	11.84
5616.00	8.07	237.44	5612.52	-49.62	-37.70	48.57	62.32	217.23	10.81
5647.00	9.22	236.83	5643.16	-52.15	-41.62	50.99	66.72	218.59	3.72
5679.00	10.22	234.36	5674.71	-55.21	-46.07	53.92	71.90	219.84	3.39
5710.00	12.14	234.10	5705.12	-58.72	-50.94	57.30	77.74	220.94	6.20
5742.00	14.04	232.88	5736.28	-63.04	-56.77	61.46	84.83	222.00	6.00
5773.00	15.69	232.00	5766.24	-67.89	-63.07	66.13	92.66	222.89	5.37
5805.00	17.47	231.50	5796.91	-73.54	-70.24	71.59	101.69	223.68	5.58
5837.00	19.18	229.62	5827.29	-79.94	-78.00	77.77	111.69	224.30	5.65
5869.00	19.23	228.42	5857.51	-86.84	-85.95	84.45	122.18	224.70	1.24
5900.00	19.82	227.42	5886.73	-93.78	-93.64	91.18	132.53	224.95	2.19

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S		E-W		Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
				FT	FT	FT	FT		Distance FT	Direction Deg	
5932.00	21.03	227.08	5916.71	-101.36	-101.84	98.54	143.68	225.13	3.80		
5964.00	22.67	228.11	5946.41	-109.39	-110.63	106.32	155.58	225.32	5.26		
5996.00	23.98	227.66	5975.80	-117.89	-120.03	114.56	168.24	225.52	4.13		
6028.00	25.53	225.27	6004.86	-127.12	-129.74	123.52	181.64	225.58	5.76		
6060.00	26.95	224.92	6033.56	-137.11	-139.76	133.23	195.78	225.55	4.46		
6092.00	29.06	224.09	6061.81	-147.83	-150.28	143.66	210.81	225.47	6.71		
6123.00	31.07	223.75	6088.64	-159.02	-161.06	154.54	226.33	225.36	6.51		
6154.00	33.23	223.89	6114.88	-170.92	-172.48	166.13	242.82	225.26	6.97		
6186.00	35.36	223.98	6141.32	-183.90	-184.99	178.76	260.85	225.17	6.66		
6218.00	37.61	224.33	6167.04	-197.55	-198.24	192.05	279.87	225.10	7.06		
6250.00	39.50	224.57	6192.07	-211.79	-212.21	205.89	299.81	225.06	5.92		
6282.00	41.57	222.92	6216.39	-226.81	-226.58	220.52	320.60	224.97	7.28		
6314.00	43.10	221.21	6240.04	-242.81	-241.02	236.12	342.12	224.79	5.98		
6346.00	45.21	221.48	6263.00	-259.55	-255.74	252.44	364.37	224.58	6.62		
6377.00	46.22	222.26	6284.64	-276.07	-270.55	268.56	386.54	224.42	3.72		
6409.00	47.80	222.06	6306.46	-293.42	-286.26	285.47	409.93	224.29	4.96		
6441.00	49.93	222.23	6327.51	-311.29	-302.44	302.89	434.02	224.17	6.67		
6473.00	52.48	222.61	6347.56	-329.70	-319.26	320.83	458.94	224.08	8.02		
6505.00	55.10	222.08	6366.46	-348.78	-336.65	339.43	484.75	223.99	8.30		
6537.00	57.06	221.75	6384.32	-368.54	-354.39	358.70	511.29	223.88	6.18		
6568.00	58.73	221.95	6400.79	-388.10	-371.90	377.77	537.53	223.78	5.41		
6600.00	60.71	221.57	6416.93	-408.72	-390.31	397.87	565.14	223.68	6.27		
6632.00	63.51	221.84	6431.90	-429.83	-409.12	418.46	593.41	223.59	8.78		
6664.00	65.28	220.22	6445.73	-451.60	-428.06	439.70	622.24	223.47	7.17		
6695.00	67.09	216.90	6458.25	-473.77	-445.73	461.38	650.49	223.25	11.40		
6727.00	69.11	214.62	6470.18	-497.87	-463.08	484.99	679.93	222.93	9.14		
6759.00	70.36	211.41	6481.27	-523.03	-479.43	509.70	709.52	222.51	10.19		
6791.00	71.35	208.88	6491.76	-549.17	-494.61	535.42	739.07	222.01	8.08		
6822.00	72.57	207.00	6501.36	-575.21	-508.41	561.07	767.70	221.47	6.98		
6854.00	74.40	205.41	6510.46	-602.74	-521.96	588.21	797.33	220.89	7.44		
6885.00	75.92	203.34	6518.40	-630.03	-534.32	615.16	826.10	220.30	8.11		
6917.00	76.90	202.52	6525.92	-658.68	-546.44	643.46	855.84	219.68	3.95		
6949.00	77.21	202.16	6533.09	-687.52	-558.30	671.97	885.65	219.08	1.46		
6981.00	77.59	200.08	6540.07	-716.65	-569.55	700.78	915.41	218.48	6.45		
7013.00	78.14	197.72	6546.80	-746.25	-579.68	730.09	944.94	217.84	7.41		
7044.00	78.65	194.65	6553.04	-775.41	-588.14	759.00	973.23	217.18	9.84		
7076.00	78.85	191.55	6559.28	-805.97	-595.25	789.36	1001.96	216.45	9.52		
7108.00	79.18	188.43	6565.38	-836.91	-600.70	820.13	1030.17	215.67	9.63		
7140.00	79.33	187.07	6571.35	-868.06	-604.94	851.16	1058.05	214.87	4.20		
7172.00	80.36	186.80	6576.99	-899.33	-608.74	882.31	1085.98	214.09	3.32		
7204.00	81.65	185.71	6581.99	-930.74	-612.19	913.62	1114.03	213.33	5.25		
7235.00	82.66	183.37	6586.22	-961.35	-614.62	944.15	1141.03	212.59	8.16		
7266.00	82.93	180.84	6590.11	-992.09	-615.75	974.84	1167.64	211.83	8.14		
7298.00	83.61	178.53	6593.86	-1023.86	-615.57	1006.61	1194.66	211.02	7.48		
7330.00	84.18	177.47	6597.27	-1055.66	-614.46	1038.43	1221.47	210.20	3.74		

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	
7362.00	84.45	176.96	6600.44	-1087.47	-612.91	1070.26	1248.30	209.41	1.80
7394.00	85.87	175.58	6603.14	-1119.28	-610.84	1102.13	1275.11	208.62	6.18
7426.00	87.28	174.03	6605.05	-1151.09	-607.95	1134.00	1301.77	207.84	6.54
7458.00	88.69	172.24	6606.17	-1182.84	-604.12	1165.84	1328.19	207.06	7.12
7518.00	89.87	171.13	6606.93	-1242.20	-595.45	1225.42	1377.54	205.61	2.70
7582.00	89.33	170.41	6607.37	-1305.37	-585.18	1288.85	1430.54	204.15	1.41
7646.00	88.35	169.84	6608.67	-1368.41	-574.21	1352.16	1484.00	202.76	1.77
7709.00	88.42	169.97	6610.44	-1430.41	-563.17	1414.44	1537.28	201.49	.23
7773.00	87.85	169.90	6612.53	-1493.39	-551.99	1477.71	1592.14	200.29	.90
7836.00	88.39	170.16	6614.59	-1555.41	-541.09	1540.00	1646.84	199.18	.95
7899.00	89.03	170.57	6616.01	-1617.50	-530.55	1602.36	1702.29	198.16	1.21
7962.00	89.87	171.36	6616.62	-1679.72	-520.66	1664.82	1758.56	197.22	1.83
8026.00	90.20	172.29	6616.58	-1743.07	-511.56	1728.40	1816.58	196.36	1.54
8090.00	90.44	172.12	6616.22	-1806.47	-502.88	1792.02	1875.16	195.56	.46
8153.00	90.64	171.77	6615.63	-1868.85	-494.05	1854.61	1933.05	194.81	.64
8217.00	90.17	170.08	6615.17	-1932.04	-483.95	1918.06	1991.73	194.06	2.74
8280.00	89.97	170.15	6615.10	-1994.11	-473.14	1980.40	2049.47	193.35	.34
8344.00	90.54	170.00	6614.81	-2057.15	-462.11	2043.72	2108.41	192.66	.92
8407.00	89.83	169.86	6614.61	-2119.18	-451.09	2106.02	2166.66	192.02	1.15
8471.00	89.66	170.36	6614.89	-2182.23	-440.10	2169.35	2226.16	191.40	.83
8535.00	89.43	170.47	6615.40	-2245.33	-429.44	2232.72	2286.03	190.83	.40
8598.00	89.53	171.01	6615.97	-2307.51	-419.31	2295.15	2345.29	190.30	.87
8662.00	88.86	171.09	6616.87	-2370.72	-409.35	2358.62	2405.80	189.80	1.05
8726.00	88.89	171.40	6618.13	-2433.96	-399.61	2422.10	2466.55	189.32	.49
8789.00	87.21	170.80	6620.27	-2496.17	-389.87	2484.55	2526.43	188.88	2.83
8853.00	86.71	170.96	6623.67	-2559.27	-379.74	2547.90	2587.29	188.44	.82
8917.00	87.11	170.00	6627.12	-2622.29	-369.17	2611.19	2648.15	188.01	1.62
8981.00	87.35	169.31	6630.21	-2685.18	-357.69	2674.37	2708.90	187.59	1.14
9044.00	88.32	169.16	6632.59	-2747.03	-345.93	2736.52	2768.72	187.18	1.56
9108.00	89.26	168.79	6633.94	-2809.83	-333.70	2799.63	2829.58	186.77	1.58
9172.00	90.17	169.01	6634.26	-2872.63	-321.38	2862.75	2890.55	186.38	1.46
9235.00	90.94	168.50	6633.65	-2934.42	-309.09	2924.85	2950.65	186.01	1.47
9298.00	91.24	167.69	6632.45	-2996.05	-296.10	2986.81	3010.65	185.64	1.37
9362.00	91.54	167.73	6630.90	-3058.57	-282.48	3049.68	3071.58	185.28	.47
9425.00	90.54	168.05	6629.76	-3120.15	-269.26	3111.60	3131.75	184.93	1.67
9488.00	90.30	168.40	6629.29	-3181.83	-256.41	3173.61	3192.14	184.61	.67
9552.00	88.32	166.95	6630.06	-3244.34	-242.75	3236.47	3253.41	184.28	3.83
9616.00	87.45	169.15	6632.43	-3306.91	-229.51	3299.38	3314.86	183.97	3.69
9679.00	87.92	170.31	6634.97	-3368.85	-218.29	3361.60	3375.91	183.71	1.99
9742.00	88.46	170.27	6636.96	-3430.91	-207.66	3423.93	3437.19	183.46	.86
9806.00	89.46	170.76	6638.12	-3494.03	-197.12	3487.31	3499.58	183.23	1.74
9870.00	89.63	171.65	6638.63	-3557.27	-187.34	3550.80	3562.20	183.01	1.42
9933.00	89.06	170.96	6639.35	-3619.54	-177.81	3613.31	3623.91	182.81	1.42
9996.00	87.85	169.65	6641.05	-3681.62	-167.21	3675.65	3685.41	182.60	2.83
10059.00	87.85	170.29	6643.41	-3743.61	-156.24	3737.92	3746.87	182.39	1.02

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	
10123.00	88.28	169.28	6645.57	-3806.56	-144.90	3801.16	3809.32	182.18	1.71
10187.00	88.66	169.55	6647.28	-3869.45	-133.15	3864.35	3871.74	181.97	.73
10250.00	88.05	170.18	6649.09	-3931.44	-122.07	3926.62	3933.33	181.78	1.39
10314.00	88.12	169.71	6651.23	-3994.42	-110.90	3989.88	3995.96	181.59	.74
10377.00	88.89	170.20	6652.87	-4056.43	-99.91	4052.17	4057.66	181.41	1.45
10440.00	88.92	170.40	6654.08	-4118.52	-89.30	4114.53	4119.49	181.24	.32
10504.00	88.19	170.55	6655.69	-4181.62	-78.71	4177.89	4182.36	181.08	1.16
10568.00	88.02	170.44	6657.81	-4244.70	-68.15	4241.24	4245.25	180.92	.32
10631.00	88.19	170.48	6659.89	-4306.80	-57.71	4303.60	4307.19	180.77	.28
10695.00	87.99	170.72	6662.02	-4369.90	-47.27	4366.97	4370.16	180.62	.49
10759.00	87.98	169.96	6664.27	-4432.96	-36.54	4430.29	4433.11	180.47	1.19
10823.00	88.32	170.11	6666.34	-4495.96	-25.47	4493.57	4496.03	180.32	.58
10887.00	88.39	169.60	6668.18	-4558.93	-14.20	4556.83	4558.95	180.18	.80
10950.00	88.79	169.76	6669.73	-4620.89	-2.92	4619.08	4620.89	180.04	.68
11014.00	88.69	168.82	6671.14	-4683.76	8.98	4682.25	4683.77	179.89	1.48
11077.00	88.93	169.52	6672.44	-4745.63	20.81	4744.42	4745.67	179.75	1.17
11141.00	88.49	170.88	6673.89	-4808.68	31.70	4807.74	4808.78	179.62	2.23
11205.00	88.49	171.87	6675.57	-4871.93	41.30	4871.23	4872.10	179.51	1.55
11269.00	88.59	173.36	6677.20	-4935.38	49.52	4934.88	4935.62	179.43	2.33
11332.00	89.43	173.07	6678.29	-4997.92	56.96	4997.61	4998.25	179.35	1.41
11395.00	88.79	173.34	6679.27	-5060.47	64.41	5060.34	5060.88	179.27	1.10
11459.00	87.01	172.06	6681.61	-5123.91	72.54	5123.97	5124.42	179.19	3.42
11522.00	86.57	171.87	6685.14	-5186.19	81.33	5186.47	5186.83	179.10	.76
11586.00	87.15	171.91	6688.65	-5249.46	90.35	5249.96	5250.23	179.01	.91
11650.00	87.65	171.41	6691.55	-5312.71	99.62	5313.45	5313.65	178.93	1.10
11713.00	88.82	171.35	6693.49	-5374.97	109.06	5375.94	5376.08	178.84	1.86
11776.00	88.19	172.49	6695.14	-5437.32	117.91	5438.51	5438.60	178.76	2.07
11840.00	88.12	172.94	6697.20	-5500.77	126.02	5502.16	5502.22	178.69	.71
11904.00	88.99	171.76	6698.81	-5564.18	134.54	5565.78	5565.81	178.61	2.29
11967.00	89.87	171.48	6699.44	-5626.51	143.72	5628.33	5628.34	178.54	1.47
12031.00	90.44	171.98	6699.26	-5689.84	152.92	5691.89	5691.89	178.46	1.18
12095.00	91.21	171.62	6698.34	-5753.18	162.05	5755.46	5755.46	178.39	1.33
<b>Projection To TD</b>									
12153.00	91.21	171.62	6697.12	-5810.55	170.50	5813.04	5813.05	178.32	.00