

<b>Job Number:</b> 23D0511075	<b>State/Country:</b> West Virginia
<b>Company:</b> Stone Energy	<b>Declination:</b> -8.4
<b>Lease/Well:</b> Nice et al Unit B3H	<b>Grid:</b> .85
<b>Location:</b> Wetzel County	<b>File name:</b> D:WINSERVE\JOBS\NICEB3H.SVY
<b>Rig Name:</b> Saxon 141	<b>Date/Time:</b> 03-Jun-11 / 23:55
<b>RKB:</b> 18	<b>Curve Name:</b> Nice B#3H As Drilled
<b>G.L. or M.S.L.:</b> 1344	

### Scientific Drilling

WINSERVE SURVEY CALCULATIONS  
*Minimum Curvature Method*  
*Vertical Section Plane 156.86*  
*Vertical Section Referenced to Wellhead*  
*Rectangular Coordinates Referenced to Wellhead*

<i>Measured Depth FT</i>	<i>Incl Angle Deg</i>	<i>Drift Direction Deg</i>	<i>True Vertical Depth</i>	<i>N-S FT</i>	<i>E-W FT</i>	<i>Vertical Section FT</i>	<i>C L O S U R E</i>		<i>Dogleg Severity Deg/100</i>
							<i>Distance FT</i>	<i>Direction Deg</i>	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.26	142.59	100.00	-.18	.14	.22	.23	142.59	.26
200.00	.15	196.57	200.00	-.48	.24	.54	.54	153.89	.21
300.00	.16	254.16	300.00	-.65	.06	.62	.65	174.48	.15
400.00	.17	306.04	400.00	-.60	-.19	.48	.63	197.58	.14
500.00	.05	20.78	500.00	-.48	-.29	.33	.56	211.41	.16
600.00	.09	162.75	600.00	-.51	-.25	.37	.57	206.33	.13
700.00	.23	213.61	700.00	-.75	-.34	.56	.83	204.32	.18
800.00	.27	241.57	800.00	-1.03	-.65	.69	1.22	212.44	.12
900.00	.14	359.25	900.00	-1.02	-.86	.60	1.33	220.12	.35
1000.00	.24	26.51	1000.00	-.71	-.77	.35	1.04	227.14	.14
1100.00	.16	24.38	1100.00	-.40	-.61	.12	.73	237.19	.08
1200.00	.12	37.61	1200.00	-.19	-.49	-.02	.53	249.29	.05
1300.00	.25	356.49	1299.99	.11	-.44	-.28	.46	284.30	.17
1400.00	.39	36.47	1399.99	.60	-.25	-.65	.65	337.41	.26
1500.00	.58	39.90	1499.99	1.27	.28	-1.06	1.30	12.46	.19
1600.00	.61	25.66	1599.98	2.14	.84	-1.64	2.30	21.38	.15
1700.00	.60	10.13	1699.98	3.13	1.16	-2.42	3.34	20.31	.16
1800.00	.38	30.30	1799.97	3.94	1.42	-3.06	4.18	19.84	.27
1900.00	.36	104.15	1899.97	4.15	1.89	-3.07	4.56	24.52	.45
2000.00	.37	120.49	1999.97	3.91	2.47	-2.62	4.63	32.33	.10
2100.00	.26	81.95	2099.97	3.78	2.98	-2.30	4.81	38.26	.23
2200.00	.45	92.03	2199.97	3.79	3.60	-2.08	5.23	43.48	.20
2300.00	.49	108.00	2299.96	3.65	4.40	-1.63	5.71	50.31	.13
2400.00	.35	97.01	2399.96	3.48	5.11	-1.19	6.18	55.71	.16

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	
2499.99	.56	74.88	2499.95	3.57	5.88	-.97	6.88	58.73	.27
2599.99	.46	47.66	2599.95	3.97	6.64	-1.04	7.74	59.17	.26
2699.99	1.69	67.95	2699.93	4.79	8.30	-1.14	9.59	60.04	1.27
2799.99	2.92	85.37	2799.84	5.54	12.21	-.30	13.41	65.57	1.40
2899.99	3.79	92.84	2899.67	5.59	18.04	1.95	18.89	72.80	.98
2999.99	4.38	91.40	2999.42	5.33	25.16	4.99	25.72	78.04	.59
3099.99	4.96	96.87	3099.09	4.72	33.26	8.73	33.60	81.93	.74
3199.99	5.30	101.18	3198.69	3.30	42.09	13.50	42.22	85.51	.52
3299.99	5.39	102.00	3298.25	1.43	51.22	18.81	51.24	88.40	.12
3399.99	5.46	101.87	3397.80	-.53	60.48	24.25	60.48	90.50	.07
3499.99	4.90	99.36	3497.39	-2.20	69.35	29.28	69.39	91.82	.61
3599.99	3.70	93.95	3597.11	-3.12	76.78	33.04	76.85	92.32	1.27
3699.99	2.63	98.26	3696.96	-3.67	82.27	35.71	82.36	92.55	1.09
3799.99	1.42	119.66	3796.89	-4.61	85.62	37.89	85.75	93.08	1.41
3899.99	.37	54.86	3896.88	-5.04	86.96	38.81	87.11	93.32	1.31
3999.99	.50	15.55	3996.88	-4.44	87.34	38.41	87.45	92.91	.32
4099.99	.65	35.39	4096.87	-3.57	87.78	37.77	87.85	92.33	.25
4199.99	.47	26.00	4196.87	-2.74	88.29	37.22	88.33	91.78	.20
4299.99	.80	47.45	4296.86	-1.91	88.98	36.72	89.00	91.23	.40
4399.99	.78	45.60	4396.85	-.96	89.98	36.24	89.98	90.61	.03
4499.99	1.01	51.61	4496.84	.07	91.16	35.76	91.16	89.96	.24
4599.99	.85	49.62	4596.83	1.09	92.41	35.31	92.42	89.32	.17
4699.99	1.14	54.89	4696.81	2.15	93.79	34.88	93.81	88.69	.31
4799.99	.95	63.02	4796.80	3.09	95.34	34.62	95.39	88.14	.24
4899.99	1.12	58.73	4896.78	3.98	96.92	34.43	97.00	87.65	.19
4999.99	.95	67.02	4996.76	4.81	98.52	34.29	98.64	87.20	.22
5099.99	.85	54.25	5096.75	5.57	99.89	34.13	100.05	86.81	.22
5199.99	.97	46.37	5196.74	6.59	101.11	33.67	101.33	86.27	.17
5299.99	.96	28.76	5296.72	7.91	102.12	32.86	102.43	85.57	.30
5399.99	1.06	35.28	5396.71	9.40	103.06	31.86	103.49	84.79	.15
5499.99	1.14	38.70	5496.69	10.93	104.22	30.90	104.79	84.01	.11
5599.99	4.19	95.99	5596.58	11.33	108.48	32.21	109.07	84.04	3.70
5699.99	9.17	102.98	5695.87	9.16	119.88	38.69	120.23	85.63	5.04
5799.99	13.68	104.57	5793.87	4.39	139.11	50.63	139.18	88.19	4.52
5830.99	14.21	106.17	5823.95	2.41	146.31	55.28	146.33	89.06	2.11
<b>SDI MWD Survey</b>									
5867.00	15.21	113.73	5858.78	-.72	154.88	61.53	154.88	90.27	6.01
5899.00	16.60	114.07	5889.56	-4.28	162.90	67.95	162.95	91.50	4.35
5931.00	18.53	111.70	5920.07	-8.02	171.80	74.89	171.98	92.67	6.43
5963.00	20.52	107.46	5950.23	-11.59	181.87	82.13	182.24	93.65	7.63
5994.00	22.78	104.49	5979.04	-14.72	192.87	89.33	193.43	94.36	8.10
6026.00	24.58	103.44	6008.34	-17.82	205.34	97.08	206.11	94.96	5.78
6058.00	26.76	102.84	6037.18	-20.96	218.84	105.28	219.84	95.47	6.86
6090.00	28.45	100.89	6065.54	-24.01	233.35	113.78	234.58	95.87	5.99
6122.00	31.23	100.24	6093.29	-26.92	249.00	122.61	250.45	96.17	8.75
6153.00	33.52	101.17	6119.47	-30.01	265.31	131.85	267.00	96.45	7.56

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	
6185.00	35.56	102.81	6145.83	-33.78	283.05	142.30	285.06	96.81	7.01
6217.00	38.60	103.79	6171.36	-38.23	301.82	153.76	304.24	97.22	9.68
6248.00	41.53	104.32	6195.08	-43.07	321.18	165.83	324.05	97.64	9.52
6280.00	43.66	104.57	6218.64	-48.48	342.15	179.04	345.57	98.06	6.68
6311.00	45.48	104.01	6240.72	-53.85	363.23	192.26	367.20	98.43	6.01
6343.00	47.66	104.69	6262.72	-59.61	385.74	206.40	390.32	98.78	6.99
6375.00	50.64	105.35	6283.65	-65.88	409.12	221.36	414.39	99.15	9.44
6407.00	52.52	106.33	6303.53	-72.73	433.23	237.13	439.30	99.53	6.35
6438.00	54.33	107.28	6322.00	-79.93	457.06	253.11	464.00	99.92	6.34
6470.00	55.16	107.59	6340.47	-87.76	481.99	270.11	489.92	100.32	2.71
6502.00	56.42	107.55	6358.46	-95.75	507.22	287.37	516.18	100.69	3.94
6534.00	57.16	107.62	6375.99	-103.83	532.74	304.84	542.77	101.03	2.32
6566.00	57.76	107.75	6393.20	-112.03	558.45	322.47	569.57	101.34	1.91
6598.00	59.49	107.84	6409.86	-120.38	584.46	340.37	596.73	101.64	5.41
6629.00	61.80	107.81	6425.06	-128.65	610.18	358.09	623.59	101.91	7.45
6661.00	63.54	108.21	6439.75	-137.44	637.21	376.79	651.87	102.17	5.55
6693.00	64.13	108.50	6453.86	-146.48	664.47	395.82	680.43	102.43	2.02
6725.00	66.33	108.06	6467.27	-155.60	692.06	415.04	709.34	102.67	6.99
6757.00	68.99	109.13	6479.43	-165.04	720.11	434.75	738.78	102.91	8.87
6789.00	70.38	112.15	6490.54	-175.62	748.19	455.51	768.52	103.21	9.86
6820.00	70.72	116.30	6500.87	-187.61	774.84	477.01	797.23	103.61	12.67
6852.00	71.03	119.33	6511.35	-201.71	801.57	500.49	826.56	104.13	9.00
6884.00	72.25	121.57	6521.43	-217.11	827.75	524.93	855.75	104.70	7.66
6916.00	73.76	122.81	6530.79	-233.41	853.65	550.10	884.98	105.29	6.00
6948.00	75.76	124.16	6539.20	-250.44	879.40	575.88	914.36	105.90	7.46
6980.00	77.15	125.81	6546.69	-268.28	904.88	602.30	943.81	106.51	6.63
7012.00	77.79	126.47	6553.64	-286.70	930.11	629.15	973.29	107.13	2.84
7044.00	78.16	127.68	6560.30	-305.57	955.08	656.31	1002.77	107.74	3.87
7076.00	78.07	130.25	6566.90	-325.26	979.42	683.99	1032.02	108.37	7.86
7107.00	78.27	133.39	6573.25	-345.49	1002.03	711.47	1059.92	109.02	9.93
7139.00	78.83	135.86	6579.61	-367.52	1024.35	740.50	1088.29	109.74	7.76
7171.00	79.95	138.28	6585.50	-390.55	1045.77	770.09	1116.32	110.48	8.22
7203.00	80.08	140.37	6591.05	-414.45	1066.31	800.14	1144.02	111.24	6.45
7235.00	81.18	144.01	6596.26	-439.39	1085.66	830.68	1171.21	112.03	11.74
7267.00	82.19	146.55	6600.89	-465.41	1103.69	861.70	1197.81	112.86	8.46
7298.00	82.67	150.08	6604.97	-491.56	1119.83	892.08	1222.97	113.70	11.39
7330.00	83.88	151.95	6608.72	-519.36	1135.23	923.69	1248.39	114.58	6.93
7362.00	84.52	154.74	6611.95	-547.81	1149.51	955.47	1273.37	115.48	8.90
7394.00	85.29	157.35	6614.80	-576.93	1162.45	987.33	1297.74	116.40	8.47
7426.00	86.03	159.87	6617.22	-606.64	1174.09	1019.22	1321.55	117.32	8.19
7458.00	86.41	162.55	6619.33	-636.86	1184.37	1051.06	1344.74	118.27	8.44
7490.00	86.78	163.79	6621.23	-667.44	1193.62	1082.81	1367.55	119.21	4.04
7522.00	87.15	163.59	6622.92	-698.11	1202.59	1114.54	1390.53	120.14	1.31
7554.00	87.72	163.61	6624.36	-728.78	1211.62	1146.28	1413.91	121.03	1.78
7617.00	88.62	163.77	6626.37	-789.21	1229.30	1208.80	1460.83	122.70	1.45

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	
7681.00	88.05	164.47	6628.23	-850.74	1246.81	1272.26	1509.40	124.31	1.41
7745.00	88.36	164.73	6630.23	-912.41	1263.79	1335.65	1558.74	125.83	.63
7808.00	88.86	165.31	6631.76	-973.25	1280.07	1397.99	1608.04	127.25	1.22
7872.00	87.85	165.69	6633.60	-1035.19	1296.09	1461.24	1658.75	128.61	1.69
7936.00	88.09	166.49	6635.86	-1097.27	1311.47	1524.37	1709.95	129.92	1.30
8000.00	88.39	165.70	6637.83	-1159.37	1326.84	1587.51	1762.00	131.15	1.32
8063.00	88.82	165.52	6639.36	-1220.37	1342.49	1649.76	1814.27	132.27	.74
8126.00	87.58	165.97	6641.34	-1281.40	1358.00	1711.97	1867.12	133.34	2.09
8189.00	87.35	166.28	6644.13	-1342.50	1373.09	1774.09	1920.33	134.35	.61
8252.00	87.95	166.63	6646.71	-1403.70	1387.83	1836.15	1973.94	135.33	1.10
8316.00	88.99	167.28	6648.42	-1466.02	1402.27	1899.14	2028.69	136.27	1.92
8379.00	89.63	167.94	6649.18	-1527.55	1415.79	1961.03	2082.75	137.17	1.46
8443.00	88.96	167.75	6649.97	-1590.11	1429.26	2023.85	2138.05	138.05	1.09
8507.00	89.19	167.69	6651.00	-1652.64	1442.87	2086.70	2193.88	138.88	.37
8570.00	87.75	166.32	6652.68	-1714.00	1457.03	2148.69	2249.61	139.63	3.15
8634.00	88.05	165.73	6655.03	-1776.06	1472.48	2211.83	2307.07	140.34	1.03
8697.00	88.56	165.93	6656.89	-1837.12	1487.89	2274.03	2364.07	141.00	.87
8760.00	89.13	166.37	6658.16	-1898.27	1502.97	2336.19	2421.23	141.63	1.14
8823.00	88.42	165.38	6659.51	-1959.35	1518.34	2398.40	2478.80	142.23	1.93
8887.00	88.93	166.09	6660.99	-2021.36	1534.11	2461.61	2537.60	142.80	1.37
8951.00	89.53	166.57	6661.85	-2083.54	1549.23	2524.73	2596.40	143.37	1.20
9014.00	88.72	165.21	6662.81	-2144.63	1564.59	2586.94	2654.69	143.89	2.51
9078.00	88.42	164.37	6664.41	-2206.37	1581.37	2650.31	2714.56	144.37	1.39
9141.00	89.03	163.71	6665.81	-2266.93	1598.69	2712.80	2773.95	144.81	1.43
9204.00	89.56	163.75	6666.58	-2327.40	1616.34	2775.34	2833.61	145.22	.84
9267.00	88.66	162.18	6667.56	-2387.63	1634.79	2837.98	2893.67	145.60	2.87
9331.00	88.59	161.15	6669.10	-2448.36	1654.92	2901.73	2955.20	145.94	1.61
9395.00	88.79	161.01	6670.56	-2508.89	1675.67	2965.54	3017.01	146.26	.38
9458.00	87.82	160.90	6672.43	-2568.41	1696.21	3028.35	3077.97	146.56	1.55
9521.00	88.36	160.40	6674.52	-2627.82	1717.08	3091.18	3139.07	146.84	1.17
9585.00	88.59	161.83	6676.23	-2688.35	1737.78	3154.98	3201.11	147.12	2.26
9649.00	89.29	162.07	6677.41	-2749.19	1757.61	3218.72	3263.01	147.41	1.16
9712.00	88.42	162.21	6678.67	-2809.14	1776.93	3281.43	3323.97	147.68	1.40
9776.00	88.29	162.39	6680.51	-2870.09	1796.38	3345.12	3385.91	147.96	.35
9840.00	88.52	163.27	6682.29	-2931.21	1815.26	3408.75	3447.78	148.23	1.42
9903.00	88.02	164.37	6684.19	-2991.69	1832.81	3471.25	3508.47	148.51	1.92
9967.00	88.09	164.99	6686.36	-3053.38	1849.71	3534.62	3569.95	148.79	.97
10031.00	88.66	165.89	6688.18	-3115.30	1865.79	3597.88	3631.29	149.08	1.66
10095.00	89.36	166.05	6689.28	-3177.38	1881.31	3661.06	3692.56	149.37	1.12
10158.00	90.07	165.89	6689.60	-3238.50	1896.58	3723.27	3752.98	149.65	1.16
10222.00	89.09	166.60	6690.07	-3300.66	1911.80	3786.41	3814.35	149.92	1.89
10286.00	89.43	167.92	6690.89	-3363.08	1925.91	3849.35	3875.49	150.20	2.13
10350.00	90.03	167.83	6691.20	-3425.65	1939.35	3912.17	3936.51	150.48	.95
10414.00	89.23	166.87	6691.61	-3488.09	1953.37	3975.10	3997.80	150.75	1.95
10477.00	89.23	166.52	6692.46	-3549.39	1967.86	4037.16	4058.41	151.00	.56

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	
10541.00	89.66	166.93	6693.08	-3611.68	1982.56	4100.22	4120.05	151.24	.93
10604.00	89.03	166.64	6693.80	-3673.01	1996.96	4162.27	4180.77	151.47	1.10
10667.00	89.26	167.02	6694.74	-3734.34	2011.31	4224.31	4241.54	151.69	.70
10731.00	87.65	165.01	6696.46	-3796.42	2026.77	4287.47	4303.56	151.90	4.02
10795.00	87.34	165.02	6699.26	-3858.18	2043.30	4350.76	4365.85	152.09	.48
10859.00	88.05	164.25	6701.83	-3919.85	2060.25	4414.12	4428.30	152.27	1.64
10922.00	88.96	165.01	6703.48	-3980.57	2076.94	4476.52	4489.83	152.45	1.88
10985.00	89.50	165.52	6704.32	-4041.49	2092.96	4538.83	4551.28	152.62	1.18
11048.00	89.23	165.98	6705.02	-4102.55	2108.47	4601.07	4612.65	152.80	.85
11112.00	89.23	166.32	6705.88	-4164.68	2123.79	4664.23	4674.94	152.98	.53
11176.00	86.57	164.73	6708.23	-4226.60	2139.77	4727.45	4737.38	153.15	4.84
11239.00	85.96	165.04	6712.33	-4287.29	2156.16	4789.70	4798.95	153.30	1.09
11303.00	86.94	164.33	6716.29	-4348.90	2173.04	4852.98	4861.59	153.45	1.89
11366.00	87.58	164.26	6719.30	-4409.48	2190.07	4915.38	4923.41	153.59	1.02
11429.00	88.22	165.01	6721.61	-4470.19	2206.75	4977.76	4985.21	153.73	1.56
11493.00	89.13	164.25	6723.09	-4531.88	2223.71	5041.15	5048.05	153.86	1.85
11557.00	88.83	164.87	6724.23	-4593.56	2240.75	5104.56	5110.94	154.00	1.08
11621.00	88.42	164.90	6725.77	-4655.33	2257.43	5167.92	5173.79	154.13	.64
11645.00	88.52	164.31	6726.41	-4678.46	2263.80	5191.69	5197.38	154.18	2.49
<b>Strait Line Projection To TD</b>									
11700.00	88.52	164.31	6727.83	-4731.39	2278.67	5246.21	5251.51	154.28	.00