

Job Number:	State/Country:
Company:	Declination:
Lease/Well:	Grid:
Location:	File name: D:\WINSERVE\JOBS\IP#8H.SVY
Rig Name:	Date/Time: 27-Oct-11 / 17:42
RKB:	Curve Name: Potts #8H As Drilled
G.L. or M.S.L.:	

Scientific Drilling

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 151.80
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>CLOSURE</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
108.00	.17	13.48	108.00	.16	.04	-.12	.16	13.48	.16
208.00	.15	311.93	208.00	.39	-.03	-.35	.39	356.24	.16
308.00	.19	3.55	308.00	.64	-.11	-.62	.65	350.03	.15
408.00	.09	65.37	408.00	.84	-.03	-.75	.84	357.89	.17
508.00	.11	99.70	508.00	.86	.14	-.69	.87	8.98	.06
608.00	.07	31.52	608.00	.89	.26	-.66	.93	16.36	.11
708.00	.09	138.35	708.00	.88	.35	-.62	.95	21.35	.13
808.00	.02	185.65	808.00	.81	.40	-.53	.90	26.11	.08
908.00	.19	303.51	908.00	.88	.26	-.66	.92	16.19	.20
1008.00	.15	29.68	1008.00	1.09	.18	-.87	1.10	9.54	.23
1108.00	.10	272.87	1108.00	1.21	.16	-.99	1.22	7.58	.21
1208.00	.11	146.45	1208.00	1.13	.13	-.94	1.14	6.38	.19
1308.00	.14	238.45	1308.00	.99	.08	-.83	.99	4.37	.18
1408.00	.29	226.72	1408.00	.75	-.21	-.76	.78	344.13	.16
1508.00	.66	270.60	1507.99	.58	-.97	-.97	1.13	300.87	.49
1608.00	.94	289.88	1607.98	.87	-2.32	-1.86	2.48	290.48	.38
1708.00	1.20	283.55	1707.97	1.39	-4.11	-3.17	4.34	288.70	.29
1808.00	1.55	294.42	1807.94	2.20	-6.36	-4.94	6.73	289.05	.44
1908.00	1.02	317.85	1907.91	3.41	-8.19	-6.88	8.87	292.64	.74
2008.00	1.38	316.57	2007.89	4.95	-9.61	-8.90	10.81	297.24	.36
2108.00	1.70	332.33	2107.85	7.14	-11.13	-11.55	13.22	302.67	.53
2208.00	1.54	329.81	2207.81	9.61	-12.49	-14.38	15.76	307.57	.18
2308.00	1.78	326.74	2307.77	12.07	-14.02	-17.27	18.50	310.73	.26
2408.00	1.80	332.14	2407.72	14.76	-15.61	-20.38	21.48	313.40	.17

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	
2508.00	1.94	323.85	2507.67	17.51	-17.34	-23.63	24.65	315.29	.30
2608.00	2.01	329.10	2607.61	20.39	-19.24	-27.06	28.03	316.66	.19
2708.00	1.75	4.84	2707.56	23.41	-20.01	-30.09	30.80	319.48	1.18
2808.00	2.41	50.44	2807.50	26.27	-18.26	-31.78	32.00	325.20	1.72
2908.00	2.97	69.97	2907.39	28.50	-14.21	-31.83	31.84	333.51	1.07
3008.00	4.42	88.99	3007.19	29.46	-7.92	-29.70	30.50	344.95	1.88
3108.00	4.65	102.61	3106.88	28.64	-.11	-25.29	28.64	359.78	1.10
3208.00	5.15	108.91	3206.51	26.30	8.09	-19.35	27.52	17.10	.73
3308.00	5.46	107.94	3306.08	23.38	16.86	-12.63	28.83	35.80	.32
3408.00	5.36	106.67	3405.64	20.57	25.86	-5.91	33.05	51.50	.16
3508.00	5.01	109.28	3505.23	17.79	34.46	.60	38.78	62.69	.42
3608.00	4.65	108.75	3604.87	15.05	42.42	6.78	45.01	70.47	.36
3708.00	4.65	107.37	3704.54	12.53	50.13	12.64	51.67	75.96	.11
3808.00	4.59	106.63	3804.22	10.18	57.83	18.36	58.72	80.02	.08
3908.00	4.92	106.74	3903.87	7.80	65.77	24.21	66.23	83.24	.33
4008.00	5.14	105.93	4003.49	5.33	74.18	30.35	74.38	85.89	.23
4108.00	4.89	113.32	4103.11	2.42	82.41	36.81	82.44	88.32	.69
4208.00	4.47	118.16	4202.77	-1.11	89.76	43.39	89.76	90.71	.58
4308.00	4.42	118.08	4302.47	-4.76	96.59	49.84	96.71	92.82	.05
4408.00	3.45	97.86	4402.24	-6.99	102.97	54.82	103.21	93.88	1.68
4508.00	2.64	101.71	4502.10	-7.87	108.21	58.07	108.49	94.16	.83
4608.00	1.59	123.40	4602.03	-9.10	111.62	60.76	111.99	94.66	1.30
4708.00	.58	127.36	4702.01	-10.17	113.18	62.45	113.64	95.13	1.01
4808.00	.52	94.96	4802.01	-10.51	114.04	63.15	114.52	95.27	.31
4908.00	1.12	74.75	4902.00	-10.30	115.43	63.62	115.89	95.10	.66
5008.00	1.91	83.89	5001.96	-9.86	118.03	64.47	118.44	94.78	.82
5108.00	2.58	71.39	5101.88	-8.97	121.82	65.47	122.15	94.21	.83
5208.00	4.33	64.41	5201.70	-6.62	127.36	66.02	127.53	92.97	1.80
5258.00	4.34	69.83	5251.56	-5.15	130.84	66.37	130.94	92.25	.82
5329.00	4.18	69.63	5322.36	-3.32	135.78	67.09	135.83	91.40	.23
5392.00	3.90	65.94	5385.20	-1.65	139.89	67.56	139.90	90.68	.61
5455.00	3.36	59.38	5448.08	.16	143.44	67.64	143.44	89.93	1.08
5516.00	2.74	56.11	5508.99	1.89	146.19	67.42	146.20	89.26	1.06
5547.00	2.45	54.93	5539.96	2.68	147.34	67.27	147.37	88.96	.95
5578.00	2.37	52.55	5570.93	3.45	148.40	67.08	148.44	88.67	.41
5609.00	3.50	57.52	5601.89	4.35	149.70	66.91	149.77	88.34	3.73
5639.00	5.62	63.67	5631.79	5.49	151.79	66.89	151.89	87.93	7.24
5670.00	7.75	70.37	5662.58	6.87	155.12	67.25	155.27	87.46	7.31
5701.00	9.61	74.81	5693.23	8.25	159.59	68.14	159.80	87.04	6.37
5732.00	11.41	78.98	5723.70	9.51	165.10	69.63	165.37	86.70	6.30
Bottom Line CK.									
5763.00	12.99	83.62	5754.00	10.49	171.57	71.83	171.89	86.50	5.99
5794.00	14.95	88.33	5784.09	10.99	179.03	74.91	179.37	86.49	7.30
5825.00	17.06	92.28	5813.88	10.93	187.57	79.01	187.89	86.67	7.66
5856.00	19.22	94.97	5843.34	10.30	197.20	84.11	197.47	87.01	7.47
5887.00	21.33	97.82	5872.42	9.09	207.87	90.22	208.07	87.50	7.51

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	
5918.00	22.98	100.64	5901.13	7.21	219.40	97.33	219.52	88.12	6.33
5948.00	24.97	102.50	5928.54	4.76	231.34	105.13	231.39	88.82	7.09
5979.00	26.93	103.21	5956.42	1.74	244.57	114.04	244.57	89.59	6.40
6010.00	29.16	105.40	5983.77	-1.87	258.68	123.89	258.69	90.42	7.92
6041.00	30.91	106.14	6010.61	-6.09	273.61	134.67	273.68	91.28	5.77
6071.00	32.72	107.17	6036.10	-10.63	288.76	145.82	288.96	92.11	6.30
Bottom Line CK.									
6102.00	34.61	107.06	6061.90	-15.69	305.19	158.04	305.59	92.94	6.10
6133.00	36.26	107.17	6087.16	-20.98	322.36	170.82	323.05	93.72	5.33
6164.00	37.69	107.32	6111.93	-26.50	340.17	184.11	341.20	94.46	4.62
6195.00	39.39	108.12	6136.17	-32.38	358.57	197.98	360.03	95.16	5.71
6226.00	41.36	108.95	6159.79	-38.77	377.60	212.61	379.59	95.86	6.59
6256.00	42.91	107.96	6182.03	-45.14	396.70	227.24	399.26	96.49	5.62
6287.00	44.42	107.84	6204.46	-51.72	417.06	242.66	420.26	97.07	4.88
6318.00	46.03	108.05	6226.29	-58.50	438.00	258.53	441.89	97.61	5.22
6349.00	47.27	108.08	6247.57	-65.49	459.43	274.82	464.07	98.11	4.00
6380.00	49.05	108.61	6268.25	-72.76	481.35	291.58	486.82	98.60	5.88
Bottom Line CK.									
6411.00	50.89	108.87	6288.19	-80.38	503.83	308.93	510.20	99.06	5.97
6442.00	52.47	109.34	6307.41	-88.35	526.81	326.80	534.16	99.52	5.23
6472.00	54.08	108.82	6325.35	-96.20	549.53	344.47	557.89	99.93	5.54
6503.00	55.95	108.91	6343.12	-104.42	573.56	363.06	582.99	100.32	6.04
6535.00	56.62	111.64	6360.88	-113.64	598.53	382.99	609.22	100.75	7.40
6567.00	56.78	114.19	6378.46	-124.05	623.16	403.80	635.39	101.26	6.68
6598.00	57.10	116.86	6395.37	-135.25	646.60	424.75	660.59	101.81	7.29
6630.00	57.88	119.23	6412.57	-147.94	670.41	447.18	686.54	102.44	6.70
6662.00	58.55	122.18	6429.43	-161.83	693.79	470.47	712.42	103.13	8.11
6694.00	59.22	124.01	6445.96	-176.79	716.74	494.50	738.22	103.86	5.32
6725.00	60.60	125.84	6461.51	-192.14	738.73	518.42	763.31	104.58	6.78
6757.00	62.47	127.43	6476.76	-208.93	761.30	543.88	789.45	105.35	7.30
6789.00	63.98	128.76	6491.17	-226.56	783.78	570.04	815.87	106.12	6.00
6821.00	65.03	130.69	6504.95	-245.02	806.00	596.81	842.41	106.91	6.36
6853.00	66.31	133.94	6518.14	-264.65	827.55	624.29	868.84	107.73	10.08
6885.00	67.74	135.86	6530.63	-285.44	848.41	652.48	895.14	108.60	7.11
6917.00	69.33	136.16	6542.34	-306.87	869.10	681.14	921.68	109.45	5.04
6949.00	71.00	138.20	6553.19	-328.95	889.55	710.26	948.42	110.29	7.95
6981.00	72.57	141.07	6563.20	-352.10	909.23	739.97	975.03	111.17	9.83
Bottom Line CK.									
7013.00	73.38	142.79	6572.57	-376.19	928.10	770.11	1001.44	112.06	5.73
7045.00	75.07	144.37	6581.27	-400.97	946.38	800.59	1027.82	112.96	7.10
7076.00	76.43	146.31	6588.90	-425.68	963.46	830.44	1053.31	113.84	7.49
7108.00	78.45	148.64	6595.86	-452.02	980.25	861.58	1079.45	114.76	9.51
7140.00	79.55	151.03	6601.97	-479.17	996.03	892.98	1105.30	115.69	8.10
7171.00	80.64	152.94	6607.30	-506.13	1010.38	923.51	1130.06	116.61	7.01
7203.00	82.80	154.95	6611.91	-534.58	1024.28	955.15	1155.39	117.56	9.18
7235.00	83.68	155.22	6615.67	-563.40	1037.67	986.88	1180.75	118.50	2.87
7267.00	84.02	155.52	6619.10	-592.32	1050.93	1018.63	1206.36	119.41	1.41

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	
7299.00	86.41	155.52	6621.77	-621.34	1064.14	1050.45	1232.26	120.28	7.47		
7330.00	88.19	155.62	6623.23	-649.53	1076.95	1081.35	1257.66	121.10	5.75		
7394.00	89.36	156.41	6624.60	-707.99	1102.96	1145.16	1310.64	122.70	2.21		
7457.00	88.62	156.40	6625.71	-765.71	1128.17	1207.94	1363.48	124.17	1.17		
7521.00	88.89	156.11	6627.10	-824.28	1153.93	1271.74	1418.10	125.54	.62		
7584.00	88.09	155.57	6628.76	-881.74	1179.71	1334.56	1472.82	126.78	1.53		
7647.00	88.39	155.20	6630.70	-938.99	1205.94	1397.40	1528.40	127.91	.76		
7710.00	87.92	156.65	6632.72	-996.48	1231.62	1460.21	1584.26	128.98	2.42		
7774.00	88.36	157.19	6634.80	-1055.33	1256.70	1523.92	1641.04	130.02	1.09		
7837.00	87.69	158.44	6636.97	-1113.62	1280.47	1586.53	1696.99	131.01	2.25		
7901.00	87.52	160.09	6639.65	-1173.43	1303.11	1649.93	1753.58	132.00	2.59		
7965.00	88.52	160.61	6641.86	-1233.66	1324.62	1713.18	1810.12	132.96	1.76		
8029.00	88.15	161.31	6643.72	-1294.13	1345.49	1776.34	1866.85	133.89	1.24		
8092.00	88.22	161.65	6645.71	-1353.84	1365.49	1838.41	1922.88	134.75	.55		
8156.00	87.35	161.79	6648.19	-1414.57	1385.55	1901.40	1980.09	135.59	1.38		
8219.00	87.25	161.46	6651.15	-1474.29	1405.39	1963.41	2036.82	136.37	.55		
8283.00	87.92	161.11	6653.85	-1534.85	1425.91	2026.48	2094.99	137.11	1.18		
8346.00	88.99	160.98	6655.55	-1594.41	1446.36	2088.64	2152.70	137.79	1.71		
Bottom Line CK.											
8410.00	88.22	161.02	6657.11	-1654.90	1467.19	2151.80	2211.64	138.44	1.20		
8473.00	88.02	161.12	6659.17	-1714.47	1487.62	2213.94	2269.89	139.05	.35		
8537.00	88.86	161.12	6660.92	-1775.00	1508.32	2277.07	2329.30	139.64	1.31		
8601.00	87.59	161.30	6662.90	-1835.56	1528.92	2340.18	2388.91	140.21	2.00		
8664.00	87.11	160.37	6665.81	-1895.00	1549.58	2402.33	2447.91	140.73	1.66		
8727.00	87.69	160.07	6668.67	-1954.22	1570.88	2464.59	2507.32	141.21	1.04		
8791.00	88.52	161.54	6670.79	-2014.63	1591.91	2527.76	2567.67	141.69	2.64		
8855.00	89.23	163.94	6672.04	-2075.73	1610.90	2590.58	2627.48	142.19	3.91		
8919.00	88.62	164.21	6673.24	-2137.26	1628.45	2653.10	2686.96	142.70	1.04		
8983.00	89.16	164.66	6674.48	-2198.90	1645.62	2715.54	2746.50	143.19	1.10		
9046.00	88.26	163.22	6675.90	-2259.43	1663.05	2777.12	2805.48	143.65	2.69		
9110.00	88.52	163.14	6677.70	-2320.67	1681.56	2839.83	2865.86	144.07	.43		
9174.00	89.46	163.53	6678.83	-2381.97	1699.91	2902.53	2926.34	144.49	1.59		
9237.00	90.40	162.79	6678.91	-2442.27	1718.16	2964.29	2986.09	144.87	1.90		
9301.00	89.53	162.18	6678.94	-2503.30	1737.42	3027.18	3047.15	145.24	1.66		
9364.00	89.80	161.31	6679.31	-2563.12	1757.15	3089.24	3107.60	145.57	1.45		
9428.00	88.89	160.87	6680.04	-2623.67	1777.89	3152.39	3169.31	145.88	1.58		
9492.00	88.99	160.32	6681.23	-2684.02	1799.15	3215.63	3231.24	146.17	.87		
Bottom Line CK.											
9555.00	87.58	158.56	6683.11	-2742.98	1821.27	3278.04	3292.56	146.42	3.58		
9618.00	87.35	157.56	6685.90	-2801.36	1844.78	3340.60	3354.22	146.63	1.63		
9682.00	88.09	157.13	6688.45	-2860.37	1869.41	3404.25	3417.08	146.83	1.34		
9745.00	89.06	157.06	6690.01	-2918.38	1893.93	3466.96	3479.07	147.02	1.54		
9809.00	88.46	158.18	6691.40	-2977.55	1918.29	3530.61	3541.98	147.21	1.98		
9873.00	88.19	158.56	6693.27	-3037.02	1941.87	3594.16	3604.76	147.41	.73		
9936.00	88.05	160.33	6695.34	-3095.97	1963.98	3656.57	3666.37	147.61	2.82		
9999.00	88.19	161.53	6697.40	-3155.48	1984.55	3718.74	3727.67	147.83	1.92		
10063.00	89.03	161.16	6698.96	-3216.10	2005.01	3781.83	3789.90	148.06	1.43		

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	
10126.00	90.00	160.81	6699.49	-3275.66	2025.54	3844.02	3851.33	148.27	1.64
10190.00	89.09	161.25	6700.00	-3336.18	2046.34	3907.19	3913.77	148.48	1.58
10254.00	89.33	161.46	6700.88	-3396.82	2066.80	3970.29	3976.18	148.68	.50
10317.00	88.39	161.40	6702.13	-3456.52	2086.86	4032.39	4037.64	148.88	1.50
10381.00	88.29	161.14	6703.99	-3517.11	2107.40	4095.49	4100.15	149.07	.44
Bottom Line									
10445.00	89.13	160.69	6705.43	-3577.57	2128.32	4158.67	4162.79	149.25	1.49
10509.00	87.92	160.73	6707.07	-3637.96	2149.46	4221.88	4225.51	149.42	1.89
10572.00	87.65	160.21	6709.51	-3697.29	2170.50	4284.11	4287.31	149.58	.93
10636.00	88.52	160.32	6711.65	-3757.50	2192.10	4347.38	4350.18	149.74	1.37
10700.00	87.52	161.79	6713.86	-3817.99	2212.87	4410.50	4412.92	149.90	2.78
10764.00	87.42	162.34	6716.69	-3878.82	2232.56	4473.42	4475.44	150.08	.87
10827.00	86.58	161.81	6719.98	-3938.68	2251.92	4535.32	4537.00	150.24	1.58
10891.00	86.17	161.72	6724.03	-3999.35	2271.91	4598.23	4599.60	150.40	.66
10954.00	86.91	162.42	6727.83	-4059.18	2291.26	4660.11	4661.20	150.56	1.62
11018.00	87.99	161.18	6730.68	-4119.91	2311.23	4723.07	4723.93	150.71	2.57
11081.00	88.99	161.49	6732.34	-4179.58	2331.39	4785.18	4785.84	150.85	1.66
11145.00	88.36	159.13	6733.82	-4239.81	2352.94	4848.45	4848.96	150.97	3.82
11209.00	88.72	157.53	6735.45	-4299.27	2376.57	4912.01	4912.41	151.07	2.56
11272.00	88.22	156.78	6737.13	-4357.31	2401.02	4974.71	4975.04	151.14	1.43
11336.00	89.16	157.50	6738.59	-4416.26	2425.87	5038.42	5038.68	151.22	1.85
11400.00	87.82	153.59	6740.28	-4474.49	2452.35	5102.24	5102.46	151.27	6.46
11441.00	87.41	151.36	6741.99	-4510.82	2471.28	5143.20	5143.41	151.28	5.53
11495.00	87.41	151.36	6744.43	-4558.16	2497.14	5197.15	5197.36	151.28	.00