

4708301223



Job Number:  1010-3621  
 Company: Berry Energy  
 Lease/Well:   
 Location: Middle Mtn., Randolph County  
 Rig Name: Waco Rig  
 RKB:   
 G.L. or M.S.L.:

State/Country: WV / USA  
 Declination: -9.05  
 Grid:   
 File name: C:\WINSERVE\BERRY1.SVY  
 Date/Time: 27-Oct-10 / 10:38  
 Curve Name: MAGNETIC SINGLE SHOT SURVEY

JAVINS CORPORATION

WINSERVE SURVEY CALCULATIONS  
 Minimum Curvature Method  
 Vertical Section Plane 32.00  
 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
62.00	1.00	72.90	62.00	.16	.52	.41	.54	72.90	1.61
128.00	1.50	15.70	127.98	1.16	1.30	1.67	1.74	48.29	1.93
182.00	.90	38.10	181.97	2.17	1.75	2.77	2.79	38.90	1.39
372.00	2.90	5.90	371.86	8.13	3.17	8.57	8.73	21.30	1.15
468.00	3.40	350.50	467.72	13.35	2.95	12.89	13.68	12.45	1.02
531.00	4.00	355.90	530.59	17.39	2.48	16.06	17.56	8.13	1.10
651.00	5.40	354.00	650.18	27.18	1.59	23.89	27.23	3.36	1.17
746.00	6.90	353.30	744.63	37.29	.46	31.87	37.30	.71	1.58
841.00	9.00	350.10	838.71	50.28	-1.48	41.86	50.30	358.31	2.26
967.00	10.20	346.20	962.95	70.83	-5.84	56.97	71.07	355.29	1.08
1095.00	10.00	352.00	1088.97	92.84	-10.09	73.38	93.38	353.80	.81
1191.00	9.50	353.30	1183.58	108.96	-12.17	85.95	109.64	353.63	.57
1287.00	8.80	345.20	1278.36	123.93	-14.97	97.16	124.83	353.11	1.53
1413.00	6.60	350.20	1403.22	140.38	-18.67	109.16	141.62	352.43	1.82
1530.00	5.30	357.20	1519.59	152.41	-20.08	118.61	153.72	352.50	1.27
1647.00	4.30	350.40	1636.18	162.13	-21.07	126.33	163.49	352.59	.98
1817.00	3.90	344.00	1805.74	173.97	-23.73	134.96	175.58	352.23	.36
2008.00	4.80	342.40	1996.19	187.83	-27.94	144.49	189.90	351.54	.48
2104.00	4.30	354.70	2091.89	195.25	-29.48	149.95	197.46	351.41	1.14
2241.00	3.50	356.80	2228.57	204.53	-30.19	157.46	206.75	351.60	.59
2359.00	3.30	357.90	2346.36	211.53	-30.52	163.21	213.72	351.79	.18
2526.00	3.80	337.20	2513.05	221.43	-32.84	170.38	223.85	351.56	.82
2685.00	2.80	3.60	2671.79	230.16	-34.63	176.84	232.76	351.44	1.13

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	
2844.00	2.10	338.70	2830.65	236.75	-35.45	181.99	239.39	351.48	.79
2970.00	3.30	345.20	2956.51	242.41	-37.21	185.86	245.25	351.27	.98
3112.00	3.40	347.50	3098.27	250.47	-39.17	191.66	253.52	351.11	.12
3335.00	2.20	20.90	3321.01	260.93	-39.07	200.58	263.84	351.48	.89
3790.00	1.90	83.00	3775.77	270.01	-28.47	213.89	271.51	353.98	.47
3947.00	2.20	83.00	3932.67	270.69	-22.90	217.43	271.66	355.17	.19
4052.00	3.50	97.50	4037.54	270.52	-17.72	220.03	271.10	356.25	1.41
4180.00	3.70	93.00	4165.29	269.79	-9.72	223.65	269.97	357.94	.27
4308.00	4.50	86.00	4292.96	269.93	-.59	228.60	269.93	359.88	.74
4432.00	4.20	65.70	4416.61	272.14	8.41	235.24	272.27	1.77	1.26
4559.00	3.70	53.80	4543.31	276.47	15.95	242.91	276.93	3.30	.75
4687.00	2.90	60.70	4671.10	280.49	22.11	249.59	281.36	4.51	.70
4847.00	2.20	32.90	4830.94	285.05	27.31	256.21	286.36	5.47	.88
5004.00	2.80	358.90	4987.80	291.42	28.87	262.44	292.84	5.66	1.00
5230.00	3.90	337.30	5213.42	304.03	25.80	271.50	305.12	4.85	.73
5480.00	4.90	315.80	5462.70	319.53	15.07	278.96	319.88	2.70	.76
5580.00	6.20	310.40	5562.23	326.09	7.98	280.77	326.19	1.40	1.40
5636.00	6.00	315.00	5617.91	330.12	3.61	281.87	330.14	.63	.94
5734.00	5.50	314.90	5715.42	337.06	-3.34	284.07	337.07	359.43	.51
5861.00	5.70	314.20	5841.81	345.75	-12.17	286.76	345.96	357.98	.17
5985.00	7.70	309.50	5964.96	355.33	-23.00	289.15	356.07	356.30	1.67