



State/County: COLORADO/WELD
Latitude: 40.499, Longitude: -104.411
GRID North is 0.700 Degrees East of True North
VS-Azi: 0.000 Degrees



FIELD COPY ONLY (NOT DEFINITIVE)

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: msgyro_run01-01_ed.ut

Minimum Curvature Method

Report Date/Time: 7/23/2011 / 19:17

Vaughn Energy Services

Denver, Co

303-853-4976

Andrew Meadville

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	****
100.000	0.143	176.618	100.000	-0.125	0.007	-0.125	0.125	176.618	0.143
200.000	0.140	51.692	200.000	-0.174	0.111	-0.174	0.206	147.480	0.251
300.000	0.190	249.613	300.000	-0.156	0.051	-0.156	0.164	161.693	0.326
400.000	0.329	111.898	399.999	-0.320	0.163	-0.320	0.359	153.087	0.486
500.000	0.081	264.988	499.999	-0.433	0.358	-0.433	0.562	140.431	0.403
600.000	0.137	235.057	599.998	-0.508	0.190	-0.508	0.542	159.530	0.078
700.000	0.142	301.271	699.998	-0.512	-0.014	-0.512	0.512	181.622	0.153
800.000	0.140	351.761	799.998	-0.326	-0.138	-0.326	0.354	202.965	0.121
900.000	0.110	254.474	899.998	-0.231	-0.249	-0.231	0.339	227.084	0.189
1000.000	0.173	278.972	999.998	-0.233	-0.490	-0.233	0.543	244.533	0.085
1100.000	0.082	25.260	1099.997	-0.145	-0.608	-0.145	0.625	256.581	0.211
1200.000	0.341	313.111	1199.997	0.123	-0.795	0.123	0.805	278.811	0.326
1300.000	0.060	124.448	1299.996	0.297	-0.969	0.297	1.014	287.041	0.401
1400.000	0.196	255.900	1399.996	0.226	-1.092	0.226	1.115	281.671	0.240
1500.000	0.378	327.010	1499.995	0.460	-1.438	0.460	1.510	287.757	0.365
1600.000	0.364	287.730	1599.993	0.834	-1.920	0.834	2.093	293.474	0.250
1700.000	0.299	272.534	1699.991	0.942	-2.483	0.942	2.656	290.776	0.109
1800.000	0.556	314.736	1799.989	1.295	-3.089	1.295	3.349	292.753	0.390
1900.000	0.326	303.251	1899.986	1.793	-3.672	1.793	4.086	296.030	0.245
2000.000	0.703	337.558	1999.982	2.517	-4.144	2.517	4.848	301.270	0.471
2100.000	0.301	4.641	2099.978	3.346	-4.357	3.346	5.494	307.522	0.456
2200.000	0.449	322.546	2199.976	3.919	-4.574	3.919	6.024	310.590	0.303
2300.000	0.501	308.104	2299.972	4.501	-5.157	4.501	6.845	311.111	0.130
2400.000	0.491	326.304	2399.969	5.127	-5.739	5.127	7.696	311.777	0.157
2500.000	0.467	345.782	2499.965	5.879	-6.077	5.879	8.455	314.050	0.164
2600.000	0.508	357.536	2599.962	6.717	-6.196	6.717	9.139	317.310	0.108
2700.000	0.768	38.610	2699.956	7.684	-5.797	7.684	9.625	322.967	0.510
2800.000	0.638	31.976	2799.948	8.680	-5.084	8.680	10.059	329.642	0.153
2900.000	0.620	11.008	2899.942	9.684	-4.686	9.684	10.758	334.179	0.230
3000.000	0.537	48.109	2999.938	10.528	-4.234	10.528	11.347	338.093	0.377
3100.000	0.521	81.053	3099.934	10.911	-3.436	10.911	11.440	342.520	0.300
3200.000	0.497	68.185	3199.930	11.143	-2.584	11.143	11.439	346.942	0.116
3300.000	0.139	129.078	3299.928	11.228	-2.087	11.228	11.421	349.468	0.447
3400.000	0.129	264.295	3399.928	11.141	-2.106	11.141	11.338	349.296	0.248
3500.000	0.309	0.016	3499.927	11.399	-2.218	11.399	11.613	348.988	0.347

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
3600.000	0.484	333.416	3599.925	12.046	-2.407	12.046	12.284	348.700	0.249
3700.000	0.309	267.026	3699.923	12.409	-2.865	12.409	12.736	346.999	0.458
3800.000	0.622	263.457	3799.920	12.333	-3.674	12.333	12.869	343.411	0.314
3900.000	0.421	341.697	3899.917	12.621	-4.329	12.621	13.343	341.066	0.677
4000.000	0.476	345.132	3999.914	13.372	-4.551	13.372	14.125	341.202	0.061
4100.000	0.692	307.126	4099.909	14.138	-5.140	14.138	15.043	340.021	0.432
4200.000	0.636	344.368	4199.902	15.037	-5.771	15.037	16.106	339.003	0.427
4300.000	1.436	348.174	4299.885	16.797	-6.177	16.797	17.897	339.808	0.803
4400.000	2.335	347.085	4399.830	20.009	-6.890	20.009	21.162	341.000	0.900
4500.000	3.132	344.272	4499.716	24.624	-8.085	24.624	25.918	341.823	0.807
4600.000	3.740	341.837	4599.535	30.353	-9.843	30.353	31.909	342.034	0.626
4700.000	4.645	347.189	4699.267	37.400	-11.757	37.400	39.205	342.549	0.984
4800.000	3.920	351.210	4798.987	44.727	-13.177	44.727	46.627	343.584	0.784
4900.000	2.996	349.863	4898.804	50.678	-14.160	50.678	52.619	344.389	0.927
5000.000	2.126	358.391	4998.704	55.104	-14.672	55.104	57.024	345.091	0.948
5100.000	1.589	1.973	5098.651	58.344	-14.676	58.344	60.161	345.880	0.549
5200.000	1.022	5.203	5198.625	60.617	-14.547	60.617	62.338	346.505	0.571
5300.000	0.764	7.319	5298.612	62.167	-14.382	62.167	63.809	346.975	0.260
5400.000	0.692	335.323	5398.605	63.378	-14.549	63.378	65.026	347.071	0.407
5500.000	1.100	344.398	5498.592	64.851	-15.059	64.851	66.576	346.927	0.430
5600.000	0.810	313.804	5598.579	66.265	-15.828	66.265	68.129	346.566	0.576
5700.000	0.545	330.086	5698.572	67.167	-16.575	67.167	69.182	346.138	0.325
5800.000	1.230	333.186	5798.559	68.538	-17.297	68.538	70.687	345.836	0.687
5900.000	0.805	342.659	5898.543	70.167	-17.991	70.167	72.436	345.619	0.456
6000.000	0.837	348.532	5998.533	71.553	-18.345	71.553	73.868	345.620	0.090
6100.000	0.874	305.856	6098.523	72.716	-19.109	72.716	75.185	345.276	0.624
6200.000	0.431	4.901	6198.517	73.538	-19.696	73.538	76.130	345.006	0.750
6300.000	0.205	93.725	6298.516	73.901	-19.485	73.901	76.427	345.230	0.474
6400.000	0.522	107.075	6398.514	73.756	-18.870	73.756	76.132	345.649	0.326
6500.000	0.710	83.515	6498.508	73.692	-17.819	73.692	75.816	346.407	0.312
6600.000	0.456	91.109	6598.503	73.754	-16.805	73.754	75.645	347.164	0.265
6700.000	0.102	86.097	6698.502	73.753	-16.318	73.753	75.537	347.524	0.355

HORIZONTAL DISPLACEMENT IS 75.537 FEET AT 347.524 DEGREES									
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