



## FIELD COPY ONLY (NOT DEFINITIVE)

Depth Reference : KB= GROUND LEVEL

## DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: run1-01-de\_01.ut

Minimum Curvature Method

Report Date/Time: 10/14/2013 / 13:26

Vaughn Energy Services

Pinedale, Wyoming

866-835-8333

Jay Hinman

Baker Red V 1-12

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	0.441	240.870	99.999	-0.187	-0.336	-0.187	0.385	240.870	0.441
200.000	0.380	229.602	199.996	-0.589	-0.925	-0.589	1.097	237.486	0.101
300.000	0.438	236.079	299.994	-1.017	-1.494	-1.017	1.807	235.748	0.074
400.000	0.260	225.779	399.992	-1.389	-1.974	-1.389	2.413	234.868	0.188
500.000	0.231	252.301	499.991	-1.608	-2.328	-1.608	2.830	235.364	0.116
600.000	0.321	275.378	599.990	-1.643	-2.799	-1.643	3.246	239.585	0.141
700.000	0.125	354.282	699.989	-1.508	-3.089	-1.508	3.438	243.972	0.321
800.000	0.151	299.271	799.989	-1.336	-3.215	-1.336	3.481	247.437	0.129
900.000	0.694	283.595	899.986	-1.129	-3.918	-1.129	4.077	253.924	0.550
1000.000	0.584	284.436	999.980	-0.860	-4.999	-0.860	5.073	260.242	0.110
1100.000	0.711	287.552	1099.973	-0.546	-6.085	-0.546	6.109	264.876	0.132
1200.000	0.877	290.459	1199.964	-0.091	-7.394	-0.091	7.394	269.296	0.171
1300.000	0.963	284.969	1299.951	0.394	-8.923	0.394	8.931	272.527	0.123
1400.000	0.575	321.960	1399.942	1.006	-10.044	1.006	10.094	275.722	0.611
1500.000	0.940	273.144	1499.934	1.447	-11.173	1.447	11.266	277.379	0.709
1600.000	1.032	270.667	1599.919	1.502	-12.892	1.502	12.980	276.647	0.101
1700.000	0.901	280.232	1699.905	1.653	-14.566	1.653	14.660	276.473	0.207
1800.000	0.825	285.364	1799.894	1.983	-16.034	1.983	16.157	277.050	0.108
1900.000	0.515	301.275	1899.887	2.407	-17.113	2.407	17.281	278.007	0.359
2000.000	0.561	1.916	1999.883	3.130	-17.481	3.130	17.759	280.151	0.545
2100.000	0.663	21.197	2099.878	4.158	-17.255	4.158	17.749	283.550	0.228
2200.000	0.423	54.004	2199.873	4.915	-16.747	4.915	17.454	286.355	0.383
2300.000	0.396	99.230	2299.871	5.076	-16.107	5.076	16.888	287.492	0.316
2400.000	1.236	139.683	2399.861	4.199	-15.069	4.199	15.643	285.570	0.969
2500.000	1.978	157.990	2499.821	1.777	-13.724	1.777	13.839	277.376	0.894
2600.000	2.139	185.391	2599.759	-1.682	-13.253	-1.682	13.359	262.767	0.988
2700.000	2.184	208.348	2699.690	-5.217	-14.333	-5.217	15.253	249.999	0.861
2800.000	1.868	205.494	2799.627	-8.364	-15.939	-8.364	18.000	242.310	0.332
2900.000	1.289	221.699	2899.589	-10.675	-17.389	-10.675	20.404	238.453	0.725
3000.000	0.898	213.890	2999.571	-12.166	-18.574	-12.166	22.204	236.775	0.418
3100.000	0.737	223.679	3099.561	-13.282	-19.455	-13.282	23.557	235.680	0.213
3200.000	0.835	273.511	3199.553	-13.702	-20.626	-13.702	24.763	236.404	0.668
3300.000	1.566	288.069	3299.530	-13.234	-22.653	-13.234	26.235	239.707	0.787
3400.000	2.250	293.592	3399.474	-12.024	-25.751	-12.024	28.420	244.971	0.707

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
3500.000	2.124	305.063	3499.402	-10.174	-29.067	-10.174	30.796	250.709	0.455
3600.000	1.259	321.814	3599.358	-8.246	-31.263	-8.246	32.332	255.224	0.988
3700.000	0.433	324.668	3699.346	-7.074	-32.160	-7.074	32.929	257.595	0.826
3800.000	0.254	61.620	3799.345	-6.660	-32.184	-6.660	32.866	258.309	0.528
3900.000	0.391	147.867	3899.344	-6.844	-31.807	-6.844	32.535	257.858	0.452
4000.000	1.247	184.412	3999.333	-8.217	-31.710	-8.217	32.757	255.472	0.961
4100.000	1.293	150.675	4099.310	-10.286	-31.241	-10.286	32.890	251.776	0.738
4200.000	2.122	131.332	4199.265	-12.493	-29.298	-12.493	31.850	246.906	0.999
4300.000	1.399	109.014	4299.219	-14.113	-26.753	-14.113	30.247	242.186	0.984
4400.000	0.707	66.840	4399.202	-14.268	-25.031	-14.268	28.812	240.315	0.996
4500.000	0.835	346.583	4499.196	-13.317	-24.633	-13.317	28.002	241.604	0.999
4600.000	1.343	324.663	4599.178	-11.652	-25.479	-11.652	28.017	245.425	0.648
4700.000	0.697	350.771	4699.162	-10.096	-26.255	-10.096	28.129	248.967	0.780
4800.000	1.121	15.336	4799.150	-8.552	-26.094	-8.552	27.459	251.853	0.567
4900.000	0.913	342.888	4899.135	-6.847	-26.069	-6.847	26.954	255.284	0.602
5000.000	0.442	274.915	4999.129	-6.052	-26.689	-6.052	27.366	257.223	0.852
5100.000	0.210	258.899	5099.127	-6.055	-27.253	-6.055	27.918	257.474	0.247
5200.000	0.157	192.295	5199.126	-6.224	-27.462	-6.224	28.159	257.231	0.206
5300.000	0.544	1.804	5299.125	-5.883	-27.476	-5.883	28.099	257.916	0.699
5400.000	0.523	38.806	5399.121	-5.053	-27.176	-5.053	27.641	259.467	0.339
5500.000	0.255	174.237	5499.120	-4.918	-26.868	-4.918	27.314	259.626	0.726
5600.000	0.491	299.458	5599.119	-4.929	-27.218	-4.929	27.661	259.736	0.671
5700.000	0.334	325.929	5699.116	-4.477	-27.755	-4.477	28.114	260.838	0.243
5800.000	0.219	245.084	5799.115	-4.315	-28.091	-4.315	28.421	261.266	0.369
5900.000	0.484	82.531	5899.114	-4.341	-27.845	-4.341	28.181	261.139	0.696
6000.000	0.425	253.840	5999.113	-4.389	-27.783	-4.389	28.127	261.023	0.907
6100.000	0.439	221.446	6099.111	-4.780	-28.393	-4.780	28.792	260.444	0.242
6200.000	0.526	0.450	6199.109	-4.609	-28.643	-4.609	29.011	260.860	0.904
6300.000	0.414	242.223	6299.107	-4.318	-28.959	-4.318	29.279	261.519	0.808
6400.000	0.585	17.021	6399.106	-3.998	-29.129	-3.998	29.402	262.184	0.925
6500.000	0.446	63.120	6499.102	-3.334	-28.633	-3.334	28.826	263.358	0.424
6600.000	0.298	228.488	6599.101	-3.330	-28.481	-3.330	28.675	263.330	0.737
6700.000	0.448	75.185	6699.100	-3.403	-28.297	-3.403	28.501	263.143	0.726
6800.000	0.228	236.315	6799.100	-3.413	-28.086	-3.413	28.292	263.071	0.668
6900.000	0.311	246.850	6899.098	-3.630	-28.501	-3.630	28.731	262.741	0.096
7000.000	0.377	224.477	6999.097	-3.972	-28.980	-3.972	29.251	262.197	0.148
7100.000	0.346	187.791	7099.095	-4.505	-29.252	-4.505	29.596	261.245	0.229
7200.000	0.572	118.295	7199.092	-5.040	-28.853	-5.040	29.290	260.091	0.555
7300.000	0.292	34.144	7299.090	-5.066	-28.271	-5.066	28.722	259.840	0.615
7400.000	0.180	80.643	7399.089	-4.830	-27.973	-4.830	28.387	260.203	0.212
HORIZONTAL DISPLACEMENT IS 28.387 FEET AT 260.203 DEGREES									