



Company/Rig: ANADARKO / CORETECH  
 WELL/API#: GORDON FARMS #21-15/05-123-16620  
 DECLINATION: 8.59  
 TD AS DRILLED: 8177  
 COUNTY/STATE: WELD/COLORADO  
 Latitude: 40.143, Longitude: -104.880  
 Directions are relative to True North  
 VS-Azi: 0.000 Degrees



FIELD COPY ONLY (NOT DEFINITIVE)

DEPTH REFERENCE : RKB=SURFACE ELEVATION= 4979

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: msgyro\_run01-01-de\_01.ut  
 Minimum Curvature Method  
 Report Date/Time: 10/10/2013 / 10:34

LAT & LONG OBTAINED BY HANDHELD GPS AT WELLHEAD

NORTH REFERENCE: GRID  
 HENDERSON, COLORADO  
 303-853-4976  
 CJ HINES

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	0.998	255.999	99.995	-0.211	-0.845	-0.211	0.871	255.999	0.998
200.000	1.039	263.249	199.979	-0.528	-2.590	-0.528	2.643	258.480	0.135
300.000	0.923	274.881	299.965	-0.566	-4.293	-0.566	4.330	262.490	0.230
400.000	0.415	269.647	399.957	-0.500	-5.458	-0.500	5.481	264.769	0.511
500.000	0.239	270.644	499.956	-0.500	-6.029	-0.500	6.050	265.264	0.176
600.000	0.155	315.797	599.955	-0.400	-6.332	-0.400	6.345	266.384	0.170
700.000	0.035	330.491	699.955	-0.277	-6.442	-0.277	6.448	267.542	0.122
800.000	0.204	152.677	799.955	-0.408	-6.375	-0.408	6.388	266.334	0.239
900.000	0.080	320.871	899.955	-0.512	-6.337	-0.512	6.358	265.377	0.283
1000.000	0.218	180.877	999.955	-0.648	-6.384	-0.648	6.417	264.205	0.284
1100.000	0.219	212.011	1099.954	-1.000	-6.489	-1.000	6.565	261.237	0.117
1200.000	0.046	234.774	1199.954	-1.186	-6.623	-1.186	6.728	259.850	0.178
1300.000	0.201	222.474	1299.953	-1.339	-6.775	-1.339	6.906	258.823	0.157
1400.000	0.204	215.050	1399.953	-1.614	-6.996	-1.614	7.179	257.008	0.026
1500.000	0.242	248.469	1499.952	-1.837	-7.294	-1.837	7.522	255.863	0.133
1600.000	0.319	275.944	1599.951	-1.886	-7.767	-1.886	7.992	256.353	0.153
1700.000	0.369	278.572	1699.949	-1.809	-8.362	-1.809	8.555	257.793	0.052
1800.000	0.516	275.072	1799.946	-1.721	-9.129	-1.721	9.290	259.323	0.150
1900.000	0.499	279.803	1899.942	-1.607	-10.006	-1.607	10.135	260.875	0.045
2000.000	0.632	274.188	1999.937	-1.493	-10.985	-1.493	11.086	262.262	0.144
2100.000	0.801	278.154	2099.929	-1.353	-12.228	-1.353	12.302	263.684	0.176
2200.000	0.916	283.681	2199.918	-1.065	-13.696	-1.065	13.738	265.553	0.141
2300.000	0.867	290.449	2299.906	-0.612	-15.181	-0.612	15.193	267.691	0.116
2400.000	0.820	300.992	2399.895	0.021	-16.503	0.021	16.503	270.071	0.162
2500.000	0.695	338.073	2499.887	0.951	-17.343	0.951	17.369	273.140	0.496
2600.000	0.612	353.703	2599.881	2.045	-17.628	2.045	17.746	276.616	0.196
2700.000	0.917	9.927	2699.872	3.363	-17.548	3.363	17.868	280.848	0.371
2800.000	0.762	15.057	2799.861	4.792	-17.238	4.792	17.891	285.537	0.172
2900.000	0.841	14.524	2899.851	6.145	-16.881	6.145	17.965	290.001	0.080
3000.000	0.713	348.976	2999.842	7.466	-16.816	7.466	18.399	293.940	0.366
3100.000	0.558	340.448	3099.836	8.535	-17.098	8.535	19.110	296.528	0.181
3200.000	0.270	322.520	3199.833	9.181	-17.404	9.181	19.677	297.812	0.312
3300.000	0.253	329.120	3299.832	9.558	-17.661	9.558	20.081	298.421	0.035

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
3400.000	0.503	318.065	3399.830	10.074	-18.068	10.074	20.686	299.142	0.259
3500.000	0.507	307.830	3499.826	10.672	-18.711	10.672	21.540	299.698	0.090
3600.000	0.612	291.530	3599.822	11.139	-19.557	11.139	22.507	299.665	0.189
3700.000	0.772	294.266	3699.814	11.612	-20.668	11.612	23.707	299.329	0.164
3800.000	1.124	294.118	3799.800	12.290	-22.177	12.290	25.355	298.993	0.351
3900.000	1.232	297.432	3899.779	13.186	-24.027	13.186	27.407	298.758	0.128
4000.000	1.242	311.822	3999.756	14.404	-25.789	14.404	29.538	299.185	0.310
4100.000	1.251	316.942	4099.733	15.924	-27.341	15.924	31.641	300.217	0.112
4200.000	1.325	324.879	4199.707	17.668	-28.752	17.668	33.747	301.570	0.193
4300.000	1.225	325.356	4299.683	19.493	-30.025	19.493	35.798	302.992	0.101
4400.000	1.010	333.741	4399.664	21.163	-31.023	21.163	37.554	304.301	0.269
4500.000	1.003	316.228	4499.648	22.586	-32.018	22.586	39.183	305.199	0.307
4600.000	0.778	320.196	4599.636	23.739	-33.059	23.739	40.699	305.682	0.233
4700.000	0.728	312.151	4699.628	24.688	-33.965	24.688	41.989	306.012	0.117
4800.000	0.818	301.009	4799.619	25.482	-35.048	25.482	43.332	306.019	0.175
4900.000	0.790	299.125	4899.609	26.186	-36.262	26.186	44.728	305.834	0.039
5000.000	0.772	312.867	4999.600	26.980	-37.359	26.980	46.082	305.836	0.188
5100.000	1.001	306.460	5099.588	27.957	-38.555	27.957	47.625	305.947	0.249
5200.000	0.657	285.256	5199.577	28.627	-39.811	28.627	49.035	305.719	0.456
5300.000	0.652	278.616	5299.571	28.863	-40.926	28.863	50.080	305.194	0.076
5400.000	0.558	275.105	5399.565	28.992	-41.973	28.992	51.012	304.634	0.101
5500.000	0.702	274.290	5499.559	29.081	-43.068	29.081	51.967	304.028	0.144
5600.000	0.729	279.023	5599.551	29.226	-44.307	29.226	53.078	303.410	0.065
5700.000	0.661	268.397	5699.544	29.310	-45.512	29.310	54.133	302.782	0.145
5800.000	0.807	273.953	5799.536	29.342	-46.791	29.342	55.230	302.092	0.163
5900.000	0.750	253.889	5899.527	29.209	-48.122	29.209	56.293	301.257	0.277
6000.000	0.179	204.798	5999.523	28.886	-48.816	28.886	56.722	300.615	0.647
6100.000	0.517	262.707	6099.521	28.687	-49.329	28.687	57.064	300.180	0.449
6200.000	0.507	241.116	6199.518	28.416	-50.164	28.416	57.653	299.530	0.192
6300.000	0.457	292.853	6299.514	28.358	-50.918	28.358	58.282	299.114	0.423
6400.000	0.320	9.425	6399.513	28.788	-51.240	28.788	58.773	299.329	0.493
6500.000	0.247	335.500	6499.512	29.260	-51.283	29.260	59.043	299.707	0.180
6600.000	0.354	335.412	6599.510	29.736	-51.501	29.736	59.469	300.002	0.108
6700.000	0.249	48.120	6699.509	30.163	-51.468	30.163	59.655	300.372	0.367
6800.000	0.323	10.074	6799.508	30.586	-51.256	30.586	59.688	300.825	0.199
6900.000	0.259	32.022	6899.507	31.055	-51.087	31.055	59.785	301.295	0.128
7000.000	0.264	308.935	6999.506	31.391	-51.147	31.391	60.011	301.539	0.347
7100.000	0.122	359.342	7099.505	31.642	-51.327	31.642	60.297	301.653	0.209
7200.000	0.289	311.373	7199.505	31.915	-51.517	31.915	60.602	301.778	0.226
7300.000	0.200	308.307	7299.504	32.190	-51.844	32.190	61.024	301.836	0.090
7400.000	0.314	30.393	7399.503	32.535	-51.842	32.535	61.205	302.111	0.348
7500.000	0.447	41.201	7499.501	33.065	-51.446	33.065	61.156	302.729	0.150
7600.000	0.589	26.576	7599.497	33.818	-50.959	33.818	61.160	303.569	0.193
7700.000	0.776	34.126	7699.490	34.838	-50.349	34.838	61.227	304.681	0.207
7800.000	0.340	350.620	7799.485	35.692	-50.018	35.692	61.446	305.511	0.579
HORIZONTAL DISPLACEMENT IS 61.446 FEET AT 305.511 DEGREES									