



COMPANY/RIG: Noble Energy/Production/CoreTech
WELL/API: Meyer 16-3/05-123-14565
DECLINATION: 8.29 Degrees
TD AS DRILLED: 7280 Feet
COUNTY/STATE: Weld/Colorado
VS-Azi: 0.000 Degrees
Latitude: 40.31441, Longitude: -104.66573
Grid North = True North -0.54 degs (NAD 27)
Grid Correction Applied = -0.54 degs



DEPTH REFERENCE : RKB = GL Elevation = 4773

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: msgyrosurvey.ut

Minimum Curvature Method

Report Date/Time: 2/4/2016 / 14:44

LAT & LONG OBTAINED BY HANDHELD GPS AT WELLHEAD

NORTH REFERENCE: GRID

HENDERSON, COLORADO

303-853-4976

Surveyor: JUSTIN WILLIAMS / Meyer 16-3

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	0.572	346.537	99.998	0.486	-0.116	0.486	0.499	346.537	0.572
200.000	0.615	359.794	199.993	1.507	-0.234	1.507	1.526	351.162	0.143
300.000	0.405	299.997	299.990	2.220	-0.542	2.220	2.286	346.279	0.540
400.000	0.129	11.391	399.989	2.507	-0.826	2.507	2.640	341.772	0.383
500.000	0.472	325.073	499.987	2.955	-1.039	2.955	3.133	340.624	0.394
600.000	0.385	323.530	599.984	3.563	-1.475	3.563	3.856	337.516	0.088
700.000	0.358	330.097	699.982	4.104	-1.830	4.104	4.493	335.966	0.050
800.000	0.397	313.428	799.980	4.613	-2.237	4.613	5.126	334.126	0.116
900.000	0.362	235.339	899.979	4.671	-2.749	4.671	5.420	329.525	0.479
1000.000	0.124	243.726	999.978	4.443	-3.106	4.443	5.421	325.045	0.240
1100.000	0.156	239.711	1099.977	4.326	-3.321	4.326	5.454	322.493	0.033
1200.000	0.346	229.990	1199.976	4.064	-3.669	4.064	5.475	317.918	0.195
1300.000	0.513	283.947	1299.974	3.977	-4.335	3.977	5.883	312.533	0.417
1400.000	0.500	249.398	1399.970	3.932	-5.179	3.932	6.502	307.204	0.301
1500.000	0.477	294.616	1499.967	3.951	-5.966	3.951	7.156	303.516	0.376
1600.000	0.708	283.738	1599.961	4.272	-6.945	4.272	8.154	301.593	0.256
1700.000	0.559	274.510	1699.955	4.457	-8.032	4.457	9.186	299.024	0.180
1800.000	0.524	312.841	1799.951	4.806	-8.854	4.806	10.074	298.493	0.357

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
1900.000	1.018	338.882	1899.942	5.946	-9.509	5.946	11.215	302.016	0.594
2000.000	1.053	345.326	1999.926	7.663	-10.062	7.663	12.648	307.293	0.121
2100.000	0.801	355.213	2099.913	9.249	-10.353	9.249	13.883	311.776	0.297
2200.000	1.107	11.548	2199.899	10.893	-10.218	10.893	14.935	316.830	0.406
2300.000	0.964	9.256	2299.883	12.669	-9.889	12.669	16.072	322.025	0.149
2400.000	1.086	30.194	2399.867	14.319	-9.278	14.319	17.061	327.059	0.391
2500.000	1.138	21.630	2499.848	16.061	-8.435	16.061	18.141	332.293	0.174
2600.000	1.004	22.205	2599.831	17.796	-7.737	17.796	19.405	336.502	0.135
2700.000	1.065	30.710	2699.814	19.406	-6.932	19.406	20.607	340.344	0.165
2800.000	1.015	10.779	2799.798	21.075	-6.291	21.075	21.994	343.379	0.363
2900.000	1.051	10.631	2899.782	22.847	-5.957	22.847	23.611	345.387	0.036
3000.000	0.927	10.797	2999.767	24.543	-5.636	24.543	25.182	347.068	0.124
3100.000	1.170	26.572	3099.750	26.251	-5.027	26.251	26.728	349.158	0.375
3200.000	0.849	30.057	3199.735	27.805	-4.200	27.805	28.120	351.410	0.327
3300.000	0.057	11.511	3299.731	28.495	-3.819	28.495	28.750	352.366	0.795
3400.000	0.327	117.015	3399.730	28.414	-3.555	28.414	28.635	352.869	0.347
3500.000	0.434	140.034	3499.728	27.994	-3.057	27.994	28.160	353.768	0.184
3600.000	0.381	215.866	3599.726	27.434	-3.008	27.434	27.598	353.742	0.503
3700.000	0.369	267.595	3699.724	27.151	-3.524	27.151	27.379	352.604	0.327
3800.000	0.370	244.597	3799.722	26.999	-4.138	26.999	27.314	351.286	0.147
3900.000	0.430	298.362	3899.720	27.038	-4.760	27.038	27.454	350.016	0.366
4000.000	0.865	289.699	3999.714	27.471	-5.801	27.471	28.076	348.077	0.445
4100.000	1.759	289.442	4099.686	28.236	-7.959	28.236	29.336	344.258	0.894
4200.000	1.701	285.827	4199.641	29.152	-10.834	29.152	31.100	339.613	0.124
4300.000	1.597	288.322	4299.599	29.994	-13.584	29.994	32.927	335.635	0.126
4400.000	1.272	300.375	4399.568	30.994	-15.864	30.994	34.818	332.894	0.441
4500.000	1.300	291.139	4499.543	31.964	-17.880	31.964	36.625	330.778	0.209
4600.000	0.932	315.312	4599.525	32.951	-19.510	32.951	38.294	329.371	0.590
4700.000	0.879	324.857	4699.512	34.156	-20.523	34.156	39.848	329.000	0.160
4800.000	0.398	297.854	4799.506	34.946	-21.272	34.946	40.911	328.671	0.554
4900.000	0.383	150.718	4899.505	34.816	-21.416	34.816	40.875	328.404	0.750
5000.000	0.573	158.851	4999.501	34.058	-21.072	34.058	40.049	328.255	0.201
5100.000	0.434	186.161	5099.498	33.214	-20.932	33.214	39.260	327.781	0.274
5200.000	0.281	110.473	5199.496	32.752	-20.743	32.752	38.768	327.653	0.455
5300.000	0.273	110.018	5299.495	32.584	-20.289	32.584	38.385	328.091	0.009
5400.000	0.494	186.459	5399.493	32.074	-20.114	32.074	37.859	327.908	0.506
5500.000	0.365	250.655	5499.491	31.540	-20.463	31.540	37.597	327.025	0.470
5600.000	0.465	147.598	5599.489	31.092	-20.546	31.092	37.267	326.544	0.652
5700.000	0.467	196.222	5699.486	30.358	-20.442	30.358	36.599	326.045	0.384
5800.000	0.428	233.270	5799.483	29.743	-20.855	29.743	36.327	324.963	0.287

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
5900.000	0.496	286.496	5899.481	29.643	-21.570	29.643	36.660	323.958	0.419
6000.000	0.426	29.577	5999.479	30.089	-21.802	30.089	37.158	324.073	0.723
6100.000	0.312	39.936	6099.477	30.621	-21.444	30.621	37.383	324.996	0.131
6200.000	0.469	9.142	6199.474	31.234	-21.204	31.234	37.752	325.828	0.257
6300.000	0.479	9.060	6299.471	32.050	-21.073	32.050	38.358	326.675	0.010
6400.000	0.510	54.950	6399.468	32.718	-20.644	32.718	38.686	327.750	0.386
6500.000	0.262	120.067	6499.466	32.859	-20.082	32.859	38.510	328.569	0.465
6600.000	0.671	121.908	6599.462	32.435	-19.388	32.435	37.788	329.132	0.409
6700.000	0.939	106.504	6699.452	31.893	-18.105	31.893	36.674	330.418	0.343
6800.000	1.134	115.628	6799.436	31.232	-16.427	31.232	35.289	332.257	0.255
6900.000	1.186	142.873	6899.416	29.979	-14.910	29.979	33.482	333.556	0.549
7000.000	1.390	147.940	6999.391	28.126	-13.642	28.126	31.260	334.126	0.233
7050.000	1.699	151.726	7049.373	26.959	-12.969	26.959	29.916	334.310	0.651