



Company: Noble Energy
Rig: Production/CoreTech
API # 05-123-25737
Date: 9/23/2013
Surveyor: Jason Kinchelow
VS: 0.000
Lat : 40.336
Long: -104.651

Well: Weezer G 02-33
Location: Weld County, Colorado
North Reference: GRID
Convergence: Grid north is 0.55 Degrees East of
Declination: 8.5
Depth Reference: RKB = Ground Level
Elevation: 4675'
Total Depth as Drilled: 8080'

Lat & Long obtained by handheld GPS at wellhead

MS Gyro Survey Calculations

Depth	Inc	AzG	N/-S	E/-W	TVD	DL	VS	CD	Cbrg
0.000	0.000	0.000	0.000	0.000	0.000	****	0.000	0.000	0.000
100.000	0.116	30.446	0.088	0.051	100.000	0.116	0.088	0.102	30.446
200.000	0.034	169.402	0.146	0.108	200.000	0.144	0.146	0.182	36.560
300.000	0.628	54.014	0.439	0.558	299.998	0.644	0.439	0.710	51.760
400.000	4.654	69.147	2.206	4.794	399.872	4.051	2.206	5.278	65.287
500.000	9.488	71.780	6.230	16.421	499.082	4.843	6.230	17.563	69.224
600.000	13.120	74.066	11.925	35.170	597.126	3.659	11.925	37.136	71.270
700.000	17.066	79.186	17.796	60.508	693.662	4.162	17.796	63.071	73.610
800.000	19.409	82.201	22.805	91.388	788.634	2.524	22.805	94.190	75.989
900.000	22.225	74.524	30.109	126.089	882.114	3.915	30.109	129.634	76.570
1000.000	24.599	78.061	39.463	164.686	973.879	2.759	39.463	169.349	76.525
1100.000	26.486	75.677	49.286	206.661	1064.104	2.148	49.286	212.457	76.586
1200.000	29.100	78.242	59.760	252.083	1152.563	2.874	59.760	259.070	76.663
1300.000	29.636	78.936	69.460	300.155	1239.711	0.634	69.460	308.088	76.970
1400.000	30.036	85.895	75.999	349.398	1326.483	3.484	75.999	357.568	77.729
1500.000	29.353	84.081	80.318	398.742	1413.352	1.129	80.318	406.751	78.611
1600.000	28.935	77.320	88.158	446.735	1500.716	3.318	88.158	455.351	78.837
1700.000	29.642	80.536	97.535	494.732	1587.937	1.725	97.535	504.255	78.847
1800.000	29.912	78.207	106.697	543.534	1674.736	1.188	106.697	553.907	78.894
1900.000	30.012	80.090	116.098	592.578	1761.374	0.946	116.098	603.844	78.915
2000.000	29.286	79.797	124.735	641.287	1848.280	0.740	124.735	653.305	78.993
2100.000	28.540	77.784	134.123	688.708	1935.817	1.226	134.123	701.646	78.980
2200.000	28.690	78.949	143.779	735.613	2023.604	0.578	143.779	749.533	78.941
2300.000	29.151	80.663	152.332	783.206	2111.135	0.949	152.332	797.882	78.994
2400.000	28.572	82.443	159.428	830.946	2198.714	1.036	159.428	846.102	79.139
2500.000	28.245	85.209	164.550	878.234	2286.676	1.356	164.550	893.516	79.388
2600.000	29.161	87.647	167.527	926.159	2374.390	1.486	167.527	941.188	79.747
2700.000	29.437	79.521	172.998	974.684	2461.633	3.983	172.998	989.918	79.935
2800.000	30.402	73.574	184.626	1023.130	2548.324	3.118	184.626	1039.655	79.771
2900.000	32.212	71.261	200.345	1072.647	2633.763	2.173	200.345	1091.196	79.420
3000.000	32.993	72.463	217.111	1123.850	2718.006	1.014	217.111	1144.629	79.066
3100.000	33.864	72.989	233.467	1176.455	2801.462	0.918	233.467	1199.397	78.776
3200.000	32.711	72.564	249.714	1228.877	2885.054	1.177	249.714	1253.992	78.514
3300.000	33.920	76.552	264.302	1281.801	2968.628	2.502	264.302	1308.766	78.349
3400.000	34.004	80.382	275.464	1336.514	3051.579	2.141	275.464	1364.606	78.354
3500.000	32.348	79.460	285.030	1390.389	3135.276	1.731	285.030	1419.304	78.415

3600.000	29.613	76.007	295.902	1440.678	3221.008	3.261	295.902	1470.752	78.393
3700.000	29.355	76.706	307.512	1488.507	3308.057	0.430	307.512	1519.940	78.327
3800.000	28.399	77.404	318.335	1535.571	3395.622	1.014	318.335	1568.221	78.288
3900.000	27.289	76.559	328.849	1581.077	3484.043	1.178	328.849	1614.914	78.251
4000.000	25.869	79.011	338.337	1624.793	3573.475	1.794	338.337	1659.646	78.237
4100.000	25.181	76.367	347.511	1666.886	3663.717	1.331	347.511	1702.725	78.224
4200.000	27.414	78.537	357.102	1710.128	3753.364	2.431	357.102	1747.015	78.205
4300.000	29.962	75.940	367.745	1756.923	3841.085	2.836	367.745	1794.997	78.178
4400.000	30.566	74.359	380.667	1805.633	3927.457	0.999	380.667	1845.323	78.095
4500.000	30.520	79.555	392.128	1855.097	4013.597	2.640	392.128	1896.088	78.065
4600.000	28.333	80.302	400.729	1903.465	4100.691	2.218	400.729	1945.190	78.111
4700.000	28.069	77.116	409.973	1949.793	4188.826	1.529	409.973	1992.428	78.126
4800.000	27.533	76.500	420.615	1995.202	4277.283	0.608	420.615	2039.056	78.096
4900.000	28.088	74.493	432.305	2040.362	4365.734	1.088	432.305	2085.657	78.037
5000.000	28.673	78.277	443.474	2086.541	4453.722	1.891	443.474	2133.148	78.001
5100.000	28.191	79.574	452.623	2133.262	4541.661	0.783	452.623	2180.751	78.021
5200.000	28.968	85.027	458.998	2180.626	4629.491	2.721	458.998	2228.410	78.113
5300.000	30.166	81.659	464.742	2229.616	4716.473	2.049	464.742	2277.536	78.226
5400.000	29.210	81.548	471.974	2278.612	4803.346	0.958	471.974	2326.979	78.298
5500.000	30.337	77.372	481.083	2327.398	4890.154	2.359	481.083	2376.598	78.321
5600.000	31.687	76.655	492.667	2377.598	4975.858	1.400	492.667	2428.105	78.293
5700.000	29.256	77.660	503.953	2427.032	5062.040	2.484	503.953	2478.800	78.270
5800.000	28.559	78.254	514.041	2474.306	5149.580	0.754	514.041	2527.138	78.264
5900.000	30.116	81.737	522.513	2522.542	5236.759	2.310	522.513	2576.090	78.297
6000.000	31.009	82.076	529.670	2572.884	5322.865	0.909	529.670	2626.839	78.367
6100.000	31.024	77.860	538.642	2623.596	5408.577	2.172	538.642	2678.319	78.398
6200.000	30.134	80.817	548.068	2673.573	5494.674	1.747	548.068	2729.170	78.415
6300.000	30.289	85.103	554.227	2723.485	5581.101	2.162	554.227	2779.305	78.497
6400.000	29.952	84.343	558.841	2773.454	5667.599	0.509	558.841	2829.196	78.608
6500.000	30.545	80.115	565.665	2823.336	5753.993	2.210	565.665	2879.445	78.671
6600.000	30.052	79.215	574.713	2872.967	5840.334	0.670	574.713	2929.886	78.688
6700.000	28.873	78.330	584.282	2921.210	5927.401	1.257	584.282	2979.069	78.689
6800.000	28.574	81.004	592.905	2968.477	6015.099	1.319	592.905	3027.109	78.705
6900.000	28.868	83.692	599.297	3016.093	6102.800	1.324	599.297	3075.057	78.762
7000.000	27.395	81.610	605.307	3062.850	6190.986	1.771	605.307	3122.090	78.821
7100.000	26.336	79.193	612.824	3107.401	6280.195	1.521	612.824	3167.253	78.844
7200.000	25.450	84.498	619.044	3150.583	6370.167	2.479	619.044	3210.824	78.884
7300.000	24.998	84.751	623.037	3193.012	6460.632	0.465	623.037	3253.229	78.959
7400.000	24.756	86.881	626.109	3234.960	6551.355	0.928	626.109	3294.993	79.046
7500.000	22.419	81.063	630.212	3274.714	6643.007	3.296	630.212	3334.804	79.107
7600.000	20.926	82.903	635.381	3311.275	6735.936	1.640	635.381	3371.684	79.138
7700.000	19.668	79.738	640.586	3345.558	6829.728	1.670	640.586	3406.333	79.161
7800.000	19.516	78.431	646.934	3378.481	6923.939	0.463	646.934	3439.863	79.160

True North