



Company: Noble Energy

Rig: Production/ CoreTech

API # 05-123-15343

Date: 11/26/2013

Surveyor: Sean Bratt

VS: 0.000

Lat : 40.288

Long: -104.751

Well: Schwab 26-04F

Location: Weld County, Colorado

North Reference: GRID

Convergence: Grid north is 0.48 Degr

Declination: 8.52 Degrees

Depth Reference: Ground Level

Elevation: 4738 Feet

Total Depth as Drilled: 7371 Feet

**Lat & Long obtained by handheld GPS at wellhead
MS Gyro Survey Calculations**

Depth	Inc	AzG	N/-S	E/-W	TVD	DL	VS	CD
0.000	0.000	0.000	0.000	0.000	0.000	****	0.000	0.000
100.000	0.236	273.957	0.014	-0.205	100.000	0.236	0.014	0.206
200.000	0.128	194.663	-0.080	-0.439	199.999	0.247	-0.080	0.446
300.000	0.116	183.740	-0.289	-0.474	299.999	0.026	-0.289	0.555
400.000	0.204	188.818	-0.566	-0.508	399.999	0.089	-0.566	0.761
500.000	0.289	272.439	-0.732	-0.788	499.998	0.335	-0.732	1.075
600.000	0.224	296.952	-0.633	-1.214	599.997	0.126	-0.633	1.369
700.000	0.305	282.510	-0.486	-1.648	699.996	0.105	-0.486	1.719
800.000	0.257	318.081	-0.262	-2.058	799.995	0.178	-0.262	2.075
900.000	0.246	255.181	-0.150	-2.416	899.994	0.263	-0.150	2.420
1000.000	0.195	226.040	-0.322	-2.745	999.993	0.121	-0.322	2.764
1100.000	0.367	270.912	-0.435	-3.188	1099.992	0.267	-0.435	3.218
1200.000	0.430	280.753	-0.360	-3.877	1199.990	0.093	-0.360	3.894
1300.000	0.487	278.024	-0.231	-4.667	1299.987	0.061	-0.231	4.672
1400.000	0.520	275.803	-0.126	-5.538	1399.983	0.038	-0.126	5.540
1500.000	0.338	264.087	-0.110	-6.283	1499.980	0.200	-0.110	6.284
1600.000	0.546	274.773	-0.101	-7.052	1599.977	0.222	-0.101	7.052
1700.000	0.610	275.328	-0.012	-8.056	1699.972	0.065	-0.012	8.057
1800.000	0.287	252.637	-0.037	-8.825	1799.969	0.363	-0.037	8.826
1900.000	0.331	253.776	-0.193	-9.342	1899.967	0.045	-0.193	9.344
2000.000	0.439	234.354	-0.497	-9.931	1999.965	0.168	-0.497	9.944
2100.000	0.521	224.586	-1.044	-10.562	2099.961	0.115	-1.044	10.613
2200.000	0.902	236.527	-1.802	-11.537	2199.954	0.407	-1.802	11.677
2300.000	0.761	224.060	-2.713	-12.655	2299.943	0.228	-2.713	12.943
2400.000	0.941	238.210	-3.623	-13.815	2399.932	0.275	-3.623	14.282
2500.000	0.759	224.555	-4.528	-14.978	2499.921	0.271	-4.528	15.648
2600.000	0.648	230.647	-5.359	-15.881	2599.914	0.134	-5.359	16.761
2700.000	0.638	225.561	-6.108	-16.716	2699.907	0.058	-6.108	17.797
2800.000	0.736	231.770	-6.895	-17.618	2799.900	0.123	-6.895	18.919
2900.000	0.878	247.247	-7.588	-18.829	2899.890	0.259	-7.588	20.300
3000.000	0.839	254.778	-8.077	-20.242	2999.879	0.119	-8.077	21.794
3100.000	0.896	255.439	-8.466	-21.706	3099.868	0.058	-8.466	23.299
3200.000	0.947	253.042	-8.904	-23.254	3199.855	0.064	-8.904	24.900
3300.000	0.769	253.128	-9.340	-24.687	3299.844	0.178	-9.340	26.394
3400.000	0.721	258.105	-9.664	-25.945	3399.835	0.080	-9.664	27.686
3500.000	0.743	278.122	-9.702	-27.203	3499.827	0.255	-9.702	28.881

3600.000	0.651	273.674	-9.574	-28.412	3599.820	0.107	-9.574	29.981
3700.000	0.880	275.622	-9.463	-29.743	3699.811	0.231	-9.463	31.212
3800.000	0.903	256.516	-9.571	-31.273	3799.799	0.297	-9.571	32.705
3900.000	1.022	274.202	-9.689	-32.928	3899.785	0.318	-9.689	34.324
4000.000	1.056	273.627	-9.566	-34.737	3999.768	0.036	-9.566	36.030
4100.000	1.293	296.877	-8.997	-36.663	4099.748	0.527	-8.997	37.751
4200.000	1.303	305.620	-7.825	-38.594	4199.722	0.198	-7.825	39.379
4300.000	1.129	328.751	-6.321	-40.029	4299.700	0.516	-6.321	40.525
4400.000	1.044	326.203	-4.722	-41.047	4399.682	0.097	-4.722	41.317
4500.000	0.938	346.311	-3.170	-41.747	4499.668	0.361	-3.170	41.867
4600.000	0.786	341.771	-1.723	-42.155	4599.656	0.166	-1.723	42.191
4700.000	0.660	348.034	-0.507	-42.490	4699.648	0.149	-0.507	42.493
4800.000	0.116	67.401	0.095	-42.516	4799.646	0.649	0.095	42.516
4900.000	0.429	180.795	-0.240	-42.427	4899.645	0.487	-0.240	42.428
5000.000	0.347	209.777	-0.878	-42.583	4999.643	0.210	-0.878	42.592
5100.000	0.577	189.817	-1.637	-42.819	5099.640	0.277	-1.637	42.850
5200.000	0.419	190.040	-2.493	-42.969	5199.636	0.158	-2.493	43.041
5300.000	0.413	212.262	-3.158	-43.225	5299.633	0.161	-3.158	43.340
5400.000	0.905	256.777	-3.643	-44.186	5399.627	0.675	-3.643	44.336
5500.000	0.457	205.643	-4.184	-45.127	5499.620	0.713	-4.184	45.320
5600.000	0.273	325.010	-4.348	-45.436	5599.619	0.637	-4.348	45.644
5700.000	0.883	299.261	-3.776	-46.245	5699.614	0.648	-3.776	46.399
5800.000	0.434	11.928	-3.029	-46.840	5799.608	0.860	-3.029	46.938
5900.000	0.346	345.380	-2.367	-46.838	5899.606	0.198	-2.367	46.897
6000.000	0.005	103.119	-2.076	-46.910	5999.606	0.348	-2.076	46.956
6100.000	0.938	341.764	-1.300	-47.162	6099.601	0.940	-1.300	47.180
6200.000	1.087	30.797	0.292	-46.932	6199.587	0.851	0.292	46.933
6300.000	0.549	357.743	1.586	-46.466	6299.577	0.694	1.586	46.493
6400.000	0.878	358.843	2.830	-46.500	6399.569	0.328	2.830	46.586
6500.000	0.217	112.505	3.523	-46.341	6499.566	0.985	3.523	46.474
6600.000	0.554	190.814	2.976	-46.256	6599.564	0.552	2.976	46.352
6700.000	0.666	133.487	2.101	-45.925	6699.559	0.593	2.101	45.973
6800.000	0.470	26.827	2.068	-45.318	6799.556	0.919	2.068	45.365
6900.000	1.378	19.895	3.564	-44.724	6899.542	0.912	3.564	44.865
7000.000	1.770	18.163	6.162	-43.833	6999.504	0.395	6.162	44.264
7100.000	0.978	351.618	8.473	-43.476	7099.475	0.996	8.473	44.294
7150.000	0.526	350.797	9.122	-43.575	7149.471	0.904	9.122	44.520

0

degrees East of True North

Cbrg

0.000
273.957
259.709
238.632
221.895
227.102
242.477
253.562
262.755
266.457
263.301
262.224
264.691
267.167
268.699
268.994
269.178
269.914
269.758
268.818
267.135
264.355
261.124
257.901
255.306
253.180
251.353
249.929
248.627
248.050
248.247
248.693
249.048
249.277
249.570
250.371

251.377
252.351
252.983
253.603
254.604
256.212
258.538
261.026
263.438
265.658
267.660
269.316
270.129
269.675
268.819
267.811
266.680
265.821
265.286
264.703
264.534
265.332
266.300
267.107
267.466
268.422
270.357
271.954
273.483
274.348
273.681
272.620
272.612
274.557
278.002
281.029
281.824