



Company: Noble Energy Inc
Rig: Production/V.E.S.
Latitude: 40.28510
Longitude: -104.71752
API # 05-123-16146
Date: 3/7/13

Well: Schmidt 25-8F
Location: Weld County, Colorado
North Reference: Grid North (-0.51)
Depth Reference: KB= Ground Level
Surveyor: Jay Hinman
VS: 0.000

HA 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	0.034	100.275	-0.005	0.029	100.000	0.034	-0.005	0.029
200.000	0.088	88.921	-0.009	0.135	200.000	0.055	-0.009	0.135
300.000	0.060	109.874	-0.025	0.260	300.000	0.039	-0.025	0.262
400.000	0.078	213.306	-0.100	0.272	400.000	0.109	-0.100	0.290
500.000	0.158	210.044	-0.277	0.165	500.000	0.080	-0.277	0.322
600.000	0.418	210.688	-0.710	-0.090	599.998	0.260	-0.710	0.716
700.000	0.443	228.976	-1.278	-0.568	699.995	0.139	-1.278	1.399
800.000	0.235	235.476	-1.648	-1.028	799.994	0.212	-1.648	1.942
900.000	0.249	228.433	-1.908	-1.360	899.993	0.033	-1.908	2.343
1000.000	0.239	254.472	-2.108	-1.723	999.992	0.110	-2.108	2.722
1100.000	0.342	252.743	-2.252	-2.209	1099.991	0.104	-2.252	3.155
1200.000	0.438	254.465	-2.443	-2.862	1199.988	0.096	-2.443	3.763
1300.000	0.497	258.915	-2.629	-3.656	1299.985	0.070	-2.629	4.503
1400.000	0.648	268.967	-2.722	-4.647	1399.980	0.180	-2.722	5.386
1500.000	0.693	272.296	-2.708	-5.816	1499.973	0.060	-2.708	6.416
1600.000	0.650	287.990	-2.509	-6.959	1599.966	0.188	-2.509	7.398
1700.000	0.827	294.420	-2.035	-8.156	1699.958	0.196	-2.035	8.407
1800.000	0.848	287.127	-1.519	-9.521	1799.947	0.109	-1.519	9.642
1900.000	0.880	289.653	-1.042	-10.952	1899.936	0.050	-1.042	11.001
2000.000	0.650	293.449	-0.558	-12.196	1999.927	0.236	-0.558	12.208
2100.000	0.598	282.144	-0.223	-13.226	2099.921	0.133	-0.223	13.228
2200.000	0.484	288.223	0.019	-14.137	2199.917	0.128	0.019	14.137
2300.000	0.576	302.368	0.420	-14.962	2299.912	0.160	0.420	14.968
2400.000	0.418	316.662	0.955	-15.638	2399.909	0.200	0.955	15.667
2500.000	0.411	335.185	1.546	-16.039	2499.906	0.134	1.546	16.113
2600.000	0.356	292.612	1.992	-16.476	2599.904	0.283	1.992	16.596
2700.000	0.505	301.106	2.339	-17.141	2699.901	0.162	2.339	17.300
2800.000	0.644	329.132	3.049	-17.807	2799.896	0.309	3.049	18.066
2900.000	0.313	324.260	3.754	-18.255	2899.893	0.333	3.754	18.637
3000.000	0.602	322.498	4.392	-18.735	2999.889	0.289	4.392	19.243
3100.000	0.698	310.639	5.206	-19.517	3099.883	0.165	5.206	20.199
3200.000	0.659	307.432	5.952	-20.436	3199.876	0.054	5.952	21.285
3300.000	0.722	302.096	6.637	-21.427	3299.869	0.089	6.637	22.431
3400.000	0.941	295.356	7.323	-22.702	3399.858	0.239	7.323	23.854
3500.000	0.947	284.865	7.887	-24.242	3499.845	0.173	7.887	25.493
3600.000	1.319	290.382	8.499	-26.120	3599.825	0.387	8.499	27.468
3700.000	1.081	293.366	9.274	-28.064	3699.803	0.246	9.274	29.557
3800.000	1.322	289.530	10.034	-30.018	3799.781	0.254	10.034	31.650

3900.000	1.196	285.871	10.705	-32.109	3899.757	0.150	10.705	33.846
4000.000	1.390	278.350	11.166	-34.312	3999.731	0.258	11.166	36.084
4100.000	0.936	282.897	11.525	-36.308	4099.710	0.464	11.525	38.094
4200.000	1.336	292.160	12.147	-38.184	4199.691	0.439	12.147	40.069
4300.000	0.800	286.478	12.785	-39.933	4299.673	0.546	12.785	41.930
4400.000	0.732	262.522	12.900	-41.236	4399.664	0.325	12.900	43.207
4500.000	1.009	282.511	13.007	-42.729	4499.653	0.407	13.007	44.665
4600.000	0.898	258.418	13.041	-44.356	4599.639	0.413	13.041	46.234
4700.000	0.332	233.213	12.710	-45.356	4699.633	0.614	12.710	47.103
4800.000	0.316	128.507	12.364	-45.372	4799.632	0.513	12.364	47.027
4900.000	0.497	116.800	11.997	-44.769	4899.630	0.198	11.997	46.349
5000.000	0.575	103.671	11.683	-43.894	4999.626	0.145	11.683	45.423
5100.000	0.664	93.191	11.532	-42.828	5099.620	0.143	11.532	44.354
5200.000	0.680	89.211	11.508	-41.657	5199.613	0.049	11.508	43.217
5300.000	0.462	83.578	11.561	-40.663	5299.608	0.225	11.561	42.275
5400.000	0.112	93.353	11.601	-40.165	5399.606	0.351	11.601	41.807
5500.000	0.130	154.451	11.492	-40.018	5499.606	0.124	11.492	41.635
5600.000	0.200	143.959	11.248	-39.866	5599.606	0.076	11.248	41.422
5700.000	0.234	356.502	11.311	-39.776	5699.606	0.417	11.311	41.353
5800.000	0.016	243.031	11.509	-39.801	5799.605	0.241	11.509	41.431
5900.000	0.143	313.916	11.589	-39.904	5899.605	0.139	11.589	41.553
6000.000	0.139	226.969	11.593	-40.082	5999.605	0.194	11.593	41.725
6100.000	0.177	117.024	11.440	-40.033	6099.605	0.259	11.440	41.636
6200.000	0.551	159.979	10.919	-39.731	6199.603	0.438	10.919	41.204
6300.000	0.481	176.023	10.048	-39.538	6299.599	0.159	10.048	40.794
6400.000	0.633	165.094	9.096	-39.366	6399.594	0.184	9.096	40.404
6500.000	0.419	61.455	8.737	-38.903	6499.591	0.837	8.737	39.872
6600.000	0.299	88.496	8.918	-38.322	6599.589	0.204	8.918	39.346
6700.000	0.695	109.468	8.723	-37.489	6699.586	0.430	8.723	38.491
6800.000	1.031	116.677	8.117	-36.114	6799.574	0.352	8.117	37.015
6900.000	1.996	126.697	6.673	-33.914	6899.538	0.997	6.673	34.564
7000.000	2.557	137.668	3.983	-31.016	6999.459	0.708	3.983	31.270
7100.000	2.857	145.929	0.269	-28.117	7099.348	0.492	0.269	28.118
7200.000	3.283	134.221	-3.792	-24.668	7199.205	0.756	-3.792	24.958

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