



Company: Noble Energy, Inc.

Rig: Production/Lightning \

Latitude: 40.280

Longitude: -104.766

API # 05-123-16341

Date: 12/27/12

Well: UPRC 27-11 F

Location: Weld County

North Reference: -0.47

Depth Reference: RKB=Ground Level

Surveyor: Levi Sheldon

VS: 0.000

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	0.284	217.218	-0.198	-0.150	100.000	0.284	-0.198	0.248	217.218
200.000	0.314	200.470	-0.652	-0.396	199.998	0.092	-0.652	0.763	211.276
300.000	0.199	245.500	-0.981	-0.650	299.997	0.223	-0.981	1.176	213.527
400.000	0.266	167.984	-1.280	-0.759	399.997	0.296	-1.280	1.488	210.680
500.000	0.865	193.055	-2.242	-0.881	499.991	0.634	-2.242	2.409	201.462
600.000	1.148	197.560	-3.932	-1.354	599.976	0.294	-3.932	4.158	199.002
700.000	1.179	193.264	-5.888	-1.892	699.955	0.092	-5.888	6.184	197.816
800.000	0.967	203.778	-7.661	-2.468	799.938	0.288	-7.661	8.049	197.859
900.000	0.957	196.586	-9.234	-3.047	899.924	0.121	-9.234	9.724	198.263
1000.000	1.217	197.914	-11.044	-3.612	999.906	0.261	-11.044	11.620	198.110
1100.000	1.232	198.127	-13.076	-4.273	1099.883	0.016	-13.076	13.757	198.096
1200.000	1.102	220.012	-14.834	-5.226	1199.863	0.461	-14.834	15.728	199.406
1300.000	0.828	228.492	-16.050	-6.385	1299.848	0.308	-16.050	17.273	201.695
1400.000	0.851	226.595	-17.039	-7.466	1399.838	0.036	-17.039	18.603	203.661
1500.000	0.810	217.564	-18.109	-8.436	1499.827	0.137	-18.109	19.978	204.978
1600.000	0.792	213.215	-19.248	-9.246	1599.817	0.064	-19.248	21.354	205.657
1700.000	0.650	243.234	-20.082	-10.131	1699.810	0.398	-20.082	22.493	206.770
1800.000	0.921	228.011	-20.875	-11.235	1799.800	0.340	-20.875	23.707	208.289
1900.000	0.987	217.310	-22.098	-12.354	1899.787	0.190	-22.098	25.317	209.208
2000.000	0.499	256.220	-22.886	-13.299	1999.779	0.676	-22.886	26.470	210.160
2100.000	0.617	300.288	-22.718	-14.187	2099.774	0.433	-22.718	26.784	211.983
2200.000	0.777	286.446	-22.255	-15.302	2199.767	0.231	-22.255	27.008	214.512
2300.000	0.825	316.098	-21.544	-16.451	2299.758	0.413	-21.544	27.107	217.366
2400.000	0.823	340.558	-20.348	-17.190	2399.747	0.349	-20.348	26.637	220.192
2500.000	0.985	347.018	-18.833	-17.622	2499.735	0.190	-18.833	25.792	223.098
2600.000	0.842	347.296	-17.279	-17.977	2599.722	0.142	-17.279	24.934	226.134
2700.000	1.185	4.263	-15.530	-18.061	2699.707	0.452	-15.530	23.820	229.309
2800.000	1.360	0.505	-13.312	-17.974	2799.682	0.194	-13.312	22.367	233.476
2900.000	1.199	20.746	-11.146	-17.593	2899.658	0.477	-11.146	20.827	237.643
3000.000	1.139	43.812	-9.451	-16.535	2999.637	0.471	-9.451	19.045	240.248
3100.000	1.053	86.423	-8.677	-14.930	3099.621	0.800	-8.677	17.268	239.836
3200.000	1.916	122.632	-9.521	-12.605	3199.588	1.234	-9.521	15.796	232.937
3300.000	1.117	174.872	-11.393	-11.110	3299.556	1.515	-11.393	15.913	224.281
3400.000	1.093	237.248	-12.879	-11.825	3399.541	1.144	-12.879	17.485	222.557
3500.000	1.639	275.200	-13.265	-14.051	3499.514	1.028	-13.265	19.324	226.648
3600.000	1.809	300.008	-12.346	-16.843	3599.470	0.759	-12.346	20.883	233.758
3700.000	1.691	311.577	-10.578	-19.314	3699.424	0.372	-10.578	22.021	241.292
3800.000	1.671	324.136	-8.417	-21.272	3799.381	0.368	-8.417	22.876	248.412

3900.000	1.554	322.456	-6.160	-22.952	3899.342	0.126	-6.160	23.764	254.976
4000.000	1.720	320.246	-3.931	-24.738	3999.301	0.178	-3.931	25.049	260.971
4100.000	0.940	322.296	-2.128	-26.200	4099.273	0.782	-2.128	26.286	265.356
4200.000	0.787	310.404	-1.034	-27.224	4199.262	0.235	-1.034	27.244	267.824
4300.000	0.541	303.739	-0.327	-28.139	4299.255	0.258	-0.327	28.141	269.334
4400.000	0.605	315.082	0.309	-28.904	4399.250	0.130	0.309	28.906	270.612
4500.000	0.610	323.706	1.112	-29.592	4499.245	0.092	1.112	29.613	272.151
4600.000	1.153	300.236	2.048	-30.777	4599.233	0.642	2.048	30.845	273.806
4700.000	1.298	299.212	3.107	-32.635	4699.210	0.146	3.107	32.783	275.439
4800.000	1.409	293.962	4.159	-34.748	4799.182	0.167	4.159	34.996	276.826
4900.000	1.242	294.543	5.109	-36.857	4899.155	0.168	5.109	37.210	277.892
5000.000	0.815	273.283	5.600	-38.553	4999.139	0.566	5.600	38.958	278.265
5100.000	0.995	292.395	5.972	-40.066	5099.127	0.349	5.972	40.509	278.477
5200.000	0.719	297.848	6.596	-41.424	5199.115	0.287	6.596	41.946	279.047
5300.000	1.038	272.360	6.927	-42.884	5299.104	0.497	6.927	43.440	279.175
5400.000	0.761	277.861	7.055	-44.447	5399.092	0.290	7.055	45.003	279.019
5500.000	0.634	276.918	7.212	-45.653	5499.084	0.127	7.212	46.220	278.977
5600.000	1.352	291.130	7.704	-47.303	5599.069	0.754	7.704	47.927	279.250
5700.000	0.971	297.654	8.523	-49.154	5699.048	0.403	8.523	49.888	279.836
5800.000	0.766	251.844	8.708	-50.540	5799.038	0.702	8.708	51.285	279.775
5900.000	0.389	252.360	8.396	-51.499	5899.032	0.377	8.396	52.179	279.260
6000.000	0.709	250.405	8.086	-52.406	5999.028	0.320	8.086	53.026	278.771
6100.000	0.886	210.919	7.215	-53.386	6099.019	0.564	7.215	53.871	277.697
6200.000	0.722	207.427	5.993	-54.073	6199.009	0.172	5.993	54.404	276.324
6300.000	1.286	211.807	4.480	-54.954	6298.993	0.569	4.480	55.137	274.661
6400.000	1.366	220.191	2.616	-56.315	6398.966	0.210	2.616	56.376	272.660
6500.000	1.614	224.467	0.701	-58.071	6498.932	0.271	0.701	58.075	270.691
6600.000	2.173	223.780	-1.673	-60.369	6598.877	0.559	-1.673	60.392	268.413
6700.000	2.320	225.045	-4.472	-63.113	6698.801	0.156	-4.472	63.271	265.947
6800.000	3.007	236.136	-7.364	-66.723	6798.693	0.855	-7.364	67.128	263.702
6900.000	2.253	240.347	-9.798	-70.609	6898.587	0.777	-9.798	71.286	262.100
7000.000	1.938	235.333	-11.732	-73.708	6998.520	0.365	-11.732	74.636	260.956
7100.000	1.363	207.539	-13.748	-75.648	7098.479	0.969	-13.748	76.887	259.700
7200.000	1.434	190.930	-16.031	-76.435	7198.450	0.410	-16.031	78.098	258.155