



Company: Noble Energy
Rig: Production/ VES
API # 05-123-16226
Date: 3/18/13
Surveyor: Jason Kinchelow

Well: Schmidt 30-3G
Location: Weld County, Colorado
North Reference: GRID
Convergence: Grid north is 0.510 degrees east o
Declination: 8.59

VS:
Lat : 40.28908
Long: -104.708
Depth Reference: Ground Level
Elevation: 4789'
Total Depth as Drilled: 7352'

Lat & Long obtained by handheld GPS at wellhead

HA 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	0.108	46.545	0.065	0.068	100.000	0.108	0.065	0.094	46.545
200.000	0.129	343.500	0.237	0.105	200.000	0.125	0.237	0.259	23.817
300.000	0.120	241.959	0.296	-0.019	300.000	0.192	0.296	0.296	356.254
400.000	0.340	317.269	0.464	-0.313	399.999	0.330	0.464	0.560	326.054
500.000	0.620	11.957	1.211	-0.402	499.996	0.506	1.211	1.276	341.654
600.000	0.456	5.970	2.136	-0.248	599.991	0.173	2.136	2.150	353.374
700.000	0.646	9.243	3.089	-0.116	699.987	0.193	3.089	3.091	357.847
800.000	0.538	10.742	4.106	0.062	799.981	0.110	4.106	4.107	0.863
900.000	0.351	329.711	4.832	-0.005	899.978	0.357	4.832	4.832	359.938
1000.000	0.495	329.279	5.467	-0.380	999.976	0.143	5.467	5.481	356.022
1100.000	0.439	314.989	6.109	-0.871	1099.972	0.129	6.109	6.171	351.882
1200.000	0.414	285.415	6.475	-1.490	1199.970	0.219	6.475	6.645	347.041
1300.000	0.562	292.495	6.759	-2.291	1299.966	0.159	6.759	7.137	341.276
1400.000	0.586	300.454	7.205	-3.184	1399.961	0.083	7.205	7.878	336.158
1500.000	0.562	296.553	7.684	-4.064	1499.956	0.046	7.684	8.692	332.128
1600.000	0.648	297.689	8.165	-5.002	1599.951	0.087	8.165	9.576	328.507
1700.000	0.664	299.358	8.712	-6.008	1699.944	0.025	8.712	10.583	325.409
1800.000	0.695	298.271	9.284	-7.047	1799.937	0.033	9.284	11.656	322.797
1900.000	0.784	301.172	9.925	-8.167	1899.929	0.097	9.925	12.853	320.551
2000.000	1.007	297.312	10.682	-9.533	1999.916	0.231	10.682	14.318	318.254
2100.000	1.106	295.257	11.497	-11.186	2099.899	0.105	11.497	16.041	315.785
2200.000	1.291	304.485	12.546	-12.987	2199.878	0.267	12.546	18.058	314.011
2300.000	1.554	321.044	14.239	-14.768	2299.847	0.486	14.239	20.514	313.954
2400.000	1.780	335.903	16.711	-16.255	2399.805	0.486	16.711	23.313	315.793
2500.000	1.918	341.188	19.712	-17.429	2499.753	0.219	19.712	26.312	318.519
2600.000	1.961	343.870	22.940	-18.443	2599.696	0.101	22.940	29.434	321.201
2700.000	1.903	339.728	26.141	-19.494	2699.639	0.151	26.141	32.609	323.287
2800.000	1.882	336.147	29.201	-20.733	2799.585	0.120	29.201	35.813	324.624
2900.000	1.734	328.159	31.988	-22.196	2899.535	0.292	31.988	38.934	325.244
3000.000	1.887	323.013	34.588	-23.984	2999.485	0.223	34.588	42.090	325.261
3100.000	1.961	347.580	37.574	-25.343	3099.430	0.822	37.574	45.322	326.001
3200.000	2.039	354.382	41.016	-25.885	3199.370	0.250	41.016	48.501	327.744
3300.000	2.266	16.741	44.679	-25.490	3299.301	0.864	44.679	51.439	330.295
3400.000	2.845	33.967	48.631	-23.533	3399.202	0.956	48.631	54.026	334.177
3500.000	3.433	48.235	52.684	-19.913	3499.053	0.973	52.684	56.322	339.295

3600.000	3.713	59.736	56.311	-14.882	3598.860	0.768	56.311	58.244	345.196
3700.000	3.868	74.256	58.858	-8.839	3698.644	0.970	58.858	59.518	351.459
3800.000	3.817	73.235	60.734	-2.406	3798.419	0.085	60.734	60.781	357.731
3900.000	3.908	75.545	62.544	4.081	3898.192	0.180	62.544	62.677	3.733
4000.000	4.015	73.865	64.368	10.743	3997.953	0.158	64.368	65.258	9.475
4100.000	3.970	79.080	65.996	17.505	4097.711	0.366	65.996	68.278	14.855
4200.000	3.765	77.034	67.389	24.104	4197.483	0.247	67.389	71.570	19.681
4300.000	3.610	78.648	68.745	30.390	4297.276	0.187	68.745	75.163	23.848
4400.000	3.260	80.038	69.857	36.277	4397.096	0.359	69.857	78.714	27.443
4500.000	2.762	78.040	70.848	41.434	4496.958	0.509	70.848	82.075	30.321
4600.000	2.589	70.124	72.115	45.916	4596.849	0.407	72.115	85.492	32.485
4700.000	2.583	64.770	73.844	50.079	4696.747	0.242	73.844	89.223	34.144
4800.000	2.384	59.575	75.857	53.911	4796.653	0.301	75.857	93.063	35.401
4900.000	2.287	63.403	77.804	57.488	4896.570	0.183	77.804	96.738	36.460
5000.000	2.241	57.748	79.740	60.926	4996.492	0.228	79.740	100.352	37.382
5100.000	2.069	53.550	81.856	64.031	5096.422	0.233	81.856	103.925	38.034
5200.000	2.190	54.540	84.037	67.039	5196.353	0.127	84.037	107.501	38.580
5300.000	1.896	45.520	86.305	69.776	5296.289	0.435	86.305	110.983	38.955
5400.000	1.682	65.788	88.066	72.295	5396.241	0.664	88.066	113.939	39.383
5500.000	1.707	58.506	89.446	74.903	5496.198	0.217	89.446	116.666	39.943
5600.000	1.526	83.906	90.365	77.498	5596.159	0.732	90.365	119.045	40.617
5700.000	2.203	99.399	90.193	80.718	5696.106	0.838	90.193	121.038	41.827
5800.000	2.625	113.187	88.977	84.719	5796.018	0.715	88.977	122.858	43.596
5900.000	2.494	131.543	86.633	88.452	5895.920	0.826	86.633	123.810	45.595
6000.000	2.116	151.868	83.561	90.951	5995.841	0.894	83.561	123.510	47.425
6100.000	1.261	168.968	80.853	92.032	6095.797	0.984	80.853	122.504	48.700
6200.000	1.519	183.539	78.451	92.161	6195.768	0.436	78.451	121.030	49.594
6300.000	1.015	190.401	76.257	91.919	6295.743	0.525	76.257	119.433	50.321
6400.000	0.690	197.988	74.813	91.573	6395.732	0.343	74.813	118.248	50.752
6500.000	0.700	215.523	73.742	91.032	6495.725	0.212	73.742	117.153	50.990
6600.000	0.411	212.307	72.942	90.485	6595.720	0.291	72.942	116.224	51.127
6700.000	0.519	220.697	72.296	89.999	6695.717	0.127	72.296	115.440	51.225
6800.000	0.265	159.840	71.736	89.783	6795.714	0.453	71.736	114.922	51.376
6900.000	0.908	127.865	71.033	90.488	6895.709	0.697	71.033	115.038	51.868
7000.000	1.062	141.981	69.816	91.684	6995.694	0.286	69.816	115.240	52.711
7100.000	0.927	120.427	68.677	92.952	7095.680	0.395	68.677	115.571	53.542
7200.000	0.566	130.390	67.947	94.026	7195.671	0.383	67.947	116.007	54.146

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