



**Company:** Anadarko Petroleum Corp.

**Rig:** Production / Cable Inc.

**Latitude:** 40.146

**Longitude:** -104.813

**API #** 05-123-23503

**Date:** 12/16/2011

**Well:** Herman Federal 16-7

**Location:** Weld County, CO.

**North Reference:** True North

**Depth Reference:** Ground Level

**Surveyor:** Norman Cowan

**VS:** 0

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	0.639	147.166	-0.468	0.302	99.998	0.639	-0.468	0.557	147.166
200.000	0.238	161.164	-1.134	0.672	199.995	0.412	-1.134	1.318	149.353
300.000	0.304	161.784	-1.582	0.822	299.994	0.066	-1.582	1.783	152.557
400.000	0.513	199.374	-2.257	0.756	399.991	0.330	-2.257	2.380	161.482
500.000	1.013	219.298	-3.363	0.048	499.982	0.558	-3.363	3.363	179.189
600.000	1.520	228.327	-4.929	-1.503	599.958	0.544	-4.929	5.153	196.955
700.000	1.537	244.758	-6.382	-3.706	699.923	0.437	-6.382	7.380	210.143
800.000	1.692	241.923	-7.649	-6.221	799.883	0.175	-7.649	9.859	219.124
900.000	1.777	245.300	-8.991	-8.932	899.837	0.133	-8.991	12.674	224.811
1000.000	1.789	245.024	-10.298	-11.756	999.789	0.015	-10.298	15.629	228.781
1100.000	1.635	245.031	-11.560	-14.464	1099.744	0.154	-11.560	18.516	231.368
1200.000	1.832	240.296	-12.954	-17.146	1199.698	0.243	-12.954	21.489	232.928
1300.000	1.596	250.274	-14.216	-19.844	1299.654	0.380	-14.216	24.411	234.384
1400.000	1.854	237.428	-15.557	-22.518	1399.609	0.463	-15.557	27.369	235.361
1500.000	1.949	246.430	-17.107	-25.440	1499.554	0.313	-17.107	30.657	236.081
1600.000	2.094	253.630	-18.302	-28.751	1599.492	0.292	-18.302	34.082	237.520
1700.000	2.419	241.490	-19.824	-32.358	1699.415	0.576	-19.824	37.948	238.506
1800.000	2.337	252.211	-21.454	-36.154	1799.329	0.452	-21.454	42.041	239.314
1900.000	2.646	264.200	-22.311	-40.392	1899.235	0.604	-22.311	46.144	241.086
2000.000	2.488	259.500	-22.939	-44.822	1999.135	0.263	-22.939	50.351	242.897
2100.000	2.311	259.089	-23.716	-48.935	2099.047	0.178	-23.716	54.380	244.143
2200.000	2.097	273.804	-23.977	-52.740	2198.974	0.603	-23.977	57.935	245.553
2300.000	2.100	254.715	-24.338	-56.333	2298.908	0.696	-24.338	61.366	246.634
2400.000	2.145	250.843	-25.435	-59.868	2398.839	0.150	-25.435	65.047	246.982
2500.000	1.911	250.099	-26.617	-63.203	2498.777	0.235	-26.617	68.579	247.163
2600.000	1.514	250.737	-27.620	-66.017	2598.732	0.397	-27.620	71.562	247.297
2700.000	1.409	252.153	-28.432	-68.434	2698.699	0.111	-28.432	74.106	247.439
2800.000	1.279	249.636	-29.197	-70.651	2798.672	0.143	-29.197	76.446	247.546
2900.000	1.373	263.583	-29.720	-72.888	2898.645	0.335	-29.720	78.714	247.817
3000.000	1.324	265.805	-29.938	-75.231	2998.618	0.072	-29.938	80.969	248.300
3100.000	1.530	287.772	-29.615	-77.655	3098.587	0.580	-29.615	83.111	249.125
3200.000	1.733	295.867	-28.548	-80.287	3198.547	0.307	-28.548	85.212	250.426
3300.000	1.712	282.629	-27.562	-83.105	3298.502	0.398	-27.562	87.556	251.652
3400.000	1.543	275.531	-27.105	-85.903	3398.462	0.263	-27.105	90.078	252.488
3500.000	1.749	298.578	-26.246	-88.583	3498.422	0.688	-26.246	92.389	253.496
3600.000	1.297	305.342	-24.861	-90.847	3598.386	0.485	-24.861	94.187	254.695
3700.000	1.470	315.085	-23.297	-92.676	3698.357	0.291	-23.297	95.559	255.889
3800.000	1.256	315.657	-21.605	-94.348	3798.329	0.214	-21.605	96.790	257.102

3900.000	1.643	301.276	-20.077	-96.340	3898.297	0.528	-20.077	98.409	258.228
4000.000	1.575	311.227	-18.427	-98.599	3998.257	0.287	-18.427	100.306	259.414
4100.000	1.762	311.844	-16.495	-100.777	4098.215	0.188	-16.495	102.119	260.704
4200.000	1.487	320.104	-14.474	-102.755	4198.175	0.360	-14.474	103.769	261.982
4300.000	0.791	302.405	-13.109	-104.170	4298.155	0.772	-13.109	104.991	262.827
4400.000	0.993	289.122	-12.456	-105.570	4398.143	0.288	-12.456	106.303	263.271
4500.000	1.074	289.415	-11.861	-107.272	4498.127	0.081	-11.861	107.926	263.691
4600.000	1.191	284.058	-11.297	-109.164	4598.107	0.158	-11.297	109.747	264.092
4700.000	1.182	287.230	-10.739	-111.158	4698.086	0.066	-10.739	111.675	264.482
4800.000	1.559	294.167	-9.876	-113.385	4798.057	0.411	-9.876	113.814	265.022
4900.000	1.730	322.639	-8.119	-115.542	4898.017	0.825	-8.119	115.827	265.980
5000.000	1.901	315.751	-5.731	-117.615	4997.967	0.277	-5.731	117.755	267.210
5100.000	1.651	323.027	-3.392	-119.639	5097.919	0.337	-3.392	119.687	268.376
5200.000	1.847	319.605	-1.015	-121.549	5197.873	0.222	-1.015	121.554	269.522
5300.000	1.368	314.251	1.046	-123.449	5297.833	0.501	1.046	123.453	270.485
5400.000	1.314	310.834	2.628	-125.171	5397.806	0.097	2.628	125.199	271.203
5500.000	1.190	305.393	3.979	-126.885	5497.782	0.171	3.979	126.947	271.796
5600.000	1.230	277.710	4.724	-128.795	5597.760	0.580	4.724	128.881	272.101
5700.000	1.215	268.498	4.841	-130.918	5697.738	0.197	4.841	131.007	272.118
5800.000	0.899	268.490	4.792	-132.761	5797.721	0.316	4.792	132.848	272.067
5900.000	0.864	252.721	4.548	-134.265	5897.709	0.244	4.548	134.342	271.940
6000.000	0.866	280.931	4.467	-135.727	5997.698	0.422	4.467	135.800	271.885
6100.000	0.886	275.523	4.685	-137.238	6097.686	0.085	4.685	137.318	271.955
6200.000	0.484	225.297	4.462	-138.308	6197.680	0.686	4.462	138.380	271.848
6300.000	0.204	196.987	3.994	-138.660	6297.678	0.320	3.994	138.717	271.650
6400.000	0.119	311.280	3.893	-138.790	6397.678	0.275	3.893	138.845	271.607
6500.000	0.304	236.077	3.813	-139.088	6497.677	0.297	3.813	139.141	271.570
6600.000	0.055	57.205	3.691	-139.268	6597.677	0.359	3.691	139.317	271.518
6700.000	0.192	328.590	3.860	-139.316	6697.676	0.199	3.860	139.369	271.587
6800.000	0.175	320.891	4.121	-139.500	6797.676	0.030	4.121	139.561	271.692
6900.000	0.249	15.789	4.449	-139.537	6897.675	0.206	4.449	139.608	271.826
7000.000	0.550	314.304	4.992	-139.821	6997.673	0.483	4.992	139.910	272.045
7100.000	0.900	325.502	5.975	-140.609	7097.665	0.376	5.975	140.736	272.433
7200.000	1.327	316.296	7.459	-141.854	7197.646	0.462	7.459	142.050	273.010