

**GyroTracer Directional:**

Date: 5/15/2018  
 Operator : Adrian Bruner  
 API: 05-123-27069  
 Well Name: **GWAA 2-34**  
 Field : Noble Energy Inc  
 Tool Type And Number: 1719  
 Bottom Depth : 6950.00  
 Total Well Depth: 7205.00  
 Latitude : 40.42379 N  
 Longitude : 104.63663 W  
 Grid Offset : 0.56

**Starting Point Coordinates (in local grid):**

Northing: 0.00      Easting: 0.00      Altitude: 4626.00

**Description:**

*Azimuth measured in degrees and referenced to local grid*

*Inclination measured from Vertical*

*Length measured in US survey feet*

Start Time: 5/15/2018 8:44

End Time: 5/15/2018 10:33

Depth	Inclination	Azimuth	Closure Direction	True Depth	Coordinates		Dogleg Severity	Closure Distance
					+N/-S	+E/-W		
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.020	0.360	206.293	216.347	105.010	-0.530	-0.390	0.343	0.658
200.000	0.806	172.251	191.292	199.981	-1.757	-0.351	0.575	1.792
300.000	1.474	182.457	188.384	299.953	-4.047	-0.597	0.621	4.091
400.000	1.678	178.073	186.401	399.905	-7.131	-0.800	0.235	7.176
500.000	2.124	176.336	184.414	499.845	-10.544	-0.814	0.416	10.575
600.000	1.890	173.553	182.864	599.790	-13.845	-0.693	0.334	13.862
700.000	1.230	150.084	180.536	699.755	-16.376	-0.153	0.909	16.376
800.000	0.943	135.056	177.754	799.739	-17.959	0.704	0.373	17.973
900.000	1.113	138.455	174.487	899.726	-19.023	1.836	0.157	19.111
1000.000	1.863	135.602	169.183	999.695	-20.343	3.887	0.750	20.711
1100.000	2.932	117.903	161.472	1099.597	-22.607	7.577	1.283	23.843
1200.000	3.791	114.253	152.830	1199.410	-25.327	12.999	0.850	28.468
1300.000	6.368	102.846	141.994	1298.980	-27.901	21.803	2.710	35.409
1400.000	8.082	97.464	131.077	1398.163	-29.948	34.359	1.848	45.579
1500.000	9.220	94.848	122.470	1496.999	-31.487	49.482	1.209	58.650
1600.000	10.521	95.370	116.314	1595.516	-32.916	66.560	1.310	74.254
1700.000	12.934	98.936	112.271	1693.409	-35.534	86.764	2.517	93.759
1800.000	14.827	100.596	109.865	1790.579	-39.738	109.985	1.928	116.943
1900.000	15.690	100.500	108.206	1886.972	-44.766	136.109	0.857	143.281
2000.000	15.745	100.546	106.968	1983.227	-49.666	162.774	0.056	170.183
2100.000	16.829	104.016	106.284	2079.226	-55.544	190.142	1.459	198.089
2200.000	17.220	104.979	106.089	2174.812	-63.036	218.554	0.495	227.462
2300.000	17.733	103.898	105.936	2270.151	-70.734	247.725	0.597	257.625

2400.000	17.330	101.999	105.597	2365.616	-77.260	276.771	0.715	287.352
2500.000	16.896	99.217	105.158	2461.193	-82.802	305.652	0.932	316.669
2600.000	16.270	99.303	104.653	2557.171	-87.169	333.382	0.628	344.590
2700.000	16.780	101.376	104.342	2653.097	-92.338	361.153	0.784	372.771
2800.000	17.537	102.447	104.177	2748.712	-98.468	389.790	0.821	402.035
2900.000	16.126	101.427	104.027	2844.254	-104.596	418.664	1.441	431.532
3000.000	16.020	102.001	103.883	2940.374	-110.151	445.682	0.181	459.093
3100.000	15.490	104.916	103.874	3036.580	-116.624	472.180	0.948	486.369
3200.000	14.290	105.168	103.946	3133.158	-123.465	497.194	1.198	512.294
3300.000	13.948	110.980	104.099	3230.230	-130.632	520.103	1.466	536.258
3400.000	13.603	110.783	104.390	3327.427	-139.072	542.048	0.341	559.604
3500.000	13.900	106.813	104.547	3424.522	-146.553	564.766	0.986	583.471
3600.000	13.870	104.949	104.594	3521.539	-153.123	588.098	0.449	607.706
3700.000	14.878	102.584	104.549	3618.434	-158.864	612.140	1.164	632.419
3800.000	16.261	102.345	104.461	3714.625	-164.754	638.829	1.378	659.732
3900.000	17.558	101.827	104.359	3810.328	-170.794	667.185	1.302	688.699
4000.000	17.871	101.704	104.239	3905.633	-176.842	696.853	0.325	718.941
4100.000	17.415	99.987	104.090	4000.841	-182.449	726.918	0.703	749.465
4200.000	16.583	101.018	103.946	4096.502	-187.634	755.579	0.870	778.528
4300.000	16.240	101.067	103.838	4192.499	-192.892	783.088	0.316	806.495
4400.000	16.242	101.624	103.744	4288.557	-198.208	810.373	0.156	834.260
4500.000	16.577	104.240	103.705	4384.493	-204.333	837.911	0.819	862.466
4600.000	16.090	104.536	103.731	4480.310	-211.506	865.615	0.467	891.081
4700.000	14.460	104.917	103.759	4576.908	-218.085	890.614	1.635	916.927
4800.000	14.678	106.806	103.827	4673.641	-225.194	914.943	0.523	942.249
4900.000	13.200	107.290	103.937	4770.705	-232.717	937.776	1.489	966.220
5000.000	10.420	100.748	103.934	4868.690	-237.469	957.116	3.103	986.135
5100.000	9.302	100.369	103.879	4967.281	-240.543	973.553	1.105	1002.829
5200.000	7.772	98.573	103.822	5066.214	-243.059	987.889	1.548	1017.351
5300.000	5.909	95.665	103.747	5165.545	-244.465	999.309	1.862	1028.776
5400.000	4.504	91.168	103.655	5265.138	-244.963	1008.286	1.437	1037.616
5500.000	3.550	91.876	103.575	5364.894	-245.147	1015.265	0.940	1044.442
5600.000	3.275	80.679	103.497	5464.735	-245.039	1020.868	0.790	1049.864
5700.000	1.834	77.019	103.393	5564.620	-244.185	1025.521	1.435	1054.192
5800.000	1.408	86.804	103.318	5664.566	-243.499	1028.633	0.521	1057.061
5900.000	0.359	60.668	103.258	5764.545	-242.773	1030.374	1.095	1058.588
6000.000	1.140	96.767	103.224	5864.534	-242.433	1031.652	0.781	1059.755
6100.000	0.905	82.022	103.209	5964.515	-242.592	1033.555	0.369	1061.643
6200.000	1.071	84.203	103.195	6064.493	-242.801	1035.574	0.175	1063.657
6300.000	1.089	105.563	103.187	6164.471	-243.118	1037.586	0.423	1065.688
6400.000	1.340	86.539	103.183	6264.445	-243.545	1039.781	0.461	1067.923
6500.000	1.082	87.950	103.176	6364.424	-243.865	1041.692	0.256	1069.857
6600.000	1.330	122.674	103.200	6464.407	-244.690	1043.245	0.757	1071.556
6700.000	1.510	103.562	103.223	6564.380	-245.626	1045.318	0.479	1073.788
6800.000	1.176	113.263	103.251	6664.345	-246.713	1047.665	0.421	1076.322
6900.000	0.510	179.550	103.303	6764.329	-247.971	1048.771	1.032	1077.688
6950.000	0.480	305.680	103.298	6818.357	-247.862	1048.733	1.698	1077.625