

GyroTracer Directional:

Date: 12/3/2018
 Operator : Adrian Bruner
 API: 05-123-26394
 Well Name: **Karlberg State 36-45**
 Field : Noble Energy Inc
 Tool Type And Number: 1719
 Bottom Depth : 7050.00
 Total Well Depth: 7291.00
 Latitude : 40.52581 N
 Longitude : 104.60607 W
 Grid Offset : 0.58

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

Northing: 0.00 Easting: 0.00 Altitude: 4800.00

Description:

Azimuth measured in degrees and referenced to local grid

Inclination measured from Vertical

Length measured in US survey feet

Start Time: 12/3/2018 13:44

End Time: 12/3/2018 14:54

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
100.000	0.720	281.858	263.157	99.990	-0.150	-1.250	0.720	1.259
200.000	0.752	252.233	262.224	199.983	-0.318	-2.327	0.376	2.349
300.000	0.114	102.171	258.331	299.981	-0.564	-2.731	0.861	2.789
400.000	0.237	234.682	255.049	399.980	-0.774	-2.897	0.217	2.999
500.000	0.210	176.898	250.349	499.979	-0.980	-2.744	0.237	2.914
600.000	0.729	106.505	239.645	599.976	-1.308	-2.233	0.627	2.587
700.000	0.485	114.673	215.944	699.969	-1.657	-1.202	0.332	2.047
800.000	0.432	92.529	185.448	799.963	-1.933	-0.184	0.195	1.942
900.000	0.497	79.139	159.730	899.958	-2.108	0.778	0.147	2.247
1000.000	0.625	64.196	141.878	999.953	-2.070	1.625	0.174	2.632
1100.000	0.572	46.826	127.030	1099.950	-1.786	2.367	0.177	2.965
1200.000	0.556	23.976	115.365	1199.946	-1.433	3.022	0.226	3.345
1300.000	0.525	22.754	102.803	1299.943	-0.775	3.411	0.049	3.498
1400.000	0.434	7.027	92.223	1399.940	-0.144	3.697	0.452	3.700
1500.000	0.436	330.173	82.494	1499.937	0.500	3.797	0.297	3.830
1600.000	0.491	342.991	75.004	1599.935	1.020	3.807	0.130	3.941
1700.000	0.360	8.590	68.138	1699.933	1.428	3.559	0.235	3.835
1800.000	0.169	306.454	60.845	1799.931	1.792	3.212	0.233	3.678
1900.000	0.444	298.309	53.891	1899.928	1.866	2.558	0.285	3.167
2000.000	0.494	283.819	43.565	1999.923	1.784	1.696	0.143	2.461
2100.000	0.509	252.499	24.149	2099.917	1.475	0.661	0.270	1.617
2200.000	0.630	258.107	334.475	2199.908	1.100	-0.525	0.131	1.220
2300.000	0.762	293.314	293.844	2299.898	0.841	-1.904	0.452	2.082

2400.000	1.340	294.069	289.949	2399.880	1.334	-3.676	0.512	3.911
2500.000	1.192	274.147	288.750	2499.853	1.994	-5.874	0.445	6.203
2600.000	0.942	272.242	285.921	2599.829	2.276	-7.980	0.263	8.298
2700.000	0.948	273.621	282.472	2699.806	2.226	-10.063	0.061	10.306
2800.000	1.221	294.895	281.955	2799.786	2.537	-11.984	0.467	12.250
2900.000	1.124	313.792	283.488	2899.764	3.327	-13.870	0.442	14.263
3000.000	1.464	309.155	285.494	2999.739	4.375	-15.784	0.436	16.379
3100.000	1.555	292.675	287.197	3099.710	5.521	-17.839	0.474	18.674
3200.000	1.557	294.581	288.511	3199.680	6.670	-19.920	0.168	21.007
3300.000	1.325	309.963	290.240	3299.649	8.091	-21.943	0.413	23.387
3400.000	1.680	303.715	291.850	3399.615	9.616	-23.980	0.450	25.836
3500.000	1.054	288.585	292.052	3499.579	10.690	-26.389	0.674	28.472
3600.000	1.525	274.448	291.970	3599.541	11.656	-28.894	0.277	31.157
3700.000	1.920	308.723	292.649	3699.503	13.023	-31.211	1.042	33.819
3800.000	2.137	318.990	294.754	3799.444	15.458	-33.525	0.438	36.917
3900.000	2.498	330.927	297.749	3899.358	18.865	-35.858	0.584	40.518
4000.000	3.136	336.526	300.344	3999.236	22.746	-38.857	0.729	45.025
4100.000	3.133	314.479	302.646	4099.090	26.987	-42.123	1.224	50.026
4200.000	3.098	317.103	304.332	4198.936	31.211	-45.698	0.167	55.339
4300.000	3.569	330.292	305.853	4298.768	35.647	-49.330	1.080	60.862
4400.000	3.585	323.291	307.378	4398.583	40.465	-52.969	0.448	66.657
4500.000	3.642	327.482	308.660	4498.390	45.371	-56.714	0.406	72.630
4600.000	3.654	326.935	309.835	4598.215	50.165	-60.135	0.041	78.312
4700.000	3.639	324.131	310.719	4698.032	54.932	-63.822	0.390	84.206
4800.000	3.770	319.415	311.727	4797.833	60.082	-67.371	0.367	90.271
4900.000	3.959	321.895	312.405	4897.628	65.112	-71.294	0.193	96.552
5000.000	3.752	328.932	313.027	4997.420	70.194	-75.201	0.556	102.871
5100.000	3.988	336.373	314.283	5097.176	76.393	-78.329	0.581	109.414
5200.000	4.159	339.585	315.862	5196.893	83.427	-80.955	0.320	116.249
5300.000	3.035	344.832	317.073	5296.673	89.569	-83.310	1.148	122.324
5400.000	2.285	332.807	317.920	5396.554	94.085	-84.951	0.994	126.762
5500.000	1.525	335.999	318.537	5496.497	97.278	-85.952	0.779	129.811
5600.000	1.679	0.813	319.156	5596.459	99.955	-86.411	0.722	132.128
5700.000	1.547	337.671	319.718	5696.407	102.981	-87.280	0.671	134.992
5800.000	1.158	326.904	320.123	5796.366	105.618	-88.237	0.304	137.626
5900.000	1.068	340.482	320.323	5896.344	107.456	-89.138	0.263	139.616
6000.000	1.067	334.086	320.361	5996.323	109.021	-90.314	0.153	141.571
6100.000	0.664	308.894	320.285	6096.306	110.246	-91.577	0.603	143.320
6200.000	0.536	306.862	320.199	6196.293	111.249	-92.692	0.039	144.804
6300.000	0.904	328.915	320.182	6296.282	112.303	-93.627	0.475	146.212
6400.000	1.167	322.356	320.123	6396.268	113.452	-94.783	0.198	147.835
6500.000	0.962	300.349	320.091	6496.251	114.769	-95.991	0.477	149.620
6600.000	1.199	341.072	320.100	6596.232	116.216	-97.173	0.771	151.489
6700.000	1.666	340.092	320.225	6696.210	117.960	-98.195	0.408	153.483
6800.000	2.188	333.745	320.532	6796.167	120.559	-99.268	0.610	156.169
6900.000	2.014	303.974	320.749	6896.103	123.611	-100.998	1.039	159.626
7000.000	1.611	279.143	320.245	6996.044	125.037	-104.012	0.859	162.643
7050.000	1.340	276.660	319.847	7046.036	125.189	-105.615	0.628	163.789