

**GyroTracer Directional:**

Date: 2/26/2019  
 Operator : Adrian Bruner  
 API : 05-123-27352  
 Well Name : **Wolfe USX CC 7-16**  
 Field : Noble Energy Inc  
 Tool Number: 1717  
 Bottom Depth : 6950.00  
 Total Well Depth: 7260.00  
 Latitude : 40.32092 N  
 Longitude : 104.47343 W  
 Grid Offset : 0.66  
 Datum: NAD 83

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

Northing: 0.00      Easting: 0.00      GLE: 4635.00

**Description:**

*Azimuth measured in degrees and referenced to local grid*

*Inclination measured from Vertical*

*Length measured in US survey feet*

*Lat/Long/Elevation obtained by handheld GPS at wellhead. Device error  $\pm 9$  Feet*

*RKB = Ground Level Elevation*

Start Time: 2/26/2019 12:44

End Time: 2/26/2019 13:54

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	0.190	191.063	162.121	100.000	-0.310	0.100	0.190	0.326
200.000	0.180	279.242	172.843	199.999	-0.559	0.070	0.257	0.563
300.000	0.488	202.420	184.884	299.998	-0.715	-0.061	0.620	0.718
400.000	0.250	80.612	173.903	399.997	-0.792	0.085	0.757	0.797
500.000	0.320	111.220	155.248	499.995	-0.854	0.394	0.051	0.940
600.000	0.388	95.174	134.829	599.994	-0.907	0.912	0.164	1.286
700.000	0.394	127.096	127.092	699.992	-1.047	1.384	0.169	1.736
800.000	0.446	85.562	121.822	799.989	-1.201	1.936	0.336	2.278
900.000	0.582	138.935	119.375	899.987	-1.337	2.376	0.404	2.726
1000.000	0.268	116.290	119.882	999.985	-1.608	2.798	0.141	3.227
1100.000	0.229	81.014	117.029	1099.984	-1.600	3.136	0.224	3.521
1200.000	0.194	95.774	115.372	1199.983	-1.568	3.307	0.119	3.660
1300.000	0.214	1.155	113.879	1299.982	-1.532	3.462	0.098	3.786
1400.000	0.169	121.914	114.200	1399.981	-1.537	3.420	0.357	3.750
1500.000	0.132	30.818	113.483	1499.980	-1.470	3.384	0.256	3.690
1600.000	0.173	348.787	112.817	1599.979	-1.399	3.324	0.128	3.607
1700.000	0.214	82.813	111.389	1699.978	-1.277	3.261	0.375	3.502
1800.000	0.498	49.797	101.984	1799.976	-0.770	3.629	0.352	3.710
1900.000	0.819	27.338	85.873	1899.965	0.323	4.479	0.439	4.490
2000.000	1.070	38.434	74.326	1999.953	1.536	5.473	0.274	5.684
2100.000	0.876	53.213	66.568	2099.940	2.789	6.436	0.292	7.014

2200.000	1.292	104.495	67.802	2199.924	3.269	8.012	0.992	8.653
2300.000	1.889	119.703	77.826	2299.884	2.292	10.624	0.651	10.868
2400.000	2.620	110.990	89.514	2399.799	0.120	14.102	0.799	14.103
2500.000	3.007	127.534	99.528	2499.668	-3.038	18.099	0.901	18.352
2600.000	3.084	128.624	106.157	2599.526	-6.428	22.189	0.061	23.101
2700.000	3.043	131.559	111.035	2699.383	-10.041	26.111	0.218	27.975
2800.000	2.735	138.486	114.005	2799.252	-13.356	29.991	0.550	32.831
2900.000	2.084	125.057	115.660	2899.150	-16.098	33.509	0.801	37.175
3000.000	1.594	123.048	116.264	2999.100	-17.834	36.143	0.573	40.303
3100.000	1.053	107.544	115.960	3099.080	-18.498	37.993	0.661	42.257
3200.000	0.618	129.470	115.833	3199.069	-19.039	39.325	0.554	43.692
3300.000	1.284	195.301	117.696	3299.051	-20.734	39.500	1.188	44.611
3400.000	1.502	183.154	120.833	3399.014	-23.398	39.199	0.350	45.652
3500.000	1.411	182.384	123.797	3498.977	-26.110	39.008	0.148	46.940
3600.000	1.577	183.547	126.199	3598.948	-28.498	38.939	0.205	48.253
3700.000	1.252	188.505	128.560	3698.919	-30.887	38.747	0.287	49.551
3800.000	1.293	196.224	130.934	3798.891	-33.145	38.219	0.314	50.589
3900.000	1.160	198.426	133.200	3898.865	-35.299	37.590	0.140	51.566
4000.000	1.241	192.544	135.332	3998.841	-37.402	36.971	0.142	52.591
4100.000	1.276	190.463	137.434	4098.816	-39.509	36.287	0.069	53.644
4200.000	1.128	204.078	139.206	4198.798	-41.253	35.600	0.256	54.490
4300.000	1.167	194.268	140.828	4298.781	-43.006	35.040	0.108	55.473
4400.000	1.371	128.497	141.710	4398.757	-44.959	35.493	1.373	57.281
4500.000	1.206	108.381	141.275	4498.728	-46.501	37.287	0.442	59.604
4600.000	1.161	93.705	139.960	4598.710	-46.648	39.198	0.234	60.930
4700.000	0.856	77.877	138.774	4698.697	-46.484	40.731	0.403	61.805
4800.000	0.715	81.819	137.761	4798.689	-46.251	41.995	0.204	62.472
4900.000	0.765	89.457	136.879	4898.682	-46.012	43.089	0.131	63.038
5000.000	0.320	147.183	136.306	4998.678	-45.962	43.913	0.546	63.568
5100.000	0.230	87.834	135.962	5098.676	-46.063	44.542	0.348	64.076
5200.000	0.106	140.707	135.987	5198.675	-46.362	44.791	0.055	64.464
5300.000	0.421	139.762	135.976	5298.674	-46.601	45.040	0.205	64.809
5400.000	0.402	119.203	135.754	5398.671	-46.842	45.625	0.256	65.390
5500.000	0.855	68.265	135.206	5498.665	-46.959	46.623	0.683	66.173
5600.000	1.094	99.156	134.343	5598.651	-47.174	48.270	0.616	67.493
5700.000	0.967	101.619	133.545	5698.635	-47.497	49.973	0.252	68.944
5800.000	0.838	102.617	132.760	5798.622	-47.684	51.566	0.224	70.234
5900.000	0.851	97.691	132.030	5898.609	-47.892	53.134	0.043	71.533
6000.000	0.745	99.934	131.362	5998.597	-48.160	54.700	0.298	72.880
6100.000	0.695	98.669	130.712	6098.585	-48.360	56.201	0.051	74.143
6200.000	0.599	88.859	130.087	6198.576	-48.375	57.474	0.143	75.123
6300.000	0.564	86.606	129.459	6298.569	-48.253	58.621	0.087	75.927
6400.000	0.559	83.629	129.005	6398.564	-48.279	59.608	0.098	76.708
6500.000	0.281	83.274	128.668	6498.559	-48.438	60.529	0.194	77.524
6600.000	0.441	97.899	128.388	6598.554	-48.647	61.403	0.157	78.338
6700.000	0.648	123.410	128.335	6698.550	-49.147	62.154	0.303	79.238
6800.000	0.478	115.456	128.265	6798.547	-49.509	62.768	0.144	79.944
6900.000	0.445	38.713	127.802	6898.544	-49.121	63.321	0.455	80.140
6950.050	0.620	22.850	127.445	6948.591	-48.658	63.538	0.604	80.030