

GyroTracer Directional:

Date: 2/26/2019
 Operator : Adrian Bruner
 API : 05-123-27350
 Well Name : **Wolfe USX CC 7-15**
 Field : Noble Energy Inc
 Tool Number: 1717
 Bottom Depth : 6648.00
 Total Well Depth: 6813.00
 Latitude : 40.32162 N
 Longitude : 104.47811 W
 Grid Offset : 0.66
 Datum: NAD 83

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

Northing: 0.00 Easting: 0.00 GLE: 4648.00

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 ± 9 Feet

RKB = Ground Level Elevation

Start Time: 2/26/2019 8:33

End Time: 2/26/2019 9:36

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	0.460	148.381	121.701	100.000	-0.420	0.680	0.460	0.799
200.000	0.111	86.186	127.998	199.998	-0.866	1.108	0.430	1.406
300.000	0.306	95.189	128.735	299.997	-1.112	1.386	0.398	1.777
400.000	0.143	74.181	120.725	399.996	-1.071	1.801	0.156	2.095
500.000	0.070	121.624	116.935	499.995	-1.103	2.171	0.169	2.435
600.000	0.141	97.447	113.889	599.994	-1.105	2.495	0.121	2.728
700.000	0.075	65.414	109.877	699.992	-1.064	2.942	0.137	3.128
800.000	0.135	12.130	107.905	799.991	-1.044	3.231	0.107	3.395
900.000	0.111	91.556	107.261	899.990	-1.077	3.466	0.269	3.629
1000.000	0.334	127.811	107.157	999.989	-1.127	3.649	0.174	3.819
1100.000	0.215	141.230	106.950	1099.988	-1.186	3.890	0.124	4.067
1200.000	0.091	337.046	106.487	1199.988	-1.230	4.155	0.280	4.333
1300.000	0.510	287.236	106.265	1299.987	-1.269	4.349	0.432	4.531
1400.000	0.158	184.881	105.768	1399.986	-1.293	4.578	0.552	4.757
1500.000	0.339	266.090	104.917	1499.985	-1.254	4.707	0.067	4.871
1600.000	0.136	20.783	102.634	1599.984	-1.070	4.775	0.181	4.894
1700.000	1.014	325.080	93.462	1699.979	-0.275	4.544	0.921	4.553
1800.000	1.013	337.403	76.362	1799.970	1.020	4.204	0.370	4.326
1900.000	1.068	351.473	57.301	1899.958	2.469	3.846	0.197	4.571
2000.000	0.991	357.474	41.524	1999.945	4.063	3.598	0.268	5.427
2100.000	0.964	32.290	34.425	2099.928	5.752	3.942	0.575	6.974

2200.000	1.416	64.731	35.367	2199.908	7.253	5.149	0.977	8.895
2300.000	1.094	60.978	38.929	2299.887	8.441	6.818	0.226	10.851
2400.000	1.153	70.107	41.815	2399.865	9.542	8.536	0.125	12.803
2500.000	1.271	66.198	44.711	2499.845	10.443	10.338	0.136	14.694
2600.000	1.282	53.491	45.801	2599.825	11.579	11.907	0.301	16.609
2700.000	1.073	49.904	46.656	2699.803	12.834	13.598	0.253	18.698
2800.000	1.060	41.845	47.175	2799.778	14.185	15.305	0.084	20.868
2900.000	1.444	38.491	47.174	2899.755	15.630	16.864	0.232	22.993
3000.000	1.154	35.517	46.342	2999.738	17.128	17.949	0.111	24.810
3100.000	1.040	31.553	45.086	3099.722	18.688	18.744	0.265	26.468
3200.000	1.016	71.181	45.399	3199.709	19.704	19.980	0.738	28.062
3300.000	1.494	103.347	47.765	3299.688	19.902	21.921	0.799	29.608
3400.000	1.919	112.054	52.772	3399.635	18.961	24.955	0.579	31.341
3500.000	2.556	111.125	58.860	3499.534	17.657	29.224	0.068	34.143
3600.000	2.957	112.767	64.990	3599.417	15.689	33.630	0.351	37.110
3700.000	3.023	118.232	70.616	3699.277	13.523	38.435	0.283	40.744
3800.000	1.821	123.534	74.670	3799.167	11.706	42.704	1.244	44.280
3900.000	1.740	130.924	77.701	3899.110	9.933	45.562	0.529	46.632
4000.000	1.521	152.579	80.187	3999.081	8.131	47.012	0.795	47.710
4100.000	0.960	192.768	82.211	4099.065	6.434	47.038	0.582	47.476
4200.000	2.067	254.442	83.623	4199.027	5.014	44.861	1.853	45.140
4300.000	2.904	262.715	84.032	4298.928	4.236	40.520	0.872	40.741
4400.000	3.223	272.885	82.979	4398.785	4.337	35.212	0.569	35.478
4500.000	3.353	269.441	81.186	4498.634	4.613	29.746	0.278	30.102
4600.000	2.722	282.268	79.078	4598.486	4.699	24.350	0.793	24.800
4700.000	2.288	280.305	74.097	4698.386	5.702	20.014	0.422	20.810
4800.000	2.668	280.349	66.871	4798.298	6.827	15.982	0.178	17.379
4900.000	2.414	281.151	57.233	4898.207	7.605	11.816	0.231	14.052
5000.000	2.265	282.772	42.161	4998.124	8.774	7.945	0.472	11.837
5100.000	1.858	290.968	26.349	5098.070	9.757	4.833	0.297	10.888
5200.000	0.902	273.055	11.192	5198.028	10.660	2.109	0.918	10.866
5300.000	1.160	302.293	359.968	5298.002	11.486	-0.007	0.497	11.486
5400.000	0.841	302.999	352.228	5397.983	12.424	-1.696	0.172	12.539
5500.000	1.104	327.390	347.771	5497.970	13.386	-2.901	0.501	13.697
5600.000	0.901	295.346	344.476	5597.959	14.350	-3.986	0.412	14.894
5700.000	0.815	273.372	341.068	5697.950	14.921	-5.118	0.317	15.775
5800.000	0.731	305.220	337.813	5797.942	15.318	-6.247	0.452	16.542
5900.000	0.723	287.906	334.420	5897.934	15.609	-7.472	0.255	17.305
6000.000	0.707	280.648	330.541	5997.923	15.727	-8.883	0.157	18.062
6100.000	0.484	356.331	329.450	6097.919	16.170	-9.544	0.747	18.777
6200.000	0.495	359.385	330.306	6197.916	16.796	-9.578	0.085	19.335
6300.000	0.569	3.684	331.818	6297.911	17.729	-9.499	0.071	20.114
6400.000	0.483	332.859	333.464	6397.906	18.565	-9.271	0.296	20.752
6500.000	0.133	255.814	334.558	6497.902	19.274	-9.169	0.513	21.344
6600.000	0.220	256.314	333.609	6597.899	19.634	-9.743	0.052	21.919
6648.200	0.390	295.910	333.098	6646.098	19.723	-10.007	0.279	22.116