

GyroTracer Directional:

Date: 1/10/2019
 Operator : Adrian Bruner
 API : 05-123-29082
 Well Name : **Guttersen State D 10-24**
 Field : Noble Energy Inc
 Tool Number: 1719
 Bottom Depth : 7300.00
 Total Well Depth: 7558.00
 Latitude : 40.23635 N
 Longitude : 104.53735 W
 Grid Offset : 0.62
 Datum: NAD 83

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

Northing: 0.00 Easting: 0.00 GLE: 4773.00

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: 1/10/2019 10:00

End Time: 1/10/2019 11:10

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	0.480	193.644	158.325	100.000	-0.780	0.310	0.480	0.839
200.000	0.354	233.347	166.009	199.999	-1.025	0.255	0.365	1.056
300.000	0.154	40.485	171.715	299.998	-1.272	0.185	0.591	1.285
400.000	0.297	51.038	178.044	399.996	-1.396	0.048	0.137	1.397
500.000	0.270	34.002	188.013	499.994	-1.021	-0.144	0.147	1.031
600.000	0.358	29.707	203.274	599.992	-0.513	-0.221	0.352	0.559
700.000	0.339	21.771	274.772	699.990	0.025	-0.305	0.176	0.306
800.000	0.091	38.224	321.453	799.987	0.617	-0.492	0.217	0.789
900.000	0.243	71.366	335.372	899.982	1.341	-0.615	0.111	1.475
1000.000	0.534	12.512	341.467	999.978	2.166	-0.726	0.329	2.285
1100.000	0.533	329.688	336.250	1099.974	2.692	-1.185	0.363	2.941
1200.000	0.754	307.283	326.980	1199.969	3.066	-1.992	0.307	3.656
1300.000	0.647	267.159	320.157	1299.963	3.465	-2.892	0.448	4.513
1400.000	0.356	269.368	313.570	1399.957	3.675	-3.864	0.229	5.332
1500.000	0.456	285.445	306.977	1499.950	3.739	-4.966	0.151	6.216
1600.000	0.981	291.041	302.268	1599.941	3.921	-6.210	0.553	7.344
1700.000	1.266	275.750	298.548	1699.926	4.263	-7.836	0.375	8.920
1800.000	0.793	278.683	295.547	1799.909	4.590	-9.602	0.434	10.643
1900.000	1.250	302.563	294.315	1899.886	5.220	-11.554	0.653	12.678
2000.000	1.301	311.429	293.856	1999.859	6.056	-13.694	0.212	14.974
2100.000	1.551	304.567	294.707	2099.829	7.258	-15.774	0.353	17.364
2200.000	1.272	285.476	295.053	2199.804	8.276	-17.704	0.532	19.543

2300.000	1.343	269.365	294.452	2299.777	9.007	-19.808	0.390	21.760
2400.000	0.855	235.951	292.261	2399.754	8.934	-21.827	0.740	23.584
2500.000	1.562	233.815	288.647	2499.732	7.976	-23.638	0.650	24.947
2600.000	1.638	210.850	283.364	2599.697	6.004	-25.273	0.641	25.977
2700.000	1.519	202.141	278.339	2699.665	3.893	-26.559	0.301	26.843
2800.000	0.990	225.578	274.363	2799.642	2.106	-27.597	0.667	27.678
2900.000	0.519	231.644	271.521	2899.627	0.757	-28.504	0.319	28.514
3000.000	0.715	240.794	269.907	2999.621	-0.048	-29.145	0.197	29.145
3100.000	0.531	180.763	268.379	3099.615	-0.839	-29.658	0.628	29.670
3200.000	0.155	151.519	267.375	3199.612	-1.370	-29.880	0.405	29.912
3300.000	0.313	190.438	266.585	3299.610	-1.782	-29.873	0.217	29.926
3400.000	0.660	83.928	265.406	3399.605	-2.352	-29.275	0.810	29.369
3500.000	0.523	297.910	264.352	3499.601	-2.919	-29.514	1.010	29.658
3600.000	0.899	278.393	265.371	3599.591	-2.490	-30.755	0.429	30.856
3700.000	1.422	292.232	266.938	3699.572	-1.735	-32.437	0.639	32.483
3800.000	0.980	286.713	268.392	3799.545	-0.969	-34.516	0.512	34.530
3900.000	1.355	305.452	269.831	3899.517	-0.108	-36.660	0.518	36.660
4000.000	1.501	275.265	271.224	3999.482	0.834	-39.050	0.815	39.059
4100.000	1.888	274.862	272.210	4099.444	1.607	-41.639	0.443	41.670
4200.000	1.760	283.012	272.330	4199.395	1.818	-44.693	0.313	44.730
4300.000	2.564	269.892	272.207	4299.319	1.870	-48.528	0.926	48.564
4400.000	2.007	272.777	271.885	4399.239	1.728	-52.509	0.565	52.538
4500.000	1.706	251.603	271.287	4499.163	1.266	-56.320	0.763	56.334
4600.000	2.610	246.241	270.324	4599.090	0.339	-59.893	0.881	59.894
4700.000	2.673	247.210	268.335	4698.967	-1.868	-64.281	0.110	64.308
4800.000	1.813	257.389	268.016	4798.859	-2.385	-68.842	0.897	68.883
4900.000	0.761	287.309	267.998	4898.846	-2.455	-70.233	1.089	70.275
5000.000	0.488	238.952	267.980	4998.842	-2.501	-70.920	0.580	70.964
5100.000	0.775	19.155	268.132	5098.840	-2.314	-70.951	1.187	70.989
5200.000	0.803	53.056	268.569	5198.836	-1.763	-70.597	0.483	70.619
5300.000	0.684	8.685	269.411	5298.827	-0.719	-69.920	0.586	69.924
5400.000	0.904	25.381	270.300	5398.816	0.361	-69.069	0.281	69.070
5500.000	1.248	44.072	271.304	5498.802	1.550	-68.074	0.502	68.091
5600.000	0.754	6.739	272.429	5598.788	2.848	-67.155	0.650	67.215
5700.000	0.686	70.130	273.336	5698.777	3.864	-66.292	0.725	66.404
5800.000	1.147	35.171	274.216	5798.766	4.813	-65.290	0.625	65.467
5900.000	0.831	76.343	274.892	5898.757	5.501	-64.278	0.700	64.513
6000.000	1.131	45.856	275.733	5998.744	6.325	-62.998	0.553	63.315
6100.000	0.233	113.272	276.462	6098.733	7.006	-61.850	1.037	62.246
6200.000	0.374	144.141	276.506	6198.729	6.976	-61.167	0.162	61.563
6300.000	0.773	61.635	276.650	6298.724	7.045	-60.423	0.790	60.832
6400.000	0.507	127.639	276.589	6398.720	6.898	-59.716	0.856	60.113
6500.000	0.546	72.710	276.503	6498.715	6.713	-58.886	0.541	59.267
6600.000	0.047	68.589	276.400	6598.711	6.521	-58.136	0.402	58.500
6700.000	0.860	117.843	276.112	6698.705	6.147	-57.407	0.706	57.735
6800.000	0.526	147.123	275.847	6798.699	5.794	-56.572	0.583	56.868
6900.000	0.832	74.840	275.709	6898.693	5.579	-55.808	0.869	56.087
7000.000	0.188	213.999	276.000	6998.687	5.796	-55.137	1.085	55.441
7100.000	0.379	48.871	276.287	7098.683	5.997	-54.432	0.578	54.762
7200.000	0.645	43.426	276.889	7198.678	6.504	-53.840	0.320	54.232
7300.000	1.750	45.720	278.618	7298.657	8.002	-52.799	1.063	53.402