

GyroTracer Directional:

Date: 1/10/2019
 Operator : Adrian Bruner
 API : 05-123-23455
 Well Name : **Frank C 12-17**
 Field : Noble Energy Inc
 Tool Number: 1719
 Bottom Depth : 6600.00
 Total Well Depth: 7297.00
 Latitude : 40.33069 N
 Longitude : 104.49407 W
 Grid Offset : 0.65
 Datum: NAD 83

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

Northing: 0.00 Easting: 0.00 GLE: 4604.00

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: 1/10/2019 12:16

End Time: 1/10/2019 13:18

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	0.640	277.550	0.000	107.460	1.200	0.000	0.596	1.200
200.000	0.623	301.075	336.078	199.997	1.271	-0.564	0.279	1.390
300.000	0.894	308.303	319.078	299.991	1.593	-1.381	0.181	2.109
400.000	0.619	321.460	313.339	399.984	2.152	-2.281	0.502	3.136
500.000	0.768	319.462	310.472	499.973	2.965	-3.475	0.138	4.568
600.000	0.955	290.568	309.069	599.956	4.005	-4.933	0.492	6.354
700.000	1.237	296.078	309.030	699.939	5.101	-6.293	0.302	8.101
800.000	1.164	297.667	309.016	799.923	6.173	-7.619	0.074	9.806
900.000	1.196	306.055	309.033	899.907	7.248	-8.941	0.162	11.510
1000.000	0.874	328.177	308.254	999.895	8.050	-10.210	0.474	13.002
1100.000	0.483	319.693	307.836	1099.884	8.823	-11.360	0.393	14.384
1200.000	0.614	320.360	307.921	1199.875	9.552	-12.261	0.096	15.542
1300.000	0.537	261.716	306.831	1299.865	10.070	-13.447	0.562	16.800
1400.000	0.650	273.437	306.065	1399.857	10.553	-14.490	0.166	17.925
1500.000	0.513	292.535	306.315	1499.851	11.210	-15.252	0.239	18.929
1600.000	0.610	308.789	307.487	1599.842	12.257	-15.981	0.158	20.140
1700.000	1.088	335.552	309.697	1699.828	13.736	-16.547	0.608	21.505
1800.000	1.180	354.019	312.751	1799.811	15.479	-16.744	0.391	22.803
1900.000	1.002	25.986	317.095	1899.790	17.306	-16.084	0.615	23.626
2000.000	1.216	41.312	322.674	1999.760	19.304	-14.719	0.350	24.275
2100.000	1.304	40.169	328.669	2099.722	21.402	-13.029	0.099	25.056

2200.000	1.472	52.629	334.865	2199.680	23.385	-10.972	0.328	25.831
2300.000	1.886	63.473	341.311	2299.631	25.291	-8.555	0.558	26.699
2400.000	1.920	68.246	347.666	2399.584	26.597	-5.815	0.154	27.225
2500.000	1.629	60.738	353.449	2499.542	27.671	-3.178	0.370	27.853
2600.000	1.437	76.592	358.742	2599.504	28.512	-0.626	0.528	28.519
2700.000	1.987	73.483	4.175	2699.461	29.366	2.144	0.545	29.444
2800.000	1.518	67.401	8.725	2799.424	30.193	4.634	0.544	30.547
2900.000	1.025	96.230	12.307	2899.401	30.591	6.674	0.755	31.310
3000.000	0.548	96.043	15.127	2999.387	30.670	8.291	0.498	31.771
3100.000	0.471	62.593	17.375	3099.377	30.541	9.556	0.370	32.001
3200.000	0.563	82.367	19.195	3199.369	30.289	10.545	0.212	32.072
3300.000	0.405	113.380	21.082	3299.363	30.006	11.568	0.310	32.159
3400.000	0.582	28.732	22.641	3399.356	29.945	12.490	0.702	32.445
3500.000	0.741	15.020	22.545	3499.352	30.637	12.719	0.186	33.172
3600.000	0.502	22.606	21.990	3599.348	31.344	12.657	0.300	33.803
3700.000	0.937	7.332	21.425	3699.343	32.173	12.625	0.493	34.561
3800.000	1.427	10.502	20.982	3799.333	33.376	12.800	0.831	35.746
3900.000	1.168	22.004	20.377	3899.315	35.149	13.056	0.383	37.496
4000.000	0.793	1.662	19.670	3999.301	36.628	13.093	0.641	38.897
4100.000	0.680	266.393	18.382	4099.295	36.592	12.160	0.847	38.560
4200.000	0.785	227.522	16.630	4199.277	35.743	10.676	0.456	37.303
4300.000	1.358	206.506	14.384	4299.247	34.335	8.806	0.709	35.446
4400.000	2.725	232.960	11.451	4399.196	32.209	6.525	1.711	32.863
4500.000	2.933	236.173	5.508	4499.084	29.319	2.827	0.322	29.455
4600.000	2.023	260.632	357.803	4598.977	26.989	-1.035	1.404	27.009
4700.000	1.229	266.641	351.973	4698.936	26.397	-3.722	0.884	26.658
4800.000	0.572	296.349	348.378	4798.919	26.373	-5.424	0.697	26.925
4900.000	0.262	276.564	345.464	4898.906	26.657	-6.912	0.458	27.538
5000.000	0.300	292.116	344.277	4998.897	27.397	-7.713	0.058	28.462
5100.000	0.776	353.508	344.535	5098.890	28.383	-7.852	0.662	29.449
5200.000	1.193	36.567	345.931	5198.883	29.349	-7.355	0.791	30.257
5300.000	1.131	33.859	347.994	5298.872	30.239	-6.431	0.364	30.916
5400.000	1.156	56.250	350.050	5398.861	31.195	-5.472	0.471	31.671
5500.000	0.582	50.173	352.055	5498.848	32.216	-4.496	0.559	32.528
5600.000	0.657	26.138	353.998	5598.838	32.964	-3.466	0.326	33.145
5700.000	1.107	329.753	354.940	5698.832	33.622	-2.977	0.793	33.753
5800.000	0.748	22.971	355.139	5798.826	34.555	-2.939	0.642	34.680
5900.000	0.737	331.798	355.433	5898.815	35.944	-2.871	0.544	36.058
6000.000	0.818	331.175	355.595	5998.801	37.475	-2.887	0.163	37.586
6100.000	1.325	329.385	355.235	6098.783	39.242	-3.271	0.577	39.378
6200.000	1.045	351.715	354.313	6198.762	40.994	-4.083	0.527	41.197
6300.000	0.409	312.815	353.466	6298.744	42.596	-4.879	0.776	42.874
6400.000	0.714	311.580	352.984	6398.735	43.659	-5.373	0.038	43.989
6500.000	0.691	291.931	352.430	6498.731	44.110	-5.862	0.207	44.498
6600.000	0.268	343.084	351.882	6598.728	44.066	-6.285	0.539	44.512