

GyroTracer Directional:

Date: 2/8/2019
 Operator : Adrian Bruner
 API : 05-123-25351
 Well Name : **Frank CC 7-19**
 Field : Noble Energy Inc
 Tool Number: 1717
 Bottom Depth : 6600.00
 Total Well Depth: 7280.00
 Latitude : 40.33001 N
 Longitude : 104.48459 W
 Grid Offset : 0.66
 Datum: NAD 83

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

Northing: 0.00 Easting: 0.00 GLE: 4605.00

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: 2/8/2019 11:35

End Time: 2/8/2019 12:49

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	0.530	327.483	339.590	99.990	0.860	-0.320	0.530	0.918
200.000	0.637	324.194	330.258	199.986	1.568	-0.896	0.121	1.806
300.000	0.618	315.624	324.603	299.981	2.163	-1.537	0.104	2.654
400.000	0.288	290.234	321.757	399.979	2.594	-2.044	0.302	3.303
500.000	0.532	304.888	318.572	499.976	2.953	-2.606	0.271	3.939
600.000	0.545	289.834	317.697	599.974	3.380	-3.076	0.198	4.570
700.000	0.787	281.360	313.557	699.970	3.683	-3.873	0.426	5.345
800.000	0.814	290.292	307.054	799.954	4.163	-5.514	0.122	6.909
900.000	0.902	289.334	303.955	899.940	4.773	-7.088	0.110	8.545
1000.000	1.052	291.325	302.300	999.925	5.477	-8.664	0.082	10.251
1100.000	1.075	302.829	301.384	1099.911	6.182	-10.134	0.242	11.871
1200.000	0.858	298.175	301.314	1199.898	6.995	-11.498	0.108	13.458
1300.000	0.925	293.383	300.959	1299.886	7.709	-12.850	0.127	14.985
1400.000	0.849	301.799	301.068	1399.874	8.524	-14.149	0.162	16.518
1500.000	0.888	315.113	301.210	1499.865	9.256	-15.278	0.244	17.863
1600.000	0.906	303.779	301.753	1599.856	10.065	-16.263	0.170	19.126
1700.000	0.673	316.719	302.467	1699.847	10.964	-17.231	0.171	20.424
1800.000	0.689	308.692	303.092	1799.838	11.857	-18.195	0.085	21.718
1900.000	0.600	324.472	304.065	1899.830	12.852	-19.007	0.218	22.944
2000.000	0.745	349.584	305.487	1999.823	13.854	-19.432	0.367	23.865
2100.000	0.960	4.075	307.867	2099.815	15.136	-19.466	0.311	24.658

2200.000	1.144	358.070	311.157	2199.801	16.716	-19.123	0.257	25.399
2300.000	1.288	3.575	314.117	2299.788	18.290	-18.863	0.735	26.274
2400.000	0.746	352.216	316.679	2399.776	19.749	-18.624	0.462	27.145
2500.000	0.810	352.153	318.557	2499.767	21.120	-18.649	0.329	28.175
2600.000	0.757	356.548	320.263	2599.758	22.464	-18.675	0.045	29.212
2700.000	0.745	359.474	321.632	2699.748	23.805	-18.846	0.179	30.362
2800.000	0.359	35.559	322.738	2799.742	24.886	-18.932	0.441	31.269
2900.000	0.154	78.357	323.136	2899.741	25.056	-18.788	0.203	31.318
3000.000	1.143	167.235	322.173	2999.731	23.854	-18.522	1.175	30.201
3100.000	0.926	165.447	320.545	3099.711	21.927	-18.047	0.201	28.399
3200.000	0.750	144.875	320.213	3199.699	20.651	-17.198	0.326	26.875
3300.000	0.595	130.752	320.282	3299.691	19.775	-16.428	0.208	25.709
3400.000	0.735	92.499	320.979	3399.685	19.151	-15.520	0.392	24.650
3500.000	0.924	86.047	323.863	3499.673	19.198	-14.018	0.133	23.771
3600.000	1.165	83.612	327.829	3599.655	19.325	-12.156	0.344	22.830
3700.000	1.191	88.649	332.298	3699.635	19.329	-10.149	0.098	21.831
3800.000	1.032	71.822	337.397	3799.613	19.449	-8.097	0.301	21.067
3900.000	1.170	74.398	342.593	3899.594	19.832	-6.218	0.038	20.784
4000.000	1.470	89.004	348.494	3999.570	19.907	-4.052	0.430	20.315
4100.000	1.566	86.503	355.878	4099.535	20.146	-1.452	0.190	20.198
4200.000	1.188	81.665	3.320	4199.498	20.613	1.196	0.387	20.647
4300.000	0.304	22.538	5.438	4299.492	21.105	2.009	0.884	21.200
4400.000	1.073	36.952	7.024	4399.484	22.071	2.719	0.809	22.238
4500.000	1.151	47.768	9.753	4499.467	23.370	4.017	0.229	23.713
4600.000	0.992	33.403	11.479	4599.453	24.643	5.004	0.309	25.146
4700.000	1.599	26.501	12.661	4699.433	26.356	5.921	0.586	27.013
4800.000	1.109	31.891	13.813	4799.410	28.198	6.933	0.042	29.038
4900.000	1.184	28.729	14.729	4899.392	29.868	7.852	0.163	30.882
5000.000	0.869	31.198	15.683	4999.376	31.345	8.801	0.249	32.557
5100.000	1.034	29.877	16.500	5099.361	32.789	9.713	0.166	34.197
5200.000	0.818	19.705	17.426	5199.349	34.043	10.686	0.248	35.681
5300.000	0.933	36.750	18.352	5299.335	35.319	11.716	0.282	37.211
5400.000	1.040	45.490	19.394	5399.319	36.630	12.895	0.159	38.834
5500.000	1.124	43.787	20.414	5499.302	37.987	14.138	0.078	40.532
5600.000	1.265	39.826	21.232	5599.281	39.576	15.376	0.184	42.458
5700.000	1.197	27.967	21.780	5699.256	41.464	16.568	0.197	44.651
5800.000	1.355	40.734	22.214	5799.227	43.505	17.766	0.389	46.992
5900.000	1.413	51.465	23.119	5899.200	45.231	19.310	0.259	49.180
6000.000	1.043	81.027	24.688	5999.178	46.094	21.189	0.710	50.731
6100.000	0.910	127.950	26.447	6099.162	46.080	22.921	0.742	51.466
6200.000	0.995	127.115	28.191	6199.149	45.422	24.346	0.166	51.535
6300.000	2.040	145.070	30.535	6299.118	43.449	25.630	1.111	50.445
6400.000	0.832	136.717	32.890	6399.079	40.872	26.431	1.189	48.674
6500.000	1.575	98.015	34.529	6499.065	40.684	27.991	1.010	49.383
6600.000	3.140	77.710	37.308	6598.997	41.365	31.520	1.887	52.006