

GyroTracer Directional:

Date: 8/27/2018
 Operator : Adrian Bruner
 API: 05-123-22903
 Well Name : **Helms H 12-14D**
 Field : Noble Energy Inc
 Tool Type And Number: 1717
 Bottom Depth : 6800.00
 Total Well Depth: 8015.00
 Latitude : 40.23358 N
 Longitude : 104.6138 W
 Grid Offset : 0.56

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

Northing: 0.00 Easting: 0.00 Altitude: 4855.00

Description:

Azimuth measured in degrees and referenced to local grid

Inclination measured from Vertical

Length measured in US survey feet

Start Time: 8/24/2018 11:27

End Time: 8/24/2018 12:32

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	0.660	89.212	70.780	99.990	0.380	1.090	0.660	1.154
200.000	0.332	58.388	76.177	199.986	0.484	1.965	0.423	2.024
300.000	0.279	75.841	80.304	299.983	0.426	2.496	0.102	2.532
400.000	0.351	179.061	85.133	399.983	0.221	2.598	0.551	2.607
500.000	0.185	209.279	91.462	499.981	-0.070	2.757	0.217	2.758
600.000	0.371	187.460	100.895	599.980	-0.502	2.607	0.315	2.654
700.000	0.559	225.552	114.574	699.977	-1.102	2.410	0.351	2.650
800.000	0.670	210.910	132.676	799.972	-1.934	2.097	0.192	2.853
900.000	0.442	213.607	147.203	899.968	-2.791	1.799	0.223	3.321
1000.000	0.747	188.324	159.957	999.962	-3.669	1.339	0.455	3.906
1100.000	0.751	205.027	167.014	1099.958	-4.513	1.041	0.253	4.632
1200.000	0.567	216.391	172.303	1199.952	-5.411	0.731	0.166	5.460
1300.000	0.679	181.594	176.613	1299.947	-6.303	0.373	0.365	6.314
1400.000	0.640	197.107	180.482	1399.942	-7.149	-0.060	0.622	7.149
1500.000	0.621	204.815	183.321	1499.937	-8.009	-0.465	0.141	8.023
1600.000	0.615	228.868	186.761	1599.932	-8.762	-1.039	0.286	8.823
1700.000	0.438	218.575	190.285	1699.926	-9.547	-1.732	0.233	9.703
1800.000	0.703	203.322	193.053	1799.920	-10.353	-2.400	0.283	10.627
1900.000	0.729	197.970	194.944	1899.913	-11.320	-3.021	0.191	11.716
2000.000	1.287	198.251	196.466	1999.901	-12.665	-3.743	0.134	13.207
2100.000	1.097	222.222	196.748	2099.884	-14.384	-4.328	0.504	15.021
2200.000	1.021	185.393	196.382	2199.865	-16.208	-4.765	0.614	16.894
2300.000	0.963	166.201	195.548	2299.849	-17.976	-5.002	0.288	18.659

2400.000	0.998	189.307	194.689	2399.833	-19.693	-5.162	0.400	20.358
2500.000	0.558	252.751	195.818	2499.827	-20.462	-5.797	0.877	21.267
2600.000	0.950	306.761	199.310	2599.817	-19.828	-6.948	0.779	21.010
2700.000	1.006	313.353	203.576	2699.803	-18.645	-8.136	0.157	20.343
2800.000	1.131	338.989	208.203	2799.786	-17.208	-9.228	0.513	19.526
2900.000	1.118	329.748	213.711	2899.766	-15.659	-10.448	0.099	18.825
3000.000	1.094	324.145	219.898	2999.744	-14.044	-11.742	0.140	18.306
3100.000	1.245	316.325	226.562	3099.721	-12.528	-13.230	0.177	18.220
3200.000	1.225	306.903	233.669	3199.695	-10.973	-14.922	0.208	18.522
3300.000	1.575	299.525	240.425	3299.666	-9.504	-16.748	0.303	19.257
3400.000	1.584	298.527	246.296	3399.635	-8.314	-18.936	0.158	20.680
3500.000	1.815	299.844	251.463	3499.597	-7.173	-21.391	0.175	22.562
3600.000	1.650	314.536	257.108	3599.553	-5.443	-23.783	0.396	24.398
3700.000	1.465	313.362	262.435	3699.511	-3.432	-25.842	0.143	26.069
3800.000	1.424	310.479	266.587	3799.476	-1.658	-27.809	0.113	27.858
3900.000	1.541	309.010	270.326	3899.439	0.170	-29.773	0.146	29.774
4000.000	1.874	313.820	273.926	3999.401	2.174	-31.672	0.206	31.747
4100.000	1.633	319.168	276.937	4099.362	4.093	-33.643	0.228	33.891
4200.000	1.549	318.573	279.280	4199.329	5.807	-35.537	0.193	36.009
4300.000	1.359	318.102	281.471	4299.296	7.586	-37.381	0.115	38.143
4400.000	1.230	313.561	283.496	4399.264	9.391	-39.129	0.144	40.240
4500.000	1.463	303.292	285.105	4499.231	11.084	-41.063	0.242	42.532
4600.000	1.486	297.648	286.150	4599.198	12.501	-43.168	0.221	44.941
4700.000	1.158	305.748	287.000	4699.176	13.709	-44.841	0.364	46.889
4800.000	1.133	308.161	287.572	4799.160	14.664	-46.305	0.125	48.571
4900.000	1.420	300.734	288.012	4899.137	15.666	-48.181	0.361	50.664
5000.000	1.200	295.892	288.464	4999.109	16.775	-50.242	0.092	52.968
5100.000	1.146	300.567	289.084	5099.082	18.044	-52.154	0.251	55.187
5200.000	0.908	303.282	289.727	5199.066	19.198	-53.540	0.268	56.878
5300.000	0.889	321.765	290.153	5299.057	20.019	-54.550	0.329	58.107
5400.000	0.369	332.044	290.479	5399.053	20.569	-55.075	0.568	58.791
5500.000	0.607	76.631	290.746	5499.051	20.750	-54.781	0.614	58.579
5600.000	0.947	99.900	291.076	5599.044	20.672	-53.638	0.527	57.483
5700.000	1.268	104.251	291.450	5699.029	20.400	-51.922	0.322	55.785
5800.000	0.821	106.460	291.971	5799.015	20.284	-50.278	0.167	54.215
5900.000	0.639	86.247	292.545	5899.005	20.311	-48.927	0.342	52.975
6000.000	0.858	68.289	293.520	5998.995	20.715	-47.596	0.350	51.909
6100.000	0.957	66.111	294.366	6098.985	20.969	-46.299	0.204	50.826
6200.000	0.938	69.328	295.609	6198.973	21.482	-44.819	0.115	49.701
6300.000	0.842	62.933	297.163	6298.958	22.211	-43.286	0.034	48.651
6400.000	0.957	50.711	298.765	6398.947	23.153	-42.177	0.138	48.114
6500.000	0.799	42.289	300.711	6498.932	24.456	-41.170	0.229	47.886
6600.000	0.814	25.253	302.618	6598.919	25.820	-40.345	0.315	47.900
6700.000	0.814	10.774	304.560	6698.905	27.310	-39.648	0.206	48.143
6800.000	1.322	349.045	306.499	6798.886	29.223	-39.494	0.696	49.130