

**GyroTracer Directional:**

Date: 10/25/2018  
 Operator : Adrian Bruner  
 API: 05-123-21728  
 Well Name: **Ocoma C 17-23**  
 Field : Noble Energy Inc  
 Tool Type And Number: 1719  
 Bottom Depth : 6370.00  
 Total Well Depth: 7017.00  
 Latitude : 40.309146 N  
 Longitude : 104.569904 W  
 Grid Offset : 0.60

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

Northing: 0.00      Easting: 0.00      Altitude: 4700.00

**Description:**

*Azimuth measured in degrees and referenced to local grid*

*Inclination measured from Vertical*

*Length measured in US survey feet*

Start Time: 10/25/2018 12:58

End Time: 10/25/2018 14:00

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	0.730	301.135	279.982	99.990	0.220	-1.250	0.730	1.269
200.000	0.841	324.948	298.530	199.983	1.063	-1.955	0.358	2.226
300.000	0.532	323.705	308.048	299.977	1.935	-2.472	0.319	3.139
400.000	0.537	4.298	315.368	399.973	2.728	-2.693	0.364	3.833
500.000	0.227	82.904	323.602	499.970	3.477	-2.563	0.587	4.319
600.000	0.649	61.469	337.403	599.963	3.601	-1.499	0.458	3.900
700.000	0.809	107.637	353.056	699.956	3.636	-0.443	0.601	3.663
800.000	0.720	88.014	10.140	799.950	3.677	0.658	0.282	3.735
900.000	0.559	98.635	24.695	899.944	3.782	1.739	0.304	4.163
1000.000	0.765	75.221	36.809	999.936	3.826	2.863	0.336	4.779
1100.000	0.703	94.131	43.233	1099.932	3.898	3.664	0.297	5.350
1200.000	0.524	78.727	46.962	1199.929	4.080	4.369	0.288	5.978
1300.000	0.288	335.364	46.979	1299.925	4.580	4.908	0.615	6.713
1400.000	0.400	348.881	45.654	1399.922	5.145	5.264	0.617	7.360
1500.000	0.471	335.226	42.796	1499.919	5.701	5.279	0.130	7.769
1600.000	0.640	344.360	38.899	1599.916	6.469	5.220	0.213	8.313
1700.000	0.589	23.539	34.797	1699.911	7.296	5.070	0.382	8.884
1800.000	0.555	41.891	33.004	1799.904	8.346	5.421	0.220	9.952
1900.000	0.844	46.905	33.925	1899.892	9.486	6.381	0.295	11.433
2000.000	1.128	36.547	35.218	1999.869	11.067	7.812	0.271	13.546
2100.000	1.286	8.683	34.727	2099.849	12.716	8.814	0.618	15.473
2200.000	1.331	348.470	29.244	2199.822	14.937	8.363	0.532	17.119
2300.000	1.552	340.042	22.880	2299.783	17.516	7.392	0.303	19.012

2400.000	1.296	324.238	17.851	2399.741	20.216	6.510	0.445	21.238
2500.000	1.753	336.589	13.245	2499.691	23.151	5.449	0.370	23.783
2600.000	1.717	339.328	9.736	2599.633	26.403	4.530	0.204	26.789
2700.000	1.914	335.958	6.695	2699.569	29.798	3.498	0.121	30.003
2800.000	2.015	329.705	4.178	2799.502	33.241	2.428	0.226	33.330
2900.000	1.872	346.978	2.271	2899.446	36.408	1.444	0.580	36.437
3000.000	1.486	346.916	1.052	2999.411	38.906	0.715	0.371	38.913
3100.000	1.241	319.923	359.903	3099.385	40.955	-0.069	0.725	40.955
3200.000	1.080	311.588	358.495	3199.368	42.419	-1.115	0.165	42.433
3300.000	0.204	57.161	357.737	3299.363	42.917	-1.696	1.113	42.951
3400.000	0.964	162.289	357.723	3399.354	41.883	-1.666	1.037	41.916
3500.000	1.292	210.823	357.213	3499.331	39.809	-1.938	0.979	39.856
3600.000	0.945	196.920	355.373	3599.292	37.287	-3.018	0.368	37.409
3700.000	1.328	199.608	353.105	3699.253	34.819	-4.210	0.167	35.073
3800.000	1.400	220.533	350.440	3799.222	32.770	-5.519	0.498	33.231
3900.000	1.282	222.446	347.815	3899.195	30.786	-6.648	0.165	31.496
4000.000	0.912	210.117	345.309	3999.172	28.939	-7.587	0.344	29.917
4100.000	0.817	213.096	342.772	4099.153	27.297	-8.464	0.076	28.579
4200.000	1.281	212.068	339.856	4199.135	25.698	-9.426	0.424	27.373
4300.000	1.019	201.329	337.351	4299.121	24.325	-10.150	0.353	26.357
4400.000	0.860	192.245	334.849	4399.110	23.101	-10.847	0.292	25.521
4500.000	0.955	192.370	332.593	4499.100	21.920	-11.365	0.098	24.691
4600.000	1.028	154.724	331.976	4599.091	20.686	-11.010	0.605	23.433
4700.000	1.125	121.538	332.103	4699.076	19.304	-10.220	0.596	21.843
4800.000	1.119	115.546	334.186	4799.053	17.913	-8.665	0.397	19.898
4900.000	1.680	127.877	337.555	4899.020	16.297	-6.732	0.877	17.633
5000.000	1.023	86.113	342.224	4999.000	15.612	-5.005	1.130	16.394
5100.000	0.610	24.448	345.921	5098.993	16.105	-4.039	0.855	16.604
5200.000	1.208	344.590	347.673	5198.985	17.154	-3.749	0.846	17.559
5300.000	0.820	343.964	348.450	5298.968	18.918	-3.866	0.362	19.309
5400.000	2.363	1.156	349.988	5398.928	21.609	-3.815	1.618	21.943
5500.000	1.527	346.045	351.325	5498.868	25.038	-3.820	0.911	25.328
5600.000	1.204	311.102	350.694	5598.837	27.335	-4.479	0.875	27.700
5700.000	1.950	72.915	352.324	5698.819	28.444	-3.834	2.811	28.701
5800.000	2.551	51.075	359.473	5798.736	30.308	-0.279	1.016	30.309
5900.000	2.503	41.343	5.202	5898.643	33.006	3.005	0.418	33.142
6000.000	2.029	29.762	8.326	5998.578	35.725	5.229	0.394	36.105
6100.000	2.468	1.692	9.134	6098.523	38.730	6.227	1.225	39.227
6200.000	1.943	340.011	8.575	6198.473	41.777	6.300	0.875	42.249
6300.000	1.506	332.515	6.957	6298.428	44.628	5.446	0.311	44.959
6370.000	1.390	351.660	6.003	6367.559	46.504	4.890	0.310	46.760