

**GyroTracer Directional:**

Date: 11/2/2018  
 Operator : Jordan Hucke  
 API: 05-123-33216  
 Well Name: **Sylvester F 31-33**  
 Field : Noble Energy Inc  
 Tool Type And Number: 1717  
 Bottom Depth : 6900.00  
 Total Well Depth: 7303.00  
 Latitude : 40.3523 N  
 Longitude : 104.7152 W  
 Grid Offset : 0.51

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

Northing: 0.00      Easting: 0.00      Altitude: 4661.00

**Description:**

*Azimuth measured in degrees and referenced to local grid*

*Inclination measured from Vertical*

*Length measured in US survey feet*

Start Time: 11/2/2018 10:59

End Time: 11/2/2018 12:04

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	286.179	242.879	100.000	-0.420	-0.820	0.530	0.921
200.000	0.566	286.286	261.750	199.996	-0.235	-1.620	0.038	1.637
300.000	0.561	275.411	266.215	299.992	-0.167	-2.531	0.142	2.537
400.000	0.540	260.643	267.456	399.986	-0.158	-3.566	0.200	3.569
500.000	0.898	263.291	267.148	499.981	-0.230	-4.609	0.322	4.614
600.000	0.690	256.966	265.996	599.974	-0.402	-5.751	0.185	5.765
700.000	0.643	245.225	264.384	699.967	-0.678	-6.893	0.221	6.926
800.000	0.613	238.736	261.760	799.959	-1.156	-7.982	0.113	8.065
900.000	0.788	226.580	258.618	899.951	-1.819	-9.038	0.230	9.220
1000.000	0.614	232.427	255.487	999.943	-2.589	-10.000	0.206	10.330
1100.000	0.523	219.923	252.452	1099.936	-3.417	-10.807	0.151	11.334
1200.000	0.532	199.777	249.244	1199.930	-4.329	-11.421	0.329	12.214
1300.000	0.630	204.039	245.791	1299.924	-5.334	-11.864	0.105	13.007
1400.000	0.602	190.250	241.924	1399.917	-6.438	-12.070	0.182	13.680
1500.000	0.650	187.398	237.625	1499.909	-7.655	-12.074	0.175	14.297
1600.000	0.560	189.218	233.853	1599.901	-8.919	-12.210	0.026	15.121
1700.000	0.795	189.630	230.981	1699.893	-10.131	-12.502	0.189	16.092
1800.000	0.687	207.397	229.078	1799.887	-11.139	-12.850	0.258	17.006
1900.000	0.322	204.946	227.859	1899.882	-12.038	-13.303	0.309	17.941
2000.000	0.787	184.885	225.609	1999.875	-13.192	-13.475	0.346	18.858
2100.000	0.697	164.110	222.681	2099.865	-14.536	-13.405	0.315	19.774
2200.000	0.692	145.802	219.676	2199.856	-15.826	-13.128	0.314	20.563
2300.000	0.741	151.754	216.797	2299.850	-16.772	-12.546	0.033	20.945

2400.000	0.539	133.435	213.938	2399.844	-17.527	-11.795	0.367	21.127
2500.000	0.518	80.369	211.564	2499.837	-17.524	-10.766	0.556	20.566
2600.000	0.541	82.677	209.195	2599.831	-17.371	-9.707	0.013	19.899
2700.000	0.767	76.404	206.435	2699.823	-17.096	-8.500	0.273	19.092
2800.000	0.840	76.622	202.887	2799.813	-16.817	-7.099	0.163	18.254
2900.000	1.158	87.057	197.279	2899.795	-16.885	-5.252	0.561	17.683
3000.000	1.267	87.346	191.083	2999.776	-16.841	-3.299	0.194	17.161
3100.000	1.173	81.480	185.104	3099.759	-16.522	-1.476	0.144	16.588
3200.000	1.197	69.117	178.565	3199.739	-15.952	0.399	0.250	15.957
3300.000	1.430	80.304	170.627	3299.713	-15.066	2.487	0.296	15.270
3400.000	1.771	62.107	159.725	3399.671	-13.928	5.145	0.606	14.848
3500.000	1.840	60.426	147.825	3499.623	-12.551	7.896	0.119	14.828
3600.000	2.002	89.051	136.344	3599.570	-11.308	10.790	0.910	15.630
3700.000	2.134	80.886	128.036	3699.517	-10.957	14.006	0.383	17.783
3800.000	1.807	72.115	120.633	3799.465	-10.129	17.105	0.207	19.879
3900.000	1.954	76.952	114.446	3899.409	-9.238	20.321	0.217	22.322
4000.000	2.168	95.670	109.829	3999.346	-8.574	23.776	0.694	25.275
4100.000	2.693	85.153	106.295	4099.263	-8.135	27.829	0.657	28.993
4200.000	2.872	84.246	103.295	4199.157	-7.656	32.399	0.088	33.291
4300.000	2.779	83.484	100.262	4299.034	-6.743	37.243	0.114	37.848
4400.000	2.673	78.022	97.910	4398.917	-5.832	41.978	0.512	42.382
4500.000	2.692	79.949	96.215	4498.817	-5.048	46.358	0.105	46.632
4600.000	2.064	103.999	95.884	4598.739	-5.177	50.235	1.080	50.501
4700.000	1.853	125.001	97.111	4698.670	-6.686	53.594	0.801	54.009
4800.000	1.374	157.600	99.030	4798.627	-8.805	55.402	1.028	56.097
4900.000	1.407	161.929	101.121	4898.598	-11.054	56.232	0.105	57.308
5000.000	1.264	161.863	102.929	4998.574	-13.080	56.976	0.312	58.458
5100.000	0.918	161.573	104.499	5098.556	-14.882	57.548	0.327	59.441
5200.000	0.973	161.796	105.944	5198.541	-16.555	57.946	0.082	60.264
5300.000	0.993	168.283	107.332	5298.527	-18.196	58.305	0.221	61.078
5400.000	1.011	160.349	108.646	5398.514	-19.774	58.601	0.154	61.847
5500.000	0.786	170.910	109.853	5498.502	-21.265	58.895	0.178	62.617
5600.000	0.668	156.376	110.646	5598.495	-22.329	59.260	0.536	63.327
5700.000	0.705	131.212	111.208	5698.489	-23.207	59.807	0.318	64.152
5800.000	0.496	123.705	111.574	5798.484	-23.951	60.574	0.150	65.137
5900.000	0.600	98.971	111.510	5898.480	-24.200	61.404	0.313	66.001
6000.000	0.292	87.349	111.291	5998.476	-24.245	62.216	0.305	66.773
6100.000	0.240	74.158	111.008	6098.473	-24.142	62.866	0.222	67.342
6200.000	0.401	12.120	110.685	6198.472	-23.902	63.304	0.386	67.666
6300.000	0.376	344.017	110.298	6298.470	-23.441	63.377	0.156	67.573
6400.000	0.318	1.842	109.836	6398.469	-22.875	63.412	0.069	67.412
6500.000	0.358	1.474	109.281	6498.466	-22.230	63.546	0.111	67.322
6600.000	0.412	348.546	108.621	6598.463	-21.435	63.616	0.147	67.130
6700.000	0.475	336.208	107.947	6698.458	-20.529	63.383	0.125	66.624
6800.000	0.269	15.402	107.264	6798.454	-19.702	63.398	0.418	66.389
6900.000	0.654	48.087	106.667	6898.450	-19.165	64.014	0.441	66.821