

**GyroTracer Directional:**

Date: 9/20/2018  
 Operator : Adrian Bruner  
 API: 05-123-25435  
 Well Name: **Spike State CC 30-22**  
 Field : Noble Energy Inc  
 Tool Type And Number: 1717  
 Bottom Depth : 6700.00  
 Total Well Depth: 7394.00  
 Latitude : 40.283347 N  
 Longitude : 104.475427 W  
 Grid Offset : 0.66

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

Northing: 0.00      Easting: 0.00      Altitude: 4765.00

**Description:**

*Azimuth measured in degrees and referenced to local grid*

*Inclination measured from Vertical*

*Length measured in US survey feet*

Start Time: 9/20/2018 12:38

End Time: 9/20/2018 13:43

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	0.240	235.535	274.086	100.000	0.030	-0.420	0.240	0.421
200.000	0.287	252.970	258.854	199.999	-0.168	-0.851	0.085	0.868
300.000	0.270	223.404	256.098	299.998	-0.303	-1.222	0.119	1.259
400.000	0.083	44.471	248.533	399.997	-0.467	-1.187	0.615	1.276
500.000	0.098	17.164	246.339	499.997	-0.503	-1.147	0.137	1.253
600.000	0.348	335.633	253.576	599.996	-0.357	-1.211	0.308	1.263
700.000	0.361	290.473	273.216	699.994	0.095	-1.688	0.324	1.691
800.000	0.157	356.680	284.185	799.992	0.514	-2.033	0.327	2.097
900.000	0.258	291.495	291.281	899.990	0.948	-2.435	0.124	2.613
1000.000	0.426	302.057	295.361	999.988	1.349	-2.845	0.190	3.149
1100.000	0.271	282.551	297.230	1099.985	1.766	-3.431	0.097	3.859
1200.000	0.382	309.628	298.474	1199.983	2.037	-3.756	0.206	4.273
1300.000	0.388	334.700	299.098	1299.982	2.351	-4.224	0.124	4.834
1400.000	0.439	321.063	299.788	1399.980	2.679	-4.681	0.150	5.393
1500.000	0.258	265.221	298.573	1499.977	2.863	-5.258	0.328	5.987
1600.000	0.266	265.254	296.049	1599.976	2.795	-5.719	0.032	6.366
1700.000	0.417	236.478	292.423	1699.974	2.596	-6.290	0.225	6.805
1800.000	0.279	57.050	289.775	1799.972	2.457	-6.833	0.574	7.262
1900.000	0.328	222.789	286.579	1899.969	2.210	-7.422	0.428	7.744
2000.000	0.164	312.512	284.032	1999.967	1.984	-7.939	0.351	8.183
2100.000	0.362	307.735	283.852	2099.965	2.079	-8.430	0.042	8.682
2200.000	0.188	316.863	284.463	2199.963	2.288	-8.869	0.127	9.160
2300.000	0.338	7.601	285.097	2299.961	2.534	-9.394	0.310	9.730

2400.000	0.297	2.085	287.590	2399.958	3.094	-9.759	0.194	10.238
2500.000	1.503	13.814	295.808	2499.944	4.644	-9.604	1.112	10.668
2600.000	2.044	12.559	310.391	2599.894	7.762	-9.123	0.490	11.978
2700.000	1.922	11.764	322.775	2699.832	11.228	-8.530	0.180	14.101
2800.000	1.730	4.713	331.153	2799.777	14.473	-7.972	0.390	16.523
2900.000	1.774	13.105	337.299	2899.732	17.358	-7.261	0.246	18.815
3000.000	1.661	353.893	340.094	2999.686	20.315	-7.356	0.547	21.605
3100.000	1.063	343.946	341.344	3099.650	22.938	-7.744	0.518	24.210
3200.000	0.949	343.698	341.642	3199.632	24.771	-8.220	0.061	26.099
3300.000	0.461	329.226	341.453	3299.624	25.908	-8.693	0.611	27.328
3400.000	0.377	308.056	340.848	3399.620	26.492	-9.201	0.194	28.045
3500.000	0.210	255.734	340.303	3499.618	26.804	-9.596	0.225	28.470
3600.000	0.136	278.939	339.992	3599.618	26.868	-9.784	0.022	28.594
3700.000	0.245	248.202	339.216	3699.617	26.802	-10.173	0.089	28.668
3800.000	0.272	192.863	338.704	3799.615	26.515	-10.336	0.175	28.458
3900.000	0.216	171.192	338.308	3899.614	26.064	-10.368	0.103	28.051
4000.000	0.438	175.996	337.848	3999.611	25.419	-10.348	0.211	27.444
4100.000	0.618	171.761	337.433	4099.609	24.754	-10.287	0.076	26.806
4200.000	0.450	184.842	336.922	4199.606	24.034	-10.241	0.116	26.125
4300.000	0.402	188.221	336.188	4299.604	23.497	-10.369	0.039	25.683
4400.000	0.614	247.016	334.639	4399.601	23.193	-10.994	0.552	25.667
4500.000	1.846	226.469	329.873	4499.575	21.976	-12.753	1.319	25.408
4600.000	2.011	244.611	322.999	4599.527	20.555	-15.490	0.858	25.738
4700.000	1.490	259.137	316.725	4699.477	19.533	-18.391	0.598	26.829
4800.000	1.213	263.273	312.578	4799.449	18.998	-20.676	0.265	28.079
4900.000	0.803	249.335	309.755	4899.434	18.590	-22.348	0.470	29.069
5000.000	1.026	259.369	307.534	4999.422	18.309	-23.831	0.248	30.052
5100.000	0.785	281.738	306.067	5099.413	18.257	-25.068	0.394	31.012
5200.000	0.637	358.264	306.222	5199.409	18.784	-25.644	0.785	31.788
5300.000	0.707	12.744	307.591	5299.404	19.727	-25.625	0.206	32.339
5400.000	0.966	24.702	309.996	5399.393	21.065	-25.108	0.459	32.774
5500.000	1.368	41.073	313.444	5499.373	22.630	-23.894	0.594	32.909
5600.000	1.564	34.528	317.701	5599.342	24.609	-22.391	0.360	33.271
5700.000	1.846	46.138	322.321	5699.301	26.945	-20.810	0.533	34.045
5800.000	1.701	32.131	327.318	5799.252	29.399	-18.860	0.251	34.928
5900.000	1.872	27.274	331.858	5899.204	31.874	-17.049	0.281	36.148
6000.000	1.632	45.552	336.529	5999.152	34.147	-14.827	0.646	37.227
6100.000	1.966	51.770	341.226	6099.096	36.381	-12.367	0.289	38.425
6200.000	2.184	54.492	346.310	6199.028	38.485	-9.374	0.269	39.610
6300.000	2.618	51.113	351.843	6298.936	40.932	-5.867	0.449	41.351
6400.000	3.005	54.539	357.037	6398.827	43.855	-2.270	0.673	43.913
6500.000	2.987	44.281	1.709	6498.704	47.133	1.406	0.520	47.154
6600.000	3.668	34.651	5.063	6598.534	51.972	4.605	0.868	52.176
6700.000	3.103	22.768	6.906	6698.339	57.628	6.980	0.984	58.049

