

GyroTracer Directional:

Date: 1/11/2019
 Operator : Adrian Bruner
 API : 05-123-16845
 Well Name : **Reed 42-34**
 Field : Noble Energy Inc
 Tool Number: 1717
 Bottom Depth : 6900.00
 Total Well Depth: 7121.00
 Latitude : 40.35709 N
 Longitude : 104.61479 W
 Grid Offset : 0.54
 Datum: NAD 83

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

Northing: 0.00 Easting: 0.00 GLE: 4631.00

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: 1/11/2019 8:36

End Time: 1/11/2019 9:45

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	0.280	17.537	338.629	100.000	0.460	-0.180	0.280	0.494
200.000	0.353	18.375	354.054	199.999	0.764	-0.080	0.074	0.769
300.000	0.230	32.419	5.386	299.998	1.038	0.098	0.235	1.043
400.000	0.231	25.317	13.390	399.998	1.264	0.301	0.026	1.300
500.000	0.314	31.782	18.090	499.997	1.492	0.487	0.081	1.570
600.000	0.277	28.037	21.044	599.996	1.741	0.670	0.041	1.866
700.000	0.356	12.529	22.921	699.996	1.987	0.840	0.122	2.158
800.000	0.250	42.000	23.186	799.995	2.241	0.960	0.095	2.438
900.000	0.320	15.550	22.190	899.994	2.452	1.000	0.183	2.648
1000.000	0.249	247.016	19.146	999.994	2.571	0.893	0.462	2.721
1100.000	0.426	251.833	10.995	1099.993	2.412	0.469	0.349	2.457
1200.000	0.520	259.605	355.493	1199.990	2.268	-0.179	0.145	2.275
1300.000	0.320	257.099	337.700	1299.987	2.173	-0.891	0.242	2.349
1400.000	0.427	297.566	323.117	1399.984	2.174	-1.631	0.294	2.717
1500.000	0.474	283.542	316.987	1499.981	2.495	-2.328	0.095	3.412
1600.000	0.460	305.014	313.704	1599.978	2.842	-2.974	0.206	4.113
1700.000	1.067	251.628	304.985	1699.972	2.802	-4.003	0.889	4.886
1800.000	0.927	250.125	291.304	1799.957	2.196	-5.631	0.068	6.044
1900.000	1.316	260.813	282.997	1899.939	1.720	-7.451	0.423	7.647

2000.000	1.176	273.895	280.063	1999.915	1.702	-9.590	0.290	9.740
2100.000	1.168	271.043	278.524	2099.889	1.776	-11.852	0.131	11.984
2200.000	1.577	284.393	277.626	2199.862	1.889	-14.106	0.512	14.232
2300.000	1.400	291.109	277.857	2299.835	2.260	-16.375	0.238	16.530
2400.000	1.468	301.044	278.351	2399.808	2.735	-18.631	0.265	18.831
2500.000	1.395	276.943	279.280	2499.781	3.407	-20.853	0.560	21.130
2600.000	1.407	296.177	280.673	2599.753	4.330	-22.975	0.457	23.380
2700.000	1.219	311.872	282.372	2699.731	5.432	-24.766	0.384	25.355
2800.000	1.288	287.027	283.519	2799.712	6.346	-26.396	0.562	27.148
2900.000	0.721	274.105	283.441	2899.701	6.648	-27.818	0.518	28.602
3000.000	0.889	280.044	283.449	2999.692	6.956	-29.088	0.199	29.908
3100.000	0.938	293.335	283.247	3099.683	7.164	-30.431	0.183	31.263
3200.000	1.351	269.193	283.100	3199.669	7.452	-32.023	0.750	32.878
3300.000	1.638	267.291	282.194	3299.638	7.449	-34.470	0.543	35.266
3400.000	2.218	279.036	282.095	3399.575	8.121	-37.896	0.684	38.756
3500.000	3.260	271.592	281.843	3499.442	8.997	-42.904	1.089	43.838
3600.000	3.091	270.125	281.016	3599.292	9.407	-48.320	0.091	49.227
3700.000	2.943	271.623	280.392	3699.151	9.824	-53.570	0.325	54.463
3800.000	2.446	280.552	279.910	3799.039	10.178	-58.259	0.639	59.141
3900.000	1.827	270.815	279.943	3898.962	10.884	-62.086	0.754	63.033
4000.000	1.228	275.248	279.865	3998.929	11.234	-64.598	0.692	65.567
4100.000	1.017	270.633	279.704	4098.910	11.374	-66.513	0.126	67.478
4200.000	0.905	299.857	280.092	4198.899	12.068	-67.800	0.485	68.865
4300.000	0.792	310.377	280.582	4298.889	12.875	-68.918	0.096	70.111
4400.000	0.770	302.101	281.171	4398.879	13.808	-69.917	0.124	71.267
4500.000	0.720	330.855	281.741	4498.871	14.707	-70.760	0.387	72.272
4600.000	0.269	352.313	282.159	4598.868	15.324	-71.121	0.481	72.753
4700.000	0.929	12.604	282.880	4698.862	16.250	-71.064	0.632	72.898
4800.000	1.095	21.403	284.261	4798.846	17.927	-70.529	0.210	72.772
4900.000	1.118	24.693	285.757	4898.828	19.723	-69.900	0.101	72.629
5000.000	1.203	13.418	287.434	4998.805	21.712	-69.143	0.233	72.472
5100.000	1.395	26.872	289.370	5098.774	24.034	-68.363	0.359	72.464
5200.000	1.362	58.236	291.279	5198.741	26.042	-66.868	0.785	71.760
5300.000	1.337	86.650	292.507	5298.712	26.772	-64.611	0.671	69.938
5400.000	1.286	78.661	293.551	5398.685	27.176	-62.348	0.683	68.013
5500.000	1.172	63.456	294.768	5498.664	27.893	-60.455	0.398	66.580
5600.000	0.889	55.413	295.839	5598.650	28.551	-58.957	0.398	65.506
5700.000	0.846	57.651	297.129	5698.636	29.525	-57.624	0.072	64.747
5800.000	0.850	107.907	297.806	5798.626	29.696	-56.310	0.595	63.660
5900.000	0.808	140.975	297.904	5898.616	29.145	-55.036	0.505	62.277
6000.000	1.228	132.179	297.258	5998.601	27.796	-53.951	0.383	60.691
6100.000	1.196	146.041	296.455	6098.581	26.249	-52.751	0.363	58.921
6200.000	1.313	139.082	295.858	6198.558	24.812	-51.194	0.271	56.890
6300.000	1.410	156.238	294.773	6298.529	22.959	-49.751	0.480	54.793
6400.000	1.552	152.352	293.082	6398.495	20.690	-48.550	0.134	52.775
6500.000	1.755	165.621	291.015	6498.454	18.156	-47.259	0.396	50.626
6600.000	1.956	142.551	288.997	6598.403	15.623	-45.381	0.754	47.995
6700.000	2.288	143.125	286.317	6698.341	12.720	-43.453	0.295	45.277

6800.000	2.515	122.460	284.259	6798.267	10.301	-40.532	0.816	41.821
6900.000	2.520	133.810	283.179	6898.178	8.595	-36.705	0.520	37.698