

GyroTracer Directional:

Date: 12/10/2018
 Operator : Adrian Bruner
 API: 05-123-23352
 Well Name: **Steve J 30-4J**
 Field : Noble Energy Inc
 Tool Type And Number: 1719
 Bottom Depth : 7500.00
 Total Well Depth: 8155.00
 Latitude : 40.37261 N
 Longitude : 104.82972 W
 Grid Offset : 0.43

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

Northing: 0.00 Easting: 0.00 Altitude: 4959.00

Description:

Azimuth measured in degrees and referenced to local grid

Inclination measured from Vertical

Length measured in US survey feet

Start Time: 12/10/2018 13:14

End Time: 12/10/2018 15:29

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	0.080	20.316	12.095	100.000	0.140	0.030	0.080	0.143
200.000	0.382	28.970	53.226	199.998	0.380	0.508	0.377	0.634
300.000	0.397	77.264	48.527	299.996	0.558	0.631	0.387	0.842
400.000	0.084	63.542	36.669	399.994	0.682	0.508	0.283	0.851
500.000	0.701	296.969	3.772	499.991	1.149	0.076	0.782	1.152
600.000	1.211	315.398	330.524	599.978	2.023	-1.143	0.706	2.324
700.000	1.111	313.653	320.667	699.963	3.015	-2.471	0.198	3.898
800.000	1.173	304.233	317.160	799.948	4.060	-3.765	0.255	5.537
900.000	1.603	322.111	314.449	899.928	5.182	-5.283	0.449	7.400
1000.000	2.995	350.691	325.310	999.849	8.838	-6.118	1.866	10.749
1100.000	5.500	351.800	332.023	1099.566	15.805	-8.396	2.480	17.897
1200.000	6.697	357.768	340.045	1199.004	26.295	-9.547	1.347	27.974
1300.000	8.938	3.951	347.040	1298.066	39.919	-9.187	2.365	40.962
1400.000	9.842	1.762	351.611	1396.765	55.955	-8.252	0.970	56.561
1500.000	11.350	357.980	353.583	1495.032	74.473	-8.375	1.652	74.943
1600.000	12.407	354.462	354.102	1592.868	95.097	-9.825	1.277	95.603
1700.000	13.796	353.465	354.128	1690.292	117.524	-12.087	1.428	118.144
1800.000	14.961	352.853	353.871	1787.115	142.311	-15.281	1.190	143.129
1900.000	13.550	351.882	353.625	1883.981	166.911	-18.648	1.456	167.950
2000.000	13.660	352.358	353.466	1981.217	190.046	-21.769	0.164	191.289
2100.000	13.432	356.135	353.417	2078.406	213.408	-24.626	0.923	214.824
2200.000	13.086	357.542	353.746	2175.740	236.308	-25.898	0.487	237.723
2300.000	14.054	356.785	354.131	2272.872	260.060	-26.734	1.004	261.430

2400.000	13.915	354.656	354.286	2369.858	284.362	-28.455	0.545	285.782
2500.000	13.720	354.379	354.275	2467.071	307.681	-30.845	0.181	309.224
2600.000	13.600	353.661	354.227	2564.279	330.997	-33.464	0.222	332.685
2700.000	13.940	353.665	354.179	2661.372	354.776	-36.171	0.327	356.615
2800.000	14.190	355.559	354.258	2758.402	378.888	-38.096	0.516	380.798
2900.000	14.580	355.990	354.338	2855.311	403.483	-40.000	0.403	405.461
3000.000	14.290	355.156	354.407	2952.075	428.634	-41.973	0.368	430.684
3100.000	13.482	355.677	354.481	3049.165	452.508	-43.725	0.803	454.616
3200.000	14.055	356.065	354.546	3146.364	475.940	-45.442	0.585	478.104
3300.000	13.332	355.244	354.599	3243.483	499.695	-47.246	0.764	501.923
3400.000	13.633	348.023	354.482	3340.856	522.211	-50.452	1.704	524.643
3500.000	13.468	348.207	354.194	3437.983	545.473	-55.461	0.165	548.285
3600.000	14.211	350.096	354.000	3535.095	568.931	-59.800	0.856	572.065
3700.000	12.822	350.536	353.875	3632.553	591.027	-63.427	1.350	594.420
3800.000	12.076	349.768	353.734	3730.205	612.222	-67.224	0.767	615.901
3900.000	14.071	351.081	353.625	3827.694	634.170	-70.858	2.009	638.116
4000.000	14.692	351.271	353.532	3924.408	659.291	-74.739	0.601	663.514
4100.000	15.585	351.380	353.443	4020.838	685.456	-78.787	0.889	689.969
4200.000	15.323	350.661	353.346	4117.128	712.100	-83.078	0.325	716.930
4300.000	14.246	349.788	353.255	4213.635	737.954	-87.277	1.093	743.097
4400.000	13.389	348.588	353.141	4310.695	761.621	-91.616	0.888	767.112
4500.000	14.070	350.434	353.015	4407.910	784.612	-96.125	0.828	790.478
4600.000	15.768	355.690	353.051	4504.320	811.004	-98.845	2.173	817.005
4700.000	14.814	355.651	353.124	4600.779	837.286	-100.962	0.951	843.351
4800.000	13.850	355.708	353.201	4697.676	861.926	-102.759	0.938	868.029
4900.000	13.788	355.756	353.269	4794.782	885.744	-104.537	0.063	891.892
5000.000	13.726	355.804	353.334	4891.913	909.461	-106.287	0.063	915.650
5100.000	13.665	355.852	353.397	4989.070	933.074	-108.009	0.063	939.304
5200.000	13.603	355.900	353.458	5086.252	956.584	-109.704	0.063	962.854
5300.000	13.541	355.948	353.516	5183.460	979.992	-111.372	0.063	986.300
5400.000	13.480	355.996	353.573	5280.692	1003.296	-113.013	0.063	1009.641
5500.000	13.418	356.044	353.628	5377.950	1026.497	-114.627	0.063	1032.878
5600.000	13.245	356.021	353.681	5475.245	1049.543	-116.219	0.174	1055.958
5700.000	12.981	355.939	353.730	5572.638	1072.174	-117.809	0.265	1078.627
5800.000	12.716	355.858	353.773	5670.134	1094.355	-119.400	0.265	1100.849
5900.000	12.452	355.776	353.813	5767.732	1116.084	-120.989	0.265	1122.622
6000.000	11.831	353.566	353.842	5865.414	1137.416	-122.725	0.778	1144.018
6100.000	10.717	355.006	353.857	5963.572	1156.425	-124.465	1.120	1163.104
6200.000	8.950	355.304	353.870	6062.138	1173.202	-126.000	1.767	1179.948
6300.000	6.900	355.755	353.889	6161.207	1186.723	-127.052	2.058	1193.504
6400.000	5.302	351.816	353.893	6260.598	1197.663	-128.131	1.544	1204.497
6500.000	5.360	354.522	353.898	6360.184	1206.702	-129.003	0.261	1213.578
6600.000	3.883	356.954	353.912	6459.933	1213.691	-129.447	1.443	1220.575
6700.000	3.173	357.249	353.940	6559.779	1219.154	-129.434	0.718	1226.005
6800.000	1.828	353.840	353.941	6659.702	1222.991	-129.818	0.927	1229.862
6900.000	0.663	309.731	353.913	6759.670	1225.227	-130.664	1.491	1232.175
7000.000	0.560	273.663	353.881	6859.658	1226.296	-131.454	0.378	1233.322
7100.000	0.196	296.725	353.846	6959.651	1226.957	-132.285	0.487	1234.068
7200.000	0.181	248.295	353.820	7059.647	1227.393	-132.906	0.178	1234.568
7300.000	0.791	260.926	353.798	7159.643	1227.725	-133.427	0.654	1234.954

7400.000	0.778	264.439	353.777	7259.639	1227.891	-133.889	0.070	1235.169
7500.000	0.169	38.201	353.774	7359.635	1227.836	-133.939	0.923	1235.120