

GyroTracer Directional:

Date: 8/13/2018
 Operator : Adrian Bruner
 API: 05-123-19132
 Well Name: **HSR Gutteresen 14-1**
 Field : Noble Energy Inc
 Tool Type And Number: 1717
 Bottom Depth : 6700.00
 Total Well Depth: 7475.00
 Latitude : 40.24907 N
 Longitude : 104.50196 W
 Grid Offset : 0.64

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

Northing: 0.00 Easting: 0.00 Altitude: 4754.00

Description:

Azimuth measured in degrees and referenced to local grid

Inclination measured from Vertical

Length measured in US survey feet

Start Time: 8/13/2018 13:04

End Time: 8/13/2018 14:10

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	0.440	273.580	278.130	100.000	0.110	-0.770	0.440	0.778
200.000	0.347	320.108	282.554	199.997	0.307	-1.378	0.332	1.412
300.000	0.213	310.343	289.723	299.996	0.642	-1.792	0.227	1.904
400.000	0.356	326.453	295.219	399.994	1.012	-2.149	0.144	2.375
500.000	0.297	299.090	298.701	499.993	1.406	-2.569	0.167	2.929
600.000	0.383	319.715	300.900	599.991	1.762	-2.944	0.142	3.431
700.000	0.498	343.090	307.831	699.988	2.472	-3.184	0.218	4.031
800.000	0.343	349.982	314.604	799.985	3.278	-3.324	0.146	4.669
900.000	0.399	15.509	320.783	899.983	3.891	-3.175	0.246	5.022
1000.000	0.300	39.858	326.087	999.981	4.390	-2.952	0.188	5.290
1100.000	0.338	39.030	331.263	1099.979	4.857	-2.663	0.038	5.540
1200.000	0.301	48.399	335.713	1199.978	5.320	-2.401	0.069	5.837
1300.000	0.240	5.694	339.355	1299.976	5.748	-2.166	0.237	6.143
1400.000	0.092	34.896	341.586	1399.976	6.112	-2.035	0.142	6.442
1500.000	0.273	27.465	343.736	1499.975	6.470	-1.887	0.223	6.739
1600.000	0.235	334.571	344.452	1599.974	6.917	-1.925	0.206	7.180
1700.000	0.461	312.410	343.265	1699.972	7.444	-2.238	0.276	7.773
1800.000	0.512	313.456	340.128	1799.968	7.950	-2.874	0.039	8.454
1900.000	0.678	277.751	335.047	1899.961	8.436	-3.925	0.399	9.305
2000.000	0.949	283.714	328.994	1999.949	8.918	-5.360	0.296	10.405
2100.000	1.266	288.124	322.884	2099.931	9.487	-7.179	0.337	11.897
2200.000	1.170	287.343	317.846	2199.909	10.135	-9.175	0.126	13.671
2300.000	1.298	282.785	313.483	2299.885	10.698	-11.280	0.158	15.546

2400.000	1.570	286.488	309.726	2399.856	11.304	-13.604	0.330	17.688
2500.000	1.683	293.721	307.888	2499.817	12.533	-16.106	0.221	20.408
2600.000	1.480	301.408	306.703	2599.781	13.763	-18.463	0.301	23.028
2700.000	1.556	298.225	305.714	2699.745	14.973	-20.826	0.215	25.650
2800.000	1.769	300.894	305.041	2799.706	16.328	-23.284	0.251	28.439
2900.000	2.010	302.945	304.780	2899.650	18.122	-26.094	0.286	31.770
3000.000	2.020	299.771	304.394	2999.582	20.020	-29.246	0.132	35.442
3100.000	1.925	305.598	304.126	3099.515	21.913	-32.334	0.231	39.060
3200.000	1.842	304.131	304.200	3199.452	23.946	-35.236	0.168	42.603
3300.000	1.774	294.727	303.897	3299.400	25.548	-38.024	0.308	45.810
3400.000	1.754	284.074	303.072	3399.353	26.620	-40.879	0.323	48.783
3500.000	1.822	272.881	301.483	3499.306	26.888	-43.907	0.369	51.486
3600.000	1.967	278.785	300.122	3599.254	27.327	-47.099	0.231	54.452
3700.000	2.078	282.110	299.068	3699.199	27.975	-50.327	0.157	57.580
3800.000	2.100	283.799	297.912	3799.132	28.565	-53.923	0.083	61.022
3900.000	2.256	284.955	297.023	3899.057	29.430	-57.702	0.123	64.774
4000.000	2.629	287.026	296.399	3998.964	30.679	-61.806	0.364	69.002
4100.000	2.813	286.007	295.739	4098.857	31.942	-66.256	0.131	73.554
4200.000	3.394	288.872	294.975	4198.717	33.229	-71.343	0.566	78.702
4300.000	3.964	278.869	294.521	4298.517	35.258	-77.291	0.877	84.953
4400.000	4.488	280.119	293.333	4398.238	36.506	-84.634	0.645	92.171
4500.000	4.440	285.118	292.499	4497.923	38.259	-92.369	0.380	99.979
4600.000	4.660	287.789	292.041	4597.607	40.482	-99.991	0.301	107.875
4700.000	4.800	288.881	291.820	4697.262	43.174	-107.832	0.165	116.154
4800.000	4.195	293.861	291.806	4796.957	46.047	-115.090	0.722	123.960
4900.000	3.956	295.923	291.895	4896.704	48.868	-121.592	0.282	131.045
5000.000	3.333	289.806	291.879	4996.498	51.218	-127.543	0.646	137.443
5100.000	2.424	301.355	291.928	5096.369	53.212	-132.182	1.057	142.491
5200.000	1.675	323.003	292.359	5196.308	55.434	-134.767	1.075	145.723
5300.000	1.091	354.182	293.005	5296.274	57.690	-135.877	0.980	147.617
5400.000	0.401	353.757	293.515	5396.261	59.221	-136.099	0.696	148.425
5500.000	0.975	18.896	293.967	5496.254	60.387	-135.841	0.624	148.659
5600.000	0.810	10.721	294.696	5596.235	62.081	-135.001	0.102	148.591
5700.000	0.339	19.653	295.219	5696.225	63.306	-134.416	0.486	148.577
5800.000	0.652	24.351	295.561	5796.219	63.926	-133.656	0.374	148.157
5900.000	0.590	87.699	295.741	5896.215	64.090	-132.924	0.649	147.568
6000.000	0.659	119.510	296.091	5996.206	64.539	-131.794	0.368	146.748
6100.000	0.705	70.694	296.300	6096.201	64.740	-130.990	0.535	146.115
6200.000	0.559	78.951	296.572	6196.196	65.028	-130.018	0.088	145.374
6300.000	0.606	73.300	296.839	6296.190	65.259	-128.974	0.068	144.545
6400.000	0.810	52.920	297.171	6396.183	65.601	-127.806	0.330	143.659
6500.000	0.846	69.474	297.582	6496.173	66.094	-126.522	0.232	142.745
6600.000	0.595	69.055	297.965	6596.166	66.629	-125.495	0.248	142.086
6700.000	0.800	49.107	298.335	6696.160	67.144	-124.516	0.331	141.465

