

GyroTracer Directional:

Date: 10/4/2018
 Operator : Adrian Bruner
 API: 05-123-26537
 Well Name: **Kammerzell J 29-19**
 Field : Noble Energy Inc
 Tool Type And Number: 1605
 Bottom Depth : 7250.00
 Total Well Depth: 7536.00
 Latitude : 40.374131 N
 Longitude : 104.807899 W
 Grid Offset : 0.45

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

Northing: 0.00 Easting: 0.00 Altitude: 4923.00

Description:

Azimuth measured in degrees and referenced to local grid

Inclination measured from Vertical

Length measured in US survey feet

Start Time: 10/4/2018 7:19

End Time: 10/4/2018 8:27

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	0.460	241.776	225.000	100.000	-0.560	-0.560	0.460	0.792
200.000	0.466	227.942	229.497	199.997	-0.979	-1.146	0.119	1.507
300.000	0.583	218.541	225.504	299.994	-1.568	-1.596	0.135	2.237
400.000	0.393	192.821	220.648	399.990	-2.320	-1.992	0.196	3.058
500.000	0.577	193.274	216.696	499.986	-3.096	-2.307	0.226	3.861
600.000	0.382	182.521	212.474	599.982	-3.931	-2.502	0.118	4.659
700.000	0.591	182.461	207.301	699.976	-4.964	-2.562	0.211	5.587
800.000	0.584	179.857	202.413	799.970	-6.071	-2.504	0.044	6.567
900.000	0.517	164.683	198.562	899.965	-7.001	-2.351	0.108	7.386
1000.000	0.479	156.975	195.100	999.961	-7.759	-2.094	0.050	8.037
1100.000	0.446	152.147	192.614	1099.958	-8.477	-1.897	0.048	8.687
1200.000	0.710	173.617	190.710	1199.954	-9.335	-1.766	0.315	9.501
1300.000	0.670	191.126	189.396	1299.949	-10.329	-1.709	0.197	10.469
1400.000	0.662	192.757	189.183	1399.942	-11.452	-1.851	0.019	11.600
1500.000	0.702	180.912	189.804	1499.935	-12.555	-2.170	0.141	12.741
1600.000	0.793	186.144	189.823	1599.928	-13.690	-2.370	0.039	13.894
1700.000	0.754	189.497	189.692	1699.922	-14.795	-2.527	0.080	15.009
1800.000	0.304	220.969	190.650	1799.917	-15.644	-2.942	0.261	15.918
1900.000	0.359	230.362	192.192	1899.914	-16.157	-3.491	0.079	16.530
2000.000	0.420	248.493	194.119	1999.911	-16.463	-4.141	0.200	16.976
2100.000	0.508	254.424	196.523	2099.908	-16.652	-4.940	0.048	17.369
2200.000	0.694	251.573	198.985	2199.903	-16.807	-5.782	0.211	17.773
2300.000	0.620	266.902	201.172	2299.899	-17.026	-6.594	0.202	18.258

2400.000	0.470	300.333	203.231	2399.896	-17.048	-7.318	0.413	18.552
2500.000	0.393	310.904	205.945	2499.892	-16.518	-8.037	0.159	18.369
2600.000	0.694	309.846	208.719	2599.887	-15.870	-8.696	0.460	18.096
2700.000	0.646	295.877	211.978	2699.881	-15.321	-9.565	0.179	18.062
2800.000	0.800	290.416	215.887	2799.873	-14.756	-10.676	0.092	18.213
2900.000	0.958	282.720	220.072	2899.863	-14.218	-11.961	0.192	18.580
3000.000	0.989	274.751	224.237	2999.850	-13.851	-13.487	0.189	19.333
3100.000	1.200	278.328	228.280	3099.834	-13.528	-15.173	0.276	20.329
3200.000	1.123	267.970	231.705	3199.815	-13.509	-17.109	0.222	21.800
3300.000	1.389	259.482	234.188	3299.795	-13.782	-19.101	0.325	23.554
3400.000	1.348	229.751	235.656	3399.771	-14.420	-21.105	0.791	25.561
3500.000	2.165	247.500	237.268	3499.725	-15.376	-23.921	0.934	28.437
3600.000	1.810	252.093	238.976	3599.667	-16.318	-27.131	0.500	31.660
3700.000	1.716	253.651	239.656	3699.621	-17.504	-29.901	0.079	34.647
3800.000	1.650	231.489	239.898	3799.574	-18.886	-32.578	0.681	37.657
3900.000	1.463	223.855	238.962	3899.535	-20.815	-34.589	0.348	40.369
4000.000	1.282	218.325	238.299	3999.503	-22.499	-36.428	0.248	42.816
4100.000	1.160	218.089	237.375	4099.476	-24.271	-37.915	0.151	45.019
4200.000	1.083	190.013	236.073	4199.455	-26.093	-38.790	0.657	46.750
4300.000	1.195	171.593	233.908	4299.432	-28.205	-38.690	0.317	47.880
4400.000	1.039	182.315	231.734	4399.409	-30.297	-38.411	0.314	48.921
4500.000	0.569	144.699	230.400	4499.399	-31.635	-38.240	0.658	49.630
4600.000	0.247	289.318	230.575	4599.397	-31.711	-38.570	0.699	49.932
4700.000	0.743	188.135	230.853	4699.395	-31.734	-38.982	0.892	50.266
4800.000	1.131	167.982	229.544	4799.384	-33.137	-38.858	0.451	51.068
4900.000	1.235	158.620	227.415	4899.362	-35.017	-38.100	0.197	51.748
5000.000	0.790	146.088	225.261	4999.341	-36.814	-37.151	0.929	52.302
5100.000	1.155	157.885	223.730	5099.328	-38.233	-36.575	0.088	52.911
5200.000	0.743	165.918	222.294	5199.317	-39.540	-35.971	0.298	53.454
5300.000	0.368	155.793	221.336	5299.312	-40.443	-35.575	0.448	53.863
5400.000	0.581	176.194	220.344	5399.306	-41.350	-35.122	0.289	54.253
5500.000	0.806	192.446	219.924	5499.300	-42.305	-35.402	0.348	55.163
5600.000	0.897	200.566	219.716	5599.287	-43.622	-36.237	0.159	56.710
5700.000	1.172	215.587	219.308	5699.269	-45.264	-37.058	0.424	58.499
5800.000	0.941	185.331	218.710	5799.254	-46.872	-37.565	0.592	60.067
5900.000	0.638	149.080	217.700	5899.243	-48.313	-37.341	0.814	61.061
6000.000	0.709	169.177	216.796	5999.235	-49.304	-36.878	0.288	61.570
6100.000	0.820	137.718	215.743	6099.227	-50.325	-36.219	0.446	62.003
6200.000	0.700	128.192	214.652	6199.220	-51.207	-35.393	0.182	62.248
6300.000	0.774	134.396	213.559	6299.211	-52.119	-34.574	0.067	62.544
6400.000	0.627	110.289	212.389	6399.202	-52.875	-33.542	0.405	62.616
6500.000	0.763	117.932	211.259	6499.194	-53.494	-32.473	0.017	62.579
6600.000	1.101	68.135	209.986	6599.183	-54.087	-31.210	0.839	62.446
6700.000	0.490	97.286	208.725	6699.172	-54.595	-29.921	0.476	62.256
6800.000	1.059	111.574	207.191	6799.157	-55.110	-28.311	0.318	61.957
6900.000	1.120	111.610	205.383	6899.138	-56.015	-26.578	0.178	62.001
7000.000	0.832	133.486	203.414	6999.114	-56.826	-24.607	0.519	61.925
7100.000	1.847	85.008	201.183	7099.078	-56.728	-21.984	1.213	60.839
7200.000	2.500	55.665	198.631	7199.007	-55.180	-18.603	1.267	58.232
7250.000	2.600	70.060	196.787	7256.703	-53.606	-16.172	0.460	55.993