

**GyroTracer Directional:**

Date: 9/7/2018  
 Operator : Adrian Bruner  
 API: 05-123-25077  
 Well Name : **Johnson C 29-9**  
 Field : Noble Energy Inc  
 Tool Type And Number: 1717  
 Bottom Depth : 6950.00  
 Total Well Depth: 7195.00  
 Latitude : 40.28708 N  
 Longitude : 104.58054 W  
 Grid Offset : 0.59

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

Northing: 0.00      Easting: 0.00      Altitude: 4801.00

**Description:**

*Azimuth measured in degrees and referenced to local grid*

*Inclination measured from Vertical*

*Length measured in US survey feet*

Start Time: 9/7/2018 9:33

End Time: 9/7/2018 10:47

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	0.200	279.145	323.130	100.000	0.280	-0.210	0.200	0.350
200.000	0.110	36.040	305.962	200.000	0.169	-0.232	0.261	0.287
300.000	0.145	114.513	290.061	299.999	0.118	-0.323	0.143	0.344
400.000	0.296	236.846	276.085	399.998	0.028	-0.261	0.373	0.262
500.000	0.249	67.931	226.550	499.998	-0.142	-0.150	0.493	0.207
600.000	0.312	41.049	181.180	599.997	-0.284	-0.006	0.185	0.284
700.000	0.824	45.991	75.104	699.993	0.130	0.490	0.552	0.507
800.000	1.836	39.503	55.397	799.966	1.552	2.249	1.067	2.733
900.000	2.180	38.479	48.835	899.913	3.920	4.483	0.438	5.955
1000.000	2.437	34.488	44.344	999.834	7.047	6.887	0.362	9.854
1100.000	2.244	36.699	43.085	1099.749	10.180	9.521	0.137	13.938
1200.000	1.889	48.691	43.135	1199.679	12.900	12.086	0.577	17.677
1300.000	1.443	61.450	43.957	1299.635	14.812	14.283	0.585	20.577
1400.000	1.088	51.661	45.202	1399.616	15.802	15.914	0.448	22.427
1500.000	0.885	37.182	45.537	1499.606	16.683	16.998	0.316	23.817
1600.000	0.696	12.577	44.748	1599.598	17.788	17.633	0.406	25.047
1700.000	0.557	324.674	42.829	1699.591	18.862	17.484	0.535	25.719
1800.000	0.739	306.629	39.976	1799.581	19.936	16.714	0.284	26.015
1900.000	0.718	330.723	36.939	1899.571	21.004	15.792	0.259	26.278
2000.000	1.294	21.924	34.836	1999.559	22.471	15.638	0.992	27.377
2100.000	1.586	40.522	34.489	2099.536	24.295	16.691	0.774	29.476
2200.000	1.451	62.814	35.560	2199.508	25.813	18.453	0.558	31.730
2300.000	1.740	72.868	37.799	2299.468	27.054	20.984	0.302	34.238

2400.000	2.260	84.776	40.984	2399.404	28.056	24.375	0.678	37.165
2500.000	2.374	88.167	44.938	2499.318	28.537	28.475	0.171	40.313
2600.000	2.078	89.222	48.648	2599.231	28.712	32.622	0.287	43.458
2700.000	2.023	93.502	51.702	2699.159	28.752	36.409	0.263	46.393
2800.000	1.993	88.105	53.959	2799.101	28.940	39.774	0.210	49.188
2900.000	1.911	91.675	56.008	2899.048	29.001	43.008	0.124	51.872
3000.000	1.605	63.921	57.510	2998.997	29.397	46.162	0.863	54.727
3100.000	1.438	85.764	58.932	3098.950	29.634	49.187	0.530	57.424
3200.000	1.475	82.328	59.966	3198.915	29.923	51.757	0.129	59.784
3300.000	1.137	76.353	60.398	3298.891	30.571	53.811	0.296	61.889
3400.000	0.874	58.251	60.406	3398.876	31.415	55.313	0.400	63.611
3500.000	0.438	54.687	60.406	3498.868	32.004	56.351	0.577	64.805
3600.000	0.289	79.085	60.583	3598.865	32.135	56.991	0.184	65.426
3700.000	0.269	130.743	60.874	3698.862	32.068	57.553	0.260	65.884
3800.000	0.427	104.809	61.320	3798.860	31.827	58.181	0.214	66.317
3900.000	0.452	114.181	61.901	3898.856	31.476	58.952	0.071	66.828
4000.000	0.836	134.326	62.686	3998.850	30.862	59.759	0.473	67.257
4100.000	0.595	172.988	63.614	4098.843	29.840	60.148	0.423	67.144
4200.000	0.666	211.086	64.456	4198.835	28.622	59.889	0.515	66.378
4300.000	0.985	215.263	65.204	4298.824	27.379	59.265	0.292	65.283
4400.000	0.686	210.159	65.811	4398.814	26.239	58.416	0.093	64.038
4500.000	0.801	228.516	66.323	4498.804	25.222	57.520	0.266	62.807
4600.000	1.348	228.956	66.954	4598.787	23.919	56.224	0.467	61.100
4700.000	1.240	238.905	67.503	4698.761	22.557	54.466	0.271	58.952
4800.000	1.307	240.685	67.851	4798.737	21.412	52.601	0.168	56.792
4900.000	0.907	213.338	68.102	4898.722	20.577	51.191	0.498	55.171
5000.000	0.761	242.367	68.080	4998.714	20.136	50.040	0.617	53.939
5100.000	0.431	217.345	68.309	5098.709	19.588	49.244	0.385	52.997
5200.000	0.403	195.662	68.659	5198.707	19.087	48.851	0.145	52.447
5300.000	0.400	115.794	69.398	5298.704	18.456	49.097	0.519	52.451
5400.000	0.435	127.030	70.175	5398.700	17.847	49.506	0.327	52.625
5500.000	0.789	109.260	71.093	5498.693	17.276	50.441	0.365	53.317
5600.000	1.664	99.305	72.254	5598.670	16.796	52.482	0.908	55.104
5700.000	1.523	95.439	73.415	5698.630	16.453	55.245	0.073	57.643
5800.000	1.777	74.266	74.283	5798.586	16.374	58.185	0.693	60.445
5900.000	1.747	91.377	74.752	5898.543	16.649	61.078	0.599	63.307
6000.000	1.543	71.667	75.010	5998.500	17.121	63.944	0.580	66.197
6100.000	1.520	69.353	74.757	6098.463	18.106	66.445	0.093	68.867
6200.000	1.363	56.281	74.189	6198.426	19.474	68.769	0.394	71.473
6300.000	1.465	43.211	73.512	6298.392	20.975	70.862	0.312	73.901
6400.000	1.662	43.304	72.559	6398.362	22.776	72.499	0.210	75.993
6500.000	1.690	30.530	71.175	6498.322	25.187	73.882	0.400	78.057
6600.000	1.872	14.047	69.535	6598.276	27.985	74.989	0.494	80.040
6700.000	1.873	16.206	67.835	6698.232	30.827	75.671	0.088	81.710
6800.000	1.699	353.439	66.061	6798.194	33.552	75.575	0.657	82.688
6900.000	1.820	345.379	63.930	6898.143	36.560	74.729	0.318	83.193
6950.550	1.640	342.870	62.822	6948.666	38.111	74.227	0.206	83.440