

GyroTracer Directional:

Date: 11/30/2017
 Operator : David England
 API : 05-123-18993
 Well Number : Monfort-Gilcrest K 16-8
 Field : Noble Energy INC
 Tool Type And Number: 1213
 Total Well Depth: 7437
 Bottom Depth : 6900.00
 Latitude : 40.31
 Longitude : 104.78
 Grid Offset : 0.47

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

Northing: 0.00 Easting: 0.00 Altitude: 4737.00

Description:

Azimuth measured in degrees and referenced to local grid

Inclination measured from Vertical

Length measured in feet

Temperature measured in Fahrenheit degrees

Start Time: 11/30/2017 13:53

End Time: 11/30/2017 15:31

Depth	Inclination	Azimuth	Closure Direction	True Depth	Coordinates		Dogleg Severity	Closure Distance
					+N/-S	+E/-W		
0.00	0.00	0.00	0.00	-4737.00	0.00	0.00	0.00	0.00
100.00	0.21	124.69	145.89	-4637.00	-0.31	0.21	0.21	0.37
200.00	0.25	105.76	111.63	-4537.00	-0.13	0.34	0.12	0.36
300.00	0.51	228.53	171.28	-4437.00	-0.42	0.06	0.64	0.42
400.00	0.17	324.73	200.77	-4337.00	-0.61	-0.23	0.60	0.65
500.00	0.26	168.91	206.84	-4237.01	-1.06	-0.53	0.40	1.18
600.00	0.81	169.34	199.95	-4137.01	-1.79	-0.65	0.48	1.91
700.00	0.72	189.30	194.54	-4037.02	-2.93	-0.76	0.12	3.02
800.00	0.39	156.20	193.06	-3937.02	-3.70	-0.86	0.57	3.80
900.00	0.46	180.33	191.16	-3837.03	-4.76	-0.94	0.29	4.85
1000.00	0.80	190.51	189.52	-3737.04	-6.15	-1.03	0.27	6.23
1100.00	0.80	170.58	188.36	-3637.04	-7.27	-1.07	0.32	7.35
1200.00	0.38	182.47	188.46	-3537.05	-8.29	-1.23	0.39	8.38
1300.00	0.64	211.97	189.75	-3437.06	-9.31	-1.60	0.33	9.45
1400.00	0.55	269.64	193.94	-3337.06	-9.55	-2.37	0.51	9.84
1500.00	0.58	241.87	198.15	-3237.06	-9.58	-3.14	0.30	10.08
1600.00	0.69	249.34	204.32	-3137.07	-9.72	-4.39	0.14	10.66
1700.00	1.08	246.44	209.33	-3037.08	-10.22	-5.74	0.55	11.73
1800.00	1.07	275.28	216.61	-2937.10	-10.45	-7.76	0.50	13.02
1900.00	0.54	300.32	222.24	-2837.13	-10.51	-9.55	1.36	14.20
2000.00	0.64	344.35	226.24	-2737.13	-9.63	-10.06	0.46	13.93
2100.00	0.16	201.76	228.24	-2637.13	-9.21	-10.32	0.73	13.83
2200.00	0.36	347.60	230.03	-2537.14	-9.09	-10.85	0.67	14.16

2300.00	0.50	148.09	229.60	-2437.14	-9.00	-10.58	0.84	13.89
2400.00	1.19	299.99	228.65	-2337.15	-9.35	-10.63	1.67	14.16
2500.00	0.13	359.34	228.16	-2237.15	-9.62	-10.74	0.76	14.42
2600.00	0.24	71.11	228.82	-2137.15	-9.44	-10.79	0.26	14.33
2700.00	0.56	104.83	226.88	-2037.15	-9.64	-10.29	0.44	14.10
2800.00	0.49	96.74	224.11	-1937.15	-9.88	-9.57	0.11	13.75
2900.00	1.01	81.66	222.99	-1837.16	-9.54	-8.89	0.75	13.04
3000.00	0.45	79.23	219.60	-1737.16	-9.61	-7.95	0.31	12.48
3100.00	0.19	95.15	218.67	-1637.16	-9.45	-7.57	0.17	12.11
3200.00	0.41	301.38	220.13	-1537.16	-9.05	-7.63	0.78	11.83
3300.00	0.82	292.35	225.48	-1437.17	-8.61	-8.76	0.31	12.28
3400.00	0.84	264.77	229.74	-1337.18	-8.46	-9.99	0.39	13.09
3500.00	0.32	245.83	230.95	-1237.18	-8.72	-10.75	0.52	13.84
3600.00	0.38	247.14	231.74	-1137.19	-9.05	-11.48	0.10	14.62
3700.00	0.68	300.76	234.58	-1037.19	-8.80	-12.37	0.53	15.18
3800.00	0.18	281.97	236.92	-937.19	-8.39	-12.87	0.48	15.36
3900.00	0.47	262.85	237.72	-837.20	-8.56	-13.56	0.21	16.04
4000.00	0.91	273.12	239.58	-737.21	-8.75	-14.91	0.39	17.29
4100.00	0.58	214.60	239.48	-637.21	-9.24	-15.67	0.84	18.19
4200.00	1.27	226.29	237.58	-537.23	-10.69	-16.83	0.64	19.94
4300.00	1.62	247.01	237.38	-437.26	-11.92	-18.64	0.67	22.12
4400.00	0.63	243.84	238.04	-337.27	-12.58	-20.15	1.13	23.76
4500.00	1.25	237.34	237.84	-237.29	-13.67	-21.74	0.50	25.68
4600.00	1.46	242.98	238.12	-137.32	-14.84	-23.86	0.18	28.10
4700.00	1.91	287.99	240.48	-37.35	-14.93	-26.37	1.30	30.30
4800.00	1.80	297.85	245.35	62.59	-13.47	-29.34	0.34	32.28
4900.00	1.22	304.21	249.27	162.56	-11.94	-31.54	0.34	33.72
5000.00	0.99	295.87	251.86	262.54	-10.88	-33.21	0.31	34.94
5100.00	0.95	290.08	253.50	362.52	-10.32	-34.83	0.10	36.32
5200.00	0.88	320.06	255.40	462.51	-9.41	-36.12	0.45	37.33
5300.00	0.60	316.34	257.40	562.49	-8.33	-37.28	0.45	38.20
5400.00	0.20	343.45	257.80	662.49	-8.03	-37.13	0.50	37.98
5500.00	0.41	91.64	257.90	762.49	-7.86	-36.67	0.55	37.51
5600.00	0.13	120.72	257.67	862.49	-7.87	-36.01	0.24	36.87
5700.00	0.48	303.26	257.64	962.48	-7.89	-36.04	0.67	36.90
5800.00	0.64	274.71	258.63	1062.48	-7.41	-36.86	0.27	37.59
5900.00	0.35	153.46	259.83	1162.47	-6.69	-37.32	0.88	37.92
6000.00	0.75	328.25	261.58	1262.46	-5.64	-38.09	1.42	38.50
6100.00	0.83	352.59	263.05	1362.45	-4.68	-38.43	0.40	38.72
6200.00	4.48	15.70	271.75	1462.24	1.13	-36.93	3.80	36.95
6300.00	4.91	16.80	284.68	1561.90	9.07	-34.60	0.42	35.77
6400.00	5.48	18.11	299.35	1661.47	17.90	-31.82	0.57	36.51
6500.00	5.63	19.39	313.38	1760.99	27.09	-28.67	0.18	39.45
6600.00	1.05	24.18	315.95	1860.97	28.84	-27.90	4.30	40.13
6700.00	0.85	27.33	318.17	1960.95	30.25	-27.07	0.07	40.60
6800.00	1.01	37.08	320.97	2060.93	32.00	-25.94	0.15	41.20
6900.00	1.14	36.79	323.70	2160.91	33.72	-24.77	0.06	41.84



Temp
0.00
80.30
80.33
80.33
80.32
80.32
80.29
80.27
80.26
80.25
80.28
80.29
80.31
80.33
80.37
80.40
81.15
81.36
81.58
81.79
82.01
82.28
82.58

85.61
86.19
86.79
87.42
88.09
88.79
89.51
95.59
96.69
97.79
98.88
100.04
101.22
110.07
111.26
112.49
113.61
114.79
116.43
118.47
120.51
133.30
135.15
137.00
138.90
140.88
142.85
144.87
157.11
159.06
160.81
162.65
164.57
166.65
168.51
178.94
180.32
181.85
183.47
185.27
187.06
188.92
190.91
203.82
205.54
207.32
209.34