

GyroTracer Directional:

Date: 6/28/2019
 Operator : Adrian Bruner
 API : 05-123-22304
 Well Name : **Monfort BB 30-4**
 Field : Noble Energy Inc
 Tool Number: 1820
 Bottom Depth : 6500.00
 Total Well Depth: 6831.00
 Latitude : 40.37572 N
 Longitude : 104.48495 W
 Grid Offset : 0.66
 Datum: NAD 83

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

Northing: 0.00 Easting: 0.00 GLE: 4558.00

Description:

Azimuth measured in degrees and referenced to local grid

Inclination measured from Vertical

Length measured in US survey feet

Lat/Long/Elevation obtained by handheld GPS at wellhead. Device error ± 9 Feet

RKB = Ground Level Elevation

Start Time: 6/28/2019 13:06

End Time: 6/28/2019 14:09

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	0.220	241.249	243.435	100.000	-0.170	-0.340	0.220	0.380
200.000	0.242	222.818	235.672	199.999	-0.452	-0.662	0.075	0.802
300.000	0.292	215.463	226.683	299.997	-0.856	-0.908	0.210	1.248
400.000	0.742	50.786	223.032	399.995	-0.825	-0.770	0.964	1.128
500.000	1.039	47.005	70.507	499.984	0.122	0.346	0.294	0.367
600.000	1.230	49.450	49.802	599.965	1.467	1.736	0.219	2.272
700.000	1.279	49.667	48.752	699.940	2.973	3.391	0.084	4.510
800.000	1.520	49.447	49.188	799.909	4.572	5.295	0.227	6.996
900.000	1.423	46.577	49.194	899.874	6.273	7.266	0.120	9.599
1000.000	1.376	51.599	48.884	999.846	7.863	9.008	0.120	11.957
1100.000	1.065	58.381	49.677	1099.826	9.018	10.625	0.421	13.936
1200.000	1.087	68.077	51.066	1199.810	9.856	12.199	0.201	15.683
1300.000	0.890	73.277	52.452	1299.796	10.559	13.737	0.209	17.326
1400.000	0.928	67.307	54.102	1399.782	11.065	15.287	0.122	18.871
1500.000	0.782	71.459	55.304	1499.771	11.551	16.684	0.135	20.292
1600.000	0.739	82.668	56.529	1599.762	11.908	18.011	0.185	21.592
1700.000	0.844	102.162	58.720	1699.752	11.774	19.379	0.286	22.675
1800.000	0.949	103.984	61.351	1799.740	11.400	20.867	0.097	23.778
1900.000	0.426	135.827	63.396	1899.733	10.970	21.902	0.563	24.496

2000.000	0.596	148.204	65.602	1999.728	10.150	22.378	0.181	24.572
2100.000	0.122	158.227	67.303	2099.726	9.500	22.715	0.477	24.622
2200.000	0.100	314.132	67.564	2199.725	9.392	22.747	0.318	24.610
2300.000	0.088	308.326	67.238	2299.725	9.518	22.684	0.031	24.600
2400.000	0.205	339.346	66.615	2399.724	9.709	22.454	0.119	24.463
2500.000	0.435	311.916	65.004	2499.721	10.293	22.077	0.207	24.358
2600.000	0.501	310.513	63.394	2599.719	10.806	21.573	0.069	24.128
2700.000	0.520	319.283	61.413	2699.715	11.475	21.058	0.073	23.982
2800.000	0.563	322.696	59.204	2799.710	12.171	20.421	0.025	23.773
2900.000	0.497	323.653	57.092	2899.706	12.873	19.892	0.032	23.694
3000.000	0.418	298.615	54.820	2999.702	13.571	19.253	0.194	23.555
3100.000	0.403	184.327	54.859	3099.700	13.307	18.906	0.656	23.120
3200.000	0.799	164.764	57.330	3199.693	12.164	18.969	0.475	22.534
3300.000	1.130	138.148	61.838	3299.677	10.663	19.918	0.542	22.593
3400.000	1.254	130.878	66.742	3399.656	9.168	21.331	0.193	23.218
3500.000	1.104	140.480	71.209	3499.633	7.800	22.924	0.240	24.214
3600.000	1.019	136.059	74.926	3599.617	6.505	24.150	0.181	25.011
3700.000	1.228	119.736	78.610	3699.597	5.161	25.618	0.368	26.133
3800.000	1.780	112.063	81.736	3799.564	4.055	27.915	0.619	28.208
3900.000	2.462	107.665	85.025	3899.498	2.723	31.279	0.698	31.397
4000.000	2.795	100.059	87.281	3999.387	1.702	35.847	0.473	35.888
4100.000	2.576	89.455	88.220	4099.280	1.257	40.443	0.561	40.462
4200.000	2.300	84.269	88.028	4199.185	1.542	44.771	0.404	44.798
4300.000	2.098	78.036	87.739	4299.115	1.914	48.482	0.289	48.520
4400.000	1.524	87.891	87.433	4399.066	2.312	51.565	0.598	51.617
4500.000	1.200	114.124	88.118	4499.033	1.776	54.051	0.674	54.080
4600.000	1.151	153.512	89.092	4599.008	0.889	56.087	0.850	56.094
4700.000	1.249	148.718	91.006	4698.985	-1.002	57.072	0.119	57.080
4800.000	0.997	137.280	92.599	4798.964	-2.644	58.245	0.325	58.305
4900.000	0.606	127.538	93.513	4898.954	-3.640	59.289	0.406	59.400
5000.000	0.343	92.501	93.817	4998.950	-4.003	60.005	0.415	60.138
5100.000	0.522	357.733	93.384	5098.948	-3.567	60.325	0.620	60.430
5200.000	0.619	334.041	92.285	5198.941	-2.396	60.056	0.306	60.104
5300.000	0.540	206.942	92.313	5298.937	-2.403	59.507	1.062	59.556
5400.000	0.598	199.089	93.059	5398.933	-3.158	59.085	0.063	59.170
5500.000	0.694	196.757	94.102	5498.927	-4.214	58.757	0.148	58.908
5600.000	0.762	188.689	95.320	5598.919	-5.445	58.470	0.177	58.723
5700.000	0.580	159.896	96.353	5698.913	-6.531	58.663	0.329	59.025
5800.000	0.562	141.408	97.017	5798.908	-7.286	59.196	0.185	59.643
5900.000	0.433	104.193	97.181	5898.905	-7.555	59.958	0.345	60.432
6000.000	0.240	108.610	97.229	5998.903	-7.668	60.448	0.096	60.932
6100.000	0.162	93.736	97.233	6098.902	-7.730	60.908	0.100	61.396
6200.000	0.410	96.667	97.293	6198.901	-7.861	61.422	0.187	61.923
6300.000	0.283	136.710	97.285	6298.899	-7.911	61.887	0.327	62.391
6400.000	0.445	122.756	97.569	6398.898	-8.283	62.333	0.194	62.881
6500.000	0.473	155.056	97.920	6498.894	-8.762	62.979	0.247	63.586