

GyroTracer Directional:

Date: 12/11/2019
Operator : Jordan Hucke
API: 05-123-17461
Well Name : Monfort 2
Field : PDC Energy Inc
Tool Number: 1836
Bottom Depth : 7100.00
Latitude : 40.45778 N
Longitude : 104.7094 W

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

Northing: 0.00 **Easting:** 0.00 **Altitude:** 4722.00

Description:

Azimuth measured in degrees and referenced to True North

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: 12/11/2019 12:40

End Time: 12/11/2019 13:46

| 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 | 0.290 | 255.631 | 197.354 | 100.000 | -0.480 | -0.150 | 0.290 | 0.503 |
| 200.000 | 0.090 | 310.289 | 230.836 | 199.978 | -0.887 | -1.088 | 0.243 | 1.404 |
| 300.000 | 0.530 | 17.500 | 248.304 | 299.976 | -0.450 | -1.131 | 0.490 | 1.218 |
| 400.000 | 0.470 | 331.832 | 282.118 | 399.973 | 0.287 | -1.335 | 0.390 | 1.366 |
| 500.000 | 0.650 | 326.285 | 299.788 | 499.969 | 1.009 | -1.763 | 0.186 | 2.032 |
| 600.000 | 0.660 | 338.286 | 311.956 | 599.964 | 1.904 | -2.118 | 0.137 | 2.849 |
| 700.000 | 0.440 | 347.950 | 318.535 | 699.960 | 2.683 | -2.371 | 0.234 | 3.581 |
| 800.000 | 0.300 | 311.716 | 315.771 | 799.956 | 3.181 | -3.096 | 0.263 | 4.439 |
| 900.000 | 0.470 | 268.804 | 312.446 | 899.953 | 3.464 | -3.787 | 0.322 | 5.132 |
| 1000.000 | 0.300 | 258.729 | 307.075 | 999.951 | 3.386 | -4.481 | 0.182 | 5.616 |
| 1100.000 | 0.310 | 229.477 | 302.884 | 1099.949 | 3.273 | -5.062 | 0.154 | 6.027 |
| 1200.000 | 0.130 | 104.013 | 301.211 | 1199.948 | 3.137 | -5.177 | 0.399 | 6.053 |
| 1300.000 | 0.950 | 111.819 | 302.980 | 1299.943 | 2.927 | -4.511 | 0.823 | 5.377 |
| 1400.000 | 1.020 | 108.111 | 302.818 | 1399.930 | 2.048 | -3.176 | 0.184 | 3.779 |
| 1500.000 | 1.330 | 71.234 | 347.406 | 1499.841 | 3.805 | -0.850 | 0.871 | 3.899 |
| 1600.000 | 1.140 | 136.669 | 17.514 | 1599.818 | 3.355 | 1.059 | 1.248 | 3.518 |
| 1700.000 | 0.360 | 182.450 | 43.024 | 1699.804 | 1.862 | 1.738 | 0.875 | 2.547 |
| 1800.000 | 0.340 | 204.316 | 57.781 | 1799.799 | 0.950 | 1.508 | 0.113 | 1.782 |
| 1900.000 | 0.580 | 207.284 | 83.759 | 1899.794 | 0.121 | 1.105 | 0.197 | 1.111 |
| 2000.000 | 0.520 | 223.417 | 147.658 | 1999.788 | -0.729 | 0.461 | 0.120 | 0.863 |
| 2100.000 | 0.920 | 199.522 | 185.367 | 2099.780 | -1.770 | -0.166 | 0.389 | 1.778 |
| 2200.000 | 1.100 | 214.423 | 197.229 | 2199.765 | -3.254 | -1.009 | 0.291 | 3.407 |
| 2300.000 | 1.110 | 284.537 | 216.032 | 2299.746 | -3.786 | -2.754 | 1.191 | 4.681 |

| | | | | | | | | |
|----------|-------|---------|---------|----------|---------|---------|-------|--------|
| 2400.000 | 0.460 | 339.962 | 230.642 | 2399.735 | -3.225 | -3.932 | 0.913 | 5.085 |
| 2500.000 | 0.590 | 343.805 | 236.370 | 2499.733 | -2.696 | -4.053 | 0.028 | 4.867 |
| 2600.000 | 0.330 | 17.751 | 242.865 | 2599.729 | -2.109 | -4.116 | 0.232 | 4.625 |
| 2700.000 | 0.260 | 317.240 | 248.677 | 2699.728 | -1.656 | -4.242 | 0.186 | 4.554 |
| 2800.000 | 0.640 | 355.539 | 258.809 | 2799.723 | -0.953 | -4.818 | 0.420 | 4.912 |
| 2900.000 | 0.800 | 19.363 | 270.626 | 2899.718 | 0.053 | -4.862 | 0.352 | 4.862 |
| 3000.000 | 0.930 | 32.369 | 287.896 | 2999.707 | 1.398 | -4.328 | 0.364 | 4.549 |
| 3100.000 | 1.200 | 33.723 | 309.225 | 3099.692 | 2.785 | -3.412 | 0.260 | 4.405 |
| 3200.000 | 0.990 | 48.773 | 334.151 | 3199.669 | 4.520 | -2.190 | 0.371 | 5.022 |
| 3300.000 | 1.210 | 72.963 | 355.495 | 3299.648 | 5.528 | -0.435 | 0.473 | 5.545 |
| 3400.000 | 1.010 | 112.707 | 13.444 | 3399.628 | 5.828 | 1.393 | 0.704 | 5.992 |
| 3500.000 | 1.330 | 204.128 | 23.842 | 3499.605 | 3.996 | 1.766 | 1.633 | 4.369 |
| 3600.000 | 2.270 | 217.992 | 32.189 | 3599.541 | 0.803 | 0.505 | 0.870 | 0.948 |
| 3700.000 | 2.570 | 212.788 | 216.716 | 3699.436 | -2.895 | -2.159 | 0.341 | 3.612 |
| 3800.000 | 2.580 | 207.438 | 214.966 | 3799.324 | -6.830 | -4.776 | 0.322 | 8.334 |
| 3900.000 | 2.950 | 199.952 | 210.386 | 3899.203 | -11.363 | -6.663 | 0.487 | 13.173 |
| 4000.000 | 2.740 | 171.048 | 204.498 | 3999.090 | -15.945 | -7.266 | 1.447 | 17.522 |
| 4100.000 | 2.520 | 200.154 | 199.988 | 4098.992 | -20.199 | -7.347 | 1.302 | 21.494 |
| 4200.000 | 2.630 | 184.171 | 200.266 | 4198.898 | -24.183 | -8.929 | 0.740 | 25.778 |
| 4300.000 | 2.230 | 196.134 | 198.364 | 4298.809 | -28.281 | -9.388 | 0.542 | 29.799 |
| 4400.000 | 1.920 | 204.223 | 196.527 | 4398.741 | -31.896 | -9.464 | 0.417 | 33.270 |
| 4500.000 | 1.480 | 191.145 | 195.995 | 4498.687 | -35.098 | -10.061 | 0.764 | 36.511 |
| 4600.000 | 1.210 | 216.622 | 196.714 | 4598.659 | -37.143 | -11.154 | 0.589 | 38.782 |
| 4700.000 | 1.000 | 185.402 | 196.835 | 4698.639 | -38.995 | -11.799 | 0.601 | 40.741 |
| 4800.000 | 1.310 | 233.619 | 197.761 | 4798.622 | -40.375 | -12.933 | 0.946 | 42.396 |
| 4900.000 | 1.640 | 234.409 | 199.768 | 4898.586 | -41.977 | -15.086 | 0.367 | 44.606 |
| 5000.000 | 1.600 | 233.102 | 201.784 | 4998.543 | -43.673 | -17.454 | 0.055 | 47.032 |
| 5100.000 | 1.710 | 245.557 | 203.774 | 5098.506 | -45.001 | -19.823 | 0.370 | 49.173 |
| 5200.000 | 1.170 | 250.600 | 205.453 | 5198.474 | -46.230 | -22.004 | 0.556 | 51.200 |
| 5300.000 | 1.310 | 252.865 | 207.162 | 5298.447 | -47.086 | -24.159 | 0.147 | 52.922 |
| 5400.000 | 0.790 | 270.020 | 208.595 | 5398.429 | -47.586 | -25.939 | 0.594 | 54.196 |
| 5500.000 | 1.070 | 235.881 | 209.625 | 5498.415 | -48.168 | -27.391 | 0.606 | 55.411 |
| 5600.000 | 1.130 | 264.523 | 211.216 | 5598.397 | -48.284 | -29.260 | 0.525 | 56.457 |
| 5700.000 | 1.340 | 258.762 | 212.460 | 5698.377 | -48.939 | -31.129 | 0.245 | 58.001 |
| 5800.000 | 1.350 | 215.348 | 212.904 | 5798.352 | -50.455 | -32.645 | 0.981 | 60.095 |
| 5900.000 | 1.130 | 172.624 | 212.069 | 5898.330 | -52.438 | -32.855 | 0.906 | 61.880 |
| 6000.000 | 1.290 | 163.709 | 210.708 | 5998.308 | -54.461 | -32.347 | 0.243 | 63.343 |
| 6100.000 | 1.050 | 182.140 | 209.653 | 6098.285 | -56.557 | -32.199 | 0.442 | 65.081 |
| 6200.000 | 1.250 | 155.119 | 208.396 | 6198.268 | -58.237 | -31.483 | 0.571 | 66.202 |
| 6300.000 | 1.590 | 141.242 | 206.906 | 6298.246 | -59.972 | -30.433 | 0.486 | 67.252 |
| 6400.000 | 2.110 | 138.958 | 204.463 | 6398.195 | -62.410 | -28.394 | 0.530 | 68.565 |
| 6500.000 | 1.250 | 198.507 | 203.200 | 6498.158 | -64.816 | -27.780 | 1.828 | 70.518 |
| 6600.000 | 1.280 | 235.097 | 203.324 | 6598.135 | -66.685 | -28.753 | 0.798 | 72.620 |
| 6700.000 | 1.240 | 252.546 | 204.328 | 6698.111 | -67.781 | -30.645 | 0.387 | 74.387 |
| 6800.000 | 1.370 | 268.837 | 206.066 | 6798.078 | -67.826 | -33.178 | 0.382 | 75.506 |
| 6900.000 | 1.620 | 279.940 | 208.099 | 6898.036 | -67.464 | -36.022 | 0.370 | 76.478 |
| 7000.000 | 1.310 | 292.790 | 209.961 | 6998.004 | -66.616 | -38.400 | 0.448 | 76.891 |
| 7100.000 | 1.000 | 281.147 | 211.496 | 7097.981 | -65.925 | -40.393 | 0.383 | 77.315 |