



**Company:** Anadarko Petroleum Corp.

**Rig:** Production / Cable Inc.

**Latitude:** 40.172

**Longitude:** -104.794

**API #** 05-123-16567

**Date:** 1/3/2012

**Well:** Bluffs White W 5-1

**Location:** Weld County, CO.

**North Reference:** True North

**Depth Reference:** Ground Level

**Surveyor:** Norman Cowan

**VS:** 0

| Depth    | Inc   | AzG     | N/-S   | E/-W   | TVD      | DL    | VS     | CD     | Cbrg    |
|----------|-------|---------|--------|--------|----------|-------|--------|--------|---------|
| 0.000    | 0.000 | 0.000   | 0.000  | 0.000  | 0.000    | ****  | 0.000  | 0.000  | 0.000   |
| 100.000  | 0.167 | 50.084  | 0.094  | 0.112  | 100.000  | 0.167 | 0.094  | 0.146  | 50.084  |
| 200.000  | 0.184 | 295.564 | 0.257  | 0.079  | 200.000  | 0.296 | 0.257  | 0.268  | 17.013  |
| 300.000  | 0.163 | 112.872 | 0.271  | 0.064  | 299.999  | 0.347 | 0.271  | 0.278  | 13.305  |
| 400.000  | 0.052 | 231.478 | 0.187  | 0.159  | 399.999  | 0.193 | 0.187  | 0.246  | 40.335  |
| 500.000  | 0.099 | 79.053  | 0.175  | 0.208  | 499.999  | 0.148 | 0.175  | 0.272  | 49.915  |
| 600.000  | 0.130 | 269.532 | 0.191  | 0.180  | 599.999  | 0.228 | 0.191  | 0.262  | 43.340  |
| 700.000  | 0.180 | 346.702 | 0.342  | 0.031  | 699.999  | 0.197 | 0.342  | 0.344  | 5.129   |
| 800.000  | 0.098 | 9.474   | 0.579  | 0.009  | 799.999  | 0.097 | 0.579  | 0.579  | 0.858   |
| 900.000  | 0.152 | 22.370  | 0.785  | 0.073  | 899.998  | 0.061 | 0.785  | 0.789  | 5.315   |
| 1000.000 | 0.061 | 125.624 | 0.877  | 0.166  | 999.998  | 0.176 | 0.877  | 0.892  | 10.748  |
| 1100.000 | 0.080 | 69.483  | 0.871  | 0.275  | 1099.998 | 0.068 | 0.871  | 0.913  | 17.529  |
| 1200.000 | 0.253 | 328.209 | 1.083  | 0.224  | 1199.998 | 0.280 | 1.083  | 1.106  | 11.696  |
| 1300.000 | 0.215 | 321.816 | 1.418  | -0.008 | 1299.997 | 0.046 | 1.418  | 1.418  | 359.659 |
| 1400.000 | 0.213 | 296.068 | 1.648  | -0.292 | 1399.996 | 0.096 | 1.648  | 1.673  | 349.961 |
| 1500.000 | 0.312 | 319.880 | 1.937  | -0.634 | 1499.995 | 0.145 | 1.937  | 2.039  | 341.882 |
| 1600.000 | 0.299 | 270.796 | 2.149  | -1.070 | 1599.994 | 0.254 | 2.149  | 2.401  | 333.531 |
| 1700.000 | 0.488 | 324.580 | 2.499  | -1.578 | 1699.992 | 0.394 | 2.499  | 2.956  | 327.742 |
| 1800.000 | 0.501 | 306.652 | 3.107  | -2.175 | 1799.988 | 0.155 | 3.107  | 3.793  | 325.010 |
| 1900.000 | 0.469 | 228.129 | 3.095  | -2.830 | 1899.986 | 0.614 | 3.095  | 4.194  | 317.560 |
| 2000.000 | 0.626 | 267.717 | 2.800  | -3.681 | 1999.981 | 0.399 | 2.800  | 4.625  | 307.264 |
| 2100.000 | 0.791 | 343.462 | 3.441  | -4.423 | 2099.976 | 0.880 | 3.441  | 5.604  | 307.876 |
| 2200.000 | 0.679 | 56.743  | 4.428  | -4.124 | 2199.969 | 0.882 | 4.428  | 6.051  | 317.033 |
| 2300.000 | 0.864 | 339.933 | 5.461  | -3.887 | 2299.963 | 0.970 | 5.461  | 6.703  | 324.559 |
| 2400.000 | 0.874 | 327.347 | 6.812  | -4.557 | 2399.951 | 0.191 | 6.812  | 8.195  | 326.216 |
| 2500.000 | 1.241 | 355.126 | 8.533  | -5.061 | 2499.935 | 0.620 | 8.533  | 9.921  | 329.328 |
| 2600.000 | 1.242 | 346.113 | 10.664 | -5.413 | 2599.911 | 0.195 | 10.664 | 11.959 | 333.089 |
| 2700.000 | 1.308 | 351.864 | 12.847 | -5.835 | 2699.886 | 0.144 | 12.847 | 14.109 | 335.573 |
| 2800.000 | 1.303 | 357.112 | 15.112 | -6.054 | 2799.861 | 0.120 | 15.112 | 16.279 | 338.170 |
| 2900.000 | 1.212 | 355.564 | 17.302 | -6.193 | 2899.836 | 0.097 | 17.302 | 18.377 | 340.307 |
| 3000.000 | 1.131 | 17.640  | 19.297 | -5.975 | 2999.816 | 0.456 | 19.297 | 20.201 | 342.795 |
| 3100.000 | 0.992 | 10.553  | 21.088 | -5.518 | 3099.799 | 0.191 | 21.088 | 21.798 | 345.337 |
| 3200.000 | 0.884 | 355.606 | 22.709 | -5.419 | 3199.786 | 0.266 | 22.709 | 23.346 | 346.580 |
| 3300.000 | 0.633 | 10.692  | 24.021 | -5.375 | 3299.777 | 0.319 | 24.021 | 24.615 | 347.387 |
| 3400.000 | 0.473 | 17.297  | 24.958 | -5.150 | 3399.772 | 0.172 | 24.958 | 25.484 | 348.341 |
| 3500.000 | 0.330 | 355.585 | 25.639 | -5.050 | 3499.770 | 0.206 | 25.639 | 26.131 | 348.858 |
| 3600.000 | 0.213 | 345.595 | 26.106 | -5.118 | 3599.769 | 0.126 | 26.106 | 26.603 | 348.908 |
| 3700.000 | 0.356 | 292.291 | 26.404 | -5.452 | 3699.768 | 0.286 | 26.404 | 26.961 | 348.334 |
| 3800.000 | 0.498 | 270.605 | 26.526 | -6.174 | 3799.765 | 0.213 | 26.526 | 27.235 | 346.897 |

|          |       |         |        |         |          |       |        |        |         |
|----------|-------|---------|--------|---------|----------|-------|--------|--------|---------|
| 3900.000 | 0.901 | 257.409 | 26.360 | -7.376  | 3899.757 | 0.431 | 26.360 | 27.372 | 344.368 |
| 4000.000 | 0.861 | 212.667 | 25.556 | -8.548  | 3999.746 | 0.671 | 25.556 | 26.948 | 341.505 |
| 4100.000 | 0.936 | 224.385 | 24.340 | -9.525  | 4099.734 | 0.198 | 24.340 | 26.137 | 338.628 |
| 4200.000 | 1.572 | 254.681 | 23.394 | -11.419 | 4199.711 | 0.898 | 23.394 | 26.032 | 333.982 |
| 4300.000 | 1.704 | 234.220 | 22.162 | -13.949 | 4299.671 | 0.596 | 22.162 | 26.186 | 327.814 |
| 4400.000 | 1.455 | 208.751 | 20.180 | -15.766 | 4399.634 | 0.737 | 20.180 | 25.608 | 322.001 |
| 4500.000 | 1.329 | 247.642 | 18.625 | -17.449 | 4499.607 | 0.934 | 18.625 | 25.522 | 316.869 |
| 4600.000 | 0.626 | 279.972 | 18.279 | -19.059 | 4599.592 | 0.867 | 18.279 | 26.407 | 313.804 |
| 4700.000 | 0.454 | 255.396 | 18.274 | -19.980 | 4699.588 | 0.285 | 18.274 | 27.076 | 312.446 |
| 4800.000 | 0.532 | 238.719 | 17.933 | -20.760 | 4799.584 | 0.163 | 17.933 | 27.433 | 310.821 |
| 4900.000 | 0.324 | 148.881 | 17.449 | -21.011 | 4899.582 | 0.622 | 17.449 | 27.312 | 309.710 |
| 5000.000 | 0.510 | 96.655  | 17.156 | -20.423 | 4999.580 | 0.403 | 17.156 | 26.672 | 310.031 |
| 5100.000 | 0.382 | 109.305 | 16.994 | -19.666 | 5099.577 | 0.161 | 16.994 | 25.991 | 310.831 |
| 5200.000 | 0.998 | 32.631  | 17.617 | -18.882 | 5199.570 | 0.983 | 17.617 | 25.824 | 313.015 |
| 5300.000 | 1.225 | 12.986  | 19.392 | -18.172 | 5299.552 | 0.440 | 19.392 | 26.576 | 316.860 |
| 5400.000 | 1.426 | 44.989  | 21.314 | -17.052 | 5399.526 | 0.756 | 21.314 | 27.296 | 321.338 |
| 5500.000 | 1.821 | 71.427  | 22.700 | -14.666 | 5499.488 | 0.836 | 22.700 | 27.026 | 327.133 |
| 5600.000 | 1.173 | 70.548  | 23.547 | -12.195 | 5599.453 | 0.648 | 23.547 | 26.517 | 332.621 |
| 5700.000 | 1.033 | 69.742  | 24.200 | -10.384 | 5699.434 | 0.141 | 24.200 | 26.334 | 336.777 |
| 5800.000 | 1.156 | 43.736  | 25.241 | -8.840  | 5799.417 | 0.507 | 25.241 | 26.744 | 340.698 |
| 5900.000 | 0.431 | 347.593 | 26.337 | -8.223  | 5899.407 | 0.984 | 26.337 | 27.591 | 342.660 |
| 6000.000 | 0.183 | 153.302 | 26.562 | -8.233  | 5999.407 | 0.609 | 26.562 | 27.808 | 342.780 |
| 6100.000 | 0.475 | 93.059  | 26.397 | -7.747  | 6099.405 | 0.416 | 26.397 | 27.510 | 343.644 |
| 6200.000 | 0.707 | 26.417  | 26.928 | -7.059  | 6199.401 | 0.678 | 26.928 | 27.837 | 345.311 |
| 6300.000 | 0.212 | 169.580 | 27.298 | -6.751  | 6299.399 | 0.886 | 27.298 | 28.120 | 346.110 |
| 6400.000 | 0.721 | 340.794 | 27.710 | -6.924  | 6399.397 | 0.931 | 27.710 | 28.562 | 345.971 |
| 6500.000 | 0.694 | 253.370 | 28.130 | -7.711  | 6499.391 | 0.978 | 28.130 | 29.168 | 344.671 |
| 6600.000 | 0.190 | 274.483 | 27.970 | -8.457  | 6599.388 | 0.521 | 27.970 | 29.221 | 343.177 |
| 6700.000 | 0.699 | 343.202 | 28.567 | -8.798  | 6699.385 | 0.654 | 28.567 | 29.891 | 342.882 |
| 6800.000 | 0.214 | 235.026 | 29.044 | -9.128  | 6799.383 | 0.792 | 29.044 | 30.444 | 342.553 |
| 6900.000 | 0.517 | 347.869 | 29.378 | -9.376  | 6899.381 | 0.632 | 29.378 | 30.837 | 342.299 |
| 7000.000 | 0.690 | 356.101 | 30.419 | -9.512  | 6999.376 | 0.193 | 30.419 | 31.872 | 342.636 |
| 7100.000 | 0.662 | 46.074  | 31.421 | -9.136  | 7099.370 | 0.572 | 31.421 | 32.722 | 343.787 |
| 7200.000 | 0.574 | 58.173  | 32.086 | -8.295  | 7199.364 | 0.157 | 32.086 | 33.141 | 345.506 |