



Weatherford®

Weatherford
2000 Oil Drive
Casper, WY 82604

Survey Certification

| | |
|-----------------------------------|--------------------------|
| Operating Company: | Anadarko Petroleum Corp. |
| Well Name: | DECHANT STATE 15C-1HZ |
| State: | Colorado |
| County: | Weld |
| API Number: | 05-123-36409 |
| Datum: | NAD 83 |
| Survey Calculation Method: | Minimum Curvature |
| North Reference: | True North |

I, John R. Morgan, hereby certify the attached
directional survey run from the measure depth of 774.00 feet
to the measured depth of 16,665.00 feet as accurate and true
to the best of my knowledge.

Signature

18-Mar-13

Date

John Morgan
Directional Planning
Weatherford - Rockies District



Weatherford®



END OF WELL REPORT

FINAL SURVEYS

SECTION 1

DAILY ACTIVITIES

SECTION 2

BHA REPORTS

SECTION 3

MOTOR REPORTS

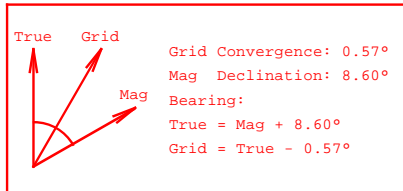
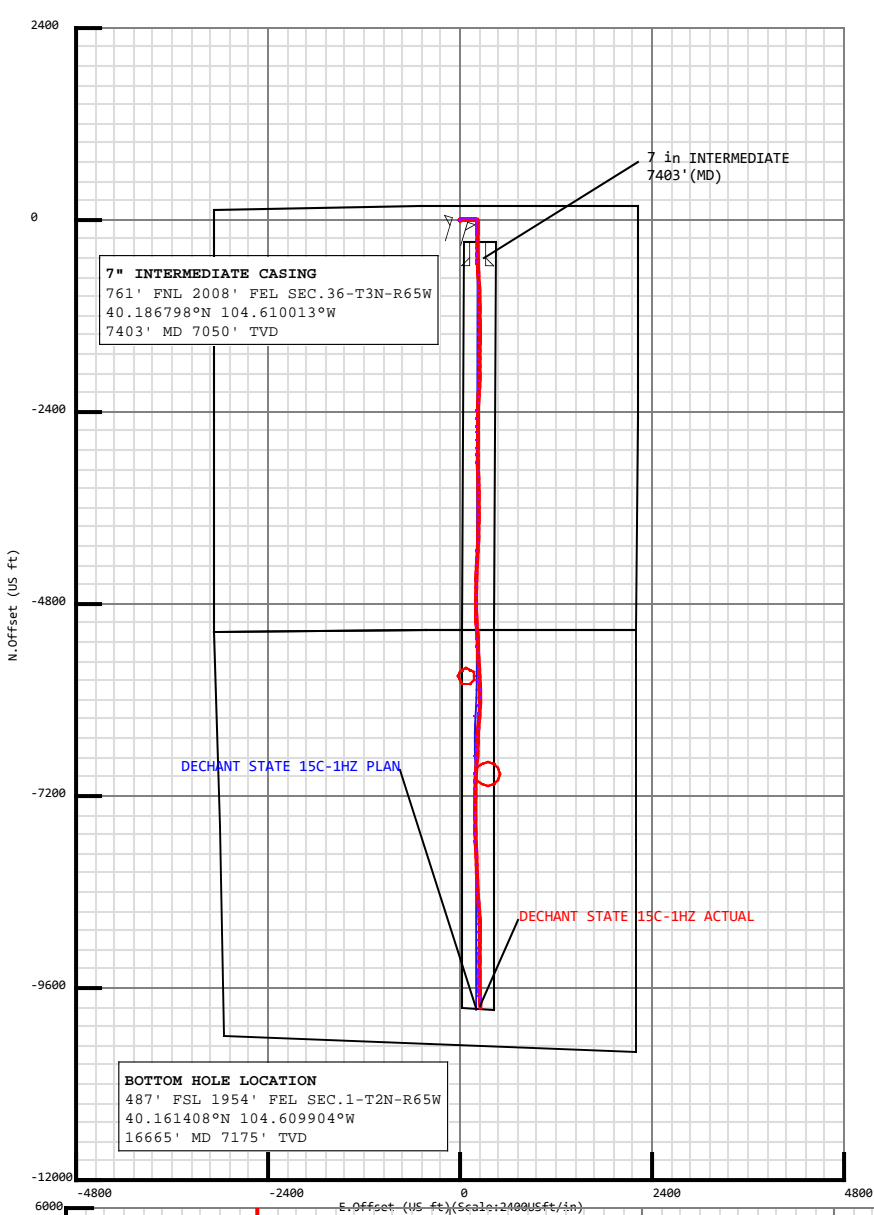
SECTION 4

SLIDE SHEET REPORTS

SECTION 5

ADDITIONAL REPORTS

SECTION 6



Survey Data for DECHANT STATE 15C-1HZ

Field: Wattenberg
Map Unit: USFt Vertical Reference Datum (VRD): Mean Sea Level
Projected Coordinate System: NAD83 / Colorado North (ftUS)

Site: Dechant 28-36HZ Pad
Unit: USFeet TVD Reference: 25' RKB (H&P 307)
Company Name: Andarko Petroleum
Position: Northing: 1312719.83USft Latitude: 40.188394°
Easting: 3248388.95USft Longitude: -104.610912°
North Reference: True Grid Convergence: 0.57°
Elevation Above VRD: 4808.00USft

Slot: Dechant State 15C-1HZ
Position:
Offset is from Site centre
+N/-S: 14.93USft Northing: 1312735.02USft Latitude: 40.188435°
+E/-W: 25.98USft Easting: 3248414.78USft Longitude: -104.610819°
Elevation Above VRD: 4808.00USft

Target Set Information:
Name: Dechant State 15C-1HZ
Position offsets from Slot centre

| Name | TVD (USft) | +N/-S (USft) | +E/-W (USft) | Lat (°) | Long (°) | Shape |
|----------------------------|------------|--------------|--------------|-----------|-------------|--------|
| Dechant State 15C-1HZ PBHL | 7078.00 | -9870.58 | 201.53 | 40.161339 | -104.610098 | Cuboid |

Casing Point Information:

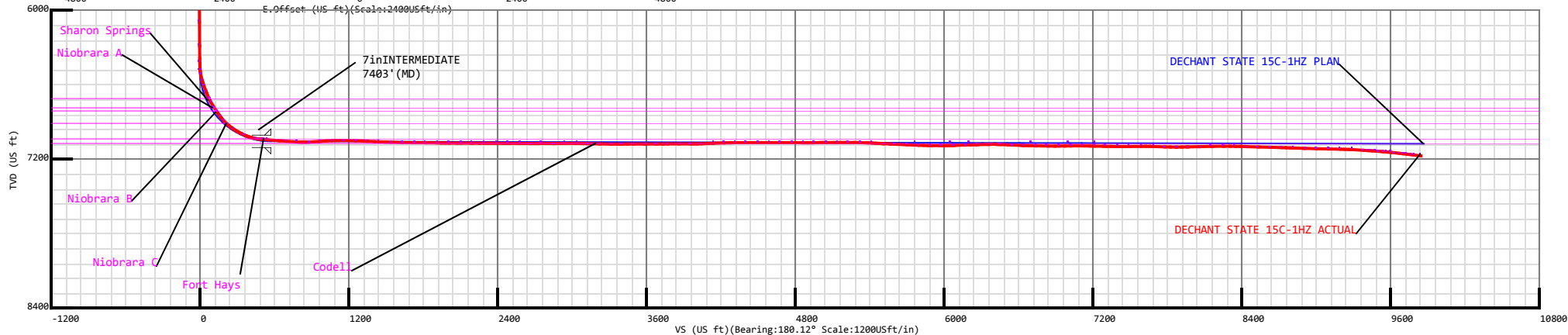
| Name | MD (USft) | TVD (USft) |
|-----------------|-----------|------------|
| 7inINTERMEDIATE | 7403.00 | 7050.00 |

Formation Point Information:

| Name | TVD (USft) | Elevation (USft) | MD (USft) |
|---------------|------------|------------------|-----------|
| Parkman | 3801.00 | 1032.00 | 3815.36 |
| Sussex | 4371.00 | 462.00 | 4386.65 |
| SharonSprings | 6723.00 | -1890.00 | 6751.82 |
| NiobraraA | 6788.00 | -1955.00 | 6827.55 |
| NiobraraB | 6818.00 | -1985.00 | 6863.44 |
| NiobraraC | 6923.00 | -2090.00 | 7001.36 |
| FortHays | 7043.00 | -2210.00 | 7324.31 |
| Code11 | 7078.00 | -2245.00 | 10002.31 |

Survey Point Information:
DogLeg Severity Unit: °/100.00ft

| MD (USft) | Inc (°) | Az (°) | TVD (USft) | +N/-S (USft) | +E/-W (USft) | VSec (USft) | DLS (DLSU) | Toolface (°) | Build (DLSU) | Turn (DLSU) | Annotation |
|-----------|---------|--------|------------|--------------|--------------|-------------|------------|--------------|--------------|-------------|--------------------------|
| 635.00 | 0.14 | 313.21 | 635.00 | -0.85 | -0.20 | 0.85 | 0.51 | 170.1R | -0.50 | 36.10 | TIE ON TO SURFACE GYRO |
| 774.00 | 0.16 | 63.85 | 774.00 | -0.65 | -0.15 | 0.65 | 0.18 | 142.7R | 0.01 | 79.60 | FIRST WFT MWD+IFR SURVEY |
| 16611.00 | 83.04 | 177.02 | 7168.22 | -9791.98 | 253.02 | 9791.43 | 0.98 | 126.7L | -0.59 | -0.79 | LAST WFT MWD+IFR SURVEY |
| 16665.00 | 83.04 | 177.02 | 7174.76 | -9845.51 | 255.81 | 9844.95 | 0.00 | 0.0R | 0.00 | 0.00 | PROJECTION TO TD |





FINAL SURVEYS

5D Survey Report**Andarko Petroleum**

Field Name: *Wattenberg*
Site Name: *Dechant 28-36HZ Pad*
Well Name: *DECHANT STATE 15C-1HZ*
Survey: *Definitive Survey*





Surveys for the DECHANT STATE 15C-1HZ

| | | | |
|---|--|------------------------------------|---------------------------------|
| Site Name Dechant 28-36HZ Pad | Units : US ft | North Reference : True | Convergence Angle : 0.57 |
| | Position | Northing : 1312719.83 US ft | Latitude : 40.188394 |
| | | Easting : 3248388.95 US ft | Longitude : -104.610912 |
| | Site TVD Reference : 25' RKB (H&P 307) Elevation above: 4808.00 US ft Comment : | | |
| Slot Name Dechant State 15C-1HZ | Position (Offsets relative to Site Centre) | | |
| | +N / -S : 14.93 US ft | Northing : 1312735.02 US ft | Latitude : 40.188435 |
| | +E / -W : 25.98 US ft | Easting : 3248414.78 US ft | Longitude : -104.610819 |
| | Elevation above : 4808.00 US ft Comment : | | |
| Well Name DECHANT STATE 15C-1HZ | Type : Main well | UWI : | |
| | Rig Height <i>Drill Floor</i> : 25.00 US ft | Comment : | |
| | Relative to : 4833.00 US ft | Closure Azimuth : 178.512° | |
| | Closure Distance : 9848.83 US ft | | |
| | Vertical Section (Position of Origin Relative to Slot) | | |
| | +N / -S : 0.00 US ft | +E / -W : 0.00 US ft | Az : 180.12° |

| | | | | |
|--------------------------------|--|--------------------|--|----------------------------|
| Survey Name :Definitive Survey | | | | |
| Date : 24/Jan/2013 | | Survey Tool : | | Comment : |
| Company : | | | | |
| Magnetic Model | | | | |
| Model Name: BGGM | | Date: 24/Jan/2013 | | Field Strength: 52816.6 nT |
| | | Declination: 8.60° | | Dip: 66.83° |

5D Survey Report

| Survey Tool Ranges | | | |
|--------------------|------------------|----------------|---------------|
| Name | Start MD (us ft) | End MD (us ft) | Source Survey |
| NSG Static GMS | 0.00 | 635.00 | Surface Gyro |
| MWD + IFR | 635.00 | 16665.00 | MWD +IFR |

Well path created using minimum curvature

| Survey Points (Relative to centre, TVD relative to Drill Floor) | | | | | | | | | | | |
|--|------------|-----------|----------------|---------------------|---------------------|-----------------|------------------|----------------------|---------------|---------------|---------------------------|
| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | N.Offset (US ft) | E.Offset (US ft) | Latitude (°) | Longitude (°) | DLS (°/100 US ft) | CL (US ft) | VS (US ft) | Comment |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 40.188435 | -104.610819 | 0.00 | 0.00 | -0.00 | |
| 25.00 | 0.00 | 0.00 | 25.00 | 0.00 | 0.00 | 40.188435 | -104.610819 | 0.00 | 25.00 | -0.00 | |
| 125.00 | 0.13 | 203.91 | 125.00 | -0.10 | -0.05 | 40.188435 | -104.610819 | 0.13 | 100.00 | 0.10 | |
| 225.00 | 0.21 | 159.37 | 225.00 | -0.38 | -0.03 | 40.188434 | -104.610819 | 0.15 | 100.00 | 0.38 | |
| 325.00 | 0.32 | 137.71 | 325.00 | -0.76 | 0.23 | 40.188433 | -104.610818 | 0.15 | 100.00 | 0.76 | |
| 425.00 | 0.13 | 247.38 | 425.00 | -1.01 | 0.31 | 40.188432 | -104.610818 | 0.38 | 100.00 | 1.01 | |
| 525.00 | 0.15 | 287.24 | 525.00 | -1.01 | 0.08 | 40.188432 | -104.610819 | 0.10 | 100.00 | 1.01 | |
| 625.00 | 0.19 | 309.60 | 625.00 | -0.87 | -0.17 | 40.188433 | -104.610820 | 0.08 | 100.00 | 0.87 | |
| 635.00 | 0.14 | 313.21 | 635.00 | -0.85 | -0.20 | 40.188433 | -104.610820 | 0.51 | 10.00 | 0.85 | TIE ON TO SURFACE GYRO |
| 774.00 | 0.16 | 63.85 | 774.00 | -0.65 | -0.15 | 40.188433 | -104.610820 | 0.18 | 139.00 | 0.65 | FIRST WFT MWD SURVEY |
| 866.00 | 0.78 | 94.60 | 865.99 | -0.64 | 0.59 | 40.188433 | -104.610817 | 0.70 | 92.00 | 0.64 | |
| 958.00 | 0.84 | 81.62 | 957.98 | -0.59 | 1.89 | 40.188433 | -104.610812 | 0.21 | 92.00 | 0.59 | |
| 1050.00 | 0.60 | 82.28 | 1049.98 | -0.43 | 3.03 | 40.188434 | -104.610808 | 0.26 | 92.00 | 0.42 | |
| 1142.00 | 0.22 | 85.07 | 1141.97 | -0.35 | 3.68 | 40.188434 | -104.610806 | 0.41 | 92.00 | 0.34 | |
| 1233.00 | 0.25 | 15.36 | 1232.97 | -0.14 | 3.91 | 40.188435 | -104.610805 | 0.30 | 91.00 | 0.13 | |
| 1325.00 | 0.16 | 94.80 | 1324.97 | 0.04 | 4.09 | 40.188435 | -104.610804 | 0.29 | 92.00 | -0.05 | |
| 1417.00 | 0.28 | 83.92 | 1416.97 | 0.05 | 4.44 | 40.188435 | -104.610803 | 0.14 | 92.00 | -0.06 | |
| 1508.00 | 0.07 | 69.68 | 1507.97 | 0.10 | 4.72 | 40.188435 | -104.610802 | 0.23 | 91.00 | -0.11 | |
| 1599.00 | 0.10 | 231.03 | 1598.97 | 0.07 | 4.71 | 40.188435 | -104.610802 | 0.18 | 91.00 | -0.07 | |
| 1690.00 | 0.35 | 306.26 | 1689.97 | 0.18 | 4.42 | 40.188435 | -104.610803 | 0.37 | 91.00 | -0.19 | |
| 1780.00 | 0.40 | 217.17 | 1779.97 | 0.09 | 4.01 | 40.188435 | -104.610805 | 0.59 | 90.00 | -0.10 | |
| 1872.00 | 0.22 | 299.27 | 1871.97 | -0.08 | 3.66 | 40.188435 | -104.610806 | 0.47 | 92.00 | 0.07 | |
| 1963.00 | 0.29 | 281.80 | 1962.97 | 0.05 | 3.28 | 40.188435 | -104.610807 | 0.11 | 91.00 | -0.06 | |
| 2054.00 | 0.51 | 13.05 | 2053.97 | 0.50 | 3.15 | 40.188436 | -104.610808 | 0.65 | 91.00 | -0.50 | |
| 2146.00 | 0.43 | 349.38 | 2145.96 | 1.23 | 3.18 | 40.188438 | -104.610808 | 0.23 | 92.00 | -1.24 | |
| 2329.00 | 1.55 | 353.64 | 2328.93 | 4.37 | 2.78 | 40.188447 | -104.610809 | 0.61 | 183.00 | -4.38 | |
| 2424.00 | 1.48 | 358.07 | 2423.90 | 6.87 | 2.59 | 40.188454 | -104.610810 | 0.14 | 95.00 | -6.88 | |
| 2518.00 | 3.08 | 60.64 | 2517.83 | 9.32 | 4.75 | 40.188461 | -104.610802 | 2.91 | 94.00 | -9.33 | |
| 2613.00 | 2.98 | 78.07 | 2612.70 | 11.09 | 9.39 | 40.188465 | -104.610785 | 0.97 | 95.00 | -11.11 | |
| 2707.00 | 5.42 | 107.01 | 2706.45 | 10.29 | 16.03 | 40.188463 | -104.610762 | 3.36 | 94.00 | -10.33 | |
| 2802.00 | 7.48 | 105.31 | 2800.85 | 7.35 | 26.29 | 40.188455 | -104.610725 | 2.18 | 95.00 | -7.40 | |
| 2897.00 | 8.47 | 102.97 | 2894.93 | 4.14 | 39.07 | 40.188446 | -104.610679 | 1.10 | 95.00 | -4.23 | |

5D Survey Report

| Survey Points (Relative to centre, TVD relative to Drill Floor) | | | | | | | | | | | |
|--|------------|-----------|----------------|---------------------|---------------------|-----------------|------------------|----------------------|---------------|---------------|---------|
| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | N.Offset (US ft) | E.Offset (US ft) | Latitude (°) | Longitude (°) | DLS (°/100 US ft) | CL (US ft) | VS (US ft) | Comment |
| 2991.00 | 10.47 | 91.21 | 2987.65 | 2.41 | 54.36 | 40.188442 | -104.610624 | 2.95 | 94.00 | -2.52 | |
| 3086.00 | 9.25 | 89.24 | 3081.25 | 2.33 | 70.62 | 40.188441 | -104.610566 | 1.33 | 95.00 | -2.48 | |
| 3181.00 | 10.57 | 90.98 | 3174.83 | 2.28 | 86.97 | 40.188441 | -104.610508 | 1.42 | 95.00 | -2.46 | |
| 3275.00 | 9.35 | 89.81 | 3267.41 | 2.16 | 103.23 | 40.188441 | -104.610450 | 1.32 | 94.00 | -2.37 | |
| 3370.00 | 9.56 | 90.33 | 3361.12 | 2.14 | 118.83 | 40.188441 | -104.610394 | 0.24 | 95.00 | -2.39 | |
| 3464.00 | 9.36 | 95.24 | 3453.84 | 1.40 | 134.25 | 40.188439 | -104.610338 | 0.88 | 94.00 | -1.68 | |
| 3559.00 | 10.42 | 92.02 | 3547.43 | 0.39 | 150.53 | 40.188436 | -104.610280 | 1.26 | 95.00 | -0.70 | |
| 3653.00 | 8.83 | 89.45 | 3640.10 | 0.16 | 166.24 | 40.188435 | -104.610224 | 1.75 | 94.00 | -0.50 | |
| 3748.00 | 7.46 | 88.44 | 3734.14 | 0.39 | 179.70 | 40.188436 | -104.610176 | 1.45 | 95.00 | -0.77 | |
| 3842.00 | 6.18 | 84.01 | 3827.48 | 1.09 | 190.83 | 40.188438 | -104.610136 | 1.47 | 94.00 | -1.49 | |
| 3937.00 | 6.20 | 86.81 | 3921.92 | 1.91 | 201.04 | 40.188440 | -104.610099 | 0.32 | 95.00 | -2.33 | |
| 4032.00 | 4.44 | 82.43 | 4016.51 | 2.68 | 209.81 | 40.188442 | -104.610068 | 1.90 | 95.00 | -3.12 | |
| 4126.00 | 1.67 | 61.09 | 4110.37 | 3.82 | 214.61 | 40.188445 | -104.610051 | 3.14 | 94.00 | -4.27 | |
| 4221.00 | 0.41 | 124.50 | 4205.35 | 4.30 | 216.10 | 40.188447 | -104.610045 | 1.61 | 95.00 | -4.75 | |
| 4316.00 | 0.29 | 64.15 | 4300.35 | 4.21 | 216.60 | 40.188447 | -104.610044 | 0.39 | 95.00 | -4.66 | |
| 4410.00 | 0.43 | 94.11 | 4394.35 | 4.29 | 217.17 | 40.188447 | -104.610042 | 0.24 | 94.00 | -4.74 | |
| 4599.00 | 0.41 | 84.03 | 4583.35 | 4.31 | 218.55 | 40.188447 | -104.610037 | 0.04 | 189.00 | -4.76 | |
| 4789.00 | 0.62 | 43.13 | 4773.34 | 5.13 | 219.93 | 40.188449 | -104.610032 | 0.22 | 190.00 | -5.59 | |
| 4978.00 | 1.13 | 54.07 | 4962.32 | 6.97 | 222.13 | 40.188454 | -104.610024 | 0.28 | 189.00 | -7.43 | |
| 5167.00 | 0.88 | 215.20 | 5151.30 | 6.87 | 222.81 | 40.188454 | -104.610022 | 1.05 | 189.00 | -7.34 | |
| 5356.00 | 0.62 | 277.07 | 5340.29 | 5.81 | 220.95 | 40.188451 | -104.610028 | 0.42 | 189.00 | -6.28 | |
| 5545.00 | 0.63 | 269.21 | 5529.28 | 5.93 | 218.90 | 40.188451 | -104.610035 | 0.05 | 189.00 | -6.38 | |
| 5735.00 | 0.55 | 224.71 | 5719.27 | 5.26 | 217.21 | 40.188449 | -104.610042 | 0.24 | 190.00 | -5.72 | |
| 5924.00 | 0.41 | 240.56 | 5908.26 | 4.29 | 215.99 | 40.188447 | -104.610046 | 0.10 | 189.00 | -4.74 | |
| 6113.00 | 0.53 | 114.80 | 6097.26 | 3.59 | 216.19 | 40.188445 | -104.610045 | 0.44 | 189.00 | -4.04 | |
| 6302.00 | 0.77 | 108.54 | 6286.25 | 2.82 | 218.19 | 40.188443 | -104.610038 | 0.13 | 189.00 | -3.27 | |
| 6440.00 | 1.89 | 142.95 | 6424.21 | 0.71 | 220.44 | 40.188437 | -104.610030 | 0.96 | 138.00 | -1.17 | |
| 6491.00 | 3.15 | 163.37 | 6475.16 | -1.31 | 221.35 | 40.188431 | -104.610027 | 3.00 | 51.00 | 0.84 | |
| 6538.00 | 10.27 | 174.12 | 6521.81 | -6.72 | 222.15 | 40.188417 | -104.610024 | 15.32 | 47.00 | 6.25 | |
| 6585.00 | 17.03 | 178.17 | 6567.46 | -17.78 | 222.80 | 40.188386 | -104.610022 | 14.52 | 47.00 | 17.31 | |
| 6632.00 | 20.94 | 183.54 | 6611.90 | -33.05 | 222.50 | 40.188344 | -104.610023 | 9.10 | 47.00 | 32.58 | |
| 6680.00 | 19.78 | 182.76 | 6656.90 | -49.72 | 221.58 | 40.188298 | -104.610026 | 2.48 | 48.00 | 49.26 | |
| 6727.00 | 23.67 | 181.39 | 6700.55 | -67.10 | 220.97 | 40.188251 | -104.610028 | 8.35 | 47.00 | 66.64 | |
| 6774.00 | 29.55 | 181.27 | 6742.55 | -88.14 | 220.48 | 40.188193 | -104.610030 | 12.51 | 47.00 | 87.68 | |
| 6821.00 | 33.76 | 179.40 | 6782.55 | -112.80 | 220.36 | 40.188125 | -104.610030 | 9.20 | 47.00 | 112.34 | |
| 6869.00 | 32.85 | 179.51 | 6822.67 | -139.15 | 220.61 | 40.188053 | -104.610029 | 1.90 | 48.00 | 138.69 | |
| 6916.00 | 37.75 | 180.90 | 6861.02 | -166.30 | 220.49 | 40.187978 | -104.610030 | 10.56 | 47.00 | 165.84 | |
| 6964.00 | 44.09 | 182.32 | 6897.27 | -197.71 | 219.59 | 40.187892 | -104.610033 | 13.35 | 48.00 | 197.25 | |
| 7058.00 | 56.03 | 179.55 | 6957.51 | -269.63 | 218.56 | 40.187695 | -104.610037 | 12.90 | 94.00 | 269.18 | |
| 7153.00 | 65.10 | 179.03 | 7004.15 | -352.28 | 219.61 | 40.187468 | -104.610033 | 9.56 | 95.00 | 351.82 | |
| 7248.00 | 78.64 | 179.08 | 7033.64 | -442.34 | 221.09 | 40.187221 | -104.610028 | 14.25 | 95.00 | 441.87 | |

5D Survey Report

| Survey Points (Relative to centre, TVD relative to Drill Floor) | | | | | | | | | | | |
|--|------------|-----------|----------------|---------------------|---------------------|-----------------|------------------|----------------------|---------------|---------------|---------|
| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | N.Offset (US ft) | E.Offset (US ft) | Latitude (°) | Longitude (°) | DLS (°/100 US ft) | CL (US ft) | VS (US ft) | Comment |
| 7279.00 | 82.91 | 177.91 | 7038.61 | -472.92 | 221.89 | 40.187137 | -104.610025 | 14.27 | 31.00 | 472.45 | |
| 7311.00 | 85.31 | 178.69 | 7041.90 | -504.73 | 222.84 | 40.187049 | -104.610021 | 7.88 | 32.00 | 504.27 | |
| 7354.00 | 84.89 | 178.90 | 7045.57 | -547.57 | 223.74 | 40.186932 | -104.610018 | 1.09 | 43.00 | 547.10 | |
| 7496.00 | 86.30 | 176.25 | 7056.48 | -689.00 | 229.73 | 40.186544 | -104.609997 | 2.11 | 142.00 | 688.52 | |
| 7590.00 | 86.54 | 176.05 | 7062.35 | -782.61 | 236.03 | 40.186287 | -104.609974 | 0.33 | 94.00 | 782.11 | |
| 7685.00 | 91.98 | 178.72 | 7063.57 | -877.46 | 240.36 | 40.186026 | -104.609959 | 6.38 | 95.00 | 876.95 | |
| 7779.00 | 94.38 | 178.79 | 7058.36 | -971.28 | 242.40 | 40.185769 | -104.609951 | 2.55 | 94.00 | 970.77 | |
| 7874.00 | 92.53 | 179.21 | 7052.63 | -1066.09 | 244.06 | 40.185508 | -104.609945 | 2.00 | 95.00 | 1065.58 | |
| 7968.00 | 89.26 | 179.11 | 7051.17 | -1160.06 | 245.43 | 40.185250 | -104.609941 | 3.48 | 94.00 | 1159.54 | |
| 8063.00 | 88.33 | 178.89 | 7053.16 | -1255.02 | 247.09 | 40.184990 | -104.609935 | 1.01 | 95.00 | 1254.50 | |
| 8158.00 | 86.79 | 178.90 | 7057.21 | -1349.92 | 248.92 | 40.184729 | -104.609928 | 1.62 | 95.00 | 1349.39 | |
| 8252.00 | 87.53 | 180.28 | 7061.87 | -1443.79 | 249.59 | 40.184472 | -104.609926 | 1.66 | 94.00 | 1443.27 | |
| 8347.00 | 88.77 | 181.66 | 7064.93 | -1538.73 | 247.99 | 40.184211 | -104.609931 | 1.95 | 95.00 | 1538.20 | |
| 8441.00 | 88.70 | 180.99 | 7067.01 | -1632.68 | 245.81 | 40.183953 | -104.609939 | 0.72 | 94.00 | 1632.16 | |
| 8536.00 | 89.14 | 180.09 | 7068.80 | -1727.66 | 244.92 | 40.183692 | -104.609942 | 1.05 | 95.00 | 1727.14 | |
| 8631.00 | 89.69 | 180.04 | 7069.77 | -1822.65 | 244.81 | 40.183432 | -104.609943 | 0.58 | 95.00 | 1822.13 | |
| 8725.00 | 89.03 | 179.49 | 7070.82 | -1916.64 | 245.19 | 40.183174 | -104.609941 | 0.91 | 94.00 | 1916.13 | |
| 8820.00 | 89.26 | 182.57 | 7072.24 | -2011.61 | 243.49 | 40.182913 | -104.609948 | 3.25 | 95.00 | 2011.09 | |
| 8914.00 | 90.37 | 183.60 | 7072.54 | -2105.47 | 238.43 | 40.182655 | -104.609966 | 1.61 | 94.00 | 2104.96 | |
| 9009.00 | 89.20 | 183.93 | 7072.90 | -2200.26 | 232.19 | 40.182395 | -104.609988 | 1.28 | 95.00 | 2199.77 | |
| 9103.00 | 90.31 | 182.67 | 7073.30 | -2294.10 | 226.78 | 40.182137 | -104.610007 | 1.79 | 94.00 | 2293.62 | |
| 9198.00 | 89.29 | 179.49 | 7073.63 | -2389.07 | 224.99 | 40.181877 | -104.610014 | 3.52 | 95.00 | 2388.59 | |
| 9293.00 | 90.06 | 180.82 | 7074.17 | -2484.06 | 224.73 | 40.181616 | -104.610015 | 1.62 | 95.00 | 2483.59 | |
| 9387.00 | 89.32 | 180.06 | 7074.68 | -2578.06 | 224.01 | 40.181358 | -104.610017 | 1.13 | 94.00 | 2577.58 | |
| 9479.00 | 90.06 | 179.39 | 7075.18 | -2670.05 | 224.45 | 40.181105 | -104.610016 | 1.09 | 92.00 | 2669.58 | |
| 9571.00 | 90.25 | 181.06 | 7074.93 | -2762.05 | 224.09 | 40.180853 | -104.610017 | 1.83 | 92.00 | 2761.57 | |
| 9663.00 | 89.63 | 180.64 | 7075.02 | -2854.04 | 222.73 | 40.180600 | -104.610022 | 0.81 | 92.00 | 2853.57 | |
| 9755.00 | 90.56 | 180.11 | 7074.87 | -2946.04 | 222.12 | 40.180348 | -104.610024 | 1.16 | 92.00 | 2945.56 | |
| 9847.00 | 89.63 | 179.25 | 7074.72 | -3038.03 | 222.64 | 40.180095 | -104.610022 | 1.38 | 92.00 | 3037.56 | |
| 9939.00 | 88.40 | 177.66 | 7076.30 | -3129.98 | 225.12 | 40.179843 | -104.610013 | 2.18 | 92.00 | 3129.50 | |
| 10032.00 | 88.58 | 178.56 | 7078.75 | -3222.90 | 228.18 | 40.179588 | -104.610002 | 0.99 | 93.00 | 3222.41 | |
| 10124.00 | 89.38 | 178.70 | 7080.39 | -3314.86 | 230.38 | 40.179335 | -104.609995 | 0.88 | 92.00 | 3314.37 | |
| 10216.00 | 90.80 | 178.51 | 7080.24 | -3406.83 | 232.62 | 40.179083 | -104.609986 | 1.56 | 92.00 | 3406.33 | |
| 10307.00 | 89.57 | 180.11 | 7079.95 | -3497.81 | 233.72 | 40.178833 | -104.609983 | 2.22 | 91.00 | 3497.32 | |
| 10399.00 | 90.43 | 179.53 | 7079.95 | -3589.81 | 234.01 | 40.178581 | -104.609982 | 1.13 | 92.00 | 3589.31 | |
| 10491.00 | 90.25 | 180.29 | 7079.40 | -3681.81 | 234.15 | 40.178328 | -104.609981 | 0.85 | 92.00 | 3681.31 | |
| 10583.00 | 90.35 | 181.96 | 7078.92 | -3773.79 | 232.35 | 40.178075 | -104.609988 | 1.82 | 92.00 | 3773.29 | |
| 10675.00 | 90.31 | 181.17 | 7078.39 | -3865.75 | 229.83 | 40.177823 | -104.609996 | 0.86 | 92.00 | 3865.26 | |
| 10767.00 | 89.57 | 180.85 | 7078.49 | -3957.74 | 228.21 | 40.177571 | -104.610002 | 0.88 | 92.00 | 3957.25 | |
| 10858.00 | 92.10 | 183.07 | 7077.16 | -4048.66 | 225.10 | 40.177321 | -104.610013 | 3.70 | 91.00 | 4048.18 | |
| 10948.00 | 92.34 | 182.85 | 7073.68 | -4138.47 | 220.46 | 40.177074 | -104.610030 | 0.36 | 90.00 | 4138.00 | |

5D Survey Report

| Survey Points (Relative to centre, TVD relative to Drill Floor) | | | | | | | | | | | |
|--|------------|-----------|----------------|---------------------|---------------------|-----------------|------------------|----------------------|---------------|---------------|---------|
| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | N.Offset (US ft) | E.Offset (US ft) | Latitude (°) | Longitude (°) | DLS (°/100 US ft) | CL (US ft) | VS (US ft) | Comment |
| 11039.00 | 91.79 | 183.30 | 7070.40 | -4229.28 | 215.58 | 40.176825 | -104.610048 | 0.78 | 91.00 | 4228.82 | |
| 11130.00 | 90.25 | 182.53 | 7068.78 | -4320.15 | 210.95 | 40.176576 | -104.610064 | 1.89 | 91.00 | 4319.69 | |
| 11221.00 | 90.12 | 182.99 | 7068.48 | -4411.04 | 206.57 | 40.176326 | -104.610080 | 0.53 | 91.00 | 4410.60 | |
| 11313.00 | 89.75 | 180.93 | 7068.59 | -4502.98 | 203.42 | 40.176074 | -104.610091 | 2.27 | 92.00 | 4502.54 | |
| 11404.00 | 90.09 | 180.55 | 7068.71 | -4593.97 | 202.25 | 40.175824 | -104.610095 | 0.56 | 91.00 | 4593.54 | |
| 11497.00 | 90.19 | 180.97 | 7068.49 | -4686.96 | 201.01 | 40.175569 | -104.610100 | 0.46 | 93.00 | 4686.53 | |
| 11588.00 | 89.57 | 179.96 | 7068.68 | -4777.96 | 200.28 | 40.175319 | -104.610102 | 1.30 | 91.00 | 4777.53 | |
| 11680.00 | 89.26 | 179.03 | 7069.62 | -4869.95 | 201.09 | 40.175066 | -104.610099 | 1.07 | 92.00 | 4869.52 | |
| 11771.00 | 91.91 | 179.08 | 7068.69 | -4960.92 | 202.59 | 40.174817 | -104.610094 | 2.91 | 91.00 | 4960.49 | |
| 11862.00 | 90.12 | 175.55 | 7067.08 | -5051.79 | 206.85 | 40.174567 | -104.610079 | 4.35 | 91.00 | 5051.35 | |
| 11954.00 | 89.69 | 174.27 | 7067.23 | -5143.43 | 215.01 | 40.174316 | -104.610050 | 1.47 | 92.00 | 5142.97 | |
| 12045.00 | 90.19 | 177.89 | 7067.32 | -5234.20 | 221.23 | 40.174066 | -104.610027 | 4.02 | 91.00 | 5233.72 | |
| 12137.00 | 88.52 | 179.06 | 7068.36 | -5326.16 | 223.68 | 40.173814 | -104.610019 | 2.22 | 92.00 | 5325.68 | |
| 12232.00 | 87.28 | 178.12 | 7071.84 | -5421.06 | 226.02 | 40.173554 | -104.610010 | 1.64 | 95.00 | 5420.57 | |
| 12326.00 | 86.98 | 174.88 | 7076.55 | -5514.75 | 231.75 | 40.173296 | -104.609990 | 3.46 | 94.00 | 5514.26 | |
| 12421.00 | 87.53 | 176.53 | 7081.10 | -5609.38 | 238.85 | 40.173037 | -104.609964 | 1.83 | 95.00 | 5608.86 | |
| 12516.00 | 87.16 | 177.28 | 7085.50 | -5704.13 | 243.98 | 40.172776 | -104.609946 | 0.88 | 95.00 | 5703.61 | |
| 12610.00 | 87.84 | 177.36 | 7089.60 | -5797.94 | 248.37 | 40.172519 | -104.609930 | 0.73 | 94.00 | 5797.41 | |
| 12705.00 | 89.08 | 179.60 | 7092.15 | -5892.87 | 250.88 | 40.172258 | -104.609921 | 2.69 | 95.00 | 5892.33 | |
| 12800.00 | 90.31 | 179.63 | 7092.66 | -5987.86 | 251.52 | 40.171998 | -104.609919 | 1.30 | 95.00 | 5987.32 | |
| 12894.00 | 92.10 | 183.72 | 7090.68 | -6081.78 | 248.78 | 40.171740 | -104.609929 | 4.75 | 94.00 | 6081.24 | |
| 12989.00 | 91.42 | 183.39 | 7087.76 | -6176.55 | 242.89 | 40.171480 | -104.609950 | 0.80 | 95.00 | 6176.02 | |
| 13083.00 | 92.04 | 185.59 | 7084.93 | -6270.21 | 235.54 | 40.171222 | -104.609976 | 2.43 | 94.00 | 6269.70 | |
| 13178.00 | 91.23 | 184.62 | 7082.21 | -6364.79 | 227.09 | 40.170963 | -104.610006 | 1.33 | 95.00 | 6364.30 | |
| 13272.00 | 87.41 | 180.03 | 7083.33 | -6458.67 | 223.27 | 40.170705 | -104.610020 | 6.35 | 94.00 | 6458.18 | |
| 13367.00 | 87.16 | 181.60 | 7087.83 | -6553.55 | 221.92 | 40.170445 | -104.610025 | 1.67 | 95.00 | 6553.07 | |
| 13462.00 | 87.96 | 182.50 | 7091.88 | -6648.40 | 218.53 | 40.170184 | -104.610037 | 1.27 | 95.00 | 6647.93 | |
| 13556.00 | 89.01 | 184.83 | 7094.36 | -6742.17 | 212.52 | 40.169927 | -104.610059 | 2.72 | 94.00 | 6741.71 | |
| 13651.00 | 89.14 | 183.85 | 7095.89 | -6836.88 | 205.33 | 40.169667 | -104.610084 | 1.04 | 95.00 | 6836.43 | |
| 13745.00 | 90.74 | 183.93 | 7095.99 | -6930.66 | 198.96 | 40.169409 | -104.610107 | 1.70 | 94.00 | 6930.23 | |
| 13840.00 | 90.55 | 181.88 | 7094.92 | -7025.53 | 194.14 | 40.169149 | -104.610124 | 2.17 | 95.00 | 7025.10 | |
| 13935.00 | 89.75 | 181.27 | 7094.67 | -7120.49 | 191.53 | 40.168888 | -104.610134 | 1.06 | 95.00 | 7120.07 | |
| 14029.00 | 88.58 | 180.10 | 7096.04 | -7214.47 | 190.41 | 40.168630 | -104.610138 | 1.76 | 94.00 | 7214.05 | |
| 14124.00 | 88.89 | 181.37 | 7098.14 | -7309.44 | 189.19 | 40.168370 | -104.610142 | 1.38 | 95.00 | 7309.02 | |
| 14219.00 | 89.20 | 178.72 | 7099.73 | -7404.41 | 189.11 | 40.168109 | -104.610142 | 2.81 | 95.00 | 7404.00 | |
| 14312.00 | 91.11 | 179.89 | 7099.47 | -7497.40 | 190.24 | 40.167854 | -104.610138 | 2.41 | 93.00 | 7496.99 | |
| 14408.00 | 90.56 | 179.20 | 7098.07 | -7593.39 | 191.01 | 40.167590 | -104.610136 | 0.92 | 96.00 | 7592.97 | |
| 14503.00 | 87.90 | 178.00 | 7099.35 | -7688.34 | 193.33 | 40.167330 | -104.610127 | 3.07 | 95.00 | 7687.92 | |
| 14597.00 | 88.03 | 177.46 | 7102.69 | -7782.21 | 197.05 | 40.167072 | -104.610114 | 0.59 | 94.00 | 7781.78 | |
| 14692.00 | 90.12 | 176.93 | 7104.22 | -7877.07 | 201.69 | 40.166811 | -104.610097 | 2.27 | 95.00 | 7876.63 | |
| 14786.00 | 91.85 | 178.43 | 7102.61 | -7970.98 | 205.50 | 40.166554 | -104.610084 | 2.44 | 94.00 | 7970.53 | |

5D Survey Report

| Survey Points (Relative to centre, TVD relative to Drill Floor) | | | | | | | | | | | |
|--|------------|-----------|----------------|---------------------|---------------------|-----------------|------------------|----------------------|---------------|---------------|------------------------|
| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | N.Offset (US ft) | E.Offset (US ft) | Latitude (°) | Longitude (°) | DLS (°/100 US ft) | CL (US ft) | VS (US ft) | Comment |
| 14881.00 | 90.93 | 177.79 | 7100.30 | -8065.90 | 208.63 | 40.166293 | -104.610073 | 1.18 | 95.00 | 8065.44 | |
| 14975.00 | 90.86 | 178.33 | 7098.83 | -8159.83 | 211.81 | 40.166035 | -104.610061 | 0.58 | 94.00 | 8159.37 | |
| 15070.00 | 90.31 | 178.85 | 7097.86 | -8254.80 | 214.15 | 40.165775 | -104.610053 | 0.80 | 95.00 | 8254.33 | |
| 15165.00 | 89.26 | 177.43 | 7098.22 | -8349.74 | 217.23 | 40.165514 | -104.610042 | 1.86 | 95.00 | 8349.27 | |
| 15257.00 | 88.09 | 175.39 | 7100.35 | -8441.53 | 222.99 | 40.165262 | -104.610021 | 2.56 | 92.00 | 8441.04 | |
| 15352.00 | 88.52 | 175.15 | 7103.16 | -8536.16 | 230.82 | 40.165002 | -104.609993 | 0.52 | 95.00 | 8535.66 | |
| 15446.00 | 88.58 | 175.42 | 7105.54 | -8629.82 | 238.55 | 40.164745 | -104.609965 | 0.29 | 94.00 | 8629.30 | |
| 15541.00 | 88.15 | 176.35 | 7108.25 | -8724.53 | 245.36 | 40.164485 | -104.609941 | 1.08 | 95.00 | 8724.00 | |
| 15636.00 | 87.96 | 179.18 | 7111.47 | -8819.40 | 249.06 | 40.164225 | -104.609928 | 2.98 | 95.00 | 8818.85 | |
| 15730.00 | 88.40 | 180.25 | 7114.46 | -8913.35 | 249.53 | 40.163967 | -104.609926 | 1.23 | 94.00 | 8912.80 | |
| 15825.00 | 88.21 | 181.28 | 7117.27 | -9008.29 | 248.26 | 40.163706 | -104.609931 | 1.10 | 95.00 | 9007.75 | |
| 15919.00 | 88.95 | 181.14 | 7119.60 | -9102.24 | 246.28 | 40.163448 | -104.609938 | 0.80 | 94.00 | 9101.71 | |
| 16014.00 | 89.08 | 180.73 | 7121.23 | -9197.22 | 244.73 | 40.163187 | -104.609943 | 0.45 | 95.00 | 9196.68 | |
| 16109.00 | 86.60 | 179.61 | 7124.81 | -9292.14 | 244.45 | 40.162927 | -104.609944 | 2.86 | 95.00 | 9291.61 | |
| 16203.00 | 86.42 | 180.20 | 7130.53 | -9385.96 | 244.60 | 40.162669 | -104.609944 | 0.66 | 94.00 | 9385.43 | |
| 16235.00 | 86.24 | 179.85 | 7132.58 | -9417.90 | 244.59 | 40.162582 | -104.609944 | 1.23 | 32.00 | 9417.37 | |
| 16266.00 | 86.67 | 179.95 | 7134.50 | -9448.84 | 244.64 | 40.162497 | -104.609944 | 1.42 | 31.00 | 9448.31 | |
| 16298.00 | 86.36 | 180.33 | 7136.44 | -9480.78 | 244.56 | 40.162409 | -104.609944 | 1.53 | 32.00 | 9480.25 | |
| 16329.00 | 85.24 | 180.02 | 7138.71 | -9511.70 | 244.47 | 40.162324 | -104.609944 | 3.75 | 31.00 | 9511.16 | |
| 16361.00 | 84.82 | 178.70 | 7141.49 | -9543.57 | 244.83 | 40.162237 | -104.609943 | 4.31 | 32.00 | 9543.04 | |
| 16392.00 | 84.71 | 178.96 | 7144.31 | -9574.44 | 245.46 | 40.162152 | -104.609941 | 0.91 | 31.00 | 9573.90 | |
| 16424.00 | 84.26 | 178.44 | 7147.39 | -9606.28 | 246.18 | 40.162065 | -104.609938 | 2.14 | 32.00 | 9605.74 | |
| 16455.00 | 83.93 | 178.63 | 7150.58 | -9637.11 | 246.97 | 40.161980 | -104.609935 | 1.23 | 31.00 | 9636.57 | |
| 16487.00 | 83.82 | 177.71 | 7153.99 | -9668.91 | 247.98 | 40.161893 | -104.609932 | 2.88 | 32.00 | 9668.37 | |
| 16519.00 | 83.58 | 178.10 | 7157.51 | -9700.69 | 249.15 | 40.161805 | -104.609928 | 1.42 | 32.00 | 9700.15 | |
| 16551.00 | 83.40 | 177.85 | 7161.13 | -9732.47 | 250.27 | 40.161718 | -104.609924 | 0.96 | 32.00 | 9731.92 | |
| 16582.00 | 83.21 | 177.25 | 7164.75 | -9763.23 | 251.59 | 40.161634 | -104.609919 | 2.02 | 31.00 | 9762.68 | |
| 16611.00 | 83.04 | 177.02 | 7168.22 | -9791.98 | 253.02 | 40.161555 | -104.609914 | 0.98 | 29.00 | 9791.43 | LAST WFT MWD SURVEY |
| 16665.00 | 83.04 | 177.02 | 7174.76 | -9845.51 | 255.81 | 40.161408 | -104.609904 | 0.00 | 54.00 | 9844.95 | PROJECTION TO TD |



DAILY ACTIVITIES

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 1 - 2013/02/09

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Eric Hughes

MWD Supervisor: Scott Coulter, Rusty Korms

Company Man: Craig Jones, Clint Tivedoux

GROUND ELEV: 4833 ft

START DEPTH: 700.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 0.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|--------------------------|-------|------|-----|-------------|----------------------------|------|------|-----|
| 00:00-20:35 | Wait On Orders | 20.58 | 0 | n/a | 22:00-23:30 | Slip And Cut | 1.50 | 0 | 1 |
| 20:35-21:20 | Handle Directional Tools | 0.75 | 0 | 1 | 23:30-23:45 | Shallow Test Tools | 0.25 | 0 | 1 |
| 21:20-22:00 | RIH With Directional | 0.67 | 0 | 1 | 23:45-24:00 | Drill Out Flt, Shoe & Cmmt | 0.25 | 0 | 1 |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.25 |
| MOTOR REAM: 0.00 | | TRIP: 0.67 |
| CIRC: 0.25 | ROTARY DRILL: 0.00 | OTHER: 23.08 |
| MOTOR HRS: 0.25 | DRILL HRS: 0.00 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|---------------------------|-------------------------|
| ROTARY TORQUE: 4000 ft-lb | STRING WEIGHT: 0 lbs |
| WOB SLIDING (HI): 20 lbf | WOB ROTATE (HI): 35 lbf |
| WOB SLIDING (LO): 8 lbf | WOB ROTATE (LO): 12 lbf |
| RPM (ROTARY): 60 rpm | DRAG UP: 0 lbf |
| RPM (MOTOR): 240 rpm | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|----------------------------|---------------------------------|
| BHA: 1 | HOLE SIZE: 8.75 in | SECTION TYPE: Build & Hold | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: 8.25 | SERIAL#: 675-3993 | MODEL: QME4570 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 6 3/4" (171mm) | LOBE CFG.: 7/8 |
| MANFCT: Varel | BIT TYPE: Varel Bit | TYPE: VM513 | MTR HRS THIS DAY: 0.25 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / TD | | | MTR HRS TO DATE: 0.25 |
| | | | NOZZLES: 0.752 in² TFA |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 2200 | PRESSURE OFF BTM: 1600 | TOTAL FLOW RATE: 598.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 78.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 78.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | | LINER: 6.00 in |
| | | STROKE VOL.: 3.8438 gal/stk |
| | | LINER: 6.00 in |
| | | STROKE VOL.: 3.8438 gal/stk |
| | | LINER: 0.00 in |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|----------------------|---------------------------|------------------------|-------------|-------------------|-----------------------|
| MUD TYPE: Polymer | VISC: 40 sec/qt | WTR LOSS: 6.5 cc/30min | PV: 13 cP | YP: 11 lb/100 ft² | pH: 9.2 |
| DENSITY: 10.4 lb/gal | GEL 0/10: 3.00 lb/100 ft² | SAND: 1.5 | SOLIDS: 8.8 | OIL: 1.5 | TEMP: 65 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Wait on orders. Pick up Build and Hold BHA. Drill Cement and Float Equipment.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981**Day 2 - 2013/02/10****FILE #:** 4028454**WELL NAME:** Dechant State 15C-1HZ**SERVICE CO.:** Weatherford**JOB TYPE:** Horizontal**COMPANY:** Anadarko Petroleum Corporation**SURVEY TYPE:** Positive Pulse MWD**RIG & NO:** Helmerich & Payne 307**SURFACE LOCATION:** Weld County**FIELD / LOCATION:** Wattenburg Field / CO / USA**DIR Supervisor:** Josh Monroe, Charles Apodaca, Eric Hughes, Joe Kelly**MWD Supervisor:** Rusty Korms, Scott Coulter**Company Man:** Craig Jones, Clint Tivedoux**GROUND ELEV:** 4833 ft**START DEPTH:** 0.0 ft**PROGRESS:** 5045.0 ft**DAILY COST:** USD\$0.00**KB ELEV:** 25 ft**END DEPTH:** 5045.0 ft**AVG. ROP.:** 371.5 ft/hr**PREVIOUS COST:** USD\$0.00**TOTAL COST:** USD\$0.00**WORK STATUS:** Operating*(All units are imperial.)*

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|--------------------------------|------|------|-----|-------------|----------------------------------|------|------|-----|
| 00:00-00:15 | Drill Out Flt, Shoe & Cmmt | 0.25 | 0 | 1 | 11:30-11:40 | Circ & Accumulate Surveys | 0.17 | 3051 | 1 |
| 00:15-00:25 | Rotating With Motor | 0.17 | 844 | 1 | 11:40-11:50 | Rotating With Motor | 0.17 | 3146 | 1 |
| 00:25-00:50 | Circ & Accumulate Surveys | 0.42 | 844 | 1 | 11:50-12:00 | Circ & Accumulate Surveys | 0.17 | 3146 | 1 |
| 00:50-01:05 | Rotating With Motor | 0.25 | 926 | 1 | 12:00-12:15 | Orienting With Motor | 0.25 | 3166 | 1 |
| 01:05-01:10 | Undefined - See Comments - SPR | 0.08 | 926 | 1 | 12:15-12:25 | Rotating With Motor | 0.17 | 3241 | 1 |
| 01:10-01:20 | Circ & Accumulate Surveys | 0.17 | 926 | 1 | 12:25-12:35 | Circ & Accumulate Surveys | 0.17 | 3241 | 1 |
| 01:20-01:25 | Rotating With Motor | 0.08 | 1018 | 1 | 12:35-12:45 | Rotating With Motor | 0.17 | 3335 | 1 |
| 01:25-01:30 | Circ & Accumulate Surveys | 0.08 | 1018 | 1 | 12:45-13:00 | Circ & Accumulate Surveys | 0.25 | 3335 | 1 |
| 01:30-01:35 | Rotating With Motor | 0.08 | 1110 | 1 | 13:00-13:10 | Orienting With Motor | 0.17 | 3355 | 1 |
| 01:35-01:45 | Circ & Accumulate Surveys | 0.17 | 1110 | 1 | 13:10-13:25 | Rotating With Motor | 0.25 | 3430 | 1 |
| 01:45-01:55 | Rotating With Motor | 0.17 | 1202 | 1 | 13:25-13:50 | Circulating | 0.42 | 3430 | 1 |
| 01:55-02:05 | Circ & Accumulate Surveys | 0.17 | 1202 | 1 | 13:50-14:00 | Circ & Accumulate Surveys | 0.17 | 3430 | 1 |
| 02:05-02:10 | Rotating With Motor | 0.08 | 1293 | 1 | 14:00-14:10 | Orienting With Motor | 0.17 | 3450 | 1 |
| 02:10-02:20 | Circ & Accumulate Surveys | 0.17 | 1293 | 1 | 14:10-14:35 | Rotating With Motor | 0.42 | 3524 | 1 |
| 02:20-02:30 | Rotating With Motor | 0.17 | 1385 | 1 | 14:35-14:45 | Circ & Accumulate Surveys | 0.17 | 3524 | 1 |
| 02:30-03:30 | Work On MWD - Rig Lost Power | 1.00 | 1385 | 1 | 14:45-14:55 | Orienting With Motor | 0.17 | 3551 | 1 |
| 03:30-03:40 | Circ & Accumulate Surveys | 0.17 | 1385 | 1 | 14:55-15:10 | Rotating With Motor | 0.25 | 3619 | 1 |
| 03:40-03:45 | Rotating With Motor | 0.08 | 1477 | 1 | 15:10-15:20 | Circ & Accumulate Surveys | 0.17 | 3619 | 1 |
| 03:45-03:55 | Undefined - See Comments - SPR | 0.17 | 1477 | 1 | 15:20-15:30 | Rotating With Motor | 0.17 | 3713 | 1 |
| 03:55-04:00 | Circ & Accumulate Surveys | 0.08 | 1477 | 1 | 15:30-15:40 | Circ & Accumulate Surveys | 0.17 | 3713 | 1 |
| 04:00-04:10 | Rotating With Motor | 0.17 | 1568 | 1 | 15:40-16:00 | Rotating With Motor | 0.33 | 3808 | 1 |
| 04:10-04:20 | Circ & Accumulate Surveys | 0.17 | 1568 | 1 | 16:00-16:10 | Circ & Accumulate Surveys | 0.17 | 3808 | 1 |
| 04:20-04:25 | Rotating With Motor | 0.08 | 1659 | 1 | 16:10-16:40 | Rotating With Motor | 0.50 | 3902 | 1 |
| 04:25-04:35 | Circ & Accumulate Surveys | 0.17 | 1659 | 1 | 16:40-16:50 | Circ & Accumulate Surveys | 0.17 | 3902 | 1 |
| 04:35-04:40 | Rotating With Motor | 0.08 | 1750 | 1 | 16:50-17:00 | Rotating With Motor | 0.17 | 3935 | 1 |
| 04:40-04:50 | Circ & Accumulate Surveys | 0.17 | 1750 | 1 | 17:00-17:15 | Rig Service | 0.25 | 3935 | 1 |
| 04:50-04:55 | Rotating With Motor | 0.08 | 1840 | 1 | 17:15-17:30 | Rotating With Motor | 0.25 | 3997 | 1 |
| 04:55-05:05 | Circ & Accumulate Surveys | 0.17 | 1840 | 1 | 17:30-17:45 | Circ & Accumulate Surveys | 0.25 | 3997 | 1 |
| 05:05-05:10 | Rotating With Motor | 0.08 | 1932 | 1 | 17:45-17:55 | Orienting With Motor | 0.17 | 4012 | 1 |
| 05:10-05:20 | Circ & Accumulate Surveys | 0.17 | 1932 | 1 | 17:55-18:10 | Rotating With Motor | 0.25 | 4092 | 1 |
| 05:20-05:35 | Rotating With Motor | 0.25 | 2023 | 1 | 18:10-18:15 | Circ & Accumulate Surveys | 0.08 | 4092 | 1 |
| 05:35-05:40 | Circulating | 0.08 | 2023 | 1 | 18:15-18:35 | Orienting With Motor | 0.33 | 4015 | 1 |
| 05:40-05:50 | Circ & Accumulate Surveys | 0.17 | 2023 | 1 | 18:35-18:45 | Rotating With Motor | 0.17 | 4186 | 1 |
| 05:50-05:55 | Rotating With Motor | 0.08 | 2114 | 1 | 18:45-18:55 | Circulating - See Comments - SPR | 0.17 | 4186 | 1 |
| 05:55-06:15 | Circ & Accumulate Surveys | 0.33 | 2114 | 1 | 18:55-19:05 | Circ & Accumulate Surveys | 0.17 | 4186 | 1 |
| 06:15-06:30 | Rotating With Motor | 0.25 | 2206 | 1 | 19:05-19:25 | Orienting With Motor | 0.33 | 4200 | 1 |
| 06:30-06:40 | Circ & Accumulate Surveys | 0.17 | 2206 | 1 | 19:25-19:35 | Rotating With Motor | 0.17 | 4281 | 1 |
| 06:40-07:30 | Rotating With Motor | 0.83 | 2389 | 1 | 19:35-19:45 | Circ & Accumulate Surveys | 0.17 | 4281 | 1 |
| 07:30-07:40 | Circ & Accumulate Surveys | 0.17 | 2389 | 1 | 19:45-20:10 | Rotating With Motor | 0.42 | 4376 | 1 |
| 07:40-07:50 | Rotating With Motor | 0.17 | 2484 | 1 | 20:10-20:20 | Circ & Accumulate Surveys | 0.17 | 4376 | 1 |

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 2 - 2013/02/10

| | | | | | | | | | |
|-------------|---------------------------|------|------|---|-------------|---------------------------------------|------|------|---|
| 07:50-08:00 | Circ & Accumulate Surveys | 0.17 | 2484 | 1 | 20:20-20:35 | Rotating With Motor | 0.25 | 4470 | 1 |
| 08:00-08:15 | Orienting With Motor | 0.25 | 2484 | 1 | 20:35-20:45 | Circ & Accumulate Surveys | 0.17 | 4470 | 1 |
| 08:15-08:20 | Rotating With Motor | 0.08 | 2578 | 1 | 20:45-21:00 | Rotating With Motor | 0.25 | 4565 | 1 |
| 08:20-08:25 | Circ & Accumulate Surveys | 0.08 | 2578 | 1 | 21:00-21:05 | Other - See Comments - CONNECTION | 0.08 | 4565 | 1 |
| 08:25-08:40 | Orienting With Motor | 0.25 | 2593 | 1 | 21:05-21:20 | Rotating With Motor | 0.25 | 4659 | 1 |
| 08:40-08:55 | Rotating With Motor | 0.25 | 2673 | 1 | 21:20-21:30 | Circ & Accumulate Surveys | 0.17 | 4659 | 1 |
| 08:55-09:05 | Circ & Accumulate Surveys | 0.17 | 2673 | 1 | 21:30-21:50 | Rotating With Motor | 0.33 | 4754 | 1 |
| 09:05-09:40 | Orienting With Motor | 0.58 | 2708 | 1 | 21:50-22:00 | Circulating - See Comments - SPR-CONN | 0.17 | 4754 | 1 |
| 09:40-09:45 | Rotating With Motor | 0.08 | 2767 | 1 | 22:00-22:15 | Rotating With Motor | 0.25 | 4849 | 1 |
| 09:45-09:50 | Circ & Accumulate Surveys | 0.08 | 2767 | 1 | 22:15-22:30 | Other - See Comments - CONNECTION | 0.25 | 4849 | 1 |
| 09:50-10:05 | Orienting With Motor | 0.25 | 2787 | 1 | 22:30-22:35 | Circ & Accumulate Surveys | 0.08 | 4849 | 1 |
| 10:05-10:15 | Rotating With Motor | 0.17 | 2862 | 1 | 22:35-22:55 | Rotating With Motor | 0.33 | 4943 | 1 |
| 10:15-10:20 | Circ & Accumulate Surveys | 0.08 | 2862 | 1 | 22:55-23:00 | Circ & Accumulate Surveys - CONN | 0.08 | 4943 | 1 |
| 10:20-10:30 | Orienting With Motor | 0.17 | 2877 | 1 | 23:00-23:20 | Rotating With Motor | 0.33 | 5038 | 1 |
| 10:30-10:45 | Rotating With Motor | 0.25 | 2957 | 1 | 23:20-23:45 | Rig Service | 0.42 | 5038 | 1 |
| 10:45-11:00 | Circ & Accumulate Surveys | 0.25 | 2957 | 1 | 23:45-23:50 | Circ & Accumulate Surveys | 0.08 | 5038 | 1 |
| 11:00-11:10 | Orienting With Motor | 0.17 | 2977 | 1 | 23:50-24:00 | Orienting With Motor | 0.17 | 5045 | 1 |
| 11:10-11:30 | Rotating With Motor | 0.33 | 3051 | 1 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | |
|---------------------------|----------------------------|---------------------------|----------------------------------|--------------------------------|
| MOTOR DRILL: 13.58 | ORIENTING HRS: 3.42 | ROTARY DRILL: 0.00 | ROTARY TORQUE: 4000 ft-lb | STRING WEIGHT 65000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 10.17 | MOTOR HRS: 21.75 | WOB SLIDING (HI): 15 lbf | WOB ROTATE (HI): 35 lbf |
| MOTOR REAM: 0.00 | | TRIP: 0.00 | WOB SLIDING (LO): 8 lbf | WOB ROTATE (LO): 16 lbf |
| CIRC: 8.17 | ROTARY DRILL: 0.00 | OTHER: 2.25 | RPM (ROTARY): 60 rpm | DRAG UP: 66000 lbf |
| MOTOR HRS: 21.75 | DRILL HRS: 13.58 | TOTAL HRS: 24.00 | RPM (MOTOR): 240 rpm | DRAG DN: 63000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|----------------------------|-----------------------------------|---|
| BHA: 1 | HOLE SIZE: 8.75 in | SECTION TYPE: Build & Hold | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: 8.25 | SERIAL#: 675-3993 | MODEL: QME4570 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 6 3/4" (171mm) | LOBE CFG.: 7/8 |
| MANFCT: Varel | BIT TYPE: Varel Bit | TYPE: VM513 | MTR HRS THIS DAY: 21.75 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / TD | | | MTR HRS TO DATE: 22 |
| | | | NOZZLES: 0.752 in ² TFA |

PUMP PARAMETERS

| | | |
|------------------------------|-------------------------------|--|
| PRESSURE ON BTM: 2100 | PRESSURE OFF BTM: 1800 | TOTAL FLOW RATE: 598.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 78.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 78.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | | LINER: 6.00 in |
| | | STROKE VOL.: 3.8438 gal/stk |
| | | LINER: 6.00 in |
| | | STROKE VOL.: 3.8438 gal/stk |
| | | LINER: 0.00 in |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|----------------------------|--|-------------------------------|--------------------|-------------------------------------|------------------------------|
| MUD TYPE: Water | VISC: 30 sec/qt | WTR LOSS: 0 cc/30min | PV: 1 cP | YP: 4 lb/100 ft ² | pH: 8.7 |
| DENSITY: 9.2 lb/gal | GEL 0/10: 0.00 lb/100 ft ² | SAND: 0.25 | SOLIDS: 3.7 | OIL: 0 | TEMP: 69 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Drilling ahead in Build and Hold section.

Had a power outage on Rig. Upon Start up a power surge was experienced and caused the MWD Instrunet USB Interface to fail. Interface was replaced and systems are working properly.

While drilling ahead we have been experiencing issues with the mud pumps. Unable to hold consistent strokes as pumps were surging causing slower than normal ROP. Often drilling w/ one pump.

While drilling today we have varied paramaters in our RPM 45-70 and WOB f/ 15-45K. This assembly drills best w/ 20k wob and 1000 diff. We have continued to run different parameters in hopes of increasing penetration rate.

CUSTOMER SIGNATURE:



Weatherford®

Daily Activity Report

Drilling Services
v4.2.3981

Day 3 - 2013/02/11

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca, Eric Hughes

MWD Supervisor: Rusty Korms, Scott Coulter

Company Man: Craig Jones, Clint Tibedoux

GROUND ELEV: 4833 ft

START DEPTH: 5045.0 ft

PROGRESS: 1600.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 6645.0 ft

AVG. ROP.: 206.4 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|-----------------------------------|------|------|-----|-------------|--|------|------|-----|
| 00:00-00:05 | Orienting With Motor | 0.08 | 5050 | 1 | 05:30-05:40 | Circ & Accumulate Surveys | 0.17 | 6173 | 1 |
| 00:05-00:25 | Rotating With Motor | 0.33 | 5133 | 1 | 05:40-06:00 | Rotating With Motor | 0.33 | 6268 | 1 |
| 00:25-00:30 | Other - See Comments - CONNECTION | 0.08 | 5133 | 1 | 06:00-06:05 | Other - See Comments - Conn. | 0.08 | 6268 | 1 |
| 00:30-00:50 | Rotating With Motor | 0.33 | 5227 | 1 | 06:05-06:30 | Rotating With Motor | 0.42 | 6362 | 1 |
| 00:50-01:05 | Circ & Accumulate Surveys | 0.25 | 5227 | 1 | 06:30-06:40 | Circ & Accumulate Surveys | 0.17 | 6362 | 1 |
| 01:05-01:20 | Rotating With Motor | 0.25 | 5322 | 1 | 06:40-08:00 | Rotating With Motor | 1.33 | 6500 | 1 |
| 01:20-01:30 | Other - See Comments - SPR-CONN | 0.17 | 5322 | 1 | 08:00-08:10 | Circ & Accumulate Surveys | 0.17 | 6500 | 1 |
| 01:30-01:45 | Rotating With Motor | 0.25 | 5416 | 1 | 08:10-09:00 | Circ Bottoms Up | 0.83 | 6500 | 1 |
| 01:45-01:55 | Circ & Accumulate Surveys | 0.17 | 5416 | 1 | 09:00-12:30 | POOH To Change BHA | 3.50 | 6500 | 1 |
| 01:55-02:15 | Rotating With Motor | 0.33 | 5511 | 1 | 12:30-13:15 | Change Bit And Motor | 0.75 | 6500 | 2 |
| 02:15-02:20 | Other - See Comments - CONN | 0.08 | 5511 | 1 | 13:15-14:50 | Rig Repair - Change Saver Sub | 1.58 | 6500 | 2 |
| 02:20-02:35 | Rotating With Motor | 0.25 | 5605 | 1 | 14:50-15:00 | Shallow Pulse Check | 0.17 | 6500 | 2 |
| 02:35-02:55 | Circ & Accumulate Surveys | 0.33 | 5605 | 1 | 15:00-20:25 | RIH | 5.42 | 6500 | 2 |
| 02:55-03:10 | Rotating With Motor | 0.25 | 5700 | 1 | 20:25-21:10 | Orienting With Motor | 0.75 | 6551 | 2 |
| 03:10-03:20 | Undefined - See Comments - CONN | 0.17 | 5700 | 1 | 21:10-21:35 | Circ & Accumulate Surveys - CONNECTION | 0.42 | 6551 | 2 |
| 03:20-03:35 | Rotating With Motor | 0.25 | 5795 | 1 | 21:35-21:55 | Orienting With Motor | 0.33 | 6571 | 2 |
| 03:35-03:50 | Circ & Accumulate Surveys | 0.25 | 5795 | 1 | 21:55-22:15 | Work on Pumps - #2 PMP GASKIT | 0.33 | 6571 | 2 |
| 03:50-04:10 | Rotating With Motor | 0.33 | 5889 | 1 | 22:15-22:35 | Orienting With Motor | 0.33 | 6594 | 2 |
| 04:10-04:20 | Other - See Comments - conn | 0.17 | 5984 | 1 | 22:35-22:40 | Rotating With Motor | 0.08 | 6598 | 2 |
| 04:20-04:40 | Rotating With Motor | 0.33 | 5984 | 1 | 22:40-22:45 | Circ & Accumulate Surveys | 0.08 | 6598 | 2 |
| 04:40-04:50 | Circ & Accumulate Surveys | 0.17 | 5984 | 1 | 22:45-23:10 | Orienting With Motor | 0.42 | 6623 | 2 |
| 04:50-05:05 | Rotating With Motor | 0.25 | 6079 | 1 | 23:10-23:25 | Rotating With Motor | 0.25 | 6645 | 2 |
| 05:05-05:15 | Other - See Comments - Connection | 0.17 | 6079 | 1 | 23:25-23:55 | Rig Service | 0.50 | 6645 | 2 |
| 05:15-05:30 | Rotating With Motor | 0.25 | 6173 | 1 | 23:55-24:00 | Circ & Accumulate Surveys | 0.08 | 6645 | 2 |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|-------|----------------|------|---------------|-------|
| MOTOR DRILL: | 7.75 | ORIENTING HRS: | 0.08 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 5.50 | MOTOR HRS: | 11.00 |
| MOTOR REAM: | 0.00 | | | TRIP: | 8.92 |
| CIRC: | 3.25 | ROTARY DRILL: | 0.00 | OTHER: | 4.08 |
| MOTOR HRS: | 11.00 | DRILL HRS: | 7.75 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|------------|------------------|------------|
| ROTARY TORQUE: | 7900 ft-lb | STRING WEIGHT | 131000 lbs |
| WOB SLIDING (HI): | 20000 lbf | WOB ROTATE (HI): | 25000 lbf |
| WOB SLIDING (LO): | 7000 lbf | WOB ROTATE (LO): | 15000 lbf |
| RPM (ROTARY): | 65 rpm | DRAG UP: | 146000 lbf |
| RPM (MOTOR): | 167 rpm | DRAG DN: | 118000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|----------------------------|-------------------------------------|
| BHA: 1 | HOLE SIZE: 8.75 in | SECTION TYPE: Build & Hold | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: 8.25 | SERIAL#: 675-3993 | MODEL: QME4570 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 6 3/4" (171mm) | LOBE CFG.: 7/8 |
| MANFCT: Varel | BIT TYPE: Varel Bit | TYPE: VM513 | MTR HRS THIS DAY: 8.083333333333333 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / TD | | | MTR HRS TO DATE: 30.083333333333333 |
| | | | NOZZLES: 0.752 in² TFA |



Weatherford

Daily Activity Report

Drilling Services
v4.2.3981

Day 3 - 2013/02/11

BHA: 2 HOLE SIZE: 8.75 in SECTION TYPE: Curve SURVEY TYPE: Positive Pulse MWD
MANFCT.: Weatherford STABILIZER: No SERIAL#: 675-4131 MODEL: LN7850 LOBE CFG.: 7/8
SETTING: 2.38 ° KICKPAD: No SIZE: 6 3/4" (171mm) MTR HRS THIS DAY: 2.9166666666666666 MTR HRS TO DATE: 2.9166666666666666
MANFCT: Reed BIT TYPE: Reed 5 Blade PDC TYPE: E1202-A1B NOZZLES: 1.242 in² TFA
IADC BIT GRADE: 1 / 1 / ? / ? / ? / ? / ? / TD

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|--|
| PRESSURE ON BTM: 4350 | PRESSURE OFF BTM: 3150 | TOTAL FLOW RATE: 598.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 78.00 | LINER: 6.00 in STROKE VOL.: 3.8438 gal/stk |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 78.00 | LINER: 6.00 in STROKE VOL.: 3.8438 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|---------------------|---------------------------------------|------------------------|-------------|------------------------------|-----------------------|
| MUD TYPE: Water | VISC: 34 sec/qt | WTR LOSS: 0 cc/30min | PV: 4 cP | YP: 5 lb/100 ft ² | pH: 8.5 |
| DENSITY: 9.3 lb/gal | GEL 0/10: 0.00 lb/100 ft ² | SAND: 0.25 | SOLIDS: 3.5 | OIL: 0 | TEMP: 159 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

DRILL F/ 5050 TO 6645

CUSTOMER SIGNATURE: _____



Weatherford®

Daily Activity Report

Drilling Services
v4.2.3981

Day 4 - 2013/02/12

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca, Eric Hughes

MWD Supervisor: Rusty Korms, Scott Coulter

Company Man: Craig Jones, Clint Tibedoux

GROUND ELEV: 4833 ft

START DEPTH: 6645.0 ft

PROGRESS: 769.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 60.3 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------------------|------|------|-----|-------------|---------------------------|------|------|-----|
| 00:00-00:15 | Orienting With Motor | 0.25 | 6651 | 2 | 07:05-07:30 | Orienting With Motor | 0.42 | 7011 | 2 |
| 00:15-00:40 | Rotating With Motor | 0.42 | 6692 | 2 | 07:30-07:40 | Rotating With Motor | 0.17 | 7024 | 2 |
| 00:40-00:45 | Circ & Accumulate Surveys | 0.08 | 6692 | 2 | 07:40-07:55 | Circ & Accumulate Surveys | 0.25 | 7024 | 2 |
| 00:45-01:35 | Orienting With Motor | 0.83 | 6727 | 2 | 07:55-09:00 | Orienting With Motor | 1.08 | 7104 | 2 |
| 01:35-01:40 | Rotating With Motor | 0.08 | 6740 | 2 | 09:00-09:20 | Rotating With Motor | 0.33 | 7118 | 2 |
| 01:40-01:50 | Circulating - See Comments - SPR | 0.17 | 6740 | 2 | 09:20-09:30 | Circ & Accumulate Surveys | 0.17 | 7118 | 2 |
| 01:50-02:00 | Circ & Accumulate Surveys | 0.17 | 6740 | 2 | 09:30-10:30 | Orienting With Motor | 1.00 | 7185 | 2 |
| 02:00-02:20 | Orienting With Motor | 0.33 | 6780 | 2 | 10:30-10:50 | Rotating With Motor | 0.33 | 7213 | 2 |
| 02:20-02:25 | Rotating With Motor | 0.08 | 6787 | 2 | 10:50-11:05 | Circ & Accumulate Surveys | 0.25 | 7213 | 2 |
| 02:25-02:35 | Circ & Accumulate Surveys | 0.17 | 6787 | 2 | 11:05-13:15 | Orienting With Motor | 2.17 | 7308 | 2 |
| 02:35-02:55 | Orienting With Motor | 0.33 | 6821 | 2 | 13:15-13:30 | Circ & Accumulate Surveys | 0.25 | 7308 | 2 |
| 02:55-03:05 | Rotating With Motor | 0.17 | 6834 | 2 | 13:30-14:10 | Rotating With Motor | 0.67 | 7339 | 2 |
| 03:05-03:15 | Circ & Accumulate Surveys | 0.17 | 6834 | 2 | 14:10-14:20 | Circ & Accumulate Surveys | 0.17 | 7339 | 2 |
| 03:15-03:25 | Rotating With Motor | 0.17 | 6847 | 2 | 14:20-15:10 | Rotating With Motor | 0.83 | 7371 | 2 |
| 03:25-04:25 | Wait On Orders | 1.00 | 6847 | 2 | 15:10-15:25 | Circ & Accumulate Surveys | 0.25 | 7371 | 2 |
| 04:25-04:40 | Rotating With Motor | 0.25 | 6881 | 2 | 15:25-16:15 | Orienting With Motor | 0.83 | 7402 | 2 |
| 04:40-04:50 | Circ & Accumulate Surveys | 0.17 | 6881 | 2 | 16:15-16:30 | Rotating With Motor | 0.25 | 7414 | 2 |
| 04:50-05:50 | Orienting With Motor | 1.00 | 6929 | 2 | 16:30-16:45 | Circ & Accumulate Surveys | 0.25 | 7414 | 2 |
| 05:50-06:05 | Circ & Accumulate Surveys | 0.25 | 6929 | 2 | 16:45-18:45 | Circ & Condition Hole | 2.00 | 7414 | 2 |
| 06:05-06:50 | Orienting With Motor | 0.75 | 6976 | 2 | 18:45-19:40 | Flow Check | 0.92 | 7414 | 2 |
| 06:50-07:05 | Circ & Accumulate Surveys | 0.25 | 6976 | 2 | 19:40-24:00 | POOH To Run Casing | 4.33 | 7414 | 2 |

TIME SUMMARY (hrs):

| | | |
|--------------------|---------------------|--------------------|
| MOTOR DRILL: 12.75 | ORIENTING HRS: 9.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 3.75 | MOTOR HRS: 17.75 |
| MOTOR REAM: 0.00 | | TRIP: 4.33 |
| CIRC: 5.00 | ROTARY DRILL: 0.00 | OTHER: 1.92 |
| MOTOR HRS: 17.75 | DRILL HRS: 12.75 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-----------------------------|----------------------------|
| ROTARY TORQUE: 10000 ft-lb | STRING WEIGHT: 152 lbs |
| WOB SLIDING (HI): 65000 lbf | WOB ROTATE (HI): 35000 lbf |
| WOB SLIDING (LO): 15000 lbf | WOB ROTATE (LO): 15000 lbf |
| RPM (ROTARY): 30 rpm | DRAG UP: 186000 lbf |
| RPM (MOTOR): 167 rpm | DRAG DN: 132000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|----------------------------|----------------------|----------------------------------|
| BHA: 2 | HOLE SIZE: 8.75 in | SECTION TYPE: Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-4131 | MODEL: LN7850 |
| SETTING: 2.38 ° | KICKPAD: No | SIZE: 6 3/4" (171mm) | LOBE CFG.: 7/8 |
| MANFCT: Reed | BIT TYPE: Reed 5 Blade PDC | TYPE: E1202-A1B | MTR HRS THIS DAY: 17.75 |
| IADC BIT GRADE: 1 / 1 / ? / ? / ? / ? / ? / TD | | | MTR HRS TO DATE: 20.666666666666 |
| | | | NOZZLES: 1.242 in² TFA |

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 4 - 2013/02/12

PUMP PARAMETERS

PRESSURE ON BTM: 4250**PRESSURE OFF BTM:** 3650**TOTAL FLOW RATE:** 547.75 gal/min**PUMP 1:** TYPE: PZ-11**EFF.:** 95.0%**SPM:** 75.00**LINER:** 6.00 in**STROKE VOL.:** 3.8438 gal/stk**PUMP 2:** TYPE: PZ-11**EFF.:** 95.0%**SPM:** 75.00**LINER:** 6.00 in**STROKE VOL.:** 3.8438 gal/stk**PUMP 3:** TYPE:**EFF.:** 100.0%**SPM:** 0.00**LINER:** 0.00 in**STROKE VOL.:** 0.0000 gal/stk

MUD RECORD

MUD TYPE: Water**VISC:** 42 sec/qt**WTR LOSS:** 18 cc/30min**PV:** 5 cP**YP:** 6 lb/100 ft²**pH:** 8.8**DENSITY:** 10 lb/gal**GEL 0/10:** 3.00 lb/100 ft²**SAND:** 0.75**SOLIDS:** 6.5**OIL:** 0**TEMP:** 168 °F**LIQUID BASE:** Water**LIQUID RATE:** 0 gal/min**GAS TYPE:****GAS RATE:** 0 cu ft/min

COMMENTS:

Drill Ahead in Curve F/ 6645 - 7114'

This curve was very frustrating to drill due to pump problems throughout the entire curve. The constant stopping to take a pump offline or put them online is effecting Bit hours and orienting time dramatically.

Drill and survey full stands per Anadarko's Drilling Engineers request.

We were given a 10' window above target TVD (7058') to land in Per Anadarko Geology.
New landing target = 7058' - 7048' TVD

TD Curve @ 7114' MD

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 5 - 2013/02/13

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca, Eric Hughes

MWD Supervisor: Rusty Korms, Scott Coulter

Company Man: Craig Jones, Clint Tivedoux

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------------|------|------|-----|-------------|----------------|-------|------|-----|
| 00:00-00:50 | POOH To Run Casing | 0.83 | 7414 | 2 | 02:00-24:00 | Wait On Orders | 22.00 | 7414 | n/a |
| 00:50-02:00 | Lay Down Directional Tools | 1.17 | 7414 | 2 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|------|---------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 0.00 |
| MOTOR REAM: | 0.00 | | | TRIP: | 0.83 |
| CIRC: | 0.00 | ROTARY DRILL: | 0.00 | OTHER: | 23.17 |
| MOTOR HRS: | 0.00 | DRILL HRS: | 0.00 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 10000 ft-lb | STRING WEIGHT | 152000 lbs |
| WOB SLIDING (HI): | 65 lbf | WOB ROTATE (HI): | 35 lbf |
| WOB SLIDING (LO): | 15 lbf | WOB ROTATE (LO): | 15 lbf |
| RPM (ROTARY): | 30 rpm | DRAG UP: | 186000 lbf |
| RPM (MOTOR): | 167 rpm | DRAG DN: | 132000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|----------------------------|----------------------|-------------------------------------|
| BHA: 2 | HOLE SIZE: 8.75 in | SECTION TYPE: Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-4131 | MODEL: LN7850 |
| SETTING: 2.38 ° | KICKPAD: No | SIZE: 6 3/4" (171mm) | LOBE CFG.: 7/8 |
| MANFCT: Reed | BIT TYPE: Reed 5 Blade PDC | TYPE: E1202-A1B | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 1 / ? / ? / ? / ? / ? / TD | | | MTR HRS TO DATE: 20.666666666666666 |
| NOZZLES: 1.242 in² TFA | | | |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 4250 | PRESSURE OFF BTM: 3650 | TOTAL FLOW RATE: 547.75 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 75.00 | LINER: 6.00 in |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 75.00 | STROKE VOL.: 3.8438 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 6.00 in |
| | | STROKE VOL.: 3.8438 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|--------------------|---------------------------|------------------------|-----------|------------------|-----------------------|
| MUD TYPE: Water | VISC: 37 sec/qt | WTR LOSS: 7.6 cc/30min | PV: 12 cP | YP: 8 lb/100 ft² | pH: 9.2 |
| DENSITY: 10 lb/gal | GEL 0/10: 3.00 lb/100 ft² | SAND: 0.75 | SOLIDS: 1 | OIL: 0 | TEMP: 181 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

T.d. @ 7414

Run casing, cement, skid the rig.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 6 - 2013/02/14

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

2013/02/14

No personnel have been recorded for this date.

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

WORK STATUS:

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|------|----------------|------|------|-----|------|----------------|------|------|-----|
| | | 0.00 | | | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 0.00 |

DRILLING PARAMETERS:

| | |
|-------------------------|------------------------|
| ROTARY TORQUE: | STRING WEIGHT: 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|-----------------|-------------|---------------|-------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|---------------------|------------------------|--|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-------------------|---------------------------|------------------------|-----------|------------------|-----------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 7 - 2013/02/15

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

2013/02/15

No personnel have been recorded for this date.

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

WORK STATUS:

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|------|----------------|------|------|-----|------|----------------|------|------|-----|
| | | 0.00 | | | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 0.00 |

DRILLING PARAMETERS:

| | |
|-------------------------|------------------------|
| ROTARY TORQUE: | STRING WEIGHT: 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|-----------------|-------------|---------------|-------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|---------------------|------------------------|--|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-------------------|---------------------------|------------------------|-----------|------------------|-----------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 8 - 2013/02/16

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

2013/02/16

No personnel have been recorded for this date.

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

WORK STATUS:

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|------|----------------|------|------|-----|------|----------------|------|------|-----|
| | | 0.00 | | | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 0.00 |

DRILLING PARAMETERS:

| | |
|-------------------------|------------------------|
| ROTARY TORQUE: | STRING WEIGHT: 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|-----------------|-------------|---------------|-------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|---------------------|------------------------|--|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-------------------|---------------------------|------------------------|-----------|------------------|-----------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 9 - 2013/02/17**FILE #:** 4028454**WELL NAME:** Dechant State 15C-1HZ**SERVICE CO.:** Weatherford**JOB TYPE:** Horizontal**COMPANY:** Anadarko Petroleum Corporation**SURVEY TYPE:** Positive Pulse MWD**RIG & NO:** Helmerich & Payne 307**SURFACE LOCATION:** Weld County**FIELD / LOCATION:** Wattenburg Field / CO / USA**2013/02/17**

No personnel have been recorded for this date.

GROUND ELEV: 4833 ft**START DEPTH:** 7414.0 ft**PROGRESS:** 0.0 ft**DAILY COST:** USD\$0.00**KB ELEV:** 25 ft**END DEPTH:** 7414.0 ft**AVG. ROP.:** 0.0 ft/hr**PREVIOUS COST:** USD\$0.00**WORK STATUS:**

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|------|----------------|------|------|-----|------|----------------|------|------|-----|
| | | 0.00 | | | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|--------------------------|----------------------------|---------------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 0.00 |

DRILLING PARAMETERS:

| | |
|--------------------------------|-------------------------------|
| ROTARY TORQUE: | STRING WEIGHT 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|------------------------|--------------------|----------------------|--------------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|----------------------------|--------------------------------------|--|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|--------------------------|----------------------------------|-------------------------------|------------------|-------------------------|------------------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:**CUSTOMER SIGNATURE:**

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 10 - 2013/02/18

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

2013/02/18

No personnel have been recorded for this date.

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

WORK STATUS:

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|------|----------------|------|------|-----|------|----------------|------|------|-----|
| | | 0.00 | | | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 0.00 |

DRILLING PARAMETERS:

| | |
|-------------------------|------------------------|
| ROTARY TORQUE: | STRING WEIGHT: 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|-----------------|-------------|---------------|-------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|---------------------|------------------------|--|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-------------------|---------------------------|------------------------|-----------|------------------|-----------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 11 - 2013/02/19**FILE #:** 4028454**WELL NAME:** Dechant State 15C-1HZ**SERVICE CO.:** Weatherford**JOB TYPE:** Horizontal**COMPANY:** Anadarko Petroleum Corporation**SURVEY TYPE:** Positive Pulse MWD**RIG & NO:** Helmerich & Payne 307**SURFACE LOCATION:** Weld County**FIELD / LOCATION:** Wattenburg Field / CO / USA**2013/02/19**

No personnel have been recorded for this date.

GROUND ELEV: 4833 ft**START DEPTH:** 7414.0 ft**PROGRESS:** 0.0 ft**DAILY COST:** USD\$0.00**KB ELEV:** 25 ft**END DEPTH:** 7414.0 ft**AVG. ROP.:** 0.0 ft/hr**PREVIOUS COST:** USD\$0.00**WORK STATUS:**

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|------|----------------|------|------|-----|------|----------------|------|------|-----|
| | | 0.00 | | | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|--------------------------|----------------------------|---------------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 0.00 |

DRILLING PARAMETERS:

| | |
|--------------------------------|-------------------------------|
| ROTARY TORQUE: | STRING WEIGHT 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|------------------------|--------------------|----------------------|--------------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|----------------------------|--------------------------------------|--|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|--------------------------|----------------------------------|-------------------------------|------------------|-------------------------|------------------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:**CUSTOMER SIGNATURE:**

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 12 - 2013/02/20

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

2013/02/20

No personnel have been recorded for this date.

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

WORK STATUS:

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|------|----------------|------|------|-----|------|----------------|------|------|-----|
| | | 0.00 | | | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 0.00 |

DRILLING PARAMETERS:

| | |
|-------------------------|------------------------|
| ROTARY TORQUE: | STRING WEIGHT: 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|-----------------|-------------|---------------|-------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|---------------------|------------------------|-------------------------------|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-------------------|---------------------------|------------------------|-----------|------------------|-----------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 13 - 2013/02/21

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

2013/02/21

No personnel have been recorded for this date.

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

WORK STATUS:

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|------|----------------|------|------|-----|------|----------------|------|------|-----|
| | | 0.00 | | | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 0.00 |

DRILLING PARAMETERS:

| | |
|-------------------------|------------------------|
| ROTARY TORQUE: | STRING WEIGHT: 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|-----------------|-------------|---------------|-------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|---------------------|------------------------|--|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-------------------|---------------------------|------------------------|-----------|------------------|-----------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 14 - 2013/02/22

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

2013/02/22

No personnel have been recorded for this date.

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

WORK STATUS:

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|------|----------------|------|------|-----|------|----------------|------|------|-----|
| | | 0.00 | | | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 0.00 |

DRILLING PARAMETERS:

| | |
|-------------------------|------------------------|
| ROTARY TORQUE: | STRING WEIGHT: 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|-----------------|-------------|---------------|-------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|---------------------|------------------------|-------------------------------|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-------------------|---------------------------|------------------------|-----------|------------------|-----------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 15 - 2013/02/23

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Eric Hughes, Charles Apodaca

MWD Supervisor: Scott Coulter, Anthony Danna

Company Man: Doug Barone, Doug Blair

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Standby

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------|-------|------|-----|------|----------------|------|------|-----|
| 00:00-24:00 | Wait On Orders | 24.00 | 7414 | n/a | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 24.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-------------------------|------------------------|
| ROTARY TORQUE: | STRING WEIGHT: 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|-----------------|-------------|---------------|-------------------|
| BHA: | HOLE SIZE: | SECTION TYPE: | SURVEY TYPE: |
| MANFCT.: | STABILIZER: | SERIAL#: | MODEL: |
| SETTING: | KICKPAD: | SIZE: | MTR HRS THIS DAY: |
| MANFCT: | BIT TYPE: | TYPE: | NOZZLES: |
| IADC BIT GRADE: | | | LOBE CFG.: |
| | | | MTR HRS TO DATE: |

PUMP PARAMETERS

| | | |
|---------------------|------------------------|--|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-------------------|---------------------------|------------------------|-----------|------------------|-----------------------|
| MUD TYPE: | VISC: 0 sec/qt | WTR LOSS: 0 cc/30min | PV: 0 cP | YP: 0 lb/100 ft² | pH: 0 |
| DENSITY: 0 lb/gal | GEL 0/10: 0.00 lb/100 ft² | SAND: 0 | SOLIDS: 0 | OIL: 0 | TEMP: 0 °F |
| LIQUID BASE: | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Waiting on orders.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 16 - 2013/02/24

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Charles Apodaca

MWD Supervisor: Anthony Danna, Scott Coulter

Company Man: Doug Barone, Doug Blair

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7414.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---------------------------------------|------|------|-----|-------------|------------------------------------|------|------|-----|
| 00:00-09:45 | Wait On Orders | 9.75 | 7414 | n/a | 13:15-15:00 | Other - See Comments - Program LWD | 1.75 | 7414 | 3 |
| 09:45-10:15 | Other - See Comments - JSA on P/U BHA | 0.50 | 7414 | n/a | 15:00-15:30 | Shallow Test Tools | 0.50 | 7414 | 3 |
| 10:15-13:15 | PU Directional Tools | 3.00 | 7414 | 3 | 15:30-24:00 | RIH With Directional | 8.50 | 7414 | 3 |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 8.50 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 15.50 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-------------------------|------------------------|
| ROTARY TORQUE: | STRING WEIGHT 0 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): | DRAG UP: 0 lbf |
| RPM (MOTOR): | DRAG DN: 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|------------------------------------|
| BHA: 3 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-41095 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 1 / ? / ? / X / 1 / ? / DTF | | | MTR HRS TO DATE: 0 |
| | | | NOZZLES: 0.982 in ² TFA |

PUMP PARAMETERS

| | | |
|---------------------|------------------------|-------------------------------|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 0.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in |
| | | STROKE VOL.: 0.0000 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-----------------------|---------------------------------------|------------------------|-----------|------------------------------|-----------------------|
| MUD TYPE: Mineral Oil | VISC: 73 sec/qt | WTR LOSS: 18 cc/30min | PV: 13 cP | YP: 4 lb/100 ft ² | pH: 0 |
| DENSITY: 9 lb/gal | GEL 0/10: 4.00 lb/100 ft ² | SAND: 0 | SOLIDS: 9 | OIL: 59 | TEMP: 154 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Wait on Orders.

P/U Lateral BHA & Program LWD Tools.

RIH & Drill Out Flt, Shoe & CMT.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 17 - 2013/02/25

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca

MWD Supervisor: Anthony Danna, Scott Coulter

Company Man: Doug Barone, Doug Blair

GROUND ELEV: 4833 ft

START DEPTH: 7414.0 ft

PROGRESS: 136.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 7550.0 ft

AVG. ROP.: 234.5 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------------------|------|------|-----|-------------|---|------|------|-----|
| 00:00-01:30 | RIH | 1.50 | 7414 | 3 | 05:30-07:00 | Circ & Condition Hole | 1.50 | 7550 | 3 |
| 01:30-02:35 | Drill Out Flt, Shoe & Cmmt | 1.08 | 7414 | 3 | 07:00-12:45 | POOH For MWD - LWD | 5.75 | 7550 | 3 |
| 02:35-02:40 | Rotating With Motor | 0.08 | 7435 | 3 | 12:45-13:00 | Other - See Comments - JSA on p/u BHA | 0.25 | 7550 | 3 |
| 02:40-02:45 | Circulating - See Comments - SPR | 0.08 | 7435 | 3 | 13:00-14:45 | Handle Directional Tools - Swap IDS & HEL | 1.75 | 7550 | 4 |
| 02:45-02:55 | Rotating With Motor | 0.17 | 7455 | 3 | 14:45-18:00 | Other - See Comments - Prog. LWD Tools | 3.25 | 7550 | 4 |
| 02:55-03:50 | Work On MWD - WORK ON LWD | 0.92 | 7455 | 3 | 18:00-23:00 | RIH | 5.00 | 7550 | 4 |
| 03:50-04:10 | Rotating With Motor | 0.33 | 7550 | 3 | 23:00-23:30 | Rig Service | 0.50 | 7550 | 4 |
| 04:10-05:30 | Work On MWD - Work on LWD | 1.33 | 7550 | 3 | 23:30-24:00 | RIH | 0.50 | 7550 | 4 |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 0.58 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.58 | MOTOR HRS: 3.25 |
| MOTOR REAM: 0.00 | TRIP: 12.75 | |
| CIRC: 2.67 | ROTARY DRILL: 0.00 | OTHER: 8.00 |
| MOTOR HRS: 3.25 | DRILL HRS: 0.58 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|---------------------------|---------------------------|
| ROTARY TORQUE: 7300 ft-lb | STRING WEIGHT: 127000 lbs |
| WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| RPM (ROTARY): 65 rpm | DRAG UP: 141000 lbf |
| RPM (MOTOR): 251 rpm | DRAG DN: 116000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|------------------------------------|
| BHA: 3 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-41095 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 3.25 |
| IADC BIT GRADE: 1 / 1 / ? / ? / X / 1 / ? / DTF | | | MTR HRS TO DATE: 3.25 |
| | | | NOZZLES: 0.982 in ² TFA |

| | | | |
|---|---------------------|-------------------------|------------------------------------|
| BHA: 4 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-41095 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 1 / ? / ? / X / 1 / FC / PP | | | MTR HRS TO DATE: 3.25 |
| | | | NOZZLES: 0.982 in ² TFA |

PUMP PARAMETERS

| | | |
|------------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 40002 | PRESSURE OFF BTM: 2800 | TOTAL FLOW RATE: 284.83 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 78.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 3.8438 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-----------------------|---------------------------------------|------------------------|-----------|------------------------------|-----------------------|
| MUD TYPE: Mineral Oil | VISC: 73 sec/qt | WTR LOSS: 18 cc/30min | PV: 13 cP | YP: 4 lb/100 ft ² | pH: 0 |
| DENSITY: 9 lb/gal | GEL 0/10: 4.00 lb/100 ft ² | SAND: 0 | SOLIDS: 9 | OIL: 59 | TEMP: 154 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Drill Ahead In Lateral F/ 7414' - 7550'

Once reaching bottom we were unable to receive surveys from Split IDS in LWD tool string. POOH for possible LWD failure.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Day 18 - 2013/02/26**Drilling Services**
v4.2.3981**FILE #:** 4028454**WELL NAME:** Dechant State 15C-1HZ**SERVICE CO.:** Weatherford**JOB TYPE:** Horizontal**COMPANY:** Anadarko Petroleum Corporation**SURVEY TYPE:** Positive Pulse MWD**RIG & NO:** Helmerich & Payne 307**SURFACE LOCATION:** Weld County**FIELD / LOCATION:** Wattenburg Field / CO / USA**DIR Supervisor:** Josh Monroe, Charles Apodaca**MWD Supervisor:** Anthony Danna, Scott Coulter**Company Man:** Doug Barone, Doug Blair**GROUND ELEV:** 4833 ft**START DEPTH:** 7550.0 ft**PROGRESS:** 2634.0 ft**DAILY COST:** USD\$0.00**KB ELEV:** 25 ft**END DEPTH:** 10184.0 ft**AVG. ROP.:** 177.6 ft/hr**PREVIOUS COST:** USD\$0.00**TOTAL COST:** USD\$0.00**WORK STATUS:** Operating*(All units are imperial.)*

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------------------|------|------|-----|-------------|--|------|-------|-----|
| 00:00-00:50 | RIH | 0.83 | 7550 | 4 | 12:45-13:00 | Rotating With Motor | 0.25 | 8874 | 4 |
| 00:50-01:00 | Work On MWD - LWD TOGGLE | 0.17 | 7550 | 4 | 13:00-13:20 | Circ & Accumulate Surveys | 0.33 | 8874 | 4 |
| 01:00-01:15 | Circ & Accumulate Surveys | 0.25 | 7550 | 4 | 13:20-13:30 | Orienting With Motor | 0.17 | 8886 | 4 |
| 01:15-01:35 | Orienting With Motor | 0.33 | 7565 | 4 | 13:30-13:40 | Rotating With Motor | 0.17 | 8968 | 4 |
| 01:35-01:45 | Rotating With Motor | 0.17 | 7613 | 4 | 13:40-13:50 | Circ & Accumulate Surveys | 0.17 | 8968 | 4 |
| 01:45-02:00 | Orienting With Motor | 0.25 | 7628 | 4 | 13:50-14:15 | Rotating With Motor | 0.42 | 9063 | 4 |
| 02:00-02:05 | Rotating With Motor | 0.08 | 7644 | 4 | 14:15-14:30 | Circ & Accumulate Surveys | 0.25 | 9063 | 4 |
| 02:05-02:20 | Circ & Accumulate Surveys - CONN | 0.25 | 7644 | 4 | 14:30-14:55 | Orienting With Motor | 0.42 | 9078 | 4 |
| 02:20-02:40 | Work On MWD - RFD | 0.33 | 7644 | 4 | 14:55-15:05 | Rotating With Motor | 0.17 | 9157 | 4 |
| 02:40-03:00 | Orienting With Motor | 0.33 | 7674 | 4 | 15:05-15:15 | Circ & Accumulate Surveys | 0.17 | 9157 | 4 |
| 03:00-03:10 | Rotating With Motor | 0.17 | 7707 | 4 | 15:15-15:30 | Rotating With Motor | 0.25 | 9252 | 4 |
| 03:10-03:30 | Orienting With Motor | 0.33 | 7727 | 4 | 15:30-15:45 | Circ & Accumulate Surveys | 0.25 | 9252 | 4 |
| 03:30-03:35 | Rotating With Motor | 0.08 | 7739 | 4 | 15:45-15:50 | Circ & Accumulate Surveys | 0.08 | 9267 | 4 |
| 03:35-03:50 | Circ & Accumulate Surveys | 0.25 | 7739 | 4 | 15:50-16:05 | Rotating With Motor | 0.25 | 9347 | 4 |
| 03:50-04:15 | Rotating With Motor | 0.42 | 7833 | 4 | 16:05-16:15 | Circ & Accumulate Surveys | 0.17 | 9347 | 4 |
| 04:15-04:35 | Ream Hole | 0.33 | 7833 | 4 | 16:15-16:40 | Rotating With Motor | 0.42 | 9441 | 4 |
| 04:35-04:45 | Circ & Accumulate Surveys | 0.17 | 7833 | 4 | 16:40-16:50 | Circ & Accumulate Surveys | 0.17 | 9441 | 4 |
| 04:45-05:05 | Orienting With Motor | 0.33 | 7848 | 4 | 16:50-16:55 | Orienting With Motor | 0.08 | 9456 | 4 |
| 05:05-05:20 | Rotating With Motor | 0.25 | 7928 | 4 | 16:55-17:20 | Rotating With Motor | 0.42 | 9533 | 4 |
| 05:20-05:30 | Circulating - See Comments - SPR | 0.17 | 7928 | 4 | 17:20-17:35 | Circ & Accumulate Surveys | 0.25 | 9533 | 4 |
| 05:30-05:40 | Circ & Accumulate Surveys | 0.17 | 7928 | 4 | 17:35-17:45 | Orienting With Motor | 0.17 | 9548 | 4 |
| 05:40-06:00 | Orienting With Motor | 0.33 | 7943 | 4 | 17:45-18:05 | Rotating With Motor | 0.33 | 9625 | 4 |
| 06:00-06:15 | Rotating With Motor | 0.25 | 8022 | 4 | 18:05-18:10 | Circ & Accumulate Surveys | 0.08 | 9625 | 4 |
| 06:15-06:40 | Circ & Accumulate Surveys | 0.42 | 8022 | 4 | 18:10-18:25 | Rotating With Motor | 0.25 | 9717 | 4 |
| 06:40-07:05 | Rotating With Motor | 0.42 | 8117 | 4 | 18:25-18:40 | Circ & Accumulate Surveys | 0.25 | 9717 | 4 |
| 07:05-07:15 | Circ & Accumulate Surveys | 0.17 | 8117 | 4 | 18:40-19:20 | Orienting With Motor | 0.67 | 9732 | 4 |
| 07:15-07:40 | Rotating With Motor | 0.42 | 8212 | 4 | 19:20-19:40 | Rotating With Motor | 0.33 | 9809 | 4 |
| 07:40-08:00 | Circ & Accumulate Surveys | 0.33 | 8212 | 4 | 19:40-19:50 | Circ & Accumulate Surveys - CONN | 0.17 | 9809 | 4 |
| 08:00-08:10 | Orienting With Motor | 0.17 | 8232 | 4 | 19:50-20:05 | Rotating With Motor | 0.25 | 9901 | 4 |
| 08:10-08:35 | Rotating With Motor | 0.42 | 8306 | 4 | 20:05-20:35 | Circulating - See Comments - SPR | 0.50 | 9901 | 4 |
| 08:35-08:55 | Circ & Accumulate Surveys | 0.33 | 8306 | 4 | 20:35-20:40 | Circ & Accumulate Surveys | 0.08 | 9901 | 4 |
| 08:55-09:15 | Orienting With Motor | 0.33 | 8326 | 4 | 20:40-20:50 | Circulating - See Comments - wait on rig | 0.17 | 9993 | 4 |
| 09:15-09:30 | Rotating With Motor | 0.25 | 8401 | 4 | 20:50-21:05 | Rotating With Motor | 0.25 | 9993 | 4 |
| 09:30-09:40 | Circ & Accumulate Surveys | 0.17 | 8401 | 4 | 21:05-21:15 | Undefined - See Comments - CONNECTION | 0.17 | 9993 | 4 |
| 09:40-10:05 | Rotating With Motor | 0.42 | 8495 | 4 | 21:15-21:20 | Circ & Accumulate Surveys | 0.08 | 9993 | 4 |
| 10:05-10:20 | Circ & Accumulate Surveys | 0.25 | 8495 | 4 | 21:20-21:50 | Orienting With Motor | 0.50 | 10008 | 4 |
| 10:20-10:30 | Orienting With Motor | 0.17 | 8508 | 4 | 21:50-22:10 | Rotating With Motor | 0.33 | 10086 | 4 |
| 10:30-11:00 | Rotating With Motor | 0.50 | 8590 | 4 | 22:10-22:20 | Other - See Comments - CONNECTION | 0.17 | 10086 | 4 |
| 11:00-11:20 | Circ & Accumulate Surveys | 0.33 | 8590 | 4 | 22:20-22:25 | Circ & Accumulate Surveys | 0.08 | 10086 | 4 |
| 11:20-11:30 | Orienting With Motor | 0.17 | 8605 | 4 | 22:25-23:00 | Orienting With Motor | 0.58 | 10101 | 4 |

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 18 - 2013/02/26

| | | | | | | | | | |
|-------------|---------------------------|------|------|---|-------------|---------------------------|------|-------|---|
| 11:30-11:50 | Rotating With Motor | 0.33 | 8685 | 4 | 23:00-23:25 | Rotating With Motor | 0.42 | 10178 | 4 |
| 11:50-12:00 | Circ & Accumulate Surveys | 0.17 | 8685 | 4 | 23:25-23:40 | Rig Service | 0.25 | 10178 | 4 |
| 12:00-12:20 | Rotating With Motor | 0.33 | 8779 | 4 | 23:40-23:45 | Circ & Accumulate Surveys | 0.08 | 10178 | 4 |
| 12:20-12:30 | Circ & Accumulate Surveys | 0.17 | 8779 | 4 | 23:45-24:00 | Orienting With Motor | 0.25 | 10184 | 4 |
| 12:30-12:45 | Orienting With Motor | 0.25 | 8799 | 4 | | | 0.00 | | |

TIME SUMMARY (hrs):

MOTOR DRILL: 14.83
TIME DRILL: 0.00
MOTOR REAM: 0.33
CIRC: 6.92
MOTOR HRS: 22.08

ORIENTING HRS: 5.83
ROTATING HRS: 9.00
ROTARY DRILL: 0.00
ROTARY DRILL: 0.00
DRILL HRS: 14.83

ROTARY DRILL: 0.00
MOTOR HRS: 22.08
TRIP: 0.83
OTHER: 1.08
TOTAL HRS: 24.00

DRILLING PARAMETERS:

ROTARY TORQUE: 7600 ft-lb
WOB SLIDING (HI): 15000 lbf
WOB SLIDING (LO): 5000 lbf
RPM (ROTARY): 65 rpm
RPM (MOTOR): 246 rpm
STRING WEIGHT 127000 lbs
WOB ROTATE (HI): 35000 lbf
WOB ROTATE (LO): 10000 lbf
DRAG UP: 141000 lbf
DRAG DN: 116000 lbf

BHA / MOTOR / BIT INFORMATION:

BHA: 4 **HOLE SIZE:** 6.125 in **SECTION TYPE:** Lateral 1 **SURVEY TYPE:** HEL LWD
MANFCT.: Weatherford **STABILIZER:** No **SERIAL#:** 475-41095 **MODEL:** ME6770 **LOBE CFG.:** 6/7
SETTING: 1.5 ° **KICKPAD:** No **SIZE:** 5" (127mm) **MTR HRS THIS DAY:** 22.08333333 **MTR HRS TO DATE:** 25.333333333333
MANFCT: Security **BIT TYPE:** Security **TYPE:** MMD54 **NOZZLES:** 0.982 in² TFA
IADC BIT GRADE: 1 / 1 / ? / ? / X / 1 / FC / PP

PUMP PARAMETERS

PRESSURE ON BTM: 4023 **PRESSURE OFF BTM:** 2800 **TOTAL FLOW RATE:** 299.00 gal/min
PUMP 1: TYPE: PZ-11 **EFF.:** 95.0% **SPM:** 78.00 **LINER:** 6.00 in **STROKE VOL.:** 3.8438 gal/stk
PUMP 2: TYPE: PZ-11 **EFF.:** 95.0% **SPM:** 0.00 **LINER:** 0.00 in **STROKE VOL.:** 0.0000 gal/stk
PUMP 3: TYPE: **EFF.:** 100.0% **SPM:** 0.00 **LINER:** 0.00 in **STROKE VOL.:** 0.0000 gal/stk

MUD RECORD

MUD TYPE: Mineral Oil **VISC:** 96 sec/qt **WTR LOSS:** 18 cc/30min **PV:** 14 cP **YP:** 7 lb/100 ft² **pH:** 0
DENSITY: 9.4 lb/gal **GEL 0/10:** 4.00 lb/100 ft² **SAND:** 0 **SOLIDS:** 10.5 **OIL:** 57 **TEMP:** 165 °F
LIQUID BASE: Oil **LIQUID RATE:** 0 gal/min **GAS TYPE:** **GAS RATE:** 0 cu ft/min

COMMENTS:

Drill f/ 7550 to 10178

Email at 20:30 from Rhead. M.D. 9901
 We are drilling in the upper Codell after a reversal in formation dip.

Please continue to stay low to the line as we have been doing.
 Thanks,
 Rhead
 Thank You!
 KNEW WINDOW @ 21:40 MD. 9993 TVD 7078
 We deflected off the Ft. Hays at 9884' MD and so I have changed the window to 0' above and 10' below.
 Please do not go below 7081' TVD as we are expecting to come out of the Codell and into the Ft. Hays at ~3600' VS.
 Thanks,
 Rhead

CUSTOMER SIGNATURE:



Weatherford®

Daily Activity Report

Drilling Services
v4.2.3981

Day 19 - 2013/02/27

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca

MWD Supervisor: Anthony Danna, Scott Coulter

Company Man: Doug Barone, Doug Blair

GROUND ELEV: 4833 ft

START DEPTH: 10184.0 ft

PROGRESS: 1305.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 11489.0 ft

AVG. ROP.: 105.8 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---------------------------------------|------|-------|-----|-------------|--|------|-------|-----|
| 00:00-00:15 | Orienting With Motor | 0.25 | 10193 | 4 | 08:15-08:30 | Circulating - See Comments - SPR | 0.25 | 10912 | 4 |
| 00:15-00:35 | Rotating With Motor | 0.33 | 10270 | 4 | 08:30-08:40 | Circ & Accumulate Surveys | 0.17 | 10912 | 4 |
| 00:35-00:45 | Other - See Comments - CONNECTION | 0.17 | 10270 | 4 | 08:40-09:30 | Rotating With Motor | 0.83 | 11002 | 4 |
| 00:45-00:50 | Circ & Accumulate Surveys | 0.08 | 10270 | 4 | 09:30-09:55 | Gamma Rerun | 0.42 | 11002 | 4 |
| 00:50-01:05 | Orienting With Motor | 0.25 | 10280 | 4 | 09:55-10:10 | Circ & Accumulate Surveys | 0.25 | 11002 | 4 |
| 01:05-01:30 | Rotating With Motor | 0.42 | 10361 | 4 | 10:10-10:20 | Orienting With Motor | 0.17 | 11008 | 4 |
| 01:30-02:05 | Orienting With Motor | 0.58 | 10376 | 4 | 10:20-11:05 | Rotating With Motor | 0.75 | 11093 | 4 |
| 02:05-02:25 | Rotating With Motor | 0.33 | 10453 | 4 | 11:05-11:20 | Circ & Accumulate Surveys | 0.25 | 11093 | 4 |
| 02:25-02:45 | Other - See Comments - PU,SO,RT, SPR. | 0.33 | 10453 | 4 | 11:20-12:00 | Orienting With Motor | 0.67 | 11108 | 4 |
| 02:45-02:55 | Circ & Accumulate Surveys | 0.17 | 10453 | 4 | 12:00-12:40 | Circ & Accumulate Surveys | 0.67 | 11184 | 4 |
| 02:55-03:20 | Orienting With Motor | 0.42 | 10468 | 4 | 12:40-12:55 | Circ & Accumulate Surveys | 0.25 | 11184 | 4 |
| 03:20-03:45 | Rotating With Motor | 0.42 | 10545 | 4 | 12:55-13:45 | Rotating With Motor | 0.83 | 11257 | 4 |
| 03:45-03:55 | Circ & Accumulate Surveys - CONN | 0.17 | 10545 | 4 | 13:45-14:00 | Circ & Accumulate Surveys | 0.25 | 11257 | 4 |
| 03:55-04:25 | Orienting With Motor | 0.50 | 10560 | 4 | 14:00-14:30 | Orienting With Motor | 0.50 | 11272 | 4 |
| 04:25-04:45 | Rotating With Motor | 0.33 | 10637 | 4 | 14:30-15:25 | Rotating With Motor | 0.92 | 11367 | 4 |
| 04:45-04:55 | Circ & Accumulate Surveys | 0.17 | 10637 | 4 | 15:25-15:40 | Circ & Accumulate Surveys | 0.25 | 11367 | 4 |
| 04:55-05:25 | Rotating With Motor | 0.50 | 10729 | 4 | 15:40-16:30 | Rotating With Motor | 0.83 | 11458 | 4 |
| 05:25-05:45 | Circ & Accumulate Surveys | 0.33 | 10729 | 4 | 16:30-16:45 | Circ & Accumulate Surveys | 0.25 | 11367 | 4 |
| 05:45-06:40 | Rotating With Motor | 0.92 | 10821 | 4 | 16:45-17:00 | Rotating With Motor | 0.25 | 11489 | 4 |
| 06:40-06:55 | Circ & Accumulate Surveys | 0.25 | 10821 | 4 | 17:00-17:20 | Circulating - See Comments - Troubleshoot Pressure | 0.33 | 11489 | 4 |
| 06:55-07:35 | Orienting With Motor | 0.67 | 10841 | 4 | 17:20-19:30 | Circulating - See Comments - Circ Sweep | 2.17 | 11489 | 4 |
| 07:35-08:15 | Rotating With Motor | 0.67 | 10912 | 4 | 19:30-24:00 | POOH - See Comments | 4.50 | 11489 | 4 |

TIME SUMMARY (hrs):

| | | |
|--------------------|---------------------|--------------------|
| MOTOR DRILL: 12.33 | ORIENTING HRS: 4.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 8.33 | MOTOR HRS: 18.58 |
| MOTOR REAM: 0.00 | | TRIP: 4.50 |
| CIRC: 6.25 | ROTARY DRILL: 0.00 | OTHER: 0.92 |
| MOTOR HRS: 18.58 | DRILL HRS: 12.33 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-----------------------------|----------------------------|
| ROTARY TORQUE: 14190 ft-lb | STRING WEIGHT: 127000 lbs |
| WOB SLIDING (HI): 20000 lbf | WOB ROTATE (HI): 35000 lbf |
| WOB SLIDING (LO): 5000 lbf | WOB ROTATE (LO): 15000 lbf |
| RPM (ROTARY): 80 rpm | DRAG UP: 173000 lbf |
| RPM (MOTOR): 225 rpm | DRAG DN: 101000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|------------------------------------|
| BHA: 4 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-41095 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 18.58333333 |
| IADC BIT GRADE: 1 / 1 / ? / ? / X / 1 / FC / PP | | | MTR HRS TO DATE: 43.91666666666666 |
| | | | NOZZLES: 0.982 in² TFA |



Daily Activity Report

Drilling Services
v4.2.3981

Day 19 - 2013/02/27

PUMP PARAMETERS

| | | | | | |
|-----------------------|-------------|------------------------|------------|---------------------------------|-----------------------------|
| PRESSURE ON BTM: 4500 | | PRESSURE OFF BTM: 3300 | | TOTAL FLOW RATE: 275.00 gal/min | |
| PUMP 1: | TYPE: PZ-11 | EFF.: 95.0% | SPM: 70.00 | LINER: 6.00 in | STROKE VOL.: 3.8438 gal/stk |
| PUMP 2: | TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |
| PUMP 3: | TYPE: | EFF.: 100.0% | SPM: 0.00 | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|---------------------|---------------------------------------|------------------------|-------------|-------------------------------|-----------------------|
| MUD TYPE: Other Oil | VISC: 75 sec/qt | WTR LOSS: 0 cc/30min | PV: 13 cP | YP: 10 lb/100 ft ² | pH: 0 |
| DENSITY: 9.6 lb/gal | GEL 0/10: 4.00 lb/100 ft ² | SAND: 0 | SOLIDS: 3.7 | OIL: 56 | TEMP: 213 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Drill F/ 10178 - 11489'

We experienced crossing through faults throughout the day. We had poor detection going through transitions of formations. It also got very troublesome to slide. We experienced difficulties transferring weight to the bit. Oil based mud does not appear to help with sliding. I can see this Codell well being very problematic in the next 6000' of the lateral to be drilled. The torque is getting high and the ROP is slowing down around 100' per hour. Oscillating of the drill string is being utilized while sliding. Also No sweeps have been pumped as of 11,500'.

At 11489' we witnessed a pressure spike (5770 psi) and a diff spike of (2225 psi). It seemed to be a coincidence that a sweep was in the pipe and 300 stks from being out of the bit close to the agitator and shock sub when pressure spike occurred. Black rubber was soon noticed coming over the shakers. POOH for possible motor failure.

CUSTOMER SIGNATURE: _____



Weatherford®

Daily Activity Report

Drilling Services
v4.2.3981

Day 20 - 2013/02/28

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca

MWD Supervisor: Anthony Danna, Scott Coulter

Company Man: Doug Barone, Doug Blair

GROUND ELEV: 4833 ft

START DEPTH: 11489.0 ft

PROGRESS: 427.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 11916.0 ft

AVG. ROP.: 84.1 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|--|------|-------|-----|-------------|--|------|-------|-----|
| 00:00-02:00 | POOH - See Comments | 2.00 | 11489 | 4 | 19:35-19:55 | Circulating - See Comments - SPR-CONN | 0.33 | 11734 | 5 |
| 02:00-05:00 | Handle Directional Tools | 3.00 | 11489 | 5 | 19:55-20:00 | Circ & Accumulate Surveys | 0.08 | 11734 | 5 |
| 05:00-07:30 | Other - See Comments - Program LWD Tools | 2.50 | 11489 | 5 | 20:00-20:05 | Rotating With Motor | 0.08 | 11739 | 5 |
| 07:30-07:45 | Shallow Test Tools | 0.25 | 11489 | 5 | 20:05-20:55 | Orienting With Motor | 0.83 | 11754 | 5 |
| 07:45-12:30 | RIH | 4.75 | 11489 | 5 | 20:55-21:15 | Rotating With Motor | 0.33 | 11825 | 5 |
| 12:30-13:45 | Slip And Cut | 1.25 | 11489 | 5 | 21:15-21:25 | Other - See Comments - CONNECTION | 0.17 | 11825 | 5 |
| 13:45-16:30 | RIH | 2.75 | 11489 | 5 | 21:25-21:30 | Circ & Accumulate Surveys | 0.08 | 11825 | 5 |
| 16:30-16:45 | Rotating With Motor | 0.25 | 11551 | 5 | 21:30-21:35 | Rotating With Motor | 0.08 | 11830 | 5 |
| 16:45-16:55 | Circ & Accumulate Surveys | 0.17 | 11551 | 5 | 21:35-21:45 | Undefined - See Comments - WORK THE PIPE | 0.17 | 11830 | 5 |
| 16:55-17:45 | Orienting With Motor | 0.83 | 11556 | 5 | 21:45-22:30 | Orienting With Motor | 0.75 | 11843 | 5 |
| 17:45-18:05 | Rotating With Motor | 0.33 | 11642 | 5 | 22:30-22:45 | Rotating With Motor | 0.25 | 11916 | 5 |
| 18:05-18:15 | Circ & Accumulate Surveys | 0.17 | 11642 | 5 | 22:45-23:25 | Rig Service | 0.67 | 11916 | 5 |
| 18:15-19:05 | Orienting With Motor | 0.83 | 11655 | 5 | 23:25-23:45 | Circ & Accumulate Surveys | 0.33 | 11916 | 5 |
| 19:05-19:35 | Rotating With Motor | 0.50 | 11734 | 5 | 23:45-24:00 | Back Reaming | 0.25 | 11916 | 5 |

TIME SUMMARY (hrs):

| | | | | |
|-------------------|---------------------|--------------------|-----------------------------|----------------------------|
| MOTOR DRILL: 5.08 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 | ROTARY TORQUE: 14190 ft-lb | STRING WEIGHT: 127000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 6.50 | WOB SLIDING (HI): 25000 lbf | WOB ROTATE (HI): 30000 lbf |
| MOTOR REAM: 0.00 | | TRIP: 9.50 | WOB SLIDING (LO): 10000 lbf | WOB ROTATE (LO): 15000 lbf |
| CIRC: 1.42 | ROTARY DRILL: 0.00 | OTHER: 8.00 | RPM (ROTARY): 60 rpm | DRAG UP: 173000 lbf |
| MOTOR HRS: 6.50 | DRILL HRS: 5.08 | TOTAL HRS: 24.00 | RPM (MOTOR): 225 rpm | DRAG DN: 101000 lbf |

DRILLING PARAMETERS:

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|------------------------------------|
| BHA: 4 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-41095 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 1 / ? / ? / X / I / FC / PP | | | MTR HRS TO DATE: 43.91666666666666 |
| | | | NOZZLES: 0.982 in² TFA |

| | | | |
|--|---------------------|-------------------------|-------------------------------------|
| BHA: 5 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-41107 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 6.500000000000000 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / WO | | | MTR HRS TO DATE: 6.500000000000000 |
| | | | NOZZLES: 0.982 in² TFA |



Weatherford®

Daily Activity Report

Drilling Services

v4.2.3981

Day 20 - 2013/02/28

PUMP PARAMETERS

PRESSURE ON BTM: 4500

PRESSURE OFF BTM: 3200

TOTAL FLOW RATE: 275.00 gal/min

PUMP 1: TYPE: PZ-11

EFF.: 95.0%

SPM: 70.00

LINER: 6.00 in

STROKE VOL.: 3.8438 gal/stk

PUMP 2: TYPE: PZ-11

EFF.: 95.0%

SPM: 0.00

LINER: 0.00 in

STROKE VOL.: 0.0000 gal/stk

PUMP 3: TYPE:

EFF.: 100.0%

SPM: 0.00

LINER: 0.00 in

STROKE VOL.: 0.0000 gal/stk

MUD RECORD

MUD TYPE: Other Oil

VISC: 75 sec/qt

WTR LOSS: 0 cc/30min

PV: 13 cP

YP: 10 lb/100 ft² pH: 0

DENSITY: 10 lb/gal

GEL 0/10: 5.00 lb/100 ft²

SAND: 0

SOLIDS: 11.7

OIL: 56.8

TEMP: 239 °F

LIQUID BASE: Oil

LIQUID RATE: 0 gal/min

GAS TYPE:

GAS RATE: 0 cu ft/min

COMMENTS:

Handle Directional Tools, Program LWD & Surface Test Tools.

RIH

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Day 21 - 2013/03/01**Drilling Services**
v4.2.3981**FILE #:** 4028454**WELL NAME:** Dechant State 15C-1HZ**SERVICE CO.:** Weatherford**JOB TYPE:** Horizontal**COMPANY:** Anadarko Petroleum Corporation**SURVEY TYPE:** Positive Pulse MWD**RIG & NO:** Helmerich & Payne 307**SURFACE LOCATION:** Weld County**FIELD / LOCATION:** Wattenburg Field / CO / USA**DIR Supervisor:** Josh Monroe, Charles Apodaca**MWD Supervisor:** Anthony Danna, Scott Coulter**Company Man:** Craig Jones, Clint Tivedoux**GROUND ELEV:** 4833 ft**START DEPTH:** 11916.0 ft**PROGRESS:** 1415.0 ft**DAILY COST:** USD\$0.00**KB ELEV:** 25 ft**END DEPTH:** 13331.0 ft**AVG. ROP.:** 93.8 ft/hr**PREVIOUS COST:** USD\$0.00**TOTAL COST:** USD\$0.00**WORK STATUS:** Operating*(All units are imperial.)*

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|--|------|-------|-----|-------------|---|------|-------|-----|
| 00:00-00:15 | Back Reaming | 0.25 | 11916 | 5 | 14:05-14:15 | Orienting With Motor | 0.17 | 12643 | 5 |
| 00:15-00:20 | Undefined - See Comments - CONNECTION | 0.08 | 11916 | 5 | 14:15-14:20 | Rotating With Motor | 0.08 | 12664 | 5 |
| 00:20-00:45 | Rotating With Motor | 0.42 | 12008 | 5 | 14:20-14:30 | Circ & Accumulate Surveys | 0.17 | 12664 | 5 |
| 00:45-01:05 | Circulating - See Comments - SWEEP | 0.33 | 12008 | 5 | 14:30-14:40 | Rotating With Motor | 0.17 | 12674 | 5 |
| 01:05-01:15 | Circ & Accumulate Surveys | 0.17 | 12008 | 5 | 14:40-15:00 | Orienting With Motor | 0.33 | 12684 | 5 |
| 01:15-01:25 | Rotating With Motor | 0.17 | 12013 | 5 | 15:00-15:25 | Rotating With Motor | 0.42 | 12727 | 5 |
| 01:25-01:35 | Other - See Comments - WORK PIPE FOR TF | 0.17 | 12013 | 5 | 15:25-16:20 | Orienting With Motor | 0.92 | 12747 | 5 |
| 01:35-02:25 | Orienting With Motor | 0.83 | 12026 | 5 | 16:20-16:30 | Rotating With Motor | 0.17 | 12759 | 5 |
| 02:25-02:45 | Rotating With Motor | 0.33 | 12099 | 5 | 16:30-16:40 | Circ & Accumulate Surveys | 0.17 | 12759 | 5 |
| 02:45-02:55 | Circ & Accumulate Surveys | 0.17 | 12099 | 5 | 16:40-17:05 | Rotating With Motor | 0.42 | 12822 | 5 |
| 02:55-03:45 | Ream - See Comments | 0.83 | 12099 | 5 | 17:05-17:45 | Circ & Condition Hole - sweep | 0.67 | 12822 | 5 |
| 03:45-03:55 | Rotating With Motor | 0.17 | 12104 | 5 | 17:45-17:55 | Circ & Accumulate Surveys - check shot | 0.17 | 12822 | 5 |
| 03:55-04:05 | Other - See Comments - Work pipe for TF | 0.17 | 12104 | 5 | 17:55-18:10 | Orienting With Motor | 0.25 | 12834 | 5 |
| 04:05-04:35 | Orienting With Motor | 0.50 | 12111 | 5 | 18:10-18:15 | Rotating With Motor | 0.08 | 12854 | 5 |
| 04:35-04:55 | Rotating With Motor | 0.33 | 12191 | 5 | 18:15-18:25 | Circ & Accumulate Surveys | 0.17 | 12854 | 5 |
| 04:55-05:10 | Circulating - See Comments | 0.25 | 12191 | 5 | 18:25-18:40 | Other - See Comments - Work pipe for T-F | 0.25 | 12854 | 5 |
| 05:10-05:20 | Circ & Accumulate Surveys | 0.17 | 12191 | 5 | 18:40-19:00 | Orienting With Motor | 0.33 | 12864 | 5 |
| 05:20-05:30 | Rotating With Motor | 0.17 | 12196 | 5 | 19:00-19:10 | Rotating With Motor | 0.17 | 12917 | 5 |
| 05:30-05:40 | Undefined - See Comments - work pipe f/ TF | 0.17 | 12196 | 5 | 19:10-19:15 | Circ & Accumulate Surveys - check shot survey | 0.08 | 12917 | 5 |
| 05:40-06:05 | Orienting With Motor | 0.42 | 12203 | 5 | 19:15-19:30 | Rotating With Motor | 0.25 | 12948 | 5 |
| 06:05-06:30 | Rotating With Motor | 0.42 | 12286 | 5 | 19:30-20:05 | Back Reaming | 0.58 | 12948 | 5 |
| 06:30-07:00 | Circ & Accumulate Surveys | 0.50 | 12286 | 5 | 20:05-20:25 | Rotating With Motor | 0.33 | 13043 | 5 |
| 07:00-07:40 | Orienting With Motor | 0.67 | 12301 | 5 | 20:25-20:30 | Circ & Accumulate Surveys | 0.08 | 13043 | 5 |
| 07:40-08:15 | Rotating With Motor | 0.58 | 12380 | 5 | 20:30-20:40 | Other - See Comments - CONNECTION | 0.17 | 13043 | 5 |
| 08:15-08:30 | Circ & Accumulate Surveys | 0.25 | 12380 | 5 | 20:40-21:00 | Orienting With Motor | 0.33 | 13055 | 5 |
| 08:30-10:00 | Orienting With Motor | 1.50 | 12395 | 5 | 21:00-21:10 | Rotating With Motor | 0.17 | 13137 | 5 |
| 10:00-10:30 | Rotating With Motor | 0.50 | 12444 | 5 | 21:10-21:30 | Circulating - See Comments - SPR- CONN | 0.33 | 13137 | 5 |
| 10:30-11:20 | Orienting With Motor | 0.83 | 12453 | 5 | 21:30-21:35 | Circ & Accumulate Surveys | 0.08 | 13137 | 5 |
| 11:20-11:30 | Rotating With Motor | 0.17 | 12475 | 5 | 21:35-21:55 | Rotating With Motor | 0.33 | 13232 | 5 |
| 11:30-11:50 | Circ & Accumulate Surveys | 0.33 | 12475 | 5 | 21:55-22:05 | Undefined - See Comments - COECTIONN | 0.17 | 13232 | 5 |
| 11:50-12:10 | Rotating With Motor | 0.33 | 12538 | 5 | 22:05-22:10 | Circ & Accumulate Surveys | 0.08 | 13232 | 5 |
| 12:10-12:20 | Circ & Accumulate Surveys - Check Shot | 0.17 | 12538 | 5 | 22:10-22:30 | Rotating With Motor | 0.33 | 13326 | 5 |
| 12:20-13:10 | Orienting With Motor | 0.83 | 12553 | 5 | 22:30-22:45 | Circ & Accumulate Surveys | 0.25 | 13326 | 5 |
| 13:10-13:30 | Rotating With Motor | 0.33 | 12570 | 5 | 22:45-23:10 | Wait On Orders | 0.42 | 13326 | 5 |
| 13:30-13:45 | Circ & Accumulate Surveys | 0.25 | 12570 | 5 | 23:10-23:45 | Work on Pumps - switch pmps, retogel | 0.58 | 13326 | 5 |
| 13:45-13:50 | Rotating With Motor | 0.08 | 12633 | 5 | 23:45-24:00 | Orienting With Motor | 0.25 | 13331 | 5 |
| 13:50-14:05 | Circ & Accumulate Surveys - Check Shot | 0.25 | 12633 | 5 | | | 0.00 | | |

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 21 - 2013/03/01

| TIME SUMMARY (hrs): | | | DRILLING PARAMETERS: | | |
|---------------------|---------------------|--------------------|-----------------------------|------------------|------------|
| MOTOR DRILL: 15.08 | ORIENTING HRS: 8.17 | ROTARY DRILL: 0.00 | ROTARY TORQUE: 11500 ft-lb | STRING WEIGHT | 147000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 6.92 | MOTOR HRS: 21.83 | WOB SLIDING (HI): 27000 lbf | WOB ROTATE (HI): | 20000 lbf |
| MOTOR REAM: 0.83 | | TRIP: 0.00 | WOB SLIDING (LO): 10000 lbf | WOB ROTATE (LO): | 10000 lbf |
| CIRC: 5.92 | ROTARY DRILL: 0.00 | OTHER: 2.17 | RPM (ROTARY): 60 rpm | DRAG UP: | 218000 lbf |
| MOTOR HRS: 21.83 | DRILL HRS: 15.08 | TOTAL HRS: 24.00 | RPM (MOTOR): 220 rpm | DRAG DN: | 92000 lbf |

— BHA / MOTOR / BIT INFORMATION: —

| | | | |
|--|---------------------|-------------------------|------------------------------------|
| BHA: 5 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-41107 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 21.83333333 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / WO | | | MTR HRS TO DATE: 28.33333333 |
| | | | NOZZLES: 0.982 in ² TFA |

— PUMP PARAMETERS —

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 4800 | PRESSURE OFF BTM: 3900 | TOTAL FLOW RATE: 275.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 70.00 | LINER: 6.00 in |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in |
| | | STROKE VOL.: 3.8438 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |

— MUD RECORD —

| | | | | | |
|---------------------|---------------------------------------|------------------------|-------------|-------------------------------|-----------------------|
| MUD TYPE: Other Oil | VISC: 80 sec/qt | WTR LOSS: 0 cc/30min | PV: 14 cP | YP: 12 lb/100 ft ² | pH: 0 |
| DENSITY: 9.5 lb/gal | GEL 0/10: 7.00 lb/100 ft ² | SAND: 0 | SOLIDS: 9.3 | OIL: 56.3 | TEMP: 243 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

— COMMENTS: —

Drill f/ 11916 to 13272'

Sliding became very problematic as transferring the weight to bit became very troublesome. We had problems getting to bottom without rotating or oscillating. 90K WOB was ran while doing so. Formation was throwing us around pretty good giving us multiple 4 degree doglegs. We were restricted to 15' slides per Anadarkos request. By all means 15' of slide is not enough for a 2 degree dogleg when the Motor output is 5 - 7 degrees per 100'. In one insistence I saw 15' of slide 90R and it turned 3.5 degrees to the left. This was brought up to the Co. man but they still restricted us to 15' slides. Because of this the results were that we ended up being 20' and 40' Left at crew change.

From a MD of 13232 to 13326 we got a 6.35 dog leg in rotation inc. went from a 91.23 to a 87.41 and azm went from a 184.62 to 180.03, Geo stir said we must have bounced off the fort hays.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 22 - 2013/03/02

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca, Eric Hughes

MWD Supervisor: Anthony Danna, Scott Coulter

Company Man: Craig Jones, Clint Tivedoux

GROUND ELEV: 4833 ft

START DEPTH: 13331.0 ft

PROGRESS: 942.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 14273.0 ft

AVG. ROP.: 78.0 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|--|------|-------|-----|-------------|---------------------------|------|-------|-----|
| 00:00-00:20 | Orienting With Motor | 0.33 | 13338 | 5 | 07:05-07:25 | Rotating With Motor | 0.33 | 13799 | 5 |
| 00:20-00:35 | Rotating With Motor | 0.25 | 13421 | 5 | 07:25-07:40 | Circ & Accumulate Surveys | 0.25 | 13799 | 5 |
| 00:35-00:40 | Circ & Accumulate Surveys | 0.08 | 13421 | 5 | 07:40-07:50 | Rotating With Motor | 0.17 | 13809 | 5 |
| 00:40-01:00 | Rig Service | 0.33 | 13421 | 5 | 07:50-09:10 | Orienting With Motor | 1.33 | 13829 | 5 |
| 01:00-01:20 | Other - See Comments - Work pipe for T-F | 0.33 | 13421 | 5 | 09:10-09:30 | Rotating With Motor | 0.33 | 13894 | 5 |
| 01:20-02:20 | Orienting With Motor | 1.00 | 13436 | 5 | 09:30-09:40 | Orienting With Motor | 0.17 | 13894 | 5 |
| 02:20-02:40 | Rotating With Motor | 0.33 | 13516 | 5 | 09:40-10:00 | Rotating With Motor | 0.33 | 13989 | 5 |
| 02:40-02:45 | Circ & Accumulate Surveys | 0.08 | 13516 | 5 | 10:00-10:10 | Circ & Accumulate Surveys | 0.17 | 13989 | 5 |
| 02:45-02:55 | Other - See Comments - CONNECTION | 0.17 | 13516 | 5 | 10:10-10:35 | Rotating With Motor | 0.42 | 14083 | 5 |
| 02:55-03:05 | Undefined - See Comments - WORK PIPE FOR T-F | 0.17 | 13516 | 5 | 10:35-10:45 | Circ & Accumulate Surveys | 0.17 | 14083 | 5 |
| 03:05-03:45 | Orienting With Motor | 0.67 | 13531 | 5 | 10:45-12:40 | Orienting With Motor | 1.92 | 14097 | 5 |
| 03:45-04:00 | Rotating With Motor | 0.25 | 13610 | 5 | 12:40-13:00 | Rotating With Motor | 0.33 | 14178 | 5 |
| 04:00-04:05 | Circ & Accumulate Surveys | 0.08 | 13610 | 5 | 13:00-13:15 | Circ & Accumulate Surveys | 0.25 | 14178 | 5 |
| 04:05-04:35 | Undefined - See Comments - Work pipe for T-F | 0.50 | 13610 | 5 | 13:15-15:30 | Circ & Condition Hole | 2.25 | 14178 | 5 |
| 04:35-05:45 | Orienting With Motor | 1.17 | 13620 | 5 | 15:30-16:30 | Orienting With Motor | 1.00 | 14193 | 5 |
| 05:45-05:50 | Work on Pumps | 0.08 | 13620 | 5 | 16:30-17:00 | Rotating With Motor | 0.50 | 14273 | 5 |
| 05:50-06:45 | Rotating With Motor | 0.92 | 13705 | 5 | 17:00-17:10 | Circ & Accumulate Surveys | 0.17 | 14273 | 5 |
| 06:45-07:05 | Orienting With Motor | 0.33 | 13720 | 5 | 17:10-24:00 | Wiper Trip | 6.83 | 14273 | 5 |

TIME SUMMARY (hrs):

| | | |
|--------------------|---------------------|--------------------|
| MOTOR DRILL: 12.08 | ORIENTING HRS: 7.92 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 4.17 | MOTOR HRS: 15.58 |
| MOTOR REAM: 0.00 | | TRIP: 6.83 |
| CIRC: 3.50 | ROTARY DRILL: 0.00 | OTHER: 1.58 |
| MOTOR HRS: 15.58 | DRILL HRS: 12.08 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-----------------------------|----------------------------|
| ROTARY TORQUE: 14000 ft-lb | STRING WEIGHT: 151000 lbs |
| WOB SLIDING (HI): 18000 lbf | WOB ROTATE (HI): 20000 lbf |
| WOB SLIDING (LO): 6000 lbf | WOB ROTATE (LO): 10000 lbf |
| RPM (ROTARY): 60 rpm | DRAG UP: 236000 lbf |
| RPM (MOTOR): 220 rpm | DRAG DN: 90000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|-------------------------|------------------------------------|
| BHA: 5 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-41107 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 15.58333333 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / WO | | | MTR HRS TO DATE: 43.91666666666666 |
| | | | NOZZLES: 0.982 in ² TFA |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 4750 | PRESSURE OFF BTM: 3900 | TOTAL FLOW RATE: 265.00 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 70.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 3.8438 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|---------------------|---------------------------------------|------------------------|------------|-------------------------------|-----------------------|
| MUD TYPE: Other Oil | VISC: 55 sec/qt | WTR LOSS: 0 cc/30min | PV: 18 cP | YP: 13 lb/100 ft ² | pH: 0 |
| DENSITY: 9.8 lb/gal | GEL 0/10: 4.00 lb/100 ft ² | SAND: 0 | SOLIDS: 13 | OIL: 55.6 | TEMP: 249 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |



Daily Activity Report

Drilling Services
v4.2.3981

Day 22 - 2013/03/02

COMMENTS:

Drill ahead F/ 13272' - 14,279'

Codell is very hard to slide in. We are unable to get to bottom without rotating or oscillating. Unable to get any diff or TF with 100K WOB. Not able to transfer the weight to bit, causing very long and poor quality slides. Stabilizers are hanging us up and it is recommended to drop them on Codell wells.

Pulled 25 Stds of Drill Pipe for a short Wiper Trip. Ream to bottom and circulate two sweeps.

CUSTOMER SIGNATURE:



Weatherford®

Daily Activity Report

Drilling Services
v4.2.3981

Day 23 - 2013/03/03

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Eric Hughes

Other: Eric Dearman

MWD Supervisor: Scott Coulter

Company Man: Craig Jones, Clint Tivedoux

GROUND ELEV: 4833 ft

START DEPTH: 14273.0 ft

PROGRESS: 962.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 15235.0 ft

AVG. ROP.: 73.5 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|--|------|-------|-----|-------------|-------------------------------------|------|-------|-----|
| 00:00-03:50 | Wiper Trip | 3.83 | 14273 | 5 | 15:20-15:35 | Circ & Accumulate Surveys | 0.25 | 14746 | 5 |
| 03:50-08:10 | Circ & Condition Hole | 4.33 | 14273 | 5 | 15:35-15:40 | Rotating With Motor | 0.08 | 14756 | 5 |
| 08:10-08:20 | Circ & Accumulate Surveys - Check Shot | 0.17 | 14273 | 5 | 15:40-17:00 | Orienting With Motor | 1.33 | 14776 | 5 |
| 08:20-09:05 | Orienting With Motor | 0.75 | 14293 | 5 | 17:00-17:30 | Rotating With Motor | 0.50 | 14840 | 5 |
| 09:05-09:20 | Rotating With Motor | 0.25 | 14367 | 5 | 17:30-17:40 | Circ & Accumulate Surveys | 0.17 | 14840 | 5 |
| 09:20-09:35 | Circ & Accumulate Surveys | 0.25 | 14367 | 5 | 17:40-18:00 | Rotating With Motor | 0.33 | 14935 | 5 |
| 09:35-10:00 | Rotating With Motor | 0.42 | 14462 | 5 | 18:00-18:20 | Circ & Accumulate Surveys | 0.33 | 14935 | 5 |
| 10:00-10:05 | Circ & Accumulate Surveys | 0.08 | 14462 | 5 | 18:20-18:40 | Rotating With Motor | 0.33 | 15029 | 5 |
| 10:05-10:30 | Rotating With Motor | 0.42 | 14557 | 5 | 18:40-18:50 | Circ & Accumulate Surveys | 0.17 | 15029 | 5 |
| 10:30-10:45 | Circ & Accumulate Surveys | 0.25 | 14557 | 5 | 18:50-19:10 | Rotating With Motor | 0.33 | 15124 | 5 |
| 10:45-13:10 | Orienting With Motor | 2.42 | 14573 | 5 | 19:10-19:25 | Circ & Accumulate Surveys | 0.25 | 15124 | 5 |
| 13:10-13:35 | Rotating With Motor | 0.42 | 14651 | 5 | 19:25-19:45 | Rotating With Motor | 0.33 | 15219 | 5 |
| 13:35-13:50 | Circ & Accumulate Surveys | 0.25 | 14651 | 5 | 19:45-19:55 | Circ & Accumulate Surveys | 0.17 | 15219 | 5 |
| 13:50-14:55 | Orienting With Motor | 1.08 | 14671 | 5 | 19:55-23:35 | Orienting With Motor | 3.67 | 15235 | 5 |
| 14:55-15:20 | Rotating With Motor | 0.42 | 14746 | 5 | 23:35-24:00 | Circ & Condition Hole - PUMP SWEEPS | 0.42 | 15235 | 5 |

TIME SUMMARY (hrs):

| | | |
|--------------------|---------------------|--------------------|
| MOTOR DRILL: 13.08 | ORIENTING HRS: 9.25 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 3.83 | MOTOR HRS: 20.17 |
| MOTOR REAM: 0.00 | | TRIP: 3.83 |
| CIRC: 7.08 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 20.17 | DRILL HRS: 13.08 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-----------------------------|----------------------------|
| ROTARY TORQUE: 14000 ft-lb | STRING WEIGHT: 151000 lbs |
| WOB SLIDING (HI): 18000 lbf | WOB ROTATE (HI): 20000 lbf |
| WOB SLIDING (LO): 6000 lbf | WOB ROTATE (LO): 10000 lbf |
| RPM (ROTARY): 60 rpm | DRAG UP: 236000 lbf |
| RPM (MOTOR): 220 rpm | DRAG DN: 90000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|-------------------------|--------------------------------------|
| BHA: 5 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-41107 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 20.166666666666666 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / WO | | | MTR HRS TO DATE: 64.08333333333333 |
| | | | NOZZLES: 0.982 in² TFA |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 4800 | PRESSURE OFF BTM: 4000 | TOTAL FLOW RATE: 255.62 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 70.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 3.8438 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|---------------------|---------------------------|------------------------|-------------|-------------------|-----------------------|
| MUD TYPE: Other Oil | VISC: 55 sec/qt | WTR LOSS: 18 cc/30min | PV: 14 cP | YP: 10 lb/100 ft² | pH: 0 |
| DENSITY: 9.6 lb/gal | GEL 0/10: 4.00 lb/100 ft² | SAND: 0 | SOLIDS: 4.5 | OIL: 55.6 | TEMP: 98 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |



Day 23 - 2013/03/03

COMMENTS:

Circulate and Condition well.

Codell is very hard to slide in. We are unable to get to bottom without rotating or oscillating. Unable to get any diff or TF with 100K WOB. Not able to transfer the weight to bit, causing very long and poor quality slides. Stabilizers are hanging us up and it is recommended to drop them on Codell wells.

While sliding a stand pipe pressure drop of 1800 psi occurred. Surface equipment was checked and no issues found. Co Rep was notified of issue and decision was made to pull out of hole at Anadarko's request.

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 24 - 2013/03/04

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly
 Other: Eric Dearman
 MWD Supervisor: Scott Coulter
 Company Man: Craig Jones, Clint Tivedoux

GROUND ELEV: 4833 ft START DEPTH: 15235.0 ft PROGRESS: 0.0 ft DAILY COST: USD\$0.00
 KB ELEV: 25 ft END DEPTH: 15235.0 ft AVG. ROP.: 0.0 ft/hr PREVIOUS COST: USD\$0.00
 WORK STATUS: Operating (All units are imperial.) TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---|------|-------|-----|-------------|-------------------------|------|-------|-----|
| 00:00-04:30 | POOH - See Comments - POOH for psi drop | 4.50 | 15235 | 5 | 14:00-19:00 | RIH With Fishing Tools | 5.00 | 15235 | 5 |
| 04:30-14:00 | Wait On Fisherman | 9.50 | 15235 | 5 | 19:00-24:00 | POOH With Fishing Tools | 5.00 | 15235 | 5 |

| TIME SUMMARY (hrs): | | | | | DRILLING PARAMETERS: | | | | |
|---------------------|------|----------------|------|---------------|----------------------|-------------------|-------|------------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 0.00 | ROTARY TORQUE: | | STRING WEIGHT | 0 lbs |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 0.00 | WOB SLIDING (HI): | 0 lbf | WOB ROTATE (HI): | 0 lbf |
| MOTOR REAM: | 0.00 | | | TRIP: | 14.50 | WOB SLIDING (LO): | 0 lbf | WOB ROTATE (LO): | 0 lbf |
| CIRC: | 0.00 | ROTARY DRILL: | 0.00 | OTHER: | 9.50 | RPM (ROTARY): | | DRAG UP: | 0 lbf |
| MOTOR HRS: | 0.00 | DRILL HRS: | 0.00 | TOTAL HRS: | 24.00 | RPM (MOTOR): | | DRAG DN: | 0 lbf |

BHA / MOTOR / BIT INFORMATION:

BHA: 5 HOLE SIZE: 6.125 in SECTION TYPE: Lateral 1 SURVEY TYPE: HEL LWD
 MANFCT.: Weatherford STABILIZER: No SERIAL#: 475-41107 MODEL: ME6770 LOBE CFG.:6/7
 SETTING: 1.5 ° KICKPAD:No SIZE: 5" (127mm) MTR HRS THIS DAY: 0 MTR HRS TO DATE:64.083333333333
 MANFCT: Security BIT TYPE:Security TYPE: MMD54 NOZZLES:0.982 in² TFA
 IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / WO

PUMP PARAMETERS

PRESSURE ON BTM: 0 PRESSURE OFF BTM:0 TOTAL FLOW RATE: 0.00 gal/min
 PUMP 1: TYPE: PZ-11 EFF.: 95.0% SPM: 0.00 LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk
 PUMP 2: TYPE: PZ-11 EFF.: 95.0% SPM: 0.00 LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk
 PUMP 3: TYPE: EFF.: 100.0% SPM: 0.00 LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk

MUD RECORD

MUD TYPE: VISC: 0 sec/qt WTR LOSS: 0 cc/30min PV: 0 cP YP: 0 lb/100 ft² pH: 0
 DENSITY: 0 lb/gal GEL 0/10: 0.00 lb/100 ft² SAND: 0 SOLIDS: 0 OIL: 0 TEMP: 0 °F
 LIQUID BASE: LIQUID RATE: 0 gal/min GAS TYPE: GAS RATE: 0 cu ft/min

COMMENTS:

While pulling off bottom, tight hole conditions required 265K hook load to be pulled in order to free pipe. When pipe broke free a loss of roughly 80K was noticed on hook load. Once on the bank and pipe tally was examined and stands pulled calculated, figures state that roughly 6,637' of pipe was left in hole. Pin end on tool joint were the string parted was noticed to be washed.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 25 - 2013/03/05

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Eric Hughes

MWD Supervisor: Scott Coulter

Field Superinte: Jet Hunter

Company Man: Craig Jones, Clint Tivedoux

GROUND ELEV: 4833 ft START DEPTH: 15235.0 ft PROGRESS: 0.0 ft DAILY COST: USD\$0.00
 KB ELEV: 25 ft END DEPTH: 15235.0 ft AVG. ROP.: 0.0 ft/hr PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating (All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------------|------|-------|-----|-------------|------------------------------------|------|-------|-----|
| 00:00-02:30 | POOH With Fishing Tools | 2.50 | 15235 | 5 | 13:15-14:45 | Handle Directional Tools | 1.50 | 15235 | 6 |
| 02:30-11:00 | POOH To Change BHA | 8.50 | 15235 | 5 | 14:45-15:45 | Other - See Comments - Program LWD | 1.00 | 15235 | 6 |
| 11:00-12:45 | Lay Down Directional Tools | 1.75 | 15235 | 5 | 15:45-23:00 | RIH With Directional | 7.25 | 15235 | 6 |
| 12:45-13:15 | Rig Service | 0.50 | 15235 | 5 | 23:00-24:00 | Slip And Cut | 1.00 | 15235 | 6 |

TIME SUMMARY (hrs):

MOTOR DRILL: 0.00 ORIENTING HRS: 0.00 ROTARY DRILL: 0.00
 TIME DRILL: 0.00 ROTATING HRS: 0.00 MOTOR HRS: 0.00
 MOTOR REAM: 0.00 TRIP: 18.25
 CIRC: 0.00 ROTARY DRILL: 0.00 OTHER: 5.75
 MOTOR HRS: 0.00 DRILL HRS: 0.00 TOTAL HRS: 24.00

DRILLING PARAMETERS:

ROTARY TORQUE: STRING WEIGHT 0 lbs
 WOB SLIDING (HI): 0 lbf WOB ROTATE (HI): 0 lbf
 WOB SLIDING (LO): 0 lbf WOB ROTATE (LO): 0 lbf
 RPM (ROTARY): DRAG UP: 0 lbf
 RPM (MOTOR): DRAG DN: 0 lbf

BHA / MOTOR / BIT INFORMATION:

BHA: 5 HOLE SIZE: 6.125 in SECTION TYPE: Lateral 1 SURVEY TYPE: HEL LWD
 MANFCT.: Weatherford STABILIZER: No SERIAL#: 475-41107 MODEL: ME6770 LOBE CFG.:6/7
 SETTING: 1.5 ° KICKPAD:No SIZE: 5" (127mm) MTR HRS THIS DAY: 0 MTR HRS TO DATE:64.083333333333
 MANFCT: Security BIT TYPE:Security TYPE: MMD54 NOZZLES:0.982 in² TFA
 IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / WO

BHA: 6 HOLE SIZE: 6.125 in SECTION TYPE: Lateral 1 SURVEY TYPE: HEL LWD
 MANFCT.: Weatherford STABILIZER: No SERIAL#: 475-45705 MODEL: ME6770 LOBE CFG.:6/7
 SETTING: 1.5 ° KICKPAD:No SIZE: 5" (127mm) MTR HRS THIS DAY: 0 MTR HRS TO DATE:0
 MANFCT: Security BIT TYPE:Security TYPE: MMD54 NOZZLES:0.982 in² TFA
 IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD

PUMP PARAMETERS

PRESSURE ON BTM: 0 PRESSURE OFF BTM:0 TOTAL FLOW RATE: 0.00 gal/min
 PUMP 1: TYPE: PZ-11 EFF.: 95.0% SPM: 0.00 LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk
 PUMP 2: TYPE: PZ-11 EFF.: 95.0% SPM: 0.00 LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk
 PUMP 3: TYPE: EFF.: 100.0% SPM: 0.00 LINER: 0.00 in STROKE VOL.: 0.0000 gal/stk

MUD RECORD

MUD TYPE: Mineral Oil VISC: 70 sec/qt WTR LOSS: 18 cc/30min PV: 20 cP YP: 13 lb/100 ft² pH: 0
 DENSITY: 9.8 lb/gal GEL 0/10: 5.00 lb/100 ft² SAND: 0 SOLIDS: 9.8 OIL: 55.6 TEMP: 96 °F
 LIQUID BASE: Synthetic LIQUID RATE: 0 gal/min GAS TYPE: GAS RATE: 0 cu ft/min

COMMENTS:

Retrieved Fish. Lay down damaged joint where string parted, continue to POOH and lay down BHA #5.
 Pick up new BHA and Trip in hole.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 26 - 2013/03/06**FILE #:** 4028454**WELL NAME:** Dechant State 15C-1HZ**SERVICE CO.:** Weatherford**JOB TYPE:** Horizontal**COMPANY:** Anadarko Petroleum Corporation**SURVEY TYPE:** Positive Pulse MWD**RIG & NO:** Helmerich & Payne 307**SURFACE LOCATION:** Weld County**FIELD / LOCATION:** Wattenburg Field / CO / USA**DIR Supervisor:** Josh Monroe, Joe Kelly, Eric Hughes**MWD Supervisor:** Scott Coulter**Other:** Pete Hashmen**GROUND ELEV:** 4833 ft**START DEPTH:** 15235.0 ft**PROGRESS:** 465.0 ft**DAILY COST:** USD\$0.00**KB ELEV:** 25 ft**END DEPTH:** 15700.0 ft**AVG. ROP.:** 36.0 ft/hr**PREVIOUS COST:** USD\$0.00**TOTAL COST:** USD\$0.00**WORK STATUS:** Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---|------|-------|-----|-------------|---|------|-------|-----|
| 00:00-05:00 | RIH With Directional | 5.00 | 15235 | 6 | 15:20-15:35 | Circ & Accumulate Surveys - Check Shot | 0.25 | 15550 | 6 |
| 05:00-09:00 | Wash To Bottom | 4.00 | 15235 | 6 | 15:35-18:20 | Orienting With Motor | 2.75 | 15575 | 6 |
| 09:00-09:45 | Rotating With Motor - Slow Pump Rates | 0.75 | 15311 | 6 | 18:20-18:30 | Rotating With Motor | 0.17 | 15595 | 6 |
| 09:45-10:15 | Circ & Accumulate Surveys - Recycle for MWD | 0.50 | 15311 | 6 | 18:30-18:40 | Circ & Accumulate Surveys | 0.17 | 15595 | 6 |
| 10:15-11:00 | Orienting With Motor | 0.75 | 15326 | 6 | 18:40-19:00 | Rotating With Motor | 0.33 | 15629 | 6 |
| 11:00-11:30 | Rotating With Motor | 0.50 | 15406 | 6 | 19:00-19:10 | Circ & Accumulate Surveys - Check shot | 0.17 | 15629 | 6 |
| 11:30-11:45 | Circ & Accumulate Surveys | 0.25 | 15406 | 6 | 19:10-21:20 | Orienting With Motor | 2.17 | 15644 | 6 |
| 11:45-13:00 | Orienting With Motor | 1.25 | 15421 | 6 | 21:20-22:20 | Rotating With Motor | 1.00 | 15690 | 6 |
| 13:00-13:20 | Rotating With Motor | 0.33 | 15483 | 6 | 22:20-22:40 | Undefined - See Comments - Change rotate head | 0.33 | 15690 | 6 |
| 13:20-14:45 | Orienting With Motor | 1.42 | 15498 | 6 | 22:40-22:50 | Circ & Accumulate Surveys | 0.17 | 15690 | 6 |
| 14:45-15:00 | Circ & Accumulate Surveys | 0.25 | 15498 | 6 | 22:50-24:00 | Orienting With Motor | 1.17 | 15700 | 6 |
| 15:00-15:20 | Rotating With Motor | 0.33 | 15550 | 6 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | |
|---------------------------|----------------------------|---------------------------|--------------------------------|-------------------------------|
| MOTOR DRILL: 12.92 | ORIENTING HRS: 9.50 | ROTARY DRILL: 0.00 | ROTARY TORQUE: | STRING WEIGHT 0 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 3.42 | MOTOR HRS: 18.67 | WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| MOTOR REAM: 0.00 | | TRIP: 5.00 | WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| CIRC: 5.75 | ROTARY DRILL: 0.00 | OTHER: 0.33 | RPM (ROTARY): 70 rpm | DRAW UP: 0 lbf |
| MOTOR HRS: 18.67 | DRILL HRS: 12.92 | TOTAL HRS: 24.00 | RPM (MOTOR): | DRAW DN: 0 lbf |

DRILLING PARAMETERS:**BHA / MOTOR / BIT INFORMATION:**

| | | | |
|--|----------------------------|--------------------------------|---|
| BHA: 6 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-45705 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 18.666666666666667 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD | | | NOZZLES: 0.982 in ² TFA |

PUMP PARAMETERS

| | | |
|------------------------------|-------------------------------|--|
| PRESSURE ON BTM: 4900 | PRESSURE OFF BTM: 3900 | TOTAL FLOW RATE: 244.66 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 67.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 3.8438 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|------------------------------|--|-------------------------------|---------------------|--------------------------------------|------------------------------|
| MUD TYPE: Mineral Oil | VISC: 70 sec/qt | WTR LOSS: 18 cc/30min | PV: 20 cP | YP: 12 lb/100 ft ² | pH: 0 |
| DENSITY: 9.8 lb/gal | GEL 0/10: 5.00 lb/100 ft ² | SAND: 0 | SOLIDS: 10.2 | OIL: 56.9 | TEMP: 98 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Trip in hole with BHA #6. Drill ahead in Lateral.

CUSTOMER SIGNATURE:



Weatherford®

Daily Activity Report

Drilling Services
v4.2.3981

Day 27 - 2013/03/07

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Eric Hughes

Other: Pete Hashmen

MWD Supervisor: Scott Coulter

Company Man: Craig Jones, Clint Tivedoux

GROUND ELEV: 4833 ft

START DEPTH: 15700.0 ft

PROGRESS: 562.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 16262.0 ft

AVG. ROP.: 30.5 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---------------------------|------|-------|-----|-------------|---|------|-------|-----|
| 00:00-01:00 | Orienting With Motor | 1.00 | 15710 | 6 | 11:30-12:25 | Rotating With Motor | 0.92 | 16163 | 6 |
| 01:00-01:20 | Rotating With Motor | 0.33 | 15784 | 6 | 12:25-12:40 | Circ & Accumulate Surveys | 0.25 | 16163 | 6 |
| 01:20-01:30 | Circ & Accumulate Surveys | 0.17 | 15784 | 6 | 12:40-14:30 | Orienting With Motor | 1.83 | 16165 | 6 |
| 01:30-03:40 | Orienting With Motor | 2.17 | 15799 | 6 | 14:30-17:10 | Circulating - See Comments - Circ. and Spot Beeds | 2.67 | 16165 | 6 |
| 03:40-04:00 | Rotating With Motor | 0.33 | 15879 | 6 | 17:10-17:25 | Circulating - See Comments - SPR'S | 0.25 | 16165 | 6 |
| 04:00-04:10 | Circ & Accumulate Surveys | 0.17 | 15879 | 6 | 17:25-19:00 | Orienting With Motor | 1.58 | 16178 | 6 |
| 04:10-06:40 | Orienting With Motor | 2.50 | 15894 | 6 | 19:00-20:00 | Other - See Comments - trouble shoot LWD | 1.00 | 16178 | 6 |
| 06:40-07:00 | Rotating With Motor | 0.33 | 15973 | 6 | 20:00-21:00 | Orienting With Motor | 1.00 | 16185 | 6 |
| 07:00-07:15 | Circ & Accumulate Surveys | 0.25 | 15973 | 6 | 21:00-21:50 | Rotating With Motor | 0.83 | 16257 | 6 |
| 07:15-08:45 | Orienting With Motor | 1.50 | 15988 | 6 | 21:50-22:00 | Circ & Accumulate Surveys | 0.17 | 16257 | 6 |
| 08:45-09:35 | Rotating With Motor | 0.83 | 16068 | 6 | 22:00-22:20 | Gamma Rerun | 0.33 | 16257 | 6 |
| 09:35-09:55 | Circ & Accumulate Surveys | 0.33 | 16068 | 6 | 22:20-24:00 | Orienting With Motor | 1.67 | 16262 | 6 |
| 09:55-11:30 | Orienting With Motor | 1.58 | 16078 | 6 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | |
|--------------------|----------------------|--------------------|----------------------------|---------------------------|
| MOTOR DRILL: 18.42 | ORIENTING HRS: 14.83 | ROTARY DRILL: 0.00 | ROTARY TORQUE: 15850 ft-lb | STRING WEIGHT: 153000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 3.58 | MOTOR HRS: 22.67 | WOB SLIDING (HI): 100 lbf | WOB ROTATE (HI): 25 lbf |
| MOTOR REAM: 0.00 | | TRIP: 0.00 | WOB SLIDING (LO): 50 lbf | WOB ROTATE (LO): 18 lbf |
| CIRC: 4.25 | ROTARY DRILL: 0.00 | OTHER: 1.33 | RPM (ROTARY): 70 rpm | DRAG UP: 235000 lbf |
| MOTOR HRS: 22.67 | DRILL HRS: 18.42 | TOTAL HRS: 24.00 | RPM (MOTOR): 207 rpm | DRAG DN: 40000 lbf |

DRILLING PARAMETERS:

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|--------------------------------------|
| BHA: 6 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-45705 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 22.666666666666666 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD | | | TOTAL HRS TO DATE: 41.33333333333333 |
| | | | NOZZLES: 0.982 in² TFA |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 4800 | PRESSURE OFF BTM: 4120 | TOTAL FLOW RATE: 241.01 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% SPM: 66.00 | LINER: 6.00 in |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 0.00 | LINER: 0.00 in |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in |
| | | STROKE VOL.: 3.8438 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-----------------------|---------------------------|------------------------|--------------|-------------------|-----------------------|
| MUD TYPE: Mineral Oil | VISC: 67 sec/qt | WTR LOSS: 18 cc/30min | PV: 18 cP | YP: 12 lb/100 ft² | pH: 0 |
| DENSITY: 9.9 lb/gal | GEL 0/10: 5.00 lb/100 ft² | SAND: 0 | SOLIDS: 12.8 | OIL: 56.5 | TEMP: 258 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Drilling ahead in Lateral F/ 15710' to 16165' Having to slide 15' to 20' every stand to hold 89 inc. and maintain 180 azm. Unable to slide @ 16165'. Cannot orientate toolface nor get any weight to bit. Anadarko decided to circulate two bottoms up to clean hole and then spot drilling beads at the BHA in attempt to aid in sliding.



Daily Activity Report

Drilling Services
v4.2.3981

Day 27 - 2013/03/07

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 28 - 2013/03/08**FILE #:** 4028454**WELL NAME:** Dechant State 15C-1HZ**SERVICE CO.:** Weatherford**JOB TYPE:** Horizontal**COMPANY:** Anadarko Petroleum Corporation**SURVEY TYPE:** Positive Pulse MWD**RIG & NO:** Helmerich & Payne 307**SURFACE LOCATION:** Weld County**FIELD / LOCATION:** Wattenburg Field / CO / USA**DIR Supervisor:** Josh Monroe, Joe Kelly, Eric Hughes**Other:** Pete Hashmen**MWD Supervisor:** Scott Coulter**Company Man:** Craig Jones, Clint Tivedoux**GROUND ELEV:** 4833 ft**START DEPTH:** 16262.0 ft**PROGRESS:** 403.0 ft**DAILY COST:** USD\$0.00**KB ELEV:** 25 ft**END DEPTH:** 16665.0 ft**AVG. ROP.:** 62.0 ft/hr**PREVIOUS COST:** USD\$0.00**TOTAL COST:** USD\$0.00**WORK STATUS:** Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---------------------------|------|-------|-----|-------------|---------------------------|-------|-------|-----|
| 00:00-02:00 | Orienting With Motor | 2.00 | 16267 | 6 | 05:55-06:05 | Rotating With Motor | 0.17 | 16509 | 6 |
| 02:00-02:30 | Rotating With Motor | 0.50 | 16289 | 6 | 06:05-06:15 | Circ & Accumulate Surveys | 0.17 | 16509 | 6 |
| 02:30-02:40 | Circ & Accumulate Surveys | 0.17 | 16289 | 6 | 06:15-06:35 | Rotating With Motor | 0.33 | 16541 | 6 |
| 02:40-03:10 | Rotating With Motor | 0.50 | 16320 | 6 | 06:35-06:45 | Circ & Accumulate Surveys | 0.17 | 16541 | 6 |
| 03:10-03:20 | Circ & Accumulate Surveys | 0.17 | 16320 | 6 | 06:45-07:05 | Rotating With Motor | 0.33 | 16573 | 6 |
| 03:20-04:00 | Rotating With Motor | 0.67 | 16352 | 6 | 07:05-07:15 | Circ & Accumulate Surveys | 0.17 | 16573 | 6 |
| 04:00-04:10 | Circ & Accumulate Surveys | 0.17 | 16352 | 6 | 07:15-07:30 | Rotating With Motor | 0.25 | 16604 | 6 |
| 04:10-04:25 | Rotating With Motor | 0.25 | 16383 | 6 | 07:30-07:40 | Circ & Accumulate Surveys | 0.17 | 16604 | 6 |
| 04:25-04:35 | Circ & Accumulate Surveys | 0.17 | 16383 | 6 | 07:40-08:00 | Rotating With Motor | 0.33 | 16636 | 6 |
| 04:35-04:50 | Rotating With Motor | 0.25 | 16415 | 6 | 08:00-08:10 | Circ & Accumulate Surveys | 0.17 | 16636 | 6 |
| 04:50-05:00 | Circ & Accumulate Surveys | 0.17 | 16415 | 6 | 08:10-08:30 | Rotating With Motor | 0.33 | 16665 | 6 |
| 05:00-05:20 | Rotating With Motor | 0.33 | 16446 | 6 | 08:30-08:40 | Circ & Accumulate Surveys | 0.17 | 16665 | 6 |
| 05:20-05:30 | Circ & Accumulate Surveys | 0.17 | 16446 | 6 | 08:40-12:30 | Circ & Condition Hole | 3.83 | 16665 | 6 |
| 05:30-05:45 | Rotating With Motor | 0.25 | 16478 | 6 | 12:30-23:30 | Wiper Trip - to shoe | 11.00 | 16665 | 6 |
| 05:45-05:55 | Circ & Accumulate Surveys | 0.17 | 16478 | 6 | 23:30-24:00 | Circ & Accumulate Surveys | 0.50 | 16665 | 6 |

TIME SUMMARY (hrs):

| | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------------|---------------------------------|
| MOTOR DRILL: 6.50 | ORIENTING HRS: 2.00 | ROTARY DRILL: 0.00 | ROTARY TORQUE: 16000 ft-lb | STRING WEIGHT 154000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 4.50 | MOTOR HRS: 13.00 | WOB SLIDING (HI): 115 lbf | WOB ROTATE (HI): 25 lbf |
| MOTOR REAM: 0.00 | | TRIP: 11.00 | WOB SLIDING (LO): 20 lbf | WOB ROTATE (LO): 20 lbf |
| CIRC: 6.50 | ROTARY DRILL: 0.00 | OTHER: 0.00 | RPM (ROTARY): 50 rpm | DRAG UP: 253000 lbf |
| MOTOR HRS: 13.00 | DRILL HRS: 6.50 | TOTAL HRS: 24.00 | RPM (MOTOR): 207 rpm | DRAG DN: 45000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|----------------------------|--------------------------------|---|
| BHA: 6 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-45705 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 13 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD | | | MTR HRS TO DATE: 54.333333333333 |

PUMP PARAMETERS

| | | |
|------------------------------|-------------------------------|--|
| PRESSURE ON BTM: 4650 | PRESSURE OFF BTM: 3521 | TOTAL FLOW RATE: 255.62 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 70.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 3.8438 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|------------------------------|----------------------------------|-------------------------------|-------------------|--------------------------|------------------------------|
| MUD TYPE: Mineral Oil | VISC: 49 sec/qt | WTR LOSS: 17 cc/30min | PV: 21 cP | YP: 11 lb/100 ft² | pH: 0 |
| DENSITY: 10 lb/gal | GEL 0/10: 4.00 lb/100 ft² | SAND: 0 | SOLIDS: 11 | OIL: 56.2 | TEMP: 260 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |



Weatherford®

Daily Activity Report

Day 28 - 2013/03/08

Drilling Services

v4.2.3981

COMMENTS:

Continue drilling ahead and sliding to 16,267'. Could not get weight to bit nor hold tool face while sliding. Drill ahead from 16,267' to TD @ 16665' rotating only and surveying every 30' per Anadarko's request.

TD'D Well @ 16665'

Circulate and Condition Hole. Make Wiper Trip to Shoe.

CUSTOMER SIGNATURE:

**Weatherford**

Daily Activity Report

Drilling Services
v4.2.3981

Day 29 - 2013/03/09

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Eric Hughes, Joe Kelly

Other: Pete Hashmen

MWD Supervisor: Scott Coulter

GROUND ELEV: 4833 ft

START DEPTH: 16665.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 16665.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|-----------------------|-------|-------|-----|-------------|------------------------------|------|-------|-----|
| 00:00-04:30 | Circ & Condition Hole | 4.50 | 16665 | 6 | 15:30-17:15 | Lay Down Directional Tools | 1.75 | 16665 | 6 |
| 04:30-15:30 | POOH To Run Casing | 11.00 | 16665 | 6 | 17:15-24:00 | Standby - for Liner and Skid | 6.75 | 16665 | 6 |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|------|---------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 4.50 |
| MOTOR REAM: | 0.00 | | | TRIP: | 11.00 |
| CIRC: | 4.50 | ROTARY DRILL: | 0.00 | OTHER: | 8.50 |
| MOTOR HRS: | 4.50 | DRILL HRS: | 0.00 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 16000 ft-lb | STRING WEIGHT | 154000 lbs |
| WOB SLIDING (HI): | 115 lbf | WOB ROTATE (HI): | 25 lbf |
| WOB SLIDING (LO): | 20 lbf | WOB ROTATE (LO): | 20 lbf |
| RPM (ROTARY): | 50 rpm | DRAG UP: | 253000 lbf |
| RPM (MOTOR): | 207 rpm | DRAG DN: | 45000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|------------------------------------|
| BHA: 6 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-45705 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | MTR HRS THIS DAY: 4.5 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | NOZZLES: 0.982 in ² TFA |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD | | | LOBE CFG.: 6/7 |
| | | | MTR HRS TO DATE: 58.833333333333 |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 4650 | PRESSURE OFF BTM: 3521 | TOTAL FLOW RATE: 255.62 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 70.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | | LINER: 6.00 in |
| | | LINER: 0.00 in |
| | | LINER: 0.00 in |
| | | STROKE VOL.: 3.8438 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-----------------------|---------------------------------------|------------------------|------------|-------------------------------|-----------------------|
| MUD TYPE: Mineral Oil | VISC: 49 sec/qt | WTR LOSS: 17 cc/30min | PV: 21 cP | YP: 11 lb/100 ft ² | pH: 0 |
| DENSITY: 10 lb/gal | GEL 0/10: 4.00 lb/100 ft ² | SAND: 0 | SOLIDS: 11 | OIL: 56.2 | TEMP: 260 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

After making their wiper trip to bottom last night we circulated until 4:30 am and then are POOH to laydown directional tools and run liner.

Standing by.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.3981

Day 30 - 2013/03/10**FILE #:** 4028454**WELL NAME:** Dechant State 15C-1HZ**SERVICE CO.:** Weatherford**JOB TYPE:** Horizontal**COMPANY:** Anadarko Petroleum Corporation**SURVEY TYPE:** Positive Pulse MWD**RIG & NO:** Helmerich & Payne 307**SURFACE LOCATION:** Weld County**FIELD / LOCATION:** Wattenburg Field / CO / USA**DIR Supervisor:** Eric Hughes, Joe Kelly, Josh Monroe, Charles Apodaca**Other:** Pete Hashmen**MWD Supervisor:** Scott Coulter**GROUND ELEV:** 4833 ft**START DEPTH:** 16665.0 ft**PROGRESS:** 0.0 ft**DAILY COST:** USD\$0.00**KB ELEV:** 25 ft**END DEPTH:** 16665.0 ft**AVG. ROP.:** 0.0 ft/hr**PREVIOUS COST:** USD\$0.00**TOTAL COST:** USD\$0.00**WORK STATUS:** Standby

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|-------------------------|-------|-------|-----|------|----------------|------|------|-----|
| 00:00-24:00 | Standby - for Liner Run | 24.00 | 16665 | 6 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|--------------------------|----------------------------|---------------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 24.00 |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-----------------------------------|---------------------------------|
| ROTARY TORQUE: 16000 ft-lb | STRING WEIGHT 154000 lbs |
| WOB SLIDING (HI): 115 lbf | WOB ROTATE (HI): 25 lbf |
| WOB SLIDING (LO): 20 lbf | WOB ROTATE (LO): 20 lbf |
| RPM (ROTARY): 50 rpm | DRAG UP: 253000 lbf |
| RPM (MOTOR): 207 rpm | DRAG DN: 45000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|----------------------------|--------------------------------|---|
| BHA: 6 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-45705 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD | | | MTR HRS TO DATE: 58.833333333333 |

PUMP PARAMETERS**PRESSURE ON BTM:** 4650**PRESSURE OFF BTM:** 3521**TOTAL FLOW RATE:** 281.18 gal/min**PUMP 1: TYPE:** PZ-11**EFF.:** 95.0%**SPM:** 77.00**LINER:** 6.00 in**STROKE VOL.:** 3.8438 gal/stk**PUMP 2: TYPE:** PZ-11**EFF.:** 95.0%**SPM:** 0.00**LINER:** 0.00 in**STROKE VOL.:** 0.0000 gal/stk**PUMP 3: TYPE:****EFF.:** 100.0%**SPM:** 0.00**LINER:** 0.00 in**STROKE VOL.:** 0.0000 gal/stk**MUD RECORD****MUD TYPE:** Mineral Oil**VISC:** 49 sec/qt**WTR LOSS:** 17 cc/30min**PV:** 21 cP**YP:** 11 lb/100 ft² **pH:** 0**DENSITY:** 10 lb/gal**GEL 0/10:** 4.00 lb/100 ft²**SAND:** 0**SOLIDS:** 11**OIL:** 56.2**TEMP:** 260 °F**LIQUID BASE:** Oil**LIQUID RATE:** 0 gal/min**GAS TYPE:****GAS RATE:** 0 cu ft/min**COMMENTS:**

Standing by for Liner Run.

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 31 - 2013/03/11

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca, Eric Hughes

MWD Supervisor: Anthony Danna, Rusty Korms

GROUND ELEV: 4833 ft

START DEPTH: 16665.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 16665.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Standby

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|-------------------------|-------|-------|-----|------|----------------|------|------|-----|
| 00:00-24:00 | Standby - for Liner Run | 24.00 | 16665 | 6 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|------|---------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 0.00 |
| MOTOR REAM: | 0.00 | | | TRIP: | 0.00 |
| CIRC: | 0.00 | ROTARY DRILL: | 0.00 | OTHER: | 24.00 |
| MOTOR HRS: | 0.00 | DRILL HRS: | 0.00 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 16000 ft-lb | STRING WEIGHT | 154000 lbs |
| WOB SLIDING (HI): | 115 lbf | WOB ROTATE (HI): | 25 lbf |
| WOB SLIDING (LO): | 20 lbf | WOB ROTATE (LO): | 20 lbf |
| RPM (ROTARY): | 50 rpm | DRAG UP: | 253000 lbf |
| RPM (MOTOR): | 207 rpm | DRAG DN: | 45000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|----------------------------------|
| BHA: 6 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-45705 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD | | | MTR HRS TO DATE: 58.833333333333 |

PUMP PARAMETERS

PRESSURE ON BTM: 4650

PRESSURE OFF BTM: 3521

TOTAL FLOW RATE: 281.18 gal/min

PUMP 1: TYPE: PZ-11

EFF.: 95.0%

SPM: 77.00

LINER: 6.00 in

STROKE VOL.: 3.8438 gal/stk

PUMP 2: TYPE: PZ-11

EFF.: 95.0%

SPM: 0.00

LINER: 0.00 in

STROKE VOL.: 0.0000 gal/stk

PUMP 3: TYPE:

EFF.: 100.0%

SPM: 0.00

LINER: 0.00 in

STROKE VOL.: 0.0000 gal/stk

MUD RECORD

MUD TYPE: Mineral Oil

VISC: 85 sec/qt

WTR LOSS: 17 cc/30min

PV: 21 cP

YP: 11 lb/100 ft² pH: 0

DENSITY: 10 lb/gal

GEL 0/10: 4.00 lb/100 ft²

SAND: 0

SOLIDS: 11

OIL: 56.2

TEMP: 260 °F

LIQUID BASE: Oil

LIQUID RATE: 0 gal/min

GAS TYPE:

GAS RATE: 0 cu ft/min

COMMENTS:

Running Liner and will skid rig to Dechant State 36N-E1HZ.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 32 - 2013/03/12

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca, Eric Hughes

MWD Supervisor: Anthony Danna, Rusty Korms

GROUND ELEV: 4833 ft

START DEPTH: 16665.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 16665.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

TOTAL COST: USD\$0.00

WORK STATUS: Standby

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPH | BHA | TIME | DAILY ACTIVITY | HRS | DPH | BHA |
|-------------|-------------------------------|-------|-------|-----|------|----------------|------|-----|-----|
| 00:00-24:00 | Standby - Stdb for Liner/SKid | 24.00 | 16665 | 6 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|------|---------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 0.00 |
| MOTOR REAM: | 0.00 | | | TRIP: | 0.00 |
| CIRC: | 0.00 | ROTARY DRILL: | 0.00 | OTHER: | 24.00 |
| MOTOR HRS: | 0.00 | DRILL HRS: | 0.00 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 16000 ft-lb | STRING WEIGHT | 154000 lbs |
| WOB SLIDING (HI): | 115000 lbf | WOB ROTATE (HI): | 25000 lbf |
| WOB SLIDING (LO): | 20000 lbf | WOB ROTATE (LO): | 20000 lbf |
| RPM (ROTARY): | 50 rpm | DRAG UP: | 253000 lbf |
| RPM (MOTOR): | 207 rpm | DRAG DN: | 45000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|----------------------------------|
| BHA: 6 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-45705 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD | | | MTR HRS TO DATE: 58.833333333333 |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 4650 | PRESSURE OFF BTM: 3521 | TOTAL FLOW RATE: 281.18 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 77.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 3.8438 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-----------------------|---------------------------|------------------------|------------|-------------------|-----------------------|
| MUD TYPE: Mineral Oil | VISC: 49 sec/qt | WTR LOSS: 17 cc/30min | PV: 21 cP | YP: 11 lb/100 ft² | pH: 0 |
| DENSITY: 10 lb/gal | GEL 0/10: 4.00 lb/100 ft² | SAND: 0 | SOLIDS: 11 | OIL: 56.2 | TEMP: 260 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

After not being able to get liner past 15700' decision was made to pull back and pick up 33 drill collars for added weight and attempt to run liner again.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 33 - 2013/03/13

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Eric Hughes, Josh Monroe, Charles Apodaca

MWD Supervisor: Anthony Danna, Rusty Korms

GROUND ELEV: 4833 ft

START DEPTH: 16665.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 16665.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

WORK STATUS: Standby

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPH | BHA | TIME | DAILY ACTIVITY | HRS | DPH | BHA |
|-------------|---------------------|-------|-------|-----|------|----------------|------|-----|-----|
| 00:00-24:00 | Standby - for Liner | 24.00 | 16665 | 6 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|------|---------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 0.00 |
| MOTOR REAM: | 0.00 | | | TRIP: | 0.00 |
| CIRC: | 0.00 | ROTARY DRILL: | 0.00 | OTHER: | 24.00 |
| MOTOR HRS: | 0.00 | DRILL HRS: | 0.00 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 16000 ft-lb | STRING WEIGHT | 154000 lbs |
| WOB SLIDING (HI): | 115000 lbf | WOB ROTATE (HI): | 25000 lbf |
| WOB SLIDING (LO): | 20000 lbf | WOB ROTATE (LO): | 20000 lbf |
| RPM (ROTARY): | 50 rpm | DRAG UP: | 253000 lbf |
| RPM (MOTOR): | 207 rpm | DRAG DN: | 45000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|----------------------------------|
| BHA: 6 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-45705 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD | | | MTR HRS TO DATE: 58.833333333333 |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 4650 | PRESSURE OFF BTM: 3521 | TOTAL FLOW RATE: 281.18 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 77.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 3.8438 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-----------------------|---------------------------|------------------------|------------|-------------------|-----------------------|
| MUD TYPE: Mineral Oil | VISC: 49 sec/qt | WTR LOSS: 17 cc/30min | PV: 21 cP | YP: 11 lb/100 ft² | pH: 0 |
| DENSITY: 9.6 lb/gal | GEL 0/10: 4.00 lb/100 ft² | SAND: 0 | SOLIDS: 11 | OIL: 56.2 | TEMP: 260 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Continue to run Liner.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.3981

Day 34 - 2013/03/14

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Eric Hughes, Charles Apodaca

MWD Supervisor: Anthony Danna, Rusty Korms

GROUND ELEV: 4833 ft

START DEPTH: 16665.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$0.00

KB ELEV: 25 ft

END DEPTH: 16665.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$0.00

WORK STATUS: Standby

(All units are imperial.)

TOTAL COST: USD\$0.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|--------------------------------|-------|-------|-----|------|----------------|------|------|-----|
| 00:00-24:00 | Standby - for liner run / Skid | 24.00 | 16665 | 6 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|------|---------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 0.00 |
| MOTOR REAM: | 0.00 | | | TRIP: | 0.00 |
| CIRC: | 0.00 | ROTARY DRILL: | 0.00 | OTHER: | 24.00 |
| MOTOR HRS: | 0.00 | DRILL HRS: | 0.00 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 16000 ft-lb | STRING WEIGHT | 154000 lbs |
| WOB SLIDING (HI): | 115000 lbf | WOB ROTATE (HI): | 25000 lbf |
| WOB SLIDING (LO): | 20000 lbf | WOB ROTATE (LO): | 20000 lbf |
| RPM (ROTARY): | 50 rpm | DRAG UP: | 253000 lbf |
| RPM (MOTOR): | 207 rpm | DRAG DN: | 45000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|-------------------------|----------------------------------|
| BHA: 6 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 475-45705 | MODEL: ME6770 |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 5" (127mm) | LOBE CFG.: 6/7 |
| MANFCT: Security | BIT TYPE: Security | TYPE: MMD54 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD | | | MTR HRS TO DATE: 58.833333333333 |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 4650 | PRESSURE OFF BTM: 3521 | TOTAL FLOW RATE: 281.18 gal/min |
| PUMP 1: TYPE: PZ-11 | EFF.: 95.0% | SPM: 77.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 0.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | | LINER: 6.00 in |
| | | LINER: 0.00 in |
| | | LINER: 0.00 in |
| | | STROKE VOL.: 3.8438 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-----------------------|---------------------------|------------------------|------------|-------------------|-----------------------|
| MUD TYPE: Mineral Oil | VISC: 49 sec/qt | WTR LOSS: 17 cc/30min | PV: 21 cP | YP: 11 lb/100 ft² | pH: 0 |
| DENSITY: 10 lb/gal | GEL 0/10: 4.00 lb/100 ft² | SAND: 0 | SOLIDS: 11 | OIL: 56.2 | TEMP: 260 °F |
| LIQUID BASE: Oil | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

Continue to run liner.

CUSTOMER SIGNATURE: _____



BHA REPORTS

**Weatherford®**

BHA Report

Drilling Services
v4.2.3981

BHA 1 - Build & Hold Section

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Eric Hughes

MWD Supervisor: Scott Coulter, Rusty Korms

Company Man: Craig Jones, Clint Tivedoux

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

| QTY | COMPONENT | MANFCT. | SERIAL # | MODEL | O.D. | I.D. | F.N. | BOT. CONN. | TOP CONN. | LEN. | C.LEN. |
|-----|-------------------|-------------|-----------|------------|-------|-------|------|----------------|----------------|----------|------------|
| 1 | Varel Bit | Varel | 4004200 | VM513 | 8.75 | 0 | 0 | | 4 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Weatherford Motor | Weatherford | 675-3993 | QME4570 | 8.25 | 0 | 0 | 4 1/2" REG Box | 4 1/2" IF Box | 28.78 ft | 29.78 ft |
| 1 | NM Muleshoe Sub | Weatherford | 675-11779 | UBHO | 6.5 | 3.125 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 3.56 ft | 33.34 ft |
| 1 | Slick NMDC | Stabadrill | SD45400 | Slick NMDC | 6.82 | 3.25 | 3 | 4 1/2" IF Pin | 4 1/2" IF Box | 31.07 ft | 64.41 ft |
| 1 | Flex NMDC | Stabadrill | SD50363 | Flex NMDC | 6.82 | 3.25 | 2.67 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.85 ft | 95.26 ft |
| 1 | X/O Sub | Stabadrill | SD111845 | X/O Sub | 6.875 | 2.875 | 1.53 | 4 1/2" IF Pin | XT39 Box | 3.00 ft | 98.26 ft |
| 75 | 4" HWDP | Rig | Rig | 30 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 2287.65 | 2385.91 ft |

(O.D. units are in; I.D. units are in; FNeck units are ft)

GENERAL INFORMATION

DATES RUN: 2013/02/09 TO 2013/02/11
 DEPTH IN: 0.00 ft ANGLE IN: 0.00 °
 DEPTH OUT: 6500.00 ft ANGLE OUT: 0.00 °
 DRILL HRS: 19.17 BUILD: 0.00 °
 ORIENTING HRS: 3.50 HOLE MADE: 6500.00 ft
 ROTATING HRS: 15.67 AVG R.O.P.: 339.07 ft/hr

MOTOR INFORMATION

MANFCT: Weatherford SETTING: 1.50 °
 SERIAL #: 675-3993 KICK PAD: No
 MODEL: QME4570 STABILIZER: 8.25
 LOBE CFG: 7/8 MOTOR HRS: 30.08
 BIT TO BEND: 6.19

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|------------------|-------------------|------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 78 | 78 | 0 |
| STROKE VOLUME: | 3.8438 gal/stk | 3.8438 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 598 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 3150 psi | ON BTM: 4350 psi | |

MUD INFORMATION

MUD TYPE: Water LIQUID BASE: Water
 DENSITY: 9.3 lb/gal TEMP: 159 °F
 VISCOSITY: 34 sec/qt pH: 8.5
 WTR LOSS: 0 cc/30min SAND: 0.25 LIQUID RATE: 0 gal/min
 PLAST VISC: 4 cP SOLIDS: 3.5 GAS TYPE:
 YIELD PT: 5 lb/100 ft² OIL: 0 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Varel TYPE: VM513 IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / TD
 NOZZLES: 0.752 in² TFA

REASON FOR BHA CHANGE

Reached KOP @ 6500'

FORMATION CHARACTERISTICS

Formations seemed very ratty causing the Diff, WOB & Torque to bounce dramatically.

MWD COMMENTS

Had detection issues causing issues during surveys. Had to re cycle pumps on majority of surveys. 19% batt consumption. 6.75 pulser and 60 deg orifice used. Bottom hole temp was 166 deg.

SIDETRACKING PROCEDURE COMMENTS

NA

**BHA 1 - Build & Hold Section**

RUN SUMMARY

Average build rates were 10 deg per 100'. Condition of BHA was good when pulled. Build rates were achieved as expected. Motor tested and drained on surface. Overall performance w/ 15.25 drilling hours to complete section was disappointing.

**Weatherford®**

BHA Report

Drilling Services
v4.2.3981

BHA 2 - Curve Section

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca, Eric Hughes

MWD Supervisor: Rusty Korms, Scott Coulter

Company Man: Craig Jones, Clint Tivedoux

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

| QTY | COMPONENT | MANFCT. | SERIAL # | MODEL | O.D. | I.D. | F.N. | BOT. CONN. | TOP CONN. | LEN. | C.LEN. |
|-----|-------------------------------|------------|-----------|------------|-------|-------|------|----------------|----------------|----------|------------|
| 1 | Reed 5 Blade PDC Reed | | E168009 | E1202-A1B | 8.75 | 0 | 0 | | 4 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Weatherford Motor Weatherford | | 675-4131 | LN7850 | 7.3 | 0 | 0 | 4 1/2" REG Box | 4 1/2" IF Box | 27.88 ft | 28.88 ft |
| 1 | NM Muleshoe Sub Weatherford | | 675-11779 | UBHO | 6.5 | 3.125 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 3.56 ft | 32.44 ft |
| 1 | Slick NMDC | Stabadrill | SD45400 | Slick NMDC | 6.82 | 3.25 | 3 | 4 1/2" IF Pin | 4 1/2" IF Box | 31.07 ft | 63.51 ft |
| 1 | Flex NMDC | Stabadrill | SD50363 | Flex NMDC | 6.82 | 3.25 | 2.67 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.85 ft | 94.36 ft |
| 1 | X/O Sub | Stabadrill | SD111845 | X/O Sub | 6.875 | 2.875 | 1.53 | 4 1/2" IF Pin | XT39 Box | 3.00 ft | 97.36 ft |
| 75 | 4" HWDP | Rig | Rig | 30 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 2287.65 | 2385.01 ft |

(O.D. units are in; I.D. units are in; FNeck units are ft)

GENERAL INFORMATION

DATES RUN: 2013/02/11 TO 2013/02/13
 DEPTH IN: 6500.00 ft ANGLE IN: 0.00 °
 DEPTH OUT: 7414.00 ft ANGLE OUT: 0.00 °
 DRILL HRS: 14.92 BUILD: 0.00 °
 ORIENTING HRS: 10.83 HOLE MADE: 914.00 ft
 ROTATING HRS: 4.08 AVG R.O.P.: 61.26 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford SETTING: 2.38 °
 SERIAL #: 675-4131 KICK PAD: No
 MODEL: LN7850 STABILIZER: No
 LOBE CFG: 7/8 MOTOR HRS: 20.67
 BIT TO BEND: 6.21

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|------------------|-------------------|------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 75 | 75 | 0 |
| STROKE VOLUME: | 3.8438 gal/stk | 3.8438 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 547.74651 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 3650 psi | ON BTM: 4250 psi | |

MUD INFORMATION

MUD TYPE: Water LIQUID BASE: Water
 DENSITY: 10 lb/gal TEMP: 181 °F
 VISCOSITY: 37 sec/qt pH: 9.2
 WTR LOSS: 7.6 cc/30min SAND: 0.75 LIQUID RATE: 0 gal/min
 PLAST VISC: 12 cP SOLIDS: 1 GAS TYPE:
 YIELD PT: 8 lb/100 ft² OIL: 0 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Reed TYPE: E1202-A1B IADC BIT GRADE: 1 / 1 / ? / ? / ? / ? / ? / TD
 NOZZLES: 1.242 in² TFA

REASON FOR BHA CHANGE

TD'D Build Section @ 7414'

FORMATION CHARACTERISTICS

Formations acted as expected. Niobrara B did come in 18' High. Penetration rates were not as high as in previous wells drilled.

MWD COMMENTS

Had detection issues causing issues during a few surveys. 6.75 pulser and 60 deg orifice used. Bottom hole temp was 180 deg.

SIDETRACKING PROCEDURE COMMENTS

NA



RUN SUMMARY

Average build rates were 13 deg per 100'. Condition of BHA was good when pulled. Build rates were achieved as expected. Motor tested and drained on surface. Overall performance w/ 12 drilling hours to complete section was disappointing but made extremely difficult as constantly having to switch from 2 pumps to 1 throughout curve really hurt our performance.

**Weatherford®**

BHA Report

Drilling Services
v4.2.3981

BHA 3 - Lateral 1 Section

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Charles Apodaca

MWD Supervisor: Anthony Danna, Scott Coulter

Company Man: Doug Barone, Doug Blair

BHA SURVEY TYPE: HEL LWD

HOLE SIZE: 6.125 in

| QTY | COMPONENT | MANFCT. | SERIAL # | MODEL | O.D. | I.D. | F.N. | BOT. CONN. | TOP CONN. | LEN. | C.LEN. |
|-----|--------------------|-------------|------------|----------------|-------|------|-------|---------------|----------------|----------|-------------|
| 1 | Security | Security | 12148915 | MMD54 | 6.125 | 0 | 0 | | 3 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Weatherford Motor | Weatherford | 475-41095 | ME6770 | 5.37 | 0 | 0 | 3 1/2" IF Box | 3 1/2" IF Box | 27.02 ft | 28.02 ft |
| 1 | IBS Stabilizer | Stabadrill | SD27775 | IBS Stabilizer | 5.79 | 2.25 | 0.92 | 3 1/2" IF Pin | 3 1/2" IF Box | 3.92 ft | 31.94 ft |
| 1 | SAGR | Weatherford | NW130439 | Azi/Gamma | 4.75 | 2.5 | 7.58 | 3 1/2" IF Pin | 3 1/2" IF Box | 14.08 ft | 46.02 ft |
| 1 | Split IDS | Weatherford | NW130438 | Svy Sensor | 4.75 | 2.25 | 0 | 3 1/2" IF Box | 3 1/2" IF Box | 11.87 ft | 57.89 ft |
| 1 | MFR | Weatherford | NW130437 | Resistivity | 4.75 | 2.75 | 7.27 | 3 1/2" IF Pin | 3 1/2" IF Box | 29.33 ft | 87.22 ft |
| 1 | HEL LWD | Weatherford | NW130436 | Pulser | 4.75 | 2.25 | 10.39 | 3 1/2" IF Pin | 3 1/2" IF Box | 14.57 ft | 101.79 ft |
| 1 | IBS Stabilizer | Stabadrill | SD29121 | IBS Stabilizer | 5.86 | 2.75 | 2.45 | 3 1/2" IF Pin | 3 1/2" IF Box | 5.89 ft | 107.68 ft |
| 1 | Slick NMDC | Stabadrill | SD47008 | Slick NMDC | 4.62 | 2.75 | 2.81 | 3 1/2" IF Pin | 3 1/2" IF Box | 29.89 ft | 137.57 ft |
| 1 | X/O Sub | Stabadrill | SD111071 | X/O Sub | 4.75 | 2.25 | 0 | 3 1/2" IF Pin | XT39 Box | 2.20 ft | 139.77 ft |
| 1 | Ghost Reamer | Rig | SD 802459 | Ghost Reamer | 5.02 | 2.5 | 0 | XT-39 Pin | XT-39 Box | 7.39 ft | 147.16 ft |
| 60 | 4" Drill Pipe | Rig | Rig | 20 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 1893.06 | 2040.22 ft |
| 1 | Agitator/Shock Sub | NOV | 1113894-12 | NOV | 5 | 2 | 0 | 4 XT39 Pin | 4 XT39 Box | 22.70 ft | 2062.92 ft |
| 234 | 4" Drill Pipe | Rig | Rig | 78 STDS | 4 | 2.25 | 0 | XT-39 Pin | XT-39 Box | 7378.60 | 9441.52 ft |
| 90 | 4" HWDP | Rig | Rig | 30 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 2749.03 | 12190.55 ft |

(O.D. units are in; I.D. units are in; F.Neck units are ft)

GENERAL INFORMATION

DATES RUN: 2013/02/24 TO 2013/02/25
 DEPTH IN: 7414.00 ft ANGLE IN: 0.00 °
 DEPTH OUT: 7550.00 ft ANGLE OUT: 0.00 °
 DRILL HRS: 0.58 BUILD: 0.00 °
 ORIENTING HRS: 0.00 HOLE MADE: 136.00 ft
 ROTATING HRS: 0.58 AVG R.O.P.: 234.48 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford SETTING: 1.50 °
 SERIAL #: 475-41095 KICK PAD: No
 MODEL: ME6770 STABILIZER: No
 LOBE CFG: 6/7 MOTOR HRS: 3.25
 BIT TO BEND: 5.74

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|------------------|-------------------|-------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 78 | 0 | 0 |
| STROKE VOLUME: | 3.8438 gal/stk | 0.0 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 284.82819 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 2800 psi | ON BTM: 40002 psi | |

MUD INFORMATION

MUD TYPE: Mineral Oil LIQUID BASE: Oil
 DENSITY: 9 lb/gal TEMP: 154 °F
 VISCOSITY: 73 sec/qt pH: 0
 WTR LOSS: 18 cc/30min SAND: 0 LIQUID RATE: 0 gal/min
 PLAST VISC: 13 cP SOLIDS: 9 GAS TYPE:
 YIELD PT: 4 lb/100 ft² OIL: 59 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Security TYPE: MMD54 IADC BIT GRADE: 1 / 1 / ? / ? / X / 1 / ? / DTF
 NOZZLES: 0.982 in² TFA

REASON FOR BHA CHANGE

Split IDS LWD Tool Failure



Weatherford®

BHA Report

Drilling Services
v4.2.3981

BHA 3 - Lateral 1 Section

FORMATION CHARACTERISTICS

Not enough footage drilled to determine formation characteristics.

MWD COMMENTS

HEL LWD tools did not perform. As soon as we tagged bottom we had a possible Split IDS failure. This time a 75 degree orifice was used with a 4 3/4" puser. This did not appear to be a successful combination. Downhole temp was 154 degrees F. And average battery consumption was 5% consumed.

SIDETRACKING PROCEDURE COMMENTS

NA

RUN SUMMARY

Unfortunately we only drilled 135' due to a possible Split IDS LWD Failure. No buildup rates were determined & Condition of BHA looked good when pulled.

**Weatherford®**

BHA Report

Drilling Services
v4.2.3981

BHA 4 - Lateral 1 Section

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca

MWD Supervisor: Anthony Danna, Scott Coulter

Company Man: Doug Barone, Doug Blair

BHA SURVEY TYPE: HEL LWD

HOLE SIZE: 6.125 in

| QTY | COMPONENT | MANFCT. | SERIAL # | MODEL | O.D. | I.D. | F.N. | BOT. CONN. | TOP CONN. | LEN. | C.LEN. |
|-----|--------------------|-------------|------------|----------------|-------|--------|-------|---------------|----------------|----------|-------------|
| 1 | Security | Security | 12148915 | MMD54 | 6.125 | 0 | 0 | | 3 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Weatherford Motor | Weatherford | 475-41095 | ME6770 | 5.37 | 0 | 0 | 3 1/2" IF Box | 3 1/2" IF Box | 27.02 ft | 28.02 ft |
| 1 | IBS Stabilizer | Stabadrill | SD27775 | IBS Stabilizer | 5.79 | 2.25 | 0.92 | 3 1/2" IF Pin | 3 1/2" IF Box | 3.92 ft | 31.94 ft |
| 1 | SAGR | Weatherford | NW130439 | Azi/Gamma | 4.75 | 2.5 | 7.58 | 3 1/2" IF Pin | 3 1/2" IF Box | 14.08 ft | 46.02 ft |
| 1 | Split IDS | Weatherford | NW130442 | Svy Sensor | 4.75 | 3.3125 | 3.43 | 3 1/2" IF Pin | 3 1/2" IF Box | 12.14 ft | 58.16 ft |
| 1 | MFR | Weatherford | NW130437 | Resistivity | 4.75 | 2.75 | 7.27 | 3 1/2" IF Pin | 3 1/2" IF Box | 29.33 ft | 87.49 ft |
| 1 | HEL LWD | Weatherford | NW130440 | Pulser | 4.75 | 3.3125 | 10.41 | 3 1/2" IF Pin | 3 1/2" IF Box | 14.55 ft | 102.04 ft |
| 1 | IBS Stabilizer | Stabadrill | SD29121 | IBS Stabilizer | 5.86 | 2.75 | 2.45 | 3 1/2" IF Pin | 3 1/2" IF Box | 5.89 ft | 107.93 ft |
| 1 | Slick NMDC | Stabadrill | SD47008 | Slick NMDC | 4.62 | 2.75 | 2.81 | 3 1/2" IF Pin | 3 1/2" IF Box | 29.89 ft | 137.82 ft |
| 1 | X/O Sub | Stabadrill | SD111071 | X/O Sub | 4.75 | 2.25 | 0 | 3 1/2" IF Pin | XT39 Box | 2.20 ft | 140.02 ft |
| 1 | Ghost Reamer | Rig | SD 802459 | Ghost Reamer | 5.02 | 2.5 | 0 | XT-39 Pin | XT-39 Box | 7.39 ft | 147.41 ft |
| 60 | 4" Drill Pipe | Rig | Rig | 20 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 1893.06 | 2040.47 ft |
| 1 | Agitator/Shock Sub | NOV | 1113894-12 | NOV | 5 | 2 | 0 | 4 XT39 Pin | 4 XT39 Box | 22.70 ft | 2063.17 ft |
| 234 | 4" Drill Pipe | Rig | Rig | 78 STDS | 4 | 2.25 | 0 | XT-39 Pin | XT-39 Box | 7378.60 | 9441.77 ft |
| 90 | 4" HWDP | Rig | Rig | 30 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 2749.03 | 12190.80 ft |

(O.D. units are in; I.D. units are in; FNeck units are ft)

GENERAL INFORMATION

DATES RUN: 2013/02/25 TO 2013/02/28
 DEPTH IN: 7550.00 ft ANGLE IN: 0.00 °
 DEPTH OUT: 11489.00 ft ANGLE OUT: 0.00 °
 DRILL HRS: 27.17 BUILD: 0.00 °
 ORIENTING HRS: 9.83 HOLE MADE: 3939.00 ft
 ROTATING HRS: 17.33 AVG R.O.P.: 144.98 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford
 SERIAL #: 475-41095
 MODEL: ME6770
 LOBE CFG: 6/7
 BIT TO BEND: 5.74
 SETTING: 1.50 °
 KICK PAD: No
 STABILIZER: No
 MOTOR HRS: 40.67

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|------------------|-------------------|------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 70 | 0 | 0 |
| STROKE VOLUME: | 3.8438 gal/stk | 0.0 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 275 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 3200 psi | ON BTM: 4500 psi | |

MUD INFORMATION

MUD TYPE: Other Oil LIQUID BASE: Oil
 DENSITY: 10 lb/gal TEMP: 239 °F
 VISCOSITY: 75 sec/qt pH: 0
 WTR LOSS: 0 cc/30min SAND: 0 LIQUID RATE: 0 gal/min
 PLAST VISC: 13 cP SOLIDS: 11.7 GAS TYPE:
 YIELD PT: 10 lb/100 ft² OIL: 56.8 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Security TYPE: MMD54 IADC BIT GRADE: 1 / 1 / ? / ? / X / I / FC / PP
 NOZZLES: 0.982 in² TFA

REASON FOR BHA CHANGE

At 11489' we witnessed a pressure spike (5770 psi) and a diff spike of (2225 psi) Found rubber coming over the shakers and in the bit.

**BHA 4 - Lateral 1 Section**

FORMATION CHARACTERISTICS

We had poor detection going through transitions of formations. It also got very troublesome to slide. We experienced difficulties transferring weight to the bit. Oil based mud does not appear to help with sliding. I can see this Codell well being very problematic in the next 6000' of the lateral to be drilled. The torque is getting high and the ROP is slowing down around 100' per hour. Oscillating of the drill string is being utilized while sliding. BHA assembly had a tendency to drop very hard and turn towards the east.

MWD COMMENTS

HEL LWD performed as expected. A 60 degree orifice was used with a 4 3/4" pulser. Pulses were weaker than normal so the HEL tool was changed out. Battery Consumption was 32% consumed and downhole temp was 239 degrees F.

SIDETRACKING PROCEDURE COMMENTS

NA

RUN SUMMARY

Average Buildup rates experienced were 9 deg per 100' Condition of BHA when pulled was good , No problems encountered other than a possible motor failure. At 11489' we witnessed a pressure spike (5770 psi) and a diff spike of (2225 psi). BHA assembly had a tendency to drop very hard and turn towards the east.

**Weatherford®**

BHA Report

Drilling Services
v4.2.3981

BHA 5 - Lateral 1 Section

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca

MWD Supervisor: Anthony Danna, Scott Coulter

Company Man: Doug Barone, Doug Blair

BHA SURVEY TYPE: HEL LWD

HOLE SIZE: 6.125 in

| QTY | COMPONENT | MANFCT. | SERIAL # | MODEL | O.D. | I.D. | F.N. | BOT. CONN. | TOP CONN. | LEN. | C.LEN. |
|-----|--------------------|-------------|------------|----------------|-------|--------|-------|----------------|----------------|----------|-------------|
| 1 | Security | Security | 12148915 | MMD54 | 6.125 | 0 | 0 | | 3 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Weatherford Motor | Weatherford | 475-41107 | ME6770 | 5.5 | 0 | 0.81 | 3 1/2" REG Box | 3 1/2" IF Box | 28.14 ft | 29.14 ft |
| 1 | IBS Stabilizer | Stabadrill | SD27775 | IBS Stabilizer | 5.79 | 2.25 | 0.92 | 3 1/2" IF Pin | 3 1/2" IF Box | 3.92 ft | 33.06 ft |
| 1 | SAGR | Weatherford | NW130439 | Azi/Gamma | 4.75 | 2.5 | 7.58 | 3 1/2" IF Pin | 3 1/2" IF Box | 14.08 ft | 47.14 ft |
| 1 | Split IDS | Weatherford | NW130442 | Svy Sensor | 4.75 | 3.3125 | 3.43 | 3 1/2" IF Pin | 3 1/2" IF Box | 12.14 ft | 59.28 ft |
| 1 | MFR | Weatherford | NW130437 | Resistivity | 4.75 | 2.75 | 7.27 | 3 1/2" IF Pin | 3 1/2" IF Box | 29.33 ft | 88.61 ft |
| 1 | HEL LWD | Weatherford | NW130436 | Pulser | 4.75 | 2.25 | 10.39 | 3 1/2" IF Pin | 3 1/2" IF Box | 14.57 ft | 103.18 ft |
| 1 | IBS Stabilizer | Stabadrill | SD29121 | IBS Stabilizer | 5.86 | 2.75 | 2.45 | 3 1/2" IF Pin | 3 1/2" IF Box | 5.89 ft | 109.07 ft |
| 1 | Slick NMDC | Stabadrill | SD47008 | Slick NMDC | 4.62 | 2.75 | 2.81 | 3 1/2" IF Pin | 3 1/2" IF Box | 29.89 ft | 138.96 ft |
| 1 | X/O Sub | Stabadrill | SD111071 | X/O Sub | 4.75 | 2.25 | 0 | 3 1/2" IF Pin | XT39 Box | 2.20 ft | 141.16 ft |
| 1 | Ghost Reamer | Rig | SD 802459 | Ghost Reamer | 5.02 | 2.5 | 0 | XT-39 Pin | XT-39 Box | 7.39 ft | 148.55 ft |
| 60 | 4" Drill Pipe | Rig | Rig | 20 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 1893.06 | 2041.61 ft |
| 1 | Agitator/Shock Sub | NOV | 1113894-12 | NOV | 5 | 2 | 0 | 4 XT39 Pin | 4 XT39 Box | 22.70 ft | 2064.31 ft |
| 234 | 4" Drill Pipe | Rig | Rig | 78 STDS | 4 | 2.25 | 0 | XT-39 Pin | XT-39 Box | 7378.60 | 9442.91 ft |
| 90 | 4" HWDP | Rig | Rig | 30 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 2749.03 | 12191.94 ft |

(O.D. units are in; I.D. units are in; FNeck units are ft)

GENERAL INFORMATION

DATES RUN: 2013/02/28 TO 2013/03/05
 DEPTH IN: 11489.00 ft ANGLE IN: 0.00 °
 DEPTH OUT: 15235.00 ft ANGLE OUT: 0.00 °
 DRILL HRS: 45.33 BUILD: 0.00 °
 ORIENTING HRS: 28.58 HOLE MADE: 3746.00 ft
 ROTATING HRS: 16.75 AVG R.O.P.: 82.64 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford
 SERIAL #: 475-41107
 MODEL: ME6770
 LOBE CFG: 6/7
 BIT TO BEND: 5.89
 SETTING: 1.50 °
 KICK PAD: No
 STABILIZER: No
 MOTOR HRS: 64.08

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|------------------|----------------|---------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 0 | 0 | 0 |
| STROKE VOLUME: | 0.0 gal/stk | 0.0 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 0 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 0 psi | ON BTM: 0 psi | |

MUD INFORMATION

MUD TYPE: Mineral Oil LIQUID BASE: Synthetic
 DENSITY: 9.8 lb/gal TEMP: 96 °F
 VISCOSITY: 70 sec/qt pH: 0
 WTR LOSS: 18 cc/30min SAND: 0 LIQUID RATE: 0 gal/min
 PLAST VISC: 20 cP SOLIDS: 9.8 GAS TYPE:
 YIELD PT: 13 lb/100 ft² OIL: 55.6 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Security TYPE: MMD54 IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / WO
 NOZZLES: 0.982 in² TFA

REASON FOR BHA CHANGE

Washout In DP

**BHA 5 - Lateral 1 Section**

FORMATION CHARACTERISTICS

Codell is very hard to slide in. We are unable to get to bottom without rotating or oscillating. Unable to get any diff or TF with 100K WOB. Not able to transfer the weight to bit, causing very long and poor quality slides. Stabilizers are hanging us up and it is recommended to drop them on Codell wells. The formation was extremely abrasive and wanted to drop tremendously the entire run.

MWD COMMENTS

HEL LWD performed as expected. A 60 degree orifice was used with a 4 3/4" pulser. Last down hole temp was 257 degrees F. and average battery consumption was 32% consumed. No pump or formation problems encountered. The tools were changed out after this run due to being jarred on.

SIDETRACKING PROCEDURE COMMENTS

NA

RUN SUMMARY

Average build rates experienced were 10 degrees per 100'. Condition of BHA looked good when pulled. We twisted off and the DP was washed therefor causing a fishing job. The BHA was jarred on to get the pipe free once we latched on to the fish. All connections were double checked for the proper torque prior running in the hole.

**Weatherford®**

BHA Report

Drilling Services
v4.2.3981

BHA 6 - Lateral 1 Section

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Eric Hughes

MWD Supervisor: Scott Coulter

Company Man: Craig Jones, Clint Tibeaux

BHA SURVEY TYPE: HEL LWD

HOLE SIZE: 6.125 in

| QTY | COMPONENT | MANFCT. | SERIAL # | MODEL | O.D. | I.D. | F.N. | BOT. CONN. | TOP CONN. | LEN. | C.LEN. |
|-----|--------------------|-------------|-----------|----------------|-------|------|-------|----------------|----------------|----------|-------------|
| 1 | Security | Security | 12148915 | MMD54 | 6.125 | 0 | 0 | | 3 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Weatherford Motor | Weatherford | 475-45705 | ME6770 | 5.5 | 0 | 0 | 3 1/2" REG Box | 3 1/2" IF Box | 27.02 ft | 28.02 ft |
| 1 | IBS Stabilizer | Stabadrill | SD27775 | IBS Stabilizer | 5.79 | 2.25 | 0.92 | 3 1/2" IF Pin | 3 1/2" IF Box | 3.92 ft | 31.94 ft |
| 1 | SAGR | Weatherford | NW130337 | Azi/Gamma | 4.75 | 0 | 7.4 | 3 1/2" IF Pin | 3 1/2" IF Box | 13.95 ft | 45.89 ft |
| 1 | Split IDS | Weatherford | NW130347 | SVY sensor | 4.75 | 0 | 3.27 | 3 1/2" IF Pin | 3 1/2" IF Box | 12.24 ft | 58.13 ft |
| 1 | MFR | Weatherford | NW130441 | Resistivity | 4.75 | 0 | 7.36 | 3 1/2" IF Pin | 3 1/2" IF Box | 34.56 ft | 92.69 ft |
| 1 | HEL LWD | Weatherford | NW130436 | Pulser | 4.75 | 2.25 | 10.39 | 3 1/2" IF Pin | 3 1/2" IF Box | 14.57 ft | 107.26 ft |
| 1 | Slick NMDC | Stabadrill | SD47008 | Slick NMDC | 4.62 | 2.75 | 2.81 | 3 1/2" IF Pin | 3 1/2" IF Box | 29.89 ft | 137.15 ft |
| 1 | X/O Sub | Stabadrill | SD111071 | X/O Sub | 4.75 | 2.25 | 0 | 3 1/2" IF Pin | XT39 Box | 2.20 ft | 139.35 ft |
| 1 | Ghost Reamer | Rig | SD 802459 | Ghost Reamer | 5.02 | 2.5 | 0 | XT-39 Pin | XT-39 Box | 7.39 ft | 146.74 ft |
| 60 | 4" Drill Pipe | Rig | Rig | 20 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 1893.06 | 2039.80 ft |
| 1 | Agitator/Shock Sub | NOV | W894010-1 | NOV | 5 | 2 | 0 | XT39 Pin | XT39 Box | 21.26 ft | 2061.06 ft |
| 234 | 4" Drill Pipe | Rig | Rig | 78 STDS | 4 | 2.25 | 0 | XT-39 Pin | XT-39 Box | 7378.60 | 9439.66 ft |
| 90 | 4" HWDP | Rig | Rig | 30 STDS | 4 | 3.5 | 0 | XT-39 Pin | XT-39 Box | 2749.03 | 12188.69 ft |

(O.D. units are in; I.D. units are in; FNeck units are ft)

GENERAL INFORMATION

DATES RUN: 2013/03/05 TO 2013/03/14
 DEPTH IN: 15235.00 ft ANGLE IN: 0.00 °
 DEPTH OUT: 16665.00 ft ANGLE OUT: 0.00 °
 DRILL HRS: 37.83 BUILD: 0.00 °
 ORIENTING HRS: 26.33 HOLE MADE: 1430.00 ft
 ROTATING HRS: 11.50 AVG R.O.P.: 37.80 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford
 SERIAL #: 475-45705
 MODEL: ME6770
 LOBE CFG: 6/7
 BIT TO BEND: 5.77
 SETTING: 1.50 °
 KICK PAD: No
 STABILIZER: No
 MOTOR HRS: 58.83

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|------------------|-------------------|------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 77 | 0 | 0 |
| STROKE VOLUME: | 3.8438 gal/stk | 0.0 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 281.17654 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 3521 psi | ON BTM: 4650 psi | |

MUD INFORMATION

MUD TYPE: Mineral Oil
 LIQUID BASE: Oil
 DENSITY: 10 lb/gal
 TEMP: 260 °F
 VISCOSITY: 49 sec/qt
 pH: 0
 WTR LOSS: 17 cc/30min
 SAND: 0
 LIQUID RATE: 0 gal/min
 PLAST VISC: 21 cP
 SOLIDS: 11
 GAS TYPE:
 YIELD PT: 11 lb/100 ft²
 OIL: 56.2
 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Security TYPE: MMD54 IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD
 NOZZLES: 0.982 in² TFA

REASON FOR BHA CHANGE

TD'D Well @ 16665'

FORMATION CHARACTERISTICS

Codell is very hard to slide in. We are unable to get to bottom without rotating or oscillating. Unable to get any diff or TF with 100K WOB. Not able to transfer the weight to bit, causing very long and poor quality slides. Stabilizers are hanging us up and it is

recommended to drop them on Codell wells. The formation was extremely abrasive and wanted to drop tremendously the entire run.

MWD COMMENTS

HEL LWD performed as expected. A 60 degree orifice was used with a 4 3/4" pulser. Last down hole temp was 257 degrees F. and average battery consumption was 32% consumed. Did have some minor detection issues while trying to slide on pump 2 but were able to work through it.

SIDETRACKING PROCEDURE COMMENTS

N/A

RUN SUMMARY

Average build rates experienced were 10 degrees per 100' when able to efficiently slide. At approximately 16000' we had very much difficulty sliding. Codell is very hard to slide in. We are unable to get to bottom without rotating or oscillating. Unable to get any diff or TF with 100K WOB. Not able to transfer the weight to bit, causing very long and poor quality slides. We were having to slide more often than usual as BHA was dropping hard and walking left in rotation. At 16267' MD decision was made by Anadarko to rotate to TD @ 16665.' Codell formation was down dipping at 86° so we were still able to land in the bottom of the Codell. Condition of overall BHA looked good upon surface inspection.



MOTOR REPORTS

**Weatherford®**

Motor / RSS Evaluation Report

Drilling Services
v4.2.3981

BHA 1 - Build & Hold Section, Motor #675-3993

FILE #: 4028454

JOB TYPE: Horizontal

RIG & NO: Helmerich & Payne 307

WELL NAME: Dechant State 15C-1HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Weld County

SERVICE CO.: Weatherford

SURVEY TYPE: Positive Pulse MWD

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Eric Hughes

MWD Supervisor: Scott Coulter, Rusty Korms

Company Man: Craig Jones, Clint Tibedoux

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #: 1
DATE IN: 2013/02/09
DATE OUT: 2013/02/11
ANGLE IN: 0.00 °
ANGLE OUT: 0.00 °
ORIENTING HRS: 3.50
START DEPTH: 0.00 ft
END DEPTH: 6500.00 ft
HOLE MADE: 6500.00 ft
AVG ROP: 339.07 ft/hr
ROTATING HRS: 15.67

MOTOR INFORMATION:

MANFCT: Weatherford
SERIAL #: 675-3993
MODEL: QME4570
LOBE: 7/8
SETTING: 1.50 °
BIT TO BEND: 6.19 ft
KICKPAD: No
STABILIZER: 8.25

DRILLING INFORMATION:

BIT TYPE: VM513
BIT PRESS DROP: 0.00 psi
MTR PRESS DROP: 0.00 psi
IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / TD
TOTAL FLOW RATE: 598.00 gal/min
NOZZLES: 0.752 in² TFA
PUMP PRESS: (OFF) 3150.00 psi
(ON) 4350.00 psi

MUD INFORMATION:

MUD TYPE: Water
DENSITY: 9 lb/gal
SAND: 0.250
SOLIDS: 3.500
OIL: 0.000
TEMP: 159 °F
LIQUID BASE: Water
VISCOSITY: 34 sec/qt
WATER LOSS: 0.00 cc/30min
PLASTIC VISC: 4.0 cP
YIELD POINT: 5.0 lb/100 ft²
pH: 8.5
LIQUID RATE: 0.00 gal/min
GAS TYPE:
GAS RATE: 0.00 cu ft/min
 (All units are imperial.)

TIME INFORMATION:

CIRCULATING HOURS: 10.92
REAMING HOURS: 0.00
TIME DRILL HOURS: 0.00
MOTOR DRILL HOURS: 19.17
MOTOR HOURS THIS RUN: 30.08
PREVIOUS HOURS: 0.00
TOTAL MOTOR HOURS: 30.08
TOTAL BRT HOURS: 30.08

MOTOR EVALUATION COMMENTS:

Motor had a total of 15.2 drill hours on it w/ an average ROP of 339 ft/hr. Average build rates of 10 deg per 100'. Motor showed no squat when tested and drained on surface. Overall performance with this motor was sub par. Penetration rate and allowable WOB run on assembly was not as expected. Average WOB was 10-40K, RPM 40-70, and Diff. Pressure was 800-1200 psi.

REASON FOR BHA CHANGE:

Reached KOP @ 6500'

COMMENTS FROM LAST DAY RAN:

DRILL F/ 5050 TO 6645

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.3981

BHA 2 - Curve Section, Motor #675-4131

FILE #: 4028454

WELL NAME: Dechant State 15C-1HZ

SERVICE CO.: Weatherford

JOB TYPE: Horizontal

COMPANY: Anadarko Petroleum Corporation

SURVEY TYPE: Positive Pulse MWD

RIG & NO: Helmerich & Payne 307

SURFACE LOCATION: Weld County

FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca, Eric Hughes

MWD Supervisor: Rusty Korms, Scott Coulter

Company Man: Craig Jones, Clint Tibeaux

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #: 2
 DATE IN: 2013/02/11
 DATE OUT: 2013/02/13
 ANGLE IN: 0.00 °
 ANGLE OUT: 0.00 °
 ORIENTING HRS: 10.83

START DEPTH: 6500.00 ft
 END DEPTH: 7414.00 ft
 HOLE MADE: 914.00 ft
 AVG ROP: 61.26 ft/hr
 ROTATING HRS: 4.08

MOTOR INFORMATION:

MANFCT: Weatherford
 SERIAL #: 675-4131
 MODEL: LN7850
 LOBE: 7/8
 SETTING: 2.38 °

BIT TO BEND: 6.21 ft
 KICKPAD: No
 STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: E1202-A1B
 BIT PRESS DROP: 0.00 psi
 MTR PRESS DROP: 0.00 psi

IADC BIT GRADE: 1 / 1 / ? / ? / ? / ? / ? / TD
 TOTAL FLOW RATE: 547.75 gal/min
 NOZZLES: 1.242 in² TFA

PUMP PRESS: (OFF) 3650.00 psi
 (ON) 4250.00 psi

MUD INFORMATION:

MUD TYPE: Water
 DENSITY: 10 lb/gal
 SAND: 0.750
 SOLIDS: 1.000
 OIL: 0.000
 TEMP: 181 °F

LIQUID BASE: Water
 VISCOSITY: 37 sec/qt
 WATER LOSS: 7.60 cc/30min
 PLASTIC VISC: 12.0 cP
 YIELD POINT: 8.0 lb/100 ft²
 pH: 9.2

LIQUID RATE: 0.00 gal/min
 GAS TYPE:
 GAS RATE: 0.00 cu ft/min

(All units are imperial.)

TIME INFORMATION:

CIRCULATING HOURS: 5.75
 REAMING HOURS: 0.00
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 14.92

MOTOR HOURS THIS RUN: 20.67
 PREVIOUS HOURS: 0.00

TOTAL MOTOR HOURS: 20.67
 TOTAL BRT HOURS: 20.50

MOTOR EVALUATION COMMENTS:

Motor had a total of 12 drill hours on it w/ an average ROP of 75 ft/hr. Average build rates of 13 deg per 100'. Motor showed no squat when tested and drained on surface. Overall performance with this motor was very strong. Penetration rate was slower than expected due to being limited to 1 pump throughout much of the curve. Average WOB was 20-40K, RPM 30, and Diff. Pressure was 250-600 psi. Bit was extremely balled up.

REASON FOR BHA CHANGE:

TD'D Build Section @ 7414'

COMMENTS FROM LAST DAY RAN:

T.d. @ 7414



Weatherford®

Motor / RSS Evaluation Report

Drilling Services

v4.2.3981

BHA 2 - Curve Section, Motor #675-4131

Run casing, cement, skid the rig.

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.3981

BHA 3 - Lateral 1 Section, Motor #475-41095

FILE #: 4028454 WELL NAME: Dechant State 15C-1HZ SERVICE CO.: Weatherford
 JOB TYPE: Horizontal COMPANY: Anadarko Petroleum Corporation SURVEY TYPE: Positive Pulse MWD
 RIG & NO: Helmerich & Payne 307 SURFACE LOCATION: Weld County FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Charles Apodaca
 MWD Supervisor: Anthony Danna, Scott Coulter
 Company Man: Doug Barone, Doug Blair

BHA SURVEY TYPE: HEL LWD

HOLE SIZE: 6.125 in

GENERAL INFORMATION:

BHA #: 3 START DEPTH: 7414.00 ft
 DATE IN: 2013/02/24 END DEPTH: 7550.00 ft
 DATE OUT: 2013/02/25 HOLE MADE: 136.00 ft
 ANGLE IN: 0.00 ° AVG ROP: 234.48 ft/hr
 ANGLE OUT: 0.00 °
 ORIENTING HRS: 0.00 ROTATING HRS: 0.58

MOTOR INFORMATION:

MANFCT: Weatherford
 SERIAL #: 475-41095
 MODEL: ME6770
 LOBE: 6/7 BIT TO BEND: 5.74 ft
 SETTING: 1.50 ° KICKPAD: No
 STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: MMD54 IADC BIT GRADE: 1 / 1 / ? / ? / X / I / ? / DTF
 BIT PRESS DROP: 0.00 psi TOTAL FLOW RATE: 284.83 gal/min PUMP PRESS: (OFF) 2800.00 psi
 MTR PRESS DROP: 0.00 psi NOZZLES: 0.982 in² TFA (ON) 40002.00 psi

MUD INFORMATION:

MUD TYPE: Mineral Oil LIQUID BASE: Oil (All units are imperial.)
 DENSITY: 9 lb/gal VISCOSITY: 73 sec/qt
 SAND: 0.000 WATER LOSS: 18.00 cc/30min LIQUID RATE: 0.00 gal/min
 SOLIDS: 9.000 PLASTIC VISC: 13.0 cP GAS TYPE:
 OIL: 59.000 YIELD POINT: 4.0 lb/100 ft² GAS RATE: 0.00 cu ft/min
 TEMP: 154 °F pH: 0.0

TIME INFORMATION:

CIRCULATING HOURS: 2.67
 REAMING HOURS: 0.00
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 0.58
 MOTOR HOURS THIS RUN: 3.25
 PREVIOUS HOURS: 0.00
 TOTAL MOTOR HOURS: 3.25
 TOTAL BRT HOURS: 3.25

MOTOR EVALUATION COMMENTS:

WFT Motor ran as expected. Only 135' was drilled due to a possible LWD Failure. 4.6 circ hours on motor and .54 drilling hours. Motor was visually inspected and looked good with zero squat in it when squat tested. Motor will be re-ran on next run.

REASON FOR BHA CHANGE:

Split IDS LWD Tool Failure

COMMENTS FROM LAST DAY RAN:

Drill Ahead In Lateral F/ 7414' - 7550'

Once reaching bottom we were unable to receive surveys from Split IDS in LWD tool string. POOH for possible LWD failure.

**Weatherford®**

Motor / RSS Evaluation Report

Drilling Services
v4.2.3981

BHA 4 - Lateral 1 Section, Motor #475-41095

FILE #: 4028454 WELL NAME: Dechant State 15C-1HZ SERVICE CO.: Weatherford
 JOB TYPE: Horizontal COMPANY: Anadarko Petroleum Corporation SURVEY TYPE: Positive Pulse MWD
 RIG & NO: Helmerich & Payne 307 SURFACE LOCATION: Weld County FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca
 MWD Supervisor: Anthony Danna, Scott Coulter
 Company Man: Doug Barone, Doug Blair

BHA SURVEY TYPE: HEL LWD

HOLE SIZE: 6.125 in

GENERAL INFORMATION:

BHA #: 4 START DEPTH: 7550.00 ft
 DATE IN: 2013/02/25 END DEPTH: 11489.00 ft
 DATE OUT: 2013/02/28 HOLE MADE: 3939.00 ft
 ANGLE IN: 0.00 ° AVG ROP: 144.98 ft/hr
 ANGLE OUT: 0.00 °
 ORIENTING HRS: 9.83 ROTATING HRS: 17.33

MOTOR INFORMATION:

MANFCT: Weatherford
 SERIAL #: 475-41095
 MODEL: ME6770
 LOBE: 6/7 BIT TO BEND: 5.74 ft
 SETTING: 1.50 ° KICKPAD: No
 STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: MMD54 IADC BIT GRADE: 1 / 1 / ? / ? / X / I / FC / PP
 BIT PRESS DROP: 0.00 psi TOTAL FLOW RATE: 275.00 gal/min PUMP PRESS: (OFF) 3200.00 psi
 MTR PRESS DROP: 0.00 psi NOZZLES: 0.982 in² TFA (ON) 4500.00 psi

MUD INFORMATION:

MUD TYPE: Other Oil LIQUID BASE: Oil (All units are imperial.)
 DENSITY: 10 lb/gal VISCOSITY: 75 sec/qt
 SAND: 0.000 WATER LOSS: 0.00 cc/30min LIQUID RATE: 0.00 gal/min
 SOLIDS: 11.700 PLASTIC VISC: 13.0 cP GAS TYPE:
 OIL: 56.800 YIELD POINT: 10.0 lb/100 ft² GAS RATE: 0.00 cu ft/min
 TEMP: 239 °F pH: 0.0

TIME INFORMATION:

CIRCULATING HOURS: 13.17
 REAMING HOURS: 0.33
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 27.17
 MOTOR HOURS THIS RUN: 40.67
 PREVIOUS HOURS: 3.25
 TOTAL MOTOR HOURS: 43.92
 TOTAL BRT HOURS: 40.67

MOTOR EVALUATION COMMENTS:

This motor had 28.75 Drill hrs on it and 70.34 circ hours. Motor performed as expected until we experienced a pressure spike. At 11489' we witnessed a pressure spike (5770 psi) and a diff spike (2225 psi). It seemed to be a coincidence that a sweep was in the pipe and 300 stks from being out of the bit close to the agitator and shock sub when pressure spike occurred. Black rubber was soon noticed coming over the shakers. POOH for possible motor failure.

REASON FOR BHA CHANGE:

At 11489' we witnessed a pressure spike (5770 psi) and a diff spike of (2225 psi) Found rubber coming over the shakers and in the bit.

COMMENTS FROM LAST DAY RAN:

Handle Directional Tools, Program LWD & Surface Test Tools.



RIH

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.3981

BHA 5 - Lateral 1 Section, Motor #475-41107

FILE #: 4028454 WELL NAME: Dechant State 15C-1HZ SERVICE CO.: Weatherford
 JOB TYPE: Horizontal COMPANY: Anadarko Petroleum Corporation SURVEY TYPE: Positive Pulse MWD
 RIG & NO: Helmerich & Payne 307 SURFACE LOCATION: Weld County FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Charles Apodaca
 MWD Supervisor: Anthony Danna, Scott Coulter
 Company Man: Doug Barone, Doug Blair

BHA SURVEY TYPE: HEL LWD

HOLE SIZE: 6.125 in

GENERAL INFORMATION:

BHA #: 5 START DEPTH: 11489.00 ft
 DATE IN: 2013/02/28 END DEPTH: 15235.00 ft
 DATE OUT: 2013/03/05 HOLE MADE: 3746.00 ft
 ANGLE IN: 0.00 ° AVG ROP: 82.64 ft/hr
 ANGLE OUT: 0.00 °
 ORIENTING HRS: 28.58 ROTATING HRS: 16.75

MOTOR INFORMATION:

MANFCT: Weatherford
 SERIAL #: 475-41107
 MODEL: ME6770
 LOBE: 6/7 BIT TO BEND: 5.89 ft
 SETTING: 1.50 ° KICKPAD: No
 STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: MMD54 IADC BIT GRADE: 1 / 2 / CT / G / X / I / FC / WO
 BIT PRESS DROP: 0.00 psi TOTAL FLOW RATE: 0.00 gal/min PUMP PRESS: (OFF) 0.00 psi
 MTR PRESS DROP: 0.00 psi NOZZLES: 0.982 in² TFA (ON) 0.00 psi

MUD INFORMATION:

MUD TYPE: Mineral Oil LIQUID BASE: Synthetic (All units are imperial.)
 DENSITY: 10 lb/gal VISCOSITY: 70 sec/qt
 SAND: 0.000 WATER LOSS: 18.00 cc/30min LIQUID RATE: 0.00 gal/min
 SOLIDS: 9.800 PLASTIC VISC: 20.0 cP GAS TYPE:
 OIL: 55.600 YIELD POINT: 13.0 lb/100 ft² GAS RATE: 0.00 cu ft/min
 TEMP: 96 °F pH: 0.0

TIME INFORMATION:

CIRCULATING HOURS: 17.92
 REAMING HOURS: 0.83
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 45.33
 MOTOR HOURS THIS RUN: 64.08
 PREVIOUS HOURS: 0.00
 TOTAL MOTOR HOURS: 64.08
 TOTAL BRT HOURS: 64.08

MOTOR EVALUATION COMMENTS:

Motor Performed As expected. This Motor had 70.34 total circ hours on it and 28.75 drill hours. Motor looked good and drained good when laid down. 1/4" of squat was noticed when squat tested.

REASON FOR BHA CHANGE:

Washout In DP

COMMENTS FROM LAST DAY RAN:

Retrieved Fish. Lay down damaged joint where string parted, continue to POOH and lay down BHA #5.
 Pick up new BHA and Trip in hole.

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.3981

BHA 6 - Lateral 1 Section, Motor #475-45705

FILE #: 4028454 WELL NAME: Dechant State 15C-1HZ SERVICE CO.: Weatherford
 JOB TYPE: Horizontal COMPANY: Anadarko Petroleum Corporation SURVEY TYPE: Positive Pulse MWD
 RIG & NO: Helmerich & Payne 307 SURFACE LOCATION: Weld County FIELD / LOCATION: Wattenburg Field / CO / USA

DIR Supervisor: Josh Monroe, Joe Kelly, Eric Hughes
 MWD Supervisor: Scott Coulter
 Company Man: Craig Jones, Clint Tivedoux

BHA SURVEY TYPE: HEL LWD

HOLE SIZE: 6.125 in

GENERAL INFORMATION:

BHA #: 6 START DEPTH: 15235.00 ft
 DATE IN: 2013/03/05 END DEPTH: 16665.00 ft
 DATE OUT: 2013/03/14 HOLE MADE: 1430.00 ft
 ANGLE IN: 0.00 ° AVG ROP: 37.80 ft/hr
 ANGLE OUT: 0.00 °
 ORIENTING HRS: 26.33 ROTATING HRS: 11.50

MOTOR INFORMATION:

MANFCT: Weatherford
 SERIAL #: 475-45705
 MODEL: ME6770
 LOBE: 6/7 BIT TO BEND: 5.77 ft
 SETTING: 1.50 ° KICKPAD: No
 STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: MMD54 IADC BIT GRADE: 1 / 2 / CT / G / X / I / ? / TD
 BIT PRESS DROP: 0.00 psi TOTAL FLOW RATE: 281.18 gal/min PUMP PRESS: (OFF) 3521.00 psi
 MTR PRESS DROP: 0.00 psi NOZZLES: 0.982 in² TFA (ON) 4650.00 psi

MUD INFORMATION:

MUD TYPE: Mineral Oil LIQUID BASE: Oil (All units are imperial.)
 DENSITY: 10 lb/gal VISCOSITY: 49 sec/qt
 SAND: 0.000 WATER LOSS: 17.00 cc/30min LIQUID RATE: 0.00 gal/min
 SOLIDS: 11.000 PLASTIC VISC: 21.0 cP GAS TYPE:
 OIL: 56.200 YIELD POINT: 11.0 lb/100 ft² GAS RATE: 0.00 cu ft/min
 TEMP: 260 °F pH: 0.0

TIME INFORMATION:

CIRCULATING HOURS: 21.00
 REAMING HOURS: 0.00
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 37.83
 MOTOR HOURS THIS RUN: 58.83
 PREVIOUS HOURS: 0.00
 TOTAL MOTOR HOURS: 58.83
 TOTAL BRT HOURS: 58.83

MOTOR EVALUATION COMMENTS:

Weatherford Motor 6:7 7.0 Stg FBH @ 1.50 SN 475-45705. Motor had 47.88 circ hours on it and 21.75 drill hours.
 Weatherford Motor Performed as expected. Motor looked good and drained good when laid down. 1/4" of squat was noticed when squat tested.

REASON FOR BHA CHANGE:

TD'D Well @ 16665'

COMMENTS FROM LAST DAY RAN:

Continue to run liner.



SLIDE SHEET REPORTS



Drilling Parameters

BHA # 1 Motor Type: 1.5 degree WFT 6 3/4" 4:5 7 stage Rig: H&P 307

Operator: Anadarko Motor Fit: 38 tite Start Date: 10-Feb

Well Name: Dechant State 15C-1HZ Bit to Bend: 6.19' End Date: 11-Feb

| Survey Depth | INC | AZI | Start Depth | End Depth | Feet | R or S | TF or RPM | Drill Hours | WOB 1000# | PU/SO/RW 1000# | GPM | Diff PSI | ROP | Comment |
|-----------------|-------|--------|----------------|--------------|------|-----------|--------------|----------------|--------------|-------------------|-----|-------------|------|---------|
| 774 | 0.16 | 63.85 | 744 | 834 | 90 | R | 60 | 0.17 | 30 | 45,45,45 | 540 | 1000 | 529 | |
| 866 | 0.78 | 94.6 | 834 | 926 | 92 | R | 60 | 0.17 | 30 | 45,45,45 | 540 | 1000 | 541 | |
| 958 | 0.84 | 81.62 | 926 | 1018 | 92 | R | 60 | 0.08 | 35 | 45,45,45 | 540 | 1000 | 1150 | |
| 1050 | 0.6 | 82.28 | 1018 | 1110 | 92 | R | 60 | 0.08 | 35 | 50,50,50 | 540 | 1000 | 1150 | |
| 1142 | 0.22 | 95.07 | 1110 | 1202 | 92 | R | 60 | 0.17 | 35 | 50,50,50 | 540 | 1000 | 541 | |
| 1233 | 0.25 | 15.36 | 1202 | 1293 | 91 | R | 60 | 0.08 | 35 | 60,60,60 | 540 | 1000 | 1138 | |
| 1325 | 0.16 | 94.8 | 1293 | 1385 | 92 | R | 60 | 0.17 | 35 | 65,65,65 | 540 | 1000 | 541 | |
| 1417 | 0.28 | 83.92 | 1385 | 1477 | 92 | R | 60 | 0.08 | 35 | 65,65,65 | 540 | 1000 | 1150 | |
| 1508 | 0.07 | 69.68 | 1477 | 1568 | 91 | R | 60 | 0.17 | 35 | 70,70,70 | 540 | 1000 | 535 | |
| 1599 | 0.1 | 231.03 | 1568 | 1659 | 91 | R | 60 | 0.08 | 35 | 70,70,70 | 540 | 1000 | 1138 | |
| 1690 | 0.35 | 306.26 | 1659 | 1750 | 91 | R | 60 | 0.08 | 35 | 70,70,70 | 540 | 1000 | 1138 | |
| 1780 | 0.4 | 217.17 | 1750 | 1840 | 90 | R | 60 | 0.08 | 35 | 85,80,75 | 540 | 900 | 1125 | |
| 1872 | 0.22 | 299.27 | 1840 | 1932 | 92 | R | 60 | 0.08 | 35 | 85,80,75 | 540 | 900 | 1150 | |
| 1960 | 0.29 | 281.8 | 1932 | 2023 | 91 | R | 60 | 0.25 | 35 | 85,80,75 | 540 | 900 | 364 | |
| 2054 | 0.51 | 13.05 | 2023 | 2114 | 91 | R | 60 | 0.08 | 45 | 85,80,75 | 540 | 900 | 1138 | |
| 2146 | 0.43 | 349.38 | 2114 | 2206 | 92 | R | 60 | 0.25 | 45 | 85,80,75 | 540 | 900 | 368 | |
| 2329 | 1.55 | 353.64 | 2206 | 2389 | 183 | R | 60 | 0.83 | 25 | 90,85,80 | 540 | 900 | 220 | |
| 2420 | 1.48 | 358.07 | 2389 | 2484 | 95 | R | 70 | 0.17 | 20 | | 540 | 900 | 559 | |
| | | | 2484 | 2507 | 23 | S | 90M | 0.25 | 10 | 90,85,80 | 540 | 500 | 92 | Slide |
| 2518 | 3.08 | 60.64 | 2507 | 2578 | 71 | R | 60 | 0.08 | 25 | 90,85,80 | 540 | 800 | 888 | |
| | | | 2578 | 2593 | 15 | S | 120M | 0.25 | 10 | 95,90,85 | 540 | 500 | 60 | Slide |
| 2613 | 2.98 | 78.07 | 2593 | 2673 | 80 | R | 60 | 0.25 | 25 | 95,90,85 | 540 | 800 | 320 | |
| | | | 2673 | 2708 | 35 | S | 90M | 0.58 | 10 | 95,90,85 | 540 | 500 | 60 | Slide |
| 2707 | 5.42 | 107.01 | 2708 | 2767 | 59 | R | 60 | 0.08 | 25 | 95,90,85 | 540 | 800 | 738 | |
| | | | 2767 | 2787 | 20 | S | 20L | 0.25 | 15 | 95,90,85 | 540 | 500 | 80 | Slide |
| 2802 | 7.48 | 105.31 | 2787 | 2862 | 75 | R | 50 | 0.17 | 30 | 100,95,90 | 499 | 1300 | 441 | |
| | | | 2862 | 2877 | 15 | S | 20L | 0.17 | 15 | 100,95,90 | 597 | 500 | 88 | Slide |
| 2897 | 8.47 | 102.97 | 2877 | 2957 | 80 | R | 50 | 0.25 | | 100,95,90 | | | 320 | |
| | | | 2957 | 2977 | 20 | S | 40L | 0.17 | 15 | 100,95,90 | 499 | 300 | 118 | Slide |
| 2991 | 10.47 | 91.21 | 2977 | 3051 | 74 | R | 50 | 0.33 | 20 | 100,95,90 | 536 | 750 | 224 | |
| 3086 | 9.25 | 89.24 | 3051 | 3146 | 95 | R | 50 | 0.17 | 20 | 100,95,90 | 536 | 850 | 559 | |
| | | | 3146 | 3166 | 20 | S | HS | 0.25 | 15 | 105,102,100 | 417 | 300 | 80 | Slide |
| 3181 | | | 3166 | 3241 | 75 | R | 50 | 0.17 | 20 | 105,102,100 | 589 | 850 | 441 | |
| 3275 | 9.35 | 89.81 | 3241 | 3335 | 94 | R | 50 | 0.17 | 20 | 105,102,100 | 575 | 850 | 553 | |
| | | | 3335 | 3355 | 20 | S | HS | 0.17 | 15 | 105,102,100 | 575 | 350 | 118 | Slide |
| 3370 | 9.56 | 90.33 | 3355 | 3430 | 75 | R | 60 | 0.25 | 20 | 105,102,100 | 575 | 1000 | 300 | |
| | | | 3430 | 3450 | 20 | S | HS | 0.17 | 15 | 105,102,100 | 575 | 500 | 118 | Slide |
| 3464 | 9.36 | 95.24 | 3450 | 3524 | 74 | R | 60 | 0.42 | 22 | 105,102,100 | 575 | 1000 | 176 | |
| | | | 3524 | 3551 | 27 | S | 30L | 0.25 | 15 | 110,105,100 | 575 | 500 | 108 | Slide |
| 3559 | 10.42 | 92.02 | 3551 | 3619 | 68 | R | 50 | 0.25 | 22 | 110,105,100 | 575 | 1000 | 272 | |



Rig: H&P 307

Start Date: 10-Feb

End Date: 11-Feb

[illegible]



Drilling Parameters

BHA # 2

Motor Type: 2.38 degree WFT 6 3/4" 7:8 5 stage

Rig: H&P 307

Operator: Anadarko

Motor Fit: 2 tite

Start Date: 11-Feb

Well Name: Dechant State 15C-1HZ

Bit to Bend: 6.2

End Date: 12-Feb

[illegible]



Drilling Parameters

BHA # 4 Motor Type: WFT 5" 6770 Hyperline CS19 Rig: H&P 307

Operator: Anadarko Motor Fit: -0.007 Start/End Dates: 2-24-13 /

Well Name: Dechant State 15C-1HZ Bit to Bend: 6.08 Bit Type/Description: 6 1/8" Security MMD54 5x16's

| Survey Depth | INC | AZI | Start Depth | End Depth | Feet | R or S | TF or RPM | Start Time | End Time | Drill Time | WOB 1000# | PU/SO/RW 1000# | GPM | PSI OFF | PSI ON | Diff PSI | ROP | Torque off | Torque on | Comment |
|-----------------|-------|--------|----------------|--------------|------|-----------|--------------|---------------|-------------|---------------|--------------|-------------------|-----|------------|-----------|-------------|-----|---------------|--------------|-------------------------|
| 7496 | 86.30 | 176.25 | 7550 | 7565 | 15 | S | 10R | | | | 10 | 141,116,127 | 268 | 3778 | 4028 | 250 | | | | |
| | | | 7565 | 7613 | 48 | R or | 55 | | | | 30 | | 268 | 2868 | 4028 | 1160 | | | 7600 | |
| | | | 7613 | 7628 | 15 | S | 10 R | | | | 10 | | 268 | 3778 | 4028 | 250 | | | | |
| 7590 | 86.54 | 176.05 | 7628 | 7644 | 16 | R or | 55 | | | | 35 | | 268 | 2828 | 4028 | 1200 | | | 7600 | |
| | | | 7644 | 7674 | 30 | S | 15 R | | | | 10 | | 268 | 2800 | 3100 | 300 | | | | |
| | | | 7674 | 7707 | 33 | R or | 55 | | | | 28 | | 268 | 2990 | 4133 | 1143 | | | 7400 | |
| | | | 7707 | 7727 | 20 | S | 30 R | | | | 10 | | 268 | 2800 | 3100 | 300 | | | | |
| 7685 | 91.98 | 178.72 | 7727 | 7739 | 12 | R or | 65 | | | | 30 | | 268 | 2966 | 4029 | 1063 | | | 8100 | Crossed a Fault |
| 7779 | 94.38 | 178.79 | 7739 | 7833 | 94 | R or | 75 | | | | 16 | | 268 | 3447 | 4530 | 1083 | | | 6600 | |
| | | | 7833 | 7848 | 15 | S | 165 R | | | | 10 | | 268 | 2975 | 3250 | 275 | | | | |
| 7874 | 92.53 | 179.21 | 7848 | 7928 | 80 | R or | 75 | | | | 16 | | 268 | 3372 | 4408 | 1036 | | | 7300 | |
| | | | 7928 | 7943 | 15 | S | 150 R | | | | 10 | | 268 | 2950 | 3250 | 300 | | | | |
| 7968 | 89.26 | 179.11 | 7943 | 8022 | 79 | R | 75 | 6:00 | 6:15 | 0:15 | 16 | | 275 | 3250 | 4050 | 800 | 316 | | 7300 | 2 Stks/Pressure Limited |
| 8063 | 88.33 | 178.89 | 8022 | 8117 | 95 | R | 80 | 6:40 | 7:05 | 0:25 | 13 | 140, 110, 126 | 275 | 2990 | 4300 | 1310 | 228 | 3000 | 7900 | Pressure Limited |
| 8158 | 86.79 | 178.90 | 8117 | 8212 | 95 | R | 80 | 7:15 | 7:40 | 0:25 | 17 | | 275 | 3020 | 4500 | 1480 | 228 | | 8000 | Pressure Limited |
| 8158 | 86.79 | 178.90 | 8212 | 8232 | 20 | S | 30R | 8:00 | 8:10 | 0:10 | 20 | | 275 | 3020 | 4000 | 980 | 120 | | 0 | Pressure Limited |
| 8252 | 87.53 | 180.28 | 8232 | 8306 | 74 | R | 80 | 8:10 | 8:35 | 0:25 | 20 | | 275 | 3050 | 4450 | 1400 | 178 | | 8700 | Pressure Limited |
| 8252 | 87.53 | 180.28 | 8306 | 8326 | 20 | S | 20R | 8:55 | 9:05 | 0:10 | 35 | | 275 | 3050 | 4050 | 1000 | 120 | | 0 | Pressure Limited |
| 8347 | 88.77 | 181.66 | 8326 | 8401 | 75 | R | 80 | 9:05 | 9:30 | 0:25 | 20 | | 275 | 3100 | 4400 | 1300 | 180 | | 8500 | Pressure Limited |
| 8441 | 88.70 | 180.99 | 8401 | 8495 | 94 | R | 80 | 9:40 | 10:05 | 0:25 | 30 | 154, 105, 125 | 275 | 3000 | 4500 | 1500 | 226 | 3500 | 8500 | Pressure Limited |
| 8441 | 88.70 | 180.99 | 8495 | 8508 | 13 | S | 30R | 10:20 | 10:30 | 0:10 | 30 | | 275 | 3100 | 4000 | 900 | 78 | | 0 | Pressure Limited |
| 8536 | 89.14 | 180.09 | 8508 | 8590 | 82 | R | 80 | 10:35 | 11:00 | 0:25 | 31 | | 275 | 3000 | 4400 | 1400 | 197 | | 8500 | Pressure Limited |
| 8536 | 89.14 | 180.09 | 8590 | 8605 | 15 | S | 30R | 11:20 | 11:35 | 0:15 | 30 | | 275 | 3200 | 3500 | 300 | 60 | | 0 | Pressure Limited |
| 8631 | 89.69 | 180.04 | 8605 | 8685 | 80 | R | 80 | 11:30 | 11:55 | 0:25 | 21 | | 275 | 3200 | 4400 | 1200 | 192 | | 8500 | Pressure Limited |
| 8725 | 89.03 | 179.49 | 8685 | 8779 | 94 | R | 55 | 12:00 | 12:20 | 0:20 | 38 | | 275 | 3250 | 4450 | 1200 | 282 | | 8500 | Pressure Limited |



Drilling Parameters

BHA # 4 Motor Type: WFT 5" 6770 Hyperline CS19 Rig: H&P 307

Operator: Anadarko Motor Fit: -0.007 Start/End Dates: 2-24-13 /

Well Name: Dechant State 15C-1HZ Bit to Bend: 6.08 Bit Type/Description: 6 1/8" Security MMD54 5x16's

| Survey Depth | INC | AZI | Start Depth | End Depth | Feet | R or S | TF or RPM | Start Time | End Time | Drill Time | WOB 1000# | PU/SO/RW 1000# | GPM | PSI OFF | PSI ON | Diff PSI | ROP | Torque off | Torque on | Comment |
|-----------------|-------|--------|----------------|--------------|------|-----------|--------------|---------------|-------------|---------------|--------------|-------------------|-----|------------|-----------|-------------|-----|---------------|--------------|------------------|
| 8725 | 89.03 | 179.49 | 8779 | 8799 | 20 | S | 30R | 12:30 | 12:45 | 0:15 | 20 | | 275 | 3250 | 3500 | 250 | 80 | | 0 | Pressure Limited |
| 8820 | 89.26 | 182.57 | 8799 | 8874 | 75 | R | 80 | 12:45 | 13:00 | 0:15 | 22 | | 275 | 3250 | 4500 | 1250 | 300 | | 8500 | Pressure Limited |
| 8820 | 89.26 | 182.57 | 8874 | 8886 | 12 | S | HS | 13:20 | 13:30 | 0:10 | 20 | | 275 | 3300 | 3650 | 350 | 72 | | 0 | Pressure Limited |
| 8914 | 90.37 | 183.60 | 8886 | 8968 | 82 | R | 80 | 13:30 | 13:40 | 0:10 | 23 | 154, 101, 124 | 275 | 3300 | 4500 | 1200 | 492 | 4000 | 8700 | Pressure Limited |
| 9009 | 89.20 | 183.93 | 8968 | 9063 | 95 | R | 80 | 13:50 | 14:15 | 0:25 | 22 | | 275 | 3300 | 4500 | 1200 | 228 | | 8700 | Pressure Limited |
| 9009 | 89.20 | 183.93 | 9063 | 9078 | 15 | S | 30L | 14:30 | 14:55 | 0:25 | 23 | | 275 | 3300 | 4500 | 1200 | 36 | | 0 | Pressure Limited |
| 9103 | 90.31 | 182.67 | 9078 | 9157 | 79 | R | 80 | 15:05 | 15:15 | 0:10 | 23 | | 275 | 3300 | 4500 | 1200 | 474 | | 9000 | Pressure Limited |
| 9198 | 90.31 | 182.67 | 9157 | 9252 | 95 | R | 80 | 15:15 | 15:30 | 0:15 | 23 | | 275 | 3200 | 4400 | 1200 | 380 | | 9272 | Pressure Limited |
| 9198 | 89.29 | 179.49 | 9252 | 9267 | 15 | S | 30R | 15:45 | 15:50 | 0:05 | 21 | | 275 | 3200 | 3600 | 400 | 180 | | 0 | Pressure Limited |
| 9293 | 90.06 | 180.82 | 9267 | 9347 | 80 | R | 80 | 15:50 | 16:05 | 0:15 | 21 | 158, 101, 125 | 275 | 3200 | 4300 | 1100 | 320 | 4300 | 8900 | Pressure Limited |
| 9293 | 90.06 | 180.82 | 9347 | 9441 | 94 | R | 65 | 16:15 | 16:40 | 0:25 | 20 | | 275 | 3200 | 4400 | 1200 | 226 | | 9100 | Pressure Limited |
| 9387 | 89.32 | 180.06 | 9441 | 9456 | 15 | S | 30R | 16:50 | 16:55 | 0:05 | 45 | | 275 | 3150 | 3600 | 450 | 180 | | 0 | Pressure Limited |
| 9387 | 89.32 | 180.06 | 9456 | 9533 | 77 | R | 65 | 16:55 | 17:15 | 0:20 | 24 | | 275 | 3450 | 4400 | 950 | 231 | | 9500 | Pressure Limited |
| 9479 | 90.06 | 179.39 | 9533 | 9548 | 15 | S | 30R | 17:35 | 17:45 | 0:10 | 22 | | 275 | 3300 | 3600 | 300 | 90 | | 0 | Pressure Limited |
| 9479 | 90.06 | 179.39 | 9548 | 9625 | 77 | R | 80 | 17:45 | 18:00 | 0:15 | 23 | | 275 | 3300 | 4450 | 1150 | 308 | | 1100 | Pressure Limited |
| 9571 | 90.25 | 181.06 | 9625 | 9717 | 92 | R | 80 | 18:10 | 18:25 | 0:15 | 19 | | 275 | 3300 | 4450 | 1150 | 368 | | 1100 | Pressure Limited |
| 9663 | 89.63 | 180.64 | 9717 | 9732 | 15 | S | HS | 18:40 | 19:20 | 0:40 | 15 | 171,103,129 | 275 | 2950 | 3200 | 250 | 23 | 5000 | | Pressure Limited |
| 9755 | 90.56 | 180.11 | 9732 | 9809 | 77 | R | 80 | 19:20 | 19:40 | 0:20 | 20 | | 275 | 2904 | 4056 | 1152 | 231 | | 1032 | Pressure Limited |
| 9847 | 89.63 | 179.25 | 9809 | 9901 | 92 | R | 80 | 19:50 | 20:05 | 0:15 | 20 | | 275 | 2906 | 4046 | 1140 | 368 | | 1200 | Pressure Limited |
| 9939 | 88.40 | 177.66 | 9901 | 9993 | 92 | R | 80 | 20:50 | 21:05 | 0:15 | 30 | | 275 | 3210 | 4475 | 1265 | 368 | | 9800 | Pressure Limited |
| | | | 9993 | 10008 | 15 | S | 30R | 21:20 | 21:50 | 0:30 | 15 | | 275 | 2900 | 3220 | 320 | 30 | | | Pressure Limited |
| 10032 | 88.58 | 178.56 | 10008 | 10086 | 78 | R | 45 | 21:50 | 22:10 | 0:20 | 25 | | 275 | 3250 | 4500 | 1250 | 234 | | 10450 | Pressure Limited |
| | | | 10086 | 10101 | 15 | S | HS | 22:25 | 23:00 | 0:35 | 15 | | 275 | 2900 | 3250 | 350 | 26 | | | Pressure Limited |
| 10124 | 89.38 | 178.70 | 10101 | 10178 | 77 | R | 45 | 23:00 | 23:25 | 0:25 | 20 | 171,103,129 | 275 | 3200 | 4450 | 1250 | 185 | 5000 | 10400 | Pressure Limited |
| | | | 10178 | 10193 | 15 | S | 30 R | 23:45 | 0:15 | 0:30 | 15 | | 275 | 2900 | 3400 | 500 | 30 | | | Pressure Limited |



Drilling Parameters

BHA # 4 Motor Type: WFT 5" 6770 Hyperline CS19 Rig: H&P 307
 Operator: Anadarko Motor Fit: -0.007 Start/End Dates: 2-24-13 /
 Well Name: Dechant State 15C-1HZ Bit to Bend: 6.08 Bit Type/Description: 6 1/8" Security MMD54 5x16's

| Survey Depth | INC | AZI | Start Depth | End Depth | Feet | R or S | TF or RPM | Start Time | End Time | Drill Time | WOB 1000# | PU/SO/RW 1000# | GPM | PSI OFF | PSI ON | Diff PSI | ROP | Torque off | Torque on | Comment |
|-----------------|-------|--------|----------------|--------------|-------|-----------|--------------|---------------|-------------|---------------|--------------|-------------------|-----|------------|-----------|-------------|-------|---------------|--------------|------------------|
| 10216 | 90.80 | 178.51 | 10193 | 10270 | 77 | R | 45 | 0:15 | 0:35 | 0:20 | 20 | | 275 | 3290 | 4340 | 1050 | 231 | | 10360 | Pressure Limited |
| | | | 10270 | 10280 | 10 | S | 90 R | 0:50 | 1:05 | 0:15 | 15 | | 275 | 2900 | 3250 | 350 | 40 | | | Pressure Limited |
| 10307 | 89.57 | 180.11 | 10280 | 10361 | 81 | R | 75 | 1:05 | 1:20 | 0:15 | 20 | | 275 | 3307 | 4507 | 1200 | 324 | | 11029 | Pressure Limited |
| | | | 10361 | 10376 | 15 | S | HS | 1:30 | 2:05 | 0:35 | 15 | | 275 | 2900 | 3250 | 350 | 26 | | | Pressure Limited |
| 10399 | 90.43 | 179.53 | 10376 | 10453 | 77 | R | 45 | 2:05 | 2:25 | 0:20 | 20 | | 275 | 3300 | 4510 | 1210 | 231 | | 11000 | Pressure Limited |
| | | | 10453 | 10468 | 15 | S | 45R | 2:55 | 3:20 | 0:25 | 15 | | 275 | 3300 | 3600 | 300 | 36 | | | Pressure Limited |
| 10491 | 90.25 | 180.29 | 10468 | 10545 | 77 | R | 45 | 3:20 | 3:45 | 0:25 | 15 | 173,101,127 | 275 | 3400 | 4500 | 1100 | 185 | 5000 | 13718 | Pressure Limited |
| | | | 10545 | 10560 | 15 | S | 50R | 3:55 | 4:25 | 0:30 | 20 | | 275 | 3250 | 3600 | 350 | 30 | | | Pressure Limited |
| 10583 | 90.35 | 181.96 | 10560 | 10637 | 77 | R | 45 | 4:25 | 4:45 | 0:20 | 25 | | 275 | 3318 | 4518 | 1200 | 231 | | 12860 | Pressure Limited |
| 10675 | 90.31 | 181.17 | 10637 | 10729 | 92 | R | 45 | 4:55 | 5:25 | 0:30 | 25 | | 268 | 3315 | 4515 | 1200 | 184 | | 11257 | Pressure Limited |
| 10767 | 89.57 | 180.85 | 10729 | 10821 | 92 | R | 45 | 5:45 | 6:40 | 0:55 | 25 | 191, 99, 138 | 268 | 3314 | 4515 | 1201 | 100 | 5500 | 11200 | Pressure Limited |
| 10767 | 89.57 | 180.85 | 10821 | 10836 | 15 | S | 30R | 6:55 | 7:35 | 0:40 | 70 | | 268 | 3550 | 4750 | 1200 | 23 | | 0 | Pressure Limited |
| 10858 | 92.10 | 183.07 | 10836 | 10912 | 76 | R | 80 | 7:35 | 8:15 | 0:40 | 30 | | 261 | 3550 | 4750 | 1200 | 114 | | 15500 | Pressure Limited |
| 10948 | 92.34 | 182.85 | 10912 | 11002 | 90 | R | 80 | 8:40 | 9:30 | 0:50 | 31 | | 272 | 3350 | 4650 | 1300 | 108 | | 15500 | Pressure Limited |
| 10948 | 92.34 | 182.85 | 11002 | 11008 | 6 | S | 160L | 10:10 | 10:20 | 0:10 | 65 | | 272 | 3500 | 3700 | 200 | 36 | | 0 | Pressure Limited |
| 11039 | 91.79 | 183.30 | 11008 | 11093 | 85 | R | 80 | 10:20 | 11:05 | 0:45 | 20 | | 272 | 3650 | 4900 | 1250 | 113 | | 15000 | Pressure Limited |
| 11039 | 91.79 | 183.30 | 11093 | 11108 | 15 | S | 160L | 11:20 | 12:00 | 0:40 | 80 | | 275 | 3700 | 4800 | 1100 | 23 | | 14000 | Pressure Limited |
| 11039 | 91.90 | 183.30 | 11108 | 11184 | 76 | R | 80 | 12:00 | 12:40 | 0:40 | 22 | | 275 | 3700 | 4900 | 1200 | 114 | | 15500 | Pressure Limited |
| 11130 | 90.25 | 182.53 | 11184 | 11275 | 91 | R | 80 | 12:55 | 13:45 | 0:50 | 24 | | 275 | 3500 | 4800 | 1300 | 109 | | 15500 | Pressure Limited |
| 11221 | 90.12 | 182.99 | 11275 | 11290 | 15 | S | 90L | 14:00 | 14:30 | 0:30 | 85 | | 275 | 3500 | 3700 | 200 | 30 | | 0 | Pressure Limited |
| 11313 | 89.75 | 180.93 | 11290 | 11367 | 77 | R | 80 | 14:30 | 15:25 | 0:55 | 60 | 207, 102, 144 | 275 | 3500 | 4500 | 1000 | 84 | 5500 | 16000 | Pressure Limited |
| 11404 | 90.09 | 180.55 | 11367 | 11458 | 91 | R | 80 | 15:40 | 16:30 | 0:50 | 30 | | 275 | 3550 | 4700 | 1150 | 109 | | 16500 | Pressure Limited |
| 11496 | 90.09 | 180.55 | 11458 | 11489 | 31 | R | 80 | 16:45 | 17:00 | 0:15 | 23 | | 275 | 3550 | 4700 | 1150 | 124 | | 16000 | Pressure Limited |
| | | | | | | | | | | | | | | | | | | | | |
| 11497 | 90.19 | 180.97 | 0 | 11551 | 11551 | R | 60 | 16:30 | 16:45 | 0:15 | 14 | | 268 | 4050 | 4850 | 800 | 46204 | | 10000 | Pressure Limited |



Drilling Parameters

BHA # 5 Motor Type: WFT 4 3/4" 6770 Rig: H&P 307

Operator: Anadarko Motor Fit: -0.007 Start/End Dates: 2-24-13 /

Well Name: Dechant State 15C-1HZ Bit to Bend: 6.08 Bit Type/Description: 6 1/8" Security MMD54 5x16's

| Survey Depth | INC | AZI | Start Depth | End Depth | Feet | R or S | TF or RPM | Start Time | End Time | Drill Time | WOB 1000# | PU/SO/RW 1000# | GPM | PSI OFF | PSI ON | Diff PSI | ROP | Torque off | Torque on | Comment |
|-----------------|-------|--------|----------------|--------------|------|-----------|--------------|---------------|-------------|---------------|--------------|-------------------|-----|------------|-----------|-------------|-----|------------------------------|--------------|-----------------------|
| 11497 | 90.19 | 180.97 | 11551 | 11566 | 15 | S | 90L | 16:55 | 17:45 | 0:50 | 85 | | 265 | 3900 | 4350 | 450 | 18 | | 0 | Slide for anti-collis |
| 11588 | 89.57 | 179.96 | 11566 | 11642 | 76 | R | 60 | 17:45 | 18:05 | 0:20 | 12 | | 265 | 4200 | 4800 | 600 | 228 | | 10000 | |
| | | | 11642 | 11655 | 13 | S | 70 L | 18:15 | 19:05 | 0:50 | 15 | | 265 | 3900 | 4100 | 200 | 16 | | 0 | FOR TURN AND |
| 11680 | 89.26 | 179.03 | 11655 | 11734 | 79 | R | 45 | 19:05 | 19:35 | 0:30 | 16 | | 265 | 4200 | 4800 | 600 | 158 | | 10000 | |
| | | | 11734 | 11739 | 5 | R | 45 | 20:00 | 20:05 | 0:05 | 12 | | 265 | 3950 | 4100 | 150 | 60 | | 9460 | |
| | | | 11739 | 11754 | 15 | S | 50 L | 20:05 | 20:55 | 0:50 | 15 | | 265 | 3950 | 4100 | 150 | 18 | | 0 | R TURN AND BU |
| 11771 | 91.91 | 179.08 | 11754 | 11825 | 71 | R | 35 | 20:55 | 21:15 | 0:20 | 15 | | 265 | 4200 | 4800 | 600 | 213 | | 1100 | |
| | | | 11825 | 11830 | 5 | R | 35 | 21:30 | 21:35 | 0:05 | 12 | | 265 | 4200 | 4500 | 300 | 60 | | 9600 | |
| | | | 11830 | 11843 | 13 | S | 98 L | 21:45 | 22:30 | 0:45 | 15 | | 265 | 4100 | 4200 | 100 | 17 | E WE GOT A 1.79 DROP AND A 3 | | |
| 11862 | 90.12 | 175.50 | 11843 | 11916 | 73 | R | 60 | 22:30 | 22:45 | 0:15 | 12 | 218,92,147 | 265 | 4200 | 4800 | 600 | 292 | | 1200 | |
| 11954 | 89.69 | 174.27 | 11916 | 12008 | 92 | R | 45 | 0:20 | 0:45 | 0:25 | 19 | | 265 | 3600 | 4700 | 1100 | 221 | | 1100 | |
| | | | 12008 | 12013 | 5 | R | 45 | 1:15 | 1:25 | 0:10 | 14 | | 265 | 4200 | 4800 | 600 | 30 | | 1050 | |
| | | | 12013 | 12026 | 13 | S | 90 R | 1:35 | 2:25 | 0:50 | 10 | | 265 | 3900 | 4000 | 100 | 16 | SLID FOR TURN BACK TO | | |
| 12045 | 90.19 | 177.89 | 12026 | 12099 | 73 | R | 55 | 2:25 | 2:45 | 0:20 | 14 | | 265 | 4200 | 4800 | 600 | 219 | | 10800 | |
| | | | 12099 | 12104 | 5 | R | 55 | 3:45 | 3:55 | 0:10 | 14 | | 265 | 3900 | 4500 | 600 | 30 | | 10800 | |
| | | | 12104 | 12111 | 7 | S | 110 R | 4:05 | 4:35 | 0:30 | 27 | | 265 | 3900 | 4050 | 150 | 14 | | | |
| 12137 | 88.52 | 179.06 | 12111 | 12191 | 80 | R | 55 | 4:35 | 4:55 | 0:20 | 15 | | 265 | 4100 | 4800 | 700 | 240 | | 11216 | |
| | | | 12191 | 12196 | 5 | R | 55 | 5:20 | 5:30 | 0:10 | 15 | | 265 | 4200 | 4500 | 300 | 30 | | 11000 | |
| | | | 12196 | 12203 | 7 | S | 75 R | 5:40 | 6:05 | 0:25 | 15 | | 265 | 3900 | 4150 | 250 | 17 | | 0 | |
| 12232 | 87.28 | 178.12 | 12203 | 12286 | 83 | R | 55 | 6:05 | 6:30 | 0:25 | 15 | | 265 | 4200 | 4800 | 600 | 199 | | 11053 | Pressure Limited |
| | | | 12286 | 12301 | 15 | S | 30R | 6:30 | 7:00 | 0:30 | 90 | | 265 | 3800 | 4800 | 1000 | 30 | | 0 | Pressure Limited |
| 12326 | 86.98 | 174.88 | 12301 | 12380 | 79 | R | 55 | 7:40 | 8:15 | 0:35 | 20 | | 265 | 3800 | 4900 | 1100 | 135 | | 11200 | Pressure Limited |
| | | | 12380 | 12395 | 15 | S | 60R | 8:30 | 10:00 | 1:30 | 90 | 223, 92, 154 | 280 | 3800 | 4500 | 700 | 10 | 6500 | 0 | Pressure Limited |
| | | | 12395 | 12444 | 49 | R | 35 | 10:00 | 10:30 | 0:30 | 23 | | 265 | 3800 | 4900 | 1100 | 98 | | 13000 | Pressure Limited |
| | | | 12444 | 12453 | 9 | S | 60R | 10:30 | 11:20 | 0:50 | 90 | | 280 | 3800 | 4900 | 1100 | 11 | | 0 | Pressure Limited |



Drilling Parameters

BHA # 5 Motor Type: WFT 4 3/4" 6770 Rig: H&P 307
 Operator: Anadarko Motor Fit: -0.007 Start/End Dates: 2-24-13 /
 Well Name: Dechant State 15C-1HZ Bit to Bend: 6.08 Bit Type/Description: 6 1/8" Security MMD54 5x16's

| Survey Depth | INC | AZI | Start Depth | End Depth | Feet | R or S | TF or RPM | Start Time | End Time | Drill Time | WOB 1000# | PU/SO/RW 1000# | GPM | PSI OFF | PSI ON | Diff PSI | ROP | Torque off | Torque on | Comment |
|-----------------|-------|--------|----------------|--------------|------|-----------|--------------|---------------|-------------|---------------|--------------|-------------------|-----|------------|-----------|-------------|-----|---------------|--------------|--------------------|
| 12421 | 87.53 | 176.53 | 12453 | 12475 | 22 | R | 35 | 11:20 | 11:30 | 0:10 | 23 | | 265 | 3900 | 4900 | 1000 | 132 | | 13000 | Pressure Limited |
| 12484 | 87.29 | 177.57 | 12475 | 12538 | 63 | R | 35 | 11:50 | 12:10 | 0:20 | 24 | | 265 | 3900 | 4800 | 900 | 189 | | 11000 | Pressure Limited |
| | | | 12538 | 12553 | 15 | S | 30R | 12:20 | 13:10 | 0:50 | 95 | | 280 | 3900 | 4500 | 600 | 18 | | 0 | Pressure Limited |
| 12516 | 87.16 | 177.28 | 12553 | 12570 | 17 | R | 35 | 13:30 | 13:35 | 0:05 | 20 | | 265 | 3900 | 4900 | 1000 | 204 | | 10300 | Pressure Limited |
| 12579 | 88.21 | 177.56 | 12570 | 12633 | 63 | R | 35 | 13:45 | 13:50 | 0:05 | 15 | | 265 | 3900 | 4700 | 800 | 756 | | 10000 | Pressure Limited |
| 12579 | 88.21 | 177.56 | 12633 | 12643 | 10 | S | 60R | 14:05 | 14:15 | 0:10 | 90 | | 280 | 3900 | 4650 | 750 | 60 | | 0 | Pressure Limited |
| 12610 | 87.84 | 177.36 | 12643 | 12664 | 21 | R | 35 | 14:15 | 14:20 | 0:05 | 24 | | 265 | 3900 | 4900 | 1000 | 252 | | 11500 | Pressure Limited |
| | | | 12664 | 12674 | 10 | R | 35 | 14:30 | 14:40 | 0:10 | 23 | | 265 | 3900 | 4900 | 1000 | 60 | | 11500 | Pressure Limited |
| | | | 12674 | 12684 | 10 | S | 90 | 14:40 | 15:00 | 0:20 | 70 | | 280 | 3900 | 4700 | 800 | 30 | | 0 | Pressure Limited |
| | | | 12684 | 12727 | 43 | R | 35 | 15:00 | 15:25 | 0:25 | 35 | | 265 | 3950 | 4900 | 950 | 103 | | 12400 | Pressure Limited |
| | | | 12727 | 12747 | 20 | S | 70 | 15:20 | 16:20 | 1:00 | 70 | | 280 | 3950 | 4650 | 700 | 20 | | 0 | Carlisle Formation |
| | | | 12747 | 12759 | 12 | R | 35 | 16:20 | 16:30 | 0:10 | 20 | | 265 | 3700 | 4220 | 520 | 72 | | 8000 | Pressure Limited |
| 12705 | 89.08 | 179.60 | 12759 | 12822 | 63 | R | 60 | 16:40 | 17:10 | 0:30 | 20 | | 265 | 3700 | 4250 | 550 | 126 | | 8000 | Pressure Limited |
| 12768 | 90.49 | 179.58 | 12822 | 12834 | 12 | S | 60 R | 17:55 | 18:10 | 0:15 | 50 | | 280 | 3900 | 4700 | 800 | 48 | | 0 | Pressure Limited |
| | | | 12834 | 12854 | 20 | R | 60 | 18:10 | 18:15 | 0:05 | 20 | | 265 | 4150 | 4800 | 650 | 240 | | 10400 | Pressure Limited |
| | | | 12854 | 12864 | 10 | S | 65 R | 18:40 | 19:00 | 0:20 | 10 | | 280 | 4200 | 4500 | 300 | 30 | | | Pressure Limited |
| 12894 | 92.10 | 183.72 | 12864 | 12948 | 84 | R | 60 | 19:15 | 19:25 | 0:10 | 20 | | 265 | 4150 | 4800 | 650 | 504 | | 1200 | Pressure Limited |
| 12989 | 91.42 | 183.39 | 12948 | 13043 | 95 | R | 60 | 20:05 | 20:25 | 0:20 | 18 | | 265 | 4280 | 4755 | 475 | 285 | | 1210 | Pressure Limited |
| | | | 13043 | 13055 | 12 | S | 60 R | 20:40 | 21:00 | 0:20 | 12 | | 280 | 4500 | 4700 | 200 | 36 | | | Pressure Limited |
| 13083 | 92.04 | 185.59 | 13055 | 13137 | 82 | R | 60 | 21:00 | 21:10 | 0:10 | 18 | | 265 | 4135 | 4750 | 615 | 492 | | 12600 | Pressure Limited |
| 13178 | 91.23 | 184.62 | 13137 | 13232 | 95 | R | 60 | 21:35 | 22:05 | 0:30 | 18 | | 265 | 4145 | 4745 | 600 | 190 | | 12000 | Pressure Limited |
| 13272 | 87.41 | 180.03 | 13232 | 13326 | 94 | R | 60 | 22:10 | 22:30 | 0:20 | 18 | | 265 | 4150 | 4750 | 600 | 282 | | 12100 | Pressure Limited |
| | | | 13326 | 13338 | 12 | S | 55 R | 23:45 | 0:20 | 0:35 | 15 | | 280 | 4200 | 4400 | 200 | 21 | | | Pressure Limited |
| 13367 | 87.16 | 181.60 | 13338 | 13421 | 83 | R | 60 | 0:20 | 0:35 | 0:15 | 20 | | 265 | 3987 | 4761 | 774 | 332 | | 14746 | Pressure Limited |
| | | | 13421 | 13436 | 15 | S | 55 R | 1:20 | 2:20 | 1:00 | 15 | | 280 | 4100 | 4200 | 100 | 15 | | | Pressure Limited |



Drilling Parameters

BHA # 5 Motor Type: WFT 4 3/4" 6770 Rig: H&P 307
 Operator: Anadarko Motor Fit: -0.007 Start/End Dates: 2-24-13 /
 Well Name: Dechant State 15C-1HZ Bit to Bend: 6.08 Bit Type/Description: 6 1/8" Security MMD54 5x16's

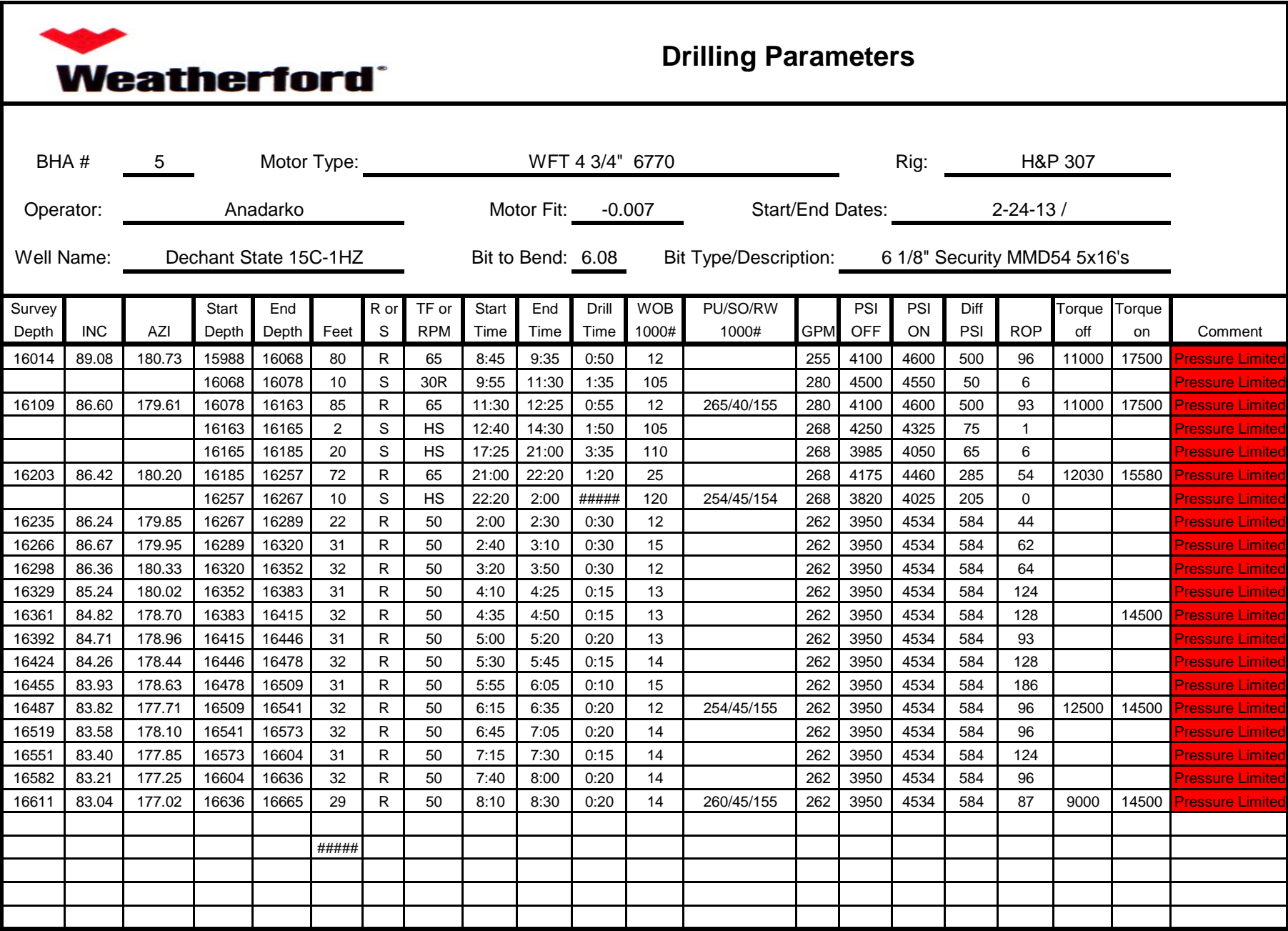
| Survey Depth | INC | AZI | Start Depth | End Depth | Feet | R or S | TF or RPM | Start Time | End Time | Drill Time | WOB 1000# | PU/SO/RW 1000# | GPM | PSI OFF | PSI ON | Diff PSI | ROP | Torque off | Torque on | Comment |
|-----------------|-------|--------|----------------|--------------|------|-----------|--------------|---------------|-------------|---------------|--------------|-------------------|-----|------------|-----------|-------------|------|---------------|--------------|------------------|
| 13462 | 87.96 | 182.50 | 13436 | 13516 | 80 | R | 60 | 2:20 | 2:40 | 0:20 | 19 | | 265 | 4000 | 4657 | 657 | 240 | | 14000 | Pressure Limited |
| | | | 13516 | 13531 | 15 | S | 35 R | 3:05 | 3:45 | 0:40 | 15 | | 280 | 4100 | 4200 | 100 | 23 | | | Pressure Limited |
| 13556 | 89.01 | 184.83 | 13531 | 13610 | 79 | R | 60 | 3:45 | 4:00 | 0:15 | 18 | | 265 | 3876 | 4750 | 874 | 316 | | 14000 | Pressure Limited |
| | | | 13610 | 13620 | 10 | S | 40 L | 4:35 | 5:45 | 1:10 | 15 | | 265 | 4000 | 4100 | 100 | 9 | | | Pressure Limited |
| 13651 | 89.14 | 183.85 | 13620 | 13705 | 85 | R | 35 | 5:45 | 5:50 | 0:05 | 25 | | 265 | 4000 | 4600 | 600 | 1020 | | 7400 | Pressure Limited |
| | | | 13705 | 13720 | 15 | S | 45L | 6:45 | 7:05 | 0:20 | 85 | | 280 | 3800 | 4400 | 600 | 45 | | 0 | Pressure Limited |
| | | | 13720 | 13799 | 79 | R | 40 | 7:05 | 0:00 | 16:55 | 18 | | 265 | 3800 | 4800 | 1000 | 0 | | 11500 | Pressure Limited |
| 13745 | 90.74 | 183.93 | 13799 | 13809 | 10 | R | 40 | 7:40 | 7:50 | 0:10 | 15 | | 265 | 3800 | 4850 | 1050 | 60 | | 11000 | Pressure Limited |
| | | | 13809 | 13829 | 20 | S | 90L | 7:50 | 9:10 | 1:20 | 85 | | 280 | 3800 | 4400 | 600 | 15 | | 0 | Pressure Limited |
| 13840 | 90.55 | 181.88 | 13829 | 13894 | 65 | R | 40 | 9:10 | 9:30 | 0:20 | 22 | | 265 | 3850 | 4850 | 1000 | 195 | | 14000 | Pressure Limited |
| 13935 | 89.75 | 181.27 | 13894 | 13989 | 95 | R | 60 | 9:40 | 10:00 | 0:20 | 22 | | 265 | 3850 | 4850 | 1000 | 285 | | 14000 | Pressure Limited |
| 14029 | 88.58 | 180.10 | 13989 | 14083 | 94 | R | HS | 10:10 | 10:45 | 0:35 | 90 | | 265 | 3900 | 4800 | 900 | 161 | | 1400 | Pressure Limited |
| | | | 14083 | 14097 | 14 | S | HS | 10:45 | 12:40 | 1:55 | 51 | | 265 | 3900 | 4800 | 900 | 7 | | 14000 | Pressure Limited |
| 14124 | 88.89 | 181.37 | 14097 | 14178 | 81 | R | 60 | 12:40 | 13:00 | 0:20 | 52 | | 265 | 3900 | 4800 | 900 | 243 | | 14000 | Pressure Limited |
| | | | 14178 | 14193 | 15 | S | 35L | 15:30 | 16:30 | 1:00 | 85 | 244/80/154 | 265 | 3900 | 4800 | 900 | 15 | 6800 | 0 | Pressure Limited |
| 14219 | | | 14193 | 14273 | 80 | R | 60 | 16:30 | 17:00 | 0:30 | 25 | | 265 | 3900 | 4800 | 900 | 160 | | 15000 | Pressure Limited |
| | | | 14273 | 14293 | 20 | S | HS | 8:20 | 9:05 | 0:45 | 90 | | 280 | 3700 | 4400 | 700 | 27 | | 0 | Pressure Limited |
| | | | 14293 | 14367 | 74 | R | 50 | 9:05 | 9:35 | 0:30 | 23 | | 265 | 3700 | 4700 | 1000 | 148 | | 15000 | Pressure Limited |
| 14408 | 90.56 | 179.20 | 14367 | 14462 | 95 | R | 50 | 9:35 | 9:55 | 0:20 | 23 | | 265 | 3700 | 4700 | 1000 | 285 | | 15000 | Pressure Limited |
| 14503 | 87.90 | 178.00 | 14462 | 14557 | 95 | R | 40 | 10:05 | 10:35 | 0:30 | 23 | | 265 | 3700 | 4700 | 1000 | 190 | | 16000 | Pressure Limited |
| | | | 14557 | 14573 | 16 | S | HS | 10:45 | 13:10 | 2:25 | 95 | | 280 | 3700 | 4300 | 600 | 7 | | 0 | Pressure Limited |
| 14597 | 88.03 | 177.46 | 14573 | 14651 | 78 | R | 35 | 13:10 | 13:35 | 0:25 | 30 | | 265 | 3700 | 4700 | 1000 | 187 | | 16000 | Pressure Limited |
| | | | 14651 | 14671 | 20 | S | 30R | 13:50 | 14:55 | 1:05 | 95 | | 280 | 3751 | 4400 | 649 | 18 | | 0 | Pressure Limited |
| 14692 | 90.12 | 176.93 | 14671 | 14756 | 85 | R | 35 | 14:55 | 15:20 | 0:25 | 30 | | 265 | 3750 | 4700 | 950 | 204 | | 15000 | Pressure Limited |
| | | | 14756 | 14776 | 20 | S | 60R | 15:40 | 17:00 | 1:20 | 95 | | 280 | 3800 | 4450 | 650 | 15 | | 0 | Pressure Limited |



Drilling Parameters

BHA # 5 Motor Type: WFT 4 3/4" 6770 Rig: H&P 307
 Operator: Anadarko Motor Fit: -0.007 Start/End Dates: 2-24-13 /
 Well Name: Dechant State 15C-1HZ Bit to Bend: 6.08 Bit Type/Description: 6 1/8" Security MMD54 5x16's

| Survey Depth | INC | AZI | Start Depth | End Depth | Feet | R or S | TF or RPM | Start Time | End Time | Drill Time | WOB 1000# | PU/SO/RW 1000# | GPM | PSI OFF | PSI ON | Diff PSI | ROP | Torque off | Torque on | Comment |
|-----------------|-------|--------|----------------|--------------|------|-----------|--------------|---------------|-------------|---------------|--------------|-------------------|-----|------------|-----------|-------------|-----|---------------|--------------|------------------|
| 14786 | 91.85 | 178.43 | 14776 | 14840 | 64 | R | 60 | 17:00 | 17:20 | 0:20 | 30 | 295, 52, 153 | 265 | 3850 | 4900 | 1050 | 192 | 8000 | 16400 | Pressure Limited |
| 14881 | 90.93 | 177.79 | 14840 | 14935 | 95 | R | 50 | 17:40 | 18:20 | 0:40 | 25 | | 265 | 3850 | 4800 | 950 | 143 | | 15000 | Pressure Limited |
| 14975 | 90.86 | 178.33 | 14935 | 15029 | 94 | R | 50 | 18:20 | 18:50 | 0:30 | 24 | | 287 | 3900 | 4850 | 950 | 188 | | 15350 | Pressure Limited |
| 15070 | 90.31 | 178.85 | 15029 | 15124 | 95 | R | 50 | 18:50 | 19:25 | 0:35 | 25 | | 287 | 3900 | 4800 | 900 | 163 | | 15400 | Pressure Limited |
| 15165 | 89.26 | 177.43 | 15124 | 15219 | 95 | R | 50 | 19:25 | 19:55 | 0:30 | 25 | | 287 | 3925 | 4875 | 950 | 190 | | 15250 | Pressure Limited |
| | | | 15219 | 15235 | 16 | S | 30R | 19:55 | 23:45 | 3:50 | 98 | 244, 80, 154 | 287 | 3900 | 4550 | 650 | 4 | 7000 | 0 | Pressure Limited |
| 15257 | 88.09 | 175.39 | 15235 | 15311 | 76 | R | 70 | 9:00 | 9:20 | 0:20 | 15 | | 261 | 3900 | 4600 | 700 | 228 | 7000 | 14400 | Pressure Limited |
| | | | 15311 | 15326 | 15 | S | 30R | 10:40 | 11:00 | 0:20 | 100 | | | | | | 45 | | | Pressure Limited |
| 15352 | 88.52 | 175.15 | 15326 | 15406 | 80 | R | 85 | 11:00 | 11:30 | 0:30 | 15 | 255,60,156 | 250 | 3900 | 4800 | 900 | 160 | | | Pressure Limited |
| | | | 15406 | 15421 | 15 | S | 60R | 11:45 | 13:00 | 1:15 | 100 | | | 4300 | 4500 | 200 | 12 | | | Pressure limited |
| | | | 15421 | 15483 | 62 | R | R | 13:00 | 13:20 | 0:20 | 15 | | | | | | 186 | | | Pressure limited |
| 15446 | 88.58 | 175.42 | 15483 | 15500 | 17 | S | 80R | 13:20 | 14:45 | 1:25 | 100 | | 285 | 4300 | 4500 | 200 | 12 | 8000 | 15000 | Pressure limited |
| | | | 15500 | 15550 | 50 | R | 85 | 14:45 | 15:20 | 0:35 | 25 | | 285 | 4350 | 4580 | 230 | 86 | | 15420 | Pressure limited |
| | | | 15550 | 15575 | 25 | S | 30R | 15:20 | 18:20 | 3:00 | 95 | | 255 | 4050 | 4775 | 725 | 8 | | | Pressure limited |
| | | | 15575 | 15595 | 20 | R | 85 | 18:20 | 18:40 | 0:20 | 25 | | 255 | 4025 | 4800 | 775 | 60 | | 14950 | Pressure limited |
| 15541 | 88.15 | 176.35 | 15595 | 15629 | 34 | R | 85 | 18:40 | 19:10 | 0:30 | 25 | | 255 | 4100 | 4725 | 625 | 68 | | 15250 | Pressure limited |
| | | | 15629 | 15644 | 15 | S | 30R | 19:10 | 21:20 | 2:10 | 100 | | 255 | 3980 | 4100 | 120 | 7 | | | Pressure limited |
| | | | 15644 | 15690 | 46 | R | 85 | 21:20 | 22:40 | 1:20 | 25 | | 255 | 4250 | 4825 | 575 | 34 | | 15520 | Pressure limited |
| 15636 | 87.96 | 179.18 | 15690 | 15710 | 20 | S | 30R | 22:40 | 1:00 | ##### | 100 | | 255 | 3850 | 4000 | 150 | -1 | | | Pressure limited |
| 15730 | 88.40 | 180.25 | 15710 | 15784 | 74 | R | 70 | 1:00 | 1:20 | 0:20 | 25 | | 255 | 4175 | 4850 | 675 | 222 | | 15820 | Pressure limited |
| | | | 15784 | 15799 | 15 | S | 20R | 1:20 | 3:40 | 2:20 | 95 | | 255 | 3820 | 4050 | 230 | 6 | | | Pressure limited |
| 15825 | 88.21 | 181.28 | 15799 | 15879 | 80 | R | 70 | 3:40 | 4:10 | 0:30 | 25 | 235/40/153 | 255 | 4200 | 4775 | 575 | 160 | 10150 | 15250 | Pressure Limited |
| | | | 15879 | 15894 | 15 | S | HS | 4:10 | 6:30 | 2:20 | 100 | | 255 | 4150 | 4325 | 175 | 6 | | | Pressure Limited |
| 15919 | 88.95 | 181.14 | 15894 | 15973 | 79 | R | 65 | 6:30 | 7:00 | 0:30 | 18 | 235/40/155 | 255 | 4100 | 4800 | 700 | 158 | 10150 | 16000 | Pressure Limited |
| | | | 15973 | 15988 | 15 | S | 65 | 7:15 | 8:45 | 1:30 | 105 | | 255 | 4100 | 4200 | 100 | 10 | | | Pressure Limited |





ADDITIONAL REPORTS



Job: 4028454
Well: Dechant State 15C-1HZ
Run: 03
Incident: FR-03

Incident Count: 1
Total Lost Time: 21.00
Start Run Date: 2/24/2013 3:25:00PM
End Run Date: 2/25/2013 12:45:00PM

Down Hole

Job Information

Company: Anadarko
Region: North America
District: Casper
Field: Wattenburg
Coordinator Name: Tyler Cluff
Rig Phone: 307-851-0588
Service Type:
Surface System: Spectrum

Engineers On Duty

| <u>Lead</u> | <u>Last Name</u> | <u>First Name</u> | <u>Description</u> |
|-------------|------------------|-------------------|--------------------|
| | Danna | Anthony | LWD Lead Engineer |
| | Colter | Scott | MWD Lead Engineer |

Reason for POOH

POOH to replace failed IDS.

Hydraulics

Drilling Parameters

Mud Parameters

| | | | | | | | |
|---------------------------|---------|-----|------------------------|------|---------|--------------------------|-----------|
| <u>Δ P Total:</u> | 856.7 | psi | <u>RPM:</u> | | | <u>Mud Type:</u> | Oil Base |
| <u>Max Oper Pressure:</u> | 4397.92 | psi | <u>Weight on Bit:</u> | 35 | klb | <u>Mud Weight:</u> | 9.5 ppg |
| <u>TFA:</u> | 0.98 | in2 | <u>Flow Rate:</u> | 295 | gpm | <u>Funnel Viscosity:</u> | 74 sec/qt |
| <u>Max Obs Pressure:</u> | 0 | psi | <u>Under Balanced:</u> | No | | <u>Oil %:</u> | 58.8 |
| <u>Max Hyd Pressure:</u> | 3541.22 | psi | <u>Gas Flow Rate:</u> | 0 | ft3/min | <u>Water %:</u> | 32.2 |
| <u>Pulse Amplitude:</u> | 15 | psi | <u>Torque:</u> | 9500 | ft-lbs | <u>Solid %:</u> | 9 |
| <u>Orifice Size:</u> | 0 | deg | | | | <u>Sand %:</u> | 1 |
| | | | | | | <u>pH:</u> | 0 |

**Weatherford**

PERCEIVED PROBLEM REPORT

| | | | | | | | |
|--|------------------|-----------------------|------------------------|---------------------------|--------------------|--------------|---------|
| Customer/Rig: | Anadarko/H&P 307 | | Well Name: | DECHANT STATE 15C-1HZ | | | |
| Job #: | 4028454 | | Lead DD: | Josh Monroe | | | |
| Perceived Problem Date: | 2/27/2013 | | 2nd DD: | Charles Apodaca | | | |
| Run/BHA #: | 4 | Hole Size: | 6.125 | Motor Size: | 5" | Lobe Config: | 6/7lobe |
| Motor Serial #: | 475-41095 | Bit to Bend: | 5.74 | Bend Housing Setting: | 1.5 | | |
| Bearing PK Config(Slick/Sleeve/KP/Stab): | Sleeve | | KP/Stab Size: | NA | Max DogLeg: | 9 | |
| Bit Type (Make/Model): | Security MMD54 | | Bit Grade: | 1-Jan | | | |
| Mud Type: | Oil Based | Chlorides: | | Oil %: | 56 | Mud Wt/Vis: | 10.0/75 |
| Solids/Sand: | 3.7/0 | Max Temp: | 239 | Flow Rate(Max/Min/Avg): | 300 -275-275 | | |
| String RPM's(Max/Min/Avg): | 80-45-70 | | Differential(Max/Avg): | 1300 | | | |
| Start Inc: | 86 | End Inc: | 90 | Depth In: | 7,414 | Depth Out: | 11,456 |
| Footage Drilled: | 4,042 | Total Drilling Hours: | 27.17 | Total Customer NPT (Hrs): | 24 hrs / Estimated | | |

Comments (Performance and operations data prior to problem, Downhole Symptoms, Downhole Corrective Actions, Surface findings/Tests, etc):

Prior to possible motor failure there was no noticeable signs that the motor was getting weak or in a possible failing stage. We experienced maximum pump pressure which was limiting us on gpm from the very beginning of this well. It was odd that the agitator seemed very weak and was not performing or helping with sliding as sliding became difficult and was very problematic to transfer weight to the bit. The torque was getting high close to 17000 ft-lbf. A weighted sweep was pumped downhole to try to clean the hole and reduce torque. Once the sweep was 300 stks from hitting the bit we had a large increase in pump pressure (5770 psi) as well as diff pressure (2225 psi) as the sweep passed through the agitator. After the pressure went back to normal we went back to drilling and we couldn't drill more than 6' per hour. At this point there was noticeable stator rubber coming over the shakers. The decision was made to POOH. Once on surface there was no noticeable problems. The motor looked good with no play and zero squat in it. One of the jets on the bit were plugged with rubber. The agitator was inspected as well and there was no noticeable problems with it either. We looked for rubber in the pipescreen as well as the junk basket on the LWD and nothing was found, indicating that the rubber was probably not from the shock sub and agitator but most likely came from the motor. Also the rotating head rubber was inspected and was in bad shape. Large chunks of rubber was missing from that as well.

Failure Data

Tool #: *NW130438BI4.75*

Incident Date: 2/25/2013 5:00:00 AM

Component: IDS

TFF: Yes

Serial Number: 23131

Cl: Yes

Lost Time: 21.00

Incident Parameters

| | | |
|------------------------|------|-----|
| <u>Depth MD:</u> | 7550 | |
| <u>Depth TVD:</u> | 7063 | ft |
| <u>Oper Pressure:</u> | 2900 | ft |
| <u>Temperature:</u> | 154 | psi |
| <u>Mud Weight:</u> | 9.5 | F |
| <u>Flow Rate:</u> | 300 | ppg |
| <u>Sand %:</u> | 1 | |
| <u>Lcm:</u> | 0 | |
| <u>Lcm Type Grade:</u> | | |
| <u>WOB:</u> | 35 | |
| <u>Torque:</u> | 9500 | klb |
| <u>RPM:</u> | 65 | |

Failure Description:

RE: 4028454_Anadarko_Dechant State 15C-1HZ_H&P 307_FR03 [FINAL]

Attachments: CORE FR03 PDF/ XML & CM/PDS/Pulser downloads

Tool String Components:

HEL: NW130436PDBB4.75-M1

MFR: NW130437RBBK4.75

Split IDS: NW130438BI4.75

SAGR: NW130439JB4.75

Suspected Failed Components

Split IDS: NW130438BI4.75

IDS SN: 23131

Comm PIC: .12

Main Processor Version: .28

Revision: AK1

While Drilling Before Survey:

ROP: 300-400 FPH

WOB: 25-35 Klb

SPP: 3500-4500 psi

RPM: 65

Torque: 7000-9500 ft lb

Flow: 260-305 GPM

Stroke Rate: 70-80 SPM

During Survey:

SPP: 2800-2900 psi

Flow: 270

Stroke Rate: 70 SPM on Pump 1 only

TEMP: 154F

25FEB13 @ 0420

-Pick up off bottom @ 7550 Bit depth for survey.

- Tool is in Mode 1 / Freq 1

-Pumps on – Take Survey – “No Response” for Gx, Gy, Gz, Bx, By, Bz, STAB_1, SURVTEMP_1, ATF, INC_1, AZM_1, GTI, BTI.

-Watched RT data for a few minutes. Getting data from SAGR & MFR, All TF data including SAGRTFSTAT is “No Response”

25FEB13 @ 0450

-Recycle Pumps to toggle to Freq 2- See “No Response” for TF and Gx before pumps off.

25FEB13 @ 0505

-Pumps on after Freq Toggle.

-Excellent Detection

-“No Response” for Gx, Gy, Gz, Bx, By, Bz, STAB_1, SURVTEMP_1, ATF, INC_1, AZM_1, GTI, BTI.

25FEB13 @ 0510

-Contact coordinator

-Decision made to POOH for failed IDS

-Notified Company Man

Special Circumstances:

- Prior to final survey station where IDS failed TOTCO shows WOB spike of 89.5 Klb while making connection.

-Not sure if this is actual value or problem with sensor calibration.

ON SURFACE

25FEB13 @ 1920

-No abnormalities / damage seen on LWD collars

-Successfully Downloaded HAGR/MFR/SAGR/HEL

-Unable to establish comms with IDS via interconnect or EDP directly

-Applying bus power does not resolve the issue

-When applying bus power to IDS the UCB Logic Power indicator light goes out, indicating a possible short-circuit

LOST TIME:

Trip for Failure: YES

Client Impact: YES

Troubleshooting Tool: 1hr

Trip Out: 7.5 hrs

Lay down / Pick up BHA: 6 hrs

Trip In: 6.5 hrs

TOTAL LOST TIME: 21 hrs

Corrective Action:

POOH to replace IDS.