



Weatherford®

Weatherford International Ltd.

2000 Oil Drive

Casper, WY 82604

Survey Certification

| | |
|-----------------------------------|--------------------------|
| Operating Company: | Anadarko Petroleum Corp. |
| Well Name: | PALYO 14N-11HZ |
| State: | Colorado |
| County: | Weld |
| API Number: | 512335452 |
| 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 972.00 feet to the measured depth of 11,525.00 feet as accurate and true to the best of my knowledge.

Signature

6-Sep-12

Date

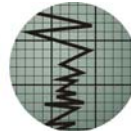
John Morgan

Directional Planning

Weatherford International - Rockies District



Weatherford®



FINAL SURVEYS.....SEC.1

DAILY ACTIVITY.....SEC.2

BHA REPORTS..... SEC.3

MOTOR REPORTS.....SEC.4

SLIDE REPORTSEC.5

Drilling Services-Denver, CO



FINAL SURVEYS

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_PALYO 29-11HZ Pad

Palyo 14N-11HZ

Palyo 14N-11HZ

Design: Palyo 14N-11HZ

Standard Survey Report

06 September, 2012

Anadarko Petroleum Corp

Survey Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well Palyo 14N-11HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Site: | WELD_PALYO 29-11HZ Pad | MD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Well: | Palyo 14N-11HZ | North Reference: | True |
| Wellbore: | Palyo 14N-11HZ | Survey Calculation Method: | Minimum Curvature |
| Design: | Palyo 14N-11HZ | Database: | edmp |

| | | | |
|--------------------|-----------------------------|----------------------|----------------|
| Project | COLORADO NORTHERN ZONE - 83 | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| | | | | |
|------------------------------|------------------------|---------------------|-------------------|---------------------------------|
| Site | WELD_PALYO 29-11HZ Pad | | | |
| Site Position: | | Northing: | 1,301,787.54 usft | Latitude: 40.158582 |
| From: | Lat/Long | Easting: | 3,241,120.73 usft | Longitude: -104.637307 |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13-3/16 " | Grid Convergence: 0.56 ° |

| | | | | |
|-----------------------------|----------------|---------|----------------------------|-------------------|
| Well | Palyo 14N-11HZ | | | |
| Well Position | +N/-S | 0.00 ft | Northing: | 1,301,787.52 usft |
| | +E/-W | 0.00 ft | Easting: | 3,241,120.73 usft |
| Position Uncertainty | 0.00 ft | | Wellhead Elevation: | ft |
| | | | Ground Level: | 4,854.00 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Palyo 14N-11HZ | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 2/16/2012 | 8.68 | 66.85 | 52,947 |

| | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------------|
| Design | Palyo 14N-11HZ | | | |
| Audit Notes: | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: 17.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 17.00 | 0.00 | 0.00 | 164.72 |

| | | | | |
|-----------------------|----------------|----------------------------|------------------|----------------------------------|
| Survey Program | Date | 9/4/2012 | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description |
| 117.00 | 842.00 | Survey #1 (Palyo 14N-11HZ) | NS-GYRO-MS | NORTH SENSING GYROCOMPASSING M/S |
| 972.00 | 11,525.00 | Survey #2 (Palyo 14N-11HZ) | MWD | MWD - STANDARD |

| | | | | | | | | | | |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|--------------------------------|-------------------------------|------------------------------|--|
| Survey | | | | | | | | | | |
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 17.00 | 0.00 | 0.00 | 17.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 117.00 | 0.45 | 265.55 | 117.00 | -0.03 | -0.39 | -0.07 | 0.45 | 0.45 | 0.00 | |
| 217.00 | 0.33 | 252.17 | 217.00 | -0.15 | -1.06 | -0.13 | 0.15 | -0.12 | -13.38 | |
| 317.00 | 0.29 | 308.88 | 317.00 | -0.08 | -1.53 | -0.33 | 0.30 | -0.04 | 56.71 | |
| 417.00 | 0.10 | 107.74 | 417.00 | 0.05 | -1.64 | -0.48 | 0.38 | -0.19 | 158.86 | |
| 517.00 | 0.11 | 244.88 | 517.00 | -0.01 | -1.65 | -0.42 | 0.20 | 0.01 | 137.14 | |
| 617.00 | 0.19 | 223.78 | 616.99 | -0.17 | -1.85 | -0.32 | 0.10 | 0.08 | -21.10 | |
| 717.00 | 0.11 | 227.67 | 716.99 | -0.36 | -2.03 | -0.19 | 0.08 | -0.08 | 3.89 | |
| 817.00 | 0.09 | 74.27 | 816.99 | -0.40 | -2.03 | -0.15 | 0.19 | -0.02 | -153.40 | |
| 842.00 | 0.21 | 347.51 | 841.99 | -0.35 | -2.02 | -0.19 | 0.89 | 0.48 | -347.04 | |

Anadarko Petroleum Corp

Survey Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well Palyo 14N-11HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Site: | WELD_PALYO 29-11HZ Pad | MD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Well: | Palyo 14N-11HZ | North Reference: | True |
| Wellbore: | Palyo 14N-11HZ | Survey Calculation Method: | Minimum Curvature |
| Design: | Palyo 14N-11HZ | Database: | edmp |

| Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|-----------|-----------|-----------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N-S (ft) | +E-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| TIE ON | | | | | | | | | |
| 972.00 | 0.14 | 256.90 | 971.99 | -0.16 | -2.23 | -0.44 | 0.20 | -0.05 | -69.70 |
| FIRST MWD SURVEY | | | | | | | | | |
| 1,065.00 | 0.14 | 291.05 | 1,064.99 | -0.14 | -2.44 | -0.51 | 0.09 | 0.00 | 36.72 |
| 1,159.00 | 0.16 | 329.40 | 1,158.99 | 0.01 | -2.62 | -0.70 | 0.11 | 0.02 | 40.80 |
| 1,252.00 | 0.00 | 242.83 | 1,251.99 | 0.13 | -2.68 | -0.83 | 0.17 | -0.17 | 0.00 |
| 1,346.00 | 0.00 | 96.91 | 1,345.99 | 0.13 | -2.68 | -0.83 | 0.00 | 0.00 | 0.00 |
| 1,439.00 | 0.25 | 335.79 | 1,438.99 | 0.31 | -2.77 | -1.03 | 0.27 | 0.27 | 0.00 |
| 1,524.00 | 1.54 | 100.98 | 1,523.98 | 0.26 | -1.72 | -0.71 | 2.00 | 1.52 | 147.28 |
| 1,610.00 | 4.89 | 69.39 | 1,609.84 | 1.33 | 2.85 | -0.54 | 4.26 | 3.90 | -36.73 |
| 1,695.00 | 6.99 | 65.28 | 1,694.38 | 4.77 | 10.94 | -1.72 | 2.52 | 2.47 | -4.84 |
| 1,780.00 | 8.37 | 71.86 | 1,778.62 | 8.86 | 21.51 | -2.88 | 1.92 | 1.62 | 7.74 |
| 1,866.00 | 9.40 | 73.59 | 1,863.58 | 12.79 | 34.20 | -3.33 | 1.24 | 1.20 | 2.01 |
| 1,951.00 | 10.52 | 71.57 | 1,947.30 | 17.21 | 48.22 | -3.89 | 1.38 | 1.32 | -2.38 |
| 2,037.00 | 9.28 | 68.90 | 2,032.02 | 22.19 | 62.14 | -5.02 | 1.54 | -1.44 | -3.10 |
| 2,122.00 | 10.33 | 66.19 | 2,115.78 | 27.73 | 75.51 | -6.85 | 1.35 | 1.24 | -3.19 |
| 2,207.00 | 11.39 | 67.09 | 2,199.25 | 34.07 | 90.21 | -9.09 | 1.26 | 1.25 | 1.06 |
| 2,293.00 | 13.05 | 67.76 | 2,283.30 | 41.06 | 107.02 | -11.40 | 1.94 | 1.93 | 0.78 |
| 2,378.00 | 14.57 | 66.33 | 2,365.84 | 48.98 | 125.70 | -14.12 | 1.83 | 1.79 | -1.68 |
| 2,464.00 | 14.87 | 66.59 | 2,449.02 | 57.71 | 145.73 | -17.26 | 0.36 | 0.35 | 0.30 |
| 2,549.00 | 15.02 | 71.66 | 2,531.15 | 65.51 | 166.19 | -19.39 | 1.55 | 0.18 | 5.96 |
| 2,634.00 | 16.26 | 73.12 | 2,613.00 | 72.43 | 188.04 | -20.31 | 1.53 | 1.46 | 1.72 |
| 2,720.00 | 14.95 | 71.31 | 2,695.83 | 79.48 | 210.07 | -21.30 | 1.62 | -1.52 | -2.10 |
| 2,805.00 | 15.72 | 75.88 | 2,777.81 | 85.80 | 231.62 | -21.72 | 1.69 | 0.91 | 5.38 |
| 2,891.00 | 14.70 | 75.10 | 2,860.79 | 91.45 | 253.46 | -21.41 | 1.21 | -1.19 | -0.91 |
| 2,976.00 | 13.28 | 73.66 | 2,943.27 | 96.97 | 273.26 | -21.52 | 1.72 | -1.67 | -1.69 |
| 3,062.00 | 14.68 | 71.87 | 3,026.72 | 103.14 | 293.09 | -22.24 | 1.70 | 1.63 | -2.08 |
| 3,147.00 | 12.72 | 68.71 | 3,109.30 | 109.89 | 312.05 | -23.76 | 2.47 | -2.31 | -3.72 |
| 3,233.00 | 12.14 | 66.60 | 3,193.28 | 116.92 | 329.17 | -26.03 | 0.86 | -0.67 | -2.45 |
| 3,318.00 | 13.36 | 68.03 | 3,276.19 | 124.14 | 346.48 | -28.43 | 1.48 | 1.44 | 1.68 |
| 3,403.00 | 12.31 | 65.67 | 3,359.06 | 131.55 | 363.84 | -31.00 | 1.38 | -1.24 | -2.78 |
| 3,489.00 | 13.67 | 65.78 | 3,442.86 | 139.50 | 381.47 | -34.02 | 1.58 | 1.58 | 0.13 |
| 3,574.00 | 16.50 | 66.55 | 3,524.92 | 148.42 | 401.70 | -37.30 | 3.34 | 3.33 | 0.91 |
| 3,660.00 | 16.93 | 67.02 | 3,607.29 | 158.17 | 424.44 | -40.71 | 0.52 | 0.50 | 0.55 |
| 3,745.00 | 15.05 | 68.23 | 3,689.00 | 167.10 | 446.08 | -43.61 | 2.25 | -2.21 | 1.42 |
| 3,830.00 | 14.55 | 66.26 | 3,771.18 | 175.49 | 466.10 | -46.43 | 0.83 | -0.59 | -2.32 |
| 3,915.00 | 16.37 | 68.55 | 3,853.10 | 184.17 | 487.03 | -49.29 | 2.26 | 2.14 | 2.69 |
| 4,001.00 | 17.73 | 71.19 | 3,935.32 | 192.82 | 510.70 | -51.40 | 1.82 | 1.58 | 3.07 |
| 4,086.00 | 17.09 | 71.46 | 4,016.42 | 200.97 | 534.80 | -52.90 | 0.76 | -0.75 | 0.32 |
| 4,171.00 | 14.37 | 69.81 | 4,098.23 | 208.58 | 556.54 | -54.52 | 3.24 | -3.20 | -1.94 |
| 4,257.00 | 14.13 | 69.11 | 4,181.59 | 216.01 | 576.37 | -56.46 | 0.34 | -0.28 | -0.81 |
| 4,342.00 | 15.64 | 69.04 | 4,263.73 | 223.81 | 596.76 | -58.60 | 1.78 | 1.78 | -0.08 |
| 4,427.00 | 15.48 | 68.52 | 4,345.62 | 232.06 | 618.01 | -60.96 | 0.25 | -0.19 | -0.61 |

Anadarko Petroleum Corp

Survey Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well Palyo 14N-11HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Site: | WELD_PALYO 29-11HZ Pad | MD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Well: | Palyo 14N-11HZ | North Reference: | True |
| Wellbore: | Palyo 14N-11HZ | Survey Calculation Method: | Minimum Curvature |
| Design: | Palyo 14N-11HZ | Database: | edmp |

| Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 4,513.00 | 16.14 | 68.13 | 4,428.36 | 240.71 | 639.79 | -63.57 | 0.78 | 0.77 | -0.45 |
| 4,598.00 | 15.03 | 66.71 | 4,510.24 | 249.47 | 660.88 | -66.46 | 1.38 | -1.31 | -1.67 |
| 4,683.00 | 16.02 | 67.75 | 4,592.13 | 258.27 | 681.86 | -69.42 | 1.21 | 1.16 | 1.22 |
| 4,769.00 | 14.35 | 67.52 | 4,675.13 | 266.84 | 702.69 | -72.20 | 1.94 | -1.94 | -0.27 |
| 4,854.00 | 11.62 | 66.87 | 4,757.95 | 274.23 | 720.30 | -74.69 | 3.22 | -3.21 | -0.76 |
| 4,940.00 | 11.66 | 68.82 | 4,842.18 | 280.77 | 736.36 | -76.76 | 0.46 | 0.05 | 2.27 |
| 5,025.00 | 11.56 | 68.63 | 4,925.44 | 286.98 | 752.30 | -78.55 | 0.13 | -0.12 | -0.22 |
| 5,110.00 | 12.30 | 73.26 | 5,008.60 | 292.69 | 768.91 | -79.68 | 1.42 | 0.87 | 5.45 |
| 5,196.00 | 15.24 | 78.32 | 5,092.13 | 297.62 | 788.75 | -79.20 | 3.69 | 3.42 | 5.88 |
| 5,281.00 | 14.70 | 72.56 | 5,174.25 | 303.11 | 809.98 | -78.91 | 1.86 | -0.64 | -6.78 |
| 5,367.00 | 14.33 | 67.91 | 5,257.50 | 310.39 | 830.26 | -80.58 | 1.42 | -0.43 | -5.41 |
| 5,452.00 | 15.24 | 68.77 | 5,339.69 | 318.39 | 850.42 | -82.98 | 1.10 | 1.07 | 1.01 |
| 5,538.00 | 15.08 | 68.47 | 5,422.70 | 326.59 | 871.36 | -85.37 | 0.21 | -0.19 | -0.35 |
| 5,623.00 | 14.61 | 67.87 | 5,504.86 | 334.68 | 891.58 | -87.86 | 0.58 | -0.55 | -0.71 |
| 5,708.00 | 15.42 | 67.87 | 5,586.96 | 342.98 | 911.97 | -90.48 | 0.95 | 0.95 | 0.00 |
| 5,794.00 | 15.56 | 73.76 | 5,669.84 | 350.51 | 933.64 | -92.04 | 1.84 | 0.16 | 6.85 |
| 5,879.00 | 15.30 | 71.64 | 5,751.77 | 357.23 | 955.23 | -92.83 | 0.73 | -0.31 | -2.49 |
| 5,965.00 | 15.40 | 67.97 | 5,834.71 | 365.09 | 976.58 | -94.78 | 1.14 | 0.12 | -4.27 |
| 6,050.00 | 15.64 | 66.33 | 5,916.61 | 373.92 | 997.54 | -97.78 | 0.59 | 0.28 | -1.93 |
| 6,136.00 | 15.00 | 65.89 | 5,999.55 | 383.12 | 1,018.32 | -101.18 | 0.76 | -0.74 | -0.51 |
| 6,221.00 | 16.32 | 62.03 | 6,081.40 | 393.22 | 1,038.91 | -105.49 | 1.98 | 1.55 | -4.54 |
| 6,307.00 | 15.56 | 67.26 | 6,164.10 | 403.35 | 1,060.22 | -109.64 | 1.89 | -0.88 | 6.08 |
| 6,392.00 | 15.50 | 63.22 | 6,245.99 | 412.87 | 1,080.87 | -113.38 | 1.27 | -0.07 | -4.75 |
| 6,478.00 | 14.70 | 71.39 | 6,329.03 | 421.53 | 1,101.47 | -116.31 | 2.64 | -0.93 | 9.50 |
| 6,521.00 | 15.18 | 87.80 | 6,370.60 | 423.49 | 1,112.28 | -115.35 | 9.87 | 1.12 | 38.16 |
| 6,564.00 | 15.89 | 98.38 | 6,412.04 | 422.85 | 1,123.73 | -111.71 | 6.78 | 1.65 | 24.60 |
| 6,606.00 | 18.82 | 98.26 | 6,452.12 | 421.04 | 1,136.12 | -106.70 | 6.98 | 6.98 | -0.29 |
| 6,649.00 | 22.28 | 95.70 | 6,492.38 | 419.23 | 1,151.10 | -101.01 | 8.31 | 8.05 | -5.95 |
| 6,692.00 | 24.28 | 104.12 | 6,531.89 | 416.26 | 1,167.79 | -93.75 | 9.02 | 4.65 | 19.58 |
| 6,735.00 | 26.00 | 113.55 | 6,570.83 | 410.34 | 1,185.01 | -83.49 | 10.13 | 4.00 | 21.93 |
| 6,777.00 | 27.26 | 123.69 | 6,608.39 | 401.32 | 1,201.47 | -70.45 | 11.22 | 3.00 | 24.14 |
| 6,820.00 | 28.15 | 129.70 | 6,646.47 | 389.37 | 1,217.47 | -54.72 | 6.82 | 2.07 | 13.98 |
| 6,863.00 | 30.25 | 136.82 | 6,684.01 | 374.99 | 1,232.69 | -36.83 | 9.43 | 4.88 | 16.56 |
| 6,905.00 | 32.80 | 141.19 | 6,719.82 | 358.41 | 1,247.06 | -17.04 | 8.15 | 6.07 | 10.40 |
| 6,948.00 | 35.54 | 152.08 | 6,755.42 | 338.26 | 1,260.23 | 5.86 | 15.56 | 6.37 | 25.33 |
| 6,991.00 | 38.55 | 162.82 | 6,789.78 | 314.39 | 1,270.05 | 31.48 | 16.57 | 7.00 | 24.98 |
| 7,034.00 | 43.58 | 171.59 | 6,822.21 | 286.89 | 1,276.19 | 59.62 | 17.76 | 11.70 | 20.40 |
| 7,077.00 | 48.34 | 172.95 | 6,852.10 | 256.26 | 1,280.33 | 90.25 | 11.30 | 11.07 | 3.16 |
| 7,119.00 | 52.93 | 173.52 | 6,878.73 | 224.03 | 1,284.15 | 122.36 | 10.98 | 10.93 | 1.36 |
| 7,162.00 | 58.18 | 174.93 | 6,903.04 | 188.76 | 1,287.70 | 157.31 | 12.50 | 12.21 | 3.28 |
| 7,205.00 | 62.34 | 178.57 | 6,924.38 | 151.50 | 1,289.79 | 193.81 | 12.15 | 9.67 | 8.47 |
| 7,248.00 | 66.40 | 179.98 | 6,942.97 | 112.74 | 1,290.27 | 231.32 | 9.89 | 9.44 | 3.28 |
| 7,290.00 | 71.64 | 181.28 | 6,958.01 | 73.54 | 1,289.83 | 269.02 | 12.81 | 12.48 | 3.10 |
| 7,333.00 | 77.60 | 183.20 | 6,969.41 | 32.14 | 1,288.20 | 308.53 | 14.51 | 13.86 | 4.47 |

Anadarko Petroleum Corp

Survey Report

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| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well Palyo 14N-11HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Site: | WELD_PALYO 29-11HZ Pad | MD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Well: | Palyo 14N-11HZ | North Reference: | True |
| Wellbore: | Palyo 14N-11HZ | Survey Calculation Method: | Minimum Curvature |
| Design: | Palyo 14N-11HZ | Database: | edmp |

| Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 7,375.00 | 84.05 | 183.99 | 6,976.10 | -9.22 | 1,285.60 | 347.74 | 15.47 | 15.36 | 1.88 |
| 7,485.00 | 88.83 | 182.46 | 6,982.93 | -118.80 | 1,279.43 | 451.82 | 4.56 | 4.35 | -1.39 |
| 7,528.00 | 88.77 | 182.44 | 6,983.83 | -161.75 | 1,277.60 | 492.77 | 0.15 | -0.14 | -0.05 |
| 7,613.00 | 90.79 | 181.79 | 6,984.16 | -246.69 | 1,274.46 | 573.88 | 2.50 | 2.38 | -0.76 |
| 7,698.00 | 90.99 | 181.52 | 6,982.84 | -331.64 | 1,272.00 | 655.18 | 0.40 | 0.24 | -0.32 |
| 7,784.00 | 91.48 | 182.05 | 6,980.98 | -417.58 | 1,269.33 | 737.37 | 0.84 | 0.57 | 0.62 |
| 7,869.00 | 91.73 | 182.56 | 6,978.60 | -502.48 | 1,265.91 | 818.37 | 0.67 | 0.29 | 0.60 |
| 7,954.00 | 91.30 | 183.49 | 6,976.35 | -587.33 | 1,261.42 | 899.04 | 1.21 | -0.51 | 1.09 |
| 8,040.00 | 92.22 | 183.78 | 6,973.71 | -673.11 | 1,255.97 | 980.35 | 1.12 | 1.07 | 0.34 |
| 8,125.00 | 90.37 | 182.62 | 6,971.79 | -757.95 | 1,251.23 | 1,060.94 | 2.57 | -2.18 | -1.36 |
| 8,210.00 | 90.79 | 181.09 | 6,970.93 | -842.90 | 1,248.48 | 1,142.16 | 1.87 | 0.49 | -1.80 |
| 8,296.00 | 90.99 | 176.37 | 6,969.59 | -928.85 | 1,250.39 | 1,225.57 | 5.49 | 0.23 | -5.49 |
| 8,381.00 | 89.57 | 169.44 | 6,969.18 | -1,013.14 | 1,260.88 | 1,309.65 | 8.32 | -1.67 | -8.15 |
| 8,464.00 | 90.00 | 168.40 | 6,969.49 | -1,094.59 | 1,276.83 | 1,392.42 | 1.36 | 0.52 | -1.25 |
| 8,551.00 | 91.79 | 170.52 | 6,968.13 | -1,180.11 | 1,292.74 | 1,479.11 | 3.19 | 2.06 | 2.44 |
| 8,637.00 | 92.22 | 173.79 | 6,965.12 | -1,265.24 | 1,304.47 | 1,564.32 | 3.83 | 0.50 | 3.80 |
| 8,722.00 | 92.78 | 179.43 | 6,961.41 | -1,349.97 | 1,309.49 | 1,647.38 | 6.66 | 0.66 | 6.64 |
| 8,808.00 | 91.50 | 183.03 | 6,958.20 | -1,435.88 | 1,307.64 | 1,729.76 | 4.44 | -1.49 | 4.19 |
| 8,893.00 | 90.26 | 183.38 | 6,956.89 | -1,520.73 | 1,302.89 | 1,810.36 | 1.52 | -1.46 | 0.41 |
| 8,979.00 | 89.75 | 183.12 | 6,956.89 | -1,606.59 | 1,298.02 | 1,891.90 | 0.67 | -0.59 | -0.30 |
| 9,064.00 | 89.51 | 184.06 | 6,957.43 | -1,691.42 | 1,292.69 | 1,972.33 | 1.14 | -0.28 | 1.11 |
| 9,150.00 | 90.80 | 184.01 | 6,957.20 | -1,777.21 | 1,286.64 | 2,053.49 | 1.50 | 1.50 | -0.06 |
| 9,235.00 | 89.88 | 182.45 | 6,956.70 | -1,862.07 | 1,281.85 | 2,134.09 | 2.13 | -1.08 | -1.84 |
| 9,321.00 | 90.86 | 182.21 | 6,956.14 | -1,947.99 | 1,278.36 | 2,216.05 | 1.17 | 1.14 | -0.28 |
| 9,406.00 | 90.92 | 182.85 | 6,954.82 | -2,032.90 | 1,274.61 | 2,296.97 | 0.76 | 0.07 | 0.75 |
| 9,491.00 | 89.51 | 181.76 | 6,954.50 | -2,117.83 | 1,271.19 | 2,377.99 | 2.10 | -1.66 | -1.28 |
| 9,577.00 | 89.75 | 181.39 | 6,955.06 | -2,203.79 | 1,268.82 | 2,460.29 | 0.51 | 0.28 | -0.43 |
| 9,662.00 | 90.49 | 183.26 | 6,954.88 | -2,288.72 | 1,265.38 | 2,541.31 | 2.37 | 0.87 | 2.20 |
| 9,748.00 | 90.79 | 184.79 | 6,953.92 | -2,374.50 | 1,259.34 | 2,622.46 | 1.81 | 0.35 | 1.78 |
| 9,833.00 | 89.65 | 183.91 | 6,953.59 | -2,459.25 | 1,252.89 | 2,702.52 | 1.69 | -1.34 | -1.04 |
| 9,919.00 | 90.31 | 183.18 | 6,953.62 | -2,545.09 | 1,247.58 | 2,783.92 | 1.14 | 0.77 | -0.85 |
| 10,004.00 | 91.60 | 183.80 | 6,952.21 | -2,629.91 | 1,242.40 | 2,864.38 | 1.68 | 1.52 | 0.73 |
| 10,089.00 | 90.86 | 184.13 | 6,950.38 | -2,714.69 | 1,236.53 | 2,944.61 | 0.95 | -0.87 | 0.39 |
| 10,175.00 | 91.29 | 184.45 | 6,948.77 | -2,800.43 | 1,230.09 | 3,025.63 | 0.62 | 0.50 | 0.37 |
| 10,260.00 | 91.54 | 185.15 | 6,946.67 | -2,885.11 | 1,222.98 | 3,105.44 | 0.87 | 0.29 | 0.82 |
| 10,346.00 | 89.57 | 184.17 | 6,945.84 | -2,970.82 | 1,216.00 | 3,186.27 | 2.56 | -2.29 | -1.14 |
| 10,431.00 | 88.89 | 184.57 | 6,946.98 | -3,055.56 | 1,209.52 | 3,266.31 | 0.93 | -0.80 | 0.47 |
| 10,517.00 | 88.21 | 183.86 | 6,949.15 | -3,141.30 | 1,203.20 | 3,347.35 | 1.14 | -0.79 | -0.83 |
| 10,602.00 | 89.20 | 183.58 | 6,951.08 | -3,226.10 | 1,197.69 | 3,427.70 | 1.21 | 1.16 | -0.33 |
| 10,688.00 | 88.95 | 183.24 | 6,952.46 | -3,311.93 | 1,192.58 | 3,509.15 | 0.49 | -0.29 | -0.40 |
| 10,773.00 | 90.43 | 182.75 | 6,952.92 | -3,396.81 | 1,188.13 | 3,589.86 | 1.83 | 1.74 | -0.58 |
| 10,859.00 | 91.48 | 183.95 | 6,951.49 | -3,482.65 | 1,183.11 | 3,671.34 | 1.85 | 1.22 | 1.40 |
| 10,944.00 | 91.98 | 184.32 | 6,948.92 | -3,567.39 | 1,176.98 | 3,751.47 | 0.73 | 0.59 | 0.44 |

Anadarko Petroleum Corp

Survey Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well Palyo 14N-11HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Site: | WELD_PALYO 29-11HZ Pad | MD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Well: | Palyo 14N-11HZ | North Reference: | True |
| Wellbore: | Palyo 14N-11HZ | Survey Calculation Method: | Minimum Curvature |
| Design: | Palyo 14N-11HZ | Database: | edmp |

| Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 11,030.00 | 92.03 | 184.45 | 6,945.92 | -3,653.09 | 1,170.41 | 3,832.40 | 0.16 | 0.06 | 0.15 |
| 11,115.00 | 92.03 | 184.44 | 6,942.90 | -3,737.78 | 1,163.83 | 3,912.36 | 0.01 | 0.00 | -0.01 |
| 11,201.00 | 93.21 | 185.51 | 6,938.97 | -3,823.36 | 1,156.38 | 3,992.96 | 1.85 | 1.37 | 1.24 |
| 11,286.00 | 90.74 | 185.28 | 6,936.04 | -3,907.93 | 1,148.39 | 4,072.43 | 2.92 | -2.91 | -0.27 |
| 11,372.00 | 90.56 | 183.92 | 6,935.07 | -3,993.64 | 1,141.50 | 4,153.29 | 1.60 | -0.21 | -1.58 |
| 11,470.00 | 90.25 | 183.01 | 6,934.38 | -4,091.46 | 1,135.57 | 4,246.09 | 0.98 | -0.32 | -0.93 |
| LAST MWD SURVEY | | | | | | | | | |
| 11,525.00 | 90.08 | 182.50 | 6,934.22 | -4,146.40 | 1,132.93 | 4,298.39 | 0.98 | -0.31 | -0.93 |
| PROJECTION TO TD | | | | | | | | | |

| Design Targets | | | | | | | | | |
|---|---------------|--------------|----------|------------|------------|-----------------|----------------|-----------|-------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| Landing point | 0.00 | 0.00 | 6,973.50 | -135.00 | 1,290.00 | 1,301,665.08 | 3,242,411.98 | 40.158211 | -104.632692 |
| - actual wellpath misses target center by 14.89ft at 7500.53ft MD (6983.25 TVD, -134.32 N, 1278.77 E) | | | | | | | | | |
| - Point | | | | | | | | | |

| Design Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | | |
| | | +N/-S (ft) | +E/-W (ft) | Comment | |
| 842.00 | 841.99 | -0.35 | -2.02 | TIE ON | |
| 972.00 | 971.99 | -0.16 | -2.23 | FIRST MWD SURVEY | |
| 11,470.00 | 6,934.38 | -4,091.46 | 1,135.57 | LAST MWD SURVEY | |
| 11,525.00 | 6,934.22 | -4,146.40 | 1,132.93 | PROJECTION TO TD | |

Checked By: _____ Approved By: _____ Date: _____

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_PALYO 29-11HZ Pad

Palyo 14N-11HZ

Palyo 14N-11HZ

Design: Palyo 14N-11HZ

Survey Report - Geographic

06 September, 2012

Anadarko Petroleum Corp

Survey Report - Geographic

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well Palyo 14N-11HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Site: | WELD_PALYO 29-11HZ Pad | MD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Well: | Palyo 14N-11HZ | North Reference: | True |
| Wellbore: | Palyo 14N-11HZ | Survey Calculation Method: | Minimum Curvature |
| Design: | Palyo 14N-11HZ | Database: | edmp |

| | | | |
|--------------------|-----------------------------|----------------------|----------------|
| Project | COLORADO NORTHERN ZONE - 83 | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| | | | | |
|------------------------------|------------------------|---------------------|-------------------|---------------------------------|
| Site | WELD_PALYO 29-11HZ Pad | | | |
| Site Position: | | Northing: | 1,301,787.54 usft | Latitude: 40.158582 |
| From: | Lat/Long | Easting: | 3,241,120.73 usft | Longitude: -104.637307 |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13-3/16 " | Grid Convergence: 0.56 ° |

| | | | | |
|-----------------------------|----------------|---------|----------------------------|-------------------|
| Well | Palyo 14N-11HZ | | | |
| Well Position | +N/-S | 0.00 ft | Northing: | 1,301,787.52 usft |
| | +E/-W | 0.00 ft | Easting: | 3,241,120.73 usft |
| Position Uncertainty | | 0.00 ft | Wellhead Elevation: | ft |
| | | | Ground Level: | 4,854.00 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Palyo 14N-11HZ | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 2/16/2012 | 8.68 | 66.85 | 52,947 |

| | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------------|
| Design | Palyo 14N-11HZ | | | |
| Audit Notes: | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: 17.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 17.00 | 0.00 | 0.00 | 164.72 |

| | | | | |
|-----------------------|----------------|----------------------------|------------------|----------------------------------|
| Survey Program | Date | 9/4/2012 | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description |
| 117.00 | 842.00 | Survey #1 (Palyo 14N-11HZ) | NS-GYRO-MS | NORTH SENSING GYROCOMPASSING M/S |
| 972.00 | 11,525.00 | Survey #2 (Palyo 14N-11HZ) | MWD | MWD - STANDARD |

| | | | | | | | | | |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|----------------------------|---------------------------|-----------------|------------------|
| Survey | | | | | | | | | |
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 17.00 | 0.00 | 0.00 | 17.00 | 0.00 | 0.00 | 1,301,787.52 | 3,241,120.73 | 40.158582 | -104.637307 |
| 117.00 | 0.45 | 265.55 | 117.00 | -0.03 | -0.39 | 1,301,787.48 | 3,241,120.34 | 40.158582 | -104.637309 |
| 217.00 | 0.33 | 252.17 | 217.00 | -0.15 | -1.06 | 1,301,787.36 | 3,241,119.68 | 40.158582 | -104.637311 |
| 317.00 | 0.29 | 308.88 | 317.00 | -0.08 | -1.53 | 1,301,787.43 | 3,241,119.21 | 40.158582 | -104.637313 |
| 417.00 | 0.10 | 107.74 | 417.00 | 0.05 | -1.64 | 1,301,787.56 | 3,241,119.09 | 40.158582 | -104.637313 |
| 517.00 | 0.11 | 244.88 | 517.00 | -0.01 | -1.65 | 1,301,787.49 | 3,241,119.09 | 40.158582 | -104.637313 |
| 617.00 | 0.19 | 223.78 | 616.99 | -0.17 | -1.85 | 1,301,787.33 | 3,241,118.89 | 40.158582 | -104.637314 |
| 717.00 | 0.11 | 227.67 | 716.99 | -0.36 | -2.03 | 1,301,787.14 | 3,241,118.70 | 40.158581 | -104.637315 |
| 817.00 | 0.09 | 74.27 | 816.99 | -0.40 | -2.03 | 1,301,787.10 | 3,241,118.71 | 40.158581 | -104.637315 |
| 842.00 | 0.21 | 347.51 | 841.99 | -0.35 | -2.02 | 1,301,787.15 | 3,241,118.72 | 40.158581 | -104.637314 |
| TIE ON | | | | | | | | | |

Anadarko Petroleum Corp

Survey Report - Geographic

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well Palyo 14N-11HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Site: | WELD_PALYO 29-11HZ Pad | MD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Well: | Palyo 14N-11HZ | North Reference: | True |
| Wellbore: | Palyo 14N-11HZ | Survey Calculation Method: | Minimum Curvature |
| Design: | Palyo 14N-11HZ | Database: | edmp |

| Survey | | | | | | | | | |
|-------------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------|-------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 972.00 | 0.14 | 256.90 | 971.99 | -0.16 | -2.23 | 1,301,787.34 | 3,241,118.51 | 40.158582 | -104.637315 |
| FIRST MWD SURVEY | | | | | | | | | |
| 1,065.00 | 0.14 | 291.05 | 1,064.99 | -0.14 | -2.44 | 1,301,787.36 | 3,241,118.29 | 40.158582 | -104.637316 |
| 1,159.00 | 0.16 | 329.40 | 1,158.99 | 0.01 | -2.62 | 1,301,787.51 | 3,241,118.12 | 40.158582 | -104.637317 |
| 1,252.00 | 0.00 | 242.83 | 1,251.99 | 0.13 | -2.68 | 1,301,787.62 | 3,241,118.05 | 40.158582 | -104.637317 |
| 1,346.00 | 0.00 | 96.91 | 1,345.99 | 0.13 | -2.68 | 1,301,787.62 | 3,241,118.05 | 40.158582 | -104.637317 |
| 1,439.00 | 0.25 | 335.79 | 1,438.99 | 0.31 | -2.77 | 1,301,787.80 | 3,241,117.97 | 40.158583 | -104.637317 |
| 1,524.00 | 1.54 | 100.98 | 1,523.98 | 0.26 | -1.72 | 1,301,787.76 | 3,241,119.01 | 40.158583 | -104.637313 |
| 1,610.00 | 4.89 | 69.39 | 1,609.84 | 1.33 | 2.85 | 1,301,788.88 | 3,241,123.57 | 40.158586 | -104.637297 |
| 1,695.00 | 6.99 | 65.28 | 1,694.38 | 4.77 | 10.94 | 1,301,792.40 | 3,241,131.62 | 40.158595 | -104.637268 |
| 1,780.00 | 8.37 | 71.86 | 1,778.62 | 8.86 | 21.51 | 1,301,796.59 | 3,241,142.16 | 40.158606 | -104.637230 |
| 1,866.00 | 9.40 | 73.59 | 1,863.58 | 12.79 | 34.20 | 1,301,800.64 | 3,241,154.81 | 40.158617 | -104.637185 |
| 1,951.00 | 10.52 | 71.57 | 1,947.30 | 17.21 | 48.22 | 1,301,805.20 | 3,241,168.78 | 40.158629 | -104.637135 |
| 2,037.00 | 9.28 | 68.90 | 2,032.02 | 22.19 | 62.14 | 1,301,810.31 | 3,241,182.65 | 40.158643 | -104.637085 |
| 2,122.00 | 10.33 | 66.19 | 2,115.78 | 27.73 | 75.51 | 1,301,815.98 | 3,241,195.97 | 40.158658 | -104.637037 |
| 2,207.00 | 11.39 | 67.09 | 2,199.25 | 34.07 | 90.21 | 1,301,822.47 | 3,241,210.61 | 40.158676 | -104.636985 |
| 2,293.00 | 13.05 | 67.76 | 2,283.30 | 41.06 | 107.02 | 1,301,829.61 | 3,241,227.35 | 40.158695 | -104.636924 |
| 2,378.00 | 14.57 | 66.33 | 2,365.84 | 48.98 | 125.70 | 1,301,837.72 | 3,241,245.95 | 40.158717 | -104.636858 |
| 2,464.00 | 14.87 | 66.59 | 2,449.02 | 57.71 | 145.73 | 1,301,846.64 | 3,241,265.89 | 40.158740 | -104.636786 |
| 2,549.00 | 15.02 | 71.66 | 2,531.15 | 65.51 | 166.19 | 1,301,854.64 | 3,241,286.28 | 40.158762 | -104.636713 |
| 2,634.00 | 16.26 | 73.12 | 2,613.00 | 72.43 | 188.04 | 1,301,861.77 | 3,241,308.06 | 40.158781 | -104.636635 |
| 2,720.00 | 14.95 | 71.31 | 2,695.83 | 79.48 | 210.07 | 1,301,869.04 | 3,241,330.02 | 40.158800 | -104.636556 |
| 2,805.00 | 15.72 | 75.88 | 2,777.81 | 85.80 | 231.62 | 1,301,875.57 | 3,241,351.51 | 40.158818 | -104.636479 |
| 2,891.00 | 14.70 | 75.10 | 2,860.79 | 91.45 | 253.46 | 1,301,881.43 | 3,241,373.30 | 40.158833 | -104.636400 |
| 2,976.00 | 13.28 | 73.66 | 2,943.27 | 96.97 | 273.26 | 1,301,887.14 | 3,241,393.03 | 40.158848 | -104.636330 |
| 3,062.00 | 14.68 | 71.87 | 3,026.72 | 103.14 | 293.09 | 1,301,893.51 | 3,241,412.81 | 40.158865 | -104.636259 |
| 3,147.00 | 12.72 | 68.71 | 3,109.30 | 109.89 | 312.05 | 1,301,900.44 | 3,241,431.70 | 40.158884 | -104.636191 |
| 3,233.00 | 12.14 | 66.60 | 3,193.28 | 116.92 | 329.17 | 1,301,907.64 | 3,241,448.75 | 40.158903 | -104.636130 |
| 3,318.00 | 13.36 | 68.03 | 3,276.19 | 124.14 | 346.48 | 1,301,915.03 | 3,241,465.99 | 40.158923 | -104.636068 |
| 3,403.00 | 12.31 | 65.67 | 3,359.06 | 131.55 | 363.84 | 1,301,922.60 | 3,241,483.28 | 40.158943 | -104.636006 |
| 3,489.00 | 13.67 | 65.78 | 3,442.86 | 139.50 | 381.47 | 1,301,930.72 | 3,241,500.82 | 40.158965 | -104.635942 |
| 3,574.00 | 16.50 | 66.55 | 3,524.92 | 148.42 | 401.70 | 1,301,939.84 | 3,241,520.97 | 40.158989 | -104.635870 |
| 3,660.00 | 16.93 | 67.02 | 3,607.29 | 158.17 | 424.44 | 1,301,949.81 | 3,241,543.61 | 40.159016 | -104.635789 |
| 3,745.00 | 15.05 | 68.23 | 3,689.00 | 167.10 | 446.08 | 1,301,958.95 | 3,241,565.17 | 40.159041 | -104.635711 |
| 3,830.00 | 14.55 | 66.26 | 3,771.18 | 175.49 | 466.10 | 1,301,967.53 | 3,241,585.11 | 40.159064 | -104.635640 |
| 3,915.00 | 16.37 | 68.55 | 3,853.10 | 184.17 | 487.03 | 1,301,976.42 | 3,241,605.95 | 40.159088 | -104.635565 |
| 4,001.00 | 17.73 | 71.19 | 3,935.32 | 192.82 | 510.70 | 1,301,985.30 | 3,241,629.54 | 40.159111 | -104.635480 |
| 4,086.00 | 17.09 | 71.46 | 4,016.42 | 200.97 | 534.80 | 1,301,993.68 | 3,241,653.55 | 40.159134 | -104.635394 |
| 4,171.00 | 14.37 | 69.81 | 4,098.23 | 208.58 | 556.54 | 1,302,001.50 | 3,241,675.22 | 40.159155 | -104.635316 |
| 4,257.00 | 14.13 | 69.11 | 4,181.59 | 216.01 | 576.37 | 1,302,009.12 | 3,241,694.97 | 40.159175 | -104.635245 |
| 4,342.00 | 15.64 | 69.04 | 4,263.73 | 223.81 | 596.76 | 1,302,017.12 | 3,241,715.29 | 40.159196 | -104.635172 |
| 4,427.00 | 15.48 | 68.52 | 4,345.62 | 232.06 | 618.01 | 1,302,025.58 | 3,241,736.46 | 40.159219 | -104.635096 |
| 4,513.00 | 16.14 | 68.13 | 4,428.36 | 240.71 | 639.79 | 1,302,034.44 | 3,241,758.15 | 40.159243 | -104.635018 |
| 4,598.00 | 15.03 | 66.71 | 4,510.24 | 249.47 | 660.88 | 1,302,043.41 | 3,241,779.15 | 40.159267 | -104.634943 |
| 4,683.00 | 16.02 | 67.75 | 4,592.13 | 258.27 | 681.86 | 1,302,052.41 | 3,241,800.04 | 40.159291 | -104.634868 |
| 4,769.00 | 14.35 | 67.52 | 4,675.13 | 266.84 | 702.69 | 1,302,061.18 | 3,241,820.79 | 40.159315 | -104.634793 |
| 4,854.00 | 11.62 | 66.87 | 4,757.95 | 274.23 | 720.30 | 1,302,068.74 | 3,241,838.33 | 40.159335 | -104.634730 |
| 4,940.00 | 11.66 | 68.82 | 4,842.18 | 280.77 | 736.36 | 1,302,075.44 | 3,241,854.33 | 40.159353 | -104.634673 |
| 5,025.00 | 11.56 | 68.63 | 4,925.44 | 286.98 | 752.30 | 1,302,081.80 | 3,241,870.21 | 40.159370 | -104.634616 |
| 5,110.00 | 12.30 | 73.26 | 5,008.60 | 292.69 | 768.91 | 1,302,087.68 | 3,241,886.76 | 40.159385 | -104.634556 |
| 5,196.00 | 15.24 | 78.32 | 5,092.13 | 297.62 | 788.75 | 1,302,092.80 | 3,241,906.55 | 40.159399 | -104.634485 |
| 5,281.00 | 14.70 | 72.56 | 5,174.25 | 303.11 | 809.98 | 1,302,098.50 | 3,241,927.73 | 40.159414 | -104.634409 |
| 5,367.00 | 14.33 | 67.91 | 5,257.50 | 310.39 | 830.26 | 1,302,105.97 | 3,241,947.93 | 40.159434 | -104.634337 |
| 5,452.00 | 15.24 | 68.77 | 5,339.69 | 318.39 | 850.42 | 1,302,114.16 | 3,241,968.01 | 40.159456 | -104.634265 |
| 5,538.00 | 15.08 | 68.47 | 5,422.70 | 326.59 | 871.36 | 1,302,122.57 | 3,241,988.87 | 40.159479 | -104.634190 |

Anadarko Petroleum Corp

Survey Report - Geographic

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well Palyo 14N-11HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Site: | WELD_PALYO 29-11HZ Pad | MD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Well: | Palyo 14N-11HZ | North Reference: | True |
| Wellbore: | Palyo 14N-11HZ | Survey Calculation Method: | Minimum Curvature |
| Design: | Palyo 14N-11HZ | Database: | edmp |

| Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------|-------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 5,623.00 | 14.61 | 67.87 | 5,504.86 | 334.68 | 891.58 | 1,302,130.86 | 3,242,009.01 | 40.159501 | -104.634117 |
| 5,708.00 | 15.42 | 67.87 | 5,586.96 | 342.98 | 911.97 | 1,302,139.35 | 3,242,029.33 | 40.159524 | -104.634044 |
| 5,794.00 | 15.56 | 73.76 | 5,669.84 | 350.51 | 933.64 | 1,302,147.10 | 3,242,050.92 | 40.159544 | -104.633967 |
| 5,879.00 | 15.30 | 71.64 | 5,751.77 | 357.23 | 955.23 | 1,302,154.03 | 3,242,072.44 | 40.159563 | -104.633890 |
| 5,965.00 | 15.40 | 67.97 | 5,834.71 | 365.09 | 976.58 | 1,302,162.09 | 3,242,093.72 | 40.159584 | -104.633813 |
| 6,050.00 | 15.64 | 66.33 | 5,916.61 | 373.92 | 997.54 | 1,302,171.13 | 3,242,114.59 | 40.159608 | -104.633738 |
| 6,136.00 | 15.00 | 65.89 | 5,999.55 | 383.12 | 1,018.32 | 1,302,180.53 | 3,242,135.27 | 40.159634 | -104.633664 |
| 6,221.00 | 16.32 | 62.03 | 6,081.40 | 393.22 | 1,038.91 | 1,302,190.83 | 3,242,155.76 | 40.159661 | -104.633590 |
| 6,307.00 | 15.56 | 67.26 | 6,164.10 | 403.35 | 1,060.22 | 1,302,201.16 | 3,242,176.98 | 40.159689 | -104.633514 |
| 6,392.00 | 15.50 | 63.22 | 6,245.99 | 412.87 | 1,080.87 | 1,302,210.88 | 3,242,197.54 | 40.159715 | -104.633440 |
| 6,478.00 | 14.70 | 71.39 | 6,329.03 | 421.53 | 1,101.47 | 1,302,219.74 | 3,242,218.05 | 40.159739 | -104.633366 |
| 6,521.00 | 15.18 | 87.80 | 6,370.60 | 423.49 | 1,112.28 | 1,302,221.81 | 3,242,228.83 | 40.159745 | -104.633328 |
| 6,564.00 | 15.89 | 98.38 | 6,412.04 | 422.85 | 1,123.73 | 1,302,221.28 | 3,242,240.29 | 40.159743 | -104.633287 |
| 6,606.00 | 18.82 | 98.26 | 6,452.12 | 421.04 | 1,136.12 | 1,302,219.59 | 3,242,252.70 | 40.159738 | -104.633242 |
| 6,649.00 | 22.28 | 95.70 | 6,492.38 | 419.23 | 1,151.10 | 1,302,217.93 | 3,242,267.70 | 40.159733 | -104.633189 |
| 6,692.00 | 24.28 | 104.12 | 6,531.89 | 416.26 | 1,167.79 | 1,302,215.12 | 3,242,284.42 | 40.159725 | -104.633129 |
| 6,735.00 | 26.00 | 113.55 | 6,570.83 | 410.34 | 1,185.01 | 1,302,209.36 | 3,242,301.70 | 40.159708 | -104.633067 |
| 6,777.00 | 27.26 | 123.69 | 6,608.39 | 401.32 | 1,201.47 | 1,302,200.50 | 3,242,318.24 | 40.159684 | -104.633009 |
| 6,820.00 | 28.15 | 129.70 | 6,646.47 | 389.37 | 1,217.47 | 1,302,188.72 | 3,242,334.35 | 40.159651 | -104.632951 |
| 6,863.00 | 30.25 | 136.82 | 6,684.01 | 374.99 | 1,232.69 | 1,302,174.48 | 3,242,349.72 | 40.159611 | -104.632897 |
| 6,905.00 | 32.80 | 141.19 | 6,719.82 | 358.41 | 1,247.06 | 1,302,158.04 | 3,242,364.25 | 40.159566 | -104.632845 |
| 6,948.00 | 35.54 | 152.08 | 6,755.42 | 338.26 | 1,260.23 | 1,302,138.03 | 3,242,377.61 | 40.159511 | -104.632798 |
| 6,991.00 | 38.55 | 162.82 | 6,789.78 | 314.39 | 1,270.05 | 1,302,114.25 | 3,242,387.66 | 40.159445 | -104.632763 |
| 7,034.00 | 43.58 | 171.59 | 6,822.21 | 286.89 | 1,276.19 | 1,302,086.81 | 3,242,394.07 | 40.159369 | -104.632741 |
| 7,077.00 | 48.34 | 172.95 | 6,852.10 | 256.26 | 1,280.33 | 1,302,056.23 | 3,242,398.51 | 40.159285 | -104.632726 |
| 7,119.00 | 52.93 | 173.52 | 6,878.73 | 224.03 | 1,284.15 | 1,302,024.03 | 3,242,402.64 | 40.159197 | -104.632713 |
| 7,162.00 | 58.18 | 174.93 | 6,903.04 | 188.76 | 1,287.70 | 1,301,988.80 | 3,242,406.53 | 40.159100 | -104.632700 |
| 7,205.00 | 62.34 | 178.57 | 6,924.38 | 151.50 | 1,289.79 | 1,301,951.56 | 3,242,408.99 | 40.158998 | -104.632693 |
| 7,248.00 | 66.40 | 179.98 | 6,942.97 | 112.74 | 1,290.27 | 1,301,912.81 | 3,242,409.85 | 40.158891 | -104.632691 |
| 7,290.00 | 71.64 | 181.28 | 6,958.01 | 73.54 | 1,289.83 | 1,301,873.61 | 3,242,409.79 | 40.158784 | -104.632693 |
| 7,333.00 | 77.60 | 183.20 | 6,969.41 | 32.14 | 1,288.20 | 1,301,832.19 | 3,242,408.56 | 40.158670 | -104.632698 |
| 7,375.00 | 84.05 | 183.99 | 6,976.10 | -9.22 | 1,285.60 | 1,301,790.81 | 3,242,406.36 | 40.158557 | -104.632708 |
| 7,485.00 | 88.83 | 182.46 | 6,982.93 | -118.80 | 1,279.43 | 1,301,681.17 | 3,242,401.26 | 40.158256 | -104.632730 |
| 7,528.00 | 88.77 | 182.44 | 6,983.83 | -161.75 | 1,277.60 | 1,301,638.20 | 3,242,399.84 | 40.158138 | -104.632736 |
| 7,613.00 | 90.79 | 181.79 | 6,984.16 | -246.69 | 1,274.46 | 1,301,553.24 | 3,242,397.53 | 40.157905 | -104.632748 |
| 7,698.00 | 90.99 | 181.52 | 6,982.84 | -331.64 | 1,272.00 | 1,301,468.27 | 3,242,395.90 | 40.157672 | -104.632756 |
| 7,784.00 | 91.48 | 182.05 | 6,980.98 | -417.58 | 1,269.33 | 1,301,382.31 | 3,242,394.06 | 40.157436 | -104.632766 |
| 7,869.00 | 91.73 | 182.56 | 6,978.60 | -502.48 | 1,265.91 | 1,301,297.38 | 3,242,391.47 | 40.157203 | -104.632778 |
| 7,954.00 | 91.30 | 183.49 | 6,976.35 | -587.33 | 1,261.42 | 1,301,212.49 | 3,242,387.81 | 40.156970 | -104.632794 |
| 8,040.00 | 92.22 | 183.78 | 6,973.71 | -673.11 | 1,255.97 | 1,301,126.66 | 3,242,383.20 | 40.156734 | -104.632814 |
| 8,125.00 | 90.37 | 182.62 | 6,971.79 | -757.95 | 1,251.23 | 1,301,041.77 | 3,242,379.28 | 40.156501 | -104.632831 |
| 8,210.00 | 90.79 | 181.09 | 6,970.93 | -842.90 | 1,248.48 | 1,300,956.80 | 3,242,377.35 | 40.156268 | -104.632841 |
| 8,296.00 | 90.99 | 176.37 | 6,969.59 | -928.85 | 1,250.39 | 1,300,870.88 | 3,242,380.09 | 40.156032 | -104.632834 |
| 8,381.00 | 89.57 | 169.44 | 6,969.18 | -1,013.14 | 1,260.88 | 1,300,786.69 | 3,242,391.41 | 40.155801 | -104.632796 |
| 8,464.00 | 90.00 | 168.40 | 6,969.49 | -1,094.59 | 1,276.83 | 1,300,705.40 | 3,242,408.15 | 40.155577 | -104.632739 |
| 8,551.00 | 91.79 | 170.52 | 6,968.13 | -1,180.11 | 1,292.74 | 1,300,620.05 | 3,242,424.89 | 40.155342 | -104.632682 |
| 8,637.00 | 92.22 | 173.79 | 6,965.12 | -1,265.24 | 1,304.47 | 1,300,535.03 | 3,242,437.45 | 40.155109 | -104.632640 |
| 8,722.00 | 92.78 | 179.43 | 6,961.41 | -1,349.97 | 1,309.49 | 1,300,450.35 | 3,242,443.29 | 40.154876 | -104.632622 |
| 8,808.00 | 91.50 | 183.03 | 6,958.20 | -1,435.88 | 1,307.64 | 1,300,364.43 | 3,242,442.28 | 40.154640 | -104.632629 |
| 8,893.00 | 90.26 | 183.38 | 6,956.89 | -1,520.73 | 1,302.89 | 1,300,279.54 | 3,242,438.36 | 40.154407 | -104.632646 |
| 8,979.00 | 89.75 | 183.12 | 6,956.89 | -1,606.59 | 1,298.02 | 1,300,193.63 | 3,242,434.32 | 40.154172 | -104.632664 |
| 9,064.00 | 89.51 | 184.06 | 6,957.43 | -1,691.42 | 1,292.69 | 1,300,108.75 | 3,242,429.82 | 40.153939 | -104.632683 |
| 9,150.00 | 90.80 | 184.01 | 6,957.20 | -1,777.21 | 1,286.64 | 1,300,022.92 | 3,242,424.60 | 40.153703 | -104.632704 |
| 9,235.00 | 89.88 | 182.45 | 6,956.70 | -1,862.07 | 1,281.85 | 1,299,938.01 | 3,242,420.64 | 40.153470 | -104.632721 |
| 9,321.00 | 90.86 | 182.21 | 6,956.14 | -1,947.99 | 1,278.36 | 1,299,852.06 | 3,242,417.98 | 40.153234 | -104.632734 |

Anadarko Petroleum Corp

Survey Report - Geographic

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Company: | US ROCKIES REGION PLANNING | Local Co-ordinate Reference: | Well Palyo 14N-11HZ |
| Project: | COLORADO NORTHERN ZONE - 83 | TVD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Site: | WELD_PALYO 29-11HZ Pad | MD Reference: | 17' RKB + 4854' GL @ 4871.00ft |
| Well: | Palyo 14N-11HZ | North Reference: | True |
| Wellbore: | Palyo 14N-11HZ | Survey Calculation Method: | Minimum Curvature |
| Design: | Palyo 14N-11HZ | Database: | edmp |

| Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------|-------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 9,406.00 | 90.92 | 182.85 | 6,954.82 | -2,032.90 | 1,274.61 | 1,299,767.12 | 3,242,415.06 | 40.153001 | -104.632747 |
| 9,491.00 | 89.51 | 181.76 | 6,954.50 | -2,117.83 | 1,271.19 | 1,299,682.16 | 3,242,412.46 | 40.152768 | -104.632760 |
| 9,577.00 | 89.75 | 181.39 | 6,955.06 | -2,203.79 | 1,268.82 | 1,299,596.18 | 3,242,410.94 | 40.152532 | -104.632768 |
| 9,662.00 | 90.49 | 183.26 | 6,954.88 | -2,288.72 | 1,265.38 | 1,299,511.22 | 3,242,408.31 | 40.152299 | -104.632780 |
| 9,748.00 | 90.79 | 184.79 | 6,953.92 | -2,374.50 | 1,259.34 | 1,299,425.39 | 3,242,403.11 | 40.152064 | -104.632802 |
| 9,833.00 | 89.65 | 183.91 | 6,953.59 | -2,459.25 | 1,252.89 | 1,299,340.58 | 3,242,397.49 | 40.151831 | -104.632825 |
| 9,919.00 | 90.31 | 183.18 | 6,953.62 | -2,545.09 | 1,247.58 | 1,299,254.70 | 3,242,393.01 | 40.151595 | -104.632844 |
| 10,004.00 | 91.60 | 183.80 | 6,952.21 | -2,629.91 | 1,242.40 | 1,299,169.82 | 3,242,388.66 | 40.151363 | -104.632863 |
| 10,089.00 | 90.86 | 184.13 | 6,950.38 | -2,714.69 | 1,236.53 | 1,299,084.99 | 3,242,383.61 | 40.151130 | -104.632884 |
| 10,175.00 | 91.29 | 184.45 | 6,948.77 | -2,800.43 | 1,230.09 | 1,298,999.19 | 3,242,378.01 | 40.150894 | -104.632907 |
| 10,260.00 | 91.54 | 185.15 | 6,946.67 | -2,885.11 | 1,222.98 | 1,298,914.45 | 3,242,371.73 | 40.150662 | -104.632932 |
| 10,346.00 | 89.57 | 184.17 | 6,945.84 | -2,970.82 | 1,216.00 | 1,298,828.68 | 3,242,365.57 | 40.150427 | -104.632957 |
| 10,431.00 | 88.89 | 184.57 | 6,946.98 | -3,055.56 | 1,209.52 | 1,298,743.88 | 3,242,359.92 | 40.150194 | -104.632980 |
| 10,517.00 | 88.21 | 183.86 | 6,949.15 | -3,141.30 | 1,203.20 | 1,298,658.08 | 3,242,354.44 | 40.149959 | -104.633003 |
| 10,602.00 | 89.20 | 183.58 | 6,951.08 | -3,226.10 | 1,197.69 | 1,298,573.23 | 3,242,349.75 | 40.149726 | -104.633023 |
| 10,688.00 | 88.95 | 183.24 | 6,952.46 | -3,311.93 | 1,192.58 | 1,298,487.35 | 3,242,345.47 | 40.149490 | -104.633041 |
| 10,773.00 | 90.43 | 182.75 | 6,952.92 | -3,396.81 | 1,188.13 | 1,298,402.43 | 3,242,341.86 | 40.149257 | -104.633057 |
| 10,859.00 | 91.48 | 183.95 | 6,951.49 | -3,482.65 | 1,183.11 | 1,298,316.55 | 3,242,337.67 | 40.149022 | -104.633075 |
| 10,944.00 | 91.98 | 184.32 | 6,948.92 | -3,567.39 | 1,176.98 | 1,298,231.75 | 3,242,332.37 | 40.148789 | -104.633097 |
| 11,030.00 | 92.03 | 184.45 | 6,945.92 | -3,653.09 | 1,170.41 | 1,298,146.00 | 3,242,326.63 | 40.148554 | -104.633120 |
| 11,115.00 | 92.03 | 184.44 | 6,942.90 | -3,737.78 | 1,163.83 | 1,298,061.25 | 3,242,320.87 | 40.148321 | -104.633144 |
| 11,201.00 | 93.21 | 185.51 | 6,938.97 | -3,823.36 | 1,156.38 | 1,297,975.59 | 3,242,314.25 | 40.148086 | -104.633171 |
| 11,286.00 | 90.74 | 185.28 | 6,936.04 | -3,907.93 | 1,148.39 | 1,297,890.95 | 3,242,307.09 | 40.147854 | -104.633199 |
| 11,372.00 | 90.56 | 183.92 | 6,935.07 | -3,993.64 | 1,141.50 | 1,297,805.18 | 3,242,301.03 | 40.147619 | -104.633224 |
| 11,470.00 | 90.25 | 183.01 | 6,934.38 | -4,091.46 | 1,135.57 | 1,297,707.31 | 3,242,296.06 | 40.147350 | -104.633245 |
| LAST MWD SURVEY | | | | | | | | | |
| 11,525.00 | 90.08 | 182.50 | 6,934.22 | -4,146.40 | 1,132.93 | 1,297,652.35 | 3,242,293.95 | 40.147200 | -104.633255 |
| PROJECTION TO TD | | | | | | | | | |

| Design Targets | | | | | | | | | |
|---|---------------|--------------|----------|------------|------------|-----------------|----------------|-----------|-------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| Landing point | 0.00 | 0.00 | 6,973.50 | -135.00 | 1,290.00 | 1,301,665.08 | 3,242,411.98 | 40.158211 | -104.632692 |
| - actual wellpath misses target center by 14.89ft at 7500.53ft MD (6983.25 TVD, -134.32 N, 1278.77 E) | | | | | | | | | |
| - Point | | | | | | | | | |

| Design Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | | |
| | | +N/-S (ft) | +E/-W (ft) | Comment | |
| 842.00 | 841.99 | -0.35 | -2.02 | TIE ON | |
| 972.00 | 971.99 | -0.16 | -2.23 | FIRST MWD SURVEY | |
| 11,470.00 | 6,934.38 | -4,091.46 | 1,135.57 | LAST MWD SURVEY | |
| 11,525.00 | 6,934.22 | -4,146.40 | 1,132.93 | PROJECTION TO TD | |

| | | |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|



DAILY ACTIVITY

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 1 - 2012/08/16

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

Company Man: Ben Clayton, Duaine Bell
 DIR Supervisor: Brian Trani, Paul Trione
 MWD Trainee: James Asher
 MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft START DEPTH: 892.0 ft PROGRESS: 0.0 ft DAILY COST: USD\$10732.50
 KB ELEV: 4871 ft END DEPTH: 850.0 ft AVG. ROP.: 0.0 ft/hr PREVIOUS COST: USD\$0.00
 WORK STATUS: Standby (All units are imperial.) TOTAL COST: USD\$10732.50

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------|-------|------|-----|------|----------------|------|------|-----|
| 00:00-24:00 | Wait On Mobilization | 24.00 | 850 | n/a | | | 0.00 | | |

| 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: | 0.00 | WOB SLIDING (LO): | 0 lbf | WOB ROTATE (LO): | 0 lbf |
| CIRC: | 0.00 | ROTARY DRILL: | 0.00 | OTHER: | 24.00 | 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: | 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: 1600 | 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: August 16th: Call out August 16th. Tools and hands on location. Tools strapped. BHA submitted. Standby for new rig prep.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 2 - 2012/08/17

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

Company Man: Ben Clayton, Duaine Bell
 DIR Supervisor: Brian Trani, Paul Trione
 MWD Trainee: James Asher
 MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft START DEPTH: 850.0 ft PROGRESS: 42.0 ft DAILY COST: USD\$8232.50
 KB ELEV: 4871 ft END DEPTH: 892.0 ft AVG. ROP.: 0.0 ft/hr PREVIOUS COST: USD\$10732.50
 WORK STATUS: Standby (All units are imperial.) TOTAL COST: USD\$18965.00

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------|-------|------|-----|------|----------------|------|------|-----|
| 00:00-24:00 | Wait On Mobilization | 24.00 | 892 | n/a | | | 0.00 | | |

| 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: | 0.00 | WOB SLIDING (LO): | 0 lbf | WOB ROTATE (LO): | 0 lbf |
| CIRC: | 0.00 | ROTARY DRILL: | 0.00 | OTHER: | 24.00 | 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: | | | | | SURVEY TYPE: | | | | |
|--------------------------------|-------------|---------------|--|--|-------------------|--|------------------|--|--|
| BHA: | HOLE SIZE: | SECTION TYPE: | | | MODEL: | | LOBE CFG.: | | |
| MANFCT.: | STABILIZER: | SERIAL#: | | | MTR HRS THIS DAY: | | MTR HRS TO DATE: | | |
| SETTING: | KICKPAD: | SIZE: | | | NOZZLES: | | | | |
| MANFCT: | BIT TYPE: | TYPE: | | | | | | | |
| IADC BIT GRADE: | | | | | | | | | |

| PUMP PARAMETERS | | | | | TOTAL FLOW RATE: 0.00 gal/min | | | | |
|---------------------|--|---------------------|-----------|--|-------------------------------|-----------------------------|--|--|--|
| PRESSURE ON BTM: 0 | | PRESSURE OFF BTM: 0 | | | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk | | | |
| PUMP 1: TYPE: 1600 | | 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 | | | | | | |

| 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: August 17th: Continue welding and prepping rig.
 Test BOP before making up stands.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 3 - 2012/08/18

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

Company Man: Ben Clayton, Duaine Bell
 DIR Supervisor: Brian Trani, Paul Trione
 MWD Trainee: James Asher
 MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft START DEPTH: 892.0 ft PROGRESS: 785.0 ft DAILY COST: USD\$20382.20
 KB ELEV: 4871 ft END DEPTH: 1677.0 ft AVG. ROP.: 294.0 ft/hr PREVIOUS COST: USD\$18965.00
 TOTAL COST: USD\$39347.20

WORK STATUS: Operating (All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---|-------|------|-----|-------------|--|------|------|-----|
| 00:00-12:15 | Pick Up Drill Pipe | 12.25 | 892 | n/a | 19:30-19:40 | Rotating With Motor | 0.17 | 1311 | 1 |
| 12:15-12:30 | Safety Meeting - Doghouse JSA | 0.25 | 892 | n/a | 19:40-19:45 | Circ & Accumulate Surveys | 0.08 | 1311 | 1 |
| 12:30-14:15 | Handle Directional Tools - PU BHA | 1.75 | 892 | 1 | 19:45-19:50 | Rotating With Motor | 0.08 | 1345 | 1 |
| 14:15-14:30 | RIH - Run in 1 stand HWDP | 0.25 | 892 | 1 | 19:50-20:10 | Undefined - See Comments - Fix PASON | 0.33 | 1345 | 1 |
| 14:30-14:45 | Shallow Test Tools | 0.25 | 892 | 1 | 20:10-20:20 | Rotating With Motor | 0.17 | 1405 | 1 |
| 14:45-16:00 | Trip In | 1.25 | 892 | 1 | 20:20-20:25 | Circ & Accumulate Surveys | 0.08 | 1405 | 1 |
| 16:00-17:20 | Drill Out Flt, Shoe & Cmmt | 1.33 | 892 | 1 | 20:25-20:35 | Rotating With Motor | 0.17 | 1498 | 1 |
| 17:20-17:30 | Rotating With Motor | 0.17 | 937 | 1 | 20:35-20:50 | Circ & Accumulate Surveys | 0.25 | 1498 | 1 |
| 17:30-17:45 | Circulating - Make Connection | 0.25 | 937 | 1 | 20:50-21:10 | Orienting With Motor - Slide @ 69M | 0.33 | 1523 | 1 |
| 17:45-17:55 | Rotating With Motor | 0.17 | 1031 | 1 | 21:10-21:15 | Rotating With Motor | 0.08 | 1583 | 1 |
| 17:55-18:05 | Circ & Accumulate Surveys - 1805 | 0.17 | 1031 | 1 | 21:15-21:30 | Circ & Accumulate Surveys | 0.25 | 1583 | 1 |
| 18:05-18:20 | Rotating With Motor | 0.25 | 1060 | 1 | 21:30-21:50 | Orienting With Motor - Slide 60M | 0.33 | 1583 | 1 |
| 18:20-18:50 | Undefined - See Comments - Change out Screens | 0.50 | 1060 | 1 | 21:50-22:05 | Rotating With Motor | 0.25 | 1669 | 1 |
| 18:50-19:00 | Rotating With Motor | 0.17 | 1124 | 1 | 22:05-22:10 | Circ & Accumulate Surveys | 0.08 | 1669 | 1 |
| 19:00-19:10 | Circ & Accumulate Surveys | 0.17 | 1124 | 1 | 22:10-22:20 | Orienting With Motor - Slide @ 69M | 0.17 | 1677 | 1 |
| 19:10-19:20 | Rotating With Motor | 0.17 | 1218 | 1 | 22:20-22:35 | Other - See Comments - Work on Shakers | 0.25 | 1677 | 1 |
| 19:20-19:30 | Circ & Accumulate Surveys | 0.17 | 1218 | 1 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | |
|-------------------|---------------------|--------------------|----------------------------|----------------------------|
| MOTOR DRILL: 2.67 | ORIENTING HRS: 0.83 | ROTARY DRILL: 0.00 | ROTARY TORQUE: 5000 ft-lb | STRING WEIGHT: 75000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 1.83 | MOTOR HRS: 5.50 | WOB SLIDING (HI): 5000 lbf | WOB ROTATE (HI): 20000 lbf |
| MOTOR REAM: 0.00 | | TRIP: 1.50 | WOB SLIDING (LO): 1000 lbf | WOB ROTATE (LO): 2000 lbf |
| CIRC: 2.83 | ROTARY DRILL: 0.00 | OTHER: 15.58 | RPM (ROTARY): 60 rpm | DRAG UP: 75000 lbf |
| MOTOR HRS: 5.50 | DRILL HRS: 2.67 | TOTAL HRS: 22.58 | RPM (MOTOR): 147 rpm | DRAG DN: 75000 lbf |

DRILLING PARAMETERS:

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|----------------------------|---------------------------------|
| BHA: 1 | HOLE SIZE: 8.75 in | SECTION TYPE: Build & Hold | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-3991 | MODEL: 7/8 L, 5 Stg |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 1.5 Bend @ 6.19ft | LOBE CFG.: 7/8 |
| MANFCT: Smith | BIT TYPE: PDC 5x16s | TYPE: Smith MDi516 | MTR HRS THIS DAY: 5.5 |
| | | | MTR HRS TO DATE: 5.5 |
| IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / PR | | | NOZZLES: 0.982 in² TFA |

PUMP PARAMETERS

| | | |
|---------------------|---------------------|---------------------------------|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 477.43 gal/min |
| PUMP 1: TYPE: 1600 | EFF.: 95.0% | SPM: 60.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 60.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 4.1880 gal/stk |
| | LINER: 6.00 in | STROKE VOL.: 4.1880 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|----------------------|---------------------------|------------------------|-------------|------------------|-----------------------|
| MUD TYPE: Polymer | VISC: 25 sec/qt | WTR LOSS: 20 cc/30min | PV: 1 cP | YP: 4 lb/100 ft² | pH: 9.5 |
| DENSITY: 8.45 lb/gal | GEL 0/10: 2.00 lb/100 ft² | SAND: 0.02 | SOLIDS: 0.7 | OIL: 0 | TEMP: 85 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |



— **COMMENTS:** —

August 18th: Finish PU drill pipe. PU BHA1. Drill out surface casing shoe track. Drilled 892-1677 MD.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674**Day 4 - 2012/08/19****FILE #:** 4027073**JOB TYPE:** Horizontal**RIG & NO:** Xtreme 23**WELL NAME:** Palyo 14N-11HZ**COMPANY:** Anadarko Petroleum Corporation**SURFACE LOCATION:** Palyo 29-11HZ Pad**SERVICE CO.:** Weatherford Drilling Services**SURVEY TYPE:** HEL LWD**FIELD / LOCATION:** Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
Company Man: Duaine Bell, Ben Clayton
MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft **START DEPTH:** 1677.0 ft **PROGRESS:** 2980.0 ft **DAILY COST:** USD\$12100.00
KB ELEV: 4871 ft **END DEPTH:** 4657.0 ft **AVG. ROP.:** 181.5 ft/hr **PREVIOUS COST:** USD\$39347.20
TOTAL COST: USD\$51447.20

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 - Slide @ 69M | 0.25 | 1694 | 1 | 11:35-11:50 | Rotating With Motor | 0.25 | 3292 | 1 |
| 00:15-00:25 | Rotating With Motor | 0.17 | 1754 | 1 | 11:50-11:55 | Circ & Accumulate Surveys | 0.08 | 3292 | 1 |
| 00:25-00:35 | Circ & Accumulate Surveys | 0.17 | 1754 | 1 | 11:55-12:05 | Orienting With Motor | 0.17 | 3312 | 1 |
| 00:35-00:50 | Orienting With Motor - Slide @ 20R | 0.25 | 1774 | 1 | 12:05-12:15 | Rotating With Motor | 0.17 | 3377 | 1 |
| 00:50-01:05 | Rotating With Motor | 0.25 | 1839 | 1 | 12:15-12:20 | Circ & Accumulate Surveys | 0.08 | 3377 | 1 |
| 01:05-01:15 | Circ & Accumulate Surveys | 0.17 | 1839 | 1 | 12:20-12:35 | Orienting With Motor | 0.25 | 3417 | 1 |
| 01:15-01:30 | Orienting With Motor - Slide @ HS | 0.25 | 1859 | 1 | 12:35-12:50 | Rotating With Motor | 0.25 | 3462 | 1 |
| 01:30-01:45 | Rotating With Motor | 0.25 | 1925 | 1 | 12:50-12:55 | Circ & Accumulate Surveys | 0.08 | 3462 | 1 |
| 01:45-02:25 | Rig Service | 0.67 | 1925 | 1 | 12:55-13:20 | Orienting With Motor | 0.42 | 3512 | 1 |
| 02:25-02:30 | Circ & Accumulate Surveys | 0.08 | 1925 | 1 | 13:20-13:25 | Rotating With Motor | 0.08 | 3512 | 1 |
| 02:30-02:40 | Orienting With Motor - Slide @ 20L | 0.17 | 1940 | 1 | 13:25-14:00 | Rig Service | 0.58 | 3512 | 1 |
| 02:40-02:55 | Rotating With Motor | 0.25 | 2010 | 1 | 14:00-14:05 | Circ & Accumulate Surveys | 0.08 | 3512 | 1 |
| 02:55-03:15 | Rotating With Motor | 0.33 | 2096 | 1 | 14:05-14:30 | Orienting With Motor | 0.42 | 3583 | 1 |
| 03:15-03:25 | Circ & Accumulate Surveys | 0.17 | 2096 | 1 | 14:30-14:40 | Rotating With Motor | 0.17 | 3633 | 1 |
| 03:25-03:45 | Orienting With Motor - Slide @ HS | 0.33 | 2121 | 1 | 14:40-14:45 | Circ & Accumulate Surveys | 0.08 | 3633 | 1 |
| 03:45-03:55 | Rotating With Motor | 0.17 | 2181 | 1 | 14:45-15:15 | Orienting With Motor | 0.50 | 3658 | 1 |
| 03:55-04:00 | Circ & Accumulate Surveys | 0.08 | 2181 | 1 | 15:15-15:30 | Rotating With Motor | 0.25 | 3719 | 1 |
| 04:00-04:20 | Orienting With Motor - Slide @ HS | 0.33 | 2206 | 1 | 15:30-15:35 | Circ & Accumulate Surveys | 0.08 | 3719 | 1 |
| 04:20-04:30 | Rotating With Motor | 0.17 | 2266 | 1 | 15:35-15:45 | Orienting With Motor | 0.17 | 3729 | 1 |
| 04:30-04:35 | Circ & Accumulate Surveys | 0.08 | 2266 | 1 | 15:45-16:00 | Rotating With Motor | 0.25 | 3804 | 1 |
| 04:35-04:55 | Orienting With Motor - Slide @ HS | 0.33 | 2296 | 1 | 16:00-16:10 | Circ & Accumulate Surveys | 0.17 | 3804 | 1 |
| 04:55-05:00 | Rotating With Motor | 0.08 | 2352 | 1 | 16:10-16:55 | Orienting With Motor | 0.75 | 3854 | 1 |
| 05:00-05:20 | Circ & Accumulate Surveys - Reshoot svy | 0.33 | 2352 | 1 | 16:55-17:10 | Rotating With Motor | 0.25 | 3889 | 1 |
| 05:20-05:40 | Orienting With Motor | 0.33 | 2377 | 1 | 17:10-17:15 | Circ & Accumulate Surveys | 0.08 | 3889 | 1 |
| 05:40-05:55 | Rotating With Motor | 0.25 | 2437 | 1 | 17:15-17:40 | Orienting With Motor - Slide @ HS | 0.42 | 3909 | 1 |
| 05:55-06:00 | Circ & Accumulate Surveys | 0.08 | 2437 | 1 | 17:40-17:45 | Rotating With Motor | 0.08 | 3974 | 1 |
| 06:00-06:15 | Orienting With Motor | 0.25 | 2457 | 1 | 17:45-17:55 | Circ & Accumulate Surveys | 0.17 | 3974 | 1 |
| 06:15-06:40 | Rotating With Motor | 0.42 | 2523 | 1 | 17:55-18:20 | Orienting With Motor - Slide @ HS | 0.42 | 3999 | 1 |
| 06:40-06:45 | Circ & Accumulate Surveys | 0.08 | 2523 | 1 | 18:20-18:25 | Rotating With Motor | 0.08 | 4060 | 1 |
| 06:45-07:00 | Orienting With Motor | 0.25 | 2558 | 1 | 18:25-18:35 | Circ & Accumulate Surveys | 0.17 | 4060 | 1 |
| 07:00-07:15 | Rotating With Motor | 0.25 | 2608 | 1 | 18:35-18:45 | Rotating With Motor | 0.17 | 4145 | 1 |
| 07:15-07:20 | Circ & Accumulate Surveys | 0.08 | 2608 | 1 | 18:45-18:55 | Circ & Accumulate Surveys | 0.17 | 4145 | 1 |
| 07:20-07:40 | Orienting With Motor | 0.33 | 2648 | 1 | 18:55-19:10 | Rotating With Motor | 0.25 | 4230 | 1 |
| 07:40-08:00 | Rotating With Motor | 0.33 | 2693 | 1 | 19:10-20:05 | Other - See Comments - Change Catch Can | 0.92 | 4230 | 1 |
| 08:00-08:05 | Circ & Accumulate Surveys | 0.08 | 2693 | 1 | 20:05-20:10 | Circ & Accumulate Surveys | 0.08 | 4230 | 1 |
| 08:05-08:25 | Rotating With Motor | 0.33 | 2779 | 1 | 20:10-20:30 | Orienting With Motor - Slide @ HS | 0.33 | 4250 | 1 |
| 08:25-08:30 | Circ & Accumulate Surveys | 0.08 | 2779 | 1 | 20:30-20:40 | Rotating With Motor | 0.17 | 4316 | 1 |
| 08:30-08:35 | Orienting With Motor | 0.08 | 2804 | 1 | 20:40-20:50 | Circ & Accumulate Surveys | 0.17 | 4316 | 1 |
| 08:35-08:45 | Rotating With Motor | 0.17 | 2864 | 1 | 20:50-21:15 | Orienting With Motor - Slide @ HS | 0.42 | 4346 | 1 |
| 08:45-08:50 | Circ & Accumulate Surveys | 0.08 | 2864 | 1 | 21:15-21:25 | Rotating With Motor | 0.17 | 4401 | 1 |

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674**Day 4 - 2012/08/19**

| | | | | | | | | | |
|-------------|------------------------------------|------|------|---|-------------|---|------|------|---|
| 08:50-09:00 | Rotating With Motor | 0.17 | 2950 | 1 | 21:25-21:35 | Circ & Accumulate Surveys | 0.17 | 4401 | 1 |
| 09:00-09:15 | Circ & Accumulate Surveys | 0.25 | 2950 | 1 | 21:35-22:10 | Orienting With Motor - Slide @ HS- 2 Stalls | 0.58 | 4421 | 1 |
| 09:15-09:25 | Rotating With Motor | 0.17 | 3035 | 1 | 22:10-22:20 | Rotating With Motor | 0.17 | 4486 | 1 |
| 09:25-09:55 | Rig Service - Instal rotating head | 0.50 | 3035 | 1 | 22:20-22:25 | Circ & Accumulate Surveys | 0.08 | 4486 | 1 |
| 09:55-10:15 | Circ & Accumulate Surveys | 0.33 | 3035 | 1 | 22:25-22:50 | Orienting With Motor - Slide @ HS | 0.42 | 4506 | 1 |
| 10:15-10:20 | Orienting With Motor | 0.08 | 3065 | 1 | 22:50-23:00 | Rotating With Motor | 0.17 | 4572 | 1 |
| 10:20-10:40 | Rotating With Motor | 0.33 | 3121 | 1 | 23:00-23:05 | Circ & Accumulate Surveys | 0.08 | 4572 | 1 |
| 10:40-10:45 | Circ & Accumulate Surveys | 0.08 | 3121 | 1 | 23:05-23:15 | Rotating With Motor | 0.17 | 4657 | 1 |
| 10:45-11:00 | Rotating With Motor | 0.25 | 3206 | 1 | 23:15-23:50 | Rig Service | 0.58 | 4657 | 1 |
| 11:00-11:05 | Circ & Accumulate Surveys | 0.08 | 3206 | 1 | 23:50-24:00 | Circ & Accumulate Surveys | 0.17 | 4657 | 1 |
| 11:05-11:35 | Orienting With Motor | 0.50 | 3241 | 1 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|---------------------------|----------------------------|---------------------------|
| MOTOR DRILL: 16.42 | ORIENTING HRS: 9.00 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 7.42 | MOTOR HRS: 20.75 |
| MOTOR REAM: 0.00 | | TRIP: 0.00 |
| CIRC: 4.33 | ROTARY DRILL: 0.00 | OTHER: 3.25 |
| MOTOR HRS: 20.75 | DRILL HRS: 16.42 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-----------------------------------|-----------------------------------|
| ROTARY TORQUE: 5000 ft-lb | STRING WEIGHT 125000 lbs |
| WOB SLIDING (HI): 8000 lbf | WOB ROTATE (HI): 25000 lbf |
| WOB SLIDING (LO): 4000 lbf | WOB ROTATE (LO): 18000 lbf |
| RPM (ROTARY): 60 rpm | DRAG UP: 150000 lbf |
| RPM (MOTOR): 145 rpm | DRAG DN: 100000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|----------------------------|-----------------------------------|---|
| BHA: 1 | HOLE SIZE: 8.75 in | SECTION TYPE: Build & Hold | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-3991 | MODEL: 7/8 L, 5 Stg |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 1.5 Bend@6.19ft | LOBE CFG.: 7/8 |
| MANFCT: Smith | BIT TYPE: PDC 5x16s | TYPE: Smith MDi516 | MTR HRS THIS DAY: 20.75 |
| IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / PR | | | MTR HRS TO DATE: 26.25 |
| | | | NOZZLES: 0.982 in ² TFA |

PUMP PARAMETERS

| | | |
|------------------------------|-------------------------------|--|
| PRESSURE ON BTM: 1900 | PRESSURE OFF BTM: 1300 | TOTAL FLOW RATE: 478.03 gal/min |
| PUMP 1: TYPE: 1600 | EFF.: 95.0% | SPM: 60.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 60.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | | LINER: 6.00 in |
| | | STROKE VOL.: 4.1933 gal/stk |
| | | LINER: 6.00 in |
| | | STROKE VOL.: 4.1933 gal/stk |
| | | LINER: 0.00 in |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-----------------------------|--|-------------------------------|--------------------|-------------------------------------|------------------------------|
| MUD TYPE: Polymer | VISC: 26 sec/qt | WTR LOSS: 20 cc/30min | PV: 2 cP | YP: 3 lb/100 ft ² | pH: 8.7 |
| DENSITY: 8.55 lb/gal | GEL 0/10: 1.00 lb/100 ft ² | SAND: 0.02 | SOLIDS: 1.2 | OIL: 0 | TEMP: 105 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

August 19th: Increasing difficulty stacking/stalling while sliding with Smith bit. Slide percentage increasing to 50%+ in order to hold 15 degree tangent to KOP. Drilled 1677-4657 MD.

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 5 - 2012/08/20

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 Company Man: Duaine Bell, Ben Clayton
 MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft START DEPTH: 4657.0 ft PROGRESS: 683.0 ft DAILY COST: USD\$18480.00
 KB ELEV: 4871 ft END DEPTH: 5340.0 ft AVG. ROP.: 91.1 ft/hr PREVIOUS COST: USD\$51447.20
 TOTAL COST: USD\$69927.20

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 - Slide @ HS | 0.33 | 4677 | 1 | 14:35-16:30 | RIH | 1.92 | 5041 | 2 |
| 00:20-00:50 | Other - See Comments - Rig Blacked Out | 0.50 | 4677 | 1 | 16:30-17:00 | Rig Service | 0.50 | 5041 | 2 |
| 00:50-01:10 | Rotating With Motor | 0.33 | 4742 | 1 | 17:00-19:00 | RIH | 2.00 | 5041 | 2 |
| 01:10-01:20 | Circ & Accumulate Surveys | 0.17 | 4742 | 1 | 19:00-19:30 | Wash To Bottom - Wash Last Stands | 0.50 | 5041 | 2 |
| 01:20-01:35 | Rotating With Motor | 0.25 | 4828 | 1 | 19:30-20:30 | Other - See Comments - Fix Saver Sub | 1.00 | 5041 | 2 |
| 01:35-01:45 | Circ & Accumulate Surveys | 0.17 | 4828 | 1 | 20:30-21:20 | Wash To Bottom - Wash and Send Sweeps | 0.83 | 5041 | 2 |
| 01:45-02:50 | Orienting With Motor - Slide @ HS | 1.08 | 4853 | 1 | 21:20-21:40 | Orienting With Motor - Slide @ HS | 0.33 | 5080 | 2 |
| 02:50-03:05 | Rotating With Motor | 0.25 | 4913 | 1 | 21:40-21:45 | Rotating With Motor | 0.08 | 5084 | 2 |
| 03:05-03:10 | Circ & Accumulate Surveys | 0.08 | 4913 | 1 | 21:45-21:50 | Circ & Accumulate Surveys | 0.08 | 5084 | 2 |
| 03:10-03:55 | Orienting With Motor - Slide @ HS | 0.75 | 4943 | 1 | 21:50-22:00 | Rotating With Motor | 0.17 | 5128 | 2 |
| 03:55-04:10 | Rotating With Motor | 0.25 | 4999 | 1 | 22:00-22:10 | Circ & Accumulate Surveys - Check Shot-INC | 0.17 | 5128 | 2 |
| 04:10-04:20 | Circ & Accumulate Surveys | 0.17 | 4999 | 1 | 22:10-22:30 | Orienting With Motor - Slide @ HS | 0.33 | 5158 | 2 |
| 04:20-06:30 | Orienting With Motor - Cntnu. diff spikes | 2.17 | 5036 | 1 | 22:30-22:35 | Rotating With Motor | 0.08 | 5169 | 2 |
| 06:30-06:35 | Rotating With Motor | 0.08 | 5041 | 1 | 22:35-22:45 | Circ & Accumulate Surveys | 0.17 | 5169 | 2 |
| 06:35-08:45 | Circulating - Pump dry pill | 2.17 | 5041 | 1 | 22:45-23:00 | Orienting With Motor - Slide @ HS | 0.25 | 5189 | 2 |
| 08:45-12:15 | POOH - See Comments | 3.50 | 5041 | 1 | 23:00-23:10 | Rotating With Motor | 0.17 | 5255 | 2 |
| 12:15-12:30 | Safety Meeting - JSA in doghouse | 0.25 | 5041 | 1 | 23:10-23:15 | Circ & Accumulate Surveys | 0.08 | 5255 | 2 |
| 12:30-14:00 | Lay Down Directional Tools - Change bit and motor | 1.50 | 5041 | 1 | 23:15-23:35 | Orienting With Motor - Slide @ 30L | 0.33 | 5255 | 2 |
| 14:00-14:15 | Safety Meeting - JSA before TIH | 0.25 | 5041 | 2 | 23:35-23:50 | Rotating With Motor | 0.25 | 5340 | 2 |
| 14:15-14:30 | Rig Up - Change elevators | 0.25 | 5041 | 2 | 23:50-24:00 | Circ & Accumulate Surveys | 0.17 | 5340 | 2 |
| 14:30-14:35 | Circulating - Test MWD OK | 0.08 | 5041 | 2 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 7.50 | ORIENTING HRS: 4.33 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 1.17 | MOTOR HRS: 12.33 |
| MOTOR REAM: 0.00 | | TRIP: 7.42 |
| CIRC: 4.83 | ROTARY DRILL: 0.00 | OTHER: 4.25 |
| MOTOR HRS: 12.33 | DRILL HRS: 7.50 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-----------------------------|----------------------------|
| ROTARY TORQUE: 8000 ft-lb | STRING WEIGHT: 125000 lbs |
| WOB SLIDING (HI): 32000 lbf | WOB ROTATE (HI): 25000 lbf |
| WOB SLIDING (LO): 9000 lbf | WOB ROTATE (LO): 7000 lbf |
| RPM (ROTARY): 50 rpm | DRAG UP: 150000 lbf |
| RPM (MOTOR): 145 rpm | DRAG DN: 100000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|----------------------------|---------------------------------|
| BHA: 1 | HOLE SIZE: 8.75 in | SECTION TYPE: Build & Hold | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-3991 | MODEL: 7/8 L, 5 Stg |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 1.5 Bend@6.19ft | LOBE CFG.: 7/8 |
| MANFCT: Smith | BIT TYPE: PDC 5x16s | TYPE: Smith MDi516 | MTR HRS THIS DAY: 8.25 |
| IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / PR | | | MTR HRS TO DATE: 34.5 |
| | | | NOZZLES: 0.982 in² TFA |

| | | | |
|--|----------------------|----------------------------|-------------------------------------|
| BHA: 2 | HOLE SIZE: 8.75 in | SECTION TYPE: Build & Hold | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-41008 | MODEL: 7/8 L, 5 Stg |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 1.5 Bend@6.19ft | LOBE CFG.: 7/8 |
| MANFCT: Varel | BIT TYPE: PDC 5x16's | TYPE: VM513 | MTR HRS THIS DAY: 4.083333333333333 |
| IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / TD | | | MTR HRS TO DATE: 4.083333333333333 |
| | | | NOZZLES: 0.982 in² TFA |



Weatherford®

Daily Activity Report

Drilling Services

v4.2.2674

Day 5 - 2012/08/20

PUMP PARAMETERS

PRESSURE ON BTM: 2600

PRESSURE OFF BTM: 1800

TOTAL FLOW RATE: 549.74 gal/min

PUMP 1: TYPE: 1600

EFF.: 95.0%

SPM: 69.00

LINER: 6.00 in

STROKE VOL.: 4.1933 gal/stk

PUMP 2: TYPE: PZ-11

EFF.: 95.0%

SPM: 69.00

LINER: 6.00 in

STROKE VOL.: 4.1933 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: Polymer

VISC: 26 sec/qt

WTR LOSS: 20 cc/30min

PV: 1 cP

YP: 4 lb/100 ft²

pH: 8.1

DENSITY: 8.45 lb/gal

GEL 0/10: 1.00 lb/100 ft²

SAND: 0.01

SOLIDS: 0.7

OIL: 0

TEMP: 105 °F

LIQUID BASE: Water

LIQUID RATE: 0 gal/min

GAS TYPE:

GAS RATE: 0 cu ft/min

COMMENTS:

August 20th: Decision made to POOH and change bit and motor due to excessive differential spikes while sliding and low ROP. Motor inspected normal. Drained strongly. Bearing play within specs. Aggressive, short bodied 5/8" cutter PDC Smith bit changed out for more standard design 5 blade Varel with 1/2" PDC cutters. Problems with differential spikes were elevated with Varel bit on BHA#2. 40%-70% slide required to hold 15 degree tangent angle.

LD Motor. PU Clean Motor. Drilled 4657-5340 MD.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 6 - 2012/08/21

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 Company Man: Duaine Bell, Ben Clayton
 MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft START DEPTH: 5340.0 ft PROGRESS: 1127.0 ft DAILY COST: USD\$22145.00
 KB ELEV: 4871 ft END DEPTH: 6467.0 ft AVG. ROP.: 118.6 ft/hr PREVIOUS COST: USD\$69927.20
 TOTAL COST: USD\$92072.20

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 - Slide @ HS | 0.25 | 5370 | 2 | 06:35-06:40 | Circ & Accumulate Surveys | 0.08 | 6024 | 2 |
| 00:15-00:25 | Rotating With Motor | 0.17 | 5426 | 2 | 06:40-07:00 | Orienting With Motor | 0.33 | 6064 | 2 |
| 00:25-00:35 | Circ & Accumulate Surveys | 0.17 | 5426 | 2 | 07:00-07:25 | Rotating With Motor | 0.42 | 6109 | 2 |
| 00:35-00:55 | Orienting With Motor - Slide @ HS | 0.33 | 5471 | 2 | 07:25-07:40 | Circ & Accumulate Surveys | 0.25 | 6109 | 2 |
| 00:55-01:05 | Rotating With Motor | 0.17 | 5511 | 2 | 07:40-08:10 | Orienting With Motor | 0.50 | 6169 | 2 |
| 01:05-01:10 | Circ & Accumulate Surveys | 0.08 | 5511 | 2 | 08:10-08:30 | Rotating With Motor | 0.33 | 6195 | 2 |
| 01:10-01:25 | Orienting With Motor - Slide @ HS | 0.25 | 5531 | 2 | 08:30-08:35 | Circ & Accumulate Surveys | 0.08 | 6195 | 2 |
| 01:25-01:40 | Rotating With Motor | 0.25 | 5597 | 2 | 08:35-09:25 | Orienting With Motor | 0.83 | 6249 | 2 |
| 01:40-02:05 | Rig Service | 0.42 | 5597 | 2 | 09:25-09:30 | Rotating With Motor | 0.08 | 6280 | 2 |
| 02:05-02:10 | Circ & Accumulate Surveys | 0.08 | 5597 | 2 | 09:30-09:40 | Circ & Accumulate Surveys | 0.17 | 6280 | 2 |
| 02:10-02:30 | Orienting With Motor - Slide @ HS | 0.33 | 5632 | 2 | 09:40-10:20 | Rig Service | 0.67 | 6280 | 2 |
| 02:30-02:50 | Rotating With Motor | 0.33 | 5682 | 2 | 10:20-11:05 | Orienting With Motor | 0.75 | 6320 | 2 |
| 02:50-02:55 | Circ & Accumulate Surveys | 0.08 | 5682 | 2 | 11:05-11:40 | Rotating With Motor | 0.58 | 6366 | 2 |
| 02:55-03:20 | Orienting With Motor | 0.42 | 5729 | 2 | 11:40-11:45 | Circ & Accumulate Surveys | 0.08 | 6366 | 2 |
| 03:20-03:30 | Rotating With Motor | 0.17 | 5767 | 2 | 11:45-12:15 | Rig Repair - Pump repair | 0.50 | 6366 | 2 |
| 03:30-03:40 | Circ & Accumulate Surveys | 0.17 | 5767 | 2 | 12:15-12:50 | Orienting With Motor | 0.58 | 6431 | 2 |
| 03:40-04:00 | Orienting With Motor - Slide @ HS | 0.33 | 5797 | 2 | 12:50-13:15 | Rotating With Motor | 0.42 | 6451 | 2 |
| 04:00-04:10 | Rotating With Motor | 0.17 | 5853 | 2 | 13:15-13:20 | Circ & Accumulate Surveys | 0.08 | 6451 | 2 |
| 04:10-04:20 | Circ & Accumulate Surveys | 0.17 | 5853 | 2 | 13:20-13:30 | Rotating With Motor - End tangent | 0.17 | 6467 | 2 |
| 04:20-04:40 | Orienting With Motor - Slide @ HS | 0.33 | 5888 | 2 | 13:30-13:35 | Circ & Accumulate Surveys | 0.08 | 6467 | 2 |
| 04:40-04:55 | Rotating With Motor | 0.25 | 5938 | 2 | 13:35-15:30 | Circulating - Circ high vis sweep | 1.92 | 6467 | 2 |
| 04:55-05:10 | Circ & Accumulate Surveys | 0.25 | 5938 | 2 | 15:30-19:50 | POOH To Change BHA - POOH to PU Curve Assy | 4.33 | 6467 | 2 |
| 05:10-05:50 | Rig Repair - Pump issues | 0.67 | 5938 | 2 | 19:50-20:50 | Handle Directional Tools - Lay down BHA 2 | 1.00 | 6467 | 2 |
| 05:50-06:15 | Orienting With Motor | 0.42 | 5988 | 2 | 20:50-22:30 | PU Directional Tools - PU Curve Assembly | 1.67 | 6467 | 3 |
| 06:15-06:35 | Rotating With Motor | 0.33 | 6024 | 2 | 22:30-24:00 | RIH | 1.50 | 6467 | 3 |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|-------|----------------|------|---------------|-------|
| MOTOR DRILL: | 9.50 | ORIENTING HRS: | 5.67 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 3.83 | MOTOR HRS: | 13.25 |
| MOTOR REAM: | 0.00 | TRIP: | 5.83 | OTHER: | 4.92 |
| CIRC: | 3.75 | ROTARY DRILL: | 0.00 | | |
| MOTOR HRS: | 13.25 | DRILL HRS: | 9.50 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 11000 ft-lb | STRING WEIGHT | 130000 lbs |
| WOB SLIDING (HI): | 18000 lbf | WOB ROTATE (HI): | 32000 lbf |
| WOB SLIDING (LO): | 4000 lbf | WOB ROTATE (LO): | 20000 lbf |
| RPM (ROTARY): | 45 rpm | DRAG UP: | 150000 lbf |
| RPM (MOTOR): | 140 rpm | DRAG DN: | 110000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|----------------------|----------------------------|----------------------------------|
| BHA: 2 | HOLE SIZE: 8.75 in | SECTION TYPE: Build & Hold | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-41008 | MODEL: 7/8 L, 5 Stg |
| SETTING: 1.5 ° | KICKPAD: No | SIZE: 1.5 Bend @ 6.19ft | LOBE CFG.: 7/8 |
| MANFCT: Varel | BIT TYPE: PDC 5x16's | TYPE: VM513 | MTR HRS THIS DAY: 13.25 |
| IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / TD | | | MTR HRS TO DATE: 17.333333333333 |
| | | | NOZZLES: 0.982 in² TFA |

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674**Day 6 - 2012/08/21**

BHA: 3 **HOLE SIZE:** 8.75 in **SECTION TYPE:** Curve **SURVEY TYPE:** Positive Pulse MWD
MANFCT.: Weatherford **STABILIZER:** No **SERIAL#:** 675-40990 **MODEL:** 7/8 5.0 stg **LOBE CFG.:** 7/8
SETTING: 2.25 ° **KICKPAD:** 8 5/8" **SIZE:** 2.25 deg@6.35' **MTR HRS THIS DAY:** 0 **MTR HRS TO DATE:** 0
MANFCT: Security **BIT TYPE:** PDC 5x18s **TYPE:** FXD55M **NOZZLES:** 1.243 in² TFA
IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / BHA

PUMP PARAMETERS

| | | | | | |
|------------------------------|--------------------|-------------------------------|-------------------|--|------------------------------------|
| PRESSURE ON BTM: 2300 | | PRESSURE OFF BTM: 1700 | | TOTAL FLOW RATE: 597.54 gal/min | |
| PUMP 1: | TYPE: 1600 | EFF.: 95.0% | SPM: 75.00 | LINER: 6.00 in | STROKE VOL.: 4.1933 gal/stk |
| PUMP 2: | TYPE: PZ-11 | EFF.: 95.0% | SPM: 75.00 | LINER: 6.00 in | STROKE VOL.: 4.1933 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:

August 21st: Finished 15 degree tangent to 50 ft before KOP.

LD Build and Hold Motor. PU Clean Curve Motor, BHA 3, using the same MWD probes and collars.

Drilled 5340-6467 MD.

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 7 - 2012/08/22

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione, Jacob Hofer

Company Man: Duaine Bell, Ben Clayton

MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft

KB ELEV: 4871 ft

START DEPTH: 6467.0 ft

END DEPTH: 6922.0 ft

PROGRESS: 455.0 ft

AVG. ROP.: 60.0 ft/hr

DAILY COST: USD\$16465.00

PREVIOUS COST: USD\$92072.20

TOTAL COST: USD\$108537.20

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---|------|------|-----|-------------|--|--------|------|-----|
| 00:00-03:30 | RIH | 3.50 | 6467 | 3 | 16:15-16:30 | Orienting With Motor | 0.25 | 6665 | 3 |
| 03:30-04:00 | Wash To Bottom - Wash from 45-4800'MD | 0.50 | 6467 | 3 | 16:30-16:40 | Circ & Accumulate Surveys | 0.17 | 6665 | 3 |
| 04:00-05:20 | RIH | 1.33 | 6467 | 3 | 16:40-17:10 | Orienting With Motor | 0.50 | 6708 | 3 |
| 05:20-07:50 | Wash To Bottom | 2.50 | 6467 | 3 | 17:10-17:20 | Circulating - Slow pump rates | 0.17 | 6708 | 3 |
| 07:50-08:30 | Rig Repair - ST80 Clamp Stuck | 0.67 | 6467 | 3 | 17:20-17:30 | Orienting With Motor | 0.17 | 6708 | 3 |
| 08:30-09:10 | Wash To Bottom | 0.67 | 6467 | 3 | 17:30-17:35 | Circ & Accumulate Surveys | 0.08 | 6708 | 3 |
| 09:10-09:20 | Circ & Accumulate Surveys - Checkshot | 0.17 | 6467 | 3 | 17:35-17:55 | Orienting With Motor | 0.33 | 6751 | 3 |
| 09:20-10:00 | Orienting With Motor - Start Curve | 0.67 | 6500 | 3 | 17:55-18:05 | Circ & Accumulate Surveys | 0.17 | 6751 | 3 |
| 10:00-11:10 | Circ & Condition Mud - Wt. Up, Fix Hopper | 1.17 | 6500 | 3 | 18:05-18:35 | Orienting With Motor - Slide @ 80R | 0.50 | 6794 | 3 |
| 11:10-11:45 | Orienting With Motor | 0.58 | 6537 | 3 | 18:35-18:45 | Circ & Accumulate Surveys | 0.17 | 6794 | 3 |
| 11:45-11:55 | Circ & Accumulate Surveys | 0.17 | 6537 | 3 | 18:45-19:20 | Orienting With Motor - Slide @ 60R | 0.58 | 6836 | 3 |
| 11:55-13:40 | Orienting With Motor - Hanging up, stalling | 1.75 | 6580 | 3 | 19:20-19:35 | Circ & Accumulate Surveys - 1930 | 0.25 | 6836 | 3 |
| 13:40-13:50 | Circ & Accumulate Surveys | 0.17 | 6580 | 3 | 19:35-20:00 | Orienting With Motor - Slide @ 60R | 0.42 | 6879 | 3 |
| 13:50-14:25 | Orienting With Motor - 15 bbl lube sweep | 0.58 | 6580 | 3 | 20:00-20:10 | Circ & Accumulate Surveys | 0.17 | 6879 | 3 |
| 14:25-14:40 | Circ & Accumulate Surveys | 0.25 | 6580 | 3 | 20:10-20:45 | Orienting With Motor - Slide @ 45R | 0.58 | 6922 | 3 |
| 14:40-15:15 | Rig Service | 0.58 | 6580 | 3 | 20:45-20:55 | Circ & Accumulate Surveys | 0.17 | 6922 | 3 |
| 15:15-15:25 | Circ & Accumulate Surveys | 0.17 | 6580 | 3 | 20:55-21:20 | Wait On Orders - Talk to Engineer | 0.42 | 6922 | 3 |
| 15:25-16:05 | Orienting With Motor | 0.67 | 6623 | 3 | 21:20-00:00 | Circulating - See Comments - Prep for Trip | -21.33 | 6922 | 3 |
| 16:05-16:15 | Circ & Accumulate Surveys | 0.17 | 6623 | 3 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|--------|----------------|------|---------------|-------|
| MOTOR DRILL: | 7.58 | ORIENTING HRS: | 7.58 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | -6.50 |
| MOTOR REAM: | 0.00 | | | TRIP: | 4.83 |
| CIRC: | -14.08 | ROTARY DRILL: | 0.00 | OTHER: | 1.67 |
| MOTOR HRS: | -6.50 | DRILL HRS: | 7.58 | TOTAL HRS: | 0.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|------------|------------------|-------|
| ROTARY TORQUE: | 9000 ft-lb | STRING WEIGHT | 0 lbs |
| WOB SLIDING (HI): | 0 lbf | WOB ROTATE (HI): | 0 lbf |
| WOB SLIDING (LO): | 20000 lbf | WOB ROTATE (LO): | 0 lbf |
| RPM (ROTARY): | 20 rpm | DRAG UP: | 0 lbf |
| RPM (MOTOR): | 145 rpm | DRAG DN: | 0 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|------------------------|---------------------------------|
| BHA: 3 | HOLE SIZE: 8.75 in | SECTION TYPE: Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-40990 | MODEL: 7/8 5.0 stg |
| SETTING: 2.25 ° | KICKPAD: 8 5/8" | SIZE: 2.25 deg @ 6.35' | LOBE CFG.: 7/8 |
| MANFCT: Security | BIT TYPE: PDC 5x18s | TYPE: FXD55M | MTR HRS THIS DAY: -6.5 |
| IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / BHA | | | MTR HRS TO DATE: -6.5 |
| | | | NOZZLES: 1.243 in² TFA |



Weatherford®

Daily Activity Report

Drilling Services

v4.2.2674

Day 7 - 2012/08/22

PUMP PARAMETERS

PRESSURE ON BTM: 2700

PRESSURE OFF BTM: 2100

TOTAL FLOW RATE: 573.64 gal/min

PUMP 1: TYPE: 1600

EFF.: 95.0%

SPM: 72.00

LINER: 6.00 in

STROKE VOL.: 4.1933 gal/stk

PUMP 2: TYPE: PZ-11

EFF.: 95.0%

SPM: 72.00

LINER: 6.00 in

STROKE VOL.: 4.1933 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: Turbo Vis

VISC: 36 sec/qt

WTR LOSS: 7.2 cc/30min

PV: 10 cP

YP: 12 lb/100 ft²

pH: 8

DENSITY: 10 lb/gal

GEL 0/10: 8.00 lb/100 ft²

SAND: 1

SOLIDS: 7.8

OIL: 0

TEMP: 80 °F

LIQUID BASE: Water

LIQUID RATE: 0 gal/min

GAS TYPE:

GAS RATE: 0 cu ft/min

COMMENTS:

August 22nd: RIH with BHA 3, wash to bottom. Start curve. Initial slides began stacking and stalling. 100ft into curve we pumped a 15bbl lube sweep and slide performance was immediately enhanced. Continued use of lube sweeps to keep assy. from hanging up while sliding. The first 200ft of 100% slide yielded an average motor output of 8 deg. per hundred. This put us behind on turn and build quickly. At 6700 MD we began seeing higher motor outputs from 10 to 11 deg. per hundred, however motor output fell again to a 7 and then a 9. This brought the build rate needed to land up to a 12.5. Discussed with engineers, superintendant, and company man. POOH at 6922MD to pick up a 2.6 slick adjustable with tri cone GT-1. Drilled 6467-6922 MD.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 8 - 2012/08/23

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione, Jacob Hofer

Company Man: Duaine Bell, Ben Clayton

MWD Supervisor: Robert Simmons, Corey Jacobs

Other: Lee Howse

GROUND ELEV: 4854 ft

KB ELEV: 4871 ft

START DEPTH: 6922.0 ft

END DEPTH: 6964.0 ft

PROGRESS: 42.0 ft

AVG. ROP.: 26.6 ft/hr

DAILY COST: USD\$24345.00

PREVIOUS COST: USD\$108537.20

TOTAL COST: USD\$132882.20

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---|------|------|-----|-------------|-------------------------------------|------|------|-----|
| 00:00-05:15 | POOH - See Comments | 5.25 | 6922 | 3 | 11:45-19:25 | Trip In | 7.67 | 6922 | 4 |
| 05:15-06:30 | Lay Down Directional Tools - Preparing to TripOut | 1.25 | 6922 | 3 | 19:25-20:45 | Wash To Bottom - Wash Last 3 Stands | 1.33 | 6922 | 4 |
| 06:30-08:30 | Slip And Cut | 2.00 | 6922 | n/a | 20:45-22:20 | Orienting With Motor - Slide @ 60R | 1.58 | 6964 | 4 |
| 08:30-09:15 | Rig Service | 0.75 | 6922 | n/a | 22:20-24:00 | Rig Repair - Work On Gas Buster | 1.67 | 6964 | 4 |
| 09:15-11:45 | PU Directional Tools | 2.50 | 6922 | 4 | | | 0.00 | | |

TIME SUMMARY (hrs):

MOTOR DRILL: 1.58

TIME DRILL: 0.00

MOTOR REAM: 0.00

CIRC: 1.33

MOTOR HRS: 2.92

ORIENTING HRS: 0.00

ROTATING HRS: 0.00

ROTARY DRILL: 0.00

ROTARY DRILL: 0.00

DRILL HRS: 1.58

ROTARY DRILL: 0.00

MOTOR HRS: 2.92

TRIP: 12.92

OTHER: 8.17

TOTAL HRS: 24.00

DRILLING PARAMETERS:

ROTARY TORQUE: 8000 ft-lb

WOB SLIDING (HI): 41000 lbf

WOB SLIDING (LO): 32000 lbf

RPM (ROTARY): 0 rpm

RPM (MOTOR): 150 rpm

STRING WEIGHT 125000 lbs

WOB ROTATE (HI): 0 lbf

WOB ROTATE (LO): 0 lbf

DRAG UP: 180000 lbf

DRAG DN: 110000 lbf

BHA / MOTOR / BIT INFORMATION:

BHA: 3

HOLE SIZE: 8.75 in

SECTION TYPE: Curve

SURVEY TYPE: Positive Pulse MWD

MANFCT.: Weatherford

STABILIZER: No

SERIAL#: 675-40990

MODEL: 7/8 5.0 stg

LOBE CFG.:7/8

SETTING: 2.25 °

KICKPAD:8 5/8"

SIZE: 2.25 deg@6.35'

MTR HRS THIS DAY: 0

MTR HRS TO DATE:-6.5

MANFCT: Security

BIT TYPE:PDC 5x18s

TYPE: FXD55M

NOZZLES:1.243 in² TFA

IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / BHA

BHA: 4

HOLE SIZE: 8.75 in

SECTION TYPE: Curve

SURVEY TYPE: Positive Pulse MWD

MANFCT.: Weatherford

STABILIZER: No

SERIAL#: 675-4095

MODEL: 7/8 5.0 Stg

LOBE CFG.:7/8

SETTING: 2.6 °

KICKPAD:No

SIZE: 2.60 deg@6.18'

MTR HRS THIS DAY: 2.9166666666666666

MTR HRS TO DATE:2.9166666666666666

MANFCT: Hughes-Christen

BIT TYPE:Tri-Cone Bit

TYPE: GT1 3 x 18/32

NOZZLES:18, 18, 18, n/a: 0.746 in² TFA

IADC BIT GRADE: 2 / 2 / WT / A / 1 / I / NO / PR

PUMP PARAMETERS

PRESSURE ON BTM: 2350

PRESSURE OFF BTM:2200

TOTAL FLOW RATE: 478.03 gal/min

PUMP 1: TYPE: 1600

EFF.: 95.0%

SPM: 60.00

LINER: 6.00 in

STROKE VOL.: 4.1933 gal/stk

PUMP 2: TYPE: PZ-11

EFF.: 95.0%

SPM: 60.00

LINER: 6.00 in

STROKE VOL.: 4.1933 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: Polymer

VISC: 38 sec/qt

WTR LOSS: 5.8 cc/30min

PV: 14 cP

YP: 11 lb/100 ft²

pH: 7.5

DENSITY: 9.9 lb/gal

GEL 0/10: 6.00 lb/100 ft²

SAND: 0.5

SOLIDS: 6.2

OIL: 0

TEMP: 88 °F

LIQUID BASE: Water

LIQUID RATE: 0 gal/min

GAS TYPE:

GAS RATE: 0 cu ft/min

COMMENTS:

August 23rd: Continue curve with BHA 4, clean 2.60 ABH slick motor and roller cone. Initially ROP was expectantly low at approximately 20 - 30 fph. Drilled 6922-6964 MD.

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.2674

Day 9 - 2012/08/24

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione, Jacob Hofer

Company Man: Duaine Bell, Ben Clayton

MWD Supervisor: Robert Simmons, Corey Jacobs

Other: Lee Howse

GROUND ELEV: 4854 ft

KB ELEV: 4871 ft

START DEPTH: 6964.0 ft

END DEPTH: 7188.0 ft

PROGRESS: 224.0 ft

AVG. ROP.: 16.4 ft/hr

DAILY COST: USD\$15765.00

PREVIOUS COST: USD\$132882.20

TOTAL COST: USD\$148647.20

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---|------|------|-----|-------------|--|--------|------|-----|
| 00:00-00:55 | Lay Down Drill Pipe | 0.92 | 6964 | 4 | 07:40-08:55 | Orienting With Motor | 1.25 | 7113 | 4 |
| 00:55-01:05 | Circ & Accumulate Surveys | 0.17 | 6964 | 4 | 08:55-09:30 | Rotating With Motor | 0.58 | 7126 | 4 |
| 01:05-03:05 | Orienting With Motor - Slide @ 60R | 2.00 | 7007 | 4 | 09:30-10:05 | Orienting With Motor | 0.58 | 7136 | 4 |
| 03:05-03:15 | Circ & Accumulate Surveys | 0.17 | 7007 | 4 | 10:05-14:30 | Orienting With Motor - Slide @ 45R | 4.42 | 7178 | 4 |
| 03:15-05:10 | Orienting With Motor - Slide @ 45R | 1.92 | 7050 | 4 | 14:30-14:40 | Circ & Accumulate Surveys | 0.17 | 7178 | 4 |
| 05:10-05:20 | Circ & Accumulate Surveys | 0.17 | 7050 | 4 | 14:40-15:35 | Orienting With Motor - Slide @ 30R | 0.92 | 7188 | 4 |
| 05:20-06:45 | Orienting With Motor | 1.42 | 7076 | 4 | 15:35-16:30 | Circ & W.O.O. | 0.92 | 7188 | 4 |
| 06:45-07:05 | Rotating With Motor | 0.33 | 7086 | 4 | 16:30-19:00 | Circulating - See Comments - Prep to TOO | 2.50 | 7188 | 4 |
| 07:05-07:19 | Circ & Accumulate Surveys - Checkshot SVY | 0.23 | 7086 | 4 | 19:00-23:15 | POOH For Bit | 4.25 | 7188 | 4 |
| 07:19-07:35 | Rotating With Motor | 0.27 | 7093 | 4 | 23:15-00:00 | Change Bit | -23.25 | 7188 | 5 |
| 07:35-07:40 | Circ & Accumulate Surveys | 0.08 | 7093 | 4 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | |
|--------------------|----------------------|--------------------|-----------------------------|----------------------------|
| MOTOR DRILL: 13.68 | ORIENTING HRS: 12.50 | ROTARY DRILL: 0.00 | ROTARY TORQUE: 9000 ft-lb | STRING WEIGHT: 150000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 1.18 | MOTOR HRS: 18.08 | WOB SLIDING (HI): 54000 lbf | WOB ROTATE (HI): 32000 lbf |
| MOTOR REAM: 0.00 | | TRIP: 5.17 | WOB SLIDING (LO): 48000 lbf | WOB ROTATE (LO): 17000 lbf |
| CIRC: 4.40 | ROTARY DRILL: 0.00 | OTHER: -23.25 | RPM (ROTARY): 0 rpm | DRAG UP: 195000 lbf |
| MOTOR HRS: 18.08 | DRILL HRS: 13.68 | TOTAL HRS: 0.00 | RPM (MOTOR): 140 rpm | DRAG DN: 95000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|------------------------|------------------------|---|
| BHA: 4 | HOLE SIZE: 8.75 in | SECTION TYPE: Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-4095 | MODEL: 7/8 5.0 Stg |
| SETTING: 2.6 ° | KICKPAD: No | SIZE: 2.60 deg @ 6.18' | LOBE CFG.: 7/8 |
| MANFCT: Hughes-Christen | BIT TYPE: Tri-Cone Bit | TYPE: GT1 3 x 18/32 | MTR HRS THIS DAY: 18.08333333 |
| IADC BIT GRADE: 2 / 2 / WT / A / 1 / I / NO / PR | | | MTR HRS TO DATE: 21 |
| | | | NOZZLES: 18, 18, 18, n/a: 0.746 in² TFA |

| | | | |
|---|---------------------|------------------------|---------------------------------|
| BHA: 5 | HOLE SIZE: 8.75 in | SECTION TYPE: Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-4095 | MODEL: 7/8 5.0 Stg |
| SETTING: 2.6 ° | KICKPAD: No | SIZE: 2.60 deg @ 6.18' | LOBE CFG.: 7/8 |
| MANFCT: Security | BIT TYPE: PDC 5x18s | TYPE: FXD55M | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / DMF | | | MTR HRS TO DATE: 21 |
| | | | NOZZLES: 1.243 in² TFA |

PUMP PARAMETERS

| | | |
|---------------------|---------------------|---------------------------------|
| PRESSURE ON BTM: 0 | PRESSURE OFF BTM: 0 | TOTAL FLOW RATE: 478.03 gal/min |
| PUMP 1: TYPE: 1600 | EFF.: 95.0% | SPM: 60.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 60.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 4.1933 gal/stk |
| | LINER: 6.00 in | STROKE VOL.: 4.1933 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|----------------------|---------------------------|------------------------|-------------|-------------------|-----------------------|
| MUD TYPE: Gelchem | VISC: 39 sec/qt | WTR LOSS: 6.2 cc/30min | PV: 13 cP | YP: 18 lb/100 ft² | pH: 8.5 |
| DENSITY: 10.1 lb/gal | GEL 0/10: 8.00 lb/100 ft² | SAND: 0.75 | SOLIDS: 8.1 | OIL: 0 | TEMP: 110 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |



Weatherford®

Daily Activity Report

Drilling Services
v4.2.2674

Day 9 - 2012/08/24

COMMENTS:

August 24th: Continued curve with BHA 4. Motor output started at 12 dph and increased to over 17 dph by 7200 MD. Slides slowed from 30 fph to 10 fph with tricone. Decision made by Anadarko to pull out of hole for a PDC to help with ROP. Bit only was changed just before midnight, starting BHA 5. Drilled 6964 - 7188 MD.

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 10 - 2012/08/25

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione, Jacob Hofer

Company Man: Duaine Bell, Ben Clayton

MWD Supervisor: Robert Simmons, Corey Jacobs

Other: Lee Howse

GROUND ELEV: 4854 ft

KB ELEV: 4871 ft

START DEPTH: 7188.0 ft

END DEPTH: 7241.0 ft

PROGRESS: 53.0 ft

AVG. ROP.: 39.9 ft/hr

DAILY COST: USD\$22145.00

PREVIOUS COST: USD\$148647.20

TOTAL COST: USD\$170792.20

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---|------|------|-----|-------------|---|------|------|-----|
| 00:00-00:45 | Rig Service | 0.75 | 7188 | 5 | 10:20-13:00 | Circ & W.O.O. - Rubber on shakers | 2.67 | 7241 | 5 |
| 00:45-01:30 | Rig Repair | 0.75 | 7188 | 5 | 13:00-13:30 | Circulating - Pump dry job | 0.50 | 7241 | 5 |
| 01:30-08:00 | RIH - Ream last 3 stands | 6.50 | 7188 | 5 | 13:30-18:40 | POOH For Motor | 5.17 | 7241 | 5 |
| 08:00-08:50 | Rig Service | 0.83 | 7188 | 5 | 18:40-18:55 | Other - See Comments - JSA - Safety Meeting | 0.25 | 7241 | 5 |
| 08:50-09:05 | Rotating With Motor | 0.25 | 7196 | 5 | 18:55-19:40 | Lay Down Directional Tools - LD BHA #5 | 0.75 | 7241 | 5 |
| 09:05-09:30 | Orienting With Motor | 0.42 | 7221 | 5 | 19:40-20:40 | Wait On Other Tools - Wait on Mud Motor | 1.00 | 7241 | n/a |
| 09:30-09:40 | Circ & Accumulate Surveys | 0.17 | 7221 | 5 | 20:40-23:00 | PU Directional Tools - Test Motor & MWD | 2.33 | 7241 | 6 |
| 09:40-10:20 | Orienting With Motor - Unable cntnu slide | 0.67 | 7241 | 5 | 23:00-24:00 | RIH | 1.00 | 7241 | 6 |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|-------|---------------|-------|
| MOTOR DRILL: | 1.33 | ORIENTING HRS: | 1.08 | ROTARY DRILL: | 0.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.25 | MOTOR HRS: | 4.67 |
| MOTOR REAM: | 0.00 | TRIP: | 12.67 | | |
| CIRC: | 3.33 | ROTARY DRILL: | 0.00 | OTHER: | 6.67 |
| MOTOR HRS: | 4.67 | DRILL HRS: | 1.33 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 11000 ft-lb | STRING WEIGHT | 130000 lbs |
| WOB SLIDING (HI): | 45000 lbf | WOB ROTATE (HI): | 35000 lbf |
| WOB SLIDING (LO): | 20000 lbf | WOB ROTATE (LO): | 20000 lbf |
| RPM (ROTARY): | 15 rpm | DRAG UP: | 168000 lbf |
| RPM (MOTOR): | 145 rpm | DRAG DN: | 120000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|---|---------------------|------------------------|--------------------------------------|
| BHA: 5 | HOLE SIZE: 8.75 in | SECTION TYPE: Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-4095 | MODEL: 7/8 5.0 Stg |
| SETTING: 2.6 ° | KICKPAD: No | SIZE: 2.60 deg @ 6.18' | LOBE CFG.: 7/8 |
| MANFCT: Security | BIT TYPE: PDC 5x18s | TYPE: FXD55M | MTR HRS THIS DAY: 4.6666666666666666 |
| IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / DMF | | | MTR HRS TO DATE: 25.6666666666666666 |
| | | | NOZZLES: 1.243 in ² TFA |

| | | | |
|--|---------------------|-----------------------|------------------------------------|
| BHA: 6 | HOLE SIZE: 8.75 in | SECTION TYPE: Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-4026 | MODEL: 7/8 5.0 stg. |
| SETTING: 2.5 ° | KICKPAD: No | SIZE: 2.5 deg @ 6.21' | LOBE CFG.: 7/8 |
| MANFCT: Security | BIT TYPE: PDC 5x18s | TYPE: FXD55M | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 2 / WT / G / X / I / NO / TD | | | MTR HRS TO DATE: 0 |
| | | | NOZZLES: 1.243 in ² TFA |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 3400 | PRESSURE OFF BTM: 3000 | TOTAL FLOW RATE: 597.54 gal/min |
| PUMP 1: TYPE: 1600 | EFF.: 95.0% | SPM: 75.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 75.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 4.1933 gal/stk |
| | LINER: 6.00 in | STROKE VOL.: 4.1933 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|-----------------------|---------------------------------------|------------------------|-------------|-------------------------------|-----------------------|
| MUD TYPE: Polymer | VISC: 38 sec/qt | WTR LOSS: 6.2 cc/30min | PV: 13 cP | YP: 17 lb/100 ft ² | pH: 8.5 |
| DENSITY: 10.35 lb/gal | GEL 0/10: 8.00 lb/100 ft ² | SAND: 0.75 | SOLIDS: 9.7 | OIL: 0 | TEMP: 110 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

August 25th: Tripped in hole with same 2.6 deg motor with PDC bit. First slide from 7196 - 7221 went well, as expected, at 50-70 fph with 150-200 diff pressure. We rotated 8 feet and then continued to slide. No diff. press. could be achieved when attempting to slide regardless of heavy oscillating and high weight. Pressure was erratic. Assembly would not drill at 7241 MD. Found a handful of rubber coming over shakers. Rubber looked like it



Daily Activity Report

Drilling Services
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Day 10 - 2012/08/25

was possibly from the mud motor. Slide was stopped at 10:20 AM. Conference was held with drilling rep., superintendent, and engineers. Decision was made to call for a 2.5 bend motor from Casper shop to complete remaining 200ft of curve. The truck arrived 30 minutes after laying down BHA. Drilled 7188-7241MD.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 11 - 2012/08/26

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Jacob Hofer, Paul Trione

MWD Supervisor: Corey Jacobs, Robert Simmons

Company Man: Duaine Bell, Ben Clayton

Other: Lee Howse

GROUND ELEV: 4854 ft
KB ELEV: 4871 ftSTART DEPTH: 7241.0 ft
END DEPTH: 7435.0 ftPROGRESS: 194.0 ft
AVG. ROP.: 29.2 ft/hrDAILY COST: USD\$15765.00
PREVIOUS COST: USD\$170792.20
TOTAL COST: USD\$186557.20

WORK STATUS: Operating (All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|------------------------------|------|------|-----|-------------|--|------|------|-----|
| 00:00-02:45 | RIH - RIH to ~6850' MD | 2.75 | 7241 | 6 | 09:40-11:00 | Orienting With Motor | 1.33 | 7393 | 6 |
| 02:45-04:20 | Wash To Bottom | 1.58 | 7241 | 6 | 11:00-11:10 | Circ & Accumulate Surveys | 0.17 | 7393 | 6 |
| 04:20-05:15 | Circ Bottoms Up - Clean Hole | 0.92 | 7241 | 6 | 11:10-12:19 | Orienting With Motor | 1.15 | 7415 | 6 |
| 05:15-05:55 | Orienting With Motor | 0.67 | 7265 | 6 | 12:19-12:25 | Circ & Accumulate Surveys - Checkshot Survey | 0.10 | 7415 | 6 |
| 05:55-06:05 | Circ & Accumulate Surveys | 0.17 | 7265 | 6 | 12:25-13:10 | Work Tight Hole & Circ | 0.75 | 7415 | 6 |
| 06:05-07:45 | Orienting With Motor | 1.67 | 7308 | 6 | 13:10-13:30 | Rotating With Motor - Rotate 20' to TD | 0.33 | 7435 | 6 |
| 07:45-08:00 | Circ & Accumulate Surveys | 0.25 | 7308 | 6 | 13:30-20:00 | Circ & Condition Hole - Pump 2 hi-vis sweeps | 6.50 | 7435 | 6 |
| 08:00-09:30 | Orienting With Motor | 1.50 | 7350 | 6 | 20:00-22:00 | Wiper Trip - to xxxx m | 2.00 | 7435 | 6 |
| 09:30-09:40 | Circ & Accumulate Surveys | 0.17 | 7350 | 6 | 22:00-24:00 | POOH To Change BHA | 2.00 | 7435 | 6 |

TIME SUMMARY (hrs):

| | | |
|-------------------|---------------------|--------------------|
| MOTOR DRILL: 6.65 | ORIENTING HRS: 6.32 | ROTARY DRILL: 0.00 |
| TIME DRILL: 0.00 | ROTATING HRS: 0.33 | MOTOR HRS: 17.25 |
| MOTOR REAM: 0.00 | TRIP: 6.75 | |
| CIRC: 10.60 | ROTARY DRILL: 0.00 | OTHER: 0.00 |
| MOTOR HRS: 17.25 | DRILL HRS: 6.65 | TOTAL HRS: 24.00 |

DRILLING PARAMETERS:

| | |
|-----------------------------|----------------------------|
| ROTARY TORQUE: 0 ft-lb | STRING WEIGHT: 150000 lbs |
| WOB SLIDING (HI): 50000 lbf | WOB ROTATE (HI): 32000 lbf |
| WOB SLIDING (LO): 30000 lbf | WOB ROTATE (LO): 24000 lbf |
| RPM (ROTARY): 15 rpm | DRAG UP: 175000 lbf |
| RPM (MOTOR): 140 rpm | DRAG DN: 125000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|-----------------------|------------------------------------|
| BHA: 6 | HOLE SIZE: 8.75 in | SECTION TYPE: Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-4026 | MODEL: 7/8 5.0 stg. |
| SETTING: 2.5 ° | KICKPAD: No | SIZE: 2.5 deg @ 6.21' | LOBE CFG.: 7/8 |
| MANFCT: Security | BIT TYPE: PDC 5x18s | TYPE: FXD55M | MTR HRS THIS DAY: 17.25 |
| IADC BIT GRADE: 1 / 2 / WT / G / X / I / NO / TD | | | MTR HRS TO DATE: 17.25 |
| | | | NOZZLES: 1.243 in ² TFA |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 2650 | PRESSURE OFF BTM: 2400 | TOTAL FLOW RATE: 517.87 gal/min |
| PUMP 1: TYPE: 1600 | EFF.: 95.0% SPM: 65.00 | LINER: 6.00 in |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% SPM: 65.00 | LINER: 6.00 in |
| PUMP 3: TYPE: | EFF.: 100.0% SPM: 0.00 | LINER: 0.00 in |
| | | STROKE VOL.: 4.1933 gal/stk |
| | | STROKE VOL.: 4.1933 gal/stk |
| | | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|----------------------|---------------------------------------|------------------------|-------------|-------------------------------|-----------------------|
| MUD TYPE: Polymer | VISC: 40 sec/qt | WTR LOSS: 6.2 cc/30min | PV: 14 cP | YP: 18 lb/100 ft ² | pH: 8.4 |
| DENSITY: 10.3 lb/gal | GEL 0/10: 5.00 lb/100 ft ² | SAND: 0.5 | SOLIDS: 9.7 | OIL: 0 | TEMP: 115 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

August 26th: Slid 100% to TD. TD Curve. 10 Stand wiper trip. Worked tight hole. POOH to run 7 inch intermediate casing. Drilled 7241-7435 MD.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 12 - 2012/08/27

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 MWD Supervisor: Corey Jacobs, Robert Simmons
 Company Man: Duaine Bell, Ben Clayton
 Other: Lee Howse

GROUND ELEV: 4854 ft START DEPTH: 7435.0 ft PROGRESS: 0.0 ft DAILY COST: USD\$22145.00
 KB ELEV: 4871 ft END DEPTH: 7435.0 ft AVG. ROP.: 0.0 ft/hr PREVIOUS COST: USD\$186557.20
 TOTAL COST: USD\$208702.20

WORK STATUS: Operating (All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---|------|------|-----|-------------|---|------|------|-----|
| 00:00-03:15 | POOH To Run Casing | 3.25 | 7435 | 6 | 12:30-18:00 | RIH With Directional - Directional Only | 5.50 | 7435 | 7 |
| 03:15-04:30 | Lay Down Directional Tools | 1.25 | 7435 | 6 | 18:00-20:00 | Wash To Bottom | 2.00 | 7435 | 7 |
| 04:30-09:30 | Wait On Orders - Prepare for casing. | 5.00 | 7435 | n/a | 20:00-21:00 | Circulating - See Comments - Clean Hole | 1.00 | 7435 | 7 |
| 09:30-10:30 | Wait On Orders - Move Casing, Prep Ream | 1.00 | 7435 | n/a | 21:00-22:30 | Work Tight Hole | 1.50 | 7435 | 7 |
| 10:30-12:30 | PU Directional Tools | 2.00 | 7435 | 7 | 22:30-24:00 | POOH To Run Casing | 1.50 | 7435 | 7 |

TIME SUMMARY (hrs):

| | | | | |
|-------------------|---------------------|--------------------|----------------------------|---------------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 | ROTARY TORQUE: 12000 ft-lb | STRING WEIGHT: 160000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 3.00 | WOB SLIDING (HI): 0 lbf | WOB ROTATE (HI): 0 lbf |
| MOTOR REAM: 0.00 | | TRIP: 10.25 | WOB SLIDING (LO): 0 lbf | WOB ROTATE (LO): 0 lbf |
| CIRC: 3.00 | ROTARY DRILL: 0.00 | OTHER: 10.75 | RPM (ROTARY): 20 rpm | DRAG UP: 200000 lbf |
| MOTOR HRS: 3.00 | DRILL HRS: 0.00 | TOTAL HRS: 24.00 | RPM (MOTOR): 145 rpm | DRAG DN: 950000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|-----------------------|---------------------------------|
| BHA: 6 | HOLE SIZE: 8.75 in | SECTION TYPE: Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: Weatherford | STABILIZER: No | SERIAL#: 675-4026 | MODEL: 7/8 5.0 stg. |
| SETTING: 2.5 ° | KICKPAD: No | SIZE: 2.5 deg @ 6.21' | LOBE CFG.: 7/8 |
| MANFCT: Security | BIT TYPE: PDC 5x18s | TYPE: FXD55M | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 1 / 2 / WT / G / X / I / NO / TD | | | MTR HRS TO DATE: 17.25 |
| | | | NOZZLES: 1.243 in² TFA |

| | | | |
|---|---------------------|--------------------------|---------------------------------|
| BHA: 7 | HOLE SIZE: 8.75 in | SECTION TYPE: Wipe Curve | SURVEY TYPE: Positive Pulse MWD |
| MANFCT.: WFT | STABILIZER: No | SERIAL#: 675-41018 | MODEL: 7/8 5.0 Stg |
| SETTING: 1.83 ° | KICKPAD: No | SIZE: 1.83 deg @ 6.20ft | LOBE CFG.: 7/8 |
| MANFCT: Security | BIT TYPE: PDC 5x18s | TYPE: FXD55M | MTR HRS THIS DAY: 3 |
| IADC BIT GRADE: 1 / 2 / WT / A / X / I / NO / BHA | | | MTR HRS TO DATE: 3 |
| | | | NOZZLES: 0.994 in² TFA |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 2800 | PRESSURE OFF BTM: 2400 | TOTAL FLOW RATE: 573.64 gal/min |
| PUMP 1: TYPE: 1600 | EFF.: 95.0% | SPM: 72.00 |
| PUMP 2: TYPE: PZ-11 | EFF.: 95.0% | SPM: 72.00 |
| PUMP 3: TYPE: | EFF.: 100.0% | SPM: 0.00 |
| | LINER: 6.00 in | STROKE VOL.: 4.1933 gal/stk |
| | LINER: 6.00 in | STROKE VOL.: 4.1933 gal/stk |
| | LINER: 0.00 in | STROKE VOL.: 0.0000 gal/stk |

MUD RECORD

| | | | | | |
|----------------------|---------------------------|------------------------|--------------|-------------------|-----------------------|
| MUD TYPE: Polymer | VISC: 41 sec/qt | WTR LOSS: 6.4 cc/30min | PV: 15 cP | YP: 19 lb/100 ft² | pH: 8.4 |
| DENSITY: 10.6 lb/gal | GEL 0/10: 9.00 lb/100 ft² | SAND: 0.5 | SOLIDS: 11.2 | OIL: 0 | TEMP: 110 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

August 27th: LD curve assembly. When preparing to run casing, Anadarko decided to do a reamer run with directional motor. They wanted to run a 2.25 bend, however, WFT office called and asked us to only run the motor adjusted to 1.83 degrees to reduce the risk of damaging the motor and or leaving something down hole. Adjusted clean motor and picked up BHA 7 with MWD to provide toolfaces to allow us to orient the motor up highside when tripping in or out with the rotary turned off. No new footage.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 13 - 2012/08/28

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 MWD Supervisor: Corey Jacobs, Robert Simmons
 Company Man: Duaine Bell, Ben Clayton
 Other: Lee Howse

GROUND ELEV: 4854 ft START DEPTH: 7435.0 ft PROGRESS: 0.0 ft DAILY COST: USD\$20027.50
 KB ELEV: 4871 ft END DEPTH: 7435.0 ft AVG. ROP.: 0.0 ft/hr PREVIOUS COST: USD\$208702.20
 WORK STATUS: Operating (All units are imperial.) TOTAL COST: USD\$228729.70

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------------|------|------|-----|-------------|----------------|-------|------|-----|
| 00:00-02:15 | POOH To Run Casing | 2.25 | 7435 | 7 | 03:20-24:00 | Run Casing | 20.67 | 7435 | n/a |
| 02:15-03:20 | Lay Down Directional Tools | 1.08 | 7435 | n/a | | | 0.00 | | |

| 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: | 2.25 | WOB SLIDING (LO): | 0 lbf | WOB ROTATE (LO): | 0 lbf |
| CIRC: | 0.00 | ROTARY DRILL: | 0.00 | OTHER: | 21.75 | 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: 7 HOLE SIZE: 8.75 in SECTION TYPE: Wipe Curve SURVEY TYPE: Positive Pulse MWD
 MANFCT.: WFT STABILIZER: No SERIAL#: 675-41018 MODEL: 7/8 5.0 Stg LOBE CFG.: 7/8
 SETTING: 1.83 ° KICKPAD: No SIZE: 1.83 deg @ 6.20ft MTR HRS THIS DAY: 0 MTR HRS TO DATE: 3
 MANFCT: Security BIT TYPE: PDC 5x18s TYPE: FXD55M NOZZLES: 0.994 in² TFA
 IADC BIT GRADE: 1 / 2 / WT / A / X / I / NO / BHA

PUMP PARAMETERS

PRESSURE ON BTM: 0 PRESSURE OFF BTM: 0 TOTAL FLOW RATE: 0.00 gal/min
 PUMP 1: TYPE: 1600 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:

August 28th: Lay down BHA 7. This motor was ran for reaming the curve only and backhauled. Started running 7 inch casing.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 14 - 2012/08/29

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 MWD Supervisor: Corey Jacobs, Robert Simmons
 Company Man: Duaine Bell, Ben Clayton
 Other: Lee Howse

GROUND ELEV: 4854 ft START DEPTH: 7435.0 ft PROGRESS: 0.0 ft DAILY COST: USD\$13077.50
 KB ELEV: 4871 ft END DEPTH: 7435.0 ft AVG. ROP.: 0.0 ft/hr PREVIOUS COST: USD\$228729.70
 WORK STATUS: Operating (All units are imperial.) TOTAL COST: USD\$241807.20

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|------------------|------|------|-----|-------------|---|--------|------|-----|
| 00:00-07:03 | Run Casing | 7.05 | 7435 | n/a | 14:30-18:00 | Nipple Up BOPs | 3.50 | 7435 | n/a |
| 07:03-09:30 | Rig Up Cementers | 2.45 | 7435 | n/a | 18:00-22:20 | Pressure Test | 4.33 | 7435 | n/a |
| 09:30-14:30 | Cement Casing | 5.00 | 7435 | n/a | 22:20-00:00 | Other - See Comments - Prep for PU DD Tools | -22.33 | 7435 | n/a |

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: LOBE CFG.:
 SETTING: KICKPAD: SIZE: MTR HRS THIS DAY: MTR HRS TO DATE:
 MANFCT: BIT TYPE: TYPE: NOZZLES:
 IADC BIT GRADE:

PUMP PARAMETERS

PRESSURE ON BTM: 0 PRESSURE OFF BTM: 0 TOTAL FLOW RATE: 0.00 gal/min
 PUMP 1: TYPE: 1600 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:

August 29th: Run 7 inch Casing.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 15 - 2012/08/30

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

MWD Supervisor: Corey Jacobs, Robert Simmons

DIR Supervisor: Brian Trani, Jacob Hofer, Paul Trione

Company Man: Duaine Bell

Other: Lee Howse

GROUND ELEV: 4854 ft

KB ELEV: 4871 ft

START DEPTH: 7435.0 ft

END DEPTH: 7854.0 ft

PROGRESS: 419.0 ft

AVG. ROP.: 79.8 ft/hr

DAILY COST: USD\$35010.00

PREVIOUS COST: USD\$241807.20

TOTAL COST: USD\$276817.20

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---|------|------|-----|-------------|---|------|------|-----|
| 00:00-01:45 | Other - See Comments - Prep to PU DD Tools | 1.75 | 7435 | n/a | 19:40-19:45 | Circ & Accumulate Surveys | 0.08 | 7540 | 8 |
| 01:45-02:00 | Other - See Comments - Pre Task JSA | 0.25 | 7435 | n/a | 19:45-20:00 | Orienting With Motor - Slide @ HS | 0.25 | 7552 | 8 |
| 02:00-02:30 | PU Directional Tools - Test Motor | 0.50 | 7435 | 8 | 20:00-20:15 | Rotating With Motor | 0.25 | 7583 | 8 |
| 02:30-04:00 | Handle Directional Tools - Pick MWD Tools | 1.50 | 7435 | 8 | 20:15-20:30 | Other - See Comments - Work on Bails/Elevat | 0.25 | 7583 | 8 |
| 04:00-05:30 | Handle Directional Tools - Download Tool Info | 1.50 | 7435 | 8 | 20:30-20:40 | Circ & Accumulate Surveys | 0.17 | 7583 | 8 |
| 05:30-14:15 | RIH With Directional - PU DP then RIH | 8.75 | 7435 | 8 | 20:40-20:50 | Orienting With Motor - Slide @ HS | 0.17 | 7593 | 8 |
| 14:15-14:30 | Circulating - Tag stringer 7200 MD | 0.25 | 7435 | 8 | 20:50-21:20 | Rotating With Motor | 0.50 | 7668 | 8 |
| 14:30-15:50 | Wash To Bottom - Wash to Float 7340MD | 1.33 | 7435 | 8 | 21:20-21:55 | Rig Service | 0.58 | 7668 | 8 |
| 15:50-16:50 | Drill Out Flt, Shoe & Cmmt - Shoe 7410 MD | 1.00 | 7435 | 8 | 21:55-22:05 | Circ & Accumulate Surveys | 0.17 | 7668 | 8 |
| 16:50-18:35 | Rotating With Motor - Hanging Up | 1.75 | 7465 | 8 | 22:05-22:35 | Rotating With Motor | 0.50 | 7753 | 8 |
| 18:35-18:45 | Circ & Accumulate Surveys - Check Shot | 0.17 | 7465 | 8 | 22:35-22:45 | Circ & Accumulate Surveys | 0.17 | 7753 | 8 |
| 18:45-18:55 | Orienting With Motor - Slide @ HS | 0.17 | 7485 | 8 | 22:45-23:10 | Orienting With Motor - Slide @ 90R | 0.42 | 7778 | 8 |
| 18:55-19:05 | Rotating With Motor | 0.17 | 7497 | 8 | 23:10-23:35 | Rotating With Motor | 0.42 | 7839 | 8 |
| 19:05-19:15 | Circ & Accumulate Surveys - Check Shot | 0.17 | 7497 | 8 | 23:35-23:45 | Circ & Accumulate Surveys | 0.17 | 7839 | 8 |
| 19:15-19:40 | Rotating With Motor | 0.42 | 7540 | 8 | 23:45-24:00 | Orienting With Motor - Slide @ 90R | 0.25 | 7854 | 8 |

TIME SUMMARY (hrs):

| | | | | |
|-------------------|---------------------|--------------------|-----------------------------|----------------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 5.25 | ROTARY TORQUE: 8000 ft-lb | STRING WEIGHT: 135000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 | WOB SLIDING (HI): 24000 lbf | WOB ROTATE (HI): 28000 lbf |
| MOTOR REAM: 0.00 | | TRIP: 8.75 | WOB SLIDING (LO): 16000 lbf | WOB ROTATE (LO): 18000 lbf |
| CIRC: 0.00 | ROTARY DRILL: 5.25 | OTHER: 10.00 | RPM (ROTARY): 50 rpm | DRAG UP: 165000 lbf |
| MOTOR HRS: 0.00 | DRILL HRS: 5.25 | TOTAL HRS: 24.00 | RPM (MOTOR): 246 rpm | DRAG DN: 115000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|-------------------------|----------------------|
| BHA: 8 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: n/a | STABILIZER: n/a | SERIAL#: n/a | MODEL: n/a |
| SETTING: n/a ° | KICKPAD: n/a | SIZE: n/a | LOBE CFG.: n/a |
| MANFCT: Smith | BIT TYPE: PDC 5x16s | TYPE: Smith SDi513 | MTR HRS THIS DAY: 0 |
| | | | MTR HRS TO DATE: 0 |
| IADC BIT GRADE: 2 / 3 / CT / G / X / 1 / WT / TD | | | |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 2450 | PRESSURE OFF BTM: 1800 | TOTAL FLOW RATE: 274.87 gal/min |
| PUMP 1: TYPE: 1600 | EFF.: 95.0% | SPM: 69.00 |
| 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.: 4.1933 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: Polymer | VISC: 39 sec/qt | WTR LOSS: 6.6 cc/30min | PV: 7 cP | YP: 10 lb/100 ft² | pH: 9.6 |
| DENSITY: 9.8 lb/gal | GEL 0/10: 3.00 lb/100 ft² | SAND: 0.25 | SOLIDS: 6.7 | OIL: 1 | TEMP: 105 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |



Weatherford®

Daily Activity Report

Day 15 - 2012/08/30

Drilling Services

v4.2.2674

COMMENTS:

August 30th: PU Lateral BHA. BHA#8. PU clean 1.5* ABH. Drilled 7435-7854 MD.

CUSTOMER SIGNATURE:

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 16 - 2012/08/31

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 MWD Supervisor: Corey Jacobs, Robert Simmons
 Company Man: Duaine Bell
 Other: Lee Howse

GROUND ELEV: 4854 ft START DEPTH: 7854.0 ft PROGRESS: 1094.0 ft DAILY COST: USD\$20550.00
 KB ELEV: 4871 ft END DEPTH: 8948.0 ft AVG. ROP.: 54.7 ft/hr PREVIOUS COST: USD\$276817.20
 TOTAL COST: USD\$297367.20

WORK STATUS: Operating (All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|--|------|------|-----|-------------|---|------|------|-----|
| 00:00-00:35 | Rotating With Motor | 0.58 | 7924 | 8 | 13:10-13:20 | Circ & Accumulate Surveys | 0.17 | 8454 | 8 |
| 00:35-00:40 | Circ & Accumulate Surveys | 0.08 | 7924 | 8 | 13:20-13:45 | Orienting With Motor | 0.42 | 8462 | 8 |
| 00:40-01:00 | Orienting With Motor - Slide @ 135R | 0.33 | 7944 | 8 | 13:45-14:25 | Rotating With Motor | 0.67 | 8521 | 8 |
| 01:00-01:25 | Rotating With Motor | 0.42 | 8009 | 8 | 14:25-14:35 | Circ & Accumulate Surveys | 0.17 | 8521 | 8 |
| 01:25-01:35 | Circ & Accumulate Surveys - Replace MWD Screen | 0.17 | 8009 | 8 | 14:35-15:10 | Orienting With Motor | 0.58 | 8561 | 8 |
| 01:35-02:20 | Orienting With Motor - Slide @ 180 | 0.75 | 8024 | 8 | 15:10-15:30 | Rotating With Motor | 0.33 | 8606 | 8 |
| 02:20-02:40 | Rotating With Motor | 0.33 | 8095 | 8 | 15:30-15:40 | Circ & Accumulate Surveys | 0.17 | 8606 | 8 |
| 02:40-02:50 | Circ & Accumulate Surveys | 0.17 | 8095 | 8 | 15:40-17:45 | Orienting With Motor | 2.08 | 8676 | 8 |
| 02:50-03:55 | Orienting With Motor - Slide @ 160L | 1.08 | 8125 | 8 | 17:45-17:55 | Rotating With Motor | 0.17 | 8692 | 8 |
| 03:55-04:20 | Rotating With Motor | 0.42 | 8180 | 8 | 17:55-18:30 | Rig Service | 0.58 | 8692 | 8 |
| 04:20-04:30 | Circ & Accumulate Surveys | 0.17 | 8180 | 8 | 18:30-18:40 | Circ & Accumulate Surveys | 0.17 | 8692 | 8 |
| 04:30-06:05 | Orienting With Motor - Slide @ 90L | 1.58 | 8220 | 8 | 18:40-19:35 | Orienting With Motor - Slide @ 110R | 0.92 | 8722 | 8 |
| 06:05-06:30 | Rotating With Motor | 0.42 | 8247 | 8 | 19:35-19:40 | Rotating With Motor | 0.08 | 8735 | 8 |
| 06:30-06:40 | Wait On Orders - Discuss Anti-Collis. | 0.17 | 8247 | 8 | 19:40-19:50 | Circ & Accumulate Surveys - Check Shot | 0.17 | 8735 | 8 |
| 06:40-06:45 | Circ & Accumulate Surveys | 0.08 | 8247 | 8 | 19:50-20:35 | Orienting With Motor - Slide @ 180R | 0.75 | 8750 | 8 |
| 06:45-07:10 | Orienting With Motor | 0.42 | 8257 | 8 | 20:35-20:45 | Rotating With Motor | 0.17 | 8777 | 8 |
| 07:10-08:20 | Rotating With Motor | 1.17 | 8265 | 8 | 20:45-20:55 | Circ & Accumulate Surveys - And Reaming | 0.17 | 8777 | 8 |
| 08:20-08:50 | Rig Service | 0.50 | 8265 | 8 | 20:55-22:00 | Orienting With Motor - slide @ 135R | 1.08 | 8807 | 8 |
| 08:50-09:00 | Circ & Accumulate Surveys | 0.17 | 8265 | 8 | 22:00-22:20 | Rotating With Motor | 0.33 | 8863 | 8 |
| 09:00-10:51 | Orienting With Motor | 1.85 | 8351 | 8 | 22:20-22:30 | Circ & Accumulate Surveys - and reaming | 0.17 | 8863 | 8 |
| 10:51-11:30 | Rotating With Motor | 0.65 | 8361 | 8 | 22:30-22:55 | Orienting With Motor - Slide @180R | 0.42 | 8888 | 8 |
| 11:30-11:40 | Circ & Accumulate Surveys | 0.17 | 8361 | 8 | 22:55-23:25 | Rotating With Motor | 0.50 | 8948 | 8 |
| 11:40-12:15 | Orienting With Motor | 0.58 | 8371 | 8 | 23:25-23:40 | Circ & Accumulate Surveys - Recycle pumps | 0.25 | 8948 | 8 |
| 12:15-13:10 | Rotating With Motor | 0.92 | 8454 | 8 | 23:40-24:00 | Other - See Comments - Get Target Change | 0.33 | 8948 | 8 |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|-------|---------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 20.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 0.00 |
| MOTOR REAM: | 0.00 | | | TRIP: | 0.00 |
| CIRC: | 0.00 | ROTARY DRILL: | 20.00 | OTHER: | 4.00 |
| MOTOR HRS: | 0.00 | DRILL HRS: | 20.00 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-----------|------------------|------------|
| ROTARY TORQUE: | 10 ft-lb | STRING WEIGHT | 145000 lbs |
| WOB SLIDING (HI): | 24000 lbf | WOB ROTATE (HI): | 28000 lbf |
| WOB SLIDING (LO): | 22000 lbf | WOB ROTATE (LO): | 24000 lbf |
| RPM (ROTARY): | 50 rpm | DRAG UP: | 165000 lbf |
| RPM (MOTOR): | 243 rpm | DRAG DN: | 115000 lbf |

BHA / MOTOR / BIT INFORMATION:

BHA: 8 HOLE SIZE: 6.125 in SECTION TYPE: Lateral 1 SURVEY TYPE: HEL LWD
 MANFCT.: n/a STABILIZER: n/a SERIAL#: n/a MODEL: n/a LOBE CFG.: n/a
 SETTING: n/a ° KICKPAD: n/a SIZE: n/a MTR HRS THIS DAY: 0 MTR HRS TO DATE: 0
 MANFCT: Smith BIT TYPE: PDC 5x16s TYPE: Smith SDi513 NOZZLES: 0.982 in² TFA
 IADC BIT GRADE: 2 / 3 / CT / G / X / 1 / WT / TD



Weatherford

Daily Activity Report

Drilling Services

v4.2.2674

Day 16 - 2012/08/31

PUMP PARAMETERS

PRESSURE ON BTM: 2600

PRESSURE OFF BTM: 1950

TOTAL FLOW RATE: 274.87 gal/min

PUMP 1: TYPE: 1600

EFF.: 95.0%

SPM: 69.00

LINER: 6.00 in

STROKE VOL.: 4.1933 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: Polymer

VISC: 38 sec/qt

WTR LOSS: 6 cc/30min

PV: 11 cP

YP: 12 lb/100 ft² pH: 9

DENSITY: 9.8 lb/gal

GEL 0/10: 4.00 lb/100 ft²

SAND: 0.5

SOLIDS: 6.7

OIL: 1

TEMP: 100 °F

LIQUID BASE: Water

LIQUID RATE: 0 gal/min

GAS TYPE:

GAS RATE: 0 cu ft/min

COMMENTS:

August 31st: Checkshot at shoe showed angle at around 89 deg. rather than the 90.5 projected. This is a good lesson as we saw good slide quality and toolface control to TD of the curve on which we based projections. A good deal of time was spent reaming the curve. It is possible that this reaming and washing casing down in the last part of the curve brought angle down slightly.

Slides were placed to bring the nose up, back to target TVD, and once the trend was started angle built quickly to 92 degrees. More sliding was required to level off, however, we did not have the turn left/East established as we approached Baldwin 6-11. A meeting was held in the morning to consult with the drilling engineer and explained we needed 5.5 doglegs first left and then back to the right in order to avoid sep. factors lower than 1.5 and also to avoid crossing the mineral hardline 20 feet left of the plan. There was no room to chance any doglegs lower than 5.5.

We slid aggressively left, knowing that we would not have room to increase slide percentage later because survey point was 55 feet behind bit. The first dogleg was at 5.5 and the second at 8.3. This made it possible to avoid the Baldwin offset with a 1.58 Sep. Factor. Aggressive slides back to the right yielded a 6.7 dogleg and kept us from crossing the mineral hardline. We came within 11 feet of the hardline. During this time angle built close to a 93 and slides were placed down to retard this angle.

Once the collision and hardline issues were behind us we were able to drill over 1000 feet in aprox. 8 hrs before deciding to backream to the shoe the following morning. Drilled 7854-8948 MD.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 17 - 2012/09/01

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Jacob Hofer, Paul Trione

Other: Lee Howse

MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft

KB ELEV: 4871 ft

START DEPTH: 8948.0 ft

END DEPTH: 10315.0 ft

PROGRESS: 1367.0 ft

AVG. ROP.: 98.2 ft/hr

DAILY COST: USD\$20550.00

PREVIOUS COST: USD\$297367.20

TOTAL COST: USD\$317917.20

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|--|------|------|-----|-------------|------------------------------------|------|-------|-----|
| 00:00-00:25 | Rotating With Motor | 0.42 | 9034 | 8 | 15:00-15:10 | Rotating With Motor | 0.17 | 9664 | 8 |
| 00:25-00:35 | Circ & Accumulate Surveys - and Reaming | 0.17 | 9034 | 8 | 15:10-16:00 | Orienting With Motor | 0.83 | 9674 | 8 |
| 00:35-01:05 | Rotating With Motor | 0.50 | 9119 | 8 | 16:00-16:20 | Rotating With Motor | 0.33 | 9717 | 8 |
| 01:05-01:15 | Circ & Accumulate Surveys - with Reaming | 0.17 | 9119 | 8 | 16:20-16:30 | Circ & Accumulate Surveys | 0.17 | 9717 | 8 |
| 01:15-02:00 | Orienting With Motor - Slide @ 45L | 0.75 | 9134 | 8 | 16:30-16:50 | Orienting With Motor | 0.33 | 9727 | 8 |
| 02:00-02:30 | Rotating With Motor - Sweep Send | 0.50 | 9205 | 8 | 16:50-17:30 | Rotating With Motor | 0.67 | 9803 | 8 |
| 02:30-02:40 | Circ & Accumulate Surveys - with Reaming | 0.17 | 9205 | 8 | 17:30-18:00 | Rig Service | 0.50 | 9803 | 8 |
| 02:40-03:30 | Orienting With Motor - Slide @ 90L | 0.83 | 9220 | 8 | 18:00-18:10 | Circ & Accumulate Surveys | 0.17 | 9803 | 8 |
| 03:30-03:55 | Rotating With Motor | 0.42 | 9290 | 8 | 18:10-18:45 | Rotating With Motor | 0.58 | 9888 | 8 |
| 03:55-04:05 | Circ & Accumulate Surveys - with Reaming | 0.17 | 9290 | 8 | 18:45-18:50 | Circ & Accumulate Surveys | 0.08 | 9888 | 8 |
| 04:05-04:25 | Orienting With Motor - Slide @ HS | 0.33 | 9300 | 8 | 18:50-19:35 | Orienting With Motor | 0.75 | 9903 | 8 |
| 04:25-04:50 | Rotating With Motor | 0.42 | 9376 | 8 | 19:35-20:10 | Rotating With Motor | 0.58 | 9974 | 8 |
| 04:50-05:00 | Circ & Accumulate Surveys - with Reaming | 0.17 | 9376 | 8 | 20:10-20:15 | Circ & Accumulate Surveys | 0.08 | 9974 | 8 |
| 05:00-05:30 | Rotating With Motor | 0.50 | 9461 | 8 | 20:15-20:50 | Orienting With Motor | 0.58 | 9994 | 8 |
| 05:30-05:40 | Circ & Accumulate Surveys | 0.17 | 9461 | 8 | 20:50-21:25 | Rotating With Motor | 0.58 | 10059 | 8 |
| 05:40-06:25 | Rotating With Motor | 0.75 | 9546 | 8 | 21:25-21:30 | Circ & Accumulate Surveys | 0.08 | 10059 | 8 |
| 06:25-06:35 | Circ & Accumulate Surveys - Ream | 0.17 | 9546 | 8 | 21:30-22:10 | Orienting With Motor | 0.67 | 10075 | 8 |
| 06:35-06:45 | Orienting With Motor | 0.17 | 9556 | 8 | 22:10-22:35 | Rotating With Motor | 0.42 | 10149 | 8 |
| 06:45-07:10 | Rotating With Motor | 0.42 | 9632 | 8 | 22:35-22:40 | Circ & Accumulate Surveys | 0.08 | 10149 | 8 |
| 07:10-07:20 | Circ & Accumulate Surveys | 0.17 | 9632 | 8 | 22:40-23:15 | Rotating With Motor | 0.58 | 10230 | 8 |
| 07:20-07:45 | Orienting With Motor | 0.42 | 9654 | 8 | 23:15-23:20 | Circ & Accumulate Surveys | 0.08 | 10230 | 8 |
| 07:45-13:00 | Back Reaming | 5.25 | 9654 | 8 | 23:20-23:45 | Rotating With Motor | 0.42 | 10315 | 8 |
| 13:00-15:00 | RIH | 2.00 | 9654 | 8 | 23:45-24:00 | Circulating - See Comments - spr's | 0.25 | 10315 | 8 |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|-------|---------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 13.92 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 0.00 |
| MOTOR REAM: | 0.00 | | | TRIP: | 2.00 |
| CIRC: | 0.00 | ROTARY DRILL: | 13.92 | OTHER: | 8.08 |
| MOTOR HRS: | 0.00 | DRILL HRS: | 13.92 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 14000 ft-lb | STRING WEIGHT | 140000 lbs |
| WOB SLIDING (HI): | 48000 lbf | WOB ROTATE (HI): | 26000 lbf |
| WOB SLIDING (LO): | 35000 lbf | WOB ROTATE (LO): | 18000 lbf |
| RPM (ROTARY): | 60 rpm | DRAG UP: | 195999 lbf |
| RPM (MOTOR): | 224 rpm | DRAG DN: | 80000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|-------------------------|------------------------|
| BHA: 8 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: n/a | STABILIZER: n/a | SERIAL#: n/a | MODEL: n/a |
| SETTING: n/a ° | KICKPAD: n/a | SIZE: n/a | LOBE CFG.: n/a |
| MANFCT: Smith | BIT TYPE: PDC 5x16s | TYPE: Smith SDi513 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 2 / 3 / CT / G / X / 1 / WT / TD | | | MTR HRS TO DATE: 0 |
| | | | NOZZLES: 0.982 in² TFA |



Daily Activity Report

Drilling Services
v4.2.2674

Day 17 - 2012/09/01

PUMP PARAMETERS

PRESSURE ON BTM: 700

PRESSURE OFF BTM: 2200

TOTAL FLOW RATE: 274.87 gal/min

PUMP 1: TYPE: 1600

EFF.: 95.0%

SPM: 69.00

LINER: 6.00 in

STROKE VOL.: 4.1933 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: Polymer

VISC: 39 sec/qt

WTR LOSS: 6.2 cc/30min

PV: 9 cP

YP: 12 lb/100 ft²

pH: 8.9

DENSITY: 9.8 lb/gal

GEL 0/10: 3.00 lb/100 ft²

SAND: 0.5

SOLIDS: 7.2

OIL: 0

TEMP: 204 °F

LIQUID BASE: Water

LIQUID RATE: 0 gal/min

GAS TYPE:

GAS RATE: 0 cu ft/min

COMMENTS:

September 1st: Drag was getting up to 70k so Company man in conjunction with Anadarko office decided to do a wiper trip. Back reamed from 9654MD to casing shoe to help reduce drag later in the lateral. Got back to bottom but drag remained the same even getting worse at times. Drilled 8948 - 10315MD

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 18 - 2012/09/02

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Jacob Hofer

Other: Lee Howse

MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft

KB ELEV: 4871 ft

START DEPTH: 10315.0 ft

END DEPTH: 11525.0 ft

PROGRESS: 1210.0 ft

AVG. ROP.: 75.6 ft/hr

DAILY COST: USD\$20550.00

PREVIOUS COST: USD\$317917.20

TOTAL COST: USD\$338467.20

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|---------------------------|------|-------|-----|-------------|--|------|-------|-----|
| 00:00-00:10 | Circ & Accumulate Surveys | 0.17 | 10315 | 8 | 09:50-10:00 | Circ & Accumulate Surveys | 0.17 | 10999 | 8 |
| 00:10-00:45 | Orienting With Motor | 0.58 | 10335 | 8 | 10:00-10:50 | Rotating With Motor | 0.83 | 11085 | 8 |
| 00:45-01:15 | Rotating With Motor | 0.50 | 10401 | 8 | 10:50-11:00 | Circ & Accumulate Surveys | 0.17 | 11085 | 8 |
| 01:15-01:20 | Circ & Accumulate Surveys | 0.08 | 10401 | 8 | 11:00-11:30 | Rotating With Motor | 0.50 | 11170 | 8 |
| 01:20-01:50 | Rotating With Motor | 0.50 | 10486 | 8 | 11:30-11:40 | Circ & Accumulate Surveys | 0.17 | 11170 | 8 |
| 01:50-01:55 | Circ & Accumulate Surveys | 0.08 | 10486 | 8 | 11:40-12:20 | Rotating With Motor | 0.67 | 11256 | 8 |
| 01:55-02:30 | Rotating With Motor | 0.58 | 10572 | 8 | 12:20-12:30 | Circ & Accumulate Surveys | 0.17 | 11256 | 8 |
| 02:30-02:35 | Circ & Accumulate Surveys | 0.08 | 10572 | 8 | 12:30-12:40 | Circulating - Reboot MWD PC | 0.17 | 11256 | 8 |
| 02:35-03:10 | Orienting With Motor | 0.58 | 10587 | 8 | 12:40-12:55 | Circulating - Red. drag w/ lube | 0.25 | 11256 | 8 |
| 03:10-03:45 | Rotating With Motor | 0.58 | 10657 | 8 | 12:55-15:20 | Orienting With Motor | 2.42 | 11286 | 8 |
| 03:45-03:50 | Circ & Accumulate Surveys | 0.08 | 10657 | 8 | 15:20-16:20 | Rotating With Motor | 1.00 | 11341 | 8 |
| 03:50-04:25 | Rotating With Motor | 0.58 | 10743 | 8 | 16:20-16:30 | Circ & Accumulate Surveys | 0.17 | 11341 | 8 |
| 04:25-04:30 | Circ & Accumulate Surveys | 0.08 | 10743 | 8 | 16:30-17:00 | Orienting With Motor | 0.50 | 11361 | 8 |
| 04:30-06:00 | Orienting With Motor | 1.50 | 10758 | 8 | 17:00-17:25 | Rotating With Motor | 0.42 | 11427 | 8 |
| 06:00-07:20 | Rotating With Motor | 1.33 | 10828 | 8 | 17:25-17:30 | Circ & Accumulate Surveys | 0.08 | 11427 | 8 |
| 07:20-07:30 | Circ & Accumulate Surveys | 0.17 | 10828 | 8 | 17:30-19:00 | Rig Service | 1.50 | 11427 | 8 |
| 07:30-08:30 | Orienting With Motor | 1.00 | 10846 | 8 | 19:00-19:45 | Rotating With Motor - TD | 0.75 | 11525 | 8 |
| 08:30-09:10 | Rotating With Motor | 0.67 | 10914 | 8 | 19:45-19:50 | Circ & Accumulate Surveys | 0.08 | 11525 | 8 |
| 09:10-09:20 | Circ & Accumulate Surveys | 0.17 | 10914 | 8 | 19:50-22:00 | Circ & Condition Hole - 2 sweeps | 2.17 | 11525 | 8 |
| 09:20-09:50 | Rotating With Motor | 0.50 | 10999 | 8 | 22:00-24:00 | POOH - See Comments - To check hole drag | 2.00 | 11525 | 8 |

TIME SUMMARY (hrs):

| | | | | | |
|--------------|------|----------------|-------|---------------|-------|
| MOTOR DRILL: | 0.00 | ORIENTING HRS: | 0.00 | ROTARY DRILL: | 16.00 |
| TIME DRILL: | 0.00 | ROTATING HRS: | 0.00 | MOTOR HRS: | 0.00 |
| MOTOR REAM: | 0.00 | | | TRIP: | 2.00 |
| CIRC: | 0.00 | ROTARY DRILL: | 16.00 | OTHER: | 6.00 |
| MOTOR HRS: | 0.00 | DRILL HRS: | 16.00 | TOTAL HRS: | 24.00 |

DRILLING PARAMETERS:

| | | | |
|-------------------|-------------|------------------|------------|
| ROTARY TORQUE: | 14000 ft-lb | STRING WEIGHT | 145000 lbs |
| WOB SLIDING (HI): | 55000 lbf | WOB ROTATE (HI): | 22000 lbf |
| WOB SLIDING (LO): | 25000 lbf | WOB ROTATE (LO): | 16000 lbf |
| RPM (ROTARY): | 60 rpm | DRAG UP: | 230000 lbf |
| RPM (MOTOR): | 224 rpm | DRAG DN: | 80000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|-------------------------|------------------------------------|
| BHA: 8 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: n/a | STABILIZER: n/a | SERIAL#: n/a | MODEL: n/a |
| SETTING: n/a ° | KICKPAD: n/a | SIZE: n/a | LOBE CFG.: n/a |
| MANFCT: Smith | BIT TYPE: PDC 5x16s | TYPE: Smith SDi513 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 2 / 3 / CT / G / X / 1 / WT / TD | | | MTR HRS TO DATE: 0 |
| | | | NOZZLES: 0.982 in ² TFA |



Daily Activity Report

Drilling Services
v4.2.2674

Day 18 - 2012/09/02

PUMP PARAMETERS

| | | |
|------------------------------|--------------------------------------|--|
| PRESSURE ON BTM: 3200 | PRESSURE OFF BTM: 2450 | TOTAL FLOW RATE: 274.87 gal/min |
| PUMP 1: TYPE: 1600 | EFF.: 95.0% SPM: 69.00 | LINER: 6.00 in STROKE VOL.: 4.1933 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: Polymer | VISC: 40 sec/qt | WTR LOSS: 6.2 cc/30min | PV: 12 cP | YP: 12 lb/100 ft ² | pH: 8.8 |
| DENSITY: 10 lb/gal | GEL 0/10: 3.00 lb/100 ft ² | SAND: 0.5 | SOLIDS: 7.5 | OIL: 0 | TEMP: 213 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

September 2nd: Pump 2 HI VIS sweeps bottoms up.

Lubes brought to 1%.

POOH to check hole drag. Back reamed while pumping 300 gpm, P/U and S/O weight of an average 250k Up and 90k Down. Various tight spots of 285k Up and 50K down.

By 10,800MD slides were painfully slow. It became impossible to get to bottom without the rotary turned on. This further increased the time to slide as torque had to be worked out while trying to orient toolfaces on bottom. Hookload was routinely brought down to 50K in order to gain even 100 psi of differential pressure. The company man asked Baroid to bring lubes up to 2% by trickling lube throughout the day.

In our experience, during tight hole situations like this, it would be better to bring lubes up to 2% by 9500 MD to get the added benefit throughout the course of the lateral. The final slide went quite well after another decision was made to put the lube in a rate of 1 drum every 30 minutes.

Every slide in the lateral, until this final lube, required aggressive use of the oscillator and hookloads at 50K. The final slide brought the hookload up to around 100K. Weight was transferred easily to the bit. Stack and stall issues that were normally slowing down slides due to reactive torque kickback and lack of weight transfer went away. The top drive oscillator was no longer necessary. Slide ROP climbed from 20 fph to 60 fph.

Drilled 10315-11525 MD. TD Lateral.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 19 - 2012/09/03

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Jacob Hofer

Other: Lee Howse

MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft

START DEPTH: 11525.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$24350.00

KB ELEV: 4871 ft

END DEPTH: 11525.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$338467.20

TOTAL COST: USD\$362817.20

WORK STATUS: Operating

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|-------------------------------|------|-------|-----|-------------|---|-------|-------|-----|
| 00:00-06:00 | Back Ream - back ream to shoe | 6.00 | 11525 | 8 | 11:00-12:15 | Lay Down Directional Tools - Upload LWD | 1.25 | 11525 | n/a |
| 06:00-07:00 | Circulating - Pump Dry Job | 1.00 | 11525 | 8 | 12:15-24:00 | Standby - Reamer Run | 11.75 | 11525 | n/a |
| 07:00-11:00 | POOH - See Comments | 4.00 | 11525 | 8 | | | 0.00 | | |

TIME SUMMARY (hrs):

| | | | | |
|-------------------|---------------------|--------------------|-----------------------------|----------------------------|
| MOTOR DRILL: 0.00 | ORIENTING HRS: 0.00 | ROTARY DRILL: 0.00 | ROTARY TORQUE: 140 ft-lb | STRING WEIGHT: 145000 lbs |
| TIME DRILL: 0.00 | ROTATING HRS: 0.00 | MOTOR HRS: 0.00 | WOB SLIDING (HI): 55000 lbf | WOB ROTATE (HI): 22000 lbf |
| MOTOR REAM: 0.00 | | TRIP: 4.00 | WOB SLIDING (LO): 20000 lbf | WOB ROTATE (LO): 16000 lbf |
| CIRC: 0.00 | ROTARY DRILL: 0.00 | OTHER: 20.00 | RPM (ROTARY): 60 rpm | DRAG UP: 230000 lbf |
| MOTOR HRS: 0.00 | DRILL HRS: 0.00 | TOTAL HRS: 24.00 | RPM (MOTOR): 224 rpm | DRAG DN: 80000 lbf |

BHA / MOTOR / BIT INFORMATION:

| | | | |
|--|---------------------|-------------------------|------------------------|
| BHA: 8 | HOLE SIZE: 6.125 in | SECTION TYPE: Lateral 1 | SURVEY TYPE: HEL LWD |
| MANFCT.: n/a | STABILIZER: n/a | SERIAL#: n/a | MODEL: n/a |
| SETTING: n/a ° | KICKPAD: n/a | SIZE: n/a | LOBE CFG.: n/a |
| MANFCT: Smith | BIT TYPE: PDC 5x16s | TYPE: Smith SDi513 | MTR HRS THIS DAY: 0 |
| IADC BIT GRADE: 2 / 3 / CT / G / X / 1 / WT / TD | | | MTR HRS TO DATE: 0 |
| | | | NOZZLES: 0.982 in² TFA |

PUMP PARAMETERS

| | | |
|-----------------------|------------------------|---------------------------------|
| PRESSURE ON BTM: 3200 | PRESSURE OFF BTM: 2400 | TOTAL FLOW RATE: 274.87 gal/min |
| PUMP 1: TYPE: 1600 | EFF.: 95.0% | SPM: 69.00 |
| 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.: 4.1933 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: Polymer | VISC: 40 sec/qt | WTR LOSS: 6.2 cc/30min | PV: 12 cP | YP: 13 lb/100 ft² | pH: 8.8 |
| DENSITY: 10 lb/gal | GEL 0/10: 3.00 lb/100 ft² | SAND: 0.5 | SOLIDS: 7.3 | OIL: 0 | TEMP: 213 °F |
| LIQUID BASE: Water | | LIQUID RATE: 0 gal/min | GAS TYPE: | | GAS RATE: 0 cu ft/min |

COMMENTS:

September 3rd: POOH to shoe to check hole drag. Back reamed while pumping 300 gpm, P/U and S/O weight of an average 250k Up and 90k Down. Various tight spots of 285k Up and 50K down. LD BHA 8. Prep for reamer run.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 20 - 2012/09/04

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Jacob Hofer

Other: Lee Howse

MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft

START DEPTH: 11525.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$13172.50

KB ELEV: 4871 ft

END DEPTH: 11525.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$362817.20

TOTAL COST: USD\$375989.70

WORK STATUS: Standby

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------|------|-------|-----|------|----------------|------|------|-----|
| 00:00-00:15 | Standby - Reamer Run | 0.25 | 11525 | 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: | 0.25 |
| MOTOR HRS: | 0.00 | DRILL HRS: | 0.00 | TOTAL HRS: | 0.25 |

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: 1600 | 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:

August 4th: LWD tools and personnel on standby. DD motors and tools on standby. Reamer run.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 21 - 2012/09/05

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Jacob Hofer

Other: Lee Howse

MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft

START DEPTH: 11525.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$13172.50

KB ELEV: 4871 ft

END DEPTH: 11525.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$375989.70

WORK STATUS: Standby

(All units are imperial.)

TOTAL COST: USD\$389162.20

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------|-------|-------|-----|------|----------------|------|------|-----|
| 00:00-24:00 | Standby - Reamer Run | 24.00 | 11525 | 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: 1600 | 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:

August 5th: LWD tools and personnel on standby. DD motors and tools on standby. Reamer run.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services
v4.2.2674

Day 22 - 2012/09/06

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Jacob Hofer

Other: Lee Howse

MWD Supervisor: Robert Simmons, Corey Jacobs

GROUND ELEV: 4854 ft

START DEPTH: 11525.0 ft

PROGRESS: 0.0 ft

DAILY COST: USD\$13172.50

KB ELEV: 4871 ft

END DEPTH: 11525.0 ft

AVG. ROP.: 0.0 ft/hr

PREVIOUS COST: USD\$389162.20

TOTAL COST: USD\$402334.70

WORK STATUS: Standby

(All units are imperial.)

| TIME | DAILY ACTIVITY | HRS | DPTH | BHA | TIME | DAILY ACTIVITY | HRS | DPTH | BHA |
|-------------|----------------------------|-------|-------|-----|------|----------------|------|------|-----|
| 00:00-24:00 | Standby - Reamer / Packers | 24.00 | 11525 | 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: 1600 | 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:

August 5th: LWD tools and personnel on standby. DD motors and tools on standby. Complete reamer run. Start running production liner with Packers Plus.

CUSTOMER SIGNATURE: _____

**Weatherford®**

Daily Activity Report

Drilling Services

v4.2.2674

Day 23 - 2012/09/07**FILE #:** 4027073**JOB TYPE:** Horizontal**RIG & NO:** Xtreme 23**WELL NAME:** Palyo 14N-11HZ**COMPANY:** Anadarko Petroleum Corporation**SURFACE LOCATION:** Palyo 29-11HZ Pad**SERVICE CO.:** Weatherford Drilling Services**SURVEY TYPE:** HEL LWD**FIELD / LOCATION:** Wattenburg / CO / USA**2012/09/07**

No personnel have been recorded for this date.

GROUND ELEV: 4854 ft**KB ELEV:** 4871 ft**START DEPTH:** 11525.0 ft**END DEPTH:** 11525.0 ft**PROGRESS:** 0.0 ft**AVG. ROP.:** 0.0 ft/hr**DAILY COST:** USD\$0.00**PREVIOUS COST:** USD\$402334.70**TOTAL COST:** USD\$402334.70**WORK STATUS:**

(All units are imperial.)

| 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: 1600 | 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:**



BHA REPORTS

**Weatherford®**

BHA Report

Drilling Services
v4.2.2674

BHA 1 - Build & Hold Section

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

Company Man: Ben Clayton, Duaine Bell
 DIR Supervisor: Brian Trani, Paul Trione
 MWD Supervisor: Robert Simmons, Corey Jacobs

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 | PDC 5x16s | Smith | JF5147 | Smith MDi516 | 8.75 | 0 | 0 | | 4 1/2" REG Pin | 0.75 ft | 0.75 ft |
| 1 | Motor 0.28 rev/gal | Weatherford | 675-3991 | 7/8 L, 5 Stg | 6.75 | 0 | 0 | 4 1/2" REG Box | 4 1/2" IF Box | 27.90 ft | 28.65 ft |
| 1 | UBHO Sub | Weatherford | 33454 | UBHO | 6.74 | 3.125 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 2.87 ft | 31.52 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 6759830 | Slick Collar | 6.6 | 3 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.89 ft | 62.41 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 38647 | Slick Collar | 6.87 | 3.25 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.43 ft | 92.84 ft |
| 1 | 4-1/2IFpin,4XT39box | | 34576 | Crossover | 6.8 | 2.813 | 0 | 4 1/2" IF Pin | 4" XT39 Box | 3.38 ft | 96.22 ft |
| 45 | 4" HWDP | Rig | Rig | HeavyWeight DP4 | 2.75 | 0 | | XT-39 Pin | XT-39 Box | 1402.30 | 1498.52 ft |

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

GENERAL INFORMATION

DATES RUN: 2012/08/18 TO 2012/08/20
 DEPTH IN: 892.00 ft ANGLE IN: 0.14 °
 DEPTH OUT: 5041.00 ft ANGLE OUT: 11.66 °
 DRILL HRS: 24.58 BUILD: 11.52 °
 ORIENTING HRS: 14.17 HOLE MADE: 4149.00 ft
 ROTATING HRS: 10.42 AVG R.O.P.: 168.80 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford SETTING: 1.50 °
 SERIAL #: 675-3991 KICK PAD: No
 MODEL: 7/8 L, 5 Stg STABILIZER: No
 LOBE CFG: 7/8 MOTOR HRS: 34.50
 BIT TO BEND: 6.19

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|------------------|-------------------|------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 69 | 69 | 0 |
| STROKE VOLUME: | 4.1933 gal/stk | 4.1933 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 549.73832 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 1800 psi | ON BTM: 2600 psi | |

MUD INFORMATION

MUD TYPE: Polymer LIQUID BASE: Water
 DENSITY: 8.45 lb/gal TEMP: 105 °F
 VISCOSITY: 26 sec/qt pH: 8.1
 WTR LOSS: 20 cc/30min SAND: 0.01 LIQUID RATE: 0 gal/min
 PLAST VISC: 1 cP SOLIDS: 0.7 GAS TYPE:
 YIELD PT: 4 lb/100 ft² OIL: 0 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Smith TYPE: Smith MDi516 ADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / PR
 NOZZLES: 0.982 in² TFA

REASON FOR BHA CHANGE

Stalling at low diff (20psi), low weight (2k) and low ROP (20fph) while sliding.

FORMATION CHARACTERISTICS

Until 2500MD assy held angle easily with slides required every other stand ranging from 10 to 30ft. After this assy started dropping angle from 1 to 3 deg per hundred and slide percentage increased to 40-60%.

MWD COMMENTS

MWD tool face disrupted continually from 200-400 psi differential spikes while sliding.

SIDETRACKING PROCEDURE COMMENTS

**BHA 1 - Build & Hold Section**

RUN SUMMARY

Sliding was slow after 2500MD. Regardless of how gentle, the bit grabbed hard and made tool face control difficult. This was a very short Smith MDi516 5-blade PDC not normally ran to our knowledge in this area on directional wells. It's shortness, aggressive design, and 5/8 cutters made it difficult to steer. POOH. No wear on bit. Motor appeared ok but was changed out at customer's request. Next assy. with a more standard design 5 blade 1/2 inch cutter Varel PDC was easy to steer in comparison.

**Weatherford®**

BHA Report

Drilling Services
v4.2.2674

BHA 2 - Build & Hold Section

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 Company Man: Duaine Bell, Ben Clayton
 MWD Supervisor: Robert Simmons, Corey Jacobs

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 | PDC 5x16's | Varel | 4004746 | VM513 | 8.75 | 0 | 0 | | 4 1/2" REG Pin | 0.75 ft | 0.75 ft |
| 1 | Motor 0.28 rev/gal | Weatherford | 675-41008 | 7/8 L, 5 Stg | 6.75 | 0 | 0 | 4 1/2" REG Box | 4 1/2" IF Box | 27.57 ft | 28.32 ft |
| 1 | UBHO Sub | Weatherford | 33454 | UBHO | 6.74 | 3.125 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 2.87 ft | 31.19 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 6759830 | Slick Collar | 6.6 | 3 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.89 ft | 62.08 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 38647 | Slick Collar | 6.87 | 3.25 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.43 ft | 92.51 ft |
| 1 | 4-1/2 IFpin, 4XT39box | | 34576 | Crossover | 6.8 | 2.813 | 0 | 4 1/2" IF Pin | 4" XT39 Box | 3.38 ft | 95.89 ft |
| 45 | 4" HWDP | Rig | Rig | HeavyWeight DP4 | 2.75 | 0 | | XT-39 Pin | XT-39 Box | 1402.30 | 1498.19 ft |

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

GENERAL INFORMATION

DATES RUN: 2012/08/20 TO 2012/08/21
 DEPTH IN: 5041.00 ft ANGLE IN: 0.00 °
 DEPTH OUT: 6467.00 ft ANGLE OUT: 15.56 °
 DRILL HRS: 11.50 BUILD: 15.56 °
 ORIENTING HRS: 6.92 HOLE MADE: 1426.00 ft
 ROTATING HRS: 4.58 AVG R.O.P.: 124.00 ft/hr

MOTOR INFORMATION

MANFCT: Weatherford SETTING: 1.50 °
 SERIAL #: 675-41008 KICK PAD: No
 MODEL: 7/8 L, 5 Stg STABILIZER: No
 LOBE CFG: 7/8 MOTOR HRS: 17.33
 BIT TO BEND: 6.19

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|------------------|-------------------|------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 75 | 75 | 0 |
| STROKE VOLUME: | 4.1933 gal/stk | 4.1933 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 597.54165 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 1700 psi | ON BTM: 2300 psi | |

MUD INFORMATION

MUD TYPE: Polymer LIQUID BASE: Water
 DENSITY: 8.45 lb/gal TEMP: 105 °F
 VISCOSITY: 26 sec/qt pH: 8.1
 WTR LOSS: 20 cc/30min SAND: 0.01 LIQUID RATE: 0 gal/min
 PLAST VISC: 1 cP SOLIDS: 0.7 GAS TYPE:
 YIELD PT: 4 lb/100 ft² OIL: 0 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Varel TYPE: VM513 IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / TD
 NOZZLES: 0.982 in² TFA

REASON FOR BHA CHANGE

Change to curve motor.

FORMATION CHARACTERISTICS

Holding 15 deg INC through Sussex required 50-60% slide.

MWD COMMENTS

No issues with MWD tools except for DDU issues with new handheld DDU device.

SIDETRACKING PROCEDURE COMMENTS

**BHA 2 - Build & Hold Section**

RUN SUMMARY

No issues with BHA. 50% of the footage and 60% of drilling time was spent sliding, making an 8.25 " near bit sleeve or stabilizer a possible option for wells designed with tangent the entire way to KOP. After changing to Varel 5 blade 1/2 inch cutter PDC: Type VM513. Bit had little wear. Motor drained strongly with bearing play within specs.

**Weatherford®**

BHA Report

BHA 3 - Curve Section

Drilling Services
v4.2.2674**FILE #:** 4027073**JOB TYPE:** Horizontal**RIG & NO:** Xtreme 23**WELL NAME:** Palyo 14N-11HZ**COMPANY:** Anadarko Petroleum Corporation**SURFACE LOCATION:** Palyo 29-11HZ Pad**SERVICE CO.:** Weatherford Drilling Services**SURVEY TYPE:** HEL LWD**FIELD / LOCATION:** Wattenburg / CO / USA**DIR Supervisor:** Brian Trani, Paul Trione
Company Man: Duaine Bell, Ben Clayton
MWD Supervisor: Robert Simmons, Corey Jacobs**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 | PDC 5x18s | Security | 12070946 | FXD55M | 8.75 | 0 | 0 | | 4 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Curve Motor 0.28 rev | Weatherford | 675-40990 | 7/8 5.0 stg | 6.75 | 0 | 0 | 4 1/2" REG Box | 4 1/2" IF Box | 27.92 ft | 28.92 ft |
| 1 | UBHO Sub | Weatherford | 33454 | UBHO | 6.74 | 3.125 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 2.87 ft | 31.79 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 6759830 | Slick Collar | 6.6 | 3 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.89 ft | 62.68 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 38647 | Slick Collar | 6.87 | 3.25 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.43 ft | 93.11 ft |
| 1 | 4-1/2 IF pin, 4XT39 box | | 34576 | Crossover | 6.8 | 2.813 | 0 | 4 1/2" IF Pin | 4" XT39 Box | 3.38 ft | 96.49 ft |
| 1 | 4" DP 56 Stands | Rig | Rig | Pushpipe XT-39, 4 | | 3.5 | 0 | XT-39 Pin | XT-39 Box | 853.89 ft | 950.38 ft |
| 45 | 4" HWDP | Rig | Rig | HeavyWeight DP4 | | 2.75 | 0 | XT-39 Pin | XT-39 Box | 1402.30 | 2352.68 ft |

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

GENERAL INFORMATION

DATES RUN: 2012/08/21 TO 2012/08/23
DEPTH IN: 6467.00 ft **ANGLE IN:** 15.87 °
DEPTH OUT: 6922.00 ft **ANGLE OUT:** 30.25 °
DRILL HRS: 7.58 **BUILD:** 14.38 °
ORIENTING HRS: 7.58 **HOLE MADE:** 455.00 ft
ROTATING HRS: 0.00 **AVG R.O.P.:** 60.03 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford **SETTING:** 2.25 °
SERIAL #: 675-40990 **KICK PAD:** 8 5/8"
MODEL: 7/8 5.0 stg **STABILIZER:** No
LOBE CFG: 7/8 **MOTOR HRS:** -6.50
BIT TO BEND: 6.35

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|-------------------------|--------------------------|-------------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 60 | 60 | 0 |
| STROKE VOLUME: | 4.1933 gal/stk | 4.1933 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 478.03332 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 2200 psi | ON BTM: 2350 psi | |

MUD INFORMATION

MUD TYPE: Polymer **LIQUID BASE:** Water
DENSITY: 9.9 lb/gal **TEMP:** 88 °F
VISCOSITY: 38 sec/qt **pH:** 7.5
WTR LOSS: 5.8 cc/30min **SAND:** 0.5 **LIQUID RATE:** 0 gal/min
PLAST VISC: 14 cP **SOLIDS:** 6.2 **GAS TYPE:**
YIELD PT: 11 lb/100 ft² **OIL:** 0 **GAS RATE:** 0 cu ft/min

BIT INFORMATION

MANFCT: Security **TYPE:** FXD55M **IADC BIT GRADE:** 1 / 1 / WT / A / X / I / NO / BHA
NOZZLES: 1.243 in² TFA

REASON FOR BHA CHANGE**FORMATION CHARACTERISTICS**

Fault directly below the curve may have played some role in our inability to achieve the 10 deg/hund. required output to make the 110 degree turn and 75 degree build.

MWD COMMENTS

No issues with MWD tools except that handheld DDU worked poorly. We would like to see a full size DDU on the rig floor hardwired via cable to the MWD shack. This, in our opinion, would be a lot more reliable and certainly easier to see in the daylight.



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BHA Report

BHA 3 - Curve Section

Drilling Services
v4.2.2674

SIDETRACKING PROCEDURE COMMENTS

RUN SUMMARY

Assembly did not produce 10 dph dls at 100% slide but this is assumed as a result of formation not motor integrity. The motor was changed out in order to pick up a mill-tooth tricone GT-1 to recover needed build and turn rates. We used an adjustable motor at 2.6 degrees. Motor drained well on surface. Bearing play within specs.

**Weatherford®**

BHA Report

BHA 4 - Curve Section

Drilling Services
v4.2.2674**FILE #:** 4027073**JOB TYPE:** Horizontal**RIG & NO:** Xtreme 23**WELL NAME:** Palyo 14N-11HZ**COMPANY:** Anadarko Petroleum Corporation**SURFACE LOCATION:** Palyo 29-11HZ Pad**SERVICE CO.:** Weatherford Drilling Services**SURVEY TYPE:** HEL LWD**FIELD / LOCATION:** Wattenburg / CO / USA**DIR Supervisor:** Brian Trani, Paul Trione, Jacob Hofer**Company Man:** Duaine Bell, Ben Clayton**MWD Supervisor:** Robert Simmons, Corey Jacobs**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 | Tri-Cone Bit | Hughes-Christen | 5213954 | GT1 3 x 18/32 | 8.75 | 0 | 0 | | 4 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Curve Motor 0.28 rev | Weatherford | 675-4095 | 7/8 5.0 Stg | 6.75 | 0 | 0 | 4 1/2" REG Box | 4 1/2" IF Box | 27.88 ft | 28.88 ft |
| 1 | UBHO Sub | Weatherford | 33454 | UBHO | 6.74 | 3.125 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 2.87 ft | 31.75 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 6759830 | Slick Collar | 6.6 | 3 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.89 ft | 62.64 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 38647 | Slick Collar | 6.87 | 3.25 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.43 ft | 93.07 ft |
| 1 | 4-1/2 IF pin, 4XT39 box | | 34576 | Crossover | 6.8 | 2.813 | 0 | 4 1/2" IF Pin | 4" XT39 Box | 3.38 ft | 96.45 ft |
| 1 | 4" DP 56 Stands | Rig | Rig | Pushpipe XT-39, 4 | | 3.5 | 0 | XT-39 Pin | XT-39 Box | 853.89 ft | 950.34 ft |
| 45 | 4" HWDP | Rig | Rig | HeavyWeight DP4 | | 2.75 | 0 | XT-39 Pin | XT-39 Box | 1402.30 | 2352.64 ft |

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

GENERAL INFORMATION

DATES RUN: 2012/08/23 TO 2012/08/24
DEPTH IN: 6922.00 ft **ANGLE IN:** 0.00 °
DEPTH OUT: 7188.00 ft **ANGLE OUT:** 52.93 °
DRILL HRS: 15.27 **BUILD:** 52.93 °
ORIENTING HRS: 14.08 **HOLE MADE:** 266.00 ft
ROTATING HRS: 1.18 **AVG R.O.P.:** 17.42 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford **SETTING:** 2.60 °
SERIAL #: 675-4095 **KICK PAD:** No
MODEL: 7/8 5.0 Stg **STABILIZER:** No
LOBE CFG: 7/8 **MOTOR HRS:** 21.00
BIT TO BEND: 6.18

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|-------------------------|-----------------------|----------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 60 | 60 | 0 |
| STROKE VOLUME: | 4.1933 gal/stk | 4.1933 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 478.03332 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 0 psi | ON BTM: 0 psi | |

MUD INFORMATION

MUD TYPE: Gelchem **LIQUID BASE:** Water
DENSITY: 10.1 lb/gal **TEMP:** 110 °F
VISCOSITY: 39 sec/qt **pH:** 8.5
WTR LOSS: 6.2 cc/30min **SAND:** 0.75 **LIQUID RATE:** 0 gal/min
PLAST VISC: 13 cP **SOLIDS:** 8.1 **GAS TYPE:**
YIELD PT: 18 lb/100 ft² **OIL:** 0 **GAS RATE:** 0 cu ft/min

BIT INFORMATION

MANFCT: Hughes-Christen **TYPE:** GT1 3 x 18/32 **ADC BIT GRADE:** 2 / 2 / WT / A / 1 / 1 / NO / PR
NOZZLES: 18, 18, 18, n/a: 0.746 in² TFA

REASON FOR BHA CHANGE

Low ROP with milltooth tri-cone.

FORMATION CHARACTERISTICS

Sharon springs brought motor output down from 15-17 dph to an 11 degree motor output at 100% slide. Build rates resumed after starting to land in Niobrara A bench.

MWD COMMENTS

Hand held DDU quit working completely. It was difficult to slide using toolfaces WITS to Pason because there is no time update on the age of the toolface. No issues with MWD mud pulse signal.



SIDETRACKING PROCEDURE COMMENTS

RUN SUMMARY

Motor from BHA 3, (first curve assy.), checked out on surface and was re-ran with PDC at customer's request on BHA 4. We recommended that we pick up a fixed 2.38 bend with kick pad with a Tri-Cone to get us back on track. Customer felt the 2.6 bend was better suited to recover our build and turn rates. Motor output ranged from 15 to 18 deg. per hund. This BHA was pulled for low ROP. Initially it drilled at 20-30 fph but slowed to 10 fph by 6800 MD. Oscillation, lube sweeps, lower WOB and high WOB all had no positive effect on the ROP.

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BHA Report

BHA 5 - Curve Section

Drilling Services
v4.2.2674**FILE #:** 4027073**JOB TYPE:** Horizontal**RIG & NO:** Xtreme 23**WELL NAME:** Palyo 14N-11HZ**COMPANY:** Anadarko Petroleum Corporation**SURFACE LOCATION:** Palyo 29-11HZ Pad**SERVICE CO.:** Weatherford Drilling Services**SURVEY TYPE:** HEL LWD**FIELD / LOCATION:** Wattenburg / CO / USA**DIR Supervisor:** Brian Trani, Paul Trione, Jacob Hofer**Company Man:** Duaine Bell, Ben Clayton**MWD Supervisor:** Robert Simmons, Corey Jacobs**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 | PDC 5x18s | Security | 12070946 | FXD55M | 8.75 | 0 | 0 | | 4 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Curve Motor 0.28 rev | Weatherford | 675-4095 | 7/8 5.0 Stg | 6.75 | 0 | 0 | 4 1/2" REG Box | 4 1/2" IF Box | 27.88 ft | 28.88 ft |
| 1 | UBHO Sub | Weatherford | 33454 | UBHO | 6.74 | 3.125 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 2.87 ft | 31.75 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 6759830 | Slick Collar | 6.6 | 3 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.89 ft | 62.64 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 38647 | Slick Collar | 6.87 | 3.25 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.43 ft | 93.07 ft |
| 1 | 4-1/2 IF pin, 4XT39 box | | 34576 | Crossover | 6.8 | 2.813 | 0 | 4 1/2" IF Pin | 4" XT39 Box | 3.38 ft | 96.45 ft |
| 1 | 4" DP 56 Stands | Rig | Rig | Pushpipe XT-39, 4 | | 3.5 | 0 | XT-39 Pin | XT-39 Box | 853.89 ft | 950.34 ft |
| 45 | 4" HWDP | Rig | Rig | HeavyWeight DP4 | | 2.75 | 0 | XT-39 Pin | XT-39 Box | 1402.30 | 2352.64 ft |

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

GENERAL INFORMATION

DATES RUN: 2012/08/24 TO 2012/08/25
DEPTH IN: 7188.00 ft **ANGLE IN:** 53.87 °
DEPTH OUT: 7241.00 ft **ANGLE OUT:** 58.18 °
DRILL HRS: 1.33 **BUILD:** 4.31 °
ORIENTING HRS: 1.08 **HOLE MADE:** 53.00 ft
ROTATING HRS: 0.25 **AVG R.O.P.:** 39.85 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford **SETTING:** 2.60 °
SERIAL #: 675-4095 **KICK PAD:** No
MODEL: 7/8 5.0 Stg **STABILIZER:** No
LOBE CFG: 7/8 **MOTOR HRS:** 4.67
BIT TO BEND: 6.18

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|-------------------------|--|----------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 75 | 75 | 0 |
| STROKE VOLUME: | 4.1933 gal/stk | 4.1933 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 597.54165 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 3000 psi ON BTM: 3400 psi | | |

MUD INFORMATION

MUD TYPE: Polymer **LIQUID BASE:** Water
DENSITY: 10.35 lb/gal **TEMP:** 110 °F
VISCOSITY: 38 sec/qt **pH:** 8.5
WTR LOSS: 6.2 cc/30min **SAND:** 0.75 **LIQUID RATE:** 0 gal/min
PLAST VISC: 13 cP **SOLIDS:** 9.7 **GAS TYPE:**
YIELD PT: 17 lb/100 ft² **OIL:** 0 **GAS RATE:** 0 cu ft/min

BIT INFORMATION

MANFCT: Security **TYPE:** FXD55M **IADC BIT GRADE:** 1 / 1 / WT / A / X / I / NO / DMF
NOZZLES: 1.243 in² TFA

REASON FOR BHA CHANGE

Rubber over shakers. Lost diff. pressure. Unable to slide.

FORMATION CHARACTERISTICS

Only 60 ft drilled with this assy. before POOH. At first it was thought that transitioning through Marl and Chalk benches in combination with higher doglegs caused us to have difficulty sliding.

MWD COMMENTS

MWDs fixed issues with RFD. However, the tiny display is still nearly impossible to see in daylight on rig floor and is not a suitable substitute for a properly hard-wired display.



SIDETRACKING PROCEDURE COMMENTS

RUN SUMMARY

Tripped in hole with same 2.6 deg motor with PDC bit. We again recommended the clean 2.38 fixed bend with kick pad motor on surface and felt it would be sufficient to land curve and would be less likely to hang up or get us stuck. Customer was concerned it may not produce the 12.9 dls needed. First slide from 7196 - 7221 went well, as expected, at 50-70 fph with 150-200 diff pressure. We rotated 8 feet and then continued to slide. No diff. press. could be achieved when attempting to slide regardless of heavy oscillating and high weight. Pressure was erratic. Assembly would not drill at 7241 MD. Found a handful of rubber coming over shakers. Rubber looked like it was possibly from the mud motor. Slide was stopped at 10:20 AM. Conference was held with drilling rep., superintendent, and engineers. Decision was made to call for a 2.5 bend motor from Casper shop to complete remaining 200ft of curve.

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BHA Report

Drilling Services
v4.2.2674

BHA 6 - Curve Section

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione, Jacob Hofer

Company Man: Duaine Bell, Ben Clayton

MWD Supervisor: Robert Simmons, Corey Jacobs

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 | PDC 5x18s | Security | 12070946 | FXD55M | 8.75 | 0 | 0 | | 4 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Curve Motor 0.28 rev | Weatherford | 675-4026 | 7/8 5.0 stg. | 7.28 | 0 | 0 | 4 1/2" REG Box | 4 1/2" IF Box | 28.89 ft | 29.89 ft |
| 1 | UBHO Sub | Weatherford | 33454 | UBHO | 6.74 | 3.125 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 2.87 ft | 32.76 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 6759830 | Slick Collar | 6.6 | 3 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.89 ft | 63.65 ft |
| 1 | 6-3/4 Slick NMDC | WFT | 38647 | Slick Collar | 6.87 | 3.25 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.43 ft | 94.08 ft |
| 1 | 4-1/2 IF pin, 4XT39 box | | 34576 | Crossover | 6.8 | 2.813 | 0 | 4 1/2" IF Pin | 4" XT39 Box | 3.38 ft | 97.46 ft |
| 1 | 4" DP 56 Stands | Rig | Rig | Pushpipe XT-39, 4 | | 3.5 | 0 | XT-39 Pin | XT-39 Box | 853.89 ft | 951.35 ft |
| 45 | 4" HWDP | Rig | Rig | HeavyWeight DP4 | | 2.75 | 0 | XT-39 Pin | XT-39 Box | 1402.30 | 2353.65 ft |

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

GENERAL INFORMATION

DATES RUN: 2012/08/25 TO 2012/08/27
DEPTH IN: 7241.00 ft **ANGLE IN:** 58.18 °
DEPTH OUT: 7435.00 ft **ANGLE OUT:** 77.60 °
DRILL HRS: 6.65 **BUILD:** 19.42 °
ORIENTING HRS: 6.32 **HOLE MADE:** 194.00 ft
ROTATING HRS: 0.33 **AVG R.O.P.:** 29.17 ft/hr

MOTOR INFORMATION

MANFCT. Weatherford **SETTING:** 2.50 °
SERIAL #: 675-4026 **KICK PAD:** No
MODEL: 7/8 5.0 stg. **STABILIZER:** No
LOBE CFG: 7/8 **MOTOR HRS:** 17.25
BIT TO BEND: 6.21

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|-------------------------|--|----------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 72 | 72 | 0 |
| STROKE VOLUME: | 4.1933 gal/stk | 4.1933 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 573.63998 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 2400 psi ON BTM: 2800 psi | | |

MUD INFORMATION

MUD TYPE: Polymer **LIQUID BASE:** Water
DENSITY: 10.6 lb/gal **TEMP:** 110 °F
VISCOSITY: 41 sec/qt **pH:** 8.4
WTR LOSS: 6.4 cc/30min **SAND:** 0.5 **LIQUID RATE:** 0 gal/min
PLAST VISC: 15 cP **SOLIDS:** 11.2 **GAS TYPE:**
YIELD PT: 19 lb/100 ft² **OIL:** 0 **GAS RATE:** 0 cu ft/min

BIT INFORMATION

MANFCT: Security **TYPE:** FXD55M **IADC BIT GRADE:** 1 / 2 / WT / G / X / I / NO / TD
NOZZLES: 1.243 in² TFA

REASON FOR BHA CHANGE

TD Curve. Run 7 inch casing.

FORMATION CHARACTERISTICS

The Niobrara Chalk tends to build in rotation and provides enhanced build rates in a Build Section. There are portions of Marl, that tend to drill slower and can get sticky. Faults in the region can severely hamper motor output and throw attitude of wellbore up or down depending on the structure.

MWD COMMENTS

At one point in the last 50 ft of the build MWD toolfaces WITS to Pason were reading up to 90 degrees out from new hand held RFD. Both the toolfaces on the Pason and on the RFD/DDU were updating normally but the DDU was showing us at 130 Right, while the Pason toolfaces showed 30 Right. This is very disturbing and a recipe for disaster. The MWDs are unfamiliar with this device and do

not have any idea why this happened. Eventually the issue went away after about 10 minutes.

SIDETRACKING PROCEDURE COMMENTS

RUN SUMMARY

Ran back in with a slick 2.5 fixed bend motor with Security FXD55M after motor failure on previous run. We needed 12.9 DLS to land when we got back on bottom. Unfortunately after 60ft of sliding 100% to survey previous BHA slide footage, we found that we had only gotten a 9.9 DLS. This set us back to needing 15's to land. Motor output with this assembly climbed consecutively from 12.8, 14.5, and then finally 15.5 degrees per hundred at TD. We slid all but the last 20 ft. TD well at 7435MD with a projected inclination of 90.5 deg. This put us 11 feet low of original target and 1 ft left. Geologists reported that we had crossed a fault somewhere in the same region of previous BHAs low motor output and motor failure. A total of 38 feet was rotated out of 948 feet total slide in the curve. 96% from KOP to TD.

**Weatherford®**

BHA Report

Drilling Services
v4.2.2674

BHA 7 - Wipe Curve Section

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 MWD Supervisor: Corey Jacobs, Robert Simmons
 Company Man: Duaine Bell, Ben Clayton

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 | PDC 5x18s | Security | 12070946 | FXD55M | 8.75 | 0 | 0 | | 4 1/2" REG Pin | 1.00 ft | 1.00 ft |
| 1 | Slick Motor 0.28 reWFT | | 675-41018 | 7/8 5.0 Stg | 6.75 | 0 | 0 | 4 1/2" REG Box | 4 1/2" IF Box | 27.52 ft | 28.52 ft |
| 1 | UBHO Sub | Weatherford | 33444 | UBHO | 6.75 | 3.125 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 3.56 ft | 32.08 ft |
| 1 | 6-3/4 Slick NMDC WFT | | 38647 | Slick Collar | 6.87 | 3.25 | 0 | 4 1/2" IF Pin | 4 1/2" IF Box | 30.43 ft | 62.51 ft |
| 1 | 4-1/2IFpin,4XT39box | | 34576 | Crossover | 6.8 | 2.813 | 0 | 4 1/2" IF Pin | 4" XT39 Box | 3.38 ft | 65.89 ft |
| 45 | 4" HWDP | Rig | Rig | HeavyWeight DP4 | 2.75 | 0 | | XT-39 Pin | XT-39 Box | 1402.30 | 1468.19 ft |

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

GENERAL INFORMATION

DATES RUN: 2012/08/27 TO 2012/08/28
 DEPTH IN: 7435.00 ft ANGLE IN: 0.00 °
 DEPTH OUT: 7435.00 ft ANGLE OUT: 0.00 °
 DRILL HRS: 0.00 BUILD: 0.00 °
 ORIENTING HRS: 0.00 HOLE MADE: 0.00 ft
 ROTATING HRS: 0.00 AVG R.O.P.: 0.00 ft/hr

MOTOR INFORMATION

MANFCT. WFT
 SERIAL #: 675-41018
 MODEL: 7/8 5.0 Stg
 LOBE CFG: 7/8
 BIT TO BEND: 6.2
 SETTING: 1.83 °
 KICK PAD: No
 STABILIZER: No
 MOTOR HRS: 3.00

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: Polymer
 LIQUID BASE: Water
 DENSITY: 10.6 lb/gal
 TEMP: 110 °F
 VISCOSITY: 41 sec/qt
 pH: 8.4
 WTR LOSS: 6.4 cc/30min
 SAND: 0.5
 LIQUID RATE: 0 gal/min
 PLAST VISC: 15 cP
 SOLIDS: 11.2
 GAS TYPE:
 YIELD PT: 19 lb/100 ft²
 OIL: 0
 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Security TYPE: FXD55M IADC BIT GRADE: 1 / 2 / WT / A / X / I / NO / BHA
 NOZZLES: 0.994 in² TFA

REASON FOR BHA CHANGE

BHA 7 laid down to PU Lateral assy. after running 7 inch casing.

FORMATION CHARACTERISTICS

MWD COMMENTS

No issues with MWD.

SIDETRACKING PROCEDURE COMMENTS



RUN SUMMARY

Reamer run was ran with MWD to orient toolface highside when pulling tight. Rotary was ran at 30 rpm throughout cleanout. Torque was monitored closely. Reamer run apparently helped with casing. 7 inch was ran to bottom of curve with no issues.



Weatherford®

BHA Report

Drilling Services
v4.2.2674

BHA 8 - Lateral 1 Section

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

MWD Supervisor: Corey Jacobs, Robert Simmons

DIR Supervisor: Brian Trani, Jacob Hofer, Paul Trione

Company Man: Duaine Bell

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 | PDC 5x16s | Smith | JE 6295 | Smith SDi513 | 6.125 | 0 | 0 | | 3 1/2" REG Pin | 0.75 ft | 0.75 ft |
| 1 | Lateral Mtr 0.82 revWeatherford Fro | 475-4073 | | 6/7 L, 7 Stg | 5 | 0 | 0 | 3 1/2" REG Box | 3 1/2" IF Box | 28.31 ft | 29.06 ft |
| 1 | Slide Reamer | Dura Drill | DM 0355-05 | 3Blade/6Roller | 4.82 | 2.25 | 0 | 3 1/2" IF Pin | 3 1/2" IF Box | 4.90 ft | 33.96 ft |
| 1 | 4-3/4 Gamma | WFT | NW21727 | SAGR Azimuthal | 4.75 | 2.44 | 0 | 3 1/2" IF Pin | 3 1/2" IF Box | 13.75 ft | 47.71 ft |
| 1 | 4-3/4 Split IDS Svy | WFT | NW21723 | Directional | 4.75 | 2.44 | 0 | 3 1/2" IF Pin | 3 1/2" IF Box | 12.15 ft | 59.86 ft |
| 1 | 4-3/4 Resistivity | WFT | 21694 | MFR | 4.77 | 2.44 | 0 | 3 1/2" IF Pin | 3 1/2" IF Box | 29.33 ft | 89.19 ft |
| 1 | 4-3/4 HEL/LWD | WFT | NW21884 | LWD Controller | 4.75 | 2.44 | 0 | 3 1/2" IF Pin | 3 1/2" IF Box | 14.57 ft | 103.76 ft |
| 1 | Non Mag Stabilizer | WFT | SD29439 | 6 inch 3 Blade | 4.85 | 2.44 | 0 | 3 1/2" IF Pin | 3 1/2" IF Box | 6.22 ft | 109.98 ft |
| 1 | 3-1/2IFpin,4XT-39Box | WFT | DR9047 | X/O Sub | 4.73 | 2.56 | 0 | 3 1/2" IF Pin | 4" XT-39 Box | 3.54 ft | 113.52 ft |
| 1 | 4" DP 56 Stands | Rig | Rig | Pushpipe XT-39, 4 | | 3.5 | 0 | XT-39 Pin | XT-39 Box | 4786.08 | 4899.60 ft |
| 45 | 4" HWDP | Rig | Rig | HeavyWeight DP4 | | 2.75 | 0 | XT-39 Pin | XT-39 Box | 1402.30 | 6301.90 ft |

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

GENERAL INFORMATION

DATES RUN: 2012/08/30 TO 2012/09/03
 DEPTH IN: 7435.00 ft ANGLE IN: 86.79 °
 DEPTH OUT: 11525.00 ft ANGLE OUT: 90.74 °
 DRILL HRS: 55.17 BUILD: 3.95 °
 ORIENTING HRS: 0.00 HOLE MADE: 4090.00 ft
 ROTATING HRS: 0.00 AVG R.O.P.: 74.13 ft/hr

MOTOR INFORMATION

MANFCT. n/a
 SERIAL #: n/a
 MODEL: n/a
 LOBE CFG: n/a
 BIT TO BEND: 0
 SETTING: 1.50 °
 KICK PAD: No
 STABILIZER: No
 MOTOR HRS: 0.00

PUMP INFORMATION

| PUMPS | PUMP 1 | PUMP 2 | PUMP 3 |
|------------------|-------------------|------------------|-------------|
| EFFICIENCY: | 95.0% | 95.0% | 100.0% |
| S.P.M.: | 69 | 0 | 0 |
| STROKE VOLUME: | 4.1933 gal/stk | 0.0 gal/stk | 0.0 gal/stk |
| TOTAL FLOW RATE: | 274.86916 gal/min | | |
| PUMP PRESSURE: | OFF BTM: 2400 psi | ON BTM: 3200 psi | |

MUD INFORMATION

MUD TYPE: Polymer
 LIQUID BASE: Water
 DENSITY: 10 lb/gal
 TEMP: 213 °F
 VISCOSITY: 40 sec/qt
 pH: 8.8
 WTR LOSS: 6.2 cc/30min
 SAND: 0.5
 LIQUID RATE: 0 gal/min
 PLAST VISC: 12 cP
 SOLIDS: 7.3
 GAS TYPE:
 YIELD PT: 13 lb/100 ft²
 OIL: 0
 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Smith TYPE: Smith SDi513
 ADC BIT GRADE: 2 / 3 / CT / G / X / 1 / WT / TD
 NOZZLES: 0.982 in² TFA

REASON FOR BHA CHANGE

End of Well.

FORMATION CHARACTERISTICS

Formation had tendencies to walk left in rotation and then back right but was very inconsistent. When angle got above 91.5° - 92° it took twice as much slide footage for down results and 88.5° - 89° took more slide footage for up results. Had an up dip for the last 1000' and around 9800'-10000' MD formation dropped 1.5°-2° in rotation.



MWD COMMENTS

Had some issues with detection and having to recycle pumps to get surveys on occasion. Used a total of 21.9 Ahr. over 8 batteries. Bottom hole temp of 213.80° Rig floor display was installed. We had no further issues with erroneous toolfaces and constant connection problems like we had with the handheld display. This was a huge improvement.

SIDETRACKING PROCEDURE COMMENTS

N/A

RUN SUMMARY

Note: Anadarko requested running a crows-foot on top of the BHA in case a gyro was needed. The crows-foot did not fit securely in the box of the top stabilizer. We recommended not running it to prevent wash or MWD detection issues. The company reps. said they had ran it before and wanted it in the string. We recommend they provide a sub machined for this purpose.

After the run the top stabilizer was inspected and we found no abnormal wear or wash from the crowsfoot placed inside the 3-1/2IF thread box.

Various tight spots of 285k Up and 50K down.

By 10,800MD slides were painfully slow. It became impossible to get to bottom without the rotary turned on. This further increased the time to slide as torque had to be worked out while trying to orient toolfaces on bottom. Hookload was routinely brought down to 50K in order to gain even 100 psi of differential pressure. The company man asked Baroid to bring lubes up to 2% by trickling lube throughout the day.

In our experience, during tight hole situations like this, it would be better to bring lubes up to 2% by 9500 MD to get the added benefit throughout the course of the lateral. The final slide went quite well after another decision was made to put the lube in a rate of 1 drum every 30 minutes.

Every slide in the lateral, until this final lube, required aggressive use of the oscillator and hookloads at 50K. The final slide brought the hookload up to around 100K. Weight was transferred easily to the bit. Stack and stall issues that were normally slowing down slides due to reactive torque kickback and lack of weight transfer went away. The top drive oscillator was no longer necessary. Slide ROP climbed from 20 fph to 60 fph+.

Motor output ranged from 8 to 10 degrees per hundred ft. slide.

Reamer and stabilizer helped hold angle and direction better than with a slick assembly. We would like to try running 5-7/8 ga. rather than 6 inch on the next well. Also worth considering; run two 5-7/8 slide reamers and get rid of the stabilizer on top of the BHA. The slide reamers have 6 rotating pucks with PDC buttons. This may give us less drag than with a conventional stabilizer, help hold direction true, and help alleviate a reamer run before running production tubing.



MOTOR REPORTS

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 1 - Build & Hold Section, Motor #675-3991

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

Company Man: Ben Clayton, Duaine Bell
 DIR Supervisor: Brian Trani, Paul Trione
 MWD Supervisor: Robert Simmons, Corey Jacobs

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #: 1
 DATE IN: 2012/08/18
 DATE OUT: 2012/08/20
 ANGLE IN: 0.14 °
 ANGLE OUT: 11.66 °
 ORIENTING HRS: 14.17
 START DEPTH: 892.00 ft
 END DEPTH: 5041.00 ft
 HOLE MADE: 4149.00 ft
 AVG ROP: 168.80 ft/hr
 ROTATING HRS: 10.42

MOTOR INFORMATION:

MANFCT: Weatherford
 SERIAL #: 675-3991
 MODEL: 7/8 L, 5 Stg
 LOBE: 7/8
 SETTING: 1.50 °
 BIT TO BEND: 6.19 ft
 KICKPAD: No
 STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: Smith MDi516
 BIT PRESS DROP: 0.00 psi
 MTR PRESS DROP: 0.00 psi
 IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / PR
 TOTAL FLOW RATE: 549.74 gal/min
 NOZZLES: 0.982 in² TFA
 PUMP PRESS: (OFF) 1800.00 psi
 (ON) 2600.00 psi

MUD INFORMATION:

MUD TYPE: Polymer
 DENSITY: 8 lb/gal
 SAND: 0.010
 SOLIDS: 0.700
 OIL: 0.000
 TEMP: 105 °F
 LIQUID BASE: Water
 VISCOSITY: 26 sec/qt
 WATER LOSS: 20.00 cc/30min
 PLASTIC VISC: 1.0 cP
 YIELD POINT: 4.0 lb/100 ft²
 pH: 8.1
 LIQUID RATE: 0.00 gal/min
 GAS TYPE:
 GAS RATE: 0.00 cu ft/min
 (All units are imperial.)

TIME INFORMATION:

CIRCULATING HOURS: 9.92
 REAMING HOURS: 0.00
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 24.58
 MOTOR HOURS THIS RUN: 34.50
 PREVIOUS HOURS: 0.00
 TOTAL MOTOR HOURS: 34.50
 TOTAL BRT HOURS: 34.50

MOTOR EVALUATION COMMENTS:

Stalling at low diff (20psi), low weight (2k) and low ROP (20fph) while sliding. Drained strong. Bearing play normal.

REASON FOR BHA CHANGE:

Stalling at low diff (20psi), low weight (2k) and low ROP (20fph) while sliding.

COMMENTS FROM LAST DAY RAN:

August 20th: Decision made to POOH and change bit and motor due to excessive differential spikes while sliding and low ROP. Motor inspected normal. Drained strongly. Bearing play within specs. Aggressive, short bodied 5/8" cutter PDC Smith bit changed out for more standard design 5 blade Varel with 1/2" PDC cutters. Problems with differential spikes were alleviated with Varel bit on BHA#2. 40%-70% slide required to hold 15 degree tangent angle.



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Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 1 - Build & Hold Section, Motor #675-3991

LD Motor. PU Clean Motor. Drilled 4657-5340 MD.

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Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 2 - Build & Hold Section, Motor #675-41008

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 Company Man: Duaine Bell, Ben Clayton
 MWD Supervisor: Robert Simmons, Corey Jacobs

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #: 2
 DATE IN: 2012/08/20
 DATE OUT: 2012/08/21
 ANGLE IN: 0.00 °
 ANGLE OUT: 15.56 °
 ORIENTING HRS: 6.92
 START DEPTH: 5041.00 ft
 END DEPTH: 6467.00 ft
 HOLE MADE: 1426.00 ft
 AVG ROP: 124.00 ft/hr
 ROTATING HRS: 4.58

MOTOR INFORMATION:

MANFCT: Weatherford
 SERIAL #: 675-41008
 MODEL: 7/8 L, 5 Stg
 LOBE: 7/8
 SETTING: 1.50 °
 BIT TO BEND: 6.19 ft
 KICKPAD: No
 STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: VM513
 BIT PRESS DROP: 0.00 psi
 MTR PRESS DROP: 0.00 psi
 IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / TD
 TOTAL FLOW RATE: 597.54 gal/min
 NOZZLES: 0.982 in² TFA
 PUMP PRESS: (OFF) 1700.00 psi
 (ON) 2300.00 psi

MUD INFORMATION:

MUD TYPE: Polymer
 DENSITY: 8 lb/gal
 SAND: 0.010
 SOLIDS: 0.700
 OIL: 0.000
 TEMP: 105 °F
 LIQUID BASE: Water
 VISCOSITY: 26 sec/qt
 WATER LOSS: 20.00 cc/30min
 PLASTIC VISC: 1.0 cP
 YIELD POINT: 4.0 lb/100 ft²
 pH: 8.1
 LIQUID RATE: 0.00 gal/min
 GAS TYPE:
 GAS RATE: 0.00 cu ft/min
 (All units are imperial.)

TIME INFORMATION:

CIRCULATING HOURS: 5.83
 REAMING HOURS: 0.00
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 11.50
 MOTOR HOURS THIS RUN: 17.33
 PREVIOUS HOURS: 0.00
 TOTAL MOTOR HOURS: 17.33
 TOTAL BRT HOURS: 17.33

MOTOR EVALUATION COMMENTS:

Good performance. Drained on surface. Bearing play normal.

REASON FOR BHA CHANGE:

Change to curve motor.

COMMENTS FROM LAST DAY RAN:

August 21st: Finished 15 degree tangent to 50 ft before KOP.

LD Build and Hold Motor. PU Clean Curve Motor, BHA 3, using the same MWD probes and collars.

Drilled 5340-6467 MD.

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 3 - Curve Section, Motor #675-40990

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
 Company Man: Duaine Bell, Ben Clayton
 MWD Supervisor: Robert Simmons, Corey Jacobs

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #: 3
 DATE IN: 2012/08/21
 DATE OUT: 2012/08/23
 ANGLE IN: 15.87 °
 ANGLE OUT: 30.25 °
 ORIENTING HRS: 7.58
 START DEPTH: 6467.00 ft
 END DEPTH: 6922.00 ft
 HOLE MADE: 455.00 ft
 AVG ROP: 60.03 ft/hr
 ROTATING HRS: 0.00

MOTOR INFORMATION:

MANFCT: Weatherford
 SERIAL #: 675-40990
 MODEL: 7/8 5.0 stg
 LOBE: 7/8
 SETTING: 2.25 °
 BIT TO BEND: 6.35 ft
 KICKPAD: 8 5/8"
 STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: FXD55M IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / BHA
 BIT PRESS DROP: 0.00 psi TOTAL FLOW RATE: 478.03 gal/min PUMP PRESS: (OFF) 2200.00 psi
 MTR PRESS DROP: 0.00 psi NOZZLES: 1.243 in² TFA (ON) 2350.00 psi

MUD INFORMATION:

MUD TYPE: Polymer LIQUID BASE: Water (All units are imperial.)
 DENSITY: 10 lb/gal VISCOSITY: 38 sec/qt
 SAND: 0.500 WATER LOSS: 5.80 cc/30min LIQUID RATE: 0.00 gal/min
 SOLIDS: 6.200 PLASTIC VISC: 14.0 cP GAS TYPE:
 OIL: 0.000 YIELD POINT: 11.0 lb/100 ft² GAS RATE: 0.00 cu ft/min
 TEMP: 88 °F pH: 7.5

TIME INFORMATION:

CIRCULATING HOURS: -14.08
 REAMING HOURS: 0.00
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 7.58
 MOTOR HOURS THIS RUN: -6.50
 PREVIOUS HOURS: 0.00
 TOTAL MOTOR HOURS: -6.50
 TOTAL BRT HOURS: -6.50

MOTOR EVALUATION COMMENTS:

Kick pad measures 8-1/4 inch across pad but is actually an 8-5/8 inch rot. diam. kickpad. Motor did not produce 10 dph dls at 100% slide but this is assumed as a result of formation not motor integrity.

REASON FOR BHA CHANGE:**COMMENTS FROM LAST DAY RAN:**

August 23rd: Continue curve with BHA 4, clean 2.60 ABH slick motor and roller cone. Initially ROP was expectantly low at approximately 20 - 30 fph. Drilled 6922-6964 MD.

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 4 - Curve Section, Motor #675-4095

FILE #: 4027073**JOB TYPE:** Horizontal**RIG & NO:** Xtreme 23**WELL NAME:** Palyo 14N-11HZ**COMPANY:** Anadarko Petroleum Corporation**SURFACE LOCATION:** Palyo 29-11HZ Pad**SERVICE CO.:** Weatherford Drilling Services**SURVEY TYPE:** HEL LWD**FIELD / LOCATION:** Wattenburg / CO / USA**DIR Supervisor:** Brian Trani, Paul Trione, Jacob Hofer**Company Man:** Duaine Bell, Ben Clayton**MWD Supervisor:** Robert Simmons, Corey Jacobs**BHA SURVEY TYPE:** Positive Pulse MWD**HOLE SIZE:** 8.75 in**GENERAL INFORMATION:**

BHA #: 4
DATE IN: 2012/08/23
DATE OUT: 2012/08/24
ANGLE IN: 0.00 °
ANGLE OUT: 52.93 °
ORIENTING HRS: 14.08

START DEPTH: 6922.00 ft
END DEPTH: 7188.00 ft
HOLE MADE: 266.00 ft
AVG ROP: 17.42 ft/hr
ROTATING HRS: 1.18

MOTOR INFORMATION:

MANFCT: Weatherford
SERIAL #: 675-4095
MODEL: 7/8 5.0 Stg
LOBE: 7/8
SETTING: 2.60 °

BIT TO BEND: 6.18 ft
KICKPAD: No
STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: GT1 3 x 18/32
BIT PRESS DROP: 0.00 psi
MTR PRESS DROP: 0.00 psi

IADC BIT GRADE: 2 / 2 / WT / A / 1 / 1 / NO / PR
TOTAL FLOW RATE: 478.03 gal/min
NOZZLES: 18, 18, 18, n/a: 0.746 in² TFA

PUMP PRESS: (OFF) 0.00 psi
 (ON) 0.00 psi

MUD INFORMATION:

MUD TYPE: Gelchem
DENSITY: 10 lb/gal
SAND: 0.750
SOLIDS: 8.100
OIL: 0.000
TEMP: 110 °F

LIQUID BASE: Water
VISCOSITY: 39 sec/qt
WATER LOSS: 6.20 cc/30min
PLASTIC VISC: 13.0 cP
YIELD POINT: 18.0 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: 5.73
REAMING HOURS: 0.00
TIME DRILL HOURS: 0.00
MOTOR DRILL HOURS: 15.27

MOTOR HOURS THIS RUN: 21.00
PREVIOUS HOURS: 0.00

TOTAL MOTOR HOURS: 21.00
TOTAL BRT HOURS: 21.00

MOTOR EVALUATION COMMENTS:

Motor checked out on surface and was re-ran with PDC at customer's request. We rec. that we pick up a fixed 2.38 bend with kick pad with a Tri-Cone to get us back on track. Customer felt the 2.6 bend was better suited to recover our build and turn rates. Motor output ranged from 15 to 18 deg. per hund.

REASON FOR BHA CHANGE:

Low ROP with milltooth tri-cone.

COMMENTS FROM LAST DAY RAN:

August 24th: Continued curve with BHA 4. Motor output started at 12 dph and increased to over 17 dph by 7200 MD. Slides slowed from 30 fph to 10 fph with tricone. Decision made by Anadarko to pull out of hole for a PDC to help with ROP. Bit only was changed just before midnight, starting BHA 5. Drilled 6964 -7188 MD.

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Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 5 - Curve Section, Motor #675-4095

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione, Jacob Hofer

Company Man: Duaine Bell, Ben Clayton

MWD Supervisor: Robert Simmons, Corey Jacobs

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #: 5
DATE IN: 2012/08/24
DATE OUT: 2012/08/25
ANGLE IN: 53.87 °
ANGLE OUT: 58.18 °
ORIENTING HRS: 1.08

START DEPTH: 7188.00 ft
END DEPTH: 7241.00 ft
HOLE MADE: 53.00 ft
AVG ROP: 39.85 ft/hr
ROTATING HRS: 0.25

MOTOR INFORMATION:

MANFCT: Weatherford
SERIAL #: 675-4095
MODEL: 7/8 5.0 Stg
LOBE: 7/8
SETTING: 2.60 °

BIT TO BEND: 6.18 ft
KICKPAD: No
STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: FXD55M
BIT PRESS DROP: 0.00 psi
MTR PRESS DROP: 0.00 psi

IADC BIT GRADE: 1 / 1 / WT / A / X / I / NO / DMF
TOTAL FLOW RATE: 597.54 gal/min
NOZZLES: 1.243 in² TFA

PUMP PRESS: (OFF) 3000.00 psi
(ON) 3400.00 psi

MUD INFORMATION:

MUD TYPE: Polymer
DENSITY: 10 lb/gal
SAND: 0.750
SOLIDS: 9.700
OIL: 0.000
TEMP: 110 °F

LIQUID BASE: Water
VISCOSITY: 38 sec/qt
WATER LOSS: 6.20 cc/30min
PLASTIC VISC: 13.0 cP
YIELD POINT: 17.0 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: 3.33
REAMING HOURS: 0.00
TIME DRILL HOURS: 0.00
MOTOR DRILL HOURS: 1.33

MOTOR HOURS THIS RUN: 4.67
PREVIOUS HOURS: 21.00

TOTAL MOTOR HOURS: 25.67
TOTAL BRT HOURS: 4.67

MOTOR EVALUATION COMMENTS:

Rubber found coming over shakers during same time that pressure became erratic and assy. quit drilling off while sliding.

REASON FOR BHA CHANGE:

Rubber over shakers. Lost diff. pressure. Unable to slide.

COMMENTS FROM LAST DAY RAN:

August 25th: Tripped in hole with same 2.6 deg motor with PDC bit. First slide from 7196 - 7221 went well, as expected, at 50-70 fph with 150-200 diff pressure. We rotated 8 feet and then continued to slide. No diff. press. could be achieved when attempting to slide regardless of heavy oscillating and high weight. Pressure was erratic. Assembly would not drill at 7241 MD. Found a handful of rubber coming over shakers. Rubber looked like it was possibly from the mud motor. Slide was stopped at 10:20 AM. Conference was held with drilling rep., superintendent, and engineers. Decision was made to call for a 2.5 bend motor from



BHA 5 - Curve Section, Motor #675-4095

Casper shop to complete remaining 200ft of curve. The truck arrived 30 minutes after laying down BHA. Drilled 7188-7241MD.

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Motor / RSS Evaluation Report

Drilling Services
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BHA 6 - Curve Section, Motor #675-4026

FILE #: 4027073**JOB TYPE:** Horizontal**RIG & NO:** Xtreme 23**WELL NAME:** Palyo 14N-11HZ**COMPANY:** Anadarko Petroleum Corporation**SURFACE LOCATION:** Palyo 29-11HZ Pad**SERVICE CO.:** Weatherford Drilling Services**SURVEY TYPE:** HEL LWD**FIELD / LOCATION:** Wattenburg / CO / USA**DIR Supervisor:** Brian Trani, Paul Trione, Jacob Hofer**Company Man:** Duaine Bell, Ben Clayton**MWD Supervisor:** Robert Simmons, Corey Jacobs**BHA SURVEY TYPE:** Positive Pulse MWD**HOLE SIZE:** 8.75 in**GENERAL INFORMATION:**

BHA #: 6
DATE IN: 2012/08/25
DATE OUT: 2012/08/27
ANGLE IN: 58.18 °
ANGLE OUT: 77.60 °
ORIENTING HRS: 6.32

START DEPTH: 7241.00 ft
END DEPTH: 7435.00 ft
HOLE MADE: 194.00 ft
AVG ROP: 29.17 ft/hr
ROTATING HRS: 0.33

MOTOR INFORMATION:

MANFCT: Weatherford
SERIAL #: 675-4026
MODEL: 7/8 5.0 stg.
LOBE: 7/8
SETTING: 2.50 °

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

DRILLING INFORMATION:

BIT TYPE: FXD55M
BIT PRESS DROP: 0.00 psi
MTR PRESS DROP: 0.00 psi

IADC BIT GRADE: 1 / 2 / WT / G / X / I / NO / TD
TOTAL FLOW RATE: 573.64 gal/min
NOZZLES: 1.243 in² TFA

PUMP PRESS: (OFF) 2400.00 psi
 (ON) 2800.00 psi

MUD INFORMATION:

MUD TYPE: Polymer
DENSITY: 11 lb/gal
SAND: 0.500
SOLIDS: 11.200
OIL: 0.000
TEMP: 110 °F

LIQUID BASE: Water
VISCOSITY: 41 sec/qt
WATER LOSS: 6.40 cc/30min
PLASTIC VISC: 15.0 cP
YIELD POINT: 19.0 lb/100 ft²
pH: 8.4

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

(All units are imperial.)

TIME INFORMATION:

CIRCULATING HOURS: 10.60
REAMING HOURS: 0.00
TIME DRILL HOURS: 0.00
MOTOR DRILL HOURS: 6.65

MOTOR HOURS THIS RUN: 17.25
PREVIOUS HOURS: 0.00

TOTAL MOTOR HOURS: 17.25
TOTAL BRT HOURS: 17.25

MOTOR EVALUATION COMMENTS:

Drained strong. No abnormal bearing play.

REASON FOR BHA CHANGE:

TD Curve. Run 7 inch casing.

COMMENTS FROM LAST DAY RAN:

August 27th: LD curve assembly. When preparing to run casing, Anadarko decided to do a reamer run with directional motor. They wanted to run a 2.25 bend, however, WFT office called and asked us to only run the motor adjusted to 1.83 degrees to reduce the risk of damaging the motor and or leaving something down hole. Adjusted clean motor and picked up BHA 7 with MWD to provide toolfaces to allow us to orient the motor up highside when tripping in or out with the rotary turned off. No new footage.

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 7 - Wipe Curve Section, Motor #675-41018

FILE #: 4027073**JOB TYPE:** Horizontal**RIG & NO:** Xtreme 23**WELL NAME:** Palyo 14N-11HZ**COMPANY:** Anadarko Petroleum Corporation**SURFACE LOCATION:** Palyo 29-11HZ Pad**SERVICE CO.:** Weatherford Drilling Services**SURVEY TYPE:** HEL LWD**FIELD / LOCATION:** Wattenburg / CO / USA**DIR Supervisor:** Brian Trani, Paul Trione**MWD Supervisor:** Corey Jacobs, Robert Simmons**Company Man:** Duaine Bell, Ben Clayton**BHA SURVEY TYPE:** Positive Pulse MWD**HOLE SIZE:** 8.75 in**GENERAL INFORMATION:**

BHA #: 7
DATE IN: 2012/08/27
DATE OUT: 2012/08/28
ANGLE IN: 0.00 °
ANGLE OUT: 0.00 °
ORIENTING HRS: 0.00

START DEPTH: 7435.00 ft
END DEPTH: 7435.00 ft
HOLE MADE: 0.00 ft
AVG ROP: 0.00 ft/hr
ROTATING HRS: 0.00

MOTOR INFORMATION:

MANFCT: WFT
SERIAL #: 675-41018
MODEL: 7/8 5.0 Stg
LOBE: 7/8
SETTING: 1.83 °

BIT TO BEND: 6.2 ft
KICKPAD: No
STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: FXD55M
BIT PRESS DROP: 0.00 psi
MTR PRESS DROP: 0.00 psi

IADC BIT GRADE: 1 / 2 / WT / A / X / I / NO / BHA
TOTAL FLOW RATE: 0.00 gal/min
NOZZLES: 0.994 in² TFA

PUMP PRESS: (OFF) 0.00 psi
 (ON) 0.00 psi

MUD INFORMATION:

MUD TYPE: Polymer
DENSITY: 11 lb/gal
SAND: 0.500
SOLIDS: 11.200
OIL: 0.000
TEMP: 110 °F

LIQUID BASE: Water
VISCOSITY: 41 sec/qt
WATER LOSS: 6.40 cc/30min
PLASTIC VISC: 15.0 cP
YIELD POINT: 19.0 lb/100 ft²
pH: 8.4

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

(All units are imperial.)

TIME INFORMATION:

CIRCULATING HOURS: 3.00
REAMING HOURS: 0.00
TIME DRILL HOURS: 0.00
MOTOR DRILL HOURS: 0.00

MOTOR HOURS THIS RUN: 3.00
PREVIOUS HOURS: 0.00

TOTAL MOTOR HOURS: 3.00
TOTAL BRT HOURS: 3.00

MOTOR EVALUATION COMMENTS:

Lay down BHA 7. This motor was ran for reaming the curve only and backhauled. Motor drained properly and had no issues with excessive bearing play.

REASON FOR BHA CHANGE:

BHA 7 laid down to PU Lateral assy. after running 7 inch casing.

COMMENTS FROM LAST DAY RAN:

August 28th: Lay down BHA 7. This motor was ran for reaming the curve only and backhauled. Started running 7 inch casing.



Weatherford

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 8 - Lateral 1 Section, Motor #n/a

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

MWD Supervisor: Corey Jacobs, Robert Simmons

DIR Supervisor: Brian Trani, Jacob Hofer, Paul Trione

Company Man: Duaine Bell

BHA SURVEY TYPE: HEL LWD

HOLE SIZE: 6.125 in

GENERAL INFORMATION:

BHA #: 8
DATE IN: 2012/08/30
DATE OUT: 2012/09/03
ANGLE IN: 86.79 °
ANGLE OUT: 90.74 °
ORIENTING HRS: 0.00
START DEPTH: 7435.00 ft
END DEPTH: 11525.00 ft
HOLE MADE: 4090.00 ft
AVG ROP: 74.13 ft/hr
ROTATING HRS: 0.00

MOTOR INFORMATION:

MANFCT: n/a
SERIAL #: n/a
MODEL: n/a
LOBE: n/a
SETTING: 1.50 °
BIT TO BEND: 0 ft
KICKPAD: No
STABILIZER: No

DRILLING INFORMATION:

BIT TYPE: Smith SDi513
BIT PRESS DROP: 0.00 psi
MTR PRESS DROP: 0.00 psi
IADC BIT GRADE: 2 / 3 / CT / G / X / 1 / WT / TD
TOTAL FLOW RATE: 274.87 gal/min
NOZZLES: 0.982 in² TFA
PUMP PRESS: (OFF) 2400.00 psi
(ON) 3200.00 psi

MUD INFORMATION:

MUD TYPE: Polymer
DENSITY: 10 lb/gal
SAND: 0.500
SOLIDS: 7.300
OIL: 0.000
TEMP: 213 °F
LIQUID BASE: Water
VISCOSITY: 40 sec/qt
WATER LOSS: 6.20 cc/30min
PLASTIC VISC: 12.0 cP
YIELD POINT: 13.0 lb/100 ft²
pH: 8.8
LIQUID RATE: 0.00 gal/min
GAS TYPE:
GAS RATE: 0.00 cu ft/min
(All units are imperial.)

TIME INFORMATION:

CIRCULATING HOURS: 19.17
REAMING HOURS: 6.00
TIME DRILL HOURS: 0.00
MOTOR DRILL HOURS: 0.00
MOTOR HOURS THIS RUN: 0.00
PREVIOUS HOURS: 0.00
TOTAL MOTOR HOURS: 0.00
TOTAL BRT HOURS: 80.33

MOTOR EVALUATION COMMENTS:

Motor had 5/16" of endplay showing signs that the thrust bearings were towards the end of specs. Motor could be turned fairly easily by hand although was tight when picked up clean. Fluid did not drain aggressively when rotated in table before laying down.

REASON FOR BHA CHANGE:

End of Well.

COMMENTS FROM LAST DAY RAN:

September 3rd: POOH to shoe to check hole drag. Back reamed while pumping 300 gpm, P/U and S/O weight of an average 250k Up and 90k Down. Various tight spots of 285k Up and 50K down. LD BHA 8. Prep for reamer run.



SLIDE REPORT



Slide Sheet Report

Drilling Services

v4.2.2674

BHA 1 - 2012/08/18 TO 2012/08/20

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

Company Man: Ben Clayton, Duaine Bell
 DIR Supervisor: Brian Trani, Paul Trione
 MWD Supervisor: Robert Simmons, Corey Jacobs

| | | | | |
|-----------------------|-------------------------------------|---------------------|-----------------------|-------------------------------------|
| BHA NO: 1 | DATES RUN: 2012/08/18 TO 2012/08/20 | SECTION: Build & Ho | TOOLFACE OFFSET: 88 ° | SURVEY OFFSET: 59 ft |
| MOTOR SETTING: 1.50 ° | KICKPAD: No | STABILIZER: No | MODEL: 7/8 L, 5 Stg | SERIAL NO: 675-3991 |
| | | | | BHA SURVEY TYPE: Positive Pulse MWD |

(Distances are shown in feet.)

| BIT | | SURVEY | | | | ORIENTING | | | ROTATING | | | SLIDE | BUR | BUR | COMMENTS |
|---------|---------|---------|-------|--------|------|-----------|---------|-------|----------|---------|--------|-------|-------|--------|----------|
| DEPTH | DRILLED | DEPTH | INC | AZM | TF | FROM | TO | FEET | FROM | TO | FEET | SEEN | /ft | /100ft | |
| 1031.00 | 93.00 | 972.00 | 0.14 | 256.90 | | 1031.00 | 1031.00 | 0.00 | 1031.00 | 1124.00 | 93.00 | 0.00 | 0.00 | 0.00 | |
| 1124.00 | 94.00 | 1065.00 | 0.14 | 291.05 | | 1124.00 | 1124.00 | 0.00 | 1124.00 | 1218.00 | 94.00 | 0.00 | 0.00 | 0.00 | |
| 1218.00 | 93.00 | 1159.00 | 0.16 | 329.40 | | 1218.00 | 1218.00 | 0.00 | 1218.00 | 1311.00 | 93.00 | 0.00 | 0.00 | 0.00 | 0.02 |
| 1311.00 | 94.00 | 1252.00 | 0.00 | 242.83 | | 1311.00 | 1311.00 | 0.00 | 1311.00 | 1405.00 | 94.00 | 0.00 | 0.00 | 0.00 | -0.17 |
| 1405.00 | 93.00 | 1346.00 | 0.00 | 96.91 | | 1405.00 | 1405.00 | 0.00 | 1405.00 | 1498.00 | 93.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1498.00 | 85.00 | 1439.00 | 0.25 | 335.79 | 69 M | 1498.00 | 1523.00 | 25.00 | 1523.00 | 1583.00 | 60.00 | 0.00 | 0.00 | 0.00 | 0.27 |
| 1583.00 | 86.00 | 1524.00 | 1.54 | 100.98 | 60M | 1583.00 | 1613.00 | 30.00 | 1613.00 | 1669.00 | 56.00 | 25.00 | 0.05 | 0.05 | 1.52 |
| 1669.00 | 85.00 | 1610.00 | 4.89 | 69.37 | 69M | 1669.00 | 1694.00 | 25.00 | 1694.00 | 1754.00 | 60.00 | 27.00 | 0.12 | 0.12 | 3.90 |
| 1754.00 | 85.00 | 1695.00 | 6.99 | 65.28 | 20R | 1754.00 | 1774.00 | 20.00 | 1774.00 | 1839.00 | 65.00 | 28.00 | 0.08 | 0.08 | 2.47 |
| 1839.00 | 86.00 | 1780.00 | 8.37 | 71.86 | HS | 1839.00 | 1859.00 | 20.00 | 1859.00 | 1925.00 | 66.00 | 20.00 | 0.07 | 0.07 | 1.62 |
| 1925.00 | 85.00 | 1866.00 | 9.40 | 73.59 | 20L | 1925.00 | 1940.00 | 15.00 | 1940.00 | 2010.00 | 70.00 | 20.00 | 0.05 | 0.05 | 1.20 |
| 2010.00 | 86.00 | 1951.00 | 10.52 | 71.57 | | 2010.00 | 2010.00 | 0.00 | 2010.00 | 2096.00 | 86.00 | 15.00 | 0.07 | 0.07 | 1.32 |
| 2096.00 | 85.00 | 2037.00 | 9.28 | 68.90 | HS | 2096.00 | 2121.00 | 25.00 | 2121.00 | 2181.00 | 60.00 | 0.00 | 0.00 | 0.00 | -1.44 |
| 2181.00 | 85.00 | 2122.00 | 10.33 | 66.19 | HS | 2181.00 | 2206.00 | 25.00 | 2206.00 | 2266.00 | 60.00 | 25.00 | 0.04 | 0.04 | 1.24 |
| 2266.00 | 86.00 | 2207.00 | 11.39 | 67.09 | HS | 2266.00 | 2296.00 | 30.00 | 2296.00 | 2352.00 | 56.00 | 25.00 | 0.04 | 0.04 | 1.25 |
| 2352.00 | 85.00 | 2293.00 | 13.05 | 70.76 | HS | 2352.00 | 2377.00 | 25.00 | 2377.00 | 2437.00 | 60.00 | 27.00 | 0.06 | 0.06 | 1.93 |
| 2437.00 | 86.00 | 2378.00 | 14.57 | 66.33 | 30R | 2437.00 | 2457.00 | 20.00 | 2457.00 | 2523.00 | 66.00 | 28.00 | 0.05 | 0.05 | 1.79 |
| 2523.00 | 85.00 | 2464.00 | 14.87 | 66.59 | 40R | 2523.00 | 2558.00 | 35.00 | 2558.00 | 2608.00 | 50.00 | 20.00 | 0.01 | 0.01 | 0.35 |
| 2608.00 | 171.00 | 2549.00 | 15.02 | 71.66 | 10L | 2608.00 | 2648.00 | 40.00 | 2648.00 | 2779.00 | 131.00 | 26.00 | 0.01 | 0.01 | 0.18 |
| 2779.00 | 256.00 | 2720.00 | 14.95 | 71.31 | HS | 2779.00 | 2804.00 | 25.00 | 2804.00 | 3035.00 | 231.00 | 49.00 | 0.00 | 0.00 | -0.04 |
| 3035.00 | 171.00 | 2976.00 | 13.28 | 73.66 | 20L | 3035.00 | 3065.00 | 30.00 | 3065.00 | 3206.00 | 141.00 | 25.00 | -0.07 | -0.07 | -0.65 |
| 3206.00 | 86.00 | 3147.00 | 12.72 | 68.71 | HS | 3206.00 | 3241.00 | 35.00 | 3241.00 | 3292.00 | 51.00 | 30.00 | -0.02 | -0.02 | -0.33 |
| 3292.00 | 85.00 | 3233.00 | 12.14 | 66.60 | 15R | 3292.00 | 3312.00 | 20.00 | 3312.00 | 3377.00 | 65.00 | 27.00 | -0.02 | -0.02 | -0.67 |
| 3377.00 | 85.00 | 3318.00 | 13.36 | 68.03 | 20L | 3377.00 | 3417.00 | 40.00 | 3417.00 | 3462.00 | 45.00 | 28.00 | 0.04 | 0.04 | 1.44 |

Slide Sheet Report

BHA 1 - 2012/08/18 TO 2012/08/20

| BIT | | SURVEY | | | | ----- ORIENTING ----- | | | ----- ROTATING ----- | | | SLIDE | BUR | BUR | COMMENTS |
|---------------------|---------|---------|-------|-------|-----|-----------------------|---------|-------|----------------------|---------|-------|-------|-------|--------|--|
| DEPTH | DRILLED | DEPTH | INC | AZM | TF | FROM | TO | FEET | FROM | TO | FEET | SEEN | /ft | /100ft | |
| 3462.00 | 86.00 | 3403.00 | 12.31 | 65.67 | 10R | 3462.00 | 3512.00 | 50.00 | 3512.00 | 3548.00 | 36.00 | 26.00 | -0.04 | -1.24 | |
| 3548.00 | 85.00 | 3489.00 | 13.67 | 65.78 | 15R | 3548.00 | 3583.00 | 35.00 | 3583.00 | 3633.00 | 50.00 | 41.00 | 0.03 | 1.58 | |
| 3633.00 | 86.00 | 3574.00 | 16.50 | 66.55 | 15R | 3633.00 | 3658.00 | 25.00 | 3658.00 | 3719.00 | 61.00 | 49.00 | 0.06 | 3.33 | |
| 3719.00 | 85.00 | 3660.00 | 16.93 | 67.02 | 20R | 3719.00 | 3729.00 | 10.00 | 3729.00 | 3804.00 | 75.00 | 34.00 | 0.01 | 0.50 | |
| 3804.00 | 85.00 | 3745.00 | 15.05 | 68.23 | 10L | 3804.00 | 3854.00 | 50.00 | 3854.00 | 3889.00 | 35.00 | 10.00 | -0.19 | -2.21 | |
| 3889.00 | 85.00 | 3830.00 | 14.55 | 66.26 | HS | 3889.00 | 3909.00 | 20.00 | 3909.00 | 3974.00 | 65.00 | 26.00 | -0.02 | -0.59 | |
| 3974.00 | 86.00 | 3915.00 | 16.37 | 68.55 | HS | 3974.00 | 3999.00 | 25.00 | 3999.00 | 4060.00 | 61.00 | 44.00 | 0.04 | 2.14 | |
| 4060.00 | 85.00 | 4001.00 | 17.73 | 71.19 | | 4060.00 | 4060.00 | 0.00 | 4060.00 | 4145.00 | 85.00 | 25.00 | 0.05 | 1.58 | |
| 4145.00 | 85.00 | 4086.00 | 17.09 | 71.46 | | 4145.00 | 4145.00 | 0.00 | 4145.00 | 4230.00 | 85.00 | 0.00 | 0.00 | -0.75 | |
| 4230.00 | 86.00 | 4171.00 | 14.37 | 69.81 | HS | 4230.00 | 4250.00 | 20.00 | 4250.00 | 4316.00 | 66.00 | 0.00 | 0.00 | -3.20 | |
| 4316.00 | 85.00 | 4257.00 | 14.13 | 69.11 | HS | 4316.00 | 4346.00 | 30.00 | 4346.00 | 4401.00 | 55.00 | 20.00 | -0.01 | -0.28 | |
| 4401.00 | 85.00 | 4342.00 | 15.64 | 69.04 | HS | 4401.00 | 4421.00 | 20.00 | 4421.00 | 4486.00 | 65.00 | 26.00 | 0.06 | 1.78 | |
| 4486.00 | 86.00 | 4427.00 | 15.48 | 68.52 | HS | 4486.00 | 4506.00 | 20.00 | 4506.00 | 4572.00 | 66.00 | 24.00 | -0.01 | -0.19 | |
| 4572.00 | 85.00 | 4513.00 | 16.14 | 68.13 | | 4572.00 | 4572.00 | 0.00 | 4572.00 | 4657.00 | 85.00 | 20.00 | 0.03 | 0.77 | |
| 4657.00 | 85.00 | 4598.00 | 15.03 | 66.71 | HS | 4657.00 | 4677.00 | 20.00 | 4677.00 | 4742.00 | 65.00 | 0.00 | 0.00 | -1.31 | |
| 4742.00 | 86.00 | 4683.00 | 16.02 | 67.75 | | 4742.00 | 4742.00 | 0.00 | 4742.00 | 4828.00 | 86.00 | 20.00 | 0.05 | 1.16 | |
| 4828.00 | 85.00 | 4769.00 | 14.35 | 67.52 | HS | 4828.00 | 4853.00 | 25.00 | 4853.00 | 4913.00 | 60.00 | 0.00 | 0.00 | -1.94 | Bad Set:multiple stalls, psi spikes and psi issues |
| 4913.00 | 86.00 | 4854.00 | 11.62 | 66.87 | HS | 4913.00 | 4943.00 | 30.00 | 4943.00 | 4999.00 | 56.00 | 25.00 | -0.11 | -3.21 | |
| 4999.00 | 42.00 | 4940.00 | 11.66 | 68.82 | HS | 4999.00 | 5036.00 | 37.00 | 5036.00 | 5041.00 | 5.00 | 27.00 | 0.00 | 0.05 | |
| Totals: | | | | | | 902.00 ft | | | 3108.00 ft | | | | | | |
| Percentages: | | | | | | 22.5% | | | 77.5% | | | | | | |
| Time: | | | | | | 14.17 hrs | | | 10.42 hrs | | | | | | |
| Percentages: | | | | | | 57.6% | | | 42.4% | | | | | | |



Slide Sheet Report

Drilling Services

v4.2.2674

BHA 2 - 2012/08/20 TO 2012/08/21

FILE #: 4027073
JOB TYPE: Horizontal
RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ
COMPANY: Anadarko Petroleum Corporation
SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services
SURVEY TYPE: HEL LWD
FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
Company Man: Duaine Bell, Ben Clayton
MWD Supervisor: Robert Simmons, Corey Jacobs

| | | | | |
|-----------------------|-------------------------------------|---------------------|-----------------------|-------------------------------------|
| BHA NO: 2 | DATES RUN: 2012/08/20 TO 2012/08/21 | SECTION: Build & Ho | TOOLFACE OFFSET: 61 ° | SURVEY OFFSET: 59 ft |
| MOTOR SETTING: 1.50 ° | KICKPAD: No | STABILIZER: No | MODEL: 7/8 L, 5 Stg | SERIAL NO: 675-41008 |
| | | | | BHA SURVEY TYPE: Positive Pulse MWD |

(Distances are shown in feet.)

| BIT | | SURVEY | | | | ORIENTING | | | ROTATING | | | SLIDE | BUR | BUR | COMMENTS |
|---------|---------|---------|-------|-------|-----|-----------|---------|-------|----------|---------|--------|-------|-------|--------|----------|
| DEPTH | DRILLED | DEPTH | INC | AZM | TF | FROM | TO | FEET | FROM | TO | FEET | SEEN | /ft | /100ft | |
| 5042.00 | 42.00 | 4983.00 | 0.00 | 0.00 | HS | 5042.00 | 5080.00 | 38.00 | 5080.00 | 5084.00 | 4.00 | 0.00 | 0.00 | 0.00 | |
| 5084.00 | 85.00 | 5025.00 | 11.56 | 68.63 | HS | 5084.00 | 5114.00 | 30.00 | 5114.00 | 5169.00 | 55.00 | 0.00 | 0.00 | 27.52 | |
| 5169.00 | 0.00 | 5110.00 | 12.30 | 73.26 | HS | 5169.00 | 5189.00 | 20.00 | 5189.00 | 5169.00 | -20.00 | 64.00 | 0.01 | 0.87 | |
| 5169.00 | 86.00 | 5110.00 | 12.30 | 73.26 | HS | 5169.00 | 5189.00 | 20.00 | 5189.00 | 5255.00 | 66.00 | 0.00 | 0.00 | 0.00 | |
| 5255.00 | 0.00 | 5196.00 | 15.24 | 78.32 | 30L | 5255.00 | 5275.00 | 20.00 | 5275.00 | 5255.00 | -20.00 | 44.00 | 0.07 | 3.42 | |
| 5255.00 | 85.00 | 5196.00 | 15.24 | 78.32 | 30L | 5255.00 | 5275.00 | 20.00 | 5275.00 | 5340.00 | 65.00 | 0.00 | 0.00 | 0.00 | |
| 5340.00 | 86.00 | 5281.00 | 14.70 | 72.56 | HS | 5340.00 | 5370.00 | 30.00 | 5370.00 | 5426.00 | 56.00 | 40.00 | -0.01 | -0.64 | |
| 5426.00 | 85.00 | 5367.00 | 14.33 | 67.91 | HS | 5426.00 | 5471.00 | 45.00 | 5471.00 | 5511.00 | 40.00 | 27.00 | -0.01 | -0.43 | |
| 5511.00 | 86.00 | 5452.00 | 15.24 | 68.77 | HS | 5511.00 | 5531.00 | 20.00 | 5531.00 | 5597.00 | 66.00 | 29.00 | 0.03 | 1.07 | |
| 5597.00 | 85.00 | 5538.00 | 15.08 | 68.47 | HS | 5597.00 | 5632.00 | 35.00 | 5632.00 | 5682.00 | 50.00 | 39.00 | 0.00 | -0.19 | |
| 5682.00 | 85.00 | 5623.00 | 14.61 | 67.87 | HS | 5682.00 | 5727.00 | 45.00 | 5727.00 | 5767.00 | 40.00 | 26.00 | -0.02 | -0.55 | |
| 5767.00 | 86.00 | 5708.00 | 15.42 | 67.87 | HS | 5767.00 | 5797.00 | 30.00 | 5797.00 | 5853.00 | 56.00 | 35.00 | 0.02 | 0.95 | |
| 5853.00 | 85.00 | 5794.00 | 15.56 | 73.76 | HS | 5853.00 | 5888.00 | 35.00 | 5888.00 | 5938.00 | 50.00 | 46.00 | 0.00 | 0.16 | |
| 5938.00 | 86.00 | 5879.00 | 15.30 | 71.64 | 40L | 5938.00 | 5988.00 | 50.00 | 5988.00 | 6024.00 | 36.00 | 29.00 | -0.01 | -0.31 | |
| 6024.00 | 85.00 | 5965.00 | 15.40 | 67.97 | HS | 6024.00 | 6064.00 | 40.00 | 6064.00 | 6109.00 | 45.00 | 36.00 | 0.00 | 0.12 | |
| 6109.00 | 86.00 | 6050.00 | 15.64 | 66.33 | 20L | 6109.00 | 6169.00 | 60.00 | 6169.00 | 6195.00 | 26.00 | 49.00 | 0.00 | 0.28 | |
| 6195.00 | 85.00 | 6136.00 | 15.00 | 65.89 | HS | 6195.00 | 6249.00 | 54.00 | 6249.00 | 6280.00 | 31.00 | 41.00 | -0.02 | -0.74 | |
| 6280.00 | 86.00 | 6221.00 | 16.32 | 62.03 | 20R | 6280.00 | 6320.00 | 40.00 | 6320.00 | 6366.00 | 46.00 | 59.00 | 0.02 | 1.55 | |
| 6366.00 | 101.00 | 6307.00 | 15.56 | 67.26 | HS | 6366.00 | 6431.00 | 65.00 | 6431.00 | 6467.00 | 36.00 | 55.00 | -0.01 | -0.88 | |

| | | |
|--------------|-----------|-----------|
| Totals: | 697.00 ft | 728.00 ft |
| Percentages: | 48.9% | 51.1% |
| Time: | 6.92 hrs | 4.58 hrs |
| Percentages: | 60.1% | 39.9% |



Slide Sheet Report

Drilling Services

v4.2.2674

BHA 3 - 2012/08/21 TO 2012/08/23

FILE #: 4027073
JOB TYPE: Horizontal
RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ
COMPANY: Anadarko Petroleum Corporation
SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services
SURVEY TYPE: HEL LWD
FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
Company Man: Duaine Bell, Ben Clayton
MWD Supervisor: Robert Simmons, Corey Jacobs

| | | | | |
|-----------------------|-------------------------------------|----------------|------------------------|-------------------------------------|
| BHA NO: 3 | DATES RUN: 2012/08/21 TO 2012/08/23 | SECTION: Curve | TOOLFACE OFFSET: 262 ° | SURVEY OFFSET: 59 ft |
| MOTOR SETTING: 2.25 ° | KICKPAD: 8 5/8" | STABILIZER: No | MODEL: 7/8 5.0 stg | SERIAL NO: 675-40990 |
| | | | | BHA SURVEY TYPE: Positive Pulse MWD |

(Distances are shown in feet.)

| BIT | | SURVEY | | | | ORIENTING | | | ROTATING | | | SLIDE | BUR | BUR | COMMENTS |
|---------|---------|---------|-------|--------|-----|-----------|---------|-------|----------|---------|------|-------|-------|--------|--|
| DEPTH | DRILLED | DEPTH | INC | AZM | TF | FROM | TO | FEET | FROM | TO | FEET | SEEN | /ft | /100ft | |
| 6467.00 | 70.00 | 6408.00 | 15.87 | 62.82 | 95R | 6467.00 | 6537.00 | 70.00 | 6537.00 | 6537.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6537.00 | 43.00 | 6478.00 | 14.70 | 71.39 | 80R | 6537.00 | 6580.00 | 43.00 | 6580.00 | 6580.00 | 0.00 | 11.00 | -0.11 | -1.67 | |
| 6580.00 | 43.00 | 6521.00 | 15.18 | 87.80 | 20R | 6580.00 | 6623.00 | 43.00 | 6623.00 | 6623.00 | 0.00 | 43.00 | 0.01 | 1.12 | |
| 6623.00 | 42.00 | 6564.00 | 15.89 | 98.38 | 20R | 6623.00 | 6665.00 | 42.00 | 6665.00 | 6665.00 | 0.00 | 43.00 | 0.02 | 1.65 | |
| 6665.00 | 43.00 | 6606.00 | 18.82 | 98.26 | 80R | 6665.00 | 6708.00 | 43.00 | 6708.00 | 6708.00 | 0.00 | 42.00 | 0.07 | 6.98 | |
| 6708.00 | 43.00 | 6649.00 | 22.28 | 95.70 | 80R | 6708.00 | 6751.00 | 43.00 | 6751.00 | 6751.00 | 0.00 | 43.00 | 0.08 | 8.05 | |
| 6751.00 | 43.00 | 6692.00 | 24.28 | 104.12 | 80R | 6751.00 | 6794.00 | 43.00 | 6794.00 | 6794.00 | 0.00 | 43.00 | 0.05 | 4.65 | |
| 6794.00 | 42.00 | 6735.00 | 26.00 | 113.55 | 60R | 6794.00 | 6836.00 | 42.00 | 6836.00 | 6836.00 | 0.00 | 43.00 | 0.04 | 4.00 | |
| 6836.00 | 43.00 | 6777.00 | 27.26 | 123.69 | 60R | 6836.00 | 6879.00 | 43.00 | 6879.00 | 6879.00 | 0.00 | 42.00 | 0.03 | 3.00 | |
| 6879.00 | 43.00 | 6820.00 | 28.15 | 129.70 | 60R | 6879.00 | 6922.00 | 43.00 | 6922.00 | 6922.00 | 0.00 | 43.00 | 0.02 | 2.07 | |
| 6922.00 | 0.00 | 6863.00 | 30.25 | 136.82 | | 6922.00 | 6922.00 | 0.00 | 6922.00 | 6922.00 | 0.00 | 43.00 | 0.05 | 4.88 | Final Survey -Pull From Hole to Change Motor |

| | | |
|--------------|-----------|----------|
| Totals: | 455.00 ft | 0.00 ft |
| Percentages: | 100.0% | 0.0% |
| Time: | 7.58 hrs | 0.00 hrs |
| Percentages: | 100.0% | 0.0% |



Slide Sheet Report

Drilling Services

v4.2.2674

BHA 4 - 2012/08/23 TO 2012/08/24

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione, Jacob Hofer

Company Man: Duaine Bell, Ben Clayton

MWD Supervisor: Robert Simmons, Corey Jacobs

| | | | | |
|-----------------------|-------------------------------------|----------------|-------------------------------------|----------------------|
| BHA NO: 4 | DATES RUN: 2012/08/23 TO 2012/08/24 | SECTION: Curve | TOOLFACE OFFSET: 291 ° | SURVEY OFFSET: 59 ft |
| MOTOR SETTING: 2.60 ° | KICKPAD: No | STABILIZER: No | MODEL: 7/8 5.0 Stg | SERIAL NO: 675-4095 |
| | | | BHA SURVEY TYPE: Positive Pulse MWD | |

(Distances are shown in feet.)

| BIT | | SURVEY | | | | ----- ORIENTING ----- | | | ----- ROTATING ----- | | | SLIDE | BUR | BUR | COMMENTS |
|---------|---------|---------|-------|--------|-----|-----------------------|---------|-------|----------------------|---------|-------|-------|------|--------|----------|
| DEPTH | DRILLED | DEPTH | INC | AZM | TF | FROM | TO | FEET | FROM | TO | FEET | SEEN | /ft | /100ft | |
| 6922.00 | 42.00 | 6863.00 | 0.00 | 0.00 | 60R | 6922.00 | 6964.00 | 42.00 | 6964.00 | 6964.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6964.00 | 43.00 | 6905.00 | 32.80 | 141.19 | 60R | 6964.00 | 7007.00 | 43.00 | 7007.00 | 7007.00 | 0.00 | 0.00 | 0.00 | 78.10 | |
| 7007.00 | 43.00 | 6948.00 | 35.54 | 152.08 | 45R | 7007.00 | 7050.00 | 43.00 | 7050.00 | 7050.00 | 0.00 | 26.00 | 0.11 | 6.37 | |
| 7050.00 | 43.00 | 6991.00 | 38.55 | 162.82 | HS | 7050.00 | 7076.00 | 26.00 | 7076.00 | 7093.00 | 17.00 | 43.00 | 0.07 | 7.00 | |
| 7093.00 | 33.00 | 7034.00 | 43.58 | 171.59 | 15L | 7093.00 | 7113.00 | 20.00 | 7113.00 | 7126.00 | 13.00 | 43.00 | 0.12 | 11.70 | |
| 7126.00 | 10.00 | 7067.00 | 48.34 | 172.95 | 20R | 7126.00 | 7136.00 | 10.00 | 7136.00 | 7136.00 | 0.00 | 33.00 | 0.14 | 14.42 | |
| 7136.00 | 42.00 | 7077.00 | 48.34 | 172.95 | 15R | 7136.00 | 7178.00 | 42.00 | 7178.00 | 7178.00 | 0.00 | 9.00 | 0.00 | 0.00 | |
| 7178.00 | 10.00 | 7119.00 | 52.93 | 173.52 | HS | 7178.00 | 7188.00 | 10.00 | 7188.00 | 7188.00 | 0.00 | 20.00 | 0.23 | 10.93 | |

| | | |
|--------------|-----------|----------|
| Totals: | 236.00 ft | 30.00 ft |
| Percentages: | 88.7% | 11.3% |
| Time: | 14.08 hrs | 1.18 hrs |
| Percentages: | 92.2% | 7.8% |



Slide Sheet Report

Drilling Services

v4.2.2674

BHA 5 - 2012/08/24 TO 2012/08/25

FILE #: 4027073
JOB TYPE: Horizontal
RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ
COMPANY: Anadarko Petroleum Corporation
SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services
SURVEY TYPE: HEL LWD
FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione, Jacob Hofer
Company Man: Duaine Bell, Ben Clayton
MWD Supervisor: Robert Simmons, Corey Jacobs

| | | | | |
|-------------------------------------|-------------------------------------|----------------|------------------------|----------------------|
| BHA NO: 5 | DATES RUN: 2012/08/24 TO 2012/08/25 | SECTION: Curve | TOOLFACE OFFSET: 291 ° | SURVEY OFFSET: 59 ft |
| MOTOR SETTING: 2.60 ° | KICKPAD: No | STABILIZER: No | MODEL: 7/8 5.0 Stg | SERIAL NO: 675-4095 |
| BHA SURVEY TYPE: Positive Pulse MWD | | | | |

(Distances are shown in feet.)

| BIT | | SURVEY | | | | ----- ORIENTING ----- | | | ----- ROTATING ----- | | | SLIDE | BUR | BUR | COMMENTS |
|---------|---------|---------|-------|--------|-----|-----------------------|---------|-------|----------------------|---------|------|-------|------|--------|----------|
| DEPTH | DRILLED | DEPTH | INC | AZM | TF | FROM | TO | FEET | FROM | TO | FEET | SEEN | /ft | /100ft | |
| 7188.00 | 8.00 | 7129.00 | 53.87 | 174.06 | ROT | 7188.00 | 7188.00 | 0.00 | 7188.00 | 7196.00 | 8.00 | 0.00 | 0.00 | 0.00 | |
| 7196.00 | 25.00 | 7137.00 | 53.87 | 174.06 | HS | 7196.00 | 7221.00 | 25.00 | 7221.00 | 7221.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7221.00 | 20.00 | 7162.00 | 58.18 | 174.93 | HS | 7221.00 | 7241.00 | 20.00 | 7241.00 | 7241.00 | 0.00 | 0.00 | 0.00 | 17.24 | |

| | | |
|--------------|----------|----------|
| Totals: | 45.00 ft | 8.00 ft |
| Percentages: | 84.9% | 15.1% |
| Time: | 1.08 hrs | 0.25 hrs |
| Percentages: | 81.3% | 18.8% |



Slide Sheet Report

Drilling Services

v4.2.2674

BHA 6 - 2012/08/25 TO 2012/08/27

FILE #: 4027073
JOB TYPE: Horizontal
RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ
COMPANY: Anadarko Petroleum Corporation
SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services
SURVEY TYPE: HEL LWD
FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione, Jacob Hofer
Company Man: Duaine Bell, Ben Clayton
MWD Supervisor: Robert Simmons, Corey Jacobs

| | | | | |
|-----------------------|-------------------------------------|----------------|-------------------------------------|----------------------|
| BHA NO: 6 | DATES RUN: 2012/08/25 TO 2012/08/27 | SECTION: Curve | TOOLFACE OFFSET: 204.9 ° | SURVEY OFFSET: 60 ft |
| MOTOR SETTING: 2.50 ° | KICKPAD: No | STABILIZER: No | MODEL: 7/8 5.0 stg. | SERIAL NO: 675-4026 |
| | | | BHA SURVEY TYPE: Positive Pulse MWD | |

(Distances are shown in feet.)

| BIT | | SURVEY | | | | ----- ORIENTING ----- | | | ----- ROTATING ----- | | | SLIDE | BUR | BUR | COMMENTS |
|---------|---------|---------|-------|--------|-----|-----------------------|---------|-------|----------------------|---------|-------|-------|------|--------|----------|
| DEPTH | DRILLED | DEPTH | INC | AZM | TF | FROM | TO | FEET | FROM | TO | FEET | SEEN | /ft | /100ft | |
| 7242.00 | 23.00 | 7182.00 | 58.18 | 174.93 | HS | 7242.00 | 7265.00 | 23.00 | 7265.00 | 7265.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7265.00 | 43.00 | 7205.00 | 62.34 | 178.57 | HS | 7265.00 | 7308.00 | 43.00 | 7308.00 | 7308.00 | 0.00 | 0.00 | 0.00 | 18.09 | |
| 7308.00 | 42.00 | 7248.00 | 66.40 | 179.98 | 10L | 7308.00 | 7350.00 | 42.00 | 7350.00 | 7350.00 | 0.00 | 6.00 | 0.68 | 9.44 | |
| 7350.00 | 43.00 | 7290.00 | 71.64 | 181.28 | 20L | 7350.00 | 7393.00 | 43.00 | 7393.00 | 7393.00 | 0.00 | 42.00 | 0.12 | 12.48 | |
| 7393.00 | 42.00 | 7333.00 | 77.60 | 183.20 | 30L | 7393.00 | 7415.00 | 22.00 | 7415.00 | 7435.00 | 20.00 | 43.00 | 0.14 | 13.86 | |

| | | |
|--------------|-----------|----------|
| Totals: | 173.00 ft | 20.00 ft |
| Percentages: | 89.6% | 10.4% |
| Time: | 6.32 hrs | 0.33 hrs |
| Percentages: | 95.0% | 5.0% |



Slide Sheet Report

Drilling Services

v4.2.2674

BHA 7 - 2012/08/27 TO 2012/08/28

FILE #: 4027073

JOB TYPE: Horizontal

RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ

COMPANY: Anadarko Petroleum Corporation

SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services

SURVEY TYPE: HEL LWD

FIELD / LOCATION: Wattenburg / CO / USA

DIR Supervisor: Brian Trani, Paul Trione
MWD Supervisor: Corey Jacobs, Robert Simmons
Company Man: Duaine Bell, Ben Clayton

| | | | | |
|-----------------------|-------------------------------------|---------------------|-------------------------------------|----------------------|
| BHA NO: 7 | DATES RUN: 2012/08/27 TO 2012/08/28 | SECTION: Wipe Curve | TOOLFACE OFFSET: | SURVEY OFFSET: 60 ft |
| MOTOR SETTING: 1.83 ° | KICKPAD: No | STABILIZER: No | MODEL: 7/8 5.0 Stg | SERIAL NO: 675-41018 |
| | | | BHA SURVEY TYPE: Positive Pulse MWD | |

(Distances are shown in feet.)

| BIT DEPTH DRILLED | SURVEY DEPTH | INC | AZM | TF | ----- ORIENTING ----- | | | ----- ROTATING ----- | | | SLIDE SEEN | BUR | BUR | COMMENTS |
|----------------------|-----------------|------|------|------|-----------------------|------|------|----------------------|------|------|---------------|------|------|----------|
| | | | | | FROM | TO | | FROM | TO | | | | | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |

| | | |
|--------------|----------|----------|
| Totals: | 0.00 ft | 0.00 ft |
| Percentages: | 0.0% | 0.0% |
| Time: | 0.00 hrs | 0.00 hrs |
| Percentages: | 0.0% | 0.0% |



Slide Sheet Report

Drilling Services

v4.2.2674

BHA 8 - 2012/08/30 TO 2012/09/03

FILE #: 4027073
JOB TYPE: Horizontal
RIG & NO: Xtreme 23

WELL NAME: Palyo 14N-11HZ
COMPANY: Anadarko Petroleum Corporation
SURFACE LOCATION: Palyo 29-11HZ Pad

SERVICE CO.: Weatherford Drilling Services
SURVEY TYPE: HEL LWD
FIELD / LOCATION: Wattenburg / CO / USA

MWD Supervisor: Corey Jacobs, Robert Simmons
DIR Supervisor: Brian Trani, Jacob Hofer, Paul Trione
Company Man: Duaine Bell

| | | | | |
|-----------------------|-------------------------------------|--------------------|------------------------|--------------------------|
| BHA NO: 8 | DATES RUN: 2012/08/30 TO 2012/09/03 | SECTION: Lateral 1 | TOOLFACE OFFSET: 115 ° | SURVEY OFFSET: 55 ft |
| MOTOR SETTING: 1.50 ° | KICKPAD: No | STABILIZER: No | MODEL: n/a | SERIAL NO: n/a |
| | | | | BHA SURVEY TYPE: HEL LWD |

(Distances are shown in feet.)

| BIT | | SURVEY | | | | ORIENTING | | | ROTATING | | | SLIDE | BUR | BUR | COMMENTS |
|---------|---------|---------|-------|--------|------|-----------|---------|-------|----------|---------|--------|-------|-------|--------|----------|
| DEPTH | DRILLED | DEPTH | INC | AZM | TF | FROM | TO | FEET | FROM | TO | FEET | SEEN | /ft | /100ft | |
| 7435.00 | 105.00 | 7380.00 | 86.79 | 182.50 | ROT | 7435.00 | 7435.00 | 0.00 | 7435.00 | 7540.00 | 105.00 | 0.00 | 0.00 | 0.00 | |
| 7540.00 | 43.00 | 7485.00 | 88.85 | 182.50 | HS | 7540.00 | 7552.00 | 12.00 | 7552.00 | 7583.00 | 31.00 | 0.00 | 0.00 | 1.96 | |
| 7583.00 | 85.00 | 7528.00 | 88.77 | 182.44 | HS | 7583.00 | 7593.00 | 10.00 | 7593.00 | 7668.00 | 75.00 | 0.00 | 0.00 | -0.19 | |
| 7668.00 | 85.00 | 7613.00 | 90.79 | 181.79 | | 7668.00 | 7668.00 | 0.00 | 7668.00 | 7753.00 | 85.00 | 22.00 | 0.09 | 2.38 | |
| 7753.00 | 86.00 | 7698.00 | 90.99 | 181.52 | 90R | 7753.00 | 7768.00 | 15.00 | 7768.00 | 7839.00 | 71.00 | 0.00 | 0.00 | 0.24 | |
| 7839.00 | 85.00 | 7784.00 | 91.48 | 182.05 | 90R | 7839.00 | 7854.00 | 15.00 | 7854.00 | 7924.00 | 70.00 | 15.00 | 0.03 | 0.57 | |
| 7924.00 | 85.00 | 7869.00 | 91.73 | 182.56 | 135R | 7924.00 | 7944.00 | 20.00 | 7944.00 | 8009.00 | 65.00 | 15.00 | 0.02 | 0.29 | |
| 8009.00 | 86.00 | 7954.00 | 91.30 | 183.49 | 180 | 8009.00 | 8024.00 | 15.00 | 8024.00 | 8095.00 | 71.00 | 20.00 | -0.02 | -0.51 | |
| 8095.00 | 85.00 | 8040.00 | 92.22 | 183.78 | 160L | 8095.00 | 8125.00 | 30.00 | 8125.00 | 8180.00 | 55.00 | 15.00 | 0.06 | 1.07 | |
| 8180.00 | 67.00 | 8125.00 | 90.37 | 182.62 | 130L | 8180.00 | 8220.00 | 40.00 | 8220.00 | 8247.00 | 27.00 | 30.00 | -0.06 | -2.18 | |
| 8247.00 | 18.00 | 8192.00 | 90.37 | 182.62 | 90L | 8247.00 | 8257.00 | 10.00 | 8257.00 | 8265.00 | 8.00 | 12.00 | 0.00 | 0.00 | |
| 8265.00 | 86.00 | 8210.00 | 90.79 | 181.09 | 90L | 8265.00 | 8351.00 | 86.00 | 8351.00 | 8351.00 | 0.00 | 18.00 | 0.02 | 2.33 | |
| 8351.00 | 85.00 | 8296.00 | 90.99 | 176.37 | 80L | 8351.00 | 8361.00 | 10.00 | 8361.00 | 8436.00 | 75.00 | 51.00 | 0.00 | 0.23 | |
| 8436.00 | 85.00 | 8381.00 | 89.57 | 169.44 | 20L | 8436.00 | 8444.00 | 8.00 | 8444.00 | 8521.00 | 77.00 | 65.00 | -0.02 | -1.67 | |
| 8521.00 | 85.00 | 8466.00 | 90.00 | 168.40 | 80R | 8521.00 | 8561.00 | 40.00 | 8561.00 | 8606.00 | 45.00 | 8.00 | 0.05 | 0.51 | |
| 8606.00 | 86.00 | 8551.00 | 91.79 | 170.52 | 110R | 8606.00 | 8676.00 | 70.00 | 8676.00 | 8692.00 | 16.00 | 30.00 | 0.06 | 2.11 | |
| 8692.00 | 85.00 | 8637.00 | 92.22 | 173.79 | 110R | 8692.00 | 8762.00 | 70.00 | 8762.00 | 8777.00 | 15.00 | 41.00 | 0.01 | 0.50 | |
| 8777.00 | 86.00 | 8722.00 | 92.78 | 179.43 | 135R | 8777.00 | 8807.00 | 30.00 | 8807.00 | 8863.00 | 56.00 | 69.00 | 0.01 | 0.66 | |
| 8863.00 | 85.00 | 8808.00 | 91.50 | 183.03 | 180R | 8863.00 | 8878.00 | 15.00 | 8878.00 | 8948.00 | 70.00 | 70.00 | -0.02 | -1.49 | |
| 8948.00 | 86.00 | 8893.00 | 90.26 | 183.38 | | 8948.00 | 8948.00 | 0.00 | 8948.00 | 9034.00 | 86.00 | 15.00 | -0.08 | -1.46 | |
| 9034.00 | 85.00 | 8979.00 | 89.75 | 183.13 | | 9034.00 | 9034.00 | 0.00 | 9034.00 | 9119.00 | 85.00 | 0.00 | 0.00 | -0.59 | |
| 9119.00 | 86.00 | 9064.00 | 89.51 | 184.06 | 45L | 9119.00 | 9134.00 | 15.00 | 9134.00 | 9205.00 | 71.00 | 0.00 | 0.00 | -0.28 | |
| 9205.00 | 85.00 | 9150.00 | 90.80 | 184.01 | 90L | 9205.00 | 9220.00 | 15.00 | 9220.00 | 9290.00 | 70.00 | 15.00 | 0.09 | 1.50 | |
| 9290.00 | 256.00 | 9235.00 | 89.88 | 182.45 | HS | 9290.00 | 9300.00 | 10.00 | 9300.00 | 9546.00 | 246.00 | 15.00 | -0.06 | -1.08 | |

Slide Sheet Report

BHA 8 - 2012/08/30 TO 2012/09/03

(Distances are shown in feet.)

| BIT | | SURVEY | | | | ----- ORIENTING ----- | | | ----- ROTATING ----- | | | SLIDE | BUR | BUR | COMMENTS |
|---------------------|---------|----------|-------|--------|------|-----------------------|----------|-------|----------------------|----------|--------|-------|-------|--------|----------|
| DEPTH | DRILLED | DEPTH | INC | AZM | TF | FROM | TO | FEET | FROM | TO | FEET | SEEN | /ft | /100ft | |
| 9546.00 | 86.00 | 9491.00 | 89.51 | 181.76 | HSR | 9546.00 | 9556.00 | 10.00 | 9556.00 | 9632.00 | 76.00 | 10.00 | -0.04 | -0.14 | |
| 9632.00 | 85.00 | 9577.00 | 89.75 | 181.39 | 70R | 9632.00 | 9657.00 | 25.00 | 9657.00 | 9717.00 | 60.00 | 10.00 | 0.02 | 0.28 | |
| 9717.00 | 171.00 | 9662.00 | 90.49 | 183.26 | 110R | 9717.00 | 9727.00 | 10.00 | 9727.00 | 9888.00 | 161.00 | 25.00 | 0.03 | 0.87 | |
| 9888.00 | 86.00 | 9833.00 | 89.65 | 183.91 | 50R | 9888.00 | 9903.00 | 15.00 | 9903.00 | 9974.00 | 71.00 | 10.00 | -0.08 | -0.49 | |
| 9974.00 | 341.00 | 9919.00 | 90.31 | 183.18 | 90R | 9974.00 | 9994.00 | 20.00 | 9994.00 | 10315.00 | 321.00 | 15.00 | 0.04 | 0.77 | |
| 10315.00 | 257.00 | 10260.00 | 91.54 | 185.60 | 150L | 10315.00 | 10335.00 | 20.00 | 10335.00 | 10572.00 | 237.00 | 20.00 | 0.06 | 0.36 | |
| 10572.00 | 171.00 | 10517.00 | 88.21 | 183.86 | HS | 10572.00 | 10587.00 | 15.00 | 10587.00 | 10743.00 | 156.00 | 20.00 | -0.17 | -1.30 | |
| 10743.00 | 85.00 | 10688.00 | 88.95 | 183.24 | 40R | 10743.00 | 10758.00 | 15.00 | 10758.00 | 10828.00 | 70.00 | 15.00 | 0.05 | 0.43 | |
| 10828.00 | 428.00 | 10773.00 | 90.43 | 182.75 | 90R | 10828.00 | 10846.00 | 18.00 | 10846.00 | 11256.00 | 410.00 | 15.00 | 0.10 | 1.74 | |
| 11256.00 | 85.00 | 11201.00 | 93.21 | 185.51 | 150L | 11256.00 | 11286.00 | 30.00 | 11286.00 | 11341.00 | 55.00 | 18.00 | 0.15 | 0.65 | |
| 11341.00 | 184.00 | 11286.00 | 90.74 | 185.28 | 90L | 11341.00 | 11361.00 | 20.00 | 11361.00 | 11525.00 | 164.00 | 30.00 | -0.08 | -2.91 | |
| Totals: | | | | | | 734.00 ft | | | 3356.00 ft | | | | | | |
| Percentages: | | | | | | 17.9% | | | 82.1% | | | | | | |
| Time: | | | | | | 0.00 hrs | | | 0.00 hrs | | | | | | |
| Percentages: | | | | | | 0.0% | | | 0.0% | | | | | | |