



PICEANCE VLY NAD 83

PA 21-06S-095W

PA 22-21 Pad

PA 41-21 - Slot 2A1

Wellbore #1

Plan: Design #2 07Nov12 kjs

Standard Planning Report - Geographic

19 March, 2013



WPX Energy
Planning Report - Geographic

| | | | |
|------------------|-----------------------|-------------------------------------|------------------------------------------|
| Database: | COMPASS-PICEANCE | Local Co-ordinate Reference: | Well PA 41-21 - Slot 2A1 |
| Company: | PICEANCE VLY NAD 83 | TVD Reference: | KELLY BUSHING @ 6056.00usft (Nabors 26') |
| Project: | PA 21-06S-095W | MD Reference: | KELLY BUSHING @ 6056.00usft (Nabors 26') |
| Site: | PA 22-21 Pad | North Reference: | True |
| Well: | PA 41-21 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #2 07Nov12 kjs | | |

| | | | |
|--------------------|--------------------------------------------------|----------------------|-----------------------------|
| Project | PA 21-06S-095W, Garfield County, CO, 21-06S-095W | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Central Zone | | Using geodetic scale factor |

| | | | | | |
|------------------------------|--------------|---------------------|-------------------|--------------------------|------------|
| Site | PA 22-21 Pad | | | | |
| Site Position: | | Northing: | 1,620,701.00 usft | Latitude: | 39.51079 |
| From: | Map | Easting: | 2,292,437.50 usft | Longitude: | -108.00815 |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13.200 in | Grid Convergence: | -1.58 ° |

| | | | | | | |
|-----------------------------|---------------------|-----------|----------------------------|-------------------|----------------------|---------------|
| Well | PA 41-21 - Slot 2A1 | | | | | |
| Well Position | +N/-S | 0.00 usft | Northing: | 1,620,599.20 usft | Latitude: | 39.51051 |
| | +E/-W | 0.00 usft | Easting: | 2,292,509.50 usft | Longitude: | -108.00789 |
| Position Uncertainty | | 0.00 usft | Wellhead Elevation: | | Ground Level: | 6,030.00 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 6/6/2012 | 10.23 | 65.72 | 52,157 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| Design | Design #2 07Nov12 kjs | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.00 | 0.00 | 0.00 | 56.12 |

| Plan Sections | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 120.00 | 0.00 | 0.00 | 120.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,197.00 | 43.08 | 56.12 | 1,098.35 | 215.28 | 320.60 | 4.00 | 4.00 | 0.00 | 56.12 | |
| 5,265.60 | 43.08 | 56.12 | 4,070.07 | 1,764.43 | 2,627.66 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 8,137.59 | 0.00 | 0.00 | 6,679.00 | 2,338.49 | 3,482.59 | 1.50 | -1.50 | 0.00 | 180.00 | |
| 8,237.59 | 0.00 | 0.00 | 6,779.00 | 2,338.49 | 3,482.59 | 0.00 | 0.00 | 0.00 | 0.00 | Top Gas (25' Radius) |
| 10,337.59 | 0.00 | 0.00 | 8,879.00 | 2,338.49 | 3,482.59 | 0.00 | 0.00 | 0.00 | 0.00 | |



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| Company: | PICEANCE VLY NAD 83 | TVD Reference: | KELLY BUSHING @ 6056.00usft (Nabors 26') |
| Project: | PA 21-06S-095W | MD Reference: | KELLY BUSHING @ 6056.00usft (Nabors 26') |
| Site: | PA 22-21 Pad | North Reference: | True |
| Well: | PA 41-21 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #2 07Nov12 kjs | | |

| Planned Survey | | | | | | | | | | |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|----------|------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,620,599.20 | 2,292,509.50 | 39.51051 | -108.00789 | |
| 120.00 | 0.00 | 0.00 | 120.00 | 0.00 | 0.00 | 1,620,599.20 | 2,292,509.50 | 39.51051 | -108.00789 | |
| Start Build 4.00 | | | | | | | | | | |
| 500.00 | 15.20 | 56.12 | 495.56 | 27.93 | 41.60 | 1,620,625.97 | 2,292,551.86 | 39.51059 | -108.00774 | |
| 1,000.00 | 35.20 | 56.12 | 945.68 | 146.01 | 217.45 | 1,620,739.14 | 2,292,730.89 | 39.51092 | -108.00712 | |
| 1,197.00 | 43.08 | 56.12 | 1,098.35 | 215.28 | 320.60 | 1,620,805.53 | 2,292,835.91 | 39.51111 | -108.00675 | |
| Hold 43.08 Inclination | | | | | | | | | | |
| 1,297.00 | 43.08 | 56.12 | 1,171.39 | 253.35 | 377.30 | 1,620,842.03 | 2,292,893.64 | 39.51121 | -108.00655 | |
| 9 5/8" | | | | | | | | | | |
| 1,500.00 | 43.08 | 56.12 | 1,319.66 | 330.65 | 492.41 | 1,620,916.11 | 2,293,010.84 | 39.51142 | -108.00614 | |
| 2,000.00 | 43.08 | 56.12 | 1,684.87 | 521.03 | 775.93 | 1,621,098.59 | 2,293,299.49 | 39.51194 | -108.00514 | |
| 2,500.00 | 43.08 | 56.12 | 2,050.07 | 711.40 | 1,059.46 | 1,621,281.06 | 2,293,588.15 | 39.51247 | -108.00413 | |
| 3,000.00 | 43.08 | 56.12 | 2,415.27 | 901.78 | 1,342.98 | 1,621,463.53 | 2,293,876.80 | 39.51299 | -108.00313 | |
| 3,500.00 | 43.08 | 56.12 | 2,780.47 | 1,092.16 | 1,626.50 | 1,621,646.01 | 2,294,165.46 | 39.51351 | -108.00212 | |
| 3,662.28 | 43.08 | 56.12 | 2,899.00 | 1,153.95 | 1,718.52 | 1,621,705.23 | 2,294,259.15 | 39.51368 | -108.00180 | |
| Top of "G" Sand | | | | | | | | | | |
| 3,799.19 | 43.08 | 56.12 | 2,999.00 | 1,206.08 | 1,796.15 | 1,621,755.19 | 2,294,338.19 | 39.51383 | -108.00152 | |
| Base of "G" Sand | | | | | | | | | | |
| 4,000.00 | 43.08 | 56.12 | 3,145.67 | 1,282.54 | 1,910.02 | 1,621,828.48 | 2,294,454.12 | 39.51404 | -108.00112 | |
| 4,500.00 | 43.08 | 56.12 | 3,510.87 | 1,472.92 | 2,193.54 | 1,622,010.95 | 2,294,742.77 | 39.51456 | -108.00011 | |
| 5,000.00 | 43.08 | 56.12 | 3,876.08 | 1,663.30 | 2,477.06 | 1,622,193.43 | 2,295,031.43 | 39.51508 | -107.99911 | |
| 5,265.60 | 43.08 | 56.12 | 4,070.07 | 1,764.43 | 2,627.66 | 1,622,290.36 | 2,295,184.76 | 39.51536 | -107.99857 | |
| Start Drop -1.50 | | | | | | | | | | |
| 5,500.00 | 39.56 | 56.12 | 4,246.08 | 1,850.69 | 2,756.13 | 1,622,373.04 | 2,295,315.56 | 39.51559 | -107.99812 | |
| 6,000.00 | 32.06 | 56.12 | 4,651.25 | 2,013.68 | 2,998.86 | 1,622,529.26 | 2,295,562.68 | 39.51604 | -107.99726 | |
| 6,500.00 | 24.56 | 56.12 | 5,091.12 | 2,145.79 | 3,195.60 | 1,622,655.88 | 2,295,762.99 | 39.51640 | -107.99656 | |
| 6,639.47 | 22.47 | 56.12 | 5,219.00 | 2,176.81 | 3,241.80 | 1,622,685.61 | 2,295,810.03 | 39.51649 | -107.99640 | |
| Mesaverde | | | | | | | | | | |
| 7,000.00 | 17.06 | 56.12 | 5,558.16 | 2,244.76 | 3,342.99 | 1,622,750.74 | 2,295,913.05 | 39.51668 | -107.99604 | |
| 7,500.00 | 9.56 | 56.12 | 6,044.37 | 2,308.90 | 3,438.52 | 1,622,812.22 | 2,296,010.30 | 39.51685 | -107.99570 | |
| 8,000.00 | 2.06 | 56.12 | 6,541.44 | 2,337.11 | 3,480.53 | 1,622,839.26 | 2,296,053.08 | 39.51693 | -107.99555 | |
| 8,137.59 | 0.00 | 0.00 | 6,679.00 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 | |
| Vertical | | | | | | | | | | |
| 8,237.59 | 0.00 | 0.00 | 6,779.00 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 | |
| Top Gas - Approx. Top Gas | | | | | | | | | | |
| 8,500.00 | 0.00 | 0.00 | 7,041.41 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 | |
| 9,000.00 | 0.00 | 0.00 | 7,541.41 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 | |
| 9,437.59 | 0.00 | 0.00 | 7,979.00 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 | |
| Cameo Coals | | | | | | | | | | |
| 9,500.00 | 0.00 | 0.00 | 8,041.41 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 | |
| 10,000.00 | 0.00 | 0.00 | 8,541.41 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 | |
| 10,237.59 | 0.00 | 0.00 | 8,779.00 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 | |
| Rollins SS | | | | | | | | | | |
| 10,337.59 | 0.00 | 0.00 | 8,879.00 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 | |
| TD at 10337.59 - TD | | | | | | | | | | |



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| Project: | PA 21-06S-095W | MD Reference: | KELLY BUSHING @ 6056.00usft (Nabors 26') |
| Site: | PA 22-21 Pad | North Reference: | True |
| Well: | PA 41-21 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #2 07Nov12 kjs | | |

| Design Targets | | | | | | | | | |
|---------------------------------------------------------------------------------|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|----------|------------|
| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| Top Gas (25' Radius) P/ - plan hits target center - Circle (radius 25.00) | 0.00 | 0.00 | 6,779.00 | 2,338.49 | 3,482.59 | 1,622,840.59 | 2,296,055.18 | 39.51693 | -107.99554 |

| Casing Points | | | | | |
|--------------------------|--------------------------|--------|-------------------------|-----------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (in) | Hole Diameter (in) | |
| 1,297.00 | 1,171.39 | 9 5/8" | 9.625 | 13.500 | |

| Formations | | | | | | |
|--------------------------|--------------------------|------------------|-----------|------------|----------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 3,662.28 | 2,899.00 | Top of "G" Sand | | | | |
| 3,799.19 | 2,999.00 | Base of "G" Sand | | | | |
| 6,639.47 | 5,219.00 | Mesaverde | | | | |
| 8,237.59 | 6,779.00 | Approx. Top Gas | | | | |
| 9,437.59 | 7,979.00 | Cameo Coals | | | | |
| 10,237.59 | 8,779.00 | Rollins SS | | | | |
| 10,337.59 | 8,879.00 | TD | | | | |

| Plan Annotations | | | | | |
|--------------------------|--------------------------|-------------------|-----------------|------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment | |
| | | +N/-S (usft) | +E/-W (usft) | | |
| 120.00 | 120.00 | 0.00 | 0.00 | Start Build 4.00 | |
| 1,197.00 | 1,098.35 | 215.28 | 320.60 | Hold 43.08 Inclination | |
| 5,265.60 | 4,070.07 | 1,764.43 | 2,627.66 | Start Drop -1.50 | |
| 8,137.59 | 6,679.00 | 2,338.49 | 3,482.59 | Vertical | |
| 8,237.59 | 6,779.00 | 2,338.49 | 3,482.59 | Top Gas | |
| 10,337.59 | 8,879.00 | 2,338.49 | 3,482.59 | TD at 10337.59 | |