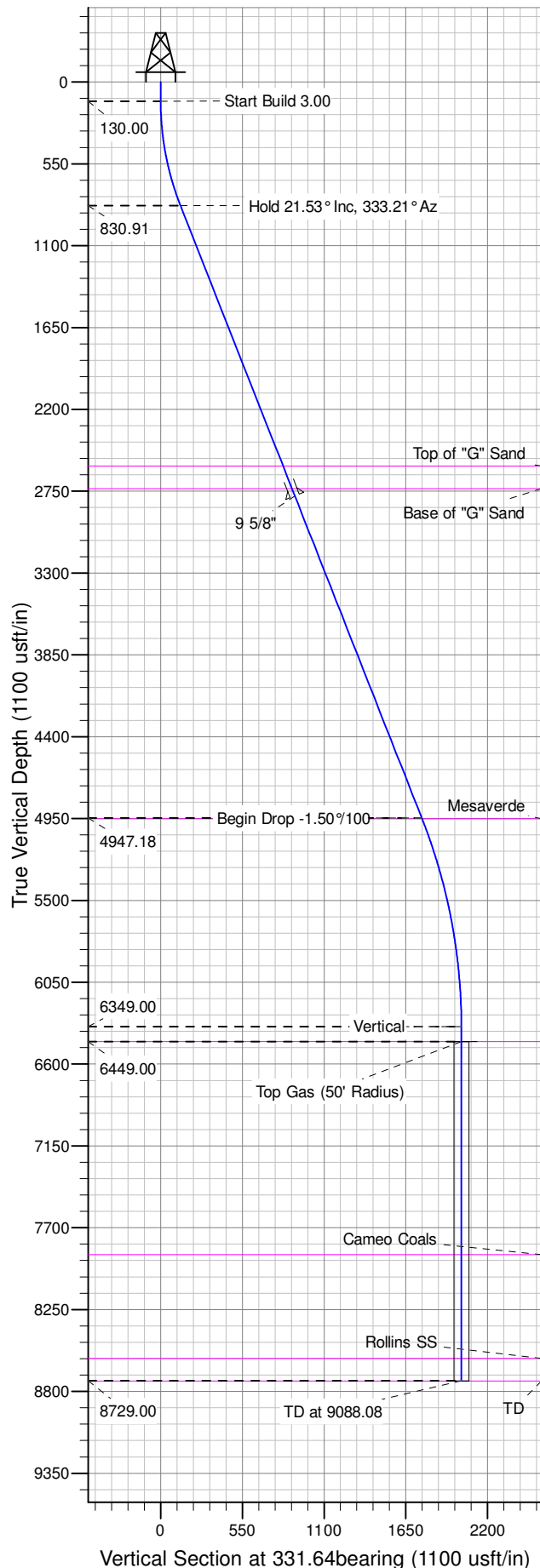
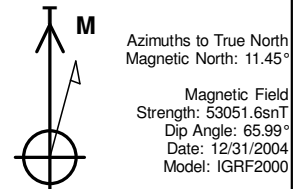
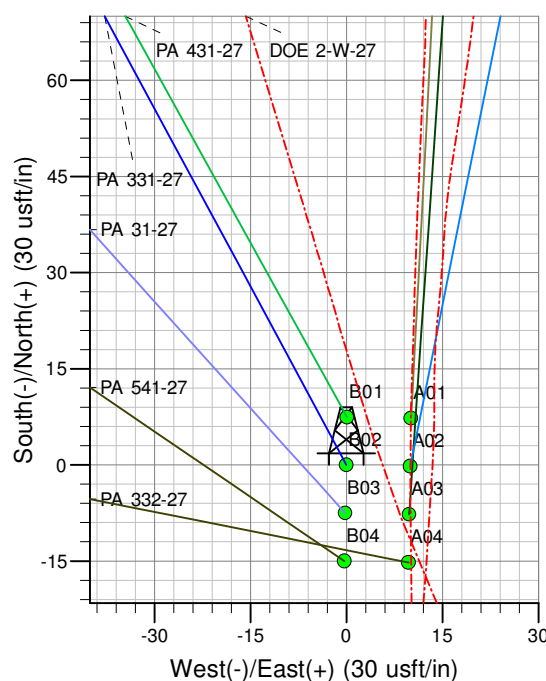
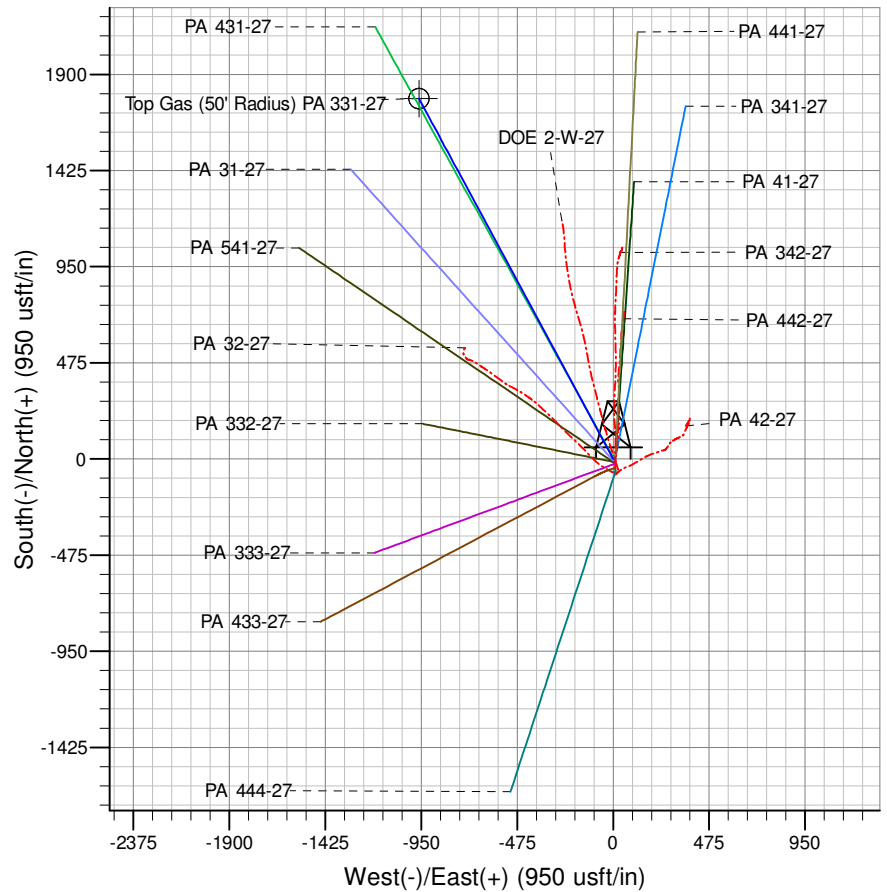




Well Name: PA 331-27
Surface Location: DOE 2-W-27 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5856.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 -0.01 1615103.29794 2300856.19691 39.49606 -107.97778 B02
KELLY BUSHING @ 5882.00usft (Nabors 576 (26' RKB) mab)



| ANNOTATIONS | | | | | | | | | |
|-------------|---------|-------|--------|---------|---------|---------|-----------|------------|-----------------------------|
| TVD | MD | Inc | Azi | +N/-S | +E/-W | VSect | Departure | Annotation | |
| 130.00 | 130.00 | 0.00 | 0.00 | 0.00 | -0.01 | 0.00 | 0.00 | 0.00 | Start Build 3.00 |
| 830.91 | 847.68 | 21.53 | 331.64 | 117.27 | -63.30 | 133.26 | 133.26 | 133.26 | Hold 21.53° Inc, 333.21° Az |
| 4947.18 | 5272.72 | 21.53 | 331.64 | 1546.36 | -834.64 | 1757.23 | 1757.23 | 1757.23 | Begin Drop -1.50°/100 |
| 6349.00 | 6708.08 | 0.00 | 0.00 | 1780.91 | -961.24 | 2023.76 | 2023.76 | 2023.76 | Vertical |
| 6449.00 | 6808.08 | 0.00 | 0.00 | 1780.91 | -961.24 | 2023.76 | 2023.76 | 2023.76 | Top Gas |
| 8729.00 | 9088.08 | 0.00 | 0.00 | 1780.91 | -961.24 | 2023.76 | 2023.76 | 2023.76 | TD at 9088.08 |



Project: PA 27-06S-095W
Site: DOE 2-W-27 Pad
Well: PA 331-27
Design #2 21Apr14 mab

PICEANCE VLY NAD 83

PA 27-06S-095W

DOE 2-W-27 Pad

PA 331-27 - Slot B02

Wellbore #1

Plan: Design #2 21Apr14 mab

Standard Planning Report - Geographic

02 June, 2014

WPX
Planning Report - Geographic

| | | | |
|------------------|-----------------------|-------------------------------------|--|
| Database: | COMPASS-PICEANCE | Local Co-ordinate Reference: | Well PA 331-27 - Slot B02 |
| Company: | PICEANCE VLY NAD 83 | TVD Reference: | KELLY BUSHING @ 5882.00usft (Nabors 576 (26' RKB) mab) |
| Project: | PA 27-06S-095W | MD Reference: | KELLY BUSHING @ 5882.00usft (Nabors 576 (26' RKB) mab) |
| Site: | DOE 2-W-27 Pad | North Reference: | Grid |
| Well: | PA 331-27 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #2 21Apr14 mab | | |

| | | | |
|--------------------|--|----------------------|-----------------------------|
| Project | PA 27-06S-095W, Garfield County, CO, 27-06S-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 | DOE 2-W-27 Pad | | |
| Site Position: | | Northing: | 1,615,065.30000 usft |
| From: | Map | Easting: | 2,300,864.40000 usft |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13.200 in |
| | | Latitude: | 39.49596 |
| | | Longitude: | -107.97775 |
| | | Grid Convergence: | -1.56 ° |

| | | | |
|-----------------------------|----------------------|----------------------------|---------------------------------------|
| Well | PA 331-27 - Slot B02 | | |
| Well Position | +N/-S | 0.00 usft | Northing: 1,615,103.29794 usft |
| | +E/-W | -0.01 usft | Easting: 2,300,856.19691 usft |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | Latitude: 39.49606 |
| | | | Longitude: -107.97778 |
| | | | Ground Level: 5,856.00 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2000 | 12/31/2004 | 11.44 | 65.99 | 53,052 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------------|
| Design | Design #2 21Apr14 mab | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (bearing) |
| | 0.00 | 0.00 | -0.01 | 333.21 |

| Plan Sections | | | | | | | | | | |
|-----------------------|-----------------|-------------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (bearing) | 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 | -0.01 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 130.00 | 0.00 | 0.00 | 130.00 | 0.00 | -0.01 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 847.68 | 21.53 | 333.21 | 830.91 | 118.95 | -60.08 | 3.00 | 3.00 | 0.00 | 333.21 | |
| 5,272.72 | 21.53 | 333.21 | 4,947.18 | 1,568.55 | -792.16 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,708.08 | 0.00 | 0.00 | 6,349.00 | 1,806.46 | -912.31 | 1.50 | -1.50 | 0.00 | 180.00 | |
| 6,808.08 | 0.00 | 0.00 | 6,449.00 | 1,806.46 | -912.31 | 0.00 | 0.00 | 0.00 | 0.00 | Top Gas (50' Radius) |
| 9,088.08 | 0.00 | 0.00 | 8,729.00 | 1,806.46 | -912.31 | 0.00 | 0.00 | 0.00 | 0.00 | |

WPX
Planning Report - Geographic

| | | | |
|------------------|-----------------------|-------------------------------------|--|
| Database: | COMPASS-PICEANCE | Local Co-ordinate Reference: | Well PA 331-27 - Slot B02 |
| Company: | PICEANCE VLY NAD 83 | TVD Reference: | KELLY BUSHING @ 5882.00usft (Nabors 576 (26' RKB) mab) |
| Project: | PA 27-06S-095W | MD Reference: | KELLY BUSHING @ 5882.00usft (Nabors 576 (26' RKB) mab) |
| Site: | DOE 2-W-27 Pad | North Reference: | Grid |
| Well: | PA 331-27 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #2 21Apr14 mab | | |

| Planned Survey | | | | | | | | | |
|------------------------------------|-----------------|-------------------|-----------------------|--------------|--------------|---------------------|--------------------|----------|------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (bearing) | 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 | -0.01 | 1,615,103.29794 | 2,300,856.19691 | 39.49606 | -107.97778 |
| 130.00 | 0.00 | 0.00 | 130.00 | 0.00 | -0.01 | 1,615,103.29794 | 2,300,856.19691 | 39.49606 | -107.97778 |
| Start Build 3.00 | | | | | | | | | |
| 200.00 | 2.10 | 333.21 | 199.98 | 1.14 | -0.58 | 1,615,104.44284 | 2,300,855.61871 | 39.49606 | -107.97779 |
| 400.00 | 8.10 | 333.21 | 399.10 | 17.00 | -8.60 | 1,615,120.30483 | 2,300,847.60804 | 39.49611 | -107.97782 |
| 600.00 | 14.10 | 333.21 | 595.27 | 51.36 | -25.94 | 1,615,154.65779 | 2,300,830.25901 | 39.49620 | -107.97788 |
| 800.00 | 20.10 | 333.21 | 786.34 | 103.83 | -52.44 | 1,615,207.12533 | 2,300,803.76170 | 39.49634 | -107.97798 |
| 847.68 | 21.53 | 333.21 | 830.91 | 118.95 | -60.08 | 1,615,222.24864 | 2,300,796.12408 | 39.49638 | -107.97801 |
| Hold 21.53° Inc, 333.21° Az | | | | | | | | | |
| 1,000.00 | 21.53 | 333.21 | 972.60 | 168.85 | -85.28 | 1,615,272.14483 | 2,300,770.92535 | 39.49652 | -107.97810 |
| 1,200.00 | 21.53 | 333.21 | 1,158.64 | 234.37 | -118.37 | 1,615,337.66013 | 2,300,737.83862 | 39.49669 | -107.97823 |
| 1,400.00 | 21.53 | 333.21 | 1,344.69 | 299.89 | -151.46 | 1,615,403.17543 | 2,300,704.75189 | 39.49687 | -107.97835 |
| 1,600.00 | 21.53 | 333.21 | 1,530.73 | 365.40 | -184.55 | 1,615,468.69073 | 2,300,671.66516 | 39.49705 | -107.97847 |
| 1,800.00 | 21.53 | 333.21 | 1,716.78 | 430.92 | -217.63 | 1,615,534.20603 | 2,300,638.57843 | 39.49723 | -107.97860 |
| 2,000.00 | 21.53 | 333.21 | 1,902.82 | 496.44 | -250.72 | 1,615,599.72133 | 2,300,605.49169 | 39.49740 | -107.97872 |
| 2,200.00 | 21.53 | 333.21 | 2,088.87 | 561.96 | -283.81 | 1,615,665.23662 | 2,300,572.40496 | 39.49758 | -107.97884 |
| 2,400.00 | 21.53 | 333.21 | 2,274.91 | 627.48 | -316.90 | 1,615,730.75192 | 2,300,539.31823 | 39.49776 | -107.97897 |
| 2,600.00 | 21.53 | 333.21 | 2,460.96 | 692.99 | -349.99 | 1,615,796.26722 | 2,300,506.23150 | 39.49794 | -107.97909 |
| 2,730.12 | 21.53 | 333.21 | 2,582.00 | 735.62 | -371.51 | 1,615,838.89248 | 2,300,484.70476 | 39.49805 | -107.97917 |
| Top of "G" Sand | | | | | | | | | |
| 2,800.00 | 21.53 | 333.21 | 2,647.00 | 758.51 | -383.07 | 1,615,861.78251 | 2,300,473.14478 | 39.49811 | -107.97921 |
| 2,891.37 | 21.53 | 333.21 | 2,732.00 | 788.45 | -398.19 | 1,615,891.71474 | 2,300,458.02832 | 39.49819 | -107.97927 |
| Base of "G" Sand | | | | | | | | | |
| 2,945.13 | 21.53 | 333.21 | 2,782.00 | 806.05 | -407.08 | 1,615,909.32216 | 2,300,449.13616 | 39.49824 | -107.97930 |
| 9 5/8" | | | | | | | | | |
| 3,000.00 | 21.53 | 333.21 | 2,833.05 | 824.03 | -416.16 | 1,615,927.29781 | 2,300,440.05805 | 39.49829 | -107.97934 |
| 3,200.00 | 21.53 | 333.21 | 3,019.09 | 889.55 | -449.25 | 1,615,992.81311 | 2,300,406.97132 | 39.49847 | -107.97946 |
| 3,400.00 | 21.53 | 333.21 | 3,205.13 | 955.07 | -482.34 | 1,616,058.32840 | 2,300,373.88458 | 39.49864 | -107.97958 |
| 3,600.00 | 21.53 | 333.21 | 3,391.18 | 1,020.58 | -515.43 | 1,616,123.84370 | 2,300,340.79785 | 39.49882 | -107.97971 |
| 3,800.00 | 21.53 | 333.21 | 3,577.22 | 1,086.10 | -548.51 | 1,616,189.35900 | 2,300,307.71112 | 39.49900 | -107.97983 |
| 4,000.00 | 21.53 | 333.21 | 3,763.27 | 1,151.62 | -581.60 | 1,616,254.87430 | 2,300,274.62439 | 39.49918 | -107.97996 |
| 4,200.00 | 21.53 | 333.21 | 3,949.31 | 1,217.14 | -614.69 | 1,616,320.38960 | 2,300,241.53766 | 39.49935 | -107.98008 |
| 4,400.00 | 21.53 | 333.21 | 4,135.36 | 1,282.66 | -647.78 | 1,616,385.90490 | 2,300,208.45093 | 39.49953 | -107.98020 |
| 4,600.00 | 21.53 | 333.21 | 4,321.40 | 1,348.17 | -680.87 | 1,616,451.42020 | 2,300,175.36420 | 39.49971 | -107.98033 |
| 4,800.00 | 21.53 | 333.21 | 4,507.45 | 1,413.69 | -713.95 | 1,616,516.93549 | 2,300,142.27747 | 39.49989 | -107.98045 |
| 5,000.00 | 21.53 | 333.21 | 4,693.49 | 1,479.21 | -747.04 | 1,616,582.45079 | 2,300,109.19073 | 39.50006 | -107.98057 |
| 5,200.00 | 21.53 | 333.21 | 4,879.54 | 1,544.73 | -780.13 | 1,616,647.96609 | 2,300,076.10401 | 39.50024 | -107.98070 |
| 5,272.72 | 21.53 | 333.21 | 4,947.18 | 1,568.55 | -792.16 | 1,616,671.78738 | 2,300,064.07371 | 39.50031 | -107.98074 |
| Begin Drop -1.50°/100 | | | | | | | | | |
| 5,277.90 | 21.45 | 333.21 | 4,952.00 | 1,570.24 | -793.02 | 1,616,673.48086 | 2,300,063.21847 | 39.50031 | -107.98074 |
| Mesaverde | | | | | | | | | |
| 5,400.00 | 19.62 | 333.21 | 5,066.34 | 1,608.48 | -812.33 | 1,616,711.71307 | 2,300,043.91032 | 39.50041 | -107.98082 |
| 5,600.00 | 16.62 | 333.21 | 5,256.40 | 1,664.00 | -840.36 | 1,616,767.23094 | 2,300,015.87252 | 39.50056 | -107.98092 |
| 5,800.00 | 13.62 | 333.21 | 5,449.45 | 1,710.56 | -863.88 | 1,616,813.79423 | 2,299,992.35699 | 39.50069 | -107.98101 |
| 6,000.00 | 10.62 | 333.21 | 5,644.97 | 1,748.04 | -882.81 | 1,616,851.27530 | 2,299,973.42819 | 39.50079 | -107.98108 |
| 6,200.00 | 7.62 | 333.21 | 5,842.42 | 1,776.34 | -897.10 | 1,616,879.57143 | 2,299,959.13799 | 39.50087 | -107.98113 |
| 6,400.00 | 4.62 | 333.21 | 6,041.25 | 1,795.38 | -906.71 | 1,616,898.60506 | 2,299,949.52557 | 39.50092 | -107.98117 |
| 6,600.00 | 1.62 | 333.21 | 6,240.93 | 1,805.10 | -911.62 | 1,616,908.32402 | 2,299,944.61727 | 39.50095 | -107.98119 |
| 6,708.08 | 0.00 | 0.00 | 6,349.00 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| Vertical | | | | | | | | | |
| 6,800.00 | 0.00 | 0.00 | 6,440.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |

WPX
Planning Report - Geographic

| | | | |
|------------------|-----------------------|-------------------------------------|--|
| Database: | COMPASS-PICEANCE | Local Co-ordinate Reference: | Well PA 331-27 - Slot B02 |
| Company: | PICEANCE VLY NAD 83 | TVD Reference: | KELLY BUSHING @ 5882.00usft (Nabors 576 (26' RKB) mab) |
| Project: | PA 27-06S-095W | MD Reference: | KELLY BUSHING @ 5882.00usft (Nabors 576 (26' RKB) mab) |
| Site: | DOE 2-W-27 Pad | North Reference: | Grid |
| Well: | PA 331-27 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #2 21Apr14 mab | | |

| Planned Survey | | | | | | | | | |
|---------------------------|-----------------|-------------------|-----------------------|--------------|--------------|---------------------|--------------------|----------|------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (bearing) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 6,808.08 | 0.00 | 0.00 | 6,449.00 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| Top Gas - Approx. Top Gas | | | | | | | | | |
| 7,000.00 | 0.00 | 0.00 | 6,640.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 7,200.00 | 0.00 | 0.00 | 6,840.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 7,400.00 | 0.00 | 0.00 | 7,040.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 7,600.00 | 0.00 | 0.00 | 7,240.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 7,800.00 | 0.00 | 0.00 | 7,440.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 8,000.00 | 0.00 | 0.00 | 7,640.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 8,200.00 | 0.00 | 0.00 | 7,840.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 8,241.08 | 0.00 | 0.00 | 7,882.00 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| Cameo Coals | | | | | | | | | |
| 8,400.00 | 0.00 | 0.00 | 8,040.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 8,600.00 | 0.00 | 0.00 | 8,240.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 8,800.00 | 0.00 | 0.00 | 8,440.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 8,938.08 | 0.00 | 0.00 | 8,579.00 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| Rollins SS | | | | | | | | | |
| 9,000.00 | 0.00 | 0.00 | 8,640.92 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| 9,088.08 | 0.00 | 0.00 | 8,729.00 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| TD at 9088.08 | | | | | | | | | |

| Design Targets | | | | | | | | | |
|---------------------------|---------------|--------------------|------------|--------------|--------------|-----------------|-----------------|----------|------------|
| Target Name | Dip Angle (°) | Dip Dir. (bearing) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| Top Gas (50' Radius) PA | 0.00 | 1.57 | 6,449.00 | 1,806.46 | -912.31 | 1,616,909.68881 | 2,299,943.92802 | 39.50095 | -107.98119 |
| - plan hits target center | | | | | | | | | |
| - Circle (radius 50.00) | | | | | | | | | |

| Casing Points | | | | | |
|-----------------------|-----------------------|--------|----------------------|--------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (in) | Hole Diameter (in) | |
| 2,945.13 | 2,782.00 | 9 5/8" | 9.625 | 13.500 | |

| Formations | | | | | | |
|-----------------------|-----------------------|------------------|-----------|---------|-------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (bearing) | |
| 2,730.12 | 2,582.00 | Top of "G" Sand | | 0.00 | | |
| 2,891.37 | 2,732.00 | Base of "G" Sand | | | | |
| 5,277.90 | 4,952.00 | Mesaverde | | | | |
| 6,808.08 | 6,449.00 | Approx. Top Gas | | | | |
| 8,241.08 | 7,882.00 | Cameo Coals | | | | |
| 8,938.08 | 8,579.00 | Rollins SS | | | | |

WPX
Planning Report - Geographic

| | | | |
|------------------|-----------------------|-------------------------------------|--|
| Database: | COMPASS-PICEANCE | Local Co-ordinate Reference: | Well PA 331-27 - Slot B02 |
| Company: | PICEANCE VLY NAD 83 | TVD Reference: | KELLY BUSHING @ 5882.00usft (Nabors 576 (26' RKB) mab) |
| Project: | PA 27-06S-095W | MD Reference: | KELLY BUSHING @ 5882.00usft (Nabors 576 (26' RKB) mab) |
| Site: | DOE 2-W-27 Pad | North Reference: | Grid |
| Well: | PA 331-27 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #2 21Apr14 mab | | |

| Plan Annotations | | | | |
|-----------------------|-----------------------|-------------------|--------------|-----------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
| | | +N/-S (usft) | +E/-W (usft) | |
| 130.00 | 130.00 | 0.00 | -0.01 | Start Build 3.00 |
| 847.68 | 830.91 | 118.95 | -60.08 | Hold 21.53° Inc, 333.21° Az |
| 5,272.72 | 4,947.18 | 1,568.55 | -792.16 | Begin Drop -1.50°/100 |
| 6,708.08 | 6,349.00 | 1,806.46 | -912.31 | Vertical |
| 6,808.08 | 6,449.00 | 1,806.46 | -912.31 | Top Gas |
| 9,088.08 | 8,729.00 | 1,806.46 | -912.31 | TD at 9088.08 |