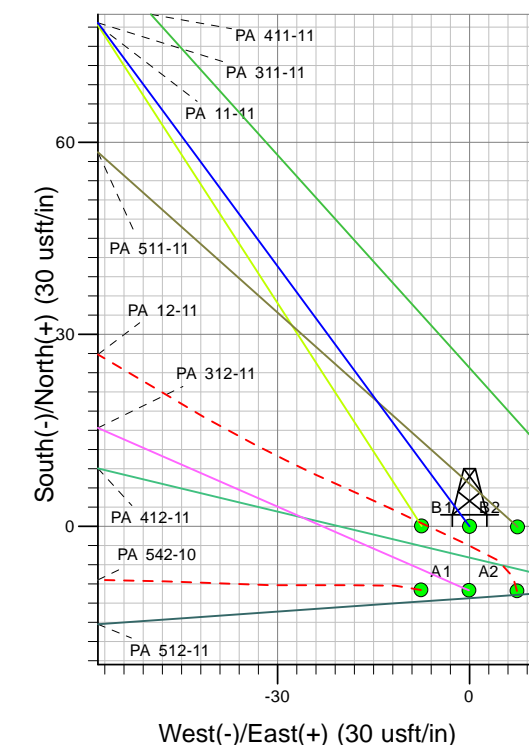
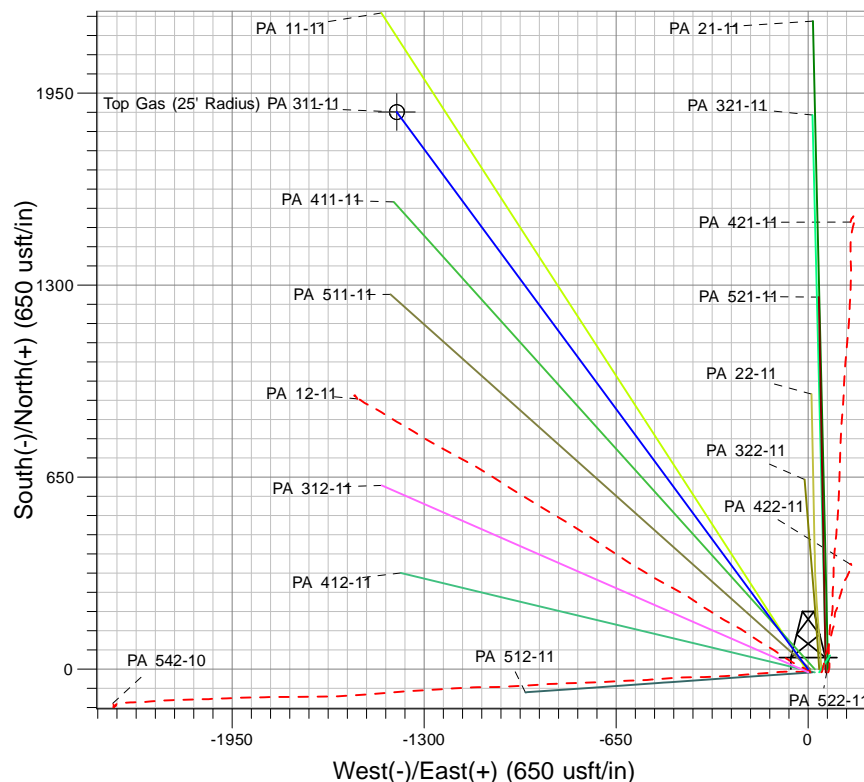
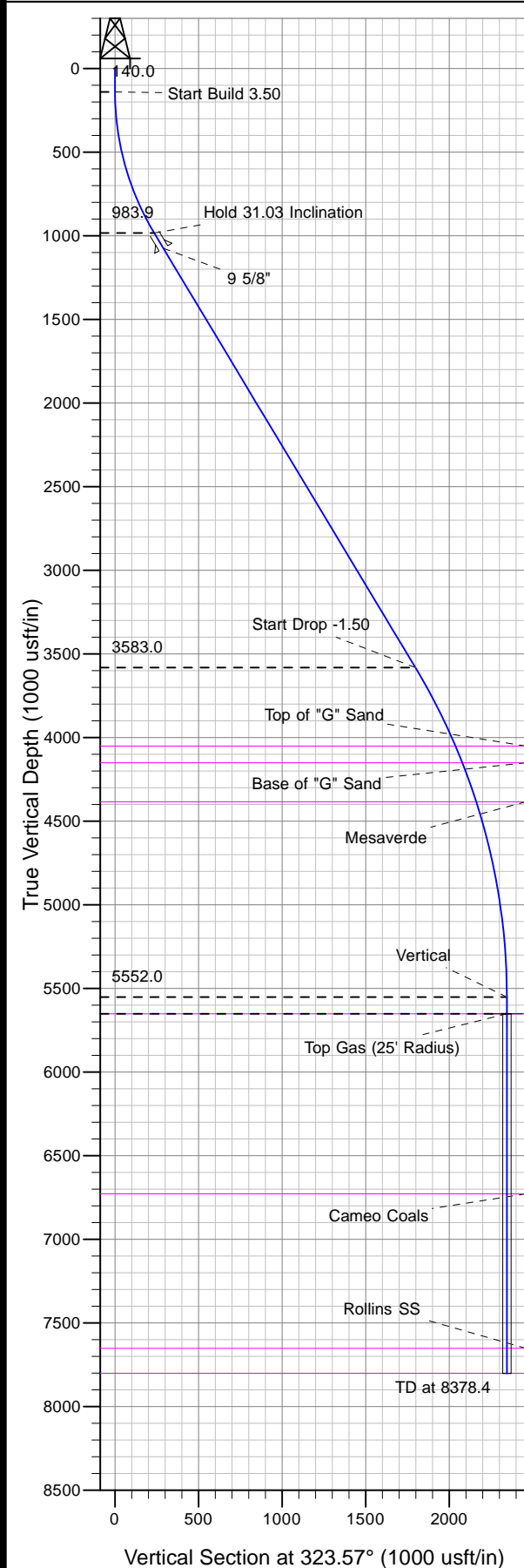




Well Name: PA 311-11  
Surface Location: PA 22-11 Pad  
North American Datum 1983 , US State Plane 1983, Colorado Central Zone  
Ground Elevation: 6274.0  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.0 0.0 1599315.34 2303336.13 39° 27' 10.494 N 107° 58' 2.919 W B2  
KELLY BUSHING @ 6300.0usft (Nabors 577 (26' RKB))



Project: PA 11-07S-095W  
Site: PA 22-11 Pad  
Well: PA 311-11  
Plan #2 23Oct12 kjs

Azimuths to True North  
Magnetic North: 10.57°  
Magnetic Field  
Strength: 52459.2snT  
Dip Angle: 65.77°  
Date: 6/3/2009  
Model: IGRF2005-10

#### ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
140.0	0.00	0.00	140.0	0.0	0.0	0.0	0.0	Start Build 3.50
1026.6	31.03	323.57	983.9	188.5	-139.1	234.3	234.3	Hold 31.03 Inclination
4059.8	31.03	323.57	3583.0	1446.4	-1067.7	1797.8	1797.8	Start Drop -1.50
6128.4	0.00	0.00	5552.0	1886.2	-1392.4	2344.4	2344.4	Vertical
6228.4	0.00	0.00	5552.0	1886.2	-1392.4	2344.4	2344.4	Top Gas
8378.4	0.00	0.00	7802.0	1886.2	-1392.4	2344.4	2344.4	TD at 8378.4



## **PICEANCE VLY NAD 83**

**PA 11-07S-095W**

**PA 22-11 Pad**

**PA 311-11 - Slot B2**

**Wellbore #1**

**Plan: Plan #2 23Oct12 kjs**

## **Standard Planning Report - Geographic**

**30 October, 2012**



**WPX Energy**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well PA 311-11 - Slot B2
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6300.0usft (Nabors 577 (26' RKB))
<b>Project:</b>	PA 11-07S-095W	<b>MD Reference:</b>	KELLY BUSHING @ 6300.0usft (Nabors 577 (26' RKB))
<b>Site:</b>	PA 22-11 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 311-11	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 23Oct12 kjs		

<b>Project</b>	PA 11-07S-095W, Garfield County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		Using geodetic scale factor

Site	PA 22-11 Pad					
Site Position:		Northing:	1,599,302.80 usft	Latitude:	39° 27' 10.388 N	
From:	Map	Easting:	2,303,403.20 usft	Longitude:	107° 58' 2.060 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.56 °

Well	PA 311-11 - Slot B2					
Well Position	+N/-S	0.0 usft	Northing:	1,599,315.33 usft	Latitude:	39° 27' 10.494 N
	+E/-W	0.0 usft	Easting:	2,303,336.13 usft	Longitude:	107° 58' 2.919 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	6,274.0 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2005-10	6/3/2009	10.57	65.77	52,459

Design	Plan #2 23Oct12 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	323.57

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
140.0	0.00	0.00	140.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,026.6	31.03	323.57	983.9	188.5	-139.1	3.50	3.50	0.00	323.57	
4,059.8	31.03	323.57	3,583.0	1,446.4	-1,067.7	0.00	0.00	0.00	0.00	
6,128.4	0.00	0.00	5,552.0	1,886.2	-1,392.4	1.50	-1.50	0.00	180.00	
6,228.4	0.00	0.00	5,652.0	1,886.2	-1,392.4	0.00	0.00	0.00	0.00	Top Gas (25' Radius)
8,378.4	0.00	0.00	7,802.0	1,886.2	-1,392.4	0.00	0.00	0.00	0.00	



# WPX Energy

## Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well PA 311-11 - Slot B2
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6300.0usft (Nabors 577 (26' RKB))
<b>Project:</b>	PA 11-07S-095W	<b>MD Reference:</b>	KELLY BUSHING @ 6300.0usft (Nabors 577 (26' RKB))
<b>Site:</b>	PA 22-11 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 311-11	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 23Oct12 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	
0.0	0.00	0.00	0.0	0.0	0.0	1,599,315.33	2,303,336.13	39° 27' 10.494 N	107° 58' 2.919 W	
140.0	0.00	0.00	140.0	0.0	0.0	1,599,315.33	2,303,336.13	39° 27' 10.494 N	107° 58' 2.919 W	
<b>Start Build 3.50</b>										
500.0	12.60	323.57	497.1	31.7	-23.4	1,599,347.67	2,303,313.59	39° 27' 10.808 N	107° 58' 3.217 W	
1,000.0	30.10	323.57	961.0	177.6	-131.1	1,599,496.42	2,303,209.90	39° 27' 12.250 N	107° 58' 4.590 W	
1,026.6	31.03	323.57	983.9	188.5	-139.1	1,599,507.51	2,303,202.18	39° 27' 12.357 N	107° 58' 4.692 W	
<b>Hold 31.03 Inclination</b>										
1,134.0	31.03	323.57	1,075.9	233.0	-172.0	1,599,552.93	2,303,170.51	39° 27' 12.797 N	107° 58' 5.112 W	
<b>9 5/8"</b>										
1,500.0	31.03	323.57	1,389.5	384.8	-284.1	1,599,707.71	2,303,062.63	39° 27' 14.298 N	107° 58' 6.540 W	
2,000.0	31.03	323.57	1,818.0	592.2	-437.1	1,599,919.14	2,302,915.25	39° 27' 16.347 N	107° 58' 8.492 W	
2,500.0	31.03	323.57	2,246.4	799.5	-590.2	1,600,130.58	2,302,767.87	39° 27' 18.396 N	107° 58' 10.443 W	
3,000.0	31.03	323.57	2,674.9	1,006.9	-743.3	1,600,342.01	2,302,620.50	39° 27' 20.446 N	107° 58' 12.395 W	
3,500.0	31.03	323.57	3,103.3	1,214.3	-896.4	1,600,553.45	2,302,473.12	39° 27' 22.495 N	107° 58' 14.347 W	
4,000.0	31.03	323.57	3,531.8	1,421.6	-1,049.4	1,600,764.88	2,302,325.74	39° 27' 24.545 N	107° 58' 16.298 W	
4,059.8	31.03	323.57	3,583.0	1,446.4	-1,067.7	1,600,790.15	2,302,308.13	39° 27' 24.789 N	107° 58' 16.531 W	
<b>Start Drop -1.50</b>										
4,500.0	24.43	323.57	3,972.5	1,611.1	-1,189.3	1,600,958.09	2,302,191.07	39° 27' 26.417 N	107° 58' 18.082 W	
4,585.8	23.14	323.57	4,051.0	1,639.0	-1,209.9	1,600,986.48	2,302,171.28	39° 27' 26.692 N	107° 58' 18.344 W	
<b>Top of "G" Sand</b>										
4,693.9	21.52	323.57	4,151.0	1,672.0	-1,234.3	1,601,020.18	2,302,147.79	39° 27' 27.019 N	107° 58' 18.655 W	
<b>Base of "G" Sand</b>										
4,941.4	17.81	323.57	4,384.0	1,739.0	-1,283.7	1,601,088.47	2,302,100.19	39° 27' 27.681 N	107° 58' 19.285 W	
<b>Mesaverde</b>										
5,000.0	16.93	323.57	4,439.9	1,753.1	-1,294.1	1,601,102.82	2,302,090.19	39° 27' 27.820 N	107° 58' 19.418 W	
5,500.0	9.43	323.57	4,926.4	1,844.7	-1,361.7	1,601,196.24	2,302,025.07	39° 27' 28.726 N	107° 58' 20.280 W	
6,000.0	1.93	323.57	5,423.6	1,884.5	-1,391.1	1,601,236.78	2,301,996.81	39° 27' 29.119 N	107° 58' 20.654 W	
6,128.4	0.00	0.00	5,552.0	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	
<b>Vertical</b>										
6,228.4	0.00	0.00	5,652.0	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	
<b>Top Gas - Approx. Top Gas</b>										
6,500.0	0.00	0.00	5,923.6	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	
7,000.0	0.00	0.00	6,423.6	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	
7,304.4	0.00	0.00	6,728.0	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	
<b>Cameo Coals</b>										
7,500.0	0.00	0.00	6,923.6	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	
8,000.0	0.00	0.00	7,423.6	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	
8,228.4	0.00	0.00	7,652.0	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	
<b>Rollins SS</b>										
8,378.4	0.00	0.00	7,802.0	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	
<b>TD</b>										

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) P4 - plan hits target center - Circle (radius 25.0)	0.00	0.00	5,652.0	1,886.2	-1,392.4	1,601,238.55	2,301,995.57	39° 27' 29.136 N	107° 58' 20.671 W	



<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well PA 311-11 - Slot B2
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6300.0usft (Nabors 577 (26' RKB))
<b>Project:</b>	PA 11-07S-095W	<b>MD Reference:</b>	KELLY BUSHING @ 6300.0usft (Nabors 577 (26' RKB))
<b>Site:</b>	PA 22-11 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 311-11	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 23Oct12 kjs		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,134.0	1,075.9	9 5/8"	9-5/8	14-3/4	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,585.8	4,051.0	Top of "G" Sand				
4,693.9	4,151.0	Base of "G" Sand				
4,941.4	4,384.0	Mesaverde				
6,228.4	5,652.0	Approx. Top Gas				
7,304.4	6,728.0	Cameo Coals				
8,228.4	7,652.0	Rollins SS				
8,378.4	7,802.0	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
140.0	140.0	0.0	0.0	Start Build 3.50	
1,026.6	983.9	188.5	-139.1	Hold 31.03 Inclination	
4,059.8	3,583.0	1,446.4	-1,067.7	Start Drop -1.50	
6,128.4	5,552.0	1,886.2	-1,392.4	Vertical	
6,228.4	5,652.0	1,886.2	-1,392.4	Top Gas	
8,378.4	7,802.0	1,886.2	-1,392.4	TD at 8378.4	