

# **PICEANCE VLY NAD 83**

**RU 06-07S-093W**

**RU 34-6 Pad**

**RU 42-6 - Slot A09**

**Wellbore #1**

**Plan: Plan #5 12May15 sam**

## **Standard Planning Report**

**12 June, 2015**

# WPX

## Planning Report

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 42-6 (A09) - Slot A09
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 34-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 42-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #5 12May15 sam		

<b>Project</b>	RU 06-07S-093W		
<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

<b>Site</b>	RU 34-6 Pad		
<b>Site Position:</b>		<b>Northing:</b>	1,603,613.20 usft
<b>From:</b>	Map	<b>Easting:</b>	2,346,531.50 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in
		<b>Latitude:</b>	39.467832
		<b>Longitude:</b>	-107.814942
		<b>Grid Convergence:</b>	-1.46 °

<b>Well</b>	RU 42-6 - Slot A09		
<b>Well Position</b>	<b>+N/-S</b>	0.56 usft	<b>Northing:</b> 1,603,613.30 usft
	<b>+E/-W</b>	17.99 usft	<b>Easting:</b> 2,346,549.50 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Latitude:</b> 39.467833
		<b>Wellhead Elevation:</b>	<b>Longitude:</b> -107.814879
			<b>Ground Level:</b> 7,537.00 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>
	IGRF2010	2/27/2015	9.79	65.65	51,872

<b>Design</b>	Plan #5 12May15 sam			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (bearing)</b>
	0.00	0.00	0.00	20.87

<b>Plan Sections</b>										
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	0.00	0.00	0.00	0.00	0.00	
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	0.00	
873.71	25.85	20.87	848.89	153.11	58.39	3.50	3.50	0.00	20.87	
5,900.21	25.85	20.87	5,372.25	2,201.25	839.44	0.00	0.00	0.00	0.00	
7,623.86	0.00	0.00	7,038.00	2,558.50	975.68	1.50	-1.50	0.00	180.00	
7,723.86	0.00	0.00	7,138.00	2,558.50	975.68	0.00	0.00	0.00	0.00	RU 42-6 TOP GAS 5C
10,473.86	0.00	0.00	9,888.00	2,558.50	975.68	0.00	0.00	0.00	0.00	

**WPX**  
Planning Report

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 42-6 (A09) - Slot A09
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 34-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 42-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #5 12May15 sam		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 3.50									
500.00	12.78	20.87	496.98	37.86	14.44	40.52	3.50	3.50	0.00
873.71	25.85	20.87	848.89	153.11	58.39	163.86	3.50	3.50	0.00
Hold 25.85 Inclination									
1,000.00	25.85	20.87	962.54	204.57	78.01	218.94	0.00	0.00	0.00
1,500.00	25.85	20.87	1,412.49	408.30	155.70	436.98	0.00	0.00	0.00
2,000.00	25.85	20.87	1,862.44	612.04	233.40	655.03	0.00	0.00	0.00
2,375.10	25.85	20.87	2,200.00	764.88	291.68	818.61	0.00	0.00	0.00
9 5/8"									
2,500.00	25.85	20.87	2,312.40	815.77	311.09	873.07	0.00	0.00	0.00
3,000.00	25.85	20.87	2,762.35	1,019.50	388.78	1,091.12	0.00	0.00	0.00
3,500.00	25.85	20.87	3,212.30	1,223.24	466.48	1,309.17	0.00	0.00	0.00
4,000.00	25.85	20.87	3,662.25	1,426.97	544.17	1,527.21	0.00	0.00	0.00
4,165.30	25.85	20.87	3,811.00	1,494.33	569.86	1,599.30	0.00	0.00	0.00
Top of "G" Sand									
4,288.64	25.85	20.87	3,922.00	1,544.59	589.02	1,653.09	0.00	0.00	0.00
Base of "G" Sand									
4,500.00	25.85	20.87	4,112.20	1,630.71	621.87	1,745.26	0.00	0.00	0.00
5,000.00	25.85	20.87	4,562.15	1,834.44	699.56	1,963.30	0.00	0.00	0.00
5,500.00	25.85	20.87	5,012.10	2,038.18	777.25	2,181.35	0.00	0.00	0.00
5,900.21	25.85	20.87	5,372.25	2,201.25	839.44	2,355.88	0.00	0.00	0.00
Start Drop -1.50									
6,000.00	24.36	20.87	5,462.61	2,240.81	854.53	2,398.22	1.50	-1.50	0.00
6,500.00	16.86	20.87	5,930.28	2,405.13	917.19	2,574.08	1.50	-1.50	0.00
6,586.14	15.57	20.87	6,013.00	2,427.60	925.76	2,598.13	1.50	-1.50	0.00
Mesaverde									
7,000.00	9.36	20.87	6,416.91	2,511.00	957.56	2,687.39	1.50	-1.50	0.00
7,500.00	1.86	20.87	6,914.16	2,556.62	974.96	2,736.21	1.50	-1.50	0.00
7,623.86	0.00	0.00	7,038.00	2,558.50	975.68	2,738.22	1.50	-1.50	0.00
Vertical									
7,723.86	0.00	0.00	7,138.00	2,558.50	975.68	2,738.22	0.00	0.00	0.00
Top Gas Target - Approx. Top Gas									
8,000.00	0.00	0.00	7,414.14	2,558.50	975.68	2,738.22	0.00	0.00	0.00
8,500.00	0.00	0.00	7,914.14	2,558.50	975.68	2,738.22	0.00	0.00	0.00
9,000.00	0.00	0.00	8,414.14	2,558.50	975.68	2,738.22	0.00	0.00	0.00
9,487.86	0.00	0.00	8,902.00	2,558.50	975.68	2,738.22	0.00	0.00	0.00
Cameo Coals									
9,500.00	0.00	0.00	8,914.14	2,558.50	975.68	2,738.22	0.00	0.00	0.00
10,000.00	0.00	0.00	9,414.14	2,558.50	975.68	2,738.22	0.00	0.00	0.00
10,162.86	0.00	0.00	9,577.00	2,558.50	975.68	2,738.22	0.00	0.00	0.00
Coal D									
10,323.86	0.00	0.00	9,738.00	2,558.50	975.68	2,738.22	0.00	0.00	0.00
Rollins SS									
10,473.86	0.00	0.00	9,888.00	2,558.50	975.68	2,738.22	0.00	0.00	0.00
TD at 10473.86 - TD									

**WPX**  
Planning Report

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 42-6 (A09) - Slot A09
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 34-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 42-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #5 12May15 sam		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
RU 42-6 TOP GAS 50' F - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,138.00	2,558.50	975.68	1,606,146.00	2,347,590.00	39.474857	-107.811423

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,375.10	2,200.00	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
4,165.30	3,811.00	Top of "G" Sand		0.00		
4,288.64	3,922.00	Base of "G" Sand		0.00		
6,586.14	6,013.00	Mesaverde		0.00		
7,723.86	7,138.00	Approx. Top Gas		0.00		
9,487.86	8,902.00	Cameo Coals		0.00		
10,162.86	9,577.00	Coal D		0.00		
10,323.86	9,738.00	Rollins SS		0.00		
10,473.86	9,888.00	TD		0.00		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
135.00	135.00	0.00	0.00	Start Build 3.50	
873.71	848.89	153.11	58.39	Hold 25.85 Inclination	
5,900.21	5,372.25	2,201.25	839.44	Start Drop -1.50	
7,623.86	7,038.00	2,558.50	975.68	Vertical	
7,723.86	7,138.00	2,558.50	975.68	Top Gas Target	
10,473.86	9,888.00	2,558.50	975.68	TD at 10473.86	