

# **PICEANCE VLY NAD 83**

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

**SR 43-12 Pad**

**SR 344-12 - Slot B3**

**Wellbore #1**

**Plan: Plan #2 30Mar16 sam**

## **Standard Planning Report**

**04 May, 2016**

# WPX

## Planning Report

<b>Database:</b>	COMPASS	<b>Local Co-ordinate Reference:</b>	Well SR 344-12 (B3) - Slot B3
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KB @ 7381.00usft (HP 318)
<b>Project:</b>	RU 07-07S-093W	<b>MD Reference:</b>	KB @ 7381.00usft (HP 318)
<b>Site:</b>	SR 43-12 Pad	<b>North Reference:</b>	True
<b>Well:</b>	SR 344-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 30Mar16 sam		

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

<b>Site</b>	SR 43-12 Pad				
<b>Site Position:</b>		<b>Northing:</b>	1,598,022.10 usft	<b>Latitude:</b>	39.452261
<b>From:</b>	Map	<b>Easting:</b>	2,343,309.20 usft	<b>Longitude:</b>	-107.825846
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	0.000 in	<b>Grid Convergence:</b>	-1.47 °

<b>Well</b>	SR 344-12 - Slot B3					
<b>Well Position</b>	<b>+N/-S</b>	-52.56 usft	<b>Northing:</b>	1,597,969.50 usft	<b>Latitude:</b>	39.452116
	<b>+E/-W</b>	2.45 usft	<b>Easting:</b>	2,343,310.30 usft	<b>Longitude:</b>	-107.825837
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	7,357.00 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>
	IGRF200510	10/21/2008	10.59	65.82	52,529

<b>Design</b>	Plan #2 30Mar16 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	205.82

<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	
140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	
738.37	17.95	205.82	728.63	-83.69	-40.49	3.00	3.00	0.00	205.82	
4,725.59	17.95	205.82	4,521.75	-1,189.93	-575.63	0.00	0.00	0.00	0.00	
5,922.32	0.00	0.00	5,699.00	-1,357.31	-656.60	1.50	-1.50	0.00	180.00	10 acre 10 SR 344-12
9,599.32	0.00	0.00	9,376.00	-1,357.31	-656.60	0.00	0.00	0.00	0.00	

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<b>Project:</b>	RU 07-07S-093W	<b>MD Reference:</b>	KB @ 7381.00usft (HP 318)
<b>Site:</b>	SR 43-12 Pad	<b>North Reference:</b>	True
<b>Well:</b>	SR 344-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 30Mar16 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	0.00
140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 3.00</b>										
500.00	10.80	205.82	497.87	-30.45	-14.73	33.83	3.00	3.00	0.00	
738.37	17.95	205.82	728.63	-83.69	-40.49	92.97	3.00	3.00	0.00	
<b>Hold 17.95 Inclination</b>										
1,000.00	17.95	205.82	977.52	-156.28	-75.60	173.61	0.00	0.00	0.00	
1,124.00	17.95	205.82	1,095.49	-190.68	-92.24	211.82	0.00	0.00	0.00	
<b>9 5/8"</b>										
1,500.00	17.95	205.82	1,453.18	-295.00	-142.71	327.71	0.00	0.00	0.00	
2,000.00	17.95	205.82	1,928.84	-433.73	-209.82	481.81	0.00	0.00	0.00	
2,500.00	17.95	205.82	2,404.50	-572.45	-276.92	635.91	0.00	0.00	0.00	
3,000.00	17.95	205.82	2,880.16	-711.17	-344.03	790.01	0.00	0.00	0.00	
3,343.56	17.95	205.82	3,207.00	-806.49	-390.14	895.90	0.00	0.00	0.00	
<b>Top of "G" Sand</b>										
3,495.98	17.95	205.82	3,352.00	-848.78	-410.60	942.88	0.00	0.00	0.00	
<b>Base of "G" Sand</b>										
3,500.00	17.95	205.82	3,355.82	-849.90	-411.14	944.12	0.00	0.00	0.00	
4,000.00	17.95	205.82	3,831.48	-988.62	-478.24	1,098.22	0.00	0.00	0.00	
4,500.00	17.95	205.82	4,307.14	-1,127.34	-545.35	1,252.32	0.00	0.00	0.00	
4,725.59	17.95	205.82	4,521.75	-1,189.93	-575.63	1,321.85	0.00	0.00	0.00	
<b>Start Drop -1.50</b>										
5,000.00	13.83	205.82	4,785.62	-1,257.56	-608.34	1,396.98	1.50	-1.50	0.00	
5,500.00	6.33	205.82	5,277.54	-1,336.32	-646.44	1,484.47	1.50	-1.50	0.00	
5,509.52	6.19	205.82	5,287.00	-1,337.25	-646.90	1,485.50	1.50	-1.50	0.00	
<b>Lowere Wasatch</b>										
5,641.07	4.22	205.82	5,418.00	-1,348.00	-652.09	1,497.44	1.50	-1.50	0.00	
<b>Ohio Creek</b>										
5,922.32	0.00	0.00	5,699.00	-1,357.31	-656.60	1,507.79	1.50	-1.50	0.00	
<b>Vertical - Mesaverde</b>										
6,000.00	0.00	0.00	5,776.68	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,276.68	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,776.68	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,276.68	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
7,558.32	0.00	0.00	7,335.00	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
<b>Approx Top Gas</b>										
8,000.00	0.00	0.00	7,776.68	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,276.68	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
8,592.32	0.00	0.00	8,369.00	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
<b>Cameo</b>										
9,000.00	0.00	0.00	8,776.68	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
9,281.32	0.00	0.00	9,058.00	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
<b>Coal D</b>										
9,449.32	0.00	0.00	9,226.00	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
<b>Rollins</b>										
9,500.00	0.00	0.00	9,276.68	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
9,599.32	0.00	0.00	9,376.00	-1,357.31	-656.60	1,507.79	0.00	0.00	0.00	
<b>TD at 9599.32 - TD</b>										

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<b>Project:</b>	RU 07-07S-093W	<b>MD Reference:</b>	KB @ 7381.00usft (HP 318)
<b>Site:</b>	SR 43-12 Pad	<b>North Reference:</b>	True
<b>Well:</b>	SR 344-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 30Mar16 sam		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(bearing)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
10 acre 10 SR 344-12 M - plan hits target center - Circle (radius 50.00)	0.00	0.00	5,699.00	-1,357.31	-656.60	1,596,629.50	2,342,619.20	39.448390	-107.828162

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(usft)	(usft)		(in)	(in)	
1,124.00	1,095.49	9 5/8"	9.625	13.500	

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(bearing)	
3,343.56	3,207.00	Top of "G" Sand		0.00		
3,495.98	3,352.00	Base of "G" Sand		0.00		
5,509.52	5,287.00	Lowere Wasatch		0.00		
5,641.07	5,418.00	Ohio Creek		0.00		
5,922.32	5,699.00	Mesaverde		0.00		
7,558.32	7,335.00	Approx Top Gas		0.00		
8,592.32	8,369.00	Cameo		0.00		
9,281.32	9,058.00	Coal D		0.00		
9,449.32	9,226.00	Rollins		0.00		
9,599.32	9,376.00	TD		0.00		

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)		
140.00	140.00	0.00	0.00	Start Build 3.00	
738.37	728.63	-83.69	-40.49	Hold 17.95 Inclination	
4,725.59	4,521.75	-1,189.93	-575.63	Start Drop -1.50	
5,922.32	5,699.00	-1,357.31	-656.60	Vertical	
9,599.32	9,376.00	-1,357.31	-656.60	TD at 9599.32	