



## **PICEANCE VLY NAD 83**

**PA 02-07S-095W**

**GV 86-2 Pad**

**PA 44-3 - Slot A4**

**Wellbore #1**

**Plan: Plan #2 12Feb13 kjs**

## **Standard Planning Report - Geographic**

**05 June, 2013**



**WPX Energy**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well PA 44-3 - Slot A4
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
<b>Project:</b>	PA 02-07S-095W	<b>MD Reference:</b>	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
<b>Site:</b>	GV 86-2 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 44-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 12Feb13 kjs		

<b>Project</b>	PA 02-07S-095W, Garfield County, CO, 02-07S-095W		
<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		GV 86-2 Pad			
Site Position:		Northing:	1,603,715.70 usft	Latitude:	39.46496
From:	Map	Easting:	2,302,953.10 usft	Longitude:	-107.96926
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	-1.557 °

Well	PA 44-3 - Slot A4					
Well Position	+N/-S	0.00 usft	Northing:	1,603,768.80 usft	Latitude:	39.46511
	+E/-W	0.00 usft	Easting:	2,302,925.00 usft	Longitude:	-107.96936
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,821.00 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>
	IGRF2005-10	11/1/2007	10.785	65.824	52,624

<b>Design</b>	Plan #2 12Feb13 kjs			
<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 (°)</b>
	0.00	0.00	0.00	249.02

<b>Plan Sections</b>										
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	0.000	
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,996.20	36.92	249.02	1,871.04	-205.70	-536.50	2.00	2.00	0.00	249.022	
4,041.31	36.92	249.02	3,505.96	-645.55	-1,683.67	0.00	0.00	0.00	0.000	
5,887.51	0.00	0.00	5,227.00	-851.26	-2,220.17	2.00	-2.00	0.00	180.000	Top Gas (50' Radius)
8,037.51	0.00	0.00	7,377.00	-851.26	-2,220.17	0.00	0.00	0.00	0.000	



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Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well PA 44-3 - Slot A4
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
<b>Project:</b>	PA 02-07S-095W	<b>MD Reference:</b>	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
<b>Site:</b>	GV 86-2 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 44-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 12Feb13 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	1,603,768.80	2,302,925.00	39.46511	-107.96936	
150.00	0.00	0.00	150.00	0.00	0.00	1,603,768.80	2,302,925.00	39.46511	-107.96936	
<b>Start Build 2.00</b>										
500.00	7.00	249.02	499.13	-7.64	-19.94	1,603,761.70	2,302,904.86	39.46509	-107.96943	
1,000.00	17.00	249.02	987.58	-44.81	-116.88	1,603,727.18	2,302,806.95	39.46498	-107.96978	
1,500.00	27.00	249.02	1,450.59	-111.78	-291.55	1,603,664.98	2,302,630.54	39.46480	-107.97040	
1,996.20	36.92	249.02	1,871.04	-205.70	-536.50	1,603,577.76	2,302,383.14	39.46454	-107.97126	
<b>Hold 36.92 Inclination</b>										
2,000.00	36.92	249.02	1,874.07	-206.52	-538.63	1,603,577.00	2,302,380.98	39.46454	-107.97127	
2,003.66	36.92	249.02	1,877.00	-207.31	-540.68	1,603,576.27	2,302,378.91	39.46454	-107.97128	
<b>Top of "G" Sand</b>										
2,097.00	36.92	249.02	1,951.62	-227.38	-593.04	1,603,557.62	2,302,326.03	39.46448	-107.97146	
<b>9 5/8"</b>										
2,128.75	36.92	249.02	1,977.00	-234.21	-610.85	1,603,551.28	2,302,308.04	39.46446	-107.97153	
<b>Base of "G" Sand</b>										
2,500.00	36.92	249.02	2,273.79	-314.06	-819.10	1,603,477.13	2,302,097.71	39.46425	-107.97227	
3,000.00	36.92	249.02	2,673.51	-421.59	-1,099.57	1,603,377.26	2,301,814.43	39.46395	-107.97326	
3,500.00	36.92	249.02	3,073.22	-529.13	-1,380.03	1,603,277.39	2,301,531.16	39.46366	-107.97425	
4,000.00	36.92	249.02	3,472.94	-636.67	-1,660.50	1,603,177.52	2,301,247.88	39.46336	-107.97525	
4,041.31	36.92	249.02	3,505.96	-645.55	-1,683.67	1,603,169.27	2,301,224.48	39.46334	-107.97533	
<b>Start Drop -2.00</b>										
4,500.00	27.75	249.02	3,893.11	-733.30	-1,912.52	1,603,087.78	2,300,993.34	39.46309	-107.97614	
4,605.11	25.65	249.02	3,987.00	-750.20	-1,956.61	1,603,072.08	2,300,948.81	39.46305	-107.97629	
<b>Mesaverde</b>										
5,000.00	17.75	249.02	4,353.62	-802.43	-2,092.83	1,603,023.57	2,300,811.23	39.46290	-107.97678	
5,500.00	7.75	249.02	4,840.67	-841.89	-2,195.74	1,602,986.93	2,300,707.29	39.46280	-107.97714	
5,887.51	0.00	0.00	5,227.00	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
<b>Top Gas - Approx. Top Gas</b>										
6,000.00	0.00	0.00	5,339.49	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
6,500.00	0.00	0.00	5,839.49	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
6,957.51	0.00	0.00	6,297.00	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
<b>Cameo Coals</b>										
7,000.00	0.00	0.00	6,339.49	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
7,500.00	0.00	0.00	6,839.49	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
7,887.51	0.00	0.00	7,227.00	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
<b>Rollins SS</b>										
8,000.00	0.00	0.00	7,339.49	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
8,037.51	0.00	0.00	7,377.00	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
<b>TD at 8037.51 - TD</b>										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Top Gas (50' Radius) P/	0.00	0.00	5,227.00	-851.26	-2,220.17	1,602,978.23	2,300,682.61	39.46277	-107.97723	
- plan hits target center										
- Circle (radius 50.00)										



**WPX Energy**  
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<b>Well:</b>	PA 44-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 12Feb13 kjs		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,097.00	1,951.62	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,003.66	1,877.00	Top of "G" Sand				
2,128.75	1,977.00	Base of "G" Sand				
4,605.11	3,987.00	Mesaverde				
5,887.51	5,227.00	Approx. Top Gas				
6,957.51	6,297.00	Cameo Coals				
7,887.51	7,227.00	Rollins SS				
8,037.51	7,377.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
150.00	150.00	0.00	0.00	Start Build 2.00	
1,996.20	1,871.04	-205.70	-536.50	Hold 36.92 Inclination	
4,041.31	3,505.96	-645.55	-1,683.67	Start Drop -2.00	
5,887.51	5,227.00	-851.26	-2,220.17	Top Gas	
8,037.51	7,377.00	-851.26	-2,220.17	TD at 8037.51	