



## **PICEANCE VLY NAD 83**

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

**GV 86-2 Pad**

**PA 524-2 - Slot B12**

**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 524-2 - Slot B12
<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 524-2	<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

<b>Site</b>	GV 86-2 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,603,715.70 usft	<b>Latitude:</b> 39.46496
<b>From:</b> Map		<b>Easting:</b>	2,302,953.10 usft	<b>Longitude:</b> -107.96926
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> -1.557 °

Well	PA 524-2 - Slot B12				
Well Position	+N/-S	0.00 usft	Northing:	1,603,720.40 usft	Latitude: 39.46498
	+E/-W	0.00 usft	Easting:	2,302,961.90 usft	Longitude: -107.96923
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	163.55

<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>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.000	
769.24	25.97	163.55	747.23	-138.71	40.96	4.00	4.00	0.00	163.547	
3,858.29	25.97	163.55	3,524.38	-1,435.99	424.09	0.00	0.00	0.00	0.000	
5,589.58	0.00	0.00	5,197.00	-1,805.88	533.33	1.50	-1.50	0.00	180.000	
5,689.58	0.00	0.00	5,297.00	-1,805.88	533.33	0.00	0.00	0.00	0.000	Top Gas (50' Radius)
7,839.58	0.00	0.00	7,447.00	-1,805.88	533.33	0.00	0.00	0.00	0.000	



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Planning Report - Geographic

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<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 524-2	<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	1,603,720.40	2,302,961.90	39.46498	-107.96923	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,720.40	2,302,961.90	39.46498	-107.96923	
Start Build 4.00										
500.00	15.20	163.55	495.56	-48.06	14.19	1,603,671.97	2,302,974.78	39.46485	-107.96918	
769.24	25.97	163.55	747.23	-138.71	40.96	1,603,580.63	2,302,999.08	39.46460	-107.96908	
Hold 25.97 Inclination										
884.00	25.97	163.55	850.41	-186.91	55.20	1,603,532.07	2,303,012.00	39.46446	-107.96903	
9 5/8"										
1,000.00	25.97	163.55	954.70	-235.62	69.59	1,603,482.98	2,303,025.06	39.46433	-107.96898	
1,500.00	25.97	163.55	1,404.21	-445.60	131.60	1,603,271.40	2,303,081.34	39.46375	-107.96876	
2,000.00	25.97	163.55	1,853.72	-655.58	193.61	1,603,059.82	2,303,137.62	39.46318	-107.96854	
2,025.89	25.97	163.55	1,877.00	-666.45	196.82	1,603,048.87	2,303,140.53	39.46315	-107.96853	
Top of "G" Sand										
2,137.12	25.97	163.55	1,977.00	-713.17	210.62	1,603,001.80	2,303,153.05	39.46302	-107.96848	
Base of "G" Sand										
2,500.00	25.97	163.55	2,303.24	-865.56	255.62	1,602,848.25	2,303,193.90	39.46260	-107.96832	
3,000.00	25.97	163.55	2,752.75	-1,075.54	317.64	1,602,636.67	2,303,250.18	39.46202	-107.96810	
3,500.00	25.97	163.55	3,202.27	-1,285.52	379.65	1,602,425.09	2,303,306.46	39.46145	-107.96788	
3,858.29	25.97	163.55	3,524.38	-1,435.99	424.09	1,602,273.48	2,303,346.79	39.46104	-107.96773	
Start Drop -1.50										
4,000.00	23.84	163.55	3,652.90	-1,493.22	440.99	1,602,215.81	2,303,362.13	39.46088	-107.96767	
4,379.44	18.15	163.55	4,007.00	-1,623.57	479.49	1,602,084.47	2,303,397.07	39.46052	-107.96753	
Mesaverde										
4,500.00	16.34	163.55	4,122.13	-1,657.85	489.61	1,602,049.93	2,303,406.26	39.46043	-107.96749	
5,000.00	8.84	163.55	4,609.76	-1,762.33	520.47	1,601,944.65	2,303,434.26	39.46014	-107.96739	
5,500.00	1.34	163.55	5,107.42	-1,804.87	533.03	1,601,901.78	2,303,445.66	39.46002	-107.96734	
5,589.58	0.00	0.00	5,197.00	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	
Vertical										
5,689.58	0.00	0.00	5,297.00	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	
Top Gas - Approx. Top Gas										
6,000.00	0.00	0.00	5,607.42	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	
6,500.00	0.00	0.00	6,107.42	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	
6,749.58	0.00	0.00	6,357.00	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	
Cameo Coals										
7,000.00	0.00	0.00	6,607.42	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	
7,500.00	0.00	0.00	7,107.42	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	
7,689.58	0.00	0.00	7,297.00	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	
Rollins SS										
7,839.58	0.00	0.00	7,447.00	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	
TD at 7839.58 - TD										

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 (50' Radius) P/ - plan hits target center - Circle (radius 50.00)	0.00	0.00	5,297.00	-1,805.88	533.33	1,601,900.77	2,303,445.93	39.46002	-107.96734	



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<b>Site:</b>	GV 86-2 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 524-2	<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)	
884.00	850.41	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,025.89	1,877.00	Top of "G" Sand				
2,137.12	1,977.00	Base of "G" Sand				
4,379.44	4,007.00	Mesaverde				
5,689.58	5,297.00	Approx. Top Gas				
6,749.58	6,357.00	Cameo Coals				
7,689.58	7,297.00	Rollins SS				
7,839.58	7,447.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
120.00	120.00	0.00	0.00	Start Build 4.00	
769.24	747.23	-138.71	40.96	Hold 25.97 Inclination	
3,858.29	3,524.38	-1,435.99	424.09	Start Drop -1.50	
5,589.58	5,197.00	-1,805.88	533.33	Vertical	
5,689.58	5,297.00	-1,805.88	533.33	Top Gas	
7,839.58	7,447.00	-1,805.88	533.33	TD at 7839.58	