



PICEANCE VLY NAD 83

PA 02-07S-095W

GV 86-2 Pad

PA 24-2 - Slot B10

Wellbore #1

Plan: Plan #2 12Feb13 kjs

Standard Planning Report - Geographic

06 June, 2013



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well PA 24-2 - Slot B10
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
Project:	PA 02-07S-095W	MD Reference:	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
Site:	GV 86-2 Pad	North Reference:	True
Well:	PA 24-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 12Feb13 kjs		

Project	PA 02-07S-095W, Garfield County, CO, 02-07S-095W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	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 24-2 - Slot B10					
Well Position	+N/-S	0.00 usft	Northing:	1,603,733.70 usft	Latitude:	39.46501
	+E/-W	0.00 usft	Easting:	2,302,954.90 usft	Longitude:	-107.96926
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,821.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	10/31/2007	10.785	65.824	52,624

Design	Plan #2 12Feb13 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	155.48

Plan Sections										
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	
130.00	0.00	0.00	130.00	0.00	0.00	0.00	0.00	0.00	0.000	
745.17	12.30	155.48	740.45	-59.86	27.30	2.00	2.00	0.00	155.485	
4,524.58	12.30	155.48	4,433.06	-792.61	361.47	0.00	0.00	0.00	0.000	
5,344.81	0.00	0.00	5,247.00	-872.43	397.87	1.50	-1.50	0.00	180.000	
5,444.81	0.00	0.00	5,347.00	-872.43	397.87	0.00	0.00	0.00	0.000	Top Gas (50' Radius)
7,594.81	0.00	0.00	7,497.00	-872.43	397.87	0.00	0.00	0.00	0.000	



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well PA 24-2 - Slot B10
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
Project:	PA 02-07S-095W	MD Reference:	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
Site:	GV 86-2 Pad	North Reference:	True
Well:	PA 24-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	1,603,733.70	2,302,954.90	39.46501	-107.96926	
130.00	0.00	0.00	130.00	0.00	0.00	1,603,733.70	2,302,954.90	39.46501	-107.96926	
Start Build 2.00										
500.00	7.40	155.48	498.97	-21.71	9.90	1,603,711.73	2,302,964.21	39.46495	-107.96922	
745.17	12.30	155.48	740.45	-59.86	27.30	1,603,673.11	2,302,980.56	39.46485	-107.96916	
Hold 12.30 Inclination										
860.00	12.30	155.48	852.65	-82.13	37.45	1,603,650.58	2,302,990.11	39.46479	-107.96912	
9 5/8"										
1,000.00	12.30	155.48	989.43	-109.27	49.83	1,603,623.12	2,303,001.74	39.46471	-107.96908	
1,500.00	12.30	155.48	1,477.95	-206.21	94.04	1,603,525.02	2,303,043.30	39.46445	-107.96892	
1,918.67	12.30	155.48	1,887.00	-287.38	131.06	1,603,442.87	2,303,078.10	39.46422	-107.96879	
Top of "G" Sand										
2,000.00	12.30	155.48	1,966.46	-303.15	138.25	1,603,426.92	2,303,084.86	39.46418	-107.96877	
2,021.02	12.30	155.48	1,987.00	-307.22	140.11	1,603,422.79	2,303,086.60	39.46417	-107.96876	
Base of "G" Sand										
2,500.00	12.30	155.48	2,454.98	-400.09	182.46	1,603,328.81	2,303,126.41	39.46392	-107.96861	
3,000.00	12.30	155.48	2,943.50	-497.03	226.67	1,603,230.71	2,303,167.97	39.46365	-107.96845	
3,500.00	12.30	155.48	3,432.01	-593.97	270.88	1,603,132.61	2,303,209.52	39.46338	-107.96830	
4,000.00	12.30	155.48	3,920.53	-690.91	315.09	1,603,034.51	2,303,251.08	39.46312	-107.96814	
4,129.44	12.30	155.48	4,047.00	-716.00	326.53	1,603,009.12	2,303,261.84	39.46305	-107.96810	
Mesaverde										
4,500.00	12.30	155.48	4,409.05	-787.84	359.29	1,602,936.41	2,303,292.64	39.46285	-107.96798	
4,524.58	12.30	155.48	4,433.06	-792.61	361.47	1,602,931.59	2,303,294.68	39.46284	-107.96797	
Start Drop -1.50										
5,000.00	5.17	155.48	4,902.66	-858.28	391.42	1,602,865.13	2,303,322.83	39.46266	-107.96787	
5,344.81	0.00	0.00	5,247.00	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
Vertical										
5,444.81	0.00	0.00	5,347.00	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
Top Gas - Approx. Top Gas										
5,500.00	0.00	0.00	5,402.19	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
6,000.00	0.00	0.00	5,902.19	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
6,494.81	0.00	0.00	6,397.00	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
Cameo Coals										
6,500.00	0.00	0.00	6,402.19	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
7,000.00	0.00	0.00	6,902.19	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
7,444.81	0.00	0.00	7,347.00	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
Rollins SS										
7,500.00	0.00	0.00	7,402.19	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
7,594.81	0.00	0.00	7,497.00	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
TD at 7594.81 - TD										

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	5,347.00	-872.43	397.87	1,602,850.81	2,303,328.90	39.46262	-107.96785	
- plan hits target center										
- Circle (radius 50.00)										



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well PA 24-2 - Slot B10
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
Project:	PA 02-07S-095W	MD Reference:	KELLY BUSHING @ 5847.00usft (Nabors 577 (26' RKB) kjs)
Site:	GV 86-2 Pad	North Reference:	True
Well:	PA 24-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 12Feb13 kjs		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
860.00	852.65	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,918.67	1,887.00	Top of "G" Sand				
2,021.02	1,987.00	Base of "G" Sand				
4,129.44	4,047.00	Mesaverde				
5,444.81	5,347.00	Approx. Top Gas				
6,494.81	6,397.00	Cameo Coals				
7,444.81	7,347.00	Rollins SS				
7,594.81	7,497.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
130.00	130.00	0.00	0.00	Start Build 2.00	
745.17	740.45	-59.86	27.30	Hold 12.30 Inclination	
4,524.58	4,433.06	-792.61	361.47	Start Drop -1.50	
5,344.81	5,247.00	-872.43	397.87	Vertical	
5,444.81	5,347.00	-872.43	397.87	Top Gas	
7,594.81	7,497.00	-872.43	397.87	TD at 7594.81	