



PICEANCE VLY NAD 83

PA 02-07S-095W

GV 86-2 Pad

PA 424-2 - Slot B11

Wellbore #1

Plan: Plan #2 12Feb13 kjs

Standard Planning Report - Geographic

07 June, 2013



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well PA 424-2 - Slot B11
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 424-2	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 424-2 - Slot B11				
Well Position	+N/-S	0.00 usft	Northing:	1,603,727.00 usft	Latitude: 39.46500
	+E/-W	0.00 usft	Easting:	2,302,958.40 usft	Longitude: -107.96924
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	165.82

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	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.000	
377.14	9.00	135.00	376.09	-14.25	14.25	3.50	3.50	0.00	135.000	
836.60	23.04	166.94	817.29	-127.98	60.28	3.50	3.06	6.95	48.368	
3,602.11	23.04	166.94	3,362.27	-1,182.20	304.77	0.00	0.00	0.00	0.000	
5,137.89	0.00	0.00	4,857.00	-1,478.93	373.59	1.50	-1.50	0.00	180.000	
7,677.89	0.00	0.00	7,397.00	-1,478.93	373.59	0.00	0.00	0.00	0.000	



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well PA 424-2 - Slot B11
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 424-2	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	1,603,727.00	2,302,958.40	39.46500	-107.96924	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,727.00	2,302,958.40	39.46500	-107.96924	
Start Build 3.50										
377.14	9.00	135.00	376.09	-14.25	14.25	1,603,712.36	2,302,972.26	39.46496	-107.96919	
Begin 3°/100 Build & Turn										
500.00	12.28	150.28	496.84	-32.40	27.53	1,603,693.86	2,302,985.04	39.46491	-107.96914	
836.60	23.04	166.94	817.29	-127.98	60.28	1,603,597.43	2,303,015.17	39.46464	-107.96903	
Hold 23.04 Inc, 166.94° Azi										
937.00	23.04	166.94	909.69	-166.26	69.15	1,603,558.93	2,303,023.01	39.46454	-107.96900	
9 5/8"										
1,000.00	23.04	166.94	967.67	-190.27	74.72	1,603,534.77	2,303,027.92	39.46447	-107.96898	
1,500.00	23.04	166.94	1,427.79	-380.87	118.93	1,603,343.05	2,303,066.93	39.46395	-107.96882	
1,988.13	23.04	166.94	1,877.00	-566.95	162.08	1,603,155.87	2,303,105.01	39.46344	-107.96867	
Top of "G" Sand										
2,000.00	23.04	166.94	1,887.92	-571.47	163.13	1,603,151.32	2,303,105.94	39.46343	-107.96866	
2,096.80	23.04	166.94	1,977.00	-608.37	171.69	1,603,114.21	2,303,113.49	39.46333	-107.96863	
Base of "G" Sand										
2,500.00	23.04	166.94	2,348.05	-762.08	207.34	1,602,959.60	2,303,144.94	39.46290	-107.96851	
3,000.00	23.04	166.94	2,808.17	-952.68	251.54	1,602,767.88	2,303,183.95	39.46238	-107.96835	
3,500.00	23.04	166.94	3,268.30	-1,143.28	295.75	1,602,576.15	2,303,222.96	39.46186	-107.96819	
3,602.11	23.04	166.94	3,362.27	-1,182.20	304.77	1,602,537.00	2,303,230.92	39.46175	-107.96816	
Start Drop -1.50										
4,000.00	17.07	166.94	3,735.87	-1,315.04	335.58	1,602,403.38	2,303,258.11	39.46139	-107.96805	
4,290.96	12.70	166.94	4,017.00	-1,387.84	352.47	1,602,330.15	2,303,273.01	39.46119	-107.96799	
Mesaverde										
4,500.00	9.57	166.94	4,222.07	-1,427.17	361.59	1,602,290.59	2,303,281.06	39.46108	-107.96796	
5,000.00	2.07	166.94	4,719.14	-1,476.51	373.03	1,602,240.96	2,303,291.15	39.46094	-107.96792	
5,137.89	0.00	0.00	4,857.00	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
Vertical										
5,500.00	0.00	0.00	5,219.11	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
5,587.89	0.00	0.00	5,307.00	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
Top Gas - Approx. Top Gas										
6,000.00	0.00	0.00	5,719.11	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
6,500.00	0.00	0.00	6,219.11	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
6,647.89	0.00	0.00	6,367.00	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
Cameo Coals										
7,000.00	0.00	0.00	6,719.11	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
7,500.00	0.00	0.00	7,219.11	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
7,587.89	0.00	0.00	7,307.00	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
Rollins SS										
7,677.89	0.00	0.00	7,397.00	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792	
TD at 7677.89 - TD										



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well PA 424-2 - Slot B11
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 424-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 12Feb13 kjs		

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	5,307.00	-1,478.93	373.59	1,602,238.52	2,303,291.65	39.46094	-107.96792

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
937.00	909.69	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,988.13	1,877.00	Top of "G" Sand				
2,096.80	1,977.00	Base of "G" Sand				
4,290.96	4,017.00	Mesaverde				
5,587.89	5,307.00	Approx. Top Gas				
6,647.89	6,367.00	Cameo Coals				
7,587.89	7,307.00	Rollins SS				
7,677.89	7,397.00	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 3.50	
377.14	376.09	-14.25	14.25	Begin 3"/100 Build & Turn	
836.60	817.29	-127.98	60.28	Hold 23.04 Inc, 166.94° Azi	
3,602.11	3,362.27	-1,182.20	304.77	Start Drop -1.50	
5,137.89	4,857.00	-1,478.93	373.59	Vertical	
5,587.89	5,307.00	-1,478.93	373.59	Top Gas	
7,677.89	7,397.00	-1,478.93	373.59	TD at 7677.89	