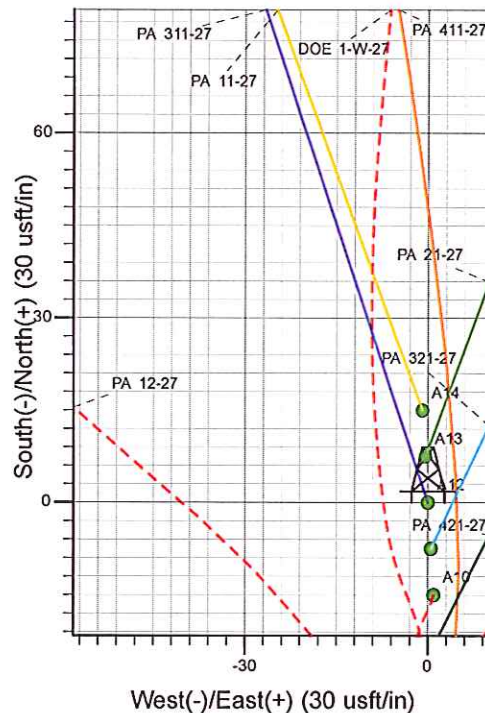
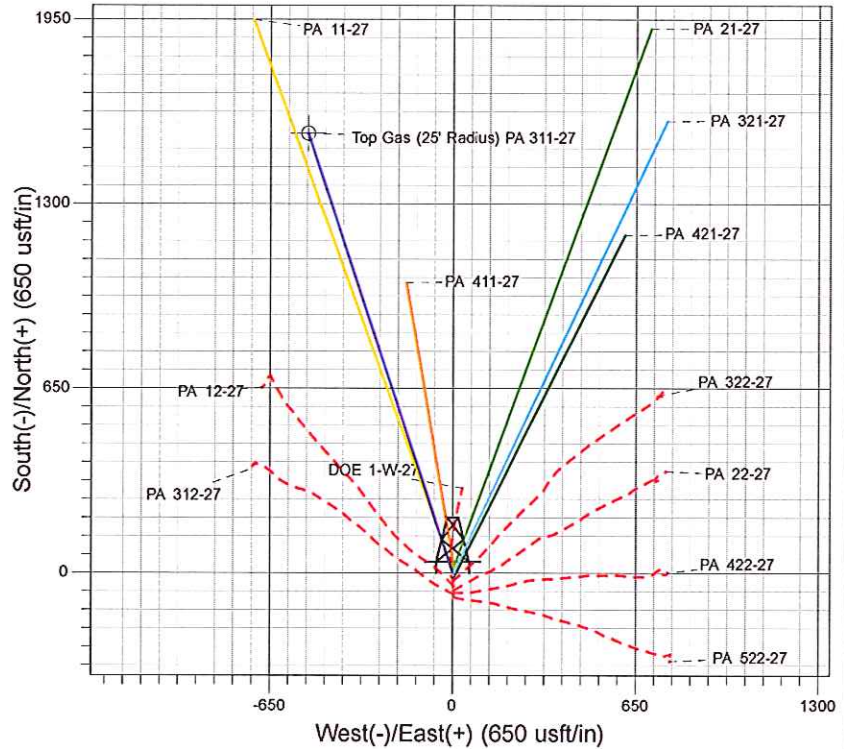
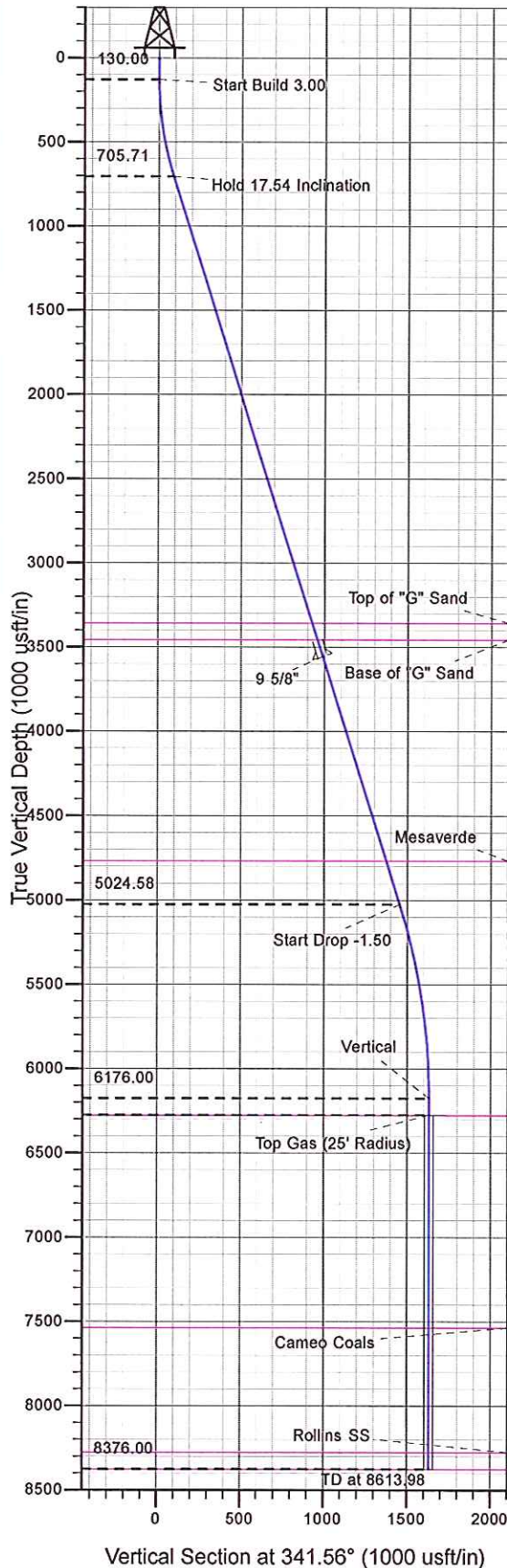




Well Name: PA 311-27
 Surface Location: DOE 1-W-27 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 5840.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1615443.40	2297660.60	39.49675	-107.98913	A12

KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))



Project: PA 27-06S-095W
 Site: DOE 1-W-27 Pad
 Well: PA 311-27
 Design #2 10Jan13 kjs



Azimuths to True North
 Magnetic North: 11.45°
 Magnetic Field
 Strength: 53050.5nT
 Dip Angle: 65.99°
 Date: 12/31/2004
 Model: IGRF2000

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
130.00	0.00	0.00	130.00	0.00	0.00	0.00	0.00	Start Build 3.00
714.80	17.54	341.56	705.71	84.28	-28.10	88.84	88.84	Hold 17.54 Inclination
5244.37	17.54	341.56	5024.58	1379.59	-459.92	1454.23	1454.23	Start Drop -1.50
6413.98	0.00	0.00	6176.00	1548.14	-516.11	1631.91	1631.91	Vertical
6513.98	0.00	0.00	6276.00	1548.14	-516.11	1631.91	1631.91	Top Gas
8613.98	0.00	0.00	8376.00	1548.14	-516.11	1631.91	1631.91	TD at 8613.98



PICEANCE VLY NAD 83

PA 27-06S-095W

DOE 1-W-27 Pad

PA 311-27 - Slot A12

Wellbore #1

Plan: Design #2 10Jan13 kjs

Standard Planning Report - Geographic

10 January, 2013



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well PA 311-27 - Slot A12
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
Project:	PA 27-06S-095W	MD Reference:	KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
Site:	DOE 1-W-27 Pad	North Reference:	True
Well:	PA 311-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 10Jan13 kjs		

Project	PA 27-06S-095W, Garfield County, CO, 27-06S-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	DOE 1-W-27 Pad		
Site Position:		Northing:	1,615,428.38 usft
From:	Map	Easting:	2,297,661.11 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	39.49671
		Longitude:	-107.98913
		Grid Convergence:	-1.57 °

Well	PA 311-27 - Slot A12		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:
			5,840.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2000	12/31/2004	11.45
			Dip Angle (°)
			65.99
			Field Strength (nT)
			53,050

Design	Design #2 10Jan13 kjs		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction (°)
			341.56

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	0.00	
130.00	0.00	0.00	130.00	0.00	0.00	0.00	0.00	0.00	0.00	
714.80	17.54	341.56	705.71	84.28	-28.10	3.00	3.00	0.00	341.56	
5,244.37	17.54	341.56	5,024.58	1,379.59	-459.92	0.00	0.00	0.00	0.00	
6,413.98	0.00	0.00	6,176.00	1,548.14	-516.11	1.50	-1.50	0.00	180.00	
6,513.98	0.00	0.00	6,276.00	1,548.14	-516.11	0.00	0.00	0.00	0.00	Top Gas (25' Radius)
8,613.98	0.00	0.00	8,376.00	1,548.14	-516.11	0.00	0.00	0.00	0.00	



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well PA 311-27 - Slot A12
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
Project:	PA 27-06S-095W	MD Reference:	KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
Site:	DOE 1-W-27 Pad	North Reference:	True
Well:	PA 311-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 10Jan13 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	1,615,443.40	2,297,660.60	39.49675	-107.98914
130.00	0.00	0.00	130.00	0.00	0.00	1,615,443.40	2,297,660.60	39.49675	-107.98914
Start Build 3.00									
500.00	11.10	341.56	497.69	33.89	-11.30	1,615,477.59	2,297,650.24	39.49685	-107.98918
714.80	17.54	341.56	705.71	84.28	-28.10	1,615,528.41	2,297,634.83	39.49698	-107.98924
Hold 17.54 Inclination									
1,000.00	17.54	341.56	977.64	165.83	-55.28	1,615,610.68	2,297,609.88	39.49721	-107.98933
1,500.00	17.54	341.56	1,454.38	308.82	-102.95	1,615,754.91	2,297,566.15	39.49760	-107.98950
2,000.00	17.54	341.56	1,931.12	451.80	-150.62	1,615,899.14	2,297,522.42	39.49799	-107.98967
2,500.00	17.54	341.56	2,407.87	594.79	-198.29	1,616,043.37	2,297,478.69	39.49839	-107.98984
3,000.00	17.54	341.56	2,884.61	737.77	-245.95	1,616,187.60	2,297,434.96	39.49878	-107.99001
3,494.39	17.54	341.56	3,356.00	879.15	-293.09	1,616,330.21	2,297,391.72	39.49917	-107.99018
Top of "G" Sand									
3,500.00	17.54	341.56	3,361.35	880.75	-293.62	1,616,331.83	2,297,391.23	39.49917	-107.99018
3,599.27	17.54	341.56	3,456.00	909.14	-303.08	1,616,360.46	2,297,382.55	39.49925	-107.99021
Base of "G" Sand									
3,704.14	17.54	341.56	3,556.00	939.13	-313.08	1,616,390.72	2,297,373.38	39.49933	-107.99025
9 5/8"									
4,000.00	17.54	341.56	3,838.09	1,023.74	-341.29	1,616,476.06	2,297,347.50	39.49956	-107.99035
4,500.00	17.54	341.56	4,314.84	1,166.72	-388.96	1,616,620.29	2,297,303.77	39.49996	-107.99052
4,973.17	17.54	341.56	4,766.00	1,302.03	-434.07	1,616,756.78	2,297,262.39	39.50033	-107.99067
Mesaverde									
5,000.00	17.54	341.56	4,791.58	1,309.71	-436.62	1,616,764.52	2,297,260.04	39.50035	-107.99068
5,244.37	17.54	341.56	5,024.58	1,379.59	-459.92	1,616,835.01	2,297,238.67	39.50054	-107.99077
Start Drop -1.50									
5,500.00	13.71	341.56	5,270.72	1,444.90	-481.69	1,616,900.89	2,297,218.69	39.50072	-107.99084
6,000.00	6.21	341.56	5,762.83	1,526.88	-509.02	1,616,983.59	2,297,193.62	39.50095	-107.99094
6,413.98	0.00	0.00	6,176.00	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
Vertical									
6,500.00	0.00	0.00	6,262.02	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
6,513.98	0.00	0.00	6,276.00	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
Top Gas - Approx. Top Gas									
7,000.00	0.00	0.00	6,762.02	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
7,500.00	0.00	0.00	7,262.02	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
7,773.98	0.00	0.00	7,536.00	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
Cameo Coals									
8,000.00	0.00	0.00	7,762.02	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
8,500.00	0.00	0.00	8,262.02	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
8,513.98	0.00	0.00	8,276.00	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
Rollins SS									
8,613.98	0.00	0.00	8,376.00	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
TD at 8613.98 - TD									



WPX Energy
Planning Report - Geographic

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Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
Project:	PA 27-06S-095W	MD Reference:	KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
Site:	DOE 1-W-27 Pad	North Reference:	True
Well:	PA 311-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 10Jan13 kjs		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Top Gas (25' Radius) P/	0.00	0.00	6,276.00	1,548.14	-516.11	1,617,005.03	2,297,187.12	39.50100	-107.99097
- plan hits target center									
- Circle (radius 25.00)									

Casing Points				
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(usft)	(usft)		(in)	(in)
3,704.14	3,556.00	9 5/8"	9.625	13.500

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
3,494.39	3,356.00	Top of "G" Sand				
3,599.27	3,456.00	Base of "G" Sand				
4,973.17	4,766.00	Mesaverde				
6,513.98	6,276.00	Approx. Top Gas				
7,773.98	7,536.00	Cameo Coals				
8,513.98	8,276.00	Rollins SS				
8,613.98	8,376.00	TD				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
130.00	130.00	0.00	0.00	Start Build 3.00	
714.80	705.71	84.28	-28.10	Hold 17.54 Inclination	
5,244.37	5,024.58	1,379.59	-459.92	Start Drop -1.50	
6,413.98	6,176.00	1,548.14	-516.11	Vertical	
6,513.98	6,276.00	1,548.14	-516.11	Top Gas	
8,613.98	8,376.00	1,548.14	-516.11	TD at 8613.98	