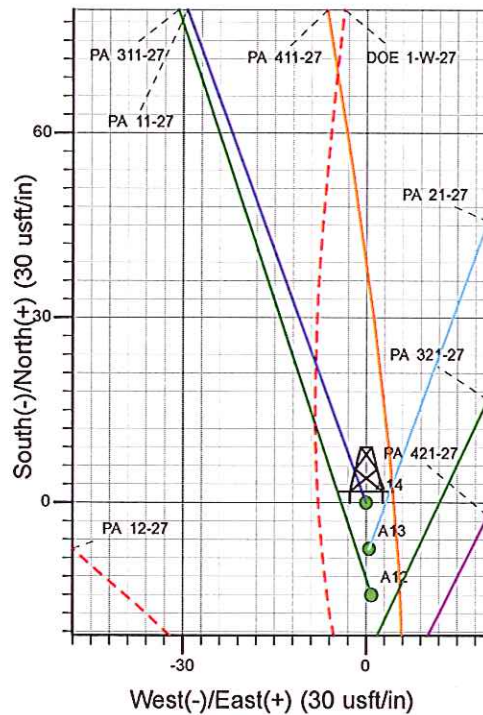
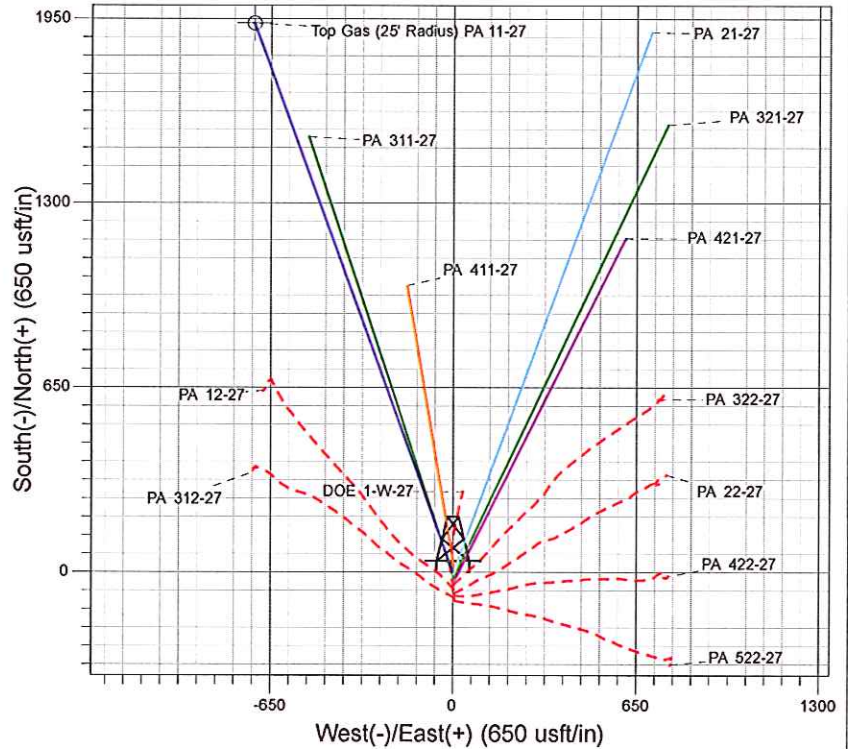
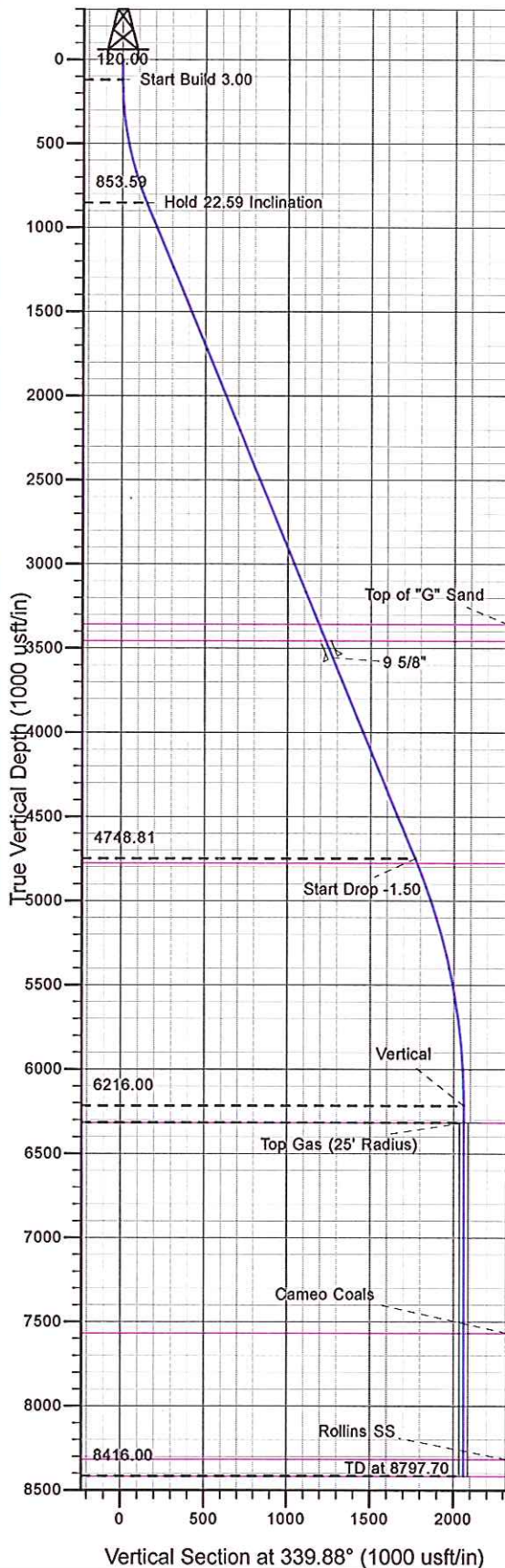




Well Name: PA 11-27
 Surface Location: DOE 1-W-27 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 5840.00
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.00 0.00 1615458.40 2297660.10 39.49679 -107.98914 A14
 KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))



Project: PA 27-06S-095W
 Site: DOE 1-W-27 Pad
 Well: PA 11-27
 Design #2 10Jan13 kjs



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

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	Start Build 3.00
872.95	22.59	339.88	853.59	137.57	-50.40	146.51	146.51	Hold 22.59 Inclination
5091.80	22.59	339.88	4748.81	1659.16	-607.87	1767.01	1767.01	Start Drop -1.50
6597.70	0.00	0.00	6216.00	1934.29	-708.68	2060.03	2060.03	Vertical
6697.70	0.00	0.00	6316.00	1934.29	-708.68	2060.03	2060.03	Top Gas
8797.70	0.00	0.00	8416.00	1934.29	-708.68	2060.03	2060.03	TD at 8797.70



PICEANCE VLY NAD 83

PA 27-06S-095W

DOE 1-W-27 Pad

PA 11-27 - Slot A14

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 11-27 - Slot A14
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 11-27	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	Latitude: 39.49671
From:	Map	Easting:	2,297,661.11 usft	Longitude: -107.98913
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.57 °

Well	PA 11-27 - Slot A14			
Well Position	+N/-S	0.00 usft	Northing:	1,615,458.40 usft
	+E/-W	0.00 usft	Easting:	2,297,660.10 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	Ground Level: 5,840.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	12/31/2004	11.45	65.99	53,051

Design	Design #2 10Jan13 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	339.88

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	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
872.95	22.59	339.88	853.59	137.57	-50.40	3.00	3.00	0.00	339.88	
5,091.80	22.59	339.88	4,748.81	1,659.16	-607.87	0.00	0.00	0.00	0.00	
6,597.70	0.00	0.00	6,216.00	1,934.29	-708.68	1.50	-1.50	0.00	180.00	
6,697.70	0.00	0.00	6,316.00	1,934.29	-708.68	0.00	0.00	0.00	0.00	Top Gas (25' Radius)
8,797.70	0.00	0.00	8,416.00	1,934.29	-708.68	0.00	0.00	0.00	0.00	



WPX Energy
Planning Report - Geographic

Database: COMPASS-PICEANCE
Company: PICEANCE VLY NAD 83

Project: PA 27-06S-095W

Site: DOE 1-W-27 Pad
Well: PA 11-27
Wellbore: Wellbore #1
Design: Design #2 10Jan13 kjs

Local Co-ordinate Reference: Well PA 11-27 - Slot A14
TVD Reference: KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
MD Reference: KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
North Reference: True
Survey Calculation Method: Minimum Curvature

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	1,615,458.40	2,297,660.10	39.49679	-107.98914
120.00	0.00	0.00	120.00	0.00	0.00	1,615,458.40	2,297,660.10	39.49679	-107.98914
Start Build 3.00									
500.00	11.40	339.88	497.50	35.38	-12.96	1,615,494.12	2,297,648.11	39.49689	-107.98919
872.95	22.59	339.88	853.59	137.57	-50.40	1,615,597.29	2,297,613.49	39.49717	-107.98932
Hold 22.59 Inclination									
1,000.00	22.59	339.88	970.90	183.39	-67.19	1,615,643.55	2,297,597.96	39.49730	-107.98938
1,500.00	22.59	339.88	1,432.54	363.72	-133.26	1,615,825.62	2,297,536.86	39.49779	-107.98961
2,000.00	22.59	339.88	1,894.19	544.06	-199.33	1,616,007.69	2,297,475.76	39.49829	-107.98985
2,500.00	22.59	339.88	2,355.83	724.39	-265.40	1,616,189.75	2,297,414.66	39.49878	-107.99008
3,000.00	22.59	339.88	2,817.48	904.72	-331.47	1,616,371.82	2,297,353.56	39.49928	-107.99031
3,500.00	22.59	339.88	3,279.12	1,085.05	-397.54	1,616,553.89	2,297,292.46	39.49977	-107.99055
3,583.27	22.59	339.88	3,356.00	1,115.08	-408.54	1,616,584.21	2,297,282.28	39.49986	-107.99059
Top of "G" Sand									
3,691.58	22.59	339.88	3,456.00	1,154.15	-422.85	1,616,623.65	2,297,269.04	39.49996	-107.99064
Base of "G" Sand									
3,799.89	22.59	339.88	3,556.00	1,193.21	-437.16	1,616,663.09	2,297,255.81	39.50007	-107.99069
9 5/8"									
4,000.00	22.59	339.88	3,740.76	1,265.38	-463.60	1,616,735.96	2,297,231.35	39.50027	-107.99078
4,500.00	22.59	339.88	4,202.41	1,445.72	-529.67	1,616,918.02	2,297,170.25	39.50076	-107.99102
5,000.00	22.59	339.88	4,664.05	1,626.05	-595.74	1,617,100.09	2,297,109.15	39.50126	-107.99125
5,091.80	22.59	339.88	4,748.81	1,659.16	-607.87	1,617,133.52	2,297,097.93	39.50135	-107.99129
Start Drop -1.50									
5,121.20	22.15	339.88	4,776.00	1,669.67	-611.72	1,617,144.13	2,297,094.37	39.50138	-107.99131
Mesaverde									
5,500.00	16.47	339.88	5,133.35	1,787.21	-654.79	1,617,262.80	2,297,054.55	39.50170	-107.99146
6,000.00	8.97	339.88	5,620.74	1,890.48	-692.62	1,617,367.06	2,297,019.56	39.50198	-107.99159
6,500.00	1.47	339.88	6,118.31	1,933.12	-708.25	1,617,410.12	2,297,005.11	39.50210	-107.99165
6,597.70	0.00	0.00	6,216.00	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165
Vertical									
6,697.70	0.00	0.00	6,316.00	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165
Top Gas - Approx. Top Gas									
7,000.00	0.00	0.00	6,618.30	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165
7,500.00	0.00	0.00	7,118.30	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165
7,947.70	0.00	0.00	7,566.00	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165
Cameo Coals									
8,000.00	0.00	0.00	7,618.30	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165
8,500.00	0.00	0.00	8,118.30	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165
8,697.70	0.00	0.00	8,316.00	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165
Rollins SS									
8,797.70	0.00	0.00	8,416.00	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165
TD at 8797.70 - TD									



WPX Energy
Planning Report - Geographic

Database: COMPASS-PICEANCE
Company: PICEANCE VLY NAD 83
Project: PA 27-06S-095W
Site: DOE 1-W-27 Pad
Well: PA 11-27
Wellbore: Wellbore #1
Design: Design #2 10Jan13 kjs

Local Co-ordinate Reference: Well PA 11-27 - Slot A14
TVD Reference: KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
MD Reference: KELLY BUSHING @ 5866.00usft (Nabors 577 (26' KB))
North Reference: True
Survey Calculation Method: Minimum Curvature

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 (25' Radius) P/ - plan hits target center - Circle (radius 25.00)	0.00	0.00	6,316.00	1,934.29	-708.68	1,617,411.30	2,297,004.71	39.50210	-107.99165

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
3,799.89	3,556.00	9 5/8"	9.625	13.500

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,583.27	3,356.00	Top of "G" Sand			
3,691.58	3,456.00	Base of "G" Sand			
5,121.20	4,776.00	Mesaverde			
6,697.70	6,316.00	Approx. Top Gas			
7,947.70	7,566.00	Cameo Coals			
8,697.70	8,316.00	Rollins SS			
8,797.70	8,416.00	TD			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
120.00	120.00	0.00	0.00	Start Build 3.00
872.95	853.59	137.57	-50.40	Hold 22.59 Inclination
5,091.80	4,748.81	1,659.16	-607.87	Start Drop -1.50
6,597.70	6,216.00	1,934.29	-708.68	Vertical
6,697.70	6,316.00	1,934.29	-708.68	Top Gas
8,797.70	8,416.00	1,934.29	-708.68	TD at 8797.70