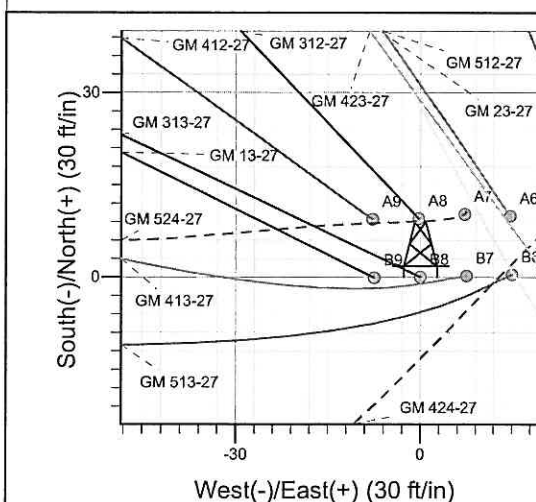
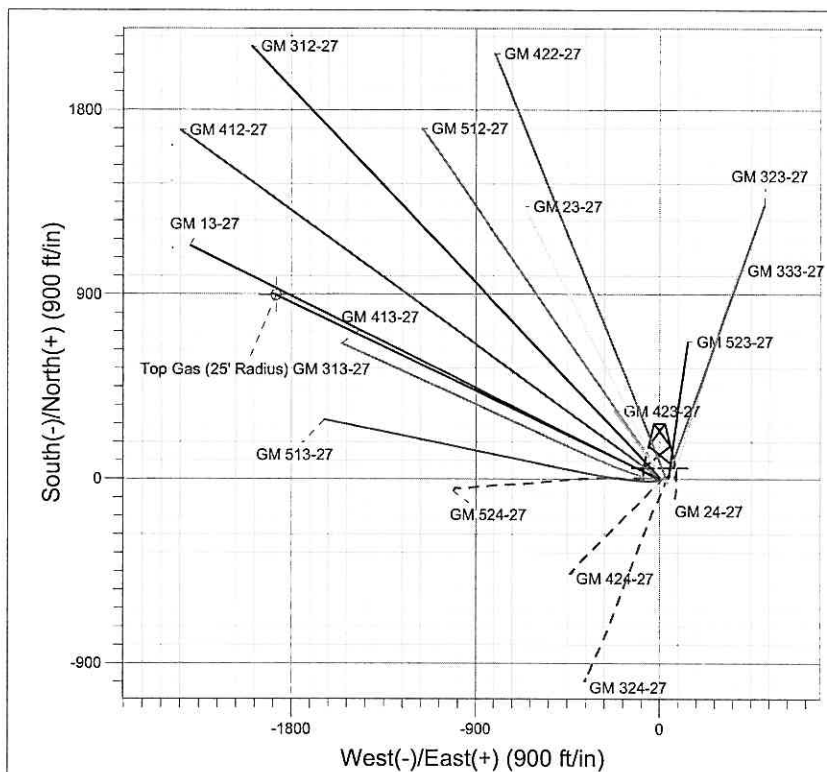
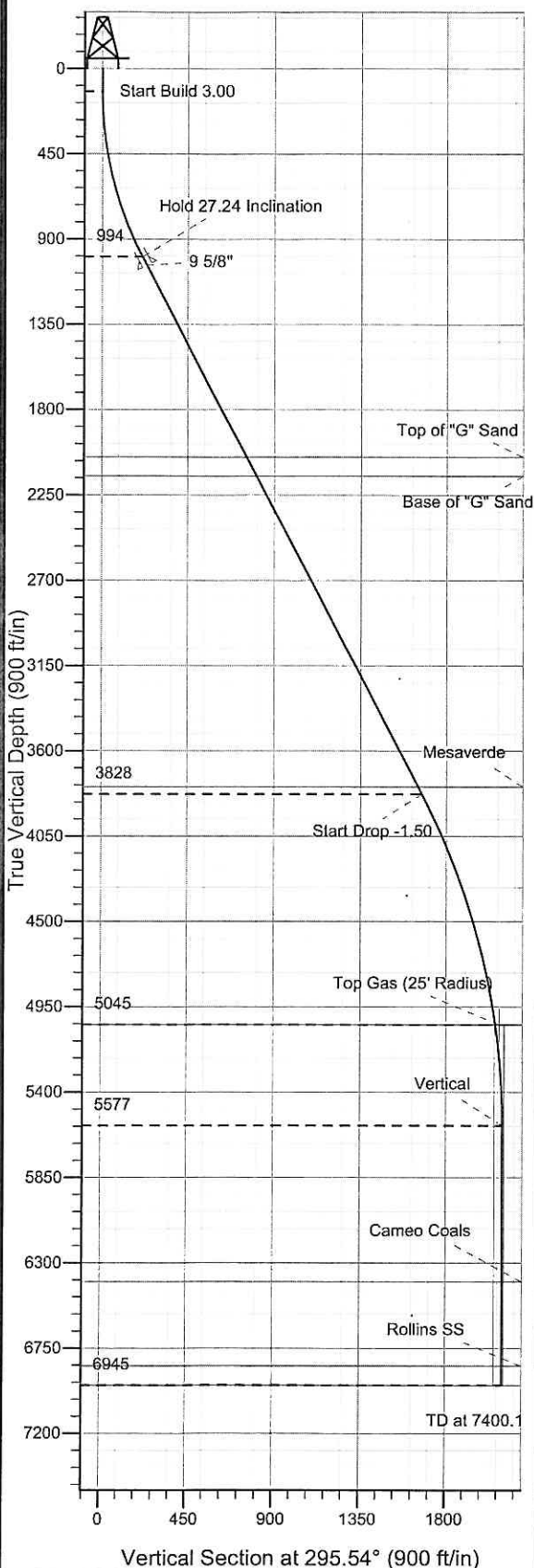




Well Name: GM 313-27
 Surface Location: GM 24-27 Pad
 North American Datum 1983, US State Plane 1983 Colorado Central Zone
 Ground Elevation: 5604.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1614208.20 2267660.30 39° 29' 27.809 N 108° 5' 42.991 W B8
 KELLY BUSHING @ 5628.0ft (H&P 278 (24') kjs)



Project: GV 27-06S-096W
 Site: GM 24-27 Pad
 Well: GM 313-27
 Plan #1 11Dec08 kjs



Azimuths to True North
 Magnetic North: 10.70°
 Magnetic Field
 Strength: 52560.6nT
 Dip Angle: 65.79°
 Date: 12/10/2008
 Model: IGRF2005-10

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.0	
3	1028.2	27.24	295.54	994.3	91.3	-191.2	3.00	295.54	211.9	
4	4215.4	27.24	295.54	3828.0	720.4	-1507.7	0.00	0.00	1671.0	
5	5498.4	8.00	295.54	5045.0	887.0	-1856.5	1.50	180.00	2057.6	Top Gas (25' Radius) GM 313-27
6	6031.7	0.00	0.00	5576.6	903.1	-1890.1	1.50	180.00	2094.7	
7	7400.1	0.00	0.00	6945.0	903.1	-1890.1	0.00	0.00	2094.7	

ANNOTATIONS		
TVD	MD	Annotation
120.0	120.0	Start Build 3.00
994.3	1028.2	Hold 27.24 Inclination
3828.0	4215.4	Start Drop -1.50
5045.0	5498.4	Top Gas
5576.6	6031.7	Vertical
6945.0	7400.1	TD at 7400.1

PICEANCE VLY NAD 83

GV 27-06S-096W

GM 24-27 Pad

GM 313-27 - Slot B8

Wellbore #1

Plan: Plan #1 11Dec08 kjs

Standard Planning Report - Geographic

11 August, 2009

Williams Production RMT Company

Planning Report - Geographic

Database:	EDMDB_COMPASS	Local Co-ordinate Reference:	Well GM 313-27 - Slot B8
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5628.0ft (H&P 278 (24') kjs)
Project:	GV 27-06S-096W	MD Reference:	KELLY BUSHING @ 5628.0ft (H&P 278 (24') kjs)
Site:	GM 24-27 Pad	North Reference:	True
Well:	GM 313-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 11Dec08 kjs		

Project	GV 27-06S-096W, Garfield County, CO, 27-06S-096W		
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	GM 24-27 Pad		
Site Position:		Northing:	1,614,217.60 ft
From:	Map	Easting:	2,267,712.90 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	39° 29' 27.917 N
		Longitude:	108° 5' 42.324 W
		Grid Convergence:	-1.64 °

Well	GM 313-27 - Slot B8		
Well Position	+N/-S	0.0 ft	Northing: 1,614,208.20 ft
	+E/-W	0.0 ft	Easting: 2,267,660.30 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	39° 29' 27.809 N
		Longitude:	108° 5' 42.991 W
		Ground Level:	5,604.0 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2005-10	12/10/2008	10.70
			Dip Angle (°)
			65.79
			Field Strength (nT)
			52,561

Design	Plan #1 11Dec08 kjs		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction (°)
			295.54

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,028.2	27.24	295.54	994.3	91.3	-191.2	3.00	3.00	0.00	295.54	
4,215.4	27.24	295.54	3,828.0	720.4	-1,507.7	0.00	0.00	0.00	0.00	
5,498.4	8.00	295.54	5,045.0	887.0	-1,856.5	1.50	-1.50	0.00	180.00	Top Gas (25' Radius)
6,031.7	0.00	0.00	5,576.6	903.1	-1,890.1	1.50	-1.50	0.00	180.00	
7,400.1	0.00	0.00	6,945.0	903.1	-1,890.1	0.00	0.00	0.00	0.00	

Williams Production RMT Company

Planning Report - Geographic

Database: EDMDB_COMPASS
Company: PICEANCE VLY NAD 83
Project: GV 27-06S-096W
Site: GM 24-27 Pad
Well: GM 313-27
Wellbore: Wellbore #1
Design: Plan #1 11Dec08 kjs

Local Co-ordinate Reference: Well GM 313-27 - Slot B8
TVD Reference: KELLY BUSHING @ 5628.0ft (H&P 278 (24') kjs)
MD Reference: KELLY BUSHING @ 5628.0ft (H&P 278 (24') kjs)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	1,614,208.20	2,267,660.30	39° 29' 27.809 N	108° 5' 42.991 W
120.0	0.00	0.00	120.0	0.0	0.0	1,614,208.20	2,267,660.30	39° 29' 27.809 N	108° 5' 42.991 W
1,028.2	27.24	295.54	994.3	91.3	-191.2	1,614,304.96	2,267,471.81	39° 29' 28.712 N	108° 5' 45.430 W
1,078.0	27.24	295.54	1,038.6	101.2	-211.8	1,614,315.38	2,267,451.52	39° 29' 28.809 N	108° 5' 45.692 W
9 5/8"									
2,215.6	27.24	295.54	2,050.0	325.7	-681.7	1,614,553.21	2,266,988.25	39° 29' 31.028 N	108° 5' 51.686 W
Top of "G" Sand									
2,328.1	27.24	295.54	2,150.0	347.9	-728.1	1,614,576.73	2,266,942.44	39° 29' 31.248 N	108° 5' 52.279 W
Base of "G" Sand									
4,172.7	27.24	295.54	3,790.0	711.9	-1,490.1	1,614,962.38	2,266,191.22	39° 29' 34.845 N	108° 6' 1.998 W
Mesaverde									
4,215.4	27.24	295.54	3,828.0	720.4	-1,507.7	1,614,971.31	2,266,173.83	39° 29' 34.928 N	108° 6' 2.223 W
5,498.4	8.00	295.54	5,045.0	887.0	-1,856.5	1,615,147.86	2,265,829.92	39° 29' 36.575 N	108° 6' 6.673 W
Approx. Top Gas									
6,031.7	0.00	0.00	5,576.6	903.1	-1,890.1	1,615,164.83	2,265,796.85	39° 29' 36.734 N	108° 6' 7.101 W
6,855.1	0.00	0.00	6,400.0	903.1	-1,890.1	1,615,164.83	2,265,796.85	39° 29' 36.734 N	108° 6' 7.101 W
Cameo Coals									
7,300.1	0.00	0.00	6,845.0	903.1	-1,890.1	1,615,164.83	2,265,796.85	39° 29' 36.734 N	108° 6' 7.101 W
Rollins SS									
7,400.1	0.00	0.00	6,945.0	903.1	-1,890.1	1,615,164.83	2,265,796.85	39° 29' 36.734 N	108° 6' 7.101 W
TD									

Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
Top Gas (25' Radius) GI	0.00	0.00	5,045.0	896.4	-1,875.7	1,615,157.80	2,265,811.00	39° 29' 36.668 N	108° 6' 6.918 W
- plan misses by 21.2ft at 5499.9ft MD (5046.5 TVD, 887.1 N, -1856.7 E)									
- Circle (radius 25.0)									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
1,078.0	1,038.6	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,215.6	2,050.00	Top of "G" Sand			
2,328.1	2,150.00	Base of "G" Sand			
4,172.7	3,790.00	Mesaverde			
5,498.4	5,045.00	Approx. Top Gas			
6,855.1	6,400.00	Cameo Coals			
7,300.1	6,845.00	Rollins SS			
7,400.1	6,945.00	TD			

Williams Production RMT Company

Planning Report - Geographic

Database: EDMDB_COMPASS
Company: PICEANCE VLY NAD 83
Project: GV 27-06S-096W
Site: GM 24-27 Pad
Well: GM 313-27
Wellbore: Wellbore #1
Design: Plan #1 11Dec08 kjs

Local Co-ordinate Reference: Well GM 313-27 - Slot B8
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MD Reference: KELLY BUSHING @ 5628.0ft (H&P 278 (24') kjs)
North Reference: True
Survey Calculation Method: Minimum Curvature

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
120.0	120.0	0.0	0.0	Start Build 3.00
1,028.2	994.3	91.3	-191.2	Hold 27.24 Inclination
4,215.4	3,828.0	720.4	-1,507.7	Start Drop -1.50
5,498.4	5,045.0	887.0	-1,856.5	Top Gas
6,031.7	5,576.6	903.1	-1,890.1	Vertical
7,400.1	6,945.0	903.1	-1,890.1	TD at 7400.1