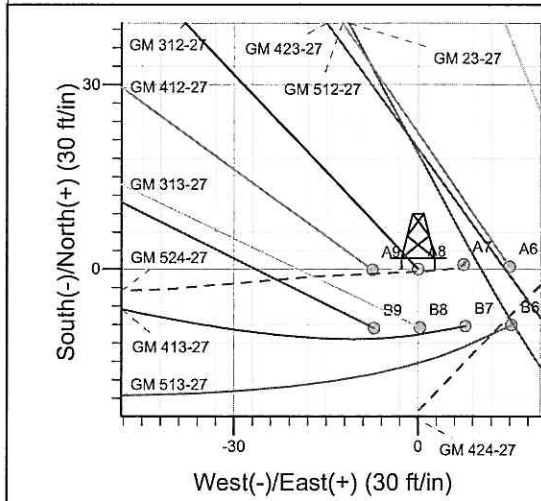
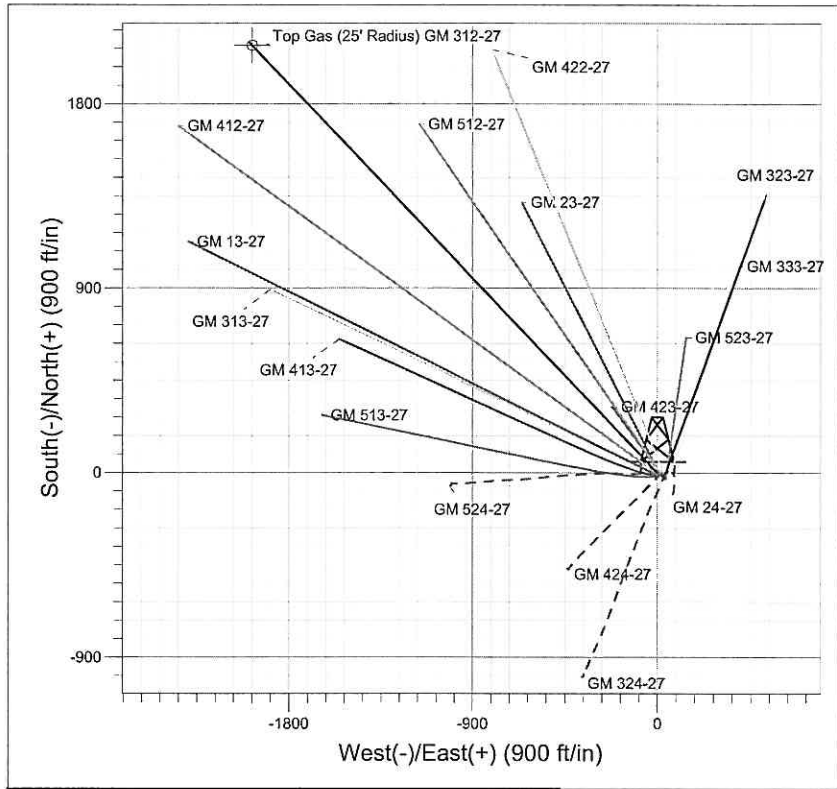
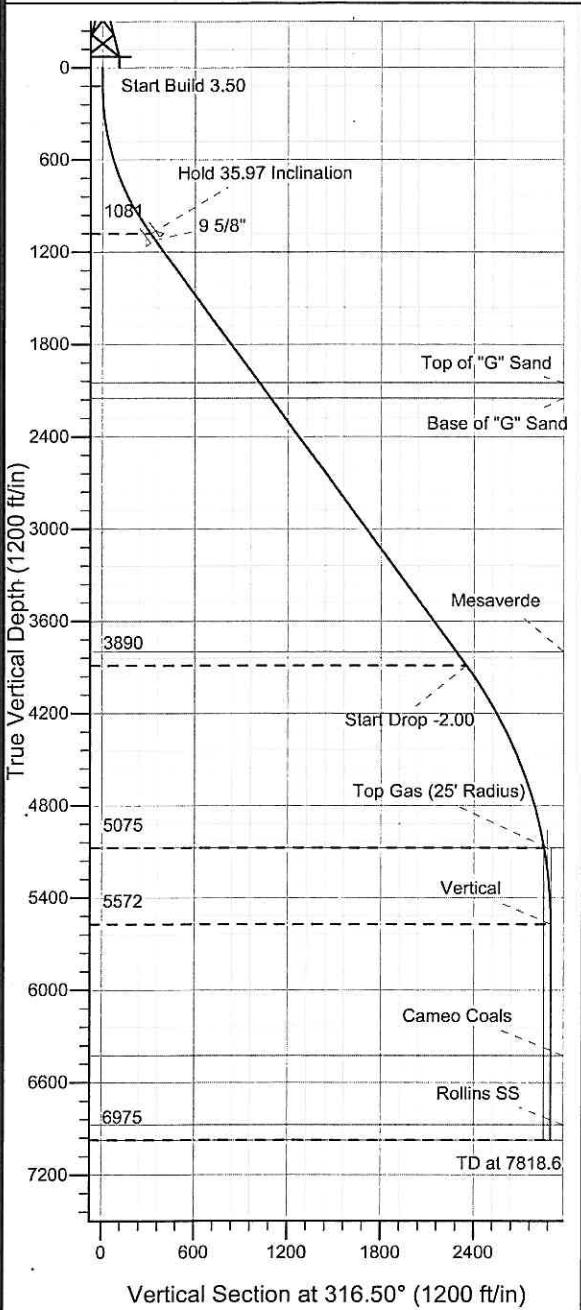




Well Name: GM 312-27
 Surface Location: GM 24-27 Pad
 North American Datum 1983, US State Plane 1983, Colorado Central Zone
 Ground Elevation: 5604.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1614217.70 2267660.30 39° 29' 27.903 N 108° 5' 42.994 W A8
 KELLY BUSHING @ 5628.0ft (H&P 278 (24') kjs)



Project: GV 27-06S-096W
 Site: GM 24-27 Pad
 Well: GM 312-27
 Plan #1 11Dec08 kjs

M Azimuths to True North
 Magnetic North: 10.70°
 Magnetic Field
 Strength: 52560.6snT
 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	1147.7	35.97	316.50	1081.5	226.4	-214.9	3.50	316.50	312.1	
4	4617.6	35.97	316.50	3889.8	1704.7	-1617.8	0.00	0.00	2350.2	
5	5916.1	10.00	316.50	5075.0	2069.3	-1963.9	2.00	180.00	2852.9	Top Gas (25' Radius) GM 312-27
6	6416.1	0.00	0.00	5572.5	2100.9	-1993.8	2.00	180.00	2896.4	
7	7818.6	0.00	0.00	6975.0	2100.9	-1993.8	0.00	0.00	2896.4	

ANNOTATIONS		
TVD	MD	Annotation
120.0	120.0	Start Build 3.50
1081.5	1147.7	Hold 35.97 Inclination
3889.8	4617.6	Start Drop -2.00
5075.0	5916.1	Top Gas
5572.5	6416.1	Vertical
6975.0	7818.6	TD at 7818.6

PICEANCE VLY NAD 83

GV 27-06S-096W

GM 24-27 Pad

GM 312-27 - Slot A8

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 312-27 - Slot A8
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 312-27	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	Latitude:	39° 29' 27.917 N
From: Map		Easting:	2,267,712.90 ft	Longitude:	108° 5' 42.324 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	-1.64 °

Well GM 312-27 - Slot A8					
Well Position	+N/-S	0.0 ft	Northing:	1,614,217.70 ft	Latitude: 39° 29' 27.903 N
	+E/-W	0.0 ft	Easting:	2,267,660.30 ft	Longitude: 108° 5' 42.994 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level: 5,604.0 ft

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

Design Plan #1 11Dec08 kjs					
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	316.50	

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	
1,147.7	35.97	316.50	1,081.5	226.4	-214.9	3.50	3.50	0.00	316.50	
4,617.6	35.97	316.50	3,889.8	1,704.7	-1,617.8	0.00	0.00	0.00	0.00	
5,916.1	10.00	316.50	5,075.0	2,069.3	-1,963.9	2.00	-2.00	0.00	180.00	Top Gas (25' Radius)
6,416.1	0.00	0.00	5,572.5	2,100.9	-1,993.8	2.00	-2.00	0.00	180.00	
7,818.6	0.00	0.00	6,975.0	2,100.9	-1,993.8	0.00	0.00	0.00	0.00	

Williams Production RMT Company

Planning Report - Geographic

Database:	EDMDB_COMPASS	Local Co-ordinate Reference:	Well GM 312-27 - Slot A8
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 312-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 11Dec08 kjs		

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	1,614,217.70	2,267,660.30	39° 29' 27.903 N	108° 5' 42.994 W
120.0	0.00	0.00	120.0	0.0	0.0	1,614,217.70	2,267,660.30	39° 29' 27.903 N	108° 5' 42.994 W
1,147.7	35.97	316.50	1,081.5	226.4	-214.9	1,614,450.13	2,267,452.01	39° 29' 30.141 N	108° 5' 45.735 W
1,198.0	35.97	316.50	1,122.2	247.8	-235.2	1,614,472.14	2,267,432.28	39° 29' 30.353 N	108° 5' 45.995 W
9 5/8"									
2,344.3	35.97	316.50	2,050.0	736.2	-698.7	1,614,973.53	2,266,982.95	39° 29' 35.179 N	108° 5' 51.907 W
Top of "G" Sand									
2,467.9	35.97	316.50	2,150.0	788.8	-748.6	1,615,027.58	2,266,934.52	39° 29' 35.699 N	108° 5' 52.544 W
Base of "G" Sand									
4,506.6	35.97	316.50	3,800.0	1,657.4	-1,572.9	1,615,919.28	2,266,135.42	39° 29' 44.283 N	108° 6' 3.059 W
Mesaverde									
4,617.6	35.97	316.50	3,889.8	1,704.7	-1,617.8	1,615,967.83	2,266,091.90	39° 29' 44.751 N	108° 6' 3.632 W
5,916.1	10.00	316.50	5,075.0	2,069.3	-1,963.9	1,616,342.18	2,265,756.43	39° 29' 48.354 N	108° 6' 8.046 W
Approx. Top Gas									
6,416.1	0.00	0.00	5,572.5	2,100.9	-1,993.8	1,616,374.59	2,265,727.39	39° 29' 48.666 N	108° 6' 8.429 W
7,268.6	0.00	0.00	6,425.0	2,100.9	-1,993.8	1,616,374.59	2,265,727.39	39° 29' 48.666 N	108° 6' 8.429 W
Cameo Coals									
7,718.6	0.00	0.00	6,875.0	2,100.9	-1,993.8	1,616,374.59	2,265,727.39	39° 29' 48.666 N	108° 6' 8.429 W
Rollins SS									
7,818.6	0.00	0.00	6,975.0	2,100.9	-1,993.8	1,616,374.59	2,265,727.39	39° 29' 48.666 N	108° 6' 8.429 W
TD									

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Top Gas (25' Radius) GI - hit/miss target - Shape	0.00	0.00	5,075.0	2,085.4	-1,979.0	1,616,358.70	2,265,741.80	39° 29' 48.513 N	108° 6' 8.239 W
- plan misses by 21.8ft at 5918.0ft MD (5076.9 TVD, 2069.6 N, -1964.1 E) - Circle (radius 25.0)									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
1,198.0	1,122.2	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,344.3	2,050.00	Top of "G" Sand			
2,467.9	2,150.00	Base of "G" Sand			
4,506.6	3,800.00	Mesaverde			
5,916.1	5,075.00	Approx. Top Gas			
7,268.6	6,425.00	Cameo Coals			
7,718.6	6,875.00	Rollins SS			
7,818.6	6,975.00	TD			

Williams Production RMT Company

Planning Report - Geographic

Database: EDMDB_COMPASS	Local Co-ordinate Reference: Well GM 312-27 - Slot A8
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 312-27	Survey Calculation Method: Minimum Curvature
Wellbore: Wellbore #1	
Design: Plan #1 11Dec08 kjs	

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 3.50
1,147.7	1,081.5	226.4	-214.9	Hold 35.97 Inclination
4,617.6	3,889.8	1,704.7	-1,617.8	Start Drop -2.00
5,916.1	5,075.0	2,069.3	-1,963.9	Top Gas
6,416.1	5,572.5	2,100.9	-1,993.8	Vertical
7,818.6	6,975.0	2,100.9	-1,993.8	TD at 7818.6