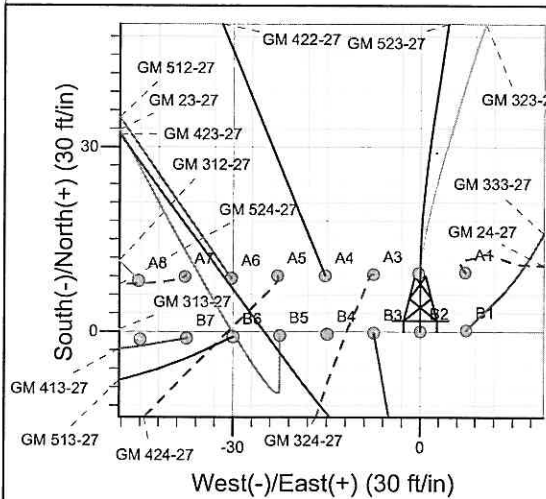
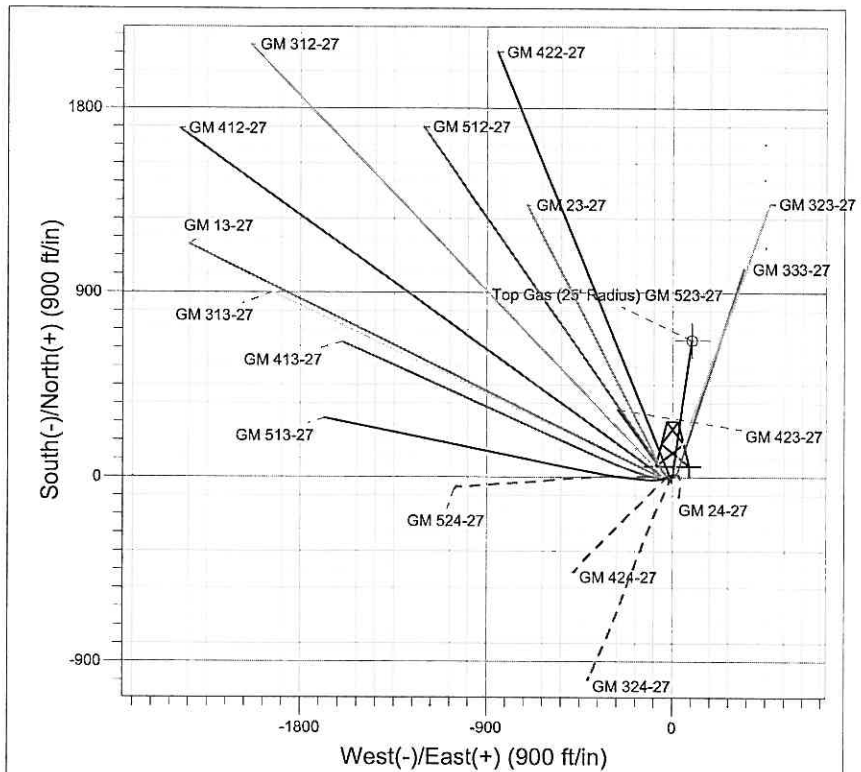
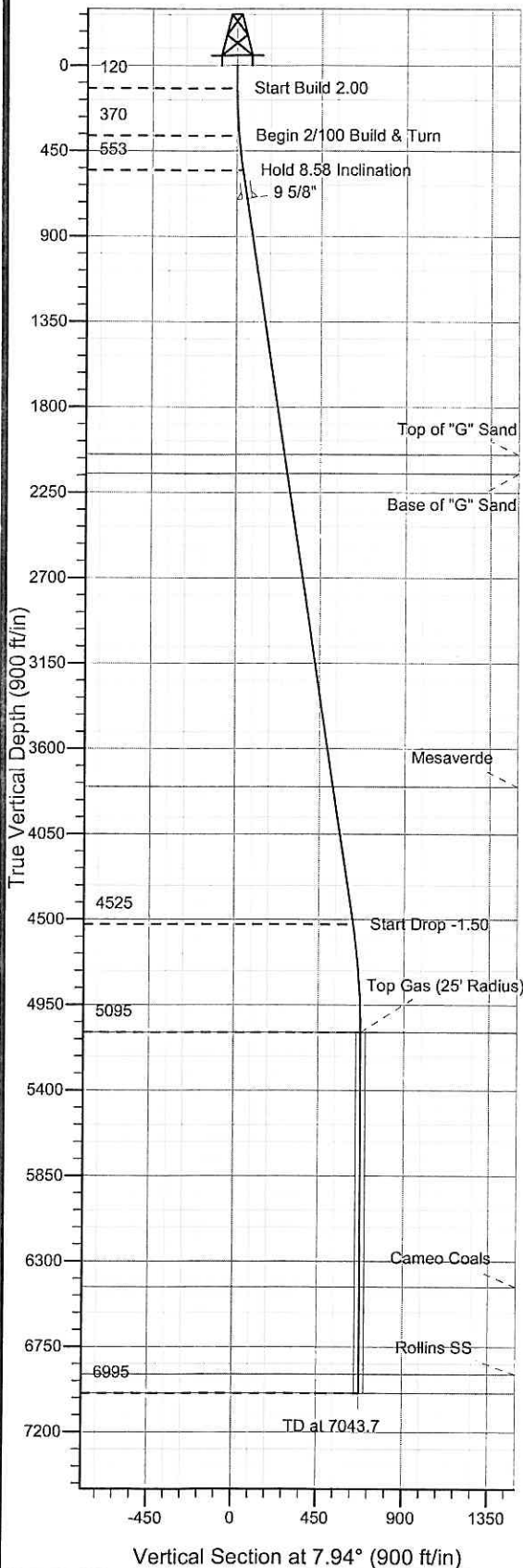




Well Name: GM 523-27
 Surface Location: GM 24-27 Pad
 North American Datum 1983, US State Plane 1983 Colorado Central Zone
 Ground Elevation: 5604.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1614208.20 2267705.30 39° 29' 27.822 N 108° 5' 42.417 W B2
 KELLY BUSHING @ 5628.0ft (H&P 278 (24') kjs)



Project: GV 27-06S-096W
 Site: GM 24-27 Pad
 Well: GM 523-27
 Plan #1 11Dec08 kjs

Mag 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	370.0	5.00	0.00	369.7	10.9	0.0	2.00	0.00	10.8	
4	554.8	8.58	8.17	553.1	32.6	2.0	2.00	19.20	32.6	
5	4571.9	8.58	8.17	4525.4	625.6	87.1	0.00	0.00	631.6	
6	5143.7	0.00	0.00	5095.0	667.9	93.2	1.50	180.00	674.3	Top Gas (25' Radius) GM 523-27
7	7043.7	0.00	0.00	6995.0	667.9	93.2	0.00	0.00	674.3	TD / PBHL GM 523-27

ANNOTATIONS		
TVD	MD	Annotation
120.0	120.0	Start Build 2.00
369.7	370.0	Begin 2/100 Build & Turn
553.1	554.8	Hold 8.58 Inclination
4525.4	4571.9	Start Drop -1.50
5095.0	5143.7	Top Gas
6995.0	7043.7	TD at 7043.7

PICEANCE VLY NAD 83

GV 27-06S-096W

GM 24-27 Pad

GM 523-27 - Slot B2

Wellbore #1

Plan: Plan #1 11Dec08 kjs

Standard Planning Report - Geographic

11 August, 2009

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 523-27
Wellbore: Wellbore #1
Design: Plan #1 11Dec08 kjs

Local Co-ordinate Reference: Well GM 523-27 - Slot B2
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

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 523-27 - Slot B2

Well Position +N/-S 0.0 ft Northing: 1,614,208.20 ft Latitude: 39° 29' 27.822 N
+E/-W 0.0 ft Easting: 2,267,705.30 ft Longitude: 108° 5' 42.417 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	7.94

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	
370.0	5.00	0.00	369.7	10.9	0.0	2.00	2.00	0.00	0.00	
554.8	8.58	8.17	553.1	32.6	2.0	2.00	1.94	4.42	19.20	
4,571.9	8.58	8.17	4,525.4	625.6	87.1	0.00	0.00	0.00	0.00	
5,143.7	0.00	0.00	5,095.0	667.9	93.2	1.50	-1.50	0.00	180.00	Top Gas (25' Radius)
7,043.7	0.00	0.00	6,995.0	667.9	93.2	0.00	0.00	0.00	0.00	TD / PBHL GM 523-2

Williams Production RMT Company

Planning Report - Geographic

Database:	EDMDB_COMPASS	Local Co-ordinate Reference:	Well GM 523-27 - Slot B2
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 523-27	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	1,614,208.20	2,267,705.30	39° 29' 27.822 N	108° 5' 42.417 W
120.0	0.00	0.00	120.0	0.0	0.0	1,614,208.20	2,267,705.30	39° 29' 27.822 N	108° 5' 42.417 W
370.0	5.00	0.00	369.7	10.9	0.0	1,614,219.10	2,267,705.61	39° 29' 27.930 N	108° 5' 42.417 W
554.8	8.58	8.17	553.1	32.6	2.0	1,614,240.73	2,267,708.19	39° 29' 28.144 N	108° 5' 42.392 W
704.0	8.58	8.17	700.7	54.6	5.1	1,614,262.66	2,267,711.98	39° 29' 28.362 N	108° 5' 42.352 W
9 5/8"									
2,068.6	8.58	8.17	2,050.0	256.1	34.0	1,614,463.17	2,267,746.64	39° 29' 30.353 N	108° 5' 41.983 W
Top of "G" Sand									
2,169.7	8.58	8.17	2,150.0	271.0	36.2	1,614,478.03	2,267,749.21	39° 29' 30.500 N	108° 5' 41.956 W
Base of "G" Sand									
3,838.4	8.58	8.17	3,800.0	517.3	71.5	1,614,723.22	2,267,791.59	39° 29' 32.935 N	108° 5' 41.504 W
Mesaverde									
4,571.9	8.58	8.17	4,525.4	625.6	87.1	1,614,831.01	2,267,810.23	39° 29' 34.005 N	108° 5' 41.306 W
5,143.7	0.00	0.00	5,095.0	667.9	93.2	1,614,873.10	2,267,817.50	39° 29' 34.423 N	108° 5' 41.229 W
Approx. Top Gas									
6,483.7	0.00	0.00	6,435.0	667.9	93.2	1,614,873.10	2,267,817.50	39° 29' 34.423 N	108° 5' 41.229 W
Cameo Coals									
6,943.7	0.00	0.00	6,895.0	667.9	93.2	1,614,873.10	2,267,817.50	39° 29' 34.423 N	108° 5' 41.229 W
Rollins SS									
7,043.7	0.00	0.00	6,995.0	667.9	93.2	1,614,873.10	2,267,817.50	39° 29' 34.423 N	108° 5' 41.229 W
TD									

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Top Gas (25' Radius) GI	0.00	0.00	5,095.0	667.9	93.2	1,614,873.10	2,267,817.50	39° 29' 34.423 N	108° 5' 41.229 W
- plan hits target									
- Circle (radius 25.0)									
TD / PBHL GM 523-27	0.00	0.00	6,995.0	667.9	93.2	1,614,873.10	2,267,817.50	39° 29' 34.423 N	108° 5' 41.229 W
- plan hits target									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
704.0	700.7	9 5/8"	9-5/8	12-1/4

Williams Production RMT Company

Planning Report - Geographic

Database:	EDMDB_COMPASS	Local Co-ordinate Reference:	Well GM 523-27 - Slot B2
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 523-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 11Dec08 kjs		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,068.6	2,050.00	Top of "G" Sand			
2,169.7	2,150.00	Base of "G" Sand			
3,838.4	3,800.00	Mesaverde			
5,143.7	5,095.00	Approx. Top Gas			
6,483.7	6,435.00	Cameo Coals			
6,943.7	6,895.00	Rollins SS			
7,043.7	6,995.00	TD			

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 2.00
370.0	369.7	10.9	0.0	Begin 2/100 Build & Turn
554.8	553.1	32.6	2.0	Hold 8.58 Inclination
4,571.9	4,525.4	625.6	87.1	Start Drop -1.50
5,143.7	5,095.0	667.9	93.2	Top Gas
7,043.7	6,995.0	667.9	93.2	TD at 7043.7