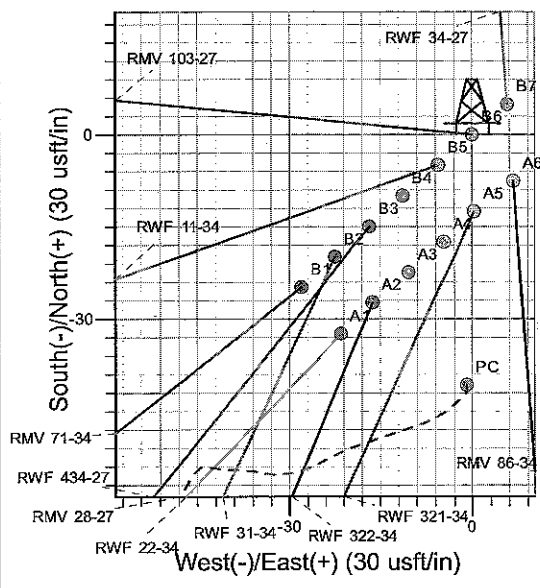
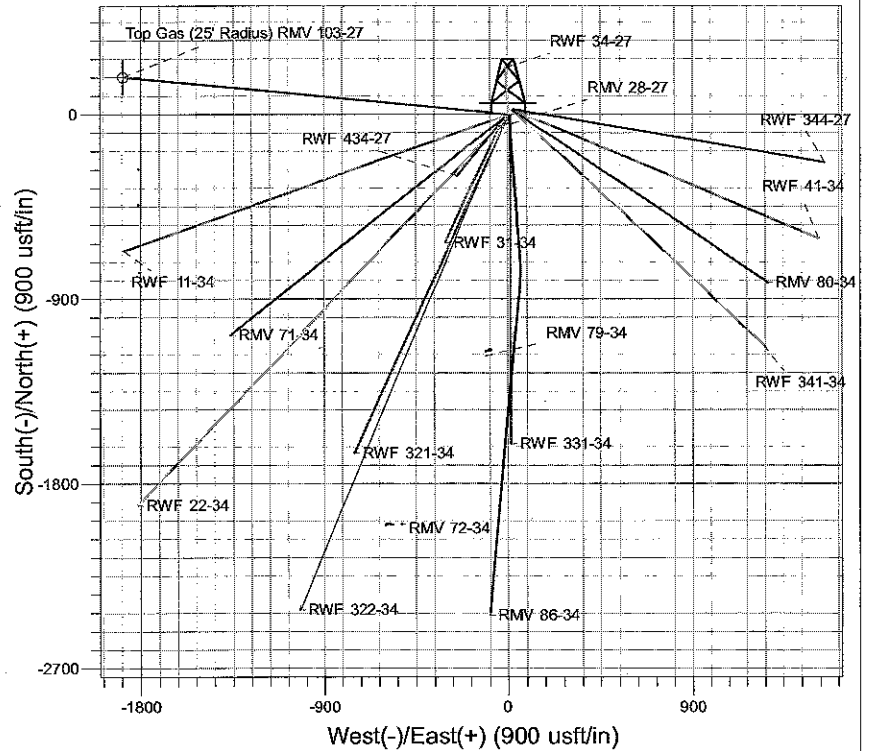
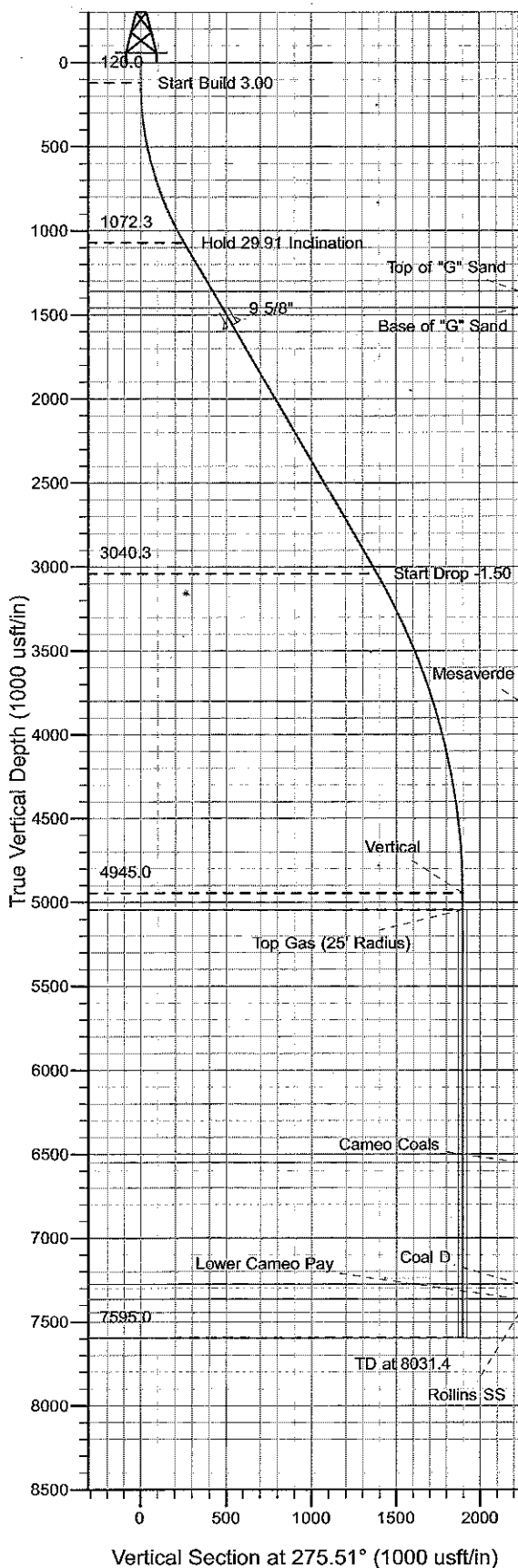




Well Name: RMV 103-27
 Surface Location: RMV 28-27 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 5297.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1612183.90 2330507.00 39° 29' 24.791 N 107° 52' 20.917 W B6
 KELLY BUSHING @ 5321.0usft (H&P (24' RKB) kjs)



Project: RU 27-06S-094W
 Site: RMV 28-27 Pad
 Well: RMV 103-27
 Plan #2 20Apr10 kjs

Asimuths to True North
 Magnetic North: 10.70°
 Magnetic Field
 Strength: 52621.0snT
 Dip Angle: 65.85°
 Date: 3/7/2008
 Model: IGRF2005-10

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
120.0	120.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 3.00
1072.3	1117.0	29.91	275.51	24.4	-253.2	254.4	254.4	Hold 29.91 Inclination
3040.3	3387.4	29.91	275.51	133.2	-1380.1	1386.5	1386.5	Start Drop -1.50
4945.0	5381.4	0.00	0.00	182.0	-1886.5	1895.2	1895.2	Vertical
5045.0	5481.4	0.00	0.00	182.0	-1886.5	1895.2	1895.2	Top Gas
7595.0	8031.4	0.00	0.00	182.0	-1886.5	1895.2	1895.2	TD at 8031.4

PICEANCE VLY NAD 83

RU 27-06S-094W

RMV 28-27 Pad

RMV 103-27 - Slot B6

Wellbore #1

Plan: Plan #2 20Apr10 kjs

Standard Planning Report - Geographic

06 July, 2010

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well RMV 103-27 - Slot B6
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5321.0usft (H&P (24' RKB) kjs)
Project:	RU 27-06S-094W	MD Reference:	KELLY BUSHING @ 5321.0usft (H&P (24' RKB) kjs)
Site:	RMV 28-27 Pad	North Reference:	True
Well:	RMV 103-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 20Apr10 kjs		

Project	RU 27-06S-094W, Garfield County, CO, 27-06S-094W		
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	RMV 28-27 Pad		
Site Position:		Northing:	1,612,143.20 usft
From:	Map	Easting:	2,330,505.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	39° 29' 24.388 N
		Longitude:	107° 52' 20.929 W
		Grid Convergence:	-1.50 °

Well	RMV 103-27 - Slot B6		
Well Position	+N/-S	0.0 usft	Northing: 1,612,183.90 usft
	+E/-W	0.0 usft	Easting: 2,330,507.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 5,297.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2005-10	3/7/2008	10.70
			Dip Angle (°)
			65.85
			Field Strength (nT)
			52,621

Design	Plan #2 20Apr10 kjs		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°)
			275.51

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
0.0	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	
1,117.0	29.91	275.51	1,072.3	24.4	-253.2	3.00	3.00	0.00	275.51	
3,387.4	29.91	275.51	3,040.3	133.2	-1,380.1	0.00	0.00	0.00	0.00	
5,381.4	0.00	0.00	4,945.0	182.0	-1,886.5	1.50	-1.50	0.00	180.00	
5,481.4	0.00	0.00	5,045.0	182.0	-1,886.5	0.00	0.00	0.00	0.00	Top Gas (25' Radius)
8,031.4	0.00	0.00	7,595.0	182.0	-1,886.5	0.00	0.00	0.00	0.00	

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well RMV 103-27 - Slot B6
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5321.0usft (H&P (24' RKB) kjs)
Project:	RU 27-06S-094W	MD Reference:	KELLY BUSHING @ 5321.0usft (H&P (24' RKB) kjs)
Site:	RMV 28-27 Pad	North Reference:	True
Well:	RMV 103-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 20Apr10 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
0.0	0.00	0.00	0.0	0.0	0.0	1,612,183.90	2,330,507.00	39° 29' 24.791 N	107° 52' 20.917 W
120.0	0.00	0.00	120.0	0.0	0.0	1,612,183.90	2,330,507.00	39° 29' 24.791 N	107° 52' 20.917 W
Start Build 3.00									
1,117.0	29.91	275.51	1,072.3	24.4	-253.2	1,612,214.93	2,330,254.54	39° 29' 25.032 N	107° 52' 24.147 W
Hold 29.91 Inclination									
1,448.9	29.91	275.51	1,360.0	40.3	-417.9	1,612,235.11	2,330,090.30	39° 29' 25.189 N	107° 52' 26.248 W
Top of "G" Sand									
1,564.2	29.91	275.51	1,460.0	45.8	-475.2	1,612,242.13	2,330,033.20	39° 29' 25.244 N	107° 52' 26.978 W
Base of "G" Sand									
1,679.6	29.91	275.51	1,560.0	51.4	-532.4	1,612,249.15	2,329,976.11	39° 29' 25.298 N	107° 52' 27.709 W
9 5/8"									
3,387.4	29.91	275.51	3,040.3	133.2	-1,380.1	1,612,353.03	2,329,130.93	39° 29' 26.106 N	107° 52' 38.521 W
Start Drop -1.50									
4,218.5	17.44	275.51	3,800.0	165.1	-1,711.6	1,612,393.67	2,328,800.33	39° 29' 26.422 N	107° 52' 42.750 W
Mesaverde									
5,381.4	0.00	0.00	4,945.0	182.0	-1,886.5	1,612,415.10	2,328,626.00	39° 29' 26.589 N	107° 52' 44.980 W
Vertical									
5,481.4	0.00	0.00	5,045.0	182.0	-1,886.5	1,612,415.10	2,328,626.00	39° 29' 26.589 N	107° 52' 44.980 W
Top Gas - Approx. Top Gas									
6,986.4	0.00	0.00	6,550.0	182.0	-1,886.5	1,612,415.10	2,328,626.00	39° 29' 26.589 N	107° 52' 44.980 W
Cameo Coals									
7,711.4	0.00	0.00	7,275.0	182.0	-1,886.5	1,612,415.10	2,328,626.00	39° 29' 26.589 N	107° 52' 44.980 W
Coal D									
7,801.4	0.00	0.00	7,365.0	182.0	-1,886.5	1,612,415.10	2,328,626.00	39° 29' 26.589 N	107° 52' 44.980 W
Lower Cameo Pay									
7,881.4	0.00	0.00	7,445.0	182.0	-1,886.5	1,612,415.10	2,328,626.00	39° 29' 26.589 N	107° 52' 44.980 W
Rollins SS									
8,031.4	0.00	0.00	7,595.0	182.0	-1,886.5	1,612,415.10	2,328,626.00	39° 29' 26.589 N	107° 52' 44.980 W
TD at 8031.4 - TD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Top Gas (25' Radius) R1	0.00	0.00	5,045.0	182.0	-1,886.5	1,612,415.10	2,328,626.00	39° 29' 26.589 N	107° 52' 44.980 W
- plan hits target center									
- Circle (radius 25.0)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,679.6	1,560.0	9 5/8"	9-5/8	12-1/4	

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well RMV 103-27 - Slot B6
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5321.0usft (H&P (24' RKB) kjs)
Project:	RU 27-06S-094W	MD Reference:	KELLY BUSHING @ 5321.0usft (H&P (24' RKB) kjs)
Site:	RMV 28-27 Pad	North Reference:	True
Well:	RMV 103-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2.20Apr10 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,448.9	1,360.0	Top of "G" Sand				
1,564.2	1,460.0	Base of "G" Sand				
4,218.5	3,800.0	Mesaverde				
5,481.4	5,045.0	Approx. Top Gas				
6,986.4	6,550.0	Cameo Coals				
7,711.4	7,275.0	Coal D				
7,801.4	7,365.0	Lower Cameo Pay				
7,881.4	7,445.0	Rollins SS				
8,031.4	7,595.0	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
120.0	120.0	0.0	0.0	Start Build 3.00	
1,117.0	1,072.3	24.4	-253.2	Hold 29.91 Inclination	
3,387.4	3,040.3	133.2	-1,380.1	Start Drop -1.50	
5,381.4	4,945.0	182.0	-1,886.5	Vertical	
5,481.4	5,045.0	182.0	-1,886.5	Top Gas	
8,031.4	7,595.0	182.0	-1,886.5	TD at 8031.4	