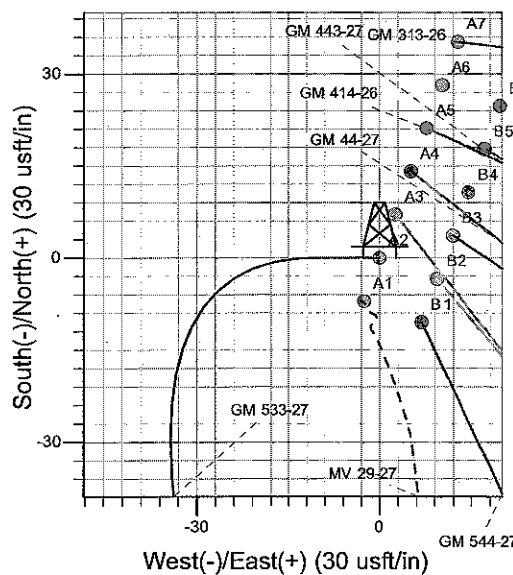
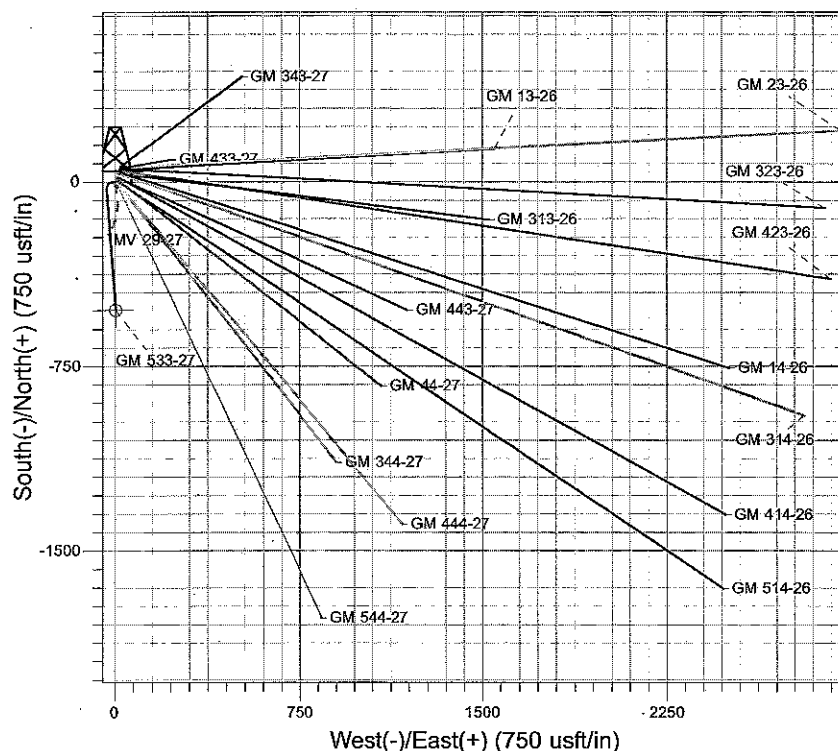
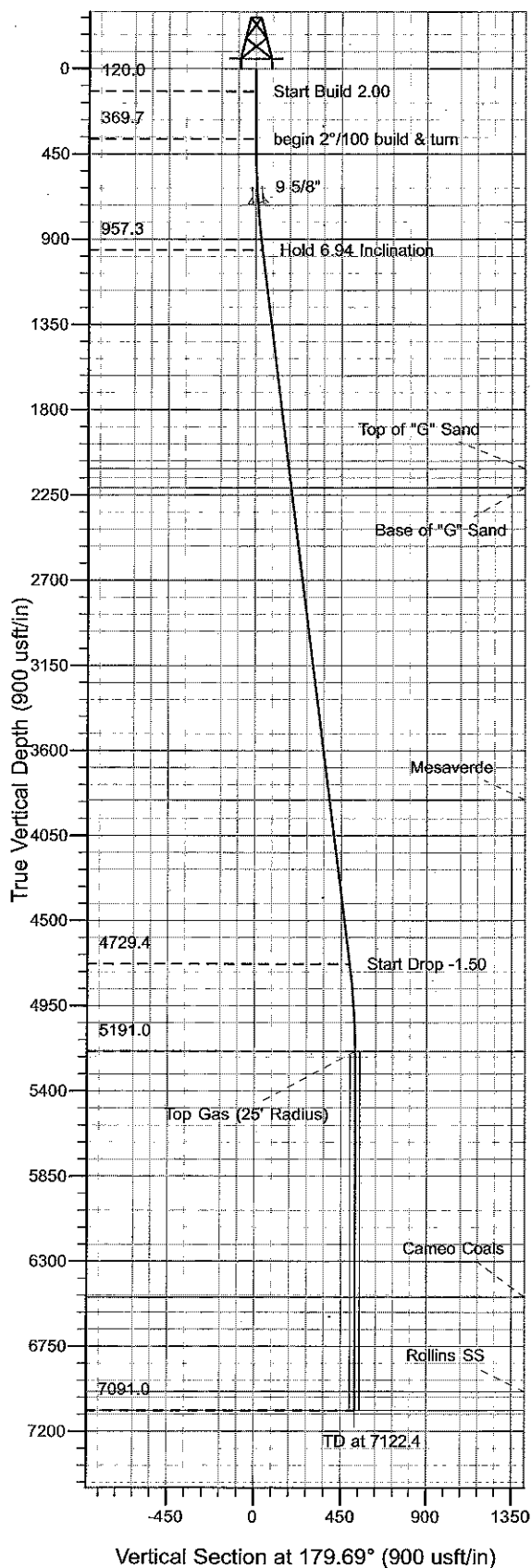




Well Name: GM 533-27
 Surface Location: MV 29-27 Pad
 North American Datum 1983 , US State Plane 1983, Colorado Central Zone
 Ground Elevation: 5659.0
 +N/-S 0.0 +E/-W 0.0 Northing 1614939.97 Easting 2269188.26 Latitude 39° 29' 35.470 N Longitude 108° 5' 23.774 W Slot A2
 KELLY BUSHING @ 5683.0usft (H&P (24"KB) JMS)



Project: RU 27-06S-096W
 Site: MV 29-27 Pad
 Well: GM 533-27
 Plan #1 29Jan09 kjs

Azimuths to True North
 Magnetic North: 10.68°
 Magnetic Field
 Strength: 52503.2snT
 Dip Angle: 65.79°
 Date: 1/29/2009
 Model: IGRF2005-10

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
120.0	120.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 2.00
369.7	370.0	5.00	270.00	-10.9	-10.9	10.9	10.9	begin 2°/100 build & turn
957.3	959.7	6.94	175.70	-35.6	-34.0	35.4	60.3	Hold 6.94 Inclination
4729.4	4759.7	6.94	175.70	-493.5	0.4	493.5	519.5	Start Drop -1.50
5191.0	5222.4	0.00	0.00	-521.4	2.5	521.4	547.5	Top Gas
7091.0	7122.4	0.02	90.00	-521.4	2.8	521.4	547.8	TD at 7122.4

PICEANCE VLY NAD 83

RU 27-06S-096W

MV 29-27 Pad

GM 533-27 - Slot A2

Wellbore #1

Plan: Plan #1 29Jan09 kjs

Standard Planning Report - Geographic

05 May, 2010

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well GM 533-27 - Slot A2
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5683.0usft (H&P (24'KB) JMS)
Project:	RU 27-06S-096W	MD Reference:	KELLY BUSHING @ 5683.0usft (H&P (24'KB) JMS)
Site:	MV 29-27 Pad	North Reference:	True
Well:	GM 533-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 29Jan09 kjs		

Project	RU 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		

Site	MV 29-27 Pad		
Site Position:		Northing:	1,614,933.00 usft
From:	Map	Easting:	2,269,185.50 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in
		Latitude:	39° 29' 35.400 N
		Longitude:	108° 5' 23.807 W
		Grid Convergence:	-1.633 °

Well	GM 533-27 - Slot A2					
Well Position	+N/-S	0.0 usft	Northing:	1,614,939.97 usft	Latitude:	39° 29' 35.470 N
	+E/-W	0.0 usft	Easting:	2,269,188.26 usft	Longitude:	108° 5' 23.774 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	5,659.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	1/29/2009	10.680	65.793	52,503

Design	Plan #1 29Jan09 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	179.69

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	0.000	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.00	0.000	
370.0	5.00	270.00	369.7	0.0	-10.9	2.00	2.00	0.00	270.000	
959.7	6.94	175.70	957.3	-35.6	-34.0	1.50	0.33	-15.99	-128.410	
4,759.7	6.94	175.70	4,729.4	-493.5	0.4	0.00	0.00	0.00	0.000	
5,222.4	0.00	0.00	5,191.0	-521.4	2.5	1.50	-1.50	0.00	180.000	Top Gas (25' Radius)
7,122.4	0.02	90.00	7,091.0	-521.4	2.8	0.00	0.00	4.74	90.000	TD / PBHL GM 533-2

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well GM 533-27 - Slot A2
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5683.0usft (H&P (24'KB) JMS)
Project:	RU 27-06S-096W	MD Reference:	KELLY BUSHING @ 5683.0usft (H&P (24'KB) JMS)
Site:	MV 29-27 Pad	North Reference:	True
Well:	GM 533-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 29Jan09 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	1,614,939.97	2,269,188.26	39° 29' 35.470 N	108° 5' 23.774 W
120.0	0.00	0.00	120.0	0.0	0.0	1,614,939.97	2,269,188.26	39° 29' 35.470 N	108° 5' 23.774 W
Start Build 2.00									
370.0	5.00	270.00	369.7	0.0	-10.9	1,614,940.28	2,269,177.36	39° 29' 35.470 N	108° 5' 23.913 W
begin 2°/100 build & turn									
712.0	4.40	204.18	710.8	-12.0	-31.2	1,614,928.88	2,269,156.73	39° 29' 35.351 N	108° 5' 24.172 W
9 5/8"									
959.7	6.94	175.70	957.3	-35.6	-34.0	1,614,905.35	2,269,153.28	39° 29' 35.118 N	108° 5' 24.208 W
Hold 6.94 Inclination									
2,121.9	6.94	175.70	2,111.0	-175.6	-23.4	1,614,765.06	2,269,159.82	39° 29' 33.734 N	108° 5' 24.073 W
Top of "G" Sand									
2,222.7	6.94	175.70	2,211.0	-187.8	-22.5	1,614,752.90	2,269,160.38	39° 29' 33.614 N	108° 5' 24.062 W
Base of "G" Sand									
3,884.9	6.94	175.70	3,861.0	-388.1	-7.5	1,614,552.26	2,269,169.72	39° 29' 31.634 N	108° 5' 23.870 W
Mesaverde									
4,759.7	6.94	175.70	4,729.4	-493.5	0.4	1,614,446.66	2,269,174.64	39° 29' 30.592 N	108° 5' 23.769 W
Start Drop -1.50									
5,222.4	0.00	0.00	5,191.0	-521.4	2.5	1,614,418.70	2,269,175.94	39° 29' 30.317 N	108° 5' 23.742 W
Top Gas - Approx. Top Gas									
6,522.4	0.01	90.00	6,491.0	-521.4	2.7	1,614,418.70	2,269,176.06	39° 29' 30.317 N	108° 5' 23.740 W
Cameo Coals									
7,022.4	0.01	90.00	6,991.0	-521.4	2.8	1,614,418.70	2,269,176.17	39° 29' 30.317 N	108° 5' 23.739 W
Rollins SS									
7,122.4	0.02	90.00	7,091.0	-521.4	2.8	1,614,418.70	2,269,176.20	39° 29' 30.317 N	108° 5' 23.739 W
TD at 7122.4 - 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) GI	0.00	0.00	5,191.0	-521.4	2.8	1,614,418.70	2,269,176.20	39° 29' 30.317 N	108° 5' 23.739 W
- plan misses target center by 0.3usft at 5222.4usft MD (5191.0 TVD, -521.4 N, 2.5 E)									
- Circle (radius 25.0)									
TD / PBHL GM 533-27	0.00	0.00	7,091.0	-521.4	2.8	1,614,418.70	2,269,176.20	39° 29' 30.317 N	108° 5' 23.739 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)		Name	Casing Diameter (in)	Hole Diameter (in)
712.0	710.8	9 5/8"		9.625	12.250

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well GM 533-27 - Slot A2
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5683.0usft (H&P (24'KB) JMS)
Project:	RU 27-06S-096W	MD Reference:	KELLY BUSHING @ 5683.0usft (H&P (24'KB) JMS)
Site:	MV 29-27 Pad	North Reference:	True
Well:	GM 533-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 29Jan09 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,121.9	2,111.0	Top of "G" Sand				
2,222.7	2,211.0	Base of "G" Sand				
3,884.9	3,861.0	Mesaverde				
5,222.4	5,191.0	Approx. Top Gas				
6,522.4	6,491.0	Carneo Coals				
7,022.6	6,991.0	Rollins SS				
7,122.4	7,091.0	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 2.00	
370.0	369.7	0.0	-10.9	begin 2°/100 build & turn	
959.7	957.3	-35.6	-34.0	Hold 6.94 Inclination	
4,759.7	4,729.4	-493.5	0.4	Start Drop -1.50	
5,222.4	5,191.0	-521.4	2.5	Top Gas	
7,122.4	7,091.0	-521.4	2.8	TD at 7122.4	