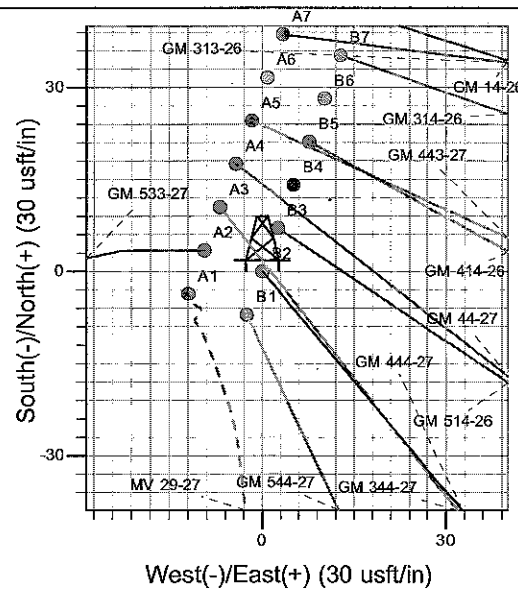
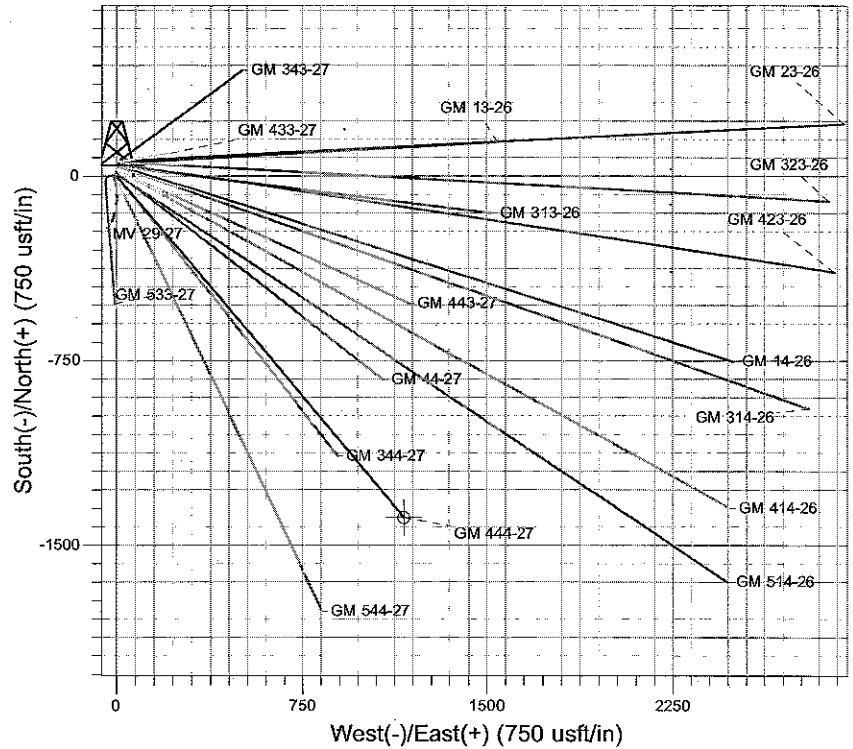
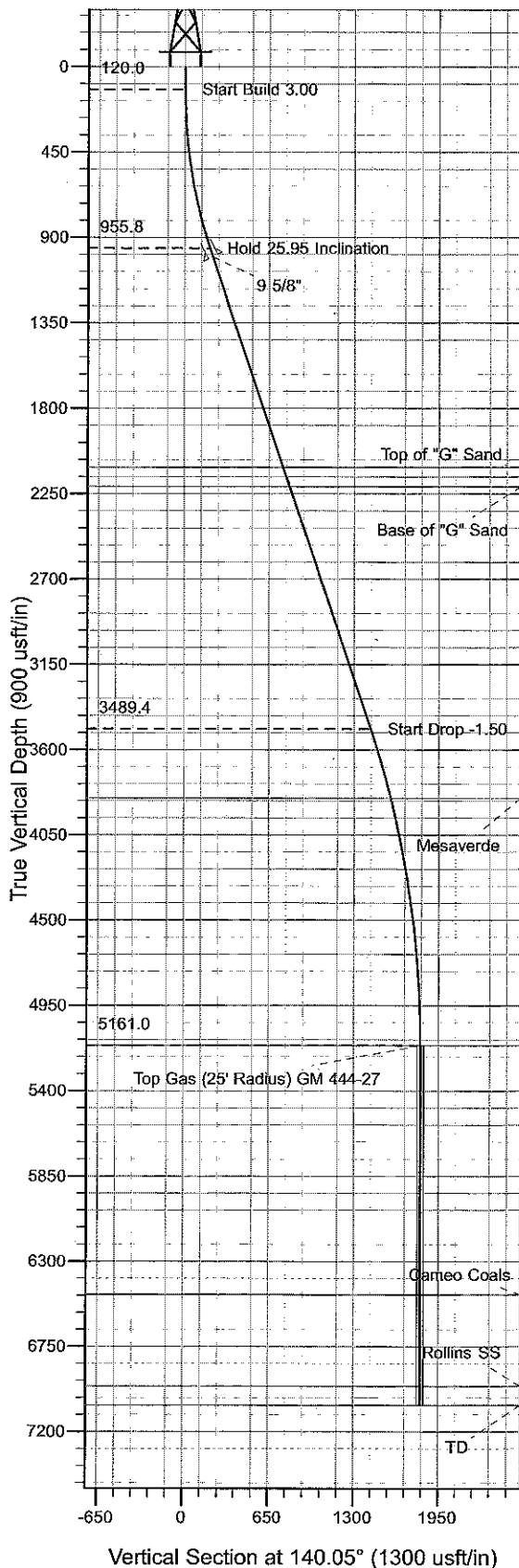





Well Name: GM 444-27
 Surface Location: MV 29-27 Pad
 North American Datum 1983 , US State Plane 1983, Colorado Central Zone
 Ground Elevation: 5659.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1614936.30 2269197.56 39° 29' 35.436 N 108° 5' 23.654 W B2
 KELLY BUSHING @ 5683.0usft (H&P 271 (24*KB) JMS)



Project: RU 27-06S-096W
 Site: MV 29-27 Pad
 Well: GM 444-27
 Plan #1 29Jan09 kjs


 Azimuths to True North
 Magnetic North: 10.68°
 Magnetic Field
 Strength: 52503.2nT
 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 3.00
955.8	985.1	25.95	140.05	-147.7	123.7	192.6	192.6	Hold 25.95 Inclination
3489.4	3802.8	25.95	140.05	-1093.0	915.4	1425.7	1425.7	Start Drop -1.50
5161.0	5533.0	0.00	0.00	-1368.3	1162.8	1810.9	1810.9	Top Gas
7061.0	7433.0	0.00	0.00	-1368.3	1162.8	1810.9	1810.9	TD at 7433.0

PICEANCE VLY NAD 83

RU 27-06S-096W

MV 29-27 Pad

GM 444-27 - Slot B2

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 444-27 - Slot B2
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5683.0usft (H&P 271 (24'KB) JMS)
Project:	RU 27-06S-096W	MD Reference:	KELLY BUSHING @ 5683.0usft (H&P 271 (24'KB) JMS)
Site:	MV 29-27 Pad	North Reference:	True
Well:	GM 444-27	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	Latitude: 39° 29' 35.400 N
From:	Map	Easting:	2,269,185.50 usft	Longitude: 108° 5' 23.807 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence: -1.633 °

Well	GM 444-27 - Slot B2			
Well Position	+N/-S	0.0 usft	Northing: 1,614,936.29 usft	Latitude: 39° 29' 35.436 N
	+E/-W	0.0 usft	Easting: 2,269,197.56 usft	Longitude: 108° 5' 23.654 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	140.05

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	
985.1	25.95	140.05	955.8	-147.7	123.7	3.00	3.00	0.00	140.052	
3,802.8	25.95	140.05	3,489.4	-1,093.0	915.4	0.00	0.00	0.00	0.000	
5,533.0	0.00	0.00	5,161.0	-1,388.3	1,162.8	1.50	-1.50	0.00	180.000	Top Gas (25' Radius)
7,433.0	0.00	0.00	7,061.0	-1,388.3	1,162.8	0.00	0.00	0.00	0.000	

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Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well GM 444-27 - Slot B2
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5683.0usft (H&P 271 (24'KB) JMS)
Project:	RU 27-06S-096W	MD Reference:	KELLY BUSHING @ 5683.0usft (H&P 271 (24'KB) JMS)
Site:	MV 29-27 Pad	North Reference:	True
Well:	GM 444-27	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	1,614,936.29	2,269,197.56	39° 29' 35.436 N	108° 5' 23.654 W
120.0	0.00	0.00	120.0	0.0	0.0	1,614,936.29	2,269,197.56	39° 29' 35.436 N	108° 5' 23.654 W
Start Build 3.00									
985.1	25.95	140.05	955.8	-147.7	123.7	1,614,785.17	2,269,316.97	39° 29' 33.977 N	108° 5' 22.077 W
Hold 25.95 Inclination									
1,035.0	25.95	140.05	1,000.7	-164.4	137.7	1,614,768.04	2,269,330.51	39° 29' 33.811 N	108° 5' 21.898 W
9 5/8"									
2,269.8	25.95	140.05	2,111.0	-578.7	484.7	1,614,344.02	2,269,665.55	39° 29' 29.717 N	108° 5' 17.472 W
Top of "G" Sand									
2,381.1	25.95	140.05	2,211.0	-616.0	515.9	1,614,305.83	2,269,695.73	39° 29' 29.348 N	108° 5' 17.073 W
Base of "G" Sand									
3,802.8	25.95	140.05	3,489.4	-1,093.0	915.4	1,613,817.64	2,270,081.48	39° 29' 24.633 N	108° 5' 11.977 W
Start Drop -1.50									
4,201.2	19.98	140.05	3,856.0	-1,212.1	1,015.2	1,613,695.73	2,270,177.80	39° 29' 23.456 N	108° 5' 10.705 W
Mesaverde									
5,533.0	0.00	0.00	5,161.0	-1,388.3	1,162.8	1,613,515.40	2,270,320.30	39° 29' 21.714 N	108° 5' 8.822 W
Top Gas - Approx. Top Gas									
6,848.0	0.00	0.00	6,476.0	-1,388.3	1,162.8	1,613,515.40	2,270,320.30	39° 29' 21.714 N	108° 5' 8.822 W
Cameo Coals									
7,333.0	0.00	0.00	6,961.0	-1,388.3	1,162.8	1,613,515.40	2,270,320.30	39° 29' 21.714 N	108° 5' 8.822 W
Rollins SS									
7,433.0	0.00	0.00	7,061.0	-1,388.3	1,162.8	1,613,515.40	2,270,320.30	39° 29' 21.714 N	108° 5' 8.822 W
TD at 7433.0									

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	5,161.0	-1,388.3	1,162.8	1,613,515.40	2,270,320.30	39° 29' 21.714 N	108° 5' 8.822 W
- plan hits target center									
- Circle (radius 25.0)									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,035.0	1,000.7	9 5/8"	9.625	12.250

Williams

Planning Report - Geographic

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Project:	RU 27-06S-096W	MD Reference:	KELLY BUSHING @ 5683.0usft (H&P 271 (24'KB) JMS)
Site:	MV 29-27 Pad	North Reference:	True
Well:	GM 444-27	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 (°)	
2,269.8	2,111.0	Top of "G" Sand				
2,381.1	2,211.0	Base of "G" Sand				
4,201.2	3,856.0	Mesaverde				
5,533.0	5,161.0	Approx. Top Gas				
6,848.0	6,476.0	Cameo Coals				
7,333.0	6,961.0	Rollins SS				
7,433.0	7,061.0	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	
985.1	955.8	-147.7	123.7	Hold 25.95 Inclination	
3,802.8	3,489.4	-1,093.0	915.4	Start Drop -1.50	
5,533.0	5,161.0	-1,388.3	1,162.8	Top Gas	
7,433.0	7,061.0	-1,388.3	1,162.8	TD at 7433.0	