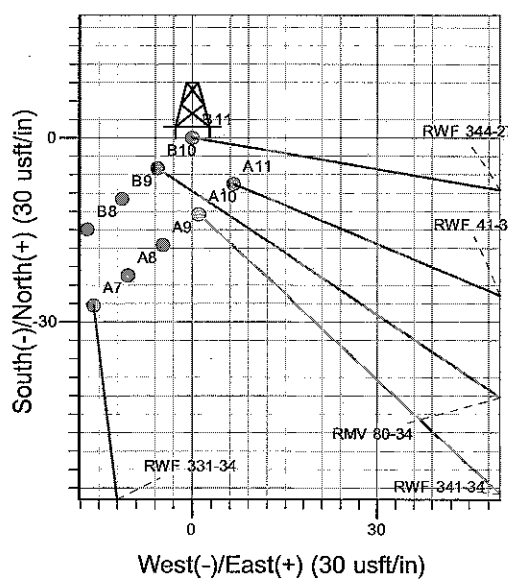
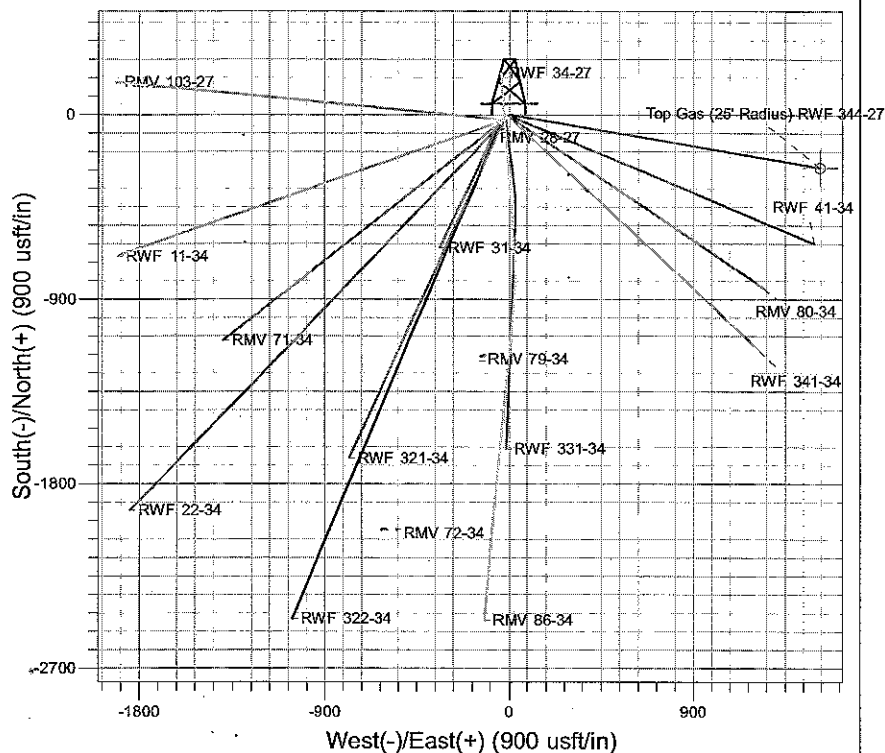
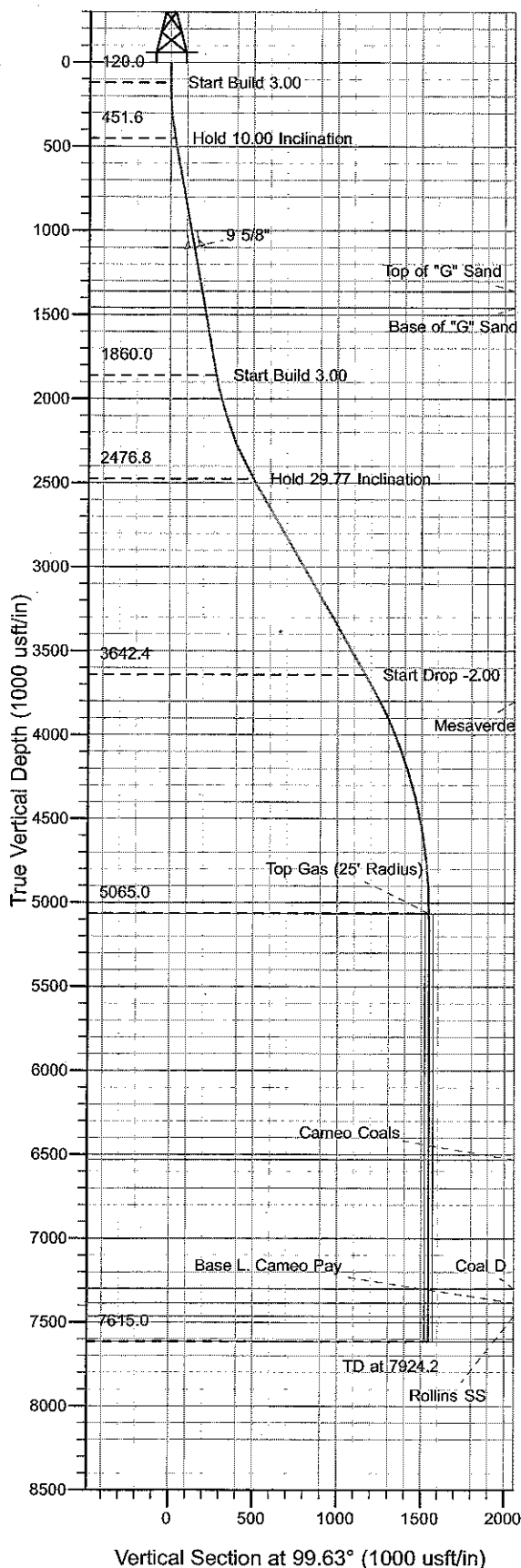




Well Name: RWF 344-27
 Surface Location: RMV 28-27 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 5297.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1612207.90 2330535.80 39° 29' 25.035 N 107° 52' 20.558 W B11
 KELLY BUSHING @ 5321.0usft (H&P (24' RKB) kjs)



Project: RU 27-06S-094W
 Site: RMV 28-27 Pad
 Well: RWF 344-27
 Plan #2 20Apr10 kjs

M Azimuths to True North
 Magnetic North: 10.70°
 Magnetic Field
 Strength: 52621.0nT
 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
451.6	453.3	10.00	99.63	-4.9	28.6	29.0	29.0	Hold 10.00 Inclination
1860.0	1883.4	10.00	99.63	-46.4	273.4	277.3	277.3	Start Build 3.00
2476.8	2542.6	29.77	99.63	-83.7	493.4	500.5	500.5	Hold 29.77 Inclination
3642.4	3885.5	29.77	99.63	-195.3	1150.9	1167.3	1167.3	Start Drop -2.00
5065.0	5374.2	0.00	0.00	-258.5	1523.7	1545.5	1545.5	Top Gas
7615.0	7924.2	0.00	0.00	-258.5	1523.7	1545.5	1545.5	TD at 7924.2

PICEANCE VLY NAD 83

RU 27-06S-094W

RMV 28-27 Pad

RWF 344-27 - Slot B11

Wellbore #1

Plan: Plan #2 20Apr10 kjs

Standard Planning Report - Geographic

07 July, 2010

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well RWF 344-27 - Slot B11
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:	RWF 344-27	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	RWF 344-27 - Slot B11		
Well Position	+N/-S	0.0 usft	Northing: 1,612,207.90 usft
	+E/-W	0.0 usft	Easting: 2,330,535.80 usft
Position Uncertainty	0.0 usft		Latitude: 39° 29' 25.035 N
			Longitude: 107° 52' 20.558 W
		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
			(°)
			99.63

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	
453.3	10.00	99.63	451.6	-4.9	28.6	3.00	3.00	0.00	99.63	
1,883.4	10.00	99.63	1,860.0	-46.4	273.4	0.00	0.00	0.00	0.00	
2,542.6	29.77	99.63	2,476.8	-83.7	493.4	3.00	3.00	0.00	0.00	
3,885.5	29.77	99.63	3,642.4	-195.3	1,150.9	0.00	0.00	0.00	0.00	
5,374.2	0.00	0.00	5,065.0	-258.5	1,523.7	2.00	-2.00	0.00	180.00	Top Gas (25' Radius)
7,924.2	0.00	0.00	7,615.0	-258.5	1,523.7	0.00	0.00	0.00	0.00	

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well RWF 344-27 - Slot B11
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:	RWF 344-27	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	1,612,207.90	2,330,535.80	39° 29' 25.035 N	107° 52' 20.558 W
120.0	0.00	0.00	120.0	0.0	0.0	1,612,207.90	2,330,535.80	39° 29' 25.035 N	107° 52' 20.558 W
Start Build 3.00									
453.3	10.00	99.63	451.6	-4.9	28.6	1,612,202.30	2,330,564.27	39° 29' 24.987 N	107° 52' 20.193 W
Hold 10.00 Inclination									
1,111.7	10.00	99.63	1,100.0	-24.0	141.3	1,612,180.24	2,330,676.44	39° 29' 24.798 N	107° 52' 18.755 W
9 5/8"									
1,375.7	10.00	99.63	1,360.0	-31.6	186.5	1,612,171.39	2,330,721.42	39° 29' 24.722 N	107° 52' 18.179 W
Top of "G" Sand									
1,477.2	10.00	99.63	1,460.0	-34.6	203.9	1,612,167.99	2,330,738.72	39° 29' 24.693 N	107° 52' 17.957 W
Base of "G" Sand									
1,883.4	10.00	99.63	1,860.0	-46.4	273.4	1,612,154.38	2,330,807.92	39° 29' 24.577 N	107° 52' 17.070 W
Start Build 3.00									
2,542.6	29.77	99.63	2,476.8	-83.7	493.4	1,612,111.33	2,331,026.83	39° 29' 24.208 N	107° 52' 14.264 W
Hold 29.77 Inclination									
3,885.5	29.77	99.63	3,642.4	-195.3	1,150.9	1,611,982.66	2,331,681.14	39° 29' 23.105 N	107° 52' 5.878 W
Start Drop -2.00									
4,064.0	26.20	99.63	3,800.0	-209.3	1,233.5	1,611,966.50	2,331,763.33	39° 29' 22.967 N	107° 52' 4.825 W
Mesaverde									
5,374.2	0.00	0.00	5,065.0	-258.5	1,523.7	1,611,909.70	2,332,052.20	39° 29' 22.480 N	107° 52' 1.122 W
Top Gas - Approx. Top Gas									
6,839.2	0.00	0.00	6,530.0	-258.5	1,523.7	1,611,909.70	2,332,052.20	39° 29' 22.480 N	107° 52' 1.122 W
Cameo Coals									
7,609.2	0.00	0.00	7,300.0	-258.5	1,523.7	1,611,909.70	2,332,052.20	39° 29' 22.480 N	107° 52' 1.122 W
Coal D									
7,694.2	0.00	0.00	7,385.0	-258.5	1,523.7	1,611,909.70	2,332,052.20	39° 29' 22.480 N	107° 52' 1.122 W
Base L. Cameo Pay									
7,774.2	0.00	0.00	7,465.0	-258.5	1,523.7	1,611,909.70	2,332,052.20	39° 29' 22.480 N	107° 52' 1.122 W
Rollins SS									
7,924.2	0.00	0.00	7,615.0	-258.5	1,523.7	1,611,909.70	2,332,052.20	39° 29' 22.480 N	107° 52' 1.122 W
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	5,065.0	-258.5	1,523.7	1,611,909.70	2,332,052.20	39° 29' 22.480 N	107° 52' 1.122 W
- plan hits target center									
- Circle (radius 25.0)									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,111.7	1,100.0	9 5/8"	9-5/8	12-1/4

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well RWF 344-27 - Slot B11
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:	RWF 344-27	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 (°)	
1,375.7	1,360.0	Top of "G" Sand				
1,477.2	1,460.0	Base of "G" Sand				
4,064.0	3,800.0	Mesaverde				
5,374.2	5,065.0	Approx. Top Gas				
6,839.2	6,530.0	Cameo Coals				
7,609.2	7,300.0	Coal D				
7,694.2	7,385.0	Base L. Cameo Pay				
7,774.2	7,465.0	Rollins SS				
7,924.2	7,615.0	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	
453.3	451.6	-4.9	28.6	Hold 10.00 Inclination	
1,883.4	1,860.0	-46.4	273.4	Start Build 3.00	
2,542.6	2,476.8	-83.7	493.4	Hold 29.77 Inclination	
3,885.5	3,642.4	-195.3	1,150.9	Start Drop -2.00	
5,374.2	5,065.0	-258.5	1,523.7	Top Gas	
7,924.2	7,615.0	-258.5	1,523.7	TD at 7924.2	