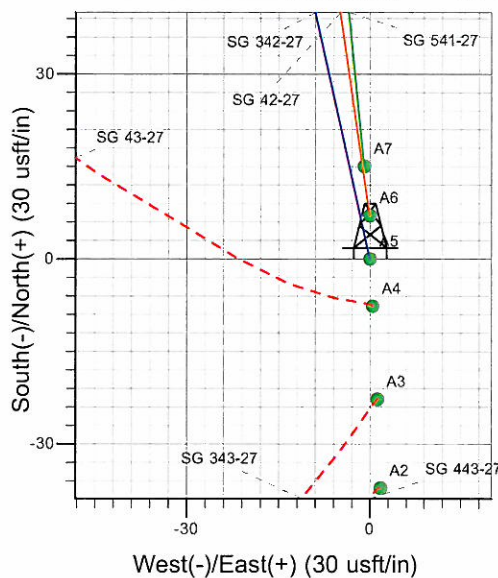
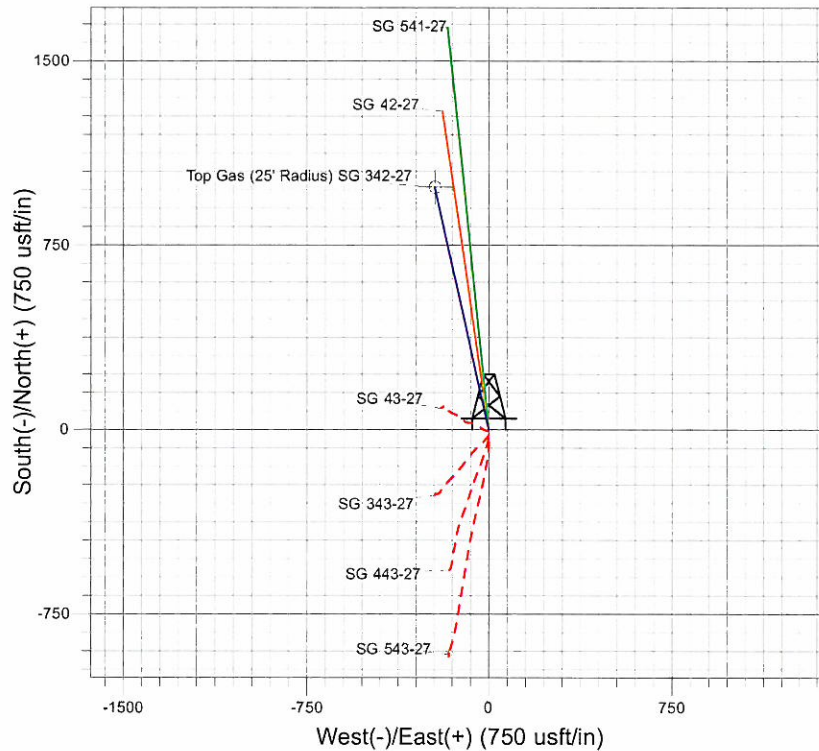
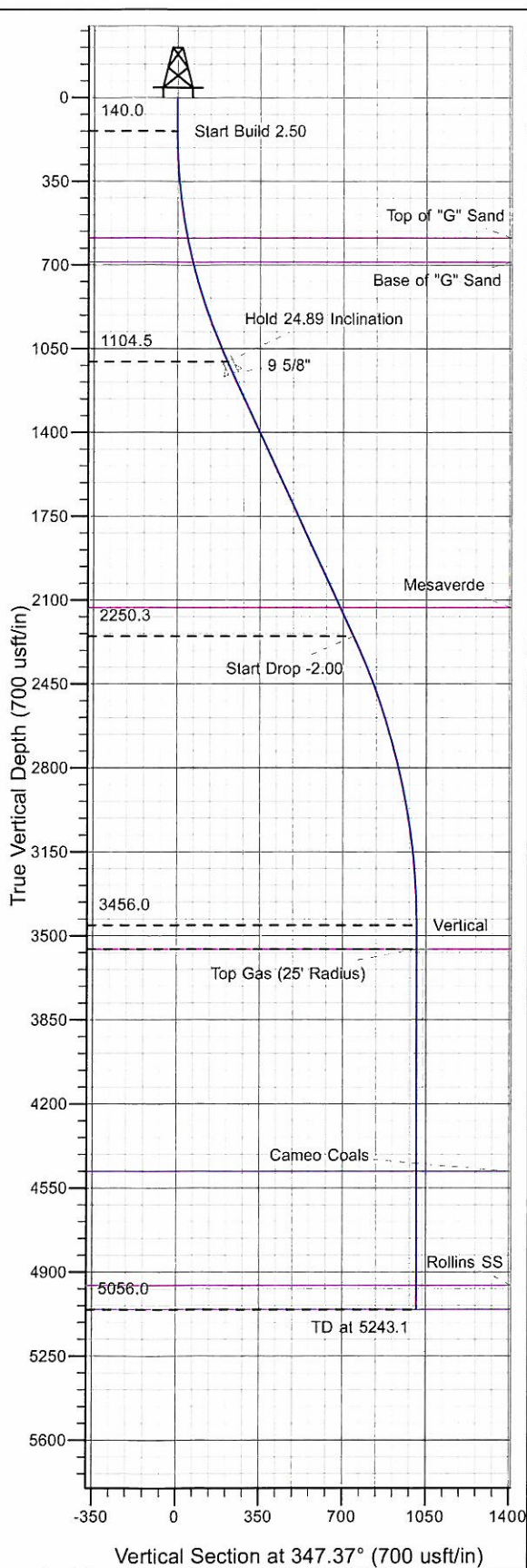




Well Name: SG 342-27
 Surface Location: SG 43-27 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 5018.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1583893.70 2268793.20 39° 24' 28.630 N 108° 5' 17.530 W A5
 WELL @ 5042.0usft (Original Well Elev)



Project: SG 27-07S-096W
 Site: SG 43-27 Pad
 Well: SG 342-27
 Design #1 14Jun10 kjs

Azimuths to True North
 Magnetic North: 10.51°
 Magnetic Field
 Strength: 52298.6snT
 Dip Angle: 65.68°
 Date: 6/14/2010
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
140.0	140.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 2.50
1104.5	1135.5	24.89	347.37	207.7	-46.5	212.8	212.8	Hold 24.89 Inclination
2250.3	2398.7	24.89	347.37	726.4	-162.7	744.4	744.4	Start Drop -2.00
3456.0	3643.1	0.00	0.00	986.1	-220.9	1010.5	1010.5	Vertical
3556.0	3743.1	0.00	0.00	986.1	-220.9	1010.5	1010.5	Top Gas
5056.0	5243.1	0.00	0.00	986.1	-220.9	1010.5	1010.5	TD at 5243.1

PICEANCE VLY NAD 83

SG 27-07S-096W

SG 43-27 Pad

SG 342-27 - Slot A5

Wellbore #1

Plan: Design #1 14Jun10 kjs

Standard Planning Report - Geographic

03 August, 2010

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well SG 342-27 - Slot A5
Company:	PICEANCE VLY NAD 83	TVD Reference:	WELL @ 5042.0usft (Original Well Elev)
Project:	SG 27-07S-096W	MD Reference:	WELL @ 5042.0usft (Original Well Elev)
Site:	SG 43-27 Pad	North Reference:	True
Well:	SG 342-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 14Jun10 kjs		

Project	SG 27-07S-096W, Garfield County, CO, 27-07S-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	SG 43-27 Pad		
Site Position:		Northing:	1,583,886.00 usft
From:	Map	Easting:	2,268,793.40 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in
		Latitude:	39° 24' 28.554 N
		Longitude:	108° 5' 17.525 W
		Grid Convergence:	-1.632 °

Well	SG 342-27 - Slot A5		
Well Position	+N/-S	0.0 usft	Northing: 1,583,893.70 usft
	+E/-W	0.0 usft	Easting: 2,268,793.20 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 39° 24' 28.630 N
			Longitude: 108° 5' 17.530 W
			Ground Level: 5,018.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/14/2010	10.511	65.676	52,299

Design	Design #1 14Jun10 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	347.37

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	
140.0	0.00	0.00	140.0	0.0	0.0	0.00	0.00	0.00	0.000	
1,135.5	24.89	347.37	1,104.5	207.7	-46.5	2.50	2.50	0.00	347.374	
2,398.7	24.89	347.37	2,250.3	726.4	-162.7	0.00	0.00	0.00	0.000	
3,643.1	0.00	0.00	3,456.0	986.1	-220.9	2.00	-2.00	0.00	180.000	
3,743.1	0.00	0.00	3,556.0	986.1	-220.9	0.00	0.00	0.00	0.000	Top Gas (25' Radius)
5,243.1	0.00	0.00	5,056.0	986.1	-220.9	0.00	0.00	0.00	0.000	

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well SG 342-27 - Slot A5
Company:	PICEANCE VLY NAD 83	TVD Reference:	WELL @ 5042.0usft (Original Well Elev)
Project:	SG 27-07S-096W	MD Reference:	WELL @ 5042.0usft (Original Well Elev)
Site:	SG 43-27 Pad	North Reference:	True
Well:	SG 342-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 14Jun10 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	1,583,893.70	2,268,793.20	39° 24' 28.630 N	108° 5' 17.530 W
140.0	0.00	0.00	140.0	0.0	0.0	1,583,893.70	2,268,793.20	39° 24' 28.630 N	108° 5' 17.530 W
Start Build 2.50									
589.9	11.25	347.37	587.0	42.9	-9.6	1,583,936.90	2,268,784.81	39° 24' 29.055 N	108° 5' 17.653 W
Top of "G" Sand									
692.3	13.81	347.37	687.0	64.6	-14.5	1,583,958.71	2,268,780.57	39° 24' 29.269 N	108° 5' 17.715 W
Base of "G" Sand									
1,135.5	24.89	347.37	1,104.5	207.7	-46.5	1,584,102.63	2,268,752.61	39° 24' 30.683 N	108° 5' 18.123 W
Hold 24.89 Inclination									
1,186.0	24.89	347.37	1,150.3	228.4	-51.2	1,584,123.47	2,268,748.56	39° 24' 30.888 N	108° 5' 18.182 W
9 5/8"									
2,268.2	24.89	347.37	2,132.0	672.9	-150.7	1,584,570.54	2,268,661.71	39° 24' 35.280 N	108° 5' 19.451 W
Mesaverde									
2,398.7	24.89	347.37	2,250.3	726.4	-162.7	1,584,624.43	2,268,651.24	39° 24' 35.810 N	108° 5' 19.603 W
Start Drop -2.00									
3,643.1	0.00	0.00	3,456.0	986.1	-220.9	1,584,885.60	2,268,600.50	39° 24' 38.376 N	108° 5' 20.344 W
Vertical									
3,743.1	0.00	0.00	3,556.0	986.1	-220.9	1,584,885.60	2,268,600.50	39° 24' 38.376 N	108° 5' 20.344 W
Top Gas - Approx. Top Gas									
4,668.1	0.00	0.00	4,481.0	986.1	-220.9	1,584,885.60	2,268,600.50	39° 24' 38.376 N	108° 5' 20.344 W
Cameo Coals									
5,143.1	0.00	0.00	4,956.0	986.1	-220.9	1,584,885.60	2,268,600.50	39° 24' 38.376 N	108° 5' 20.344 W
Rollins SS									
5,243.1	0.00	0.00	5,056.0	986.1	-220.9	1,584,885.60	2,268,600.50	39° 24' 38.376 N	108° 5' 20.344 W
TD at 5243.1 - 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) SC	0.00	0.00	3,556.0	986.1	-220.9	1,584,885.60	2,268,600.50	39° 24' 38.376 N	108° 5' 20.344 W
- plan hits target center									
- Circle (radius 25.0)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,186.0	1,150.3	9 5/8"	9.625	12.250	

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well SG 342-27 - Slot A5
Company:	PICEANCE VLY NAD 83	TVD Reference:	WELL @ 5042.0usft (Original Well Elev)
Project:	SG 27-07S-096W	MD Reference:	WELL @ 5042.0usft (Original Well Elev)
Site:	SG 43-27 Pad	North Reference:	True
Well:	SG 342-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 14Jun10 kjs		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
589.9	587.0	Top of "G" Sand			
692.3	687.0	Base of "G" Sand			
2,268.2	2,132.0	Mesaverde			
3,743.1	3,556.0	Approx. Top Gas			
4,668.1	4,481.0	Cameo Coals			
5,143.1	4,956.0	Rollins SS			
5,243.1	5,056.0	TD			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
140.0	140.0	0.0	0.0	Start Build 2.50
1,135.5	1,104.5	207.7	-46.5	Hold 24.89 Inclination
2,398.7	2,250.3	726.4	-162.7	Start Drop -2.00
3,643.1	3,456.0	986.1	-220.9	Vertical
3,743.1	3,556.0	986.1	-220.9	Top Gas
5,243.1	5,056.0	986.1	-220.9	TD at 5243.1