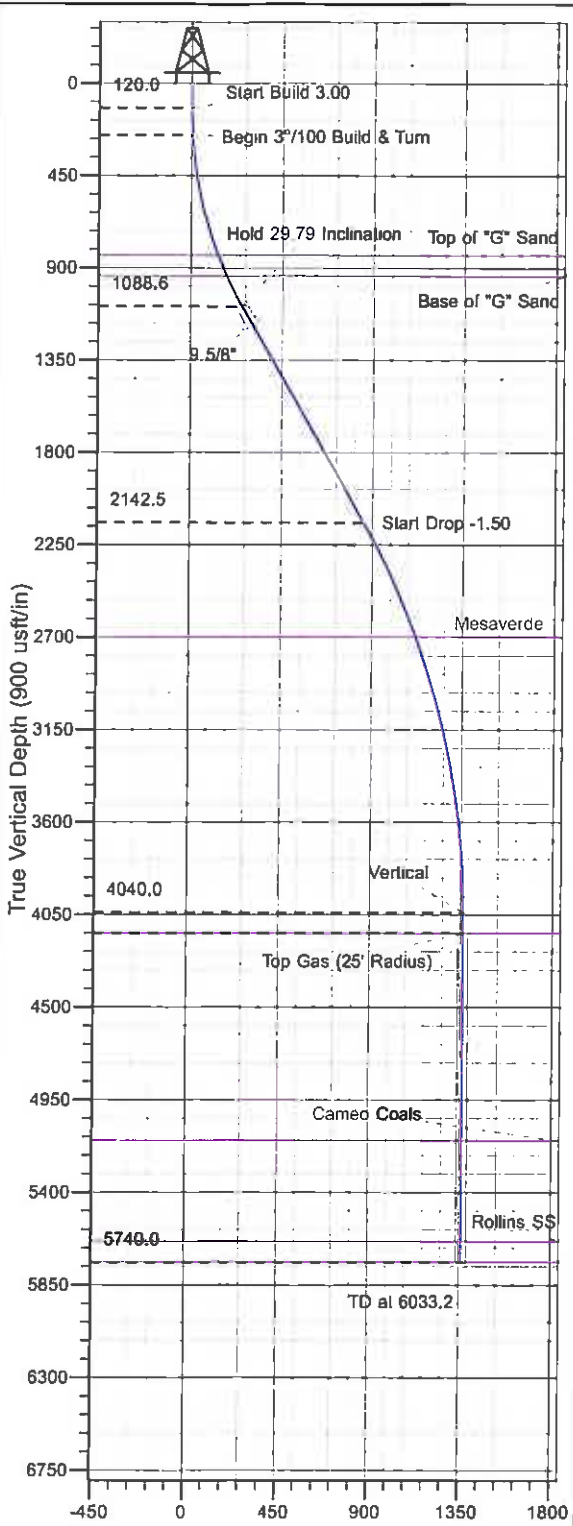


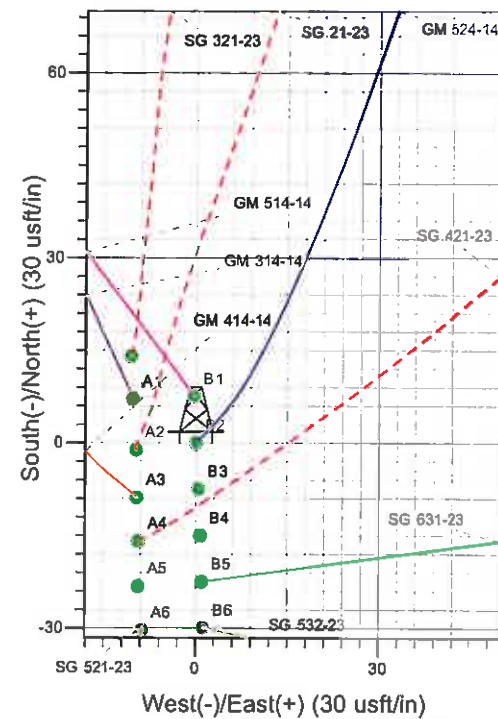
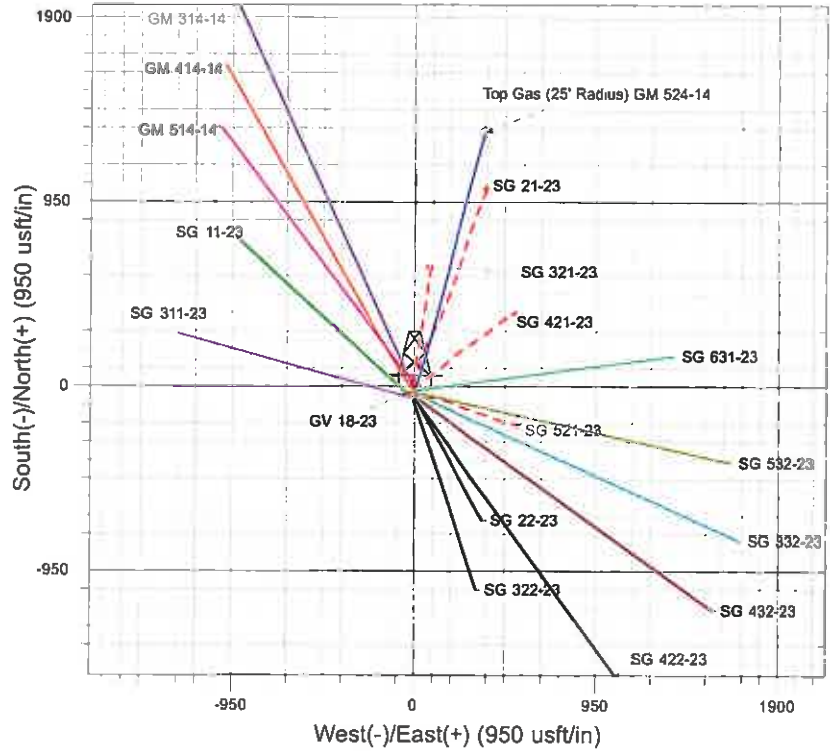


Well Name: GM 524-14
 Surface Location: GV 18-23 Pad
 North American Datum 1983, US State Plane 1983, Colorado Central Zone
 Ground Elevation: 5134.0

+N/-S 0.0 +E/-W 0.0 Northing 1590914.10 Easting 2270839.00 Latitude 39° 25' 38.566 N Longitude 108° 4' 54.017 W Slot B2
 KELLY BUSHING @ 5158.0usft (H&P 278 (24' RKB) kjs)



Vertical Section at 15.73° (900 usft/in)



Project: SG 23-07S-096W
 Site: GV 18-23 Pad
 Well: GM 524-14
 Design #1 06Apr11 kjs

M Azimuths to True North
 Magnetic North: 10.40°
 Magnetic Field
 Strength: 52276.5snT
 Dip Angle: 65.69°
 Date: 2/4/2011
 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
253.2	253.3	4.00	45.00	3.3	3.3	4.1	4.7	Begin 3°/100 Build & Turn
1088.6	1133.1	29.79	14.97	240.3	82.8	253.8	255.5	Hold 29.79 Inclination
2142.5	2347.4	29.79	14.97	823.0	238.7	856.9	858.7	Start Drop -1.50
4040.0	4333.2	0.00	0.00	1310.6	369.0	1361.5	1363.4	Vertical
4140.0	4433.2	0.00	0.00	1310.6	369.0	1361.5	1363.4	Top Gas
5740.0	6033.2	0.00	0.00	1310.6	369.0	1361.5	1363.4	TD at 6033.2

PICEANCE VLY NAD 83

SG 23-07S-096W

GV 18-23 Pad

GM 524-14 - Slot B2

Wellbore #1

Plan: Design #1 06Apr11 kjs

Standard Planning Report - Geographic

01 June, 2011

Williams
 Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well GM 524-14 - Slot B2
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5158.0usft (H&P 278 (24' RKB) kjs)
Project:	SG 23-07S-096W	MD Reference:	KELLY BUSHING @ 5158.0usft (H&P 278 (24' RKB) kjs)
Site:	GV 18-23 Pad	North Reference:	True
Well:	GM 524-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 06Apr11 kjs		

Project	SG 23-07S-096W, Garfield County, CO, 23-07S-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	GV 18-23 Pad				
Site Position:	Northing:	1,590,884.00 usft	Latitude:	39° 25' 38.266 N	
From:	Map	Easting:	2,270,829.40 usft	Longitude:	108° 4' 54.128 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence:	-1.628 °

Well	GM 524-14 - Slot B2					
Well Position	+N/-S	0.0 usft	Northing:	1,590,914.10 usft	Latitude:	39° 25' 38.566 N
	+E/-W	0.0 usft	Easting:	2,270,839.00 usft	Longitude:	108° 4' 54.017 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	5,134.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (")	Dip Angle (")	Field Strength (nT)
	IGRF2005-10	2/4/2011	10.404	65.689	52,276

Design	Design #1 06Apr11 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	15.73

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	
253.3	4.00	45.00	253.2	3.3	3.3	3.00	3.00	0.00	45.000	
1,133.1	29.79	14.97	1,088.6	240.3	82.8	3.00	2.93	-3.41	-34.006	
2,347.4	29.79	14.97	2,142.5	823.0	238.7	0.00	0.00	0.00	0.000	
4,333.2	0.00	0.00	4,040.0	1,310.6	369.0	1.50	-1.50	0.00	180.000	
6,033.2	0.00	0.00	5,740.0	1,310.6	369.0	0.00	0.00	0.00	0.000	

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well GM 524-14 - Slot B2
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5158.0usft (H&P 278 (24' RKB) kjs)
Project:	SG 23-07S-096W	MD Reference:	KELLY BUSHING @ 5158.0usft (H&P 278 (24' RKB) kjs)
Site:	GV 18-23 Pad	North Reference:	True
Well:	GM 524-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 06Apr11 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	1,590,914.10	2,270,839.00	39° 25' 38.566 N	108° 4' 54.017 W
120.0	0.00	0.00	120.0	0.0	0.0	1,590,914.10	2,270,839.00	39° 25' 38.566 N	108° 4' 54.017 W
Start Build 3.00									
253.3	4.00	45.00	253.2	3.3	3.3	1,590,917.29	2,270,842.38	39° 25' 38.598 N	108° 4' 53.975 W
Begin 3°/100 Build & Turn									
857.0	21.54	16.74	840.0	125.3	50.5	1,591,037.93	2,270,893.02	39° 25' 39.804 N	108° 4' 53.373 W
Top of "G" Sand									
965.8	24.79	15.91	940.0	166.4	62.5	1,591,078.63	2,270,906.19	39° 25' 40.210 N	108° 4' 53.220 W
Base of "G" Sand									
1,133.1	29.79	14.97	1,088.6	240.3	82.8	1,591,151.93	2,270,928.64	39° 25' 40.941 N	108° 4' 52.961 W
Hold 29.79 Inclination									
1,233.0	29.79	14.97	1,175.3	288.2	95.7	1,591,199.49	2,270,942.81	39° 25' 41.415 N	108° 4' 52.798 W
9 5/8"									
2,347.4	29.79	14.97	2,142.5	823.0	238.7	1,591,729.98	2,271,100.94	39° 25' 46.700 N	108° 4' 50.975 W
Start Drop -1.50									
2,964.0	20.54	14.97	2,700.0	1,076.1	306.3	1,591,980.96	2,271,175.76	39° 25' 49.201 N	108° 4' 50.113 W
Mesaverde									
4,333.2	0.00	0.00	4,040.0	1,310.6	369.0	1,592,213.60	2,271,245.10	39° 25' 51.519 N	108° 4' 49.314 W
Vertical									
4,433.2	0.00	0.00	4,140.0	1,310.6	369.0	1,592,213.60	2,271,245.10	39° 25' 51.519 N	108° 4' 49.314 W
Top Gas - Approx. Top Gas									
5,443.2	0.00	0.00	5,150.0	1,310.6	369.0	1,592,213.60	2,271,245.10	39° 25' 51.519 N	108° 4' 49.314 W
Cameo Coals									
5,933.2	0.00	0.00	5,640.0	1,310.6	369.0	1,592,213.60	2,271,245.10	39° 25' 51.519 N	108° 4' 49.314 W
Rollins SS									
6,033.2	0.00	0.00	5,740.0	1,310.6	369.0	1,592,213.60	2,271,245.10	39° 25' 51.519 N	108° 4' 49.314 W
TD at 6033.2 - TD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Top Gas (25' Radius) GI - hit/miss target - Shape - plan hits target center - Circle (radius 25.0)	0.00	0.00	4,140.0	1,310.6	369.0	1,592,213.60	2,271,245.10	39° 25' 51.519 N	108° 4' 49.314 W

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,233.0	1,175.3	9 5/8"	9.625	12.250

Williams
 Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well GM 524-14 - Slot B2
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5158.0usft (H&P 278 (24' RKB) kjs)
Project:	SG 23-07S-096W	MD Reference:	KELLY BUSHING @ 5158.0usft (H&P 278 (24' RKB) kjs)
Site:	GV 18-23 Pad	North Reference:	True
Well:	GM 524-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 06Apr11 kjs		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
857.0	840.0	Top of "G" Sand			
965.8	940.0	Base of "G" Sand			
2,964.0	2,700.0	Mesaverde			
4,433.2	4,140.0	Approx. Top Gas			
5,443.2	5,150.0	Cameo Coals			
5,933.2	5,640.0	Rollins SS			
6,033.2	5,740.0	TD			

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
120.0	120.0	0.0	0.0	Start Build 3.00	
253.3	253.2	3.3	3.3	Begin 3°/100 Build & Turn	
1,133.1	1,088.6	240.3	82.8	Hold 29.79 Inclination	
2,347.4	2,142.5	823.0	238.7	Start Drop -1.50	
4,333.2	4,040.0	1,310.6	369.0	Vertical	
4,433.2	4,140.0	1,310.6	369.0	Top Gas	
6,033.2	5,740.0	1,310.6	369.0	TD at 6033.2	