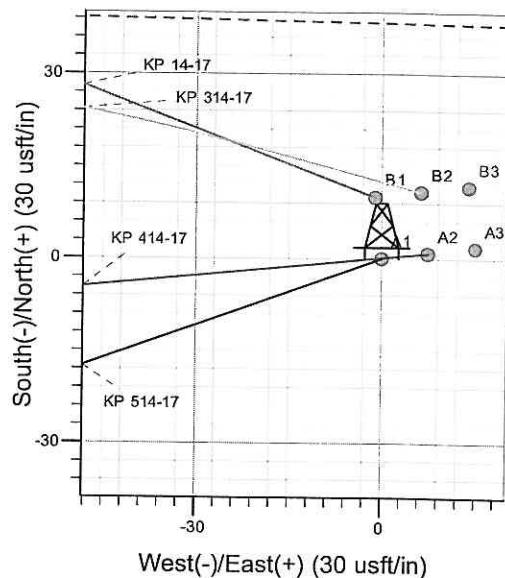
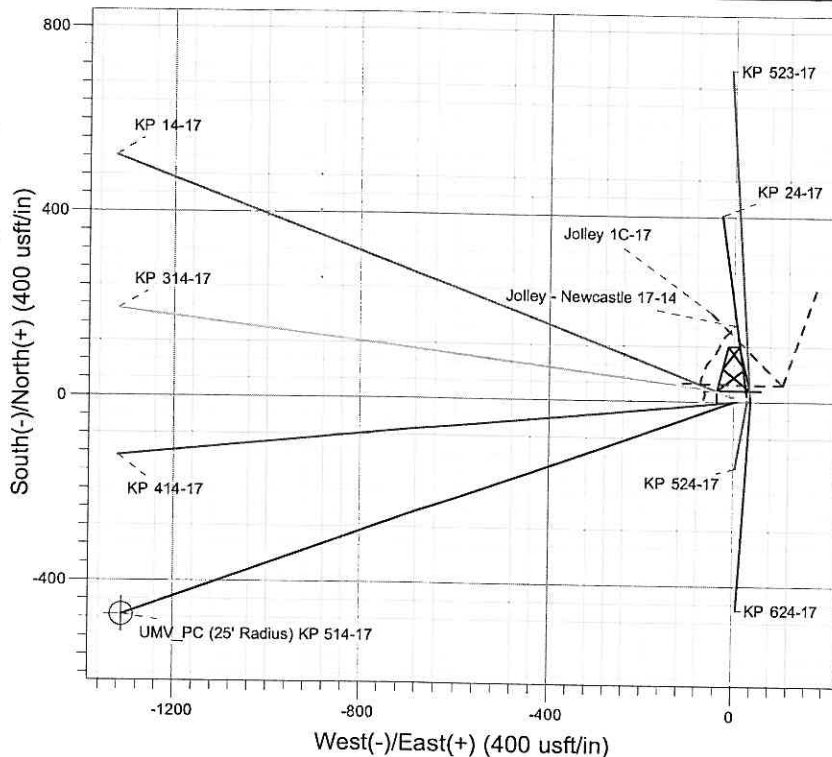
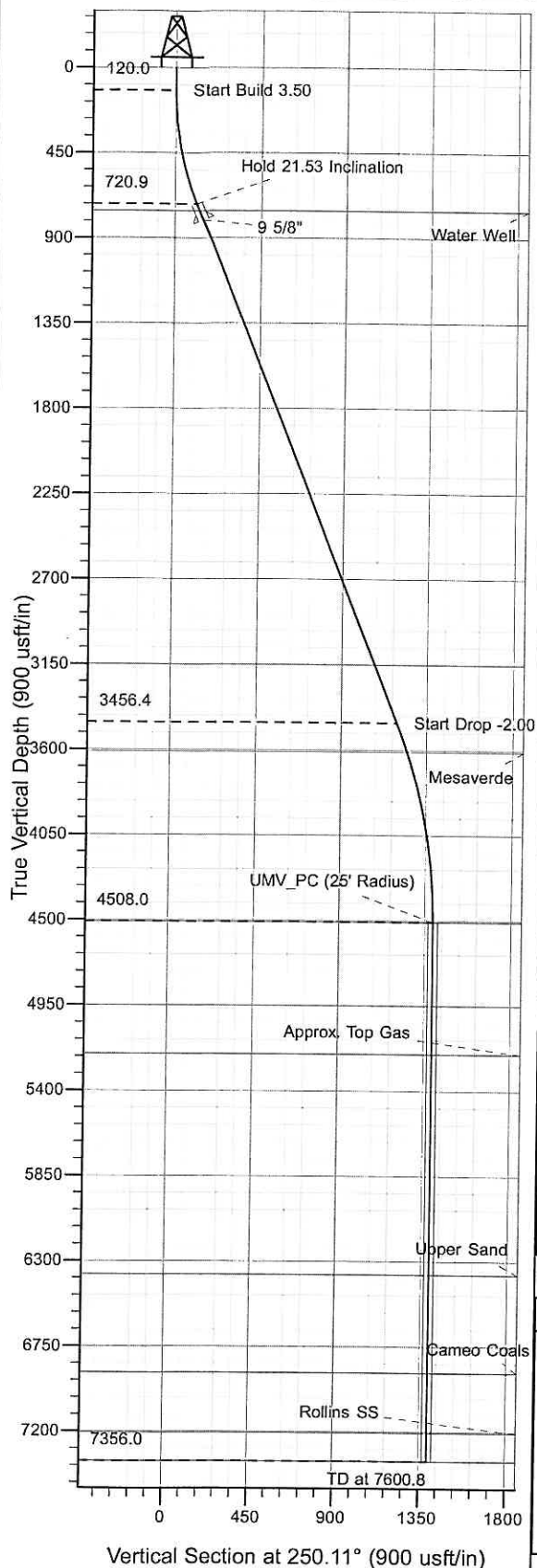




Well Name: KP 514-17
 Surface Location: KP 24-17 Pad
 North American Datum 1983 , US State Plane 1983, Colorado Central Zone
 Ground Elevation: 6290.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1621783.40 2413077.17 39° 31' 19.640 N 107° 34' 50.744 W A1
 KELLY BUSHING @ 6316.0usft (SSD 574 (26' KB) kjs)



Project: Sec. 17-06S-091W
 Site: KP 24-17 Pad
 Well: KP 514-17
 Design #1 17Mar10 kjs

M Azimuths to True North
 Magnetic North: 10.33°
 Magnetic Field
 Strength: 52442.4snT
 Dip Angle: 65.87°
 Date: 3/17/2010
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	V	Sect	Departure	Annotation
120.0	120.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	Start Build 3.50
720.9	735.3	21.53	250.11	-38.9	-107.5	114.3	114.3	114.3	Hold 21.53 Inclination
3456.4	3676.1	21.53	250.11	-406.2	-1122.5	1193.7	1193.7	1193.7	Start Drop -2.00
4508.0	4752.8	0.00	0.00	-474.2	-1310.6	1393.7	1393.7	1393.7	UMV_PC
7356.0	7600.8	0.00	0.00	-474.2	-1310.6	1393.7	1393.7	1393.7	TD at 7600.8

KOKOPELLI FIELD

Sec. 17-06S-091W

KP 24-17 Pad

KP 514-17 - Slot A1

Wellbore #1

Plan: Design #1 17Mar10 kjs

Standard Planning Report - Geographic

13 April, 2010

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 514-17 - Slot A1
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 6316.0usft (SSD 574 (26' KB) kjs)
Project:	Sec. 17-06S-091W	MD Reference:	KELLY BUSHING @ 6316.0usft (SSD 574 (26' KB) kjs)
Site:	KP 24-17 Pad	North Reference:	True
Well:	KP 514-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Mar10 kjs		

Project	Sec. 17-06S-091W, Garfield County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	KP 24-17 Pad				
Site Position:		Northing:	1,621,790.60 usft	Latitude:	39° 31' 19.729 N
From:	Map	Easting:	2,413,156.80 usft	Longitude:	107° 34' 49.730 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence:	-1.312 °

Well	KP 514-17 - Slot A1					
Well Position	+N/-S	0.0 usft	Northing:	1,621,783.40 usft	Latitude:	39° 31' 19.640 N
	+E/-W	0.0 usft	Easting:	2,413,077.18 usft	Longitude:	107° 34' 50.744 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	6,290.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/17/2010	10.329	65.873	52,442

Design	Design #1 17Mar10 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	250.11

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	
735.3	21.53	250.11	720.9	-38.9	-107.5	3.50	3.50	0.00	250.107	
3,676.1	21.53	250.11	3,456.4	-406.2	-1,122.5	0.00	0.00	0.00	0.000	
4,752.8	0.00	0.00	4,508.0	-474.2	-1,310.6	2.00	-2.00	0.00	180.000	UMV_PC (25' Radius)
7,600.8	0.00	0.00	7,356.0	-474.2	-1,310.6	0.00	0.00	0.00	0.000	

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 514-17 - Slot A1
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 6316.0usft (SSD 574 (26' KB) kjs)
Project:	Sec. 17-06S-091W	MD Reference:	KELLY BUSHING @ 6316.0usft (SSD 574 (26' KB) kjs)
Site:	KP 24-17 Pad	North Reference:	True
Well:	KP 514-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Mar10 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	1,621,783.40	2,413,077.18	39° 31' 19.640 N	107° 34' 50.744 W
120.0	0.00	0.00	120.0	0.0	0.0	1,621,783.40	2,413,077.18	39° 31' 19.640 N	107° 34' 50.744 W
Start Build 3.50									
735.3	21.53	250.11	720.9	-38.9	-107.5	1,621,746.98	2,412,968.86	39° 31' 19.255 N	107° 34' 52.115 W
Hold 21.53 Inclination									
773.0	21.53	250.11	756.0	-43.6	-120.5	1,621,742.57	2,412,955.73	39° 31' 19.209 N	107° 34' 52.281 W
Water Well									
826.8	21.53	250.11	806.0	-50.3	-139.0	1,621,736.28	2,412,937.03	39° 31' 19.142 N	107° 34' 52.518 W
9 5/8"									
3,676.1	21.53	250.11	3,456.4	-406.2	-1,122.5	1,621,403.02	2,411,945.66	39° 31' 15.625 N	107° 35' 5.069 W
Start Drop -2.00									
3,839.4	18.27	250.11	3,610.0	-425.1	-1,174.8	1,621,385.30	2,411,892.96	39° 31' 15.438 N	107° 35' 5.736 W
Mesaverde									
4,752.8	0.00	0.00	4,508.0	-474.2	-1,310.6	1,621,339.30	2,411,756.10	39° 31' 14.952 N	107° 35' 7.468 W
UMV_PC - UMV_PC									
5,450.8	0.00	0.00	5,206.0	-474.2	-1,310.6	1,621,339.30	2,411,756.10	39° 31' 14.952 N	107° 35' 7.468 W
Approx. Top Gas									
6,614.8	0.00	0.00	6,370.0	-474.2	-1,310.6	1,621,339.30	2,411,756.10	39° 31' 14.952 N	107° 35' 7.468 W
Upper Sand									
7,133.8	0.00	0.00	6,889.0	-474.2	-1,310.6	1,621,339.30	2,411,756.10	39° 31' 14.952 N	107° 35' 7.468 W
Cameo Coals									
7,450.8	0.00	0.00	7,206.0	-474.2	-1,310.6	1,621,339.30	2,411,756.10	39° 31' 14.952 N	107° 35' 7.468 W
Rollins SS									
7,600.8	0.00	0.00	7,356.0	-474.2	-1,310.6	1,621,339.30	2,411,756.10	39° 31' 14.952 N	107° 35' 7.468 W
TD at 7600.8 - TD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
UMV_PC (25' Radius) K	0.00	0.00	4,508.0	-474.2	-1,310.6	1,621,339.30	2,411,756.10	39° 31' 14.952 N	107° 35' 7.468 W
- hit/miss target									
- Shape									
- plan hits target center									
- Circle (radius 25.0)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
826.8	806.0	9 5/8"	9.625	12.250	

Williams

Planning Report - Geographic

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Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 6316.0usft (SSD 574 (26' KB) kjs)
Project:	Sec. 17-06S-091W	MD Reference:	KELLY BUSHING @ 6316.0usft (SSD 574 (26' KB) kjs)
Site:	KP 24-17 Pad	North Reference:	True
Well:	KP 514-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Mar10 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
773.0	756.0	Water Well		0.000		
3,839.4	3,610.0	Mesaverde		0.000		
4,752.8	4,508.0	UMV_PC		0.000		
5,450.8	5,206.0	Approx. Top Gas		0.000		
6,614.8	6,370.0	Upper Sand		0.000		
7,133.8	6,889.0	Cameo Coals		0.000		
7,450.8	7,206.0	Rollins SS		0.000		
7,600.8	7,356.0	TD		0.000		

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 3.50	
735.3	720.9	-38.9	-107.5	Hold 21.53 Inclination	
3,676.1	3,456.4	-406.2	-1,122.5	Start Drop -2.00	
4,752.8	4,508.0	-474.2	-1,310.6	UMV_PC	
7,600.8	7,356.0	-474.2	-1,310.6	TD at 7600.8	