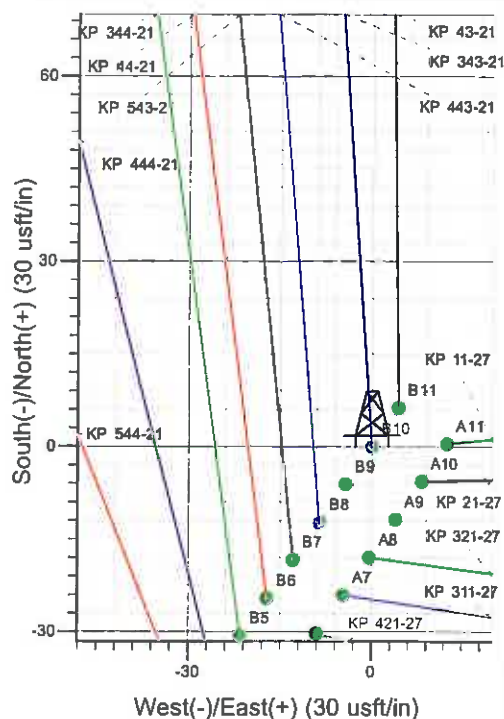
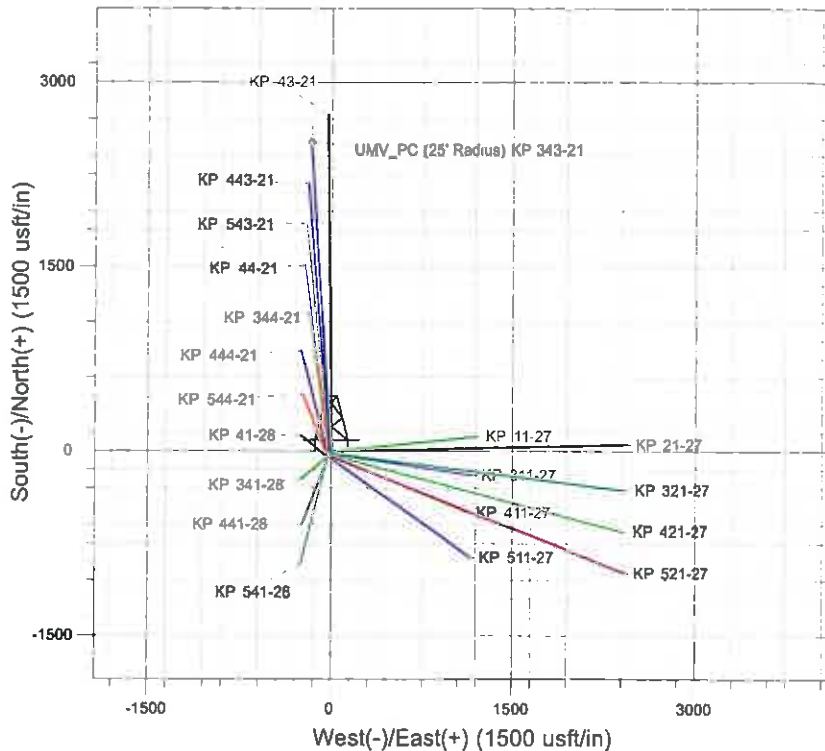
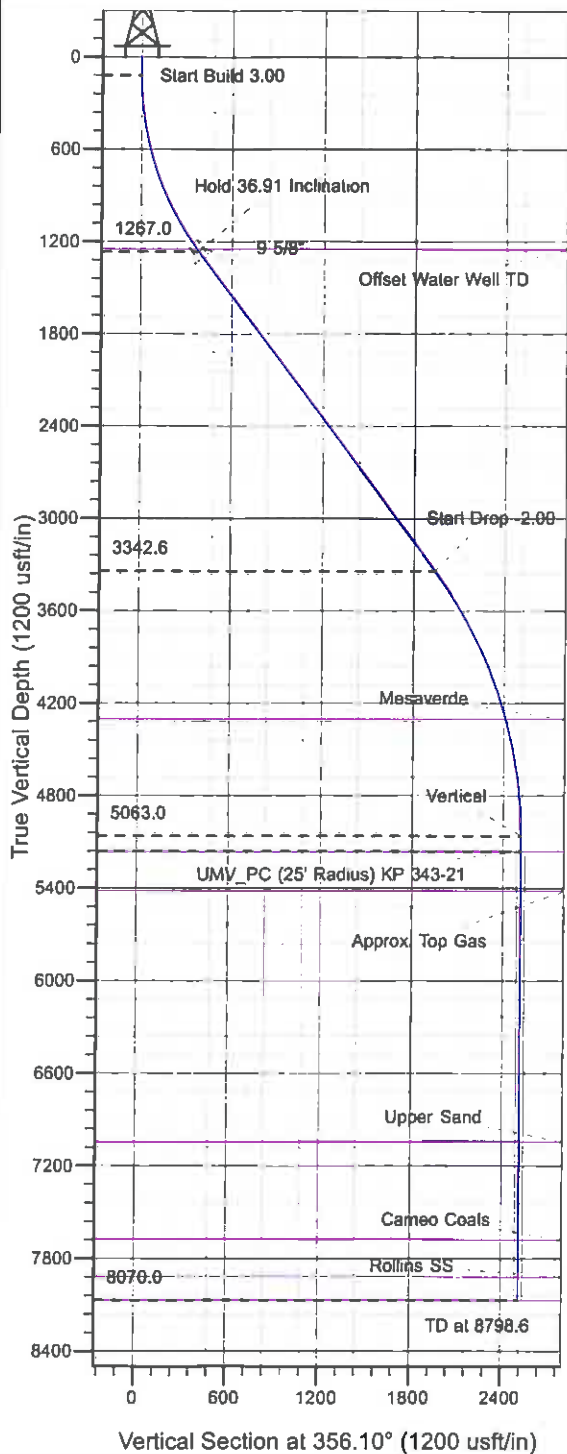




Well Name: KP 343-21
 Surface Location: KP 41-28 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 7056.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1615626.60 2421203.60 39° 30' 20.631 N 107° 33' 5.290 W B10
 KELLY BUSHING @ 7079.0usft (Cyclone 30 (23' RKB) kjs)



Project: Sec 28-T6S-R91W
 Site: KP 41-28 Pad
 Well: KP 343-21
 Design #1 28Jan11 kjs



Azimuths to True North
 Magnetic North: 10.20°
 Magnetic Field
 Strength: 52342.9nT
 Dip Angle: 65.84°
 Date: 1/28/2011
 Model: IGRF2010

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
1267.0	1350.3	36.91	358.10	381.9	-26.0	382.8	382.8	Hold 36.91 Inclination
3342.6	3946.1	36.91	358.10	1937.2	-132.0	1941.7	1941.7	Start Drop -2.00
5063.0	5791.6	0.00	0.00	2510.0	-171.0	2515.8	2515.8	Vertical
5163.0	5891.6	0.00	0.00	2510.0	-171.0	2515.8	2515.8	UMV_PC
8070.0	8798.6	0.00	0.00	2510.0	-171.0	2515.8	2515.8	TD at 8798.6

KOKOPELLI FIELD

Sec. 28-T6S-R91W

KP 41-28 Pad

KP 343-21 - Slot B10

Wellbore #1

Plan: Design #1 28Jan11 kjs

Standard Planning Report - Geographic

31 March, 2011

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 343-21 - Slot B10
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 7079.0usft (Cyclone 30 (23' RKB) kjs)
Project:	Sec. 28-T6S-R91W	MD Reference:	KELLY BUSHING @ 7079.0usft (Cyclone 30 (23' RKB) kjs)
Site:	KP 41-28 Pad	North Reference:	True
Well:	KP 343-21	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 28Jan11 kjs		

Project	Sec. 28-T6S-R91W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		KP 41-28 Pad			
Site Position:		Northing:	1,615,566.30 usft	Latitude:	39° 30' 20.028 N
From:	Map	Easting:	2,421,171.70 usft	Longitude:	107° 33' 5.678 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence:	-1.294 °

Well	KP 343-21 - Slot B10					
Well Position	+N/-S	0.0 usft	Northing:	1,615,626.60 usft	Latitude:	39° 30' 20.631 N
	+E/-W	0.0 usft	Easting:	2,421,203.60 usft	Longitude:	107° 33' 5.290 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:	7,056.0 usft	

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/28/2011	10.201	65.841	52,343

Design	Design #1 28Jan11 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	356.10

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	
1,350.3	36.91	356.10	1,267.0	381.9	-26.0	3.00	3.00	0.00	356.102	
3,946.1	36.91	356.10	3,342.6	1,937.2	-132.0	0.00	0.00	0.00	0.000	
5,791.6	0.00	0.00	5,063.0	2,510.0	-171.0	2.00	-2.00	0.00	180.000	
5,891.6	0.00	0.00	5,163.0	2,510.0	-171.0	0.00	0.00	0.00	0.000	UMV_PC (25' Radius)
8,798.6	0.00	0.00	8,070.0	2,510.0	-171.0	0.00	0.00	0.00	0.000	

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 343-21 - Slot B10
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 7079.0usft (Cyclone 30 (23' RKB) kjs)
Project:	Sec. 28-T6S-R91W	MD Reference:	KELLY BUSHING @ 7079.0usft (Cyclone 30 (23' RKB) kjs)
Site:	KP 41-28 Pad	North Reference:	True
Well:	KP 343-21	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 28Jan11 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	1,615,626.60	2,421,203.60	39° 30' 20.631 N	107° 33' 5.290 W
120.0	0.00	0.00	120.0	0.0	0.0	1,615,626.60	2,421,203.60	39° 30' 20.631 N	107° 33' 5.290 W
Start Build 3.00									
1,330.4	36.31	356.10	1,251.0	370.0	-25.2	1,615,997.11	2,421,186.75	39° 30' 24.288 N	107° 33' 5.612 W
Offset Water Well TD									
1,350.3	36.91	356.10	1,267.0	381.9	-26.0	1,616,008.95	2,421,186.21	39° 30' 24.405 N	107° 33' 5.622 W
Hold 36.91 Inclination									
1,400.0	36.91	356.10	1,306.7	411.6	-28.0	1,616,038.77	2,421,184.85	39° 30' 24.699 N	107° 33' 5.648 W
9 5/8"									
3,946.1	36.91	356.10	3,342.6	1,937.2	-132.0	1,617,566.26	2,421,115.39	39° 30' 39.777 N	107° 33' 6.974 W
Start Drop -2.00									
5,026.5	15.30	356.10	4,307.0	2,408.7	-164.1	1,618,038.35	2,421,093.92	39° 30' 44.437 N	107° 33' 7.384 W
Mesaverde									
5,791.6	0.00	0.00	5,063.0	2,510.0	-171.0	1,618,139.80	2,421,089.30	39° 30' 45.438 N	107° 33' 7.472 W
Vertical									
5,891.6	0.00	0.00	5,163.0	2,510.0	-171.0	1,618,139.80	2,421,089.30	39° 30' 45.438 N	107° 33' 7.472 W
UMV_PC - UMV_PC									
6,148.6	0.00	0.00	5,420.0	2,510.0	-171.0	1,618,139.80	2,421,089.30	39° 30' 45.438 N	107° 33' 7.472 W
Approx. Top Gas									
7,772.6	0.00	0.00	7,044.0	2,510.0	-171.0	1,618,139.80	2,421,089.30	39° 30' 45.438 N	107° 33' 7.472 W
Upper Sand									
8,408.6	0.00	0.00	7,680.0	2,510.0	-171.0	1,618,139.80	2,421,089.30	39° 30' 45.438 N	107° 33' 7.472 W
Cameo Coals									
8,648.6	0.00	0.00	7,920.0	2,510.0	-171.0	1,618,139.80	2,421,089.30	39° 30' 45.438 N	107° 33' 7.472 W
Rollins SS									
8,798.6	0.00	0.00	8,070.0	2,510.0	-171.0	1,618,139.80	2,421,089.30	39° 30' 45.438 N	107° 33' 7.472 W
TD at 8798.6 - 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									
UMV_PC (25' Radius) K	0.00	0.00	5,163.0	2,510.0	-171.0	1,618,139.80	2,421,089.30	39° 30' 45.438 N	107° 33' 7.472 W
- plan hits target center									
- Circle (radius 25.0)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (in)	Hole Diameter (in)
1,400.0	1,306.7	9 5/8"		9.625	12.250

Williams
Planning Report - Geographic

Database: Compass R5000 WIN AUTH
Company: KOKOPELLI FIELD
Project: Sec. 28-T6S-R81W
Site: KP 41-28 Pad
Well: KP 343-21
Wellbore: Wellbore #1
Design: Design #1 28Jan11 kjs

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well KP 343-21 - Slot B10
KELLY BUSHING @ 7079.0usft (Cyclone 30
(23' RKB) kjs)
KELLY BUSHING @ 7079.0usft (Cyclone 30
(23' RKB) kjs)
True
Minimum Curvature

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,330.4	1,251.0	Offset Water Well TD			
5,026.5	4,307.0	Mesaverde			
5,891.6	5,163.0	UMV_PC			
6,148.6	5,420.0	Approx. Top Gas			
7,772.6	7,044.0	Upper Sand			
8,408.6	7,680.0	Cameo Coals			
8,648.6	7,920.0	Rollins SS			
8,798.6	8,070.0	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
1,350.3	1,267.0	381.9	-26.0	Hold 36.91 Inclination
3,946.1	3,342.6	1,937.2	-132.0	Start Drop -2.00
5,791.6	5,063.0	2,510.0	-171.0	Vertical
5,891.6	5,163.0	2,510.0	-171.0	UMV_PC
8,798.6	8,070.0	2,510.0	-171.0	TD at 8798.6