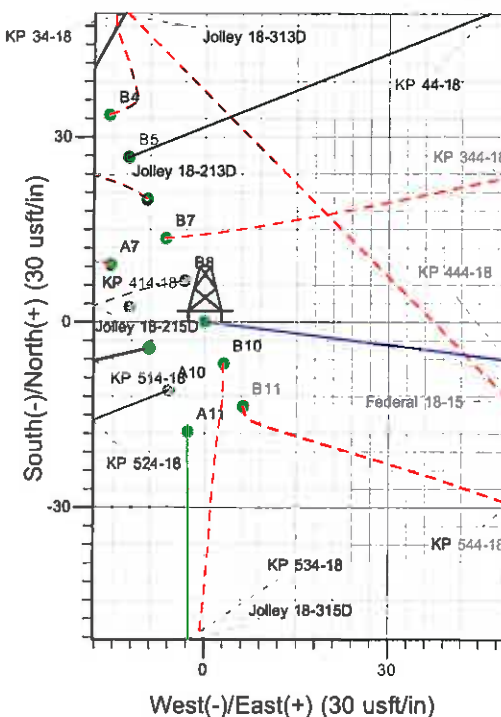
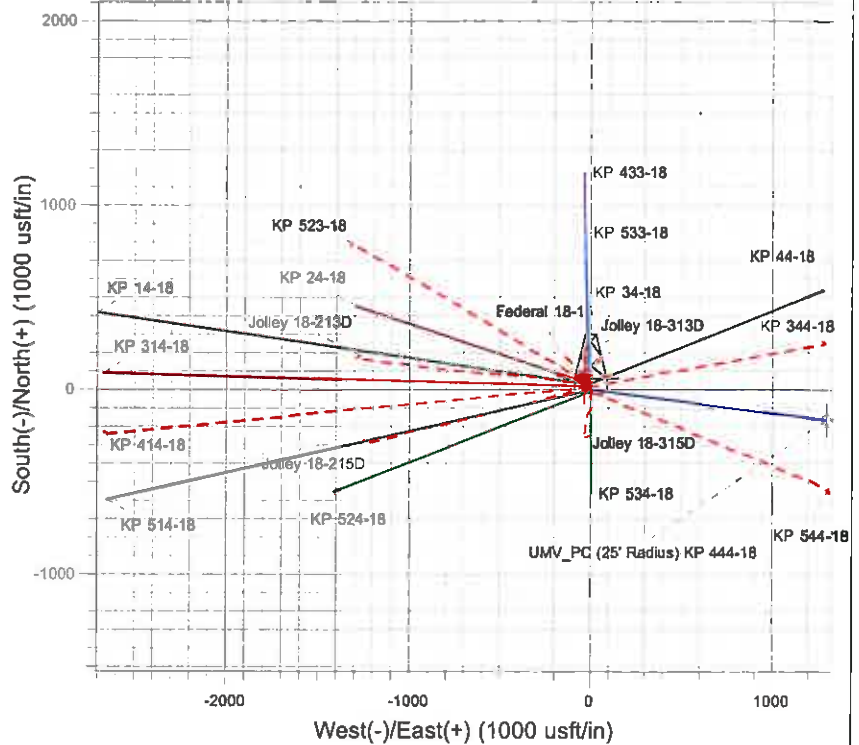
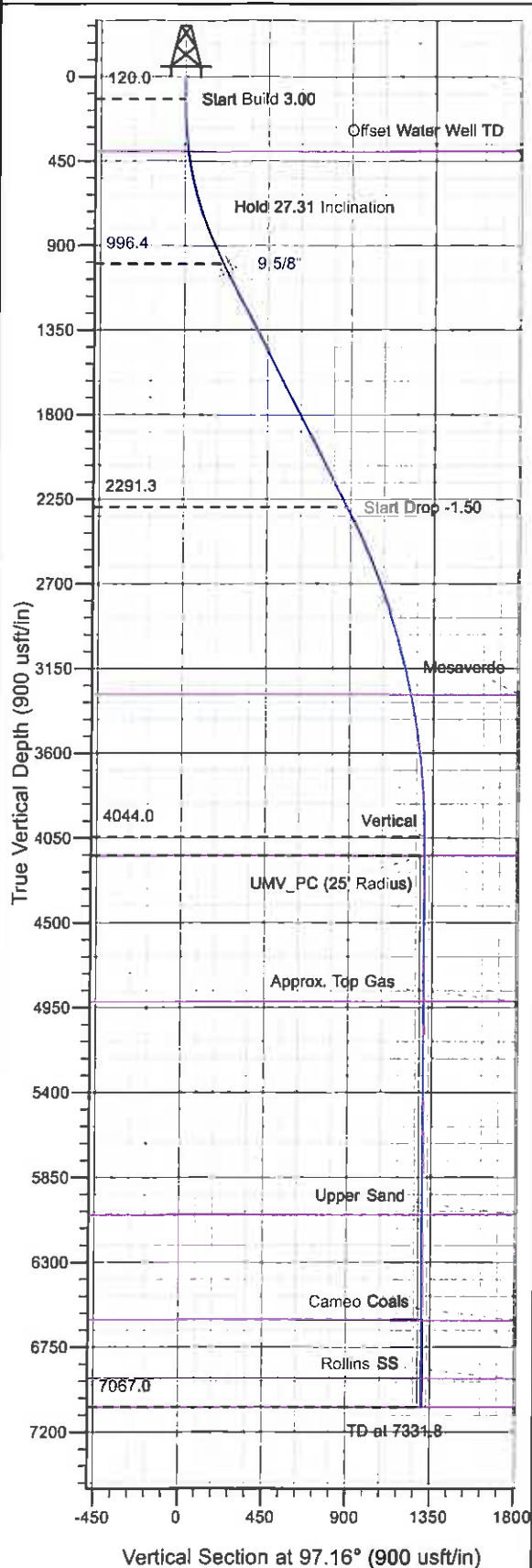




Well Name: KP 444-18
 Surface Location: KP 34-18 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 5918.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1621900.80 2409160.10 39° 31' 19.910 N 107° 35' 40.753 W B9
 KELLY BUSHING @ 5941.0usft (Cyclone 30 (23' RKB) kjs)



Project: Sec. 18-T6S-R91W
 Site: KP 34-18 Pad
 Well: KP 444-18
 Design #1 07Dec09 kjs



Azimuths to True North
 Magnetic North: 10.35°
 Magnetic Field
 Strength: 52498.3nT
 Dip Angle: 65.89°
 Date: 12/7/2009
 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
996.4	1030.4	27.31	97.16	-26.5	211.3	212.9	212.9	Hold 27.31 Inclination
2291.3	2487.9	27.31	97.16	-109.9	874.8	881.7	881.7	Start Drop -1.50
4044.0	4308.8	0.00	0.00	-162.9	1297.3	1307.5	1307.5	Vertical
4144.0	4408.8	0.00	0.00	-162.9	1297.3	1307.5	1307.5	UMV_PC
7067.0	7331.8	0.00	0.00	-162.9	1297.3	1307.5	1307.5	TD at 7331.8

KOKOPELLI FIELD

Sec. 18-T6S-R91W

KP 34-18 Pad

KP 444-18 - Slot B9

Wellbore #1

Plan: Design #1 07Dec09 kjs

Standard Planning Report - Geographic

18 March, 2011

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 444-18 - Slot B9
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 5941.0usft (Cyclone 30 (23' RKB) kjs)
Project:	Sec. 18-T6S-R91W	MD Reference:	KELLY BUSHING @ 5941.0usft (Cyclone 30 (23' RKB) kjs)
Site:	KP 34-18 Pad	North Reference:	True
Well:	KP 444-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Dec09 kjs		

Project	Sec. 18-T6S-R91W, 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		Using geodetic scale factor

Site	KP 34-18 Pad				
Site Position:		Northing:	1,621,893.85 usft	Latitude:	39° 31' 19.842 N
From:	Map	Easting:	2,409,163.01 usft	Longitude:	107° 35' 40.714 W
Position Uncertainty:	0.0 usft	Slot Radius:	0 "	Grid Convergence:	-1.32 °

Well	KP 444-18 - Slot B9					
Well Position	+N/-S	0.0 usft	Northing:	1,621,900.80 usft	Latitude:	39° 31' 19.910 N
	+E/-W	0.0 usft	Easting:	2,409,160.10 usft	Longitude:	107° 35' 40.753 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:	5,918.0 usft	

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	12/7/2009	10.35	65.89	52,498

Design	Design #1 07Dec09 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	97.16

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	
1,030.4	27.31	97.16	996.4	-26.5	211.3	3.00	3.00	0.00	97.16	
2,487.9	27.31	97.16	2,291.3	-109.9	874.8	0.00	0.00	0.00	0.00	
4,308.8	0.00	0.00	4,044.0	-162.9	1,297.3	1.50	-1.50	0.00	180.00	
4,408.8	0.00	0.00	4,144.0	-162.9	1,297.3	0.00	0.00	0.00	0.00	UMV_PC (25' Radius)
7,331.8	0.00	0.00	7,067.0	-162.9	1,297.3	0.00	0.00	0.00	0.00	

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 444-18 - Slot B9
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 5941.0usft (Cyclone 30 (23' RKB) kjs)
Project:	Sec. 18-T6S-R91W	MD Reference:	KELLY BUSHING @ 5941.0usft (Cyclone 30 (23' RKB) kjs)
Site:	KP 34-18 Pad	North Reference:	True
Well:	KP 444-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Dec09 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	1,621,900.80	2,409,160.10	39° 31' 19.910 N	107° 35' 40.753 W	
120.0	0.00	0.00	120.0	0.0	0.0	1,621,900.80	2,409,160.10	39° 31' 19.910 N	107° 35' 40.753 W	
Start Build 3.00										
398.0	8.34	97.16	397.0	-2.5	20.0	1,621,897.82	2,409,180.08	39° 31' 19.885 N	107° 35' 40.498 W	
Offset Water Well TD										
1,030.4	27.31	97.16	996.4	-26.5	211.3	1,621,869.40	2,409,370.70	39° 31' 19.648 N	107° 35' 38.057 W	
Hold 27.31 Inclination										
1,080.0	27.31	97.16	1,040.4	-29.4	233.8	1,621,866.05	2,409,393.19	39° 31' 19.620 N	107° 35' 37.769 W	
9 5/8"										
2,487.9	27.31	97.16	2,291.3	-109.9	874.8	1,621,770.79	2,410,032.12	39° 31' 18.824 N	107° 35' 29.590 W	
Start Drop -1.50										
3,549.8	11.38	97.16	3,290.0	-153.6	1,222.8	1,621,719.08	2,410,378.97	39° 31' 18.392 N	107° 35' 25.149 W	
Mesaverde										
4,308.8	0.00	0.00	4,044.0	-162.9	1,297.3	1,621,708.00	2,410,453.30	39° 31' 18.299 N	107° 35' 24.198 W	
Vertical										
4,408.8	0.00	0.00	4,144.0	-162.9	1,297.3	1,621,708.00	2,410,453.30	39° 31' 18.299 N	107° 35' 24.198 W	
UMV_PC - UMV_PC										
5,181.8	0.00	0.00	4,917.0	-162.9	1,297.3	1,621,708.00	2,410,453.30	39° 31' 18.299 N	107° 35' 24.198 W	
Approx. Top Gas										
6,312.8	0.00	0.00	6,048.0	-162.9	1,297.3	1,621,708.00	2,410,453.30	39° 31' 18.299 N	107° 35' 24.198 W	
Upper Sand										
6,872.8	0.00	0.00	6,608.0	-162.9	1,297.3	1,621,708.00	2,410,453.30	39° 31' 18.299 N	107° 35' 24.198 W	
Cameo Coals										
7,181.8	0.00	0.00	6,917.0	-162.9	1,297.3	1,621,708.00	2,410,453.30	39° 31' 18.299 N	107° 35' 24.198 W	
Rollins SS										
7,331.8	0.00	0.00	7,067.0	-162.9	1,297.3	1,621,708.00	2,410,453.30	39° 31' 18.299 N	107° 35' 24.198 W	
TD at 7331.8 - 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	4,144.0	-162.9	1,297.3	1,621,708.00	2,410,453.30	39° 31' 18.299 N	107° 35' 24.198 W	
- plan hits target center										
- Circle (radius 25.0)										

Casing Points							Casing Diameter (")	Hole Diameter (")
Measured Depth (usft)	Vertical Depth (usft)	Name						
1,080.0	1,040.4	9 5/8"					9-5/8	12-1/4

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 444-18 - Slot B9
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 5941.0usft (Cyclone 30 (23' RKB) kjs)
Project:	Sec. 18-T6S-R91W	MD Reference:	KELLY BUSHING @ 5941.0usft (Cyclone 30 (23' RKB) kjs)
Site:	KP 34-18 Pad	North Reference:	True
Well:	KP 444-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Dec09 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (")	Dip Direction (")	
398.0	397.0	Offset Water Well TD				
3,549.8	3,290.0	Mesaverde				
4,408.8	4,144.0	UMV_PC				
5,181.8	4,917.0	Approx. Top Gas				
6,312.8	6,048.0	Upper Sand				
6,872.8	6,608.0	Cameo Coals				
7,181.8	6,917.0	Rollins SS				
7,331.8	7,067.0	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
1,030.4	996.4	-26.5	211.3	Hold 27.31 Inclination
2,487.9	2,291.3	-109.9	874.8	Start Drop -1.50
4,308.8	4,044.0	-162.9	1,297.3	Vertical
4,408.8	4,144.0	-162.9	1,297.3	UMV_PC
7,331.8	7,067.0	-162.9	1,297.3	TD at 7331.8