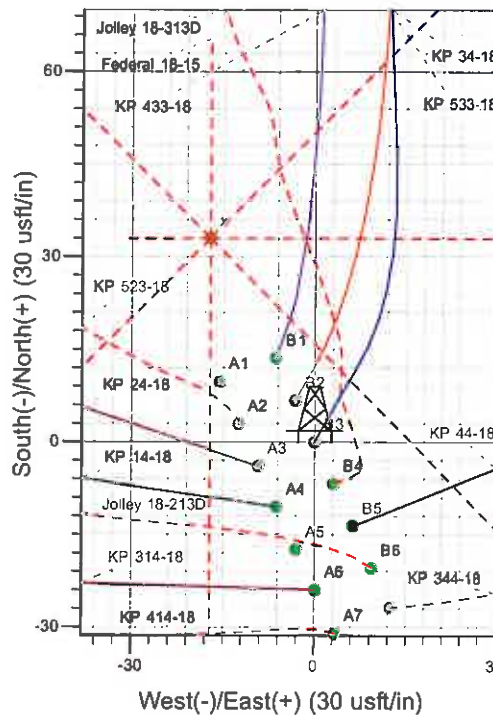
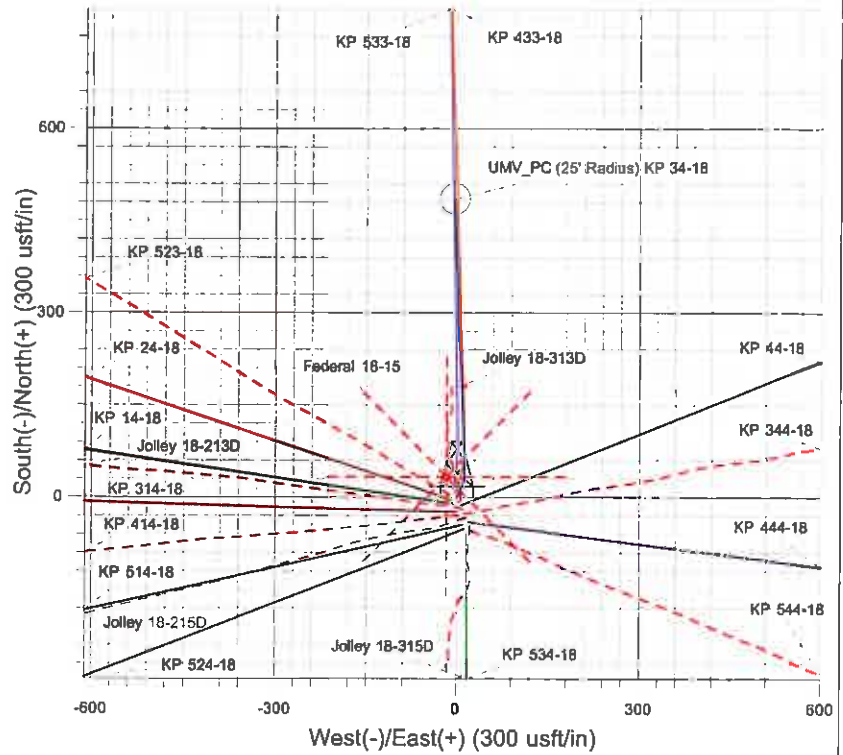
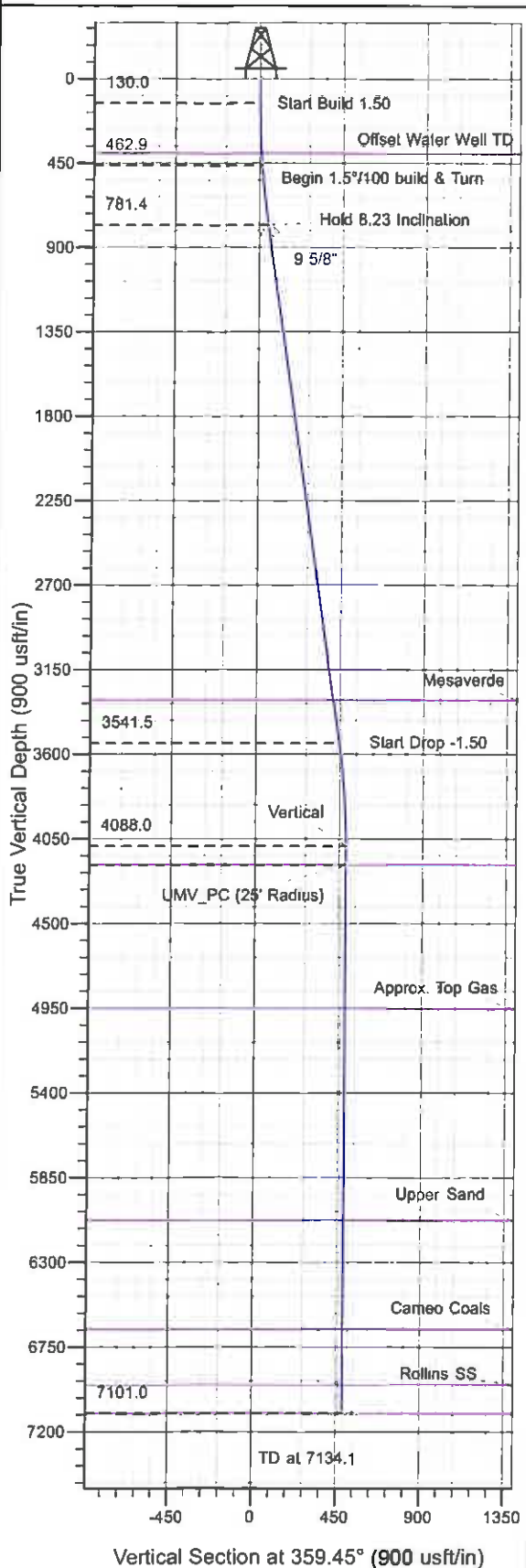




Well Name: KP 34-18
 Surface Location: KP 34-18 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 5918.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1621941.60 2409142.20 39° 31' 20.309 N 107° 35' 40.994 W B3
 KELLY BUSHING @ 5941.0usft (Cyclone 30 (23' RKB) kjs)



Project: Sec. 18-T6S-R91W
 Site: KP 34-18 Pad
 Well: KP 34-18
 Design #1 04Dec09 kjs



Azimuths to True North
 Magnetic North: 10.35°
 Magnetic Field
 Strength: 52499.2nT
 Dip Angle: 65.89°
 Date: 12/4/2009
 Model: IGRF2005-10

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
130.0	130.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 1.50
462.9	463.3	5.00	30.00	12.6	7.3	12.5	14.5	Begin 1.57/100 build & Turn
781.4	783.9	8.23	357.64	47.6	13.3	47.5	50.6	Hold 8.23 Inclination
3541.5	3572.7	8.23	357.64	446.3	-3.1	446.3	449.6	Start Drop -1.50
4088.0	4121.1	0.00	0.00	485.5	-4.7	485.6	488.9	Vertical
4188.0	4221.1	0.00	0.00	485.5	-4.7	485.6	488.9	UMV_PC
7101.0	7134.1	0.00	0.00	485.5	-4.7	485.6	488.9	TD at 7134.1

KOKOPELLI FIELD

Sec. 18-T6S-R91W

KP 34-18 Pad

KP 34-18 - Slot B3

Wellbore #1

Plan: Design #1 04Dec09 kjs

Standard Planning Report - Geographic

18 March, 2011

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 34-18 - Slot B3
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 34-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 04Dec09 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 34-18 - Slot B3					
Well Position	+N/-S	0.0 usft	Northing:	1,621,941.60 usft	Latitude:	39° 31' 20.309 N
	+E/-W	0.0 usft	Easting:	2,409,142.20 usft	Longitude:	107° 35' 40.994 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	12/4/2009	10.35	65.89	52,499

Design	Design #1 04Dec09 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	359.45

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	
130.0	0.00	0.00	130.0	0.0	0.0	0.00	0.00	0.00	0.00	
463.3	5.00	30.00	462.9	12.6	7.3	1.50	1.50	0.00	30.00	
783.9	8.23	357.65	781.4	47.6	13.3	1.50	1.01	-10.09	-65.97	
3,572.7	8.23	357.65	3,541.5	446.3	-3.1	0.00	0.00	0.00	0.00	
4,121.1	0.00	0.00	4,088.0	485.5	-4.7	1.50	-1.50	0.00	180.00	
7,134.1	0.00	0.00	7,101.0	485.5	-4.7	0.00	0.00	0.00	0.00	TD / PBHL KP 34-18

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 34-18 - Slot B3
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 34-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 04Dec09 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	1,621,941.60	2,409,142.20	39° 31' 20.309 N	107° 35' 40.994 W
130.0	0.00	0.00	130.0	0.0	0.0	1,621,941.60	2,409,142.20	39° 31' 20.309 N	107° 35' 40.994 W
Start Build 1.50									
397.2	4.01	30.00	397.0	8.1	4.7	1,621,949.58	2,409,147.06	39° 31' 20.389 N	107° 35' 40.934 W
Offset Water Well TD									
463.3	5.00	30.00	462.9	12.6	7.3	1,621,954.01	2,409,149.76	39° 31' 20.434 N	107° 35' 40.901 W
Begin 1.5"/100 build & Turn									
783.9	8.23	357.65	781.4	47.6	13.3	1,621,988.90	2,409,156.61	39° 31' 20.780 N	107° 35' 40.824 W
Hold 8.23 Inclination									
834.0	8.23	357.65	831.0	54.8	13.0	1,621,996.06	2,409,156.48	39° 31' 20.851 N	107° 35' 40.828 W
Ø 5/8"									
3,338.8	8.23	357.65	3,310.0	412.8	-1.7	1,622,354.35	2,409,150.02	39° 31' 24.389 N	107° 35' 41.016 W
Mesa Verde									
3,572.7	8.23	357.65	3,541.5	446.3	-3.1	1,622,387.81	2,409,149.41	39° 31' 24.720 N	107° 35' 41.033 W
Start Drop -1.50									
4,121.1	0.00	0.00	4,088.0	485.5	-4.7	1,622,427.10	2,409,148.70	39° 31' 25.108 N	107° 35' 41.054 W
Vertical									
4,221.1	0.00	0.00	4,188.0	485.5	-4.7	1,622,427.10	2,409,148.70	39° 31' 25.108 N	107° 35' 41.054 W
UMV_PC - UMV_PC									
4,984.1	0.00	0.00	4,951.0	485.5	-4.7	1,622,427.10	2,409,148.70	39° 31' 25.108 N	107° 35' 41.054 W
Approx. Top Gas									
6,110.1	0.00	0.00	6,077.0	485.5	-4.7	1,622,427.10	2,409,148.70	39° 31' 25.108 N	107° 35' 41.054 W
Upper Sand									
6,688.1	0.00	0.00	6,655.0	485.5	-4.7	1,622,427.10	2,409,148.70	39° 31' 25.108 N	107° 35' 41.054 W
Cameo Coals									
6,984.1	0.00	0.00	6,951.0	485.5	-4.7	1,622,427.10	2,409,148.70	39° 31' 25.108 N	107° 35' 41.054 W
Rollins SS									
7,134.1	0.00	0.00	7,101.0	485.5	-4.7	1,622,427.10	2,409,148.70	39° 31' 25.108 N	107° 35' 41.054 W
TD at 7134.1 - TD									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
UMV_PC (25' Radius) K - plan hits target center - Circle (radius 25.0)	0.00	0.00	4,188.0	485.5	-4.7	1,622,427.10	2,409,148.70	39° 31' 25.108 N	107° 35' 41.054 W
TD / PBHL KP 34-18 - plan hits target center - Point	0.00	0.00	7,101.0	485.5	-4.7	1,622,427.10	2,409,148.70	39° 31' 25.108 N	107° 35' 41.054 W

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
834.0	831.0	9 5/8"		9-5/8	12-1/4

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 34-18 - Slot B3
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 34-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 04Dec09 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (")	Dip Direction (")	
397.2	397.0	Offset Water Well TD				
3,338.8	3,310.0	Mesaverde				
4,221.1	4,188.0	UMV_PC				
4,984.1	4,951.0	Approx. Top Gas				
6,110.1	6,077.0	Upper Sand				
6,688.1	6,655.0	Cameo Coals				
6,984.1	6,951.0	Rollins SS				
7,134.1	7,101.0	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
130.0	130.0	0.0	0.0	Start Build 1.50	
463.3	462.9	12.6	7.3	Begin 1.5°/100 build & Turn	
783.9	781.4	47.6	13.3	Hold 8.23 Inclination	
3,572.7	3,541.5	446.3	-3.1	Start Drop -1.50	
4,121.1	4,088.0	485.5	-4.7	Vertical	
4,221.1	4,188.0	485.5	-4.7	UMV_PC	
7,134.1	7,101.0	485.5	-4.7	TD at 7134.1	