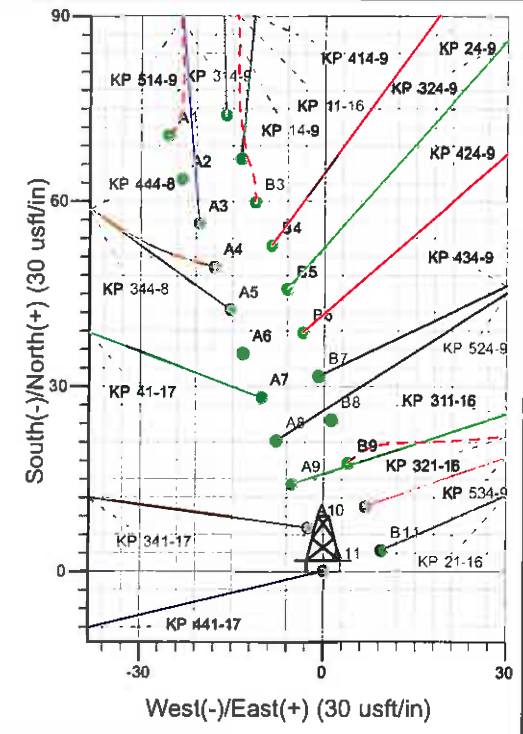
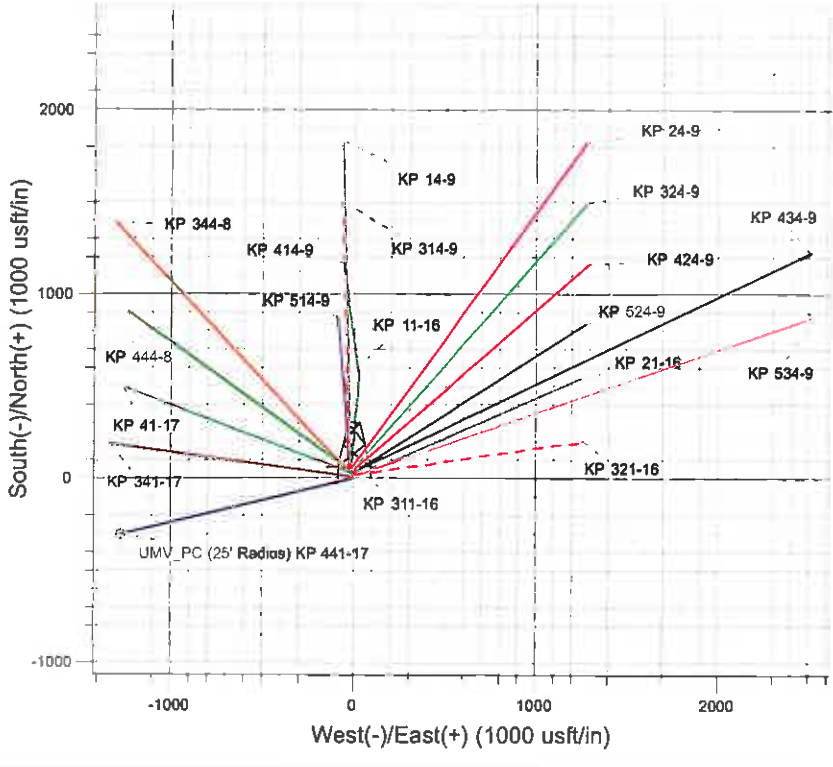
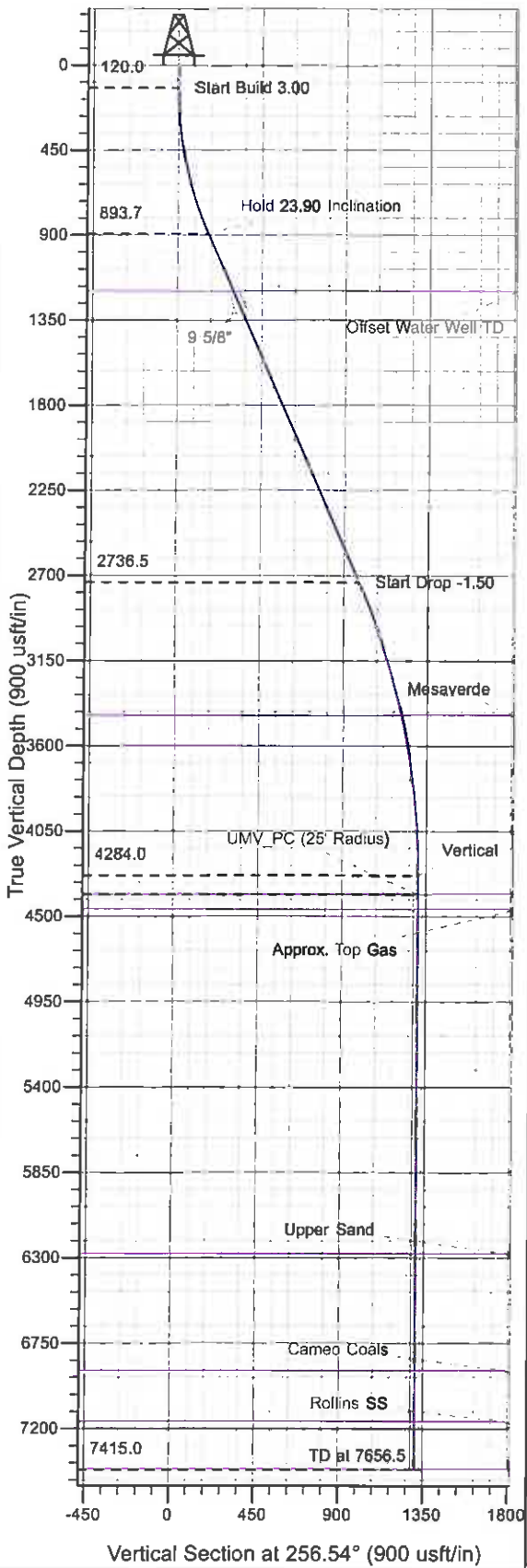




Well Name: KP 441-17
 Surface Location: KP 11-16 Pad
 North American Datum 1983, US State Plane 1983 Colorado Central Zone
 Ground Elevation: 6632.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1625758.20 2417115.60 39° 31' 59.826 N 107° 34' 0.374 W A11
 KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)



Project: Sec. 16-T6S-R91W
 Site: KP 11-16 Pad
 Well: KP 441-17
 Plan #3 12Aug11 kjs

M
 Azimuths to True North
 Magnetic North: 10.36°
 Magnetic Field
 Strength: 52522.6snT
 Dip Angle: 65.91°
 Date: 9/22/2009
 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
893.7	916.6	23.90	256.54	-38.1	-159.3	163.7	163.7	Hold 23.90 Inclination
2736.5	2932.3	23.90	256.54	-228.2	-953.4	980.3	980.3	Start Drop -1.50
4284.0	4525.5	0.00	0.00	-304.4	-1271.9	1307.8	1307.8	Vertical
4384.0	4625.5	0.00	0.00	-304.4	-1271.9	1307.8	1307.8	UMV_PC
7415.0	7656.5	0.00	0.00	-304.4	-1271.9	1307.8	1307.8	TD at 7656.5

KOKOPELLI FIELD

Sec. 16-T6S-R91W

KP 11-16 Pad

KP 441-17 - Slot A11

Wellbore #1

Plan: Plan #3 12Aug11 kjs

Standard Planning Report - Geographic

12 October, 2011

Williams
 Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well KP 441-17 - Slot A11
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)
Project:	Sec. 16-T6S-R91W	MD Reference:	KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)
Site:	KP 11-16 Pad	North Reference:	True
Well:	KP 441-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 12Aug11 kjs		

Project	Sec. 16-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		

Site	KP 11-16 Pad				
Site Position:	Northing:	1,625,762.90 usft	Latitude:	39° 31' 59.871 N	
From:	Map	Easting:	2,417,113.40 usft	Longitude:	107° 34' 0.404 W
Position Uncertainty:	0.0 usft	Slot Radius:	0"	Grid Convergence:	-1.30°

Well	KP 441-17 - Slot A11					
Well Position	+N-S	0.0 usft	Northing:	1,625,758.20 usft	Latitude:	39° 31' 59.826 N
	+E-W	0.0 usft	Easting:	2,417,115.60 usft	Longitude:	107° 34' 0.374 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	6,632.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (")	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	9/22/2009	10.36	65.91	52,523

Design	Plan #3 12Aug11 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	256.54

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	
916.6	23.90	256.54	893.7	-38.1	-159.3	3.00	3.00	0.00	256.54	
2,932.3	23.90	256.54	2,736.5	-228.2	-953.4	0.00	0.00	0.00	0.00	
4,525.5	0.00	0.00	4,284.0	-304.4	-1,271.9	1.50	-1.50	0.00	180.00	
4,625.5	0.00	0.00	4,384.0	-304.4	-1,271.9	0.00	0.00	0.00	0.00	UMV_PC (25' Radius)
7,856.5	0.00	0.00	7,415.0	-304.4	-1,271.9	0.00	0.00	0.00	0.00	

Williams
 Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well KP 441-17 - Slot A11
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)
Project:	Sec. 16-T6S-R91W	MD Reference:	KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)
Site:	KP 11-16 Pad	North Reference:	True
Well:	KP 441-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 12Aug11 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	1,625,758.20	2,417,115.60	39° 31' 59.826 N	107° 34' 0.374 W
120.0	0.00	0.00	120.0	0.0	0.0	1,625,758.20	2,417,115.60	39° 31' 59.826 N	107° 34' 0.374 W
Start Build 3.00									
916.6	23.90	256.54	893.7	-38.1	-159.3	1,625,723.71	2,416,955.53	39° 31' 59.449 N	107° 34' 2.407 W
Hold 23.00 Inclination									
1,247.2	23.90	256.54	1,196.0	-69.3	-289.5	1,625,695.51	2,416,824.59	39° 31' 59.141 N	107° 34' 4.070 W
Offset Water Well TD									
1,356.6	23.90	256.54	1,296.0	-79.6	-332.6	1,625,686.18	2,416,781.27	39° 31' 59.039 N	107° 34' 4.620 W
9 5/8"									
2,932.3	23.90	256.54	2,736.5	-228.2	-953.4	1,625,551.76	2,416,157.26	39° 31' 57.570 N	107° 34' 12.543 W
Start Drop -1.50									
3,677.6	12.72	256.54	3,443.0	-282.6	-1,180.7	1,625,502.53	2,415,928.74	39° 31' 57.032 N	107° 34' 15.445 W
Mesaverde									
4,525.5	0.00	0.00	4,284.0	-304.4	-1,271.9	1,625,482.80	2,415,837.10	39° 31' 56.817 N	107° 34' 16.608 W
Vertical									
4,625.5	0.00	0.00	4,384.0	-304.4	-1,271.9	1,625,482.80	2,415,837.10	39° 31' 56.817 N	107° 34' 16.608 W
UMV_PC - UMV_PC - UMV_PC (25' Radius) KP 441-17									
4,706.5	0.00	0.00	4,465.0	-304.4	-1,271.9	1,625,482.80	2,415,837.10	39° 31' 56.817 N	107° 34' 16.608 W
Approx. Top Gas									
6,521.5	0.00	0.00	6,280.0	-304.4	-1,271.9	1,625,482.80	2,415,837.10	39° 31' 56.817 N	107° 34' 16.608 W
Upper Sand									
7,140.5	0.00	0.00	6,899.0	-304.4	-1,271.9	1,625,482.80	2,415,837.10	39° 31' 56.817 N	107° 34' 16.608 W
Cameo Coals									
7,406.5	0.00	0.00	7,165.0	-304.4	-1,271.9	1,625,482.80	2,415,837.10	39° 31' 56.817 N	107° 34' 16.608 W
Rollins SS									
7,656.5	0.00	0.00	7,415.0	-304.4	-1,271.9	1,625,482.80	2,415,837.10	39° 31' 56.817 N	107° 34' 16.608 W
TD at 7656.5 - 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	4,384.0	-304.4	-1,271.9	1,625,482.80	2,415,837.10	39° 31' 56.817 N	107° 34' 16.608 W
- hit/miss target									
- Shape									
- plan hits target center									
- Circle (radius 25.0)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,356.6	1,296.0	9 5/8"	9-5/8	12-1/4	

Williams
 Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well KP 441-17 - Slot A11
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)
Project:	Sec. 16-T6S-R91W	MD Reference:	KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)
Site:	KP 11-16 Pad	North Reference:	True
Well:	KP 441-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 12Aug11 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,247.2	1,196.0	Offset Water Well TD				
3,677.6	3,443.0	Mesaverde				
4,625.5	4,384.0	UMV_PC				
4,706.5	4,465.0	Approx. Top Gas				
6,521.5	6,280.0	Upper Sand				
7,140.5	6,899.0	Cameo Coals				
7,406.5	7,165.0	Rollins SS				
7,656.5	7,415.0	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	
916.6	893.7	-38.1	-159.3	Hold 23.90 Inclination	
2,932.3	2,736.5	-228.2	-953.4	Start Drop -1.50	
4,525.5	4,284.0	-304.4	-1,271.9	Vertical	
4,625.5	4,384.0	-304.4	-1,271.9	UMV_PC	
7,656.5	7,415.0	-304.4	-1,271.9	TD at 7656.5	