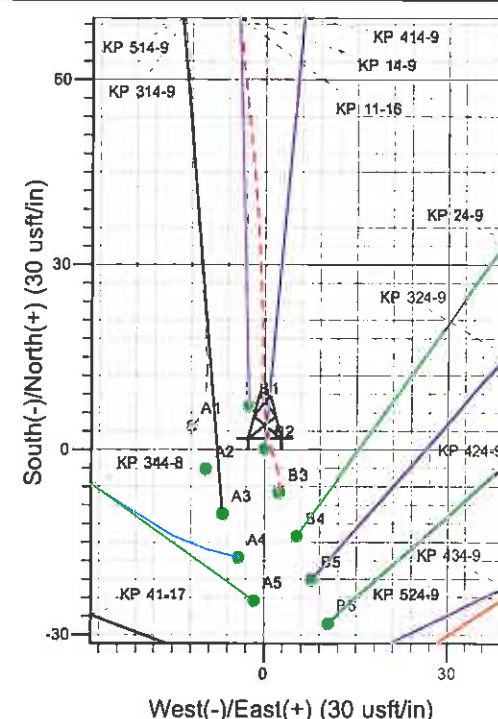
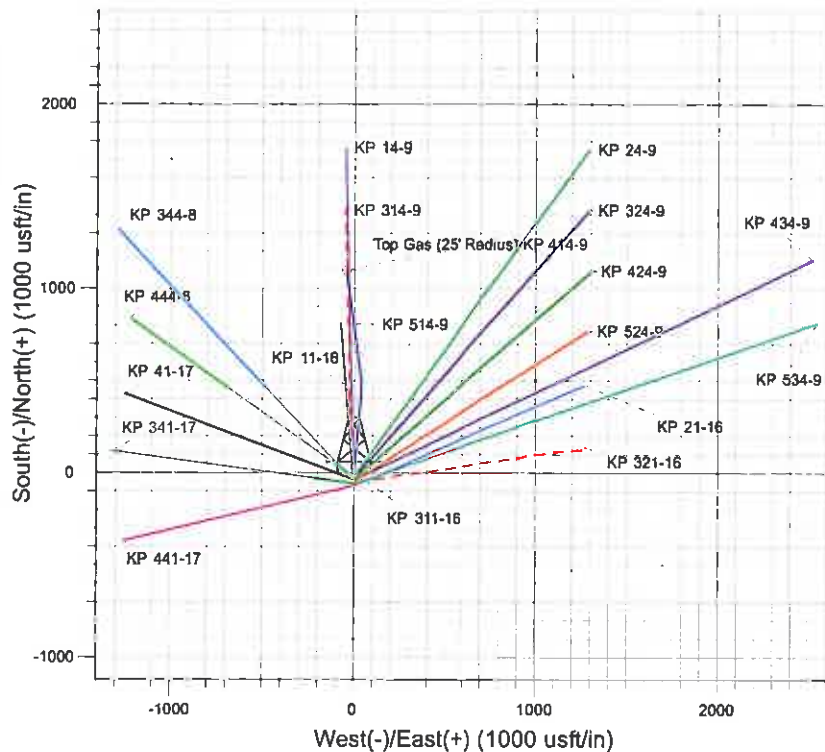
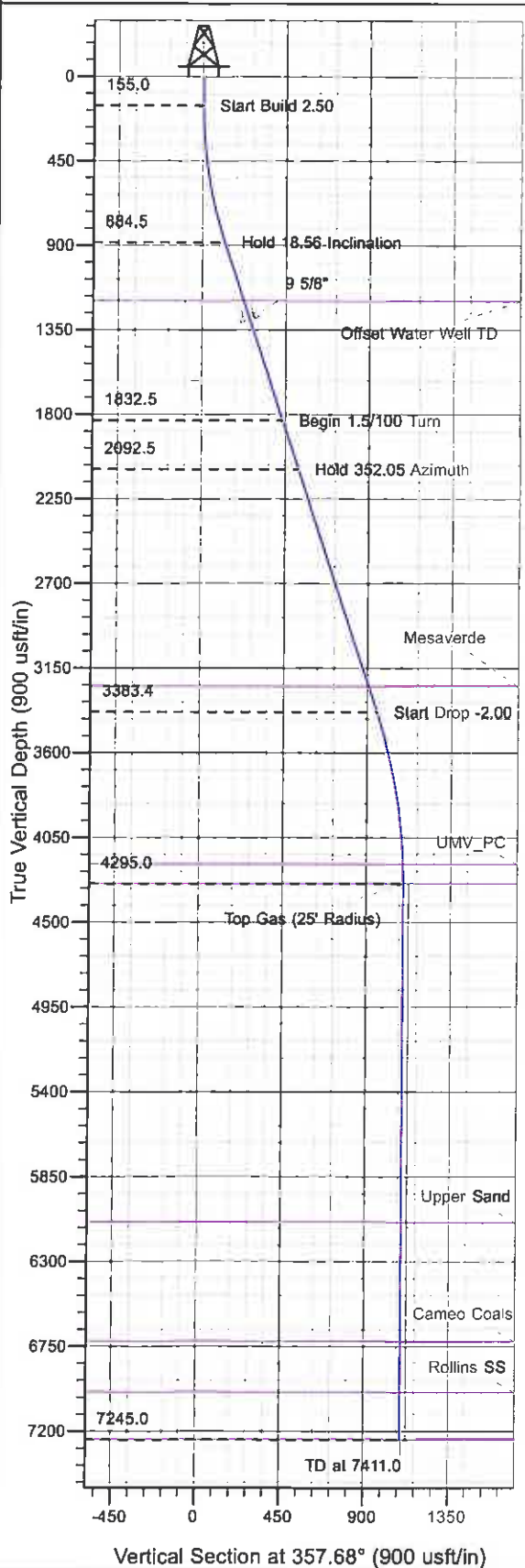




Well Name: KP 414-9
 Surface Location: KP 11-16 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 6632.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1625825.30 2417103.50 39° 32' 0.486 N 107° 34' 0.548 W B2
 KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)



Project: Sec 16-T6S-R91W
 Site: KP 11-16 Pad
 Well: KP 414-9
 Plan #4 12Aug11 kjs

Azimuths to True North
 Magnetic North: 10.36°
 Magnetic Field
 Strength: 52524.6snT
 Dip Angle: 65.91°
 Date: 9/15/2009
 Model: IGRF2005-10

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSed	Departure	Annotation
155.0	155.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 2.50
884.5	897.4	18.56	5.00	118.7	10.4	118.2	119.2	Hold 18.56 Inclination
1832.5	1897.4	18.56	5.00	435.8	38.1	433.9	437.5	Begin 1.5/100 Turn
2092.5	2171.6	18.56	352.05	522.6	35.9	520.7	524.5	Hold 352.05 Azimuth
3383.4	3533.2	18.56	352.05	951.7	-24.0	951.9	957.8	Start Drop -2.00
4295.0	4461.0	0.00	0.00	1099.2	-44.6	1100.1	1106.7	Top Gas
7245.0	7411.0	0.00	0.00	1099.2	-44.6	1100.1	1106.7	TD at 7411.0

KOKOPELLI FIELD

Sec. 16-T6S-R91W

KP 11-16 Pad

KP 414-9 - Slot B2

Wellbore #1

Plan: Plan #4 12Aug11 kjs

Standard Planning Report - Geographic

12 October, 2011

Williams
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well KP 414-9 - Slot B2
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 414-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 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 414-9 - Slot B2					
Well Position	+N/-S	0.0 usft	Northing:	1,625,825.30 usft	Latitude:	39° 32' 0.486 N
	+E/-W	0.0 usft	Easting:	2,417,103.50 usft	Longitude:	107° 34' 0.548 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	9/15/2009	10.37	65.91	52,525

Design	Plan #4 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	357.68

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	
155.0	0.00	0.00	155.0	0.0	0.0	0.00	0.00	0.00	0.00	
897.4	18.56	5.00	884.5	118.7	10.4	2.50	2.50	0.00	5.00	
1,897.4	18.56	5.00	1,832.5	435.8	38.1	0.00	0.00	0.00	0.00	
2,171.6	18.56	352.05	2,092.5	522.6	35.9	1.50	0.00	-4.72	-96.20	
3,533.2	18.56	352.05	3,383.4	951.7	-24.0	0.00	0.00	0.00	0.00	
4,461.0	0.00	0.00	4,295.0	1,099.2	-44.6	2.00	-2.00	0.00	180.00	Top Gas (25' Radius)
7,411.0	0.00	0.00	7,245.0	1,099.2	-44.6	0.00	0.00	0.00	0.00	TD / PBHL KP 414-9

Williams
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well KP 414-9 - Slot B2
Company:	KOKOPELLI FIELD	TVD Reference:	KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)
Project:	Sec. 16-T6S-R81W	MD Reference:	KELLY BUSHING @ 6654.0usft (Cyclone 17 (22' RKB) kjs)
Site:	KP 11-16 Pad	North Reference:	True
Well:	KP 414-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 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	1,625,825.30	2,417,103.50	39° 32' 0.486 N	107° 34' 0.548 W
155.0	0.00	0.00	155.0	0.0	0.0	1,625,825.30	2,417,103.50	39° 32' 0.486 N	107° 34' 0.548 W
Start Build 2.50									
897.4	18.56	5.00	884.5	118.7	10.4	1,625,943.77	2,417,116.59	39° 32' 1.659 N	107° 34' 0.416 W
Hold 18.56 Inclination									
1,226.0	18.56	5.00	1,196.0	222.9	19.5	1,626,047.73	2,417,128.08	39° 32' 2.689 N	107° 34' 0.299 W
Offset Water Well TD									
1,331.5	18.56	5.00	1,296.0	256.4	22.4	1,626,081.11	2,417,131.76	39° 32' 3.020 N	107° 34' 0.262 W
9 5/8"									
1,897.4	18.56	5.00	1,832.5	435.8	38.1	1,626,260.15	2,417,151.54	39° 32' 4.793 N	107° 34' 0.061 W
Begin 1.5/100 Turn									
2,171.6	18.56	352.05	2,092.5	522.6	35.9	1,626,346.90	2,417,151.28	39° 32' 5.650 N	107° 34' 0.090 W
Hold 352.05 Azimuth									
3,391.5	18.56	352.05	3,249.0	907.0	-17.8	1,626,732.48	2,417,106.36	39° 32' 9.450 N	107° 34' 0.775 W
Mesaverde									
3,533.2	18.56	352.05	3,383.4	951.7	-24.0	1,626,777.28	2,417,101.14	39° 32' 9.892 N	107° 34' 0.855 W
Start Drop -2.00									
4,359.0	2.04	352.05	4,193.0	1,097.4	-44.4	1,626,923.39	2,417,084.11	39° 32' 11.332 N	107° 34' 1.114 W
UMV_PC									
4,461.0	0.00	0.00	4,295.0	1,099.2	-44.6	1,626,925.20	2,417,083.90	39° 32' 11.349 N	107° 34' 1.118 W
Top Gas - Approx. Top Gas - Top Gas (25' Radius) KP 414-9									
6,261.0	0.00	0.00	6,095.0	1,099.2	-44.6	1,626,925.20	2,417,083.90	39° 32' 11.349 N	107° 34' 1.118 W
Upper Sand									
6,892.0	0.00	0.00	6,726.0	1,099.2	-44.6	1,626,925.20	2,417,083.90	39° 32' 11.349 N	107° 34' 1.118 W
Cameo Coals									
7,161.0	0.00	0.00	6,995.0	1,099.2	-44.6	1,626,925.20	2,417,083.90	39° 32' 11.349 N	107° 34' 1.118 W
Rollins SS									
7,411.0	0.00	0.00	7,245.0	1,099.2	-44.6	1,626,925.20	2,417,083.90	39° 32' 11.349 N	107° 34' 1.118 W
TD at 7411.0 - TD - TD / PBHL KP 414-9									

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
Top Gas (25' Radius) KF - plan hits target center - Circle (radius 25.0)	0.00	0.00	4,295.0	1,099.2	-44.6	1,626,925.20	2,417,083.90	39° 32' 11.349 N	107° 34' 1.118 W
TD / PBHL KP 414-9 - plan hits target center - Point	0.00	0.00	7,245.0	1,099.2	-44.6	1,626,925.20	2,417,083.90	39° 32' 11.349 N	107° 34' 1.118 W

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,331.5	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 414-9 - Slot B2
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 414-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 12Aug11 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,226.0	1,196.0	Offsel Water Well TD				
3,391.5	3,249.0	Mesaverde				
4,359.0	4,193.0	UMV_PC				
4,461.0	4,295.0	Approx. Top Gas				
6,261.0	6,095.0	Upper Sand				
6,892.0	6,726.0	Cameo Coals				
7,161.0	6,995.0	Rollins SS				
7,411.0	7,245.0	TD				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
155.0	155.0	0.0	0.0	Start Build 2.50
897.4	884.5	118.7	10.4	Hold 18.56 Inclination
1,897.4	1,832.5	435.8	38.1	Begin 1.5/100 Turn
2,171.6	2,092.5	522.6	35.9	Hold 352.05 Azimuth
3,533.2	3,383.4	951.7	-24.0	Start Drop -2.00
4,461.0	4,295.0	1,099.2	-44.6	Top Gas
7,411.0	7,245.0	1,099.2	-44.6	TD at 7411.0