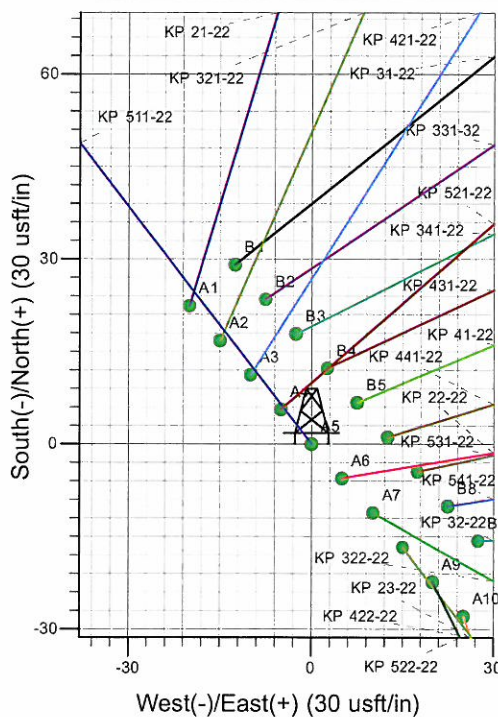
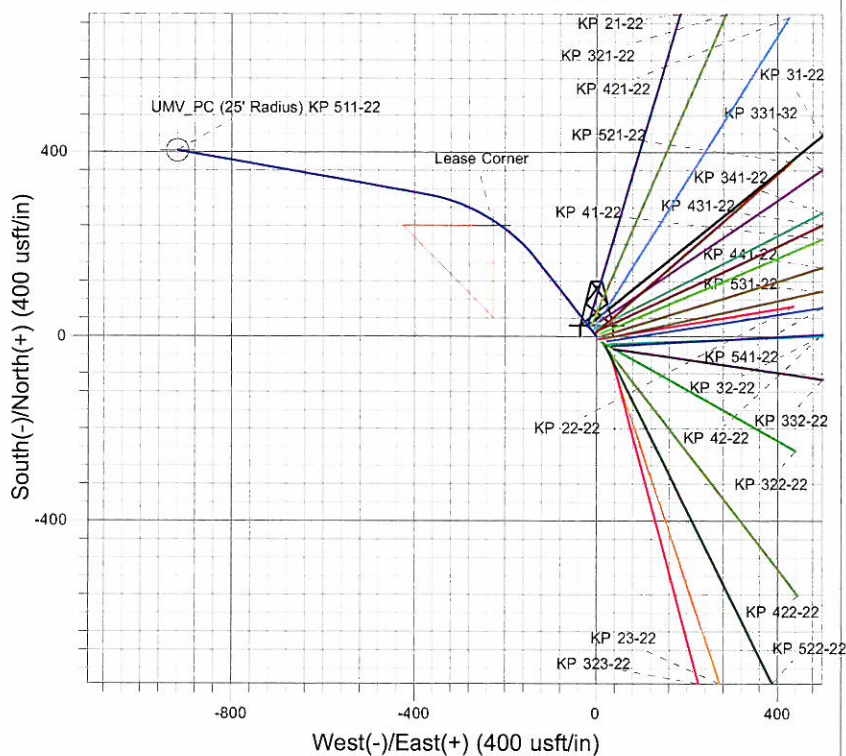
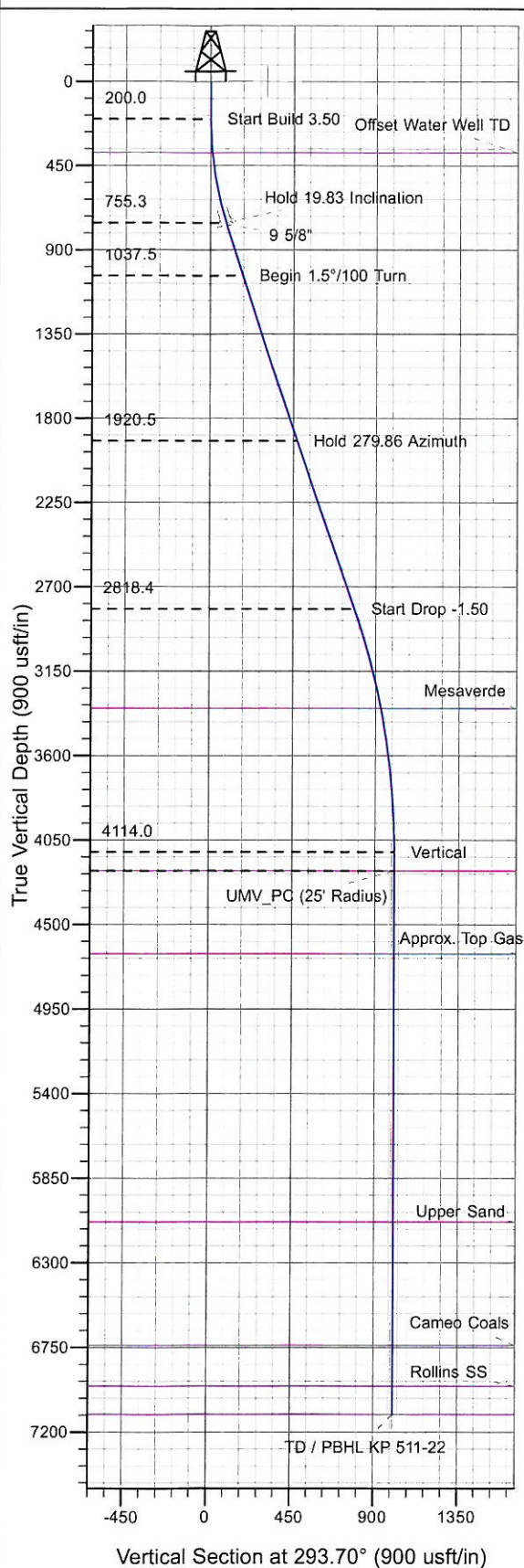




Well Name: KP 511-22
 Surface Location: KP 22-22 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 6186.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1619564.70 2423272.30 39° 31' 0.004 N 107° 32' 40.033 W A5
 WELL @ 6209.0usft (Cyclone 30 (23' RKB) kjs)



Project: Sec. 22-T6S-R91W
 Site: KP 22-22 Pad
 Well: KP 511-22
 Design #1 16Nov10 kjs



Azimuths to True North
 Magnetic North: 10.20°
 Magnetic Field
 Strength: 52407.1snT
 Dip Angle: 65.87°
 Date: 11/16/2010
 Model: IGRF200510

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
200.0	200.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 3.50
755.3	766.6	19.83	322.00	76.5	-59.8	85.5	97.1	Hold 19.83 Inclination
1037.5	1066.6	19.83	322.00	156.7	-122.4	175.1	198.8	Begin 1.5°/100 Turn
1920.5	2000.5	19.83	279.86	309.4	-377.3	469.8	503.2	Hold 279.86 Azimuth
2818.4	2955.0	19.83	279.86	364.8	-696.2	784.2	827.0	Start Drop -1.50
4114.0	4276.8	0.00	0.00	403.6	-919.3	1004.0	1053.4	Vertical
4214.0	4376.8	0.00	0.00	403.6	-919.3	1004.0	1053.4	UMV_PC
7106.0	7268.8	0.00	0.00	403.6	-919.3	1004.0	1053.4	TD at 7268.8

KOKOPELLI FIELD

Sec. 22-T6S-R91W

KP 22-22 Pad

KP 511-22 - Slot A5

Wellbore #1

Plan: Design #1 16Nov10 kjs

Standard Planning Report - Geographic

30 November, 2010

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 511-22 - Slot A5
Company:	KOKOPELLI FIELD	TVD Reference:	WELL @ 6209.0usft (Cyclone 30 (23' RKB) kjs)
Project:	Sec. 22-T6S-R91W	MD Reference:	WELL @ 6209.0usft (Cyclone 30 (23' RKB) kjs)
Site:	KP 22-22 Pad	North Reference:	True
Well:	KP 511-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 16Nov10 kjs		

Project	Sec. 22-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 22-22 Pad			
Site Position:		Northing:	1,619,530.50 usft	Latitude: 39° 30' 59.673 N
From:	Map	Easting:	2,423,301.50 usft	Longitude: 107° 32' 39.651 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence: -1.289 °

Well	KP 511-22 - Slot A5			
Well Position	+N/-S	0.0 usft	Northing:	1,619,564.70 usft
	+E/-W	0.0 usft	Easting:	2,423,272.30 usft
Position Uncertainty	0.0 usft		Wellhead Elevation:	Ground Level: 6,186.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/16/2010	10.199	65.868	52,407

Design	Design #1 16Nov10 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	293.70

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.000	
766.6	19.83	322.00	755.3	76.5	-59.8	3.50	3.50	0.00	322.000	
1,066.6	19.83	322.00	1,037.5	156.7	-122.4	0.00	0.00	0.00	0.000	
2,000.5	19.83	279.86	1,920.5	309.4	-377.3	1.50	0.00	-4.51	-109.933	
2,955.0	19.83	279.86	2,818.4	364.8	-696.2	0.00	0.00	0.00	0.000	
4,276.8	0.00	0.00	4,114.0	403.6	-919.3	1.50	-1.50	0.00	180.000	
7,268.8	0.00	0.00	7,106.0	403.6	-919.3	0.00	0.00	0.00	0.000	TD / PBHL KP 511-22

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 511-22 - Slot A5
Company:	KOKOPELLI FIELD	TVD Reference:	WELL @ 6209.0usft (Cyclone 30 (23' RKB) kjs)
Project:	Sec. 22-T6S-R91W	MD Reference:	WELL @ 6209.0usft (Cyclone 30 (23' RKB) kjs)
Site:	KP 22-22 Pad	North Reference:	True
Well:	KP 511-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 16Nov10 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	1,619,564.70	2,423,272.30	39° 31' 0.004 N	107° 32' 40.033 W
200.0	0.00	0.00	200.0	0.0	0.0	1,619,564.70	2,423,272.30	39° 31' 0.004 N	107° 32' 40.033 W
Start Build 3.50									
381.4	6.35	322.00	381.0	7.9	-6.2	1,619,572.74	2,423,266.30	39° 31' 0.083 N	107° 32' 40.112 W
Offset Water Well TD									
766.6	19.83	322.00	755.3	76.5	-59.8	1,619,642.51	2,423,214.28	39° 31' 0.760 N	107° 32' 40.796 W
Hold 19.83 Inclination									
778.0	19.83	322.00	766.1	79.5	-62.1	1,619,645.62	2,423,211.96	39° 31' 0.791 N	107° 32' 40.826 W
9 5/8"									
1,066.6	19.83	322.00	1,037.5	156.7	-122.4	1,619,724.10	2,423,153.44	39° 31' 1.553 N	107° 32' 41.595 W
Begin 1.5°/100 Turn									
2,000.5	19.83	279.86	1,920.5	309.4	-377.3	1,619,882.51	2,422,902.10	39° 31' 3.062 N	107° 32' 44.848 W
Hold 279.86 Azimuth									
2,955.0	19.83	279.86	2,818.4	364.8	-696.2	1,619,945.11	2,422,584.46	39° 31' 3.610 N	107° 32' 48.918 W
Start Drop -1.50									
3,506.6	11.55	279.86	3,349.0	390.4	-843.1	1,619,973.93	2,422,438.23	39° 31' 3.862 N	107° 32' 50.792 W
Mesaverde									
4,276.8	0.00	0.00	4,114.0	403.6	-919.3	1,619,988.90	2,422,362.30	39° 31' 3.993 N	107° 32' 51.765 W
Vertical									
4,376.8	0.00	0.00	4,214.0	403.6	-919.3	1,619,988.90	2,422,362.30	39° 31' 3.993 N	107° 32' 51.765 W
UMV_PC - UMV_PC									
4,818.8	0.00	0.00	4,656.0	403.6	-919.3	1,619,988.90	2,422,362.30	39° 31' 3.993 N	107° 32' 51.765 W
Approx. Top Gas									
6,246.8	0.00	0.00	6,084.0	403.6	-919.3	1,619,988.90	2,422,362.30	39° 31' 3.993 N	107° 32' 51.765 W
Upper Sand									
6,900.8	0.00	0.00	6,738.0	403.6	-919.3	1,619,988.90	2,422,362.30	39° 31' 3.993 N	107° 32' 51.765 W
Cameo Coals									
7,118.8	0.00	0.00	6,956.0	403.6	-919.3	1,619,988.90	2,422,362.30	39° 31' 3.993 N	107° 32' 51.765 W
Rollins SS									
7,268.8	0.00	0.00	7,106.0	403.6	-919.3	1,619,988.90	2,422,362.30	39° 31' 3.993 N	107° 32' 51.765 W
TD at 7268.8									

Williams

Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well KP 511-22 - Slot A5
Company:	KOKOPELLI FIELD	TVD Reference:	WELL @ 6209.0usft (Cyclone 30 (23' RKB) kjs)
Project:	Sec. 22-T6S-R91W	MD Reference:	WELL @ 6209.0usft (Cyclone 30 (23' RKB) kjs)
Site:	KP 22-22 Pad	North Reference:	True
Well:	KP 511-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 16Nov10 kjs		

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
Lease Corner	0.00	0.00	0.0	241.3	-225.8	1,619,811.00	2,423,052.00	39° 31' 2.389 N	107° 32' 42.915 W
- plan misses target center by 330.4usft at 0.0usft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			0.0	-200.0	0.0	1,619,611.05	2,423,047.50		True
Point 2			0.0	0.0	0.0	1,619,811.00	2,423,052.00		True
Point 3			0.0	0.0	-200.0	1,619,815.50	2,422,852.05		True
UMV_PC (25' Radius) K	0.00	0.00	4,214.0	403.6	-919.3	1,619,988.90	2,422,362.30	39° 31' 3.993 N	107° 32' 51.765 W
- plan hits target center									
- Circle (radius 25.0)									
TD / PBHL KP 511-22	0.00	0.00	7,106.0	403.6	-919.3	1,619,988.90	2,422,362.30	39° 31' 3.993 N	107° 32' 51.765 W
- plan hits target center									
- Point									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
778.0	766.1	9 5/8"	9.625	12.250

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
381.4	381.0	Offset Water Well TD			
3,506.6	3,349.0	Mesaverde			
4,376.8	4,214.0	UMV_PC			
4,818.8	4,656.0	Approx. Top Gas			
6,246.8	6,084.0	Upper Sand			
6,900.8	6,738.0	Cameo Coals			
7,118.8	6,956.0	Rollins SS			
7,268.8	7,106.0	TD			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.0	200.0	0.0	0.0	Start Build 3.50
766.6	755.3	76.5	-59.8	Hold 19.83 Inclination
1,066.6	1,037.5	156.7	-122.4	Begin 1.5°/100 Turn
2,000.5	1,920.5	309.4	-377.3	Hold 279.86 Azimuth
2,955.0	2,818.4	364.8	-696.2	Start Drop -1.50
4,276.8	4,114.0	403.6	-919.3	Vertical
4,376.8	4,214.0	403.6	-919.3	UMV_PC
7,268.8	7,106.0	403.6	-919.3	TD at 7268.8