



# **KOKOPELLI FIELD**

**Sec. 33-T6S-R90W**

**CMU 22-33**

**CMU 323-33 - Slot B10**

**Wellbore #1**

**Plan: Design #2 24Apr13 kjs**

## **Standard Planning Report - Geographic**

**24 April, 2013**



**WPX Energy**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well CMU 323-33 - Slot B10
<b>Company:</b>	KOKOPELLI FIELD	<b>TVD Reference:</b>	KELLY BUSHING @ 7252.00usft (Nabors 574 (26' RKB) kjs)
<b>Project:</b>	Sec. 33-T6S-R90W	<b>MD Reference:</b>	KELLY BUSHING @ 7252.00usft (Nabors 574 (26' RKB) kjs)
<b>Site:</b>	CMU 22-33	<b>North Reference:</b>	True
<b>Well:</b>	CMU 323-33	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2 24Apr13 kjs		

<b>Project</b>	Sec. 33-T6S-R90W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

<b>Site</b>	CMU 22-33			
<b>Site Position:</b>		<b>Northing:</b>	1,608,625.63 usft	<b>Latitude:</b> 39.48830
<b>From:</b> Map		<b>Easting:</b>	2,450,706.11 usft	<b>Longitude:</b> -107.44641
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> -1.2276 °

<b>Well</b>	CMU 323-33 - Slot B10			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,608,586.10 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,450,687.60 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	
			<b>Ground Level:</b>	7,226.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2/7/2013	9.8876	65.7884	52,140

<b>Design</b>	Design #2 24Apr13 kjs			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	204.05

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.0000	
850.99	14.62	204.05	843.08	-84.70	-37.80	2.00	2.00	0.00	204.0487	
5,923.02	14.62	204.05	5,750.89	-1,253.78	-559.50	0.00	0.00	0.00	0.0000	
6,897.67	0.00	0.00	6,715.00	-1,366.72	-609.90	1.50	-1.50	0.00	180.0000	
6,997.67	0.00	0.00	6,815.00	-1,366.72	-609.90	0.00	0.00	0.00	0.0000	UMV_PC (25' Radius)
10,814.67	0.00	0.00	10,632.00	-1,366.72	-609.90	0.00	0.00	0.00	0.0000	



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Planning Report - Geographic

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<b>Company:</b>	KOKOPELLI FIELD	<b>TVD Reference:</b>	KELLY BUSHING @ 7252.00usft (Nabors 574 (26' RKB) kjs)
<b>Project:</b>	Sec. 33-T6S-R90W	<b>MD Reference:</b>	KELLY BUSHING @ 7252.00usft (Nabors 574 (26' RKB) kjs)
<b>Site:</b>	CMU 22-33	<b>North Reference:</b>	True
<b>Well:</b>	CMU 323-33	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2 24Apr13 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	
0.00	0.00	0.00	0.00	0.00	0.00	1,608,586.10	2,450,687.60	39.48819	-107.44647	
120.00	0.00	0.00	120.00	0.00	0.00	1,608,586.10	2,450,687.60	39.48819	-107.44647	
Start Build 2.00										
500.00	7.60	204.05	498.89	-22.98	-10.26	1,608,563.34	2,450,676.86	39.48813	-107.44650	
850.99	14.62	204.05	843.08	-84.70	-37.80	1,608,502.22	2,450,648.00	39.48796	-107.44660	
Hold 14.62 Inclination										
1,000.00	14.62	204.05	987.27	-119.05	-53.13	1,608,468.21	2,450,631.94	39.48786	-107.44666	
1,013.16	14.62	204.05	1,000.00	-122.08	-54.48	1,608,465.21	2,450,630.52	39.48785	-107.44666	
Offset Water Well TD										
1,116.50	14.62	204.05	1,100.00	-145.90	-65.11	1,608,441.62	2,450,619.38	39.48779	-107.44670	
9 5/8"										
1,500.00	14.62	204.05	1,471.08	-234.30	-104.56	1,608,354.09	2,450,578.05	39.48754	-107.44684	
2,000.00	14.62	204.05	1,954.89	-349.55	-155.98	1,608,239.97	2,450,524.17	39.48723	-107.44702	
2,500.00	14.62	204.05	2,438.70	-464.79	-207.41	1,608,125.85	2,450,470.28	39.48691	-107.44720	
3,000.00	14.62	204.05	2,922.51	-580.04	-258.84	1,608,011.73	2,450,416.40	39.48660	-107.44739	
3,500.00	14.62	204.05	3,406.32	-695.29	-310.27	1,607,897.61	2,450,362.51	39.48628	-107.44757	
4,000.00	14.62	204.05	3,890.13	-810.54	-361.70	1,607,783.49	2,450,308.62	39.48596	-107.44775	
4,500.00	14.62	204.05	4,373.95	-925.78	-413.13	1,607,669.38	2,450,254.74	39.48565	-107.44793	
5,000.00	14.62	204.05	4,857.76	-1,041.03	-464.56	1,607,555.26	2,450,200.85	39.48533	-107.44811	
5,500.00	14.62	204.05	5,341.57	-1,156.28	-515.99	1,607,441.14	2,450,146.96	39.48501	-107.44830	
5,913.83	14.62	204.05	5,742.00	-1,251.67	-558.55	1,607,346.68	2,450,102.36	39.48475	-107.44845	
Mesaverde										
5,923.02	14.62	204.05	5,750.89	-1,253.78	-559.50	1,607,344.59	2,450,101.37	39.48475	-107.44845	
Start Drop -1.50										
6,000.00	13.47	204.05	5,825.57	-1,270.84	-567.11	1,607,327.70	2,450,093.40	39.48470	-107.44848	
6,500.00	5.97	204.05	6,318.05	-1,347.84	-601.47	1,607,251.46	2,450,057.40	39.48449	-107.44860	
6,897.67	0.00	0.00	6,715.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
Vertical										
6,997.67	0.00	0.00	6,815.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
UMV_PC - UMV_PC										
7,000.00	0.00	0.00	6,817.33	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
7,284.67	0.00	0.00	7,102.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
Approx. Top Gas										
7,500.00	0.00	0.00	7,317.33	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
8,000.00	0.00	0.00	7,817.33	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
8,500.00	0.00	0.00	8,317.33	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
8,859.67	0.00	0.00	8,677.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
Upper Sand										
9,000.00	0.00	0.00	8,817.33	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
9,500.00	0.00	0.00	9,317.33	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
9,519.67	0.00	0.00	9,337.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
Cameo Coals										
9,784.67	0.00	0.00	9,602.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
Rollins SS										
10,000.00	0.00	0.00	9,817.33	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
10,384.67	0.00	0.00	10,202.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
Cozzette										
10,500.00	0.00	0.00	10,317.33	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
10,564.67	0.00	0.00	10,382.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863	
Corcoran										



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Planning Report - Geographic

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<b>Company:</b>	KOKOPELLI FIELD	<b>TVD Reference:</b>	KELLY BUSHING @ 7252.00usft (Nabors 574 (26' RKB) kjs)
<b>Project:</b>	Sec. 33-T6S-R90W	<b>MD Reference:</b>	KELLY BUSHING @ 7252.00usft (Nabors 574 (26' RKB) kjs)
<b>Site:</b>	CMU 22-33	<b>North Reference:</b>	True
<b>Well:</b>	CMU 323-33	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2 24Apr13 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
10,814.66	0.00	0.00	10,631.99	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863
<b>TD</b>									
10,814.67	0.00	0.00	10,632.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863
<b>TD at 10814.67</b>									

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) C - plan hits target center - Circle (radius 25.00)	0.00	0.00	6,815.00	-1,366.72	-609.90	1,607,232.75	2,450,048.57	39.48444	-107.44863

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,116.50	1,100.00	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,013.16	1,000.00	Offset Water Well TD				
5,913.83	5,742.00	Mesaverde				
6,997.67	6,815.00	UMV_PC				
7,284.67	7,102.00	Approx. Top Gas				
8,859.67	8,677.00	Upper Sand				
9,519.67	9,337.00	Cameo Coals				
9,784.67	9,602.00	Rollins SS				
10,384.67	10,202.00	Cozzette				
10,564.67	10,382.00	Corcoran				
10,814.66	10,631.99	TD		0.0000		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
120.00	120.00	0.00	0.00	Start Build 2.00
850.99	843.08	-84.70	-37.80	Hold 14.62 Inclination
5,923.02	5,750.89	-1,253.78	-559.50	Start Drop -1.50
6,897.67	6,715.00	-1,366.72	-609.90	Vertical
6,997.67	6,815.00	-1,366.72	-609.90	UMV_PC
10,814.67	10,632.00	-1,366.72	-609.90	TD at 10814.67