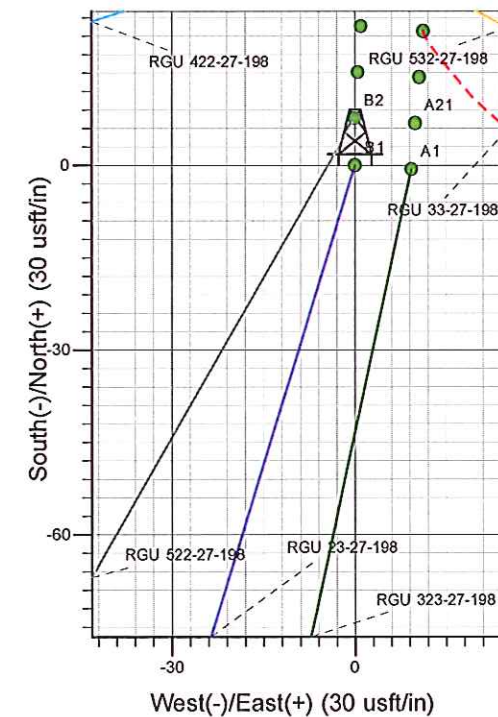
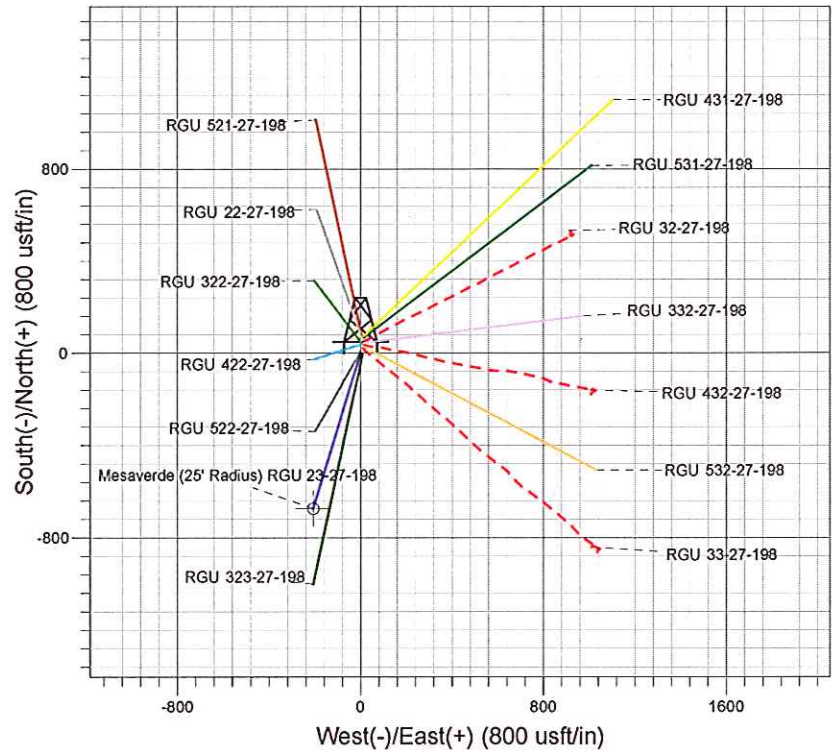
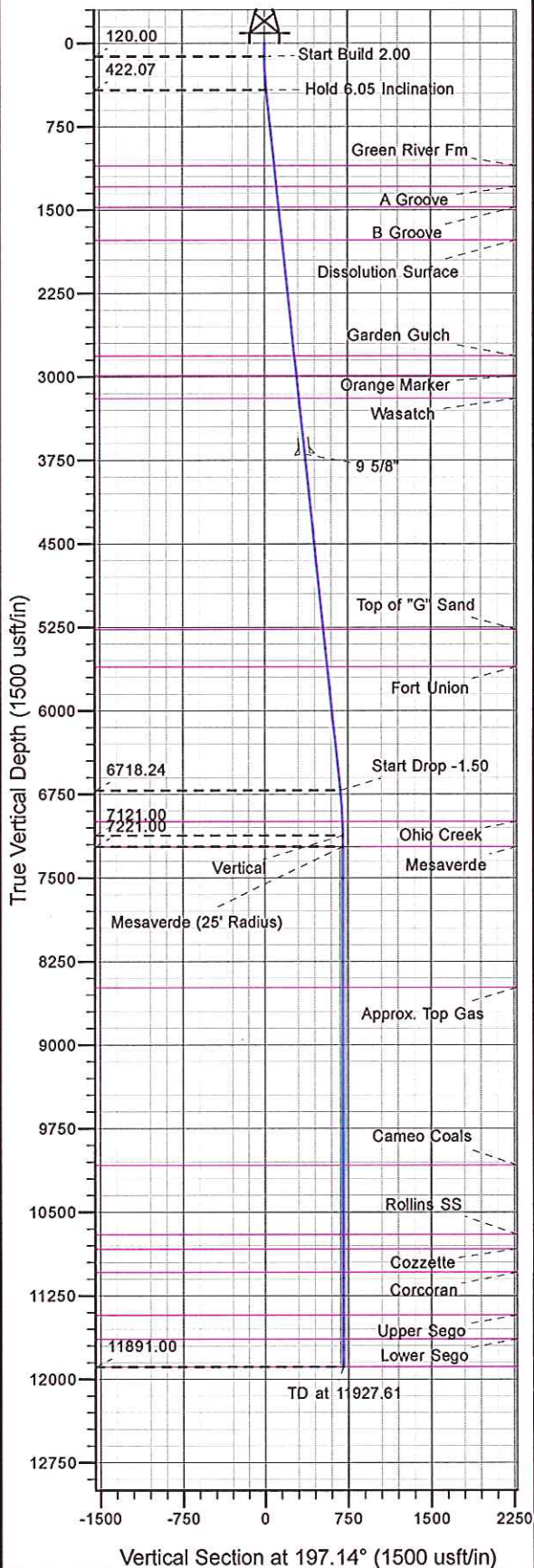




Well Name: RGU 23-27-198  
 Surface Location: RGU 22-27-198 Pad  
 North American Datum 1983 , US State Plane 1983, Colorado Central Zone  
 Ground Elevation: 6560.00  
 +N/-S 0.00 +E/-W 0.00 Northing 1778634.00 Easting 2192490.60 Latitude 39.93602 Longitude -108.37996 Slot B1  
 KELLY BUSHING @ 6581.00usft (Cyclone 29)



Project: RG 27-01S-098W  
 Site: RGU 22-27-198 Pad  
 Well: RGU 23-27-198  
 Plan #2 31Oct12 kjs



Azimuths to True North  
 Magnetic North: 11.07°  
 Magnetic Field  
 Strength: 52843.4nT  
 Dip Angle: 66.14°  
 Date: 8/2/2007  
 Model: IGRF2005-10

#### ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	Start Build 2.00
422.63	6.05	197.14	422.07	-15.26	-4.71	15.97	15.97	Hold 6.05 Inclination
6754.10	6.05	197.14	6718.24	-653.22	-201.42	683.57	683.57	Start Drop -1.50
7157.61	0.00	0.00	7121.00	-673.57	-207.69	704.86	704.86	Vertical
7257.61	0.00	0.00	7221.00	-673.57	-207.69	704.86	704.86	Mesaverde
11927.61	0.00	0.00	11891.00	-673.57	-207.69	704.86	704.86	TD at 11927.61



## **PICEANCE HL NAD 83**

**RG 27-01S-098W**

**RGU 22-27-198 Pad**

**RGU 23-27-198 - Slot B1**

**RGU 23-27-198**

**Plan: Plan #2 31Oct12 kjs**

## **Standard Planning Report - Geographic**

**24 January, 2013**





WPX Energy  
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RGU 23-27-198 - Slot B1
Company:	PICEANCE HL NAD 83	TVD Reference:	KELLY BUSHING @ 6581.00usft (Cyclone 29)
Project:	RG 27-01S-098W	MD Reference:	KELLY BUSHING @ 6581.00usft (Cyclone 29)
Site:	RGU 22-27-198 Pad	North Reference:	True
Well:	RGU 23-27-198	Survey Calculation Method:	Minimum Curvature
Wellbore:	RGU 23-27-198		
Design:	Plan #2 31Oct12 kjs		

Project	RG 27-01S-098W, Rio Blanco County, CO, RG 27-01S-098W		
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	RGU 22-27-198 Pad			
Site Position:		Northing:	1,778,610.70 usft	Latitude: 39.93596
From:	Map	Easting:	2,192,498.60 usft	Longitude: -108.37993
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.82 °

Well	RGU 23-27-198 - Slot B1			
Well Position	+N/-S	0.00 usft	Northing:	1,778,634.00 usft
	+E/-W	0.00 usft	Easting:	2,192,490.60 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:		Ground Level: 6,560.00 usft

Wellbore	RGU 23-27-198				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	8/2/2007	11.07	66.14	52,843

Design	Plan #2 31Oct12 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	197.14

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
422.63	6.05	197.14	422.07	-15.26	-4.71	2.00	2.00	0.00	197.14	
6,754.10	6.05	197.14	6,718.24	-653.22	-201.42	0.00	0.00	0.00	0.00	
7,157.61	0.00	0.00	7,121.00	-673.57	-207.69	1.50	-1.50	0.00	180.00	
7,257.61	0.00	0.00	7,221.00	-673.57	-207.69	0.00	0.00	0.00	0.00	Mesaverde (25' Radiu
11,927.61	0.00	0.00	11,891.00	-673.57	-207.69	0.00	0.00	0.00	0.00	



**WPX Energy**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RGU 23-27-198 - Slot B1
<b>Company:</b>	PICEANCE HL NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6581.00usft (Cyclone 29)
<b>Project:</b>	RG 27-01S-098W	<b>MD Reference:</b>	KELLY BUSHING @ 6581.00usft (Cyclone 29)
<b>Site:</b>	RGU 22-27-198 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 23-27-198	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	RGU 23-27-198		
<b>Design:</b>	Plan #2 31Oct12 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	1,778,634.00	2,192,490.60	39.93603	-108.37996
120.00	0.00	0.00	120.00	0.00	0.00	1,778,634.00	2,192,490.60	39.93603	-108.37996
<b>Start Build 2.00</b>									
422.63	6.05	197.14	422.07	-15.26	-4.71	1,778,618.90	2,192,485.41	39.93598	-108.37998
<b>Hold 6.05 Inclination</b>									
500.00	6.05	197.14	499.01	-23.06	-7.11	1,778,611.18	2,192,482.76	39.93596	-108.37999
1,000.00	6.05	197.14	996.22	-73.44	-22.64	1,778,561.31	2,192,465.64	39.93582	-108.38004
1,105.37	6.05	197.14	1,101.00	-84.05	-25.92	1,778,550.81	2,192,462.03	39.93580	-108.38005
<b>Green River Fm</b>									
1,296.43	6.05	197.14	1,291.00	-103.31	-31.85	1,778,531.75	2,192,455.49	39.93574	-108.38008
<b>A Groove</b>									
1,482.47	6.05	197.14	1,476.00	-122.05	-37.63	1,778,513.20	2,192,449.11	39.93569	-108.38010
<b>B Groove</b>									
1,500.00	6.05	197.14	1,493.43	-123.82	-38.18	1,778,511.45	2,192,448.51	39.93569	-108.38010
1,779.12	6.05	197.14	1,771.00	-151.94	-46.85	1,778,483.61	2,192,438.95	39.93561	-108.38013
<b>Dissolution Surface</b>									
2,000.00	6.05	197.14	1,990.64	-174.20	-53.71	1,778,461.58	2,192,431.39	39.93555	-108.38015
2,500.00	6.05	197.14	2,487.86	-224.58	-69.25	1,778,411.72	2,192,414.27	39.93541	-108.38021
2,829.98	6.05	197.14	2,816.00	-257.83	-79.50	1,778,378.81	2,192,402.96	39.93532	-108.38025
<b>Garden Gulch</b>									
3,000.00	6.05	197.14	2,985.07	-274.96	-84.78	1,778,361.86	2,192,397.14	39.93527	-108.38026
3,005.96	6.05	197.14	2,991.00	-275.56	-84.97	1,778,361.26	2,192,396.94	39.93527	-108.38027
<b>Orange Marker</b>									
3,212.11	6.05	197.14	3,196.00	-296.33	-91.37	1,778,340.70	2,192,389.88	39.93521	-108.38029
<b>Wasatch</b>									
3,500.00	6.05	197.14	3,482.28	-325.34	-100.32	1,778,311.99	2,192,380.02	39.93513	-108.38032
3,714.92	6.05	197.14	3,696.00	-346.99	-106.99	1,778,290.56	2,192,372.66	39.93507	-108.38034
<b>9 5/8"</b>									
4,000.00	6.05	197.14	3,979.50	-375.72	-115.85	1,778,262.13	2,192,362.89	39.93499	-108.38038
4,500.00	6.05	197.14	4,476.71	-426.10	-131.38	1,778,212.26	2,192,345.77	39.93486	-108.38043
5,000.00	6.05	197.14	4,973.92	-476.48	-146.92	1,778,162.40	2,192,328.65	39.93472	-108.38049
5,298.74	6.05	197.14	5,271.00	-506.58	-156.20	1,778,132.60	2,192,318.41	39.93464	-108.38052
<b>Top of "G" Sand</b>									
5,500.00	6.05	197.14	5,471.13	-526.86	-162.45	1,778,112.53	2,192,311.52	39.93458	-108.38054
5,635.62	6.05	197.14	5,606.00	-540.53	-166.67	1,778,099.01	2,192,306.88	39.93454	-108.38056
<b>Fort Union</b>									
6,000.00	6.05	197.14	5,968.35	-577.24	-177.99	1,778,062.67	2,192,294.40	39.93444	-108.38060
6,500.00	6.05	197.14	6,465.56	-627.62	-193.52	1,778,012.80	2,192,277.27	39.93430	-108.38065
6,754.10	6.05	197.14	6,718.24	-653.22	-201.42	1,777,987.46	2,192,268.57	39.93423	-108.38068
<b>Start Drop -1.50</b>									
7,000.00	2.36	197.14	6,963.44	-670.47	-206.73	1,777,970.40	2,192,262.71	39.93419	-108.38070
7,032.59	1.88	197.14	6,996.00	-671.62	-207.09	1,777,969.26	2,192,262.32	39.93418	-108.38070
<b>Ohio Creek</b>									
7,157.61	0.00	0.00	7,121.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>Vertical</b>									
7,257.61	0.00	0.00	7,221.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>Mesaverde - Mesaverde</b>									
7,500.00	0.00	0.00	7,463.39	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
8,000.00	0.00	0.00	7,963.39	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
8,500.00	0.00	0.00	8,463.39	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070





**WPX Energy**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RGU 23-27-198 - Slot B1
<b>Company:</b>	PICEANCE HL NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6581.00usft (Cyclone 29)
<b>Project:</b>	RG 27-01S-098W	<b>MD Reference:</b>	KELLY BUSHING @ 6581.00usft (Cyclone 29)
<b>Site:</b>	RGU 22-27-198 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 23-27-198	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	RGU 23-27-198		
<b>Design:</b>	Plan #2 31Oct12 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
8,522.61	0.00	0.00	8,486.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>Approx. Top Gas</b>									
9,000.00	0.00	0.00	8,963.39	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
9,500.00	0.00	0.00	9,463.39	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
10,000.00	0.00	0.00	9,963.39	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
10,117.61	0.00	0.00	10,081.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>Cameo Coals</b>									
10,500.00	0.00	0.00	10,463.39	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
10,737.61	0.00	0.00	10,701.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>Rollins SS</b>									
10,867.61	0.00	0.00	10,831.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>Cozzette</b>									
11,000.00	0.00	0.00	10,963.39	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
11,077.61	0.00	0.00	11,041.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>Corcoran</b>									
11,462.61	0.00	0.00	11,426.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>Upper Sego</b>									
11,500.00	0.00	0.00	11,463.39	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
11,677.61	0.00	0.00	11,641.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>Lower Sego</b>									
11,927.61	0.00	0.00	11,891.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070
<b>TD at 11927.61 - TD</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
Mesaverde (25' Radius) - plan hits target center - Circle (radius 25.00)	0.00	0.00	7,221.00	-673.57	-207.69	1,777,967.32	2,192,261.65	39.93418	-108.38070

**Casing Points**

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
3,714.92	3,696.00	9 5/8"	9.625	13.500



**WPX Energy**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RGU 23-27-198 - Slot B1
<b>Company:</b>	PICEANCE HL NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6581.00usft (Cyclone 29)
<b>Project:</b>	RG 27-01S-098W	<b>MD Reference:</b>	KELLY BUSHING @ 6581.00usft (Cyclone 29)
<b>Site:</b>	RGU 22-27-198 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 23-27-198	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	RGU 23-27-198		
<b>Design:</b>	Plan #2 31Oct12 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,105.37	1,101.00	Green River Fm				
1,296.43	1,291.00	A Groove				
1,482.47	1,476.00	B Groove				
1,779.12	1,771.00	Dissolution Surface				
2,829.98	2,816.00	Garden Gulch				
3,005.96	2,991.00	Orange Marker				
3,212.11	3,196.00	Wasatch				
5,298.74	5,271.00	Top of "G" Sand				
5,635.62	5,606.00	Fort Union				
7,032.59	6,996.00	Ohio Creek				
7,257.61	7,221.00	Mesaverde				
8,522.61	8,486.00	Approx. Top Gas				
10,117.61	10,081.00	Cameo Coals				
10,737.61	10,701.00	Rollins SS				
10,867.61	10,831.00	Cozzette				
11,077.61	11,041.00	Corcoran				
11,462.61	11,426.00	Upper Sego				
11,677.61	11,641.00	Lower Sego				
11,927.61	11,891.00	TD		0.00		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
120.00	120.00	0.00	0.00	Start Build 2.00	
422.63	422.07	-15.26	-4.71	Hold 6.05 Inclination	
6,754.10	6,718.24	-653.22	-201.42	Start Drop -1.50	
7,157.61	7,121.00	-673.57	-207.69	Vertical	
7,257.61	7,221.00	-673.57	-207.69	Mesaverde	
11,927.61	11,891.00	-673.57	-207.69	TD at 11927.61	