



## **PICEANCE HL NAD 83**

**RG 36-01S-098W**

**RGU 33-36-198 Pad**

**RGU 34-36-198 - Slot B7**

**Wellbore #1**

**Plan: Design #1 18Oct11 kjs**

## **Standard Planning Report - Geographic**

**05 March, 2012**



WPX Energy  
Planning Report - Geographic

Database: COMPASS-PICEANCE  
Company: PICEANCE HL NAD 83  
Project: RG 36-01S-098W  
Site: RGU 33-36-198 Pad  
Well: RGU 34-36-198  
Wellbore: Wellbore #1  
Design: Design #1 18Oct11 kjs

Local Co-ordinate Reference: Well RGU 34-36-198 - Slot B7  
TVD Reference: WELL @ 6595.00usft (Original Well Elev)  
MD Reference: WELL @ 6595.00usft (Original Well Elev)  
North Reference: True  
Survey Calculation Method: Minimum Curvature

Project RG 36-01S-098W, Rio Blanco County, CO, RG 36-01S-098W

Map System: US State Plane 1983  
Geo Datum: North American Datum 1983  
Map Zone: Colorado Central Zone  
System Datum: Mean Sea Level  
Using geodetic scale factor

Site RGU 33-36-198 Pad

Site Position: Northing: 1,771,032.40 usft Latitude: 39° 54' 58.026 N  
From: Map Easting: 2,203,480.60 usft Longitude: 108° 20' 23.794 W  
Position Uncertainty: 0.00 usft Slot Radius: 13.200 in Grid Convergence: -1.791 °

Well RGU 34-36-198 - Slot B7

Well Position: +N/-S 0.00 usft Northing: 1,771,036.60 usft Latitude: 39° 54' 58.077 N  
+E/-W 0.00 usft Easting: 2,203,511.90 usft Longitude: 108° 20' 23.394 W  
Position Uncertainty: 0.00 usft Wellhead Elevation: Ground Level: 6,574.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	10/18/2011	10.489	66.023	52,429

Design Design #1 18Oct11 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	182.27

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	0.000	
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	0.000	
269.48	2.69	182.27	269.43	-3.15	-0.12	2.00	2.00	0.00	182.270	
6,793.00	2.69	182.27	6,785.76	-309.03	-12.25	0.00	0.00	0.00	0.000	
6,972.30	0.00	0.00	6,965.00	-313.23	-12.42	1.50	-1.50	0.00	180.000	
7,472.30	0.00	0.00	7,465.00	-313.23	-12.42	0.00	0.00	0.00	0.000	Mesaverde (25' Radiu
12,402.30	0.00	0.00	12,395.00	-313.23	-12.42	0.00	0.00	0.00	0.000	





**WPX Energy**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RGU 34-36-198 - Slot B7
<b>Company:</b>	PICEANCE HL NAD 83	<b>TVD Reference:</b>	WELL @ 6595.00usft (Original Well Elev)
<b>Project:</b>	RG 36-01S-098W	<b>MD Reference:</b>	WELL @ 6595.00usft (Original Well Elev)
<b>Site:</b>	RGU 33-36-198 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 34-36-198	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 18Oct11 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	1,771,036.60	2,203,511.90	39° 54' 58.077 N	108° 20' 23.394 W
135.00	0.00	0.00	135.00	0.00	0.00	1,771,036.60	2,203,511.90	39° 54' 58.077 N	108° 20' 23.394 W
<b>Start Build 2.00</b>									
269.48	2.69	182.27	269.43	-3.15	-0.12	1,771,033.45	2,203,511.68	39° 54' 58.046 N	108° 20' 23.395 W
<b>Hold 2.69 Inclination</b>									
1,075.94	2.69	182.27	1,075.00	-40.97	-1.62	1,770,995.70	2,203,509.00	39° 54' 57.672 N	108° 20' 23.415 W
<b>Green River Fm</b>									
1,226.10	2.69	182.27	1,225.00	-48.01	-1.90	1,770,988.67	2,203,508.50	39° 54' 57.603 N	108° 20' 23.418 W
<b>A Groove</b>									
1,416.31	2.69	182.27	1,415.00	-56.93	-2.26	1,770,979.77	2,203,507.86	39° 54' 57.515 N	108° 20' 23.423 W
<b>B Groove</b>									
1,716.64	2.69	182.27	1,715.00	-71.01	-2.81	1,770,965.71	2,203,506.87	39° 54' 57.375 N	108° 20' 23.430 W
<b>Dissolution Surface</b>									
2,732.76	2.69	182.27	2,730.00	-118.65	-4.70	1,770,918.15	2,203,503.49	39° 54' 56.905 N	108° 20' 23.454 W
<b>Garden Gulch</b>									
2,907.96	2.69	182.27	2,905.00	-126.87	-5.03	1,770,909.95	2,203,502.91	39° 54' 56.823 N	108° 20' 23.458 W
<b>Orange Marker</b>									
3,128.20	2.69	182.27	3,125.00	-137.19	-5.44	1,770,899.64	2,203,502.18	39° 54' 56.721 N	108° 20' 23.464 W
<b>Wasatch</b>									
3,628.75	2.69	182.27	3,625.00	-160.66	-6.37	1,770,876.21	2,203,500.51	39° 54' 56.489 N	108° 20' 23.476 W
<b>9 5/8"</b>									
5,460.77	2.69	182.27	5,455.00	-246.56	-9.77	1,770,790.46	2,203,494.42	39° 54' 55.640 N	108° 20' 23.519 W
<b>G' Sand</b>									
5,801.14	2.69	182.27	5,795.00	-262.52	-10.41	1,770,774.52	2,203,493.29	39° 54' 55.483 N	108° 20' 23.527 W
<b>Ft. Union</b>									
6,793.00	2.69	182.27	6,785.76	-309.03	-12.25	1,770,728.10	2,203,490.00	39° 54' 55.023 N	108° 20' 23.551 W
<b>Start Drop -1.50</b>									
6,972.30	0.00	0.00	6,965.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Vertical</b>									
7,172.30	0.00	0.00	7,165.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Ohio Creek</b>									
7,472.30	0.00	0.00	7,465.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Mesaverde - Mesaverde - Mesaverde (25' Radius) RGU 34-36-198</b>									
8,902.30	0.00	0.00	8,895.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Top Gas</b>									
10,592.30	0.00	0.00	10,585.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Cameo Coals</b>									
11,152.30	0.00	0.00	11,145.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Rollins SS</b>									
11,292.30	0.00	0.00	11,285.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Cozzette</b>									
11,522.30	0.00	0.00	11,515.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Corcoran</b>									
11,907.30	0.00	0.00	11,900.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Upper Sego</b>									
12,152.30	0.00	0.00	12,145.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>Lower Sego</b>									
12,402.27	0.00	0.00	12,394.97	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>TD</b>									
12,402.30	0.00	0.00	12,395.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
<b>TD at 12402.30</b>									



WPX Energy  
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RGU 34-36-198 - Slot B7
Company:	PICEANCE HL NAD 83	TVD Reference:	WELL @ 6595.00usft (Original Well Elev)
Project:	RG 36-01S-098W	MD Reference:	WELL @ 6595.00usft (Original Well Elev)
Site:	RGU 33-36-198 Pad	North Reference:	True
Well:	RGU 34-36-198	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 18Oct11 kjs		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
Mesaverde (25' Radius)	0.00	0.00	7,465.00	-313.23	-12.42	1,770,723.90	2,203,489.70	39° 54' 54.982 N	108° 20' 23.553 W
- plan hits target center									
- Circle (radius 25.00)									

Casing Points					
Measured Depth	Vertical Depth		Name	Casing Diameter	Hole Diameter
(usft)	(usft)			(in)	(in)
3,628.75	3,625.00	9 5/8"		9.625	14.750

Formations						
Measured Depth	Vertical Depth		Name	Lithology	Dip	Dip Direction
(usft)	(usft)				(°)	(°)
1,075.94	1,075.00		Green River Fm			
1,226.10	1,225.00		A Groove			
1,416.31	1,415.00		B Groove			
1,716.64	1,715.00		Dissolution Surface			
2,732.76	2,730.00		Garden Gulch			
2,907.96	2,905.00		Orange Marker			
3,128.20	3,125.00		Wasatch			
5,460.77	5,455.00		G' Sand			
5,801.14	5,795.00		Ft. Union			
7,172.30	7,165.00		Ohio Creek			
7,472.30	7,465.00		Mesaverde			
8,902.30	8,895.00		Top Gas			
10,592.30	10,585.00		Cameo Coals			
11,152.30	11,145.00		Rollins SS			
11,292.30	11,285.00		Cozzette			
11,522.30	11,515.00		Corcoran			
11,907.30	11,900.00		Upper Sego			
12,152.30	12,145.00		Lower Sego			
12,402.27	12,394.97		TD		0.000	

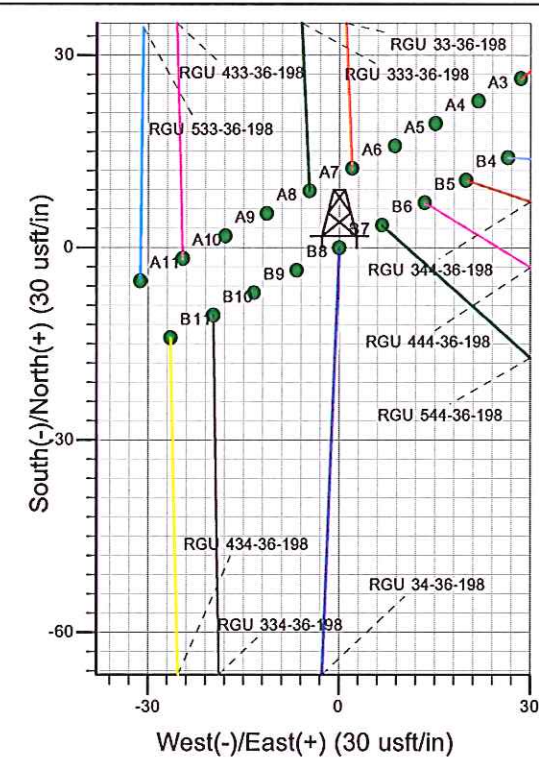
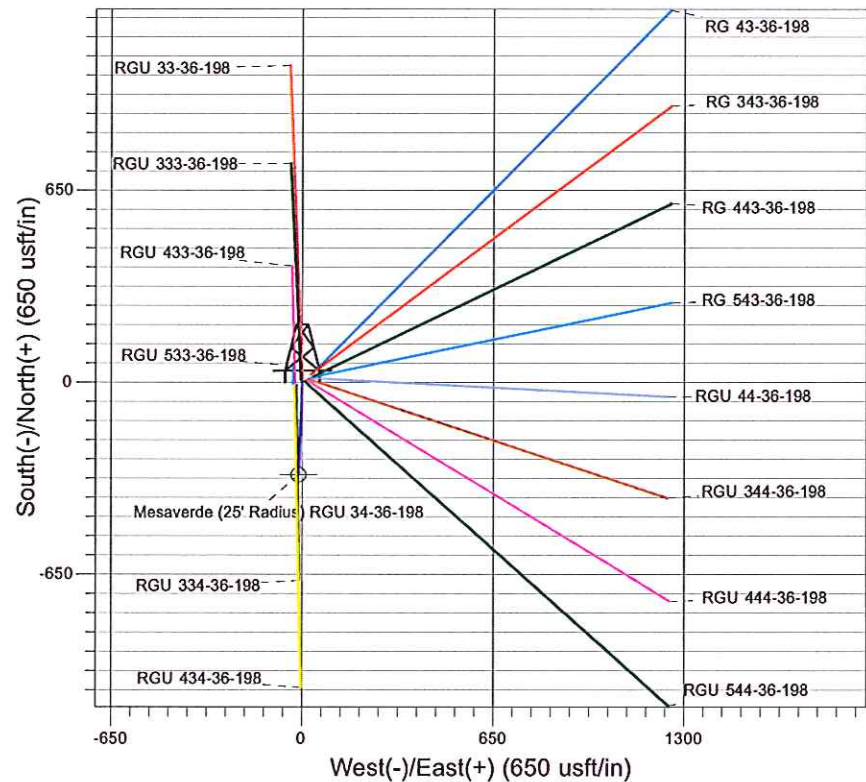
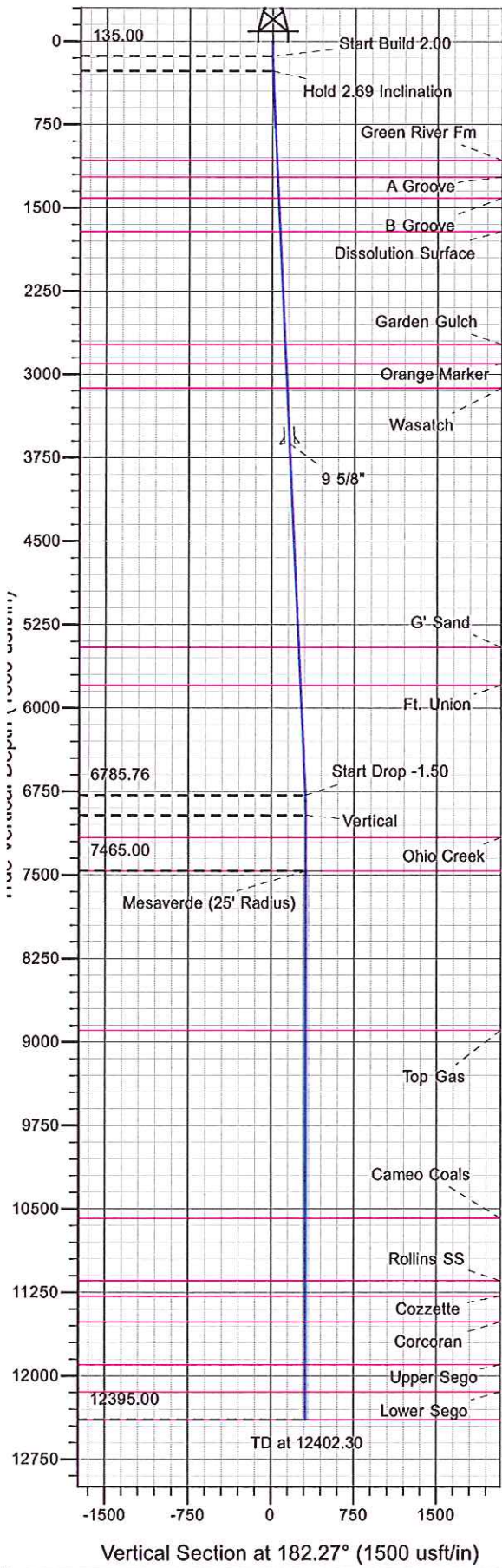
Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
135.00	135.00	0.00	0.00	Start Build 2.00	
269.48	269.43	-3.15	-0.12	Hold 2.69 Inclination	
6,793.00	6,785.76	-309.03	-12.25	Start Drop -1.50	
6,972.30	6,965.00	-313.23	-12.42	Vertical	
7,472.30	7,465.00	-313.23	-12.42	Mesaverde	
12,402.30	12,395.00	-313.23	-12.42	TD at 12402.30	





Surface Location: RGU 33-36-198 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 6574.00  
WELL @ 6595.00usft (Original Well Elev)

+N/-S    +E/-W    Northing    Easting    Latitude    Longitude    Slot  
0.00    0.00    1771036.60    2203511.90    39° 54' 58.077 N    108° 20' 23.394 W    B7



Project: RG 36-01S-098W  
Site: RGU 33-36-198 Pad  
Well: RGU 34-36-198  
Design #1 18Oct11 kjs

Azimuths to True North  
Magnetic North: 10.49°  
Magnetic Field  
Strength: 52428.5nT  
Dip Angle: 66.02°  
Date: 10/18/2011  
Model: IGRF2005-10

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	Start Build 2.00
269.48	2.69	182.27	269.43	-3.15	-0.12	3.16	3.16	Hold 2.69 Inclination
6793.00	2.69	182.27	6785.76	-309.03	-12.25	309.27	309.27	Start Drop -1.50
6972.30	0.00	0.00	6965.00	-313.23	-12.42	313.48	313.48	Vertical
7472.30	0.00	0.00	7465.00	-313.23	-12.42	313.48	313.48	Mesaverde
12402.30	0.00	0.00	12395.00	-313.23	-12.42	313.48	313.48	TD at 12402.30