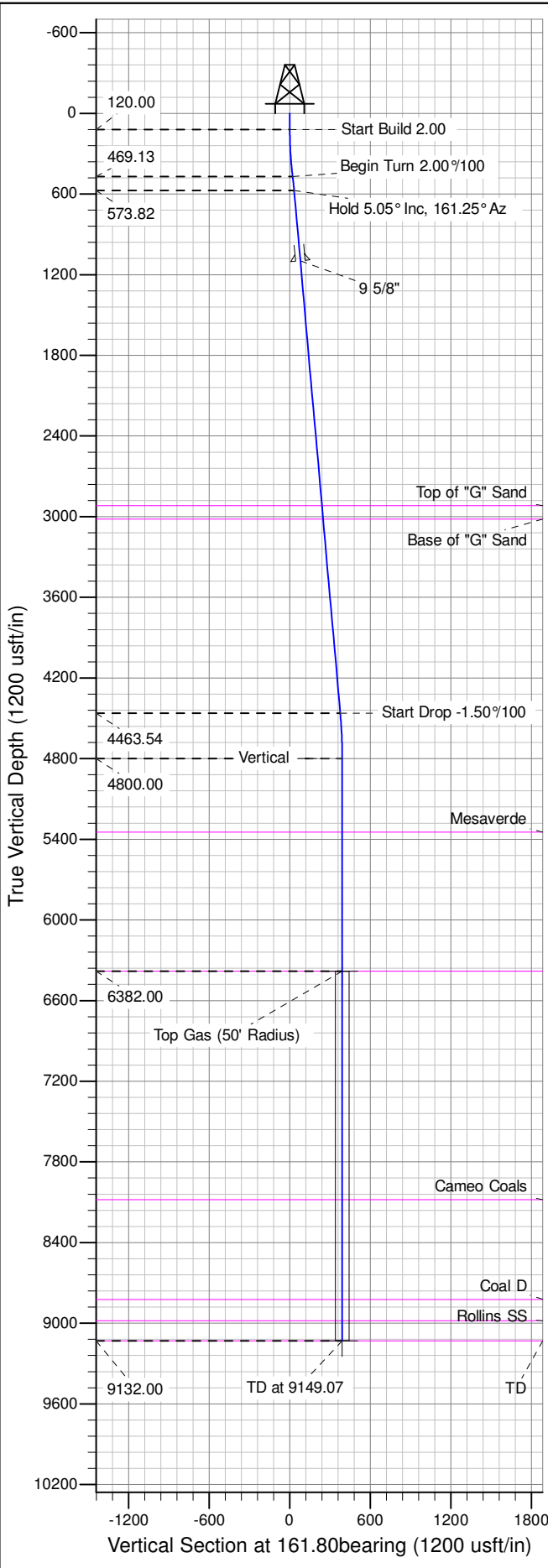
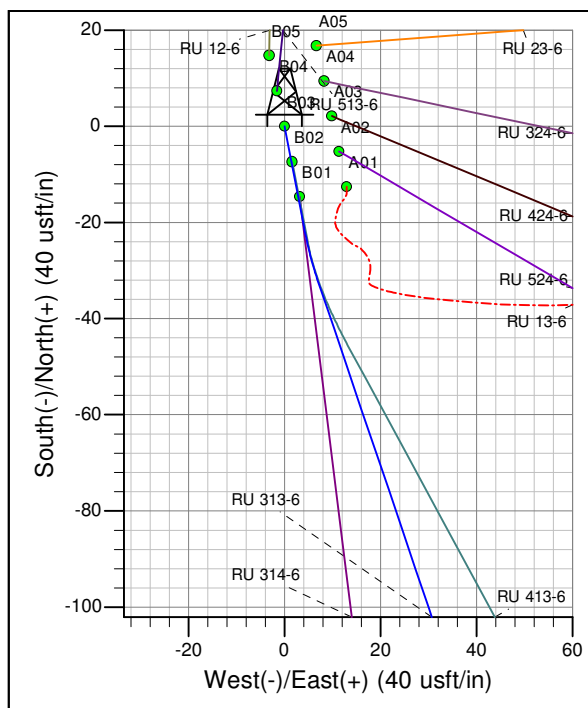
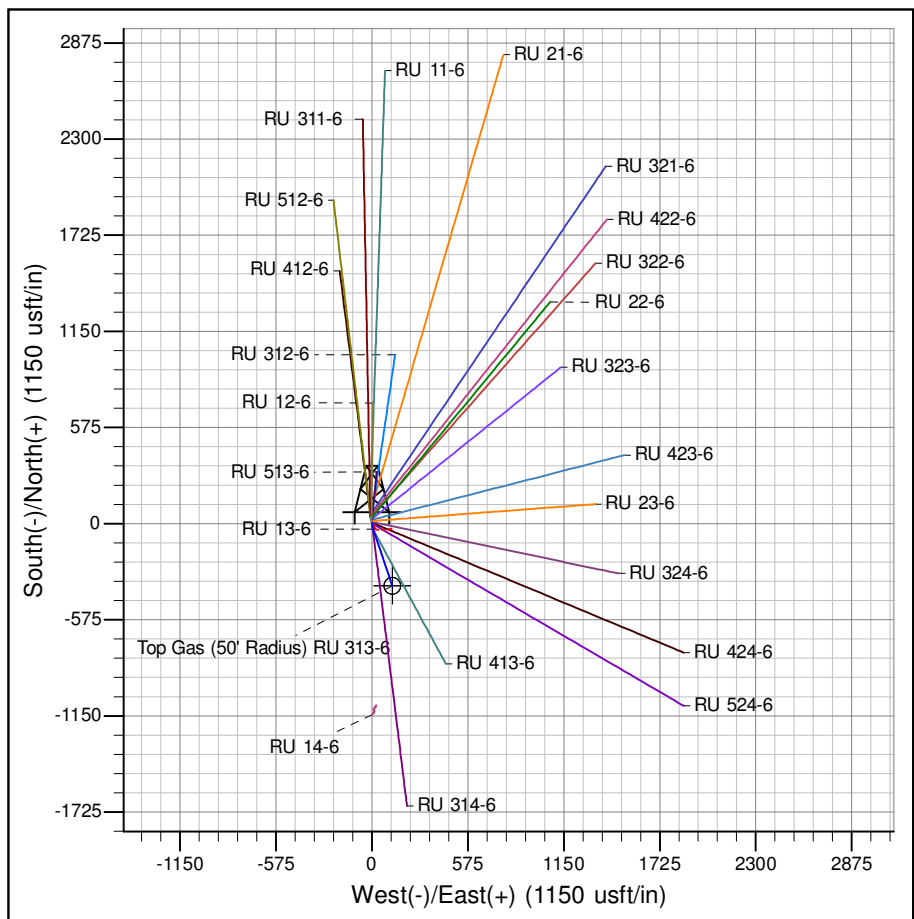




Well Name: RU 313-6  
Surface Location: RU 13-6 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 6985.00  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.00 0.00 1603418.30000 2343748.70000 39.467102 -107.824778 B03  
KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
120.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build	2.00
469.13	470.00	7.00	169.00	-20.96	4.07	21.19	21.35	Begin Turn	2.00%/100
573.82	575.28	5.05	161.25	-31.65	6.79	32.19	32.40	Hold 5.05° Inc,	161.25° Az
4463.54	4480.17	5.05	161.25	-357.35	117.37	376.14	376.36	Start Drop	-1.50%/100
4800.00	4817.07	0.00	0.00	-371.41	122.15	390.98	391.21	Vertical	
6382.00	6399.07	0.00	0.00	-371.41	122.15	390.98	391.21	Top Gas	
9132.00	9149.07	0.00	0.00	-371.41	122.15	390.98	391.21	TD at 9149.07	



Azimuths to True North  
Magnetic North: 9.87°  
Magnetic Field  
Strength: 51936.6snT  
Dip Angle: 65.66°  
Date: 7/17/2014  
Model: IGRF2010

Project: RU 06-07S-093W  
Site: RU 13-6 Pad  
Well: RU 313-6  
Design #1 17Jul14 mab

# **PICEANCE VLY NAD 83**

**RU 06-07S-093W**

**RU 13-6 Pad**

**RU 313-6 - Slot B03**

**Wellbore #1**

**Plan: Design #1 17Jul14 mab**

## **Standard Planning Report - Geographic**

**16 September, 2014**

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 313-6 - Slot B03
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 13-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 313-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 17Jul14 mab		

<b>Project</b>	RU 06-07S-093W		
<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		Using geodetic scale factor

<b>Site</b>	RU 13-6 Pad		
<b>Site Position:</b>		<b>Northing:</b>	1,603,405.40000 usft
<b>From:</b>	Map	<b>Easting:</b>	2,343,761.30000 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in
		<b>Latitude:</b>	39.467067
		<b>Longitude:</b>	-107.824733
		<b>Grid Convergence:</b>	-1.47 °

<b>Well</b>	RU 313-6 - Slot B03		
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b> 1,603,418.30000 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 2,343,748.70000 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	0.00 usft
		<b>Latitude:</b>	39.467102
		<b>Longitude:</b>	-107.824779
		<b>Ground Level:</b>	6,985.00 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	7/17/2014	9.87	65.66	51,937

<b>Design</b>	Design #1 17Jul14 mab			
<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 (bearing)</b>
	0.00	0.00	0.00	161.80

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	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	
470.00	7.00	169.00	469.13	-20.96	4.07	2.00	2.00	0.00	169.00	
575.28	5.05	161.25	573.82	-31.65	6.79	2.00	-1.85	-7.36	-161.13	
4,480.17	5.05	161.25	4,463.54	-357.35	117.37	0.00	0.00	0.00	0.00	
4,817.07	0.00	0.00	4,800.00	-371.41	122.15	1.50	-1.50	0.00	180.00	
9,149.07	0.00	0.00	9,132.00	-371.41	122.15	0.00	0.00	0.00	0.00	TD / PBHL RU 313-6

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 313-6 - Slot B03
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 13-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 313-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 17Jul14 mab		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	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	1,603,418.30000	2,343,748.70000	39.467102	-107.824779	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,418.30000	2,343,748.70000	39.467102	-107.824779	
Start Build 2.00										
200.00	1.60	169.00	199.99	-1.10	0.21	1,603,417.19853	2,343,748.88499	39.467099	-107.824778	
400.00	5.60	169.00	399.55	-13.42	2.61	1,603,404.81694	2,343,750.96446	39.467065	-107.824769	
470.00	7.00	169.00	469.13	-20.96	4.07	1,603,397.24215	2,343,752.23664	39.467044	-107.824764	
Begin Turn 2.00°/100										
575.28	5.05	161.25	573.82	-31.65	6.79	1,603,386.48752	2,343,754.67726	39.467015	-107.824755	
Hold 5.05° Inc, 161.25° Az										
600.00	5.05	161.25	598.45	-33.71	7.49	1,603,384.40847	2,343,755.32431	39.467009	-107.824752	
800.00	5.05	161.25	797.67	-50.39	13.15	1,603,367.58796	2,343,760.55932	39.466964	-107.824732	
1,000.00	5.05	161.25	996.89	-67.08	18.82	1,603,350.76746	2,343,765.79433	39.466918	-107.824712	
1,100.00	5.05	161.25	1,096.51	-75.42	21.65	1,603,342.35720	2,343,768.41183	39.466895	-107.824702	
9 5/8"										
1,200.00	5.05	161.25	1,196.12	-83.76	24.48	1,603,333.94695	2,343,771.02934	39.466872	-107.824692	
1,400.00	5.05	161.25	1,395.34	-100.44	30.15	1,603,317.12645	2,343,776.26435	39.466826	-107.824672	
1,600.00	5.05	161.25	1,594.56	-117.12	35.81	1,603,300.30594	2,343,781.49935	39.466780	-107.824652	
1,800.00	5.05	161.25	1,793.78	-133.80	41.47	1,603,283.48544	2,343,786.73436	39.466735	-107.824632	
2,000.00	5.05	161.25	1,993.01	-150.48	47.14	1,603,266.66493	2,343,791.96937	39.466689	-107.824612	
2,200.00	5.05	161.25	2,192.23	-167.17	52.80	1,603,249.84443	2,343,797.20438	39.466643	-107.824592	
2,400.00	5.05	161.25	2,391.45	-183.85	58.47	1,603,233.02392	2,343,802.43939	39.466597	-107.824572	
2,600.00	5.05	161.25	2,590.67	-200.53	64.13	1,603,216.20342	2,343,807.67439	39.466551	-107.824552	
2,800.00	5.05	161.25	2,789.90	-217.21	69.79	1,603,199.38291	2,343,812.90940	39.466506	-107.824532	
2,928.60	5.05	161.25	2,918.00	-227.94	73.43	1,603,188.56709	2,343,816.27559	39.466476	-107.824519	
Top of "G" Sand										
3,000.00	5.05	161.25	2,989.12	-233.89	75.46	1,603,182.56241	2,343,818.14441	39.466460	-107.824511	
3,028.99	5.05	161.25	3,018.00	-236.31	76.28	1,603,180.12402	2,343,818.90330	39.466453	-107.824509	
Base of "G" Sand										
3,200.00	5.05	161.25	3,188.34	-250.58	81.12	1,603,165.74190	2,343,823.37942	39.466414	-107.824491	
3,400.00	5.05	161.25	3,387.56	-267.26	86.78	1,603,148.92140	2,343,828.61443	39.466368	-107.824471	
3,600.00	5.05	161.25	3,586.79	-283.94	92.45	1,603,132.10089	2,343,833.84943	39.466322	-107.824451	
3,800.00	5.05	161.25	3,786.01	-300.62	98.11	1,603,115.28039	2,343,839.08444	39.466277	-107.824431	
4,000.00	5.05	161.25	3,985.23	-317.30	103.78	1,603,098.45988	2,343,844.31945	39.466231	-107.824411	
4,200.00	5.05	161.25	4,184.46	-333.98	109.44	1,603,081.63938	2,343,849.55446	39.466185	-107.824391	
4,400.00	5.05	161.25	4,383.68	-350.67	115.10	1,603,064.81887	2,343,854.78947	39.466139	-107.824371	
4,480.17	5.05	161.25	4,463.54	-357.35	117.37	1,603,058.07618	2,343,856.88798	39.466121	-107.824363	
Start Drop -1.50°/100										
4,600.00	3.26	161.25	4,583.05	-365.57	120.17	1,603,049.78746	2,343,859.46766	39.466098	-107.824353	
4,800.00	0.26	161.25	4,782.93	-371.38	122.14	1,603,043.93642	2,343,861.28867	39.466082	-107.824346	
4,817.07	0.00	0.00	4,800.00	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346	
Vertical										
5,000.00	0.00	0.00	4,982.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346	
5,200.00	0.00	0.00	5,182.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346	
5,363.07	0.00	0.00	5,346.00	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346	
Mesaverde										
5,400.00	0.00	0.00	5,382.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346	
5,600.00	0.00	0.00	5,582.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346	
5,800.00	0.00	0.00	5,782.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346	
6,000.00	0.00	0.00	5,982.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346	
6,200.00	0.00	0.00	6,182.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 313-6 - Slot B03
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 13-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 313-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 17Jul14 mab		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,399.07	0.00	0.00	6,382.00	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
<b>Top Gas - Approx. Top Gas</b>									
6,400.00	0.00	0.00	6,382.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
6,600.00	0.00	0.00	6,582.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
6,800.00	0.00	0.00	6,782.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
7,000.00	0.00	0.00	6,982.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
7,200.00	0.00	0.00	7,182.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
7,400.00	0.00	0.00	7,382.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
7,600.00	0.00	0.00	7,582.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
7,800.00	0.00	0.00	7,782.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
8,000.00	0.00	0.00	7,982.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
8,098.07	0.00	0.00	8,081.00	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
<b>Cameo Coals</b>									
8,200.00	0.00	0.00	8,182.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
8,400.00	0.00	0.00	8,382.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
8,600.00	0.00	0.00	8,582.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
8,800.00	0.00	0.00	8,782.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
8,841.07	0.00	0.00	8,824.00	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
<b>Coal D</b>									
8,999.07	0.00	0.00	8,982.00	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
<b>Rollins SS</b>									
9,000.00	0.00	0.00	8,982.93	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
9,149.07	0.00	0.00	9,132.00	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
<b>TD at 9149.07</b>									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Top Gas (50' Radius) RL	0.00	0.00	6,382.00	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
- plan hits target center									
- Circle (radius 50.00)									
TD / PBHL RU 313-6	0.00	0.00	9,132.00	-371.41	122.15	1,603,043.90000	2,343,861.30000	39.466082	-107.824346
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,096.51	9 5/8"	9.625	13.500	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 313-6 - Slot B03
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 13-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 313-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 17Jul14 mab		

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)
	2,928.60	2,918.00	Top of "G" Sand			
	3,028.99	3,018.00	Base of "G" Sand			
	5,363.07	5,346.00	Mesaverde			
	6,399.07	6,382.00	Approx. Top Gas			
	8,098.07	8,081.00	Cameo Coals			
	8,841.07	8,824.00	Coal D			
	8,999.07	8,982.00	Rollins SS			
	9,149.07	9,132.00	TD			

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
	470.00	469.13	-20.96	4.07	Begin Turn 2.00°/100
	575.28	573.82	-31.65	6.79	Hold 5.05° Inc, 161.25° Az
	4,480.17	4,463.54	-357.35	117.37	Start Drop -1.50°/100
	4,817.07	4,800.00	-371.41	122.15	Vertical
	6,399.07	6,382.00	-371.41	122.15	Top Gas
	9,149.07	9,132.00	-371.41	122.15	TD at 9149.07