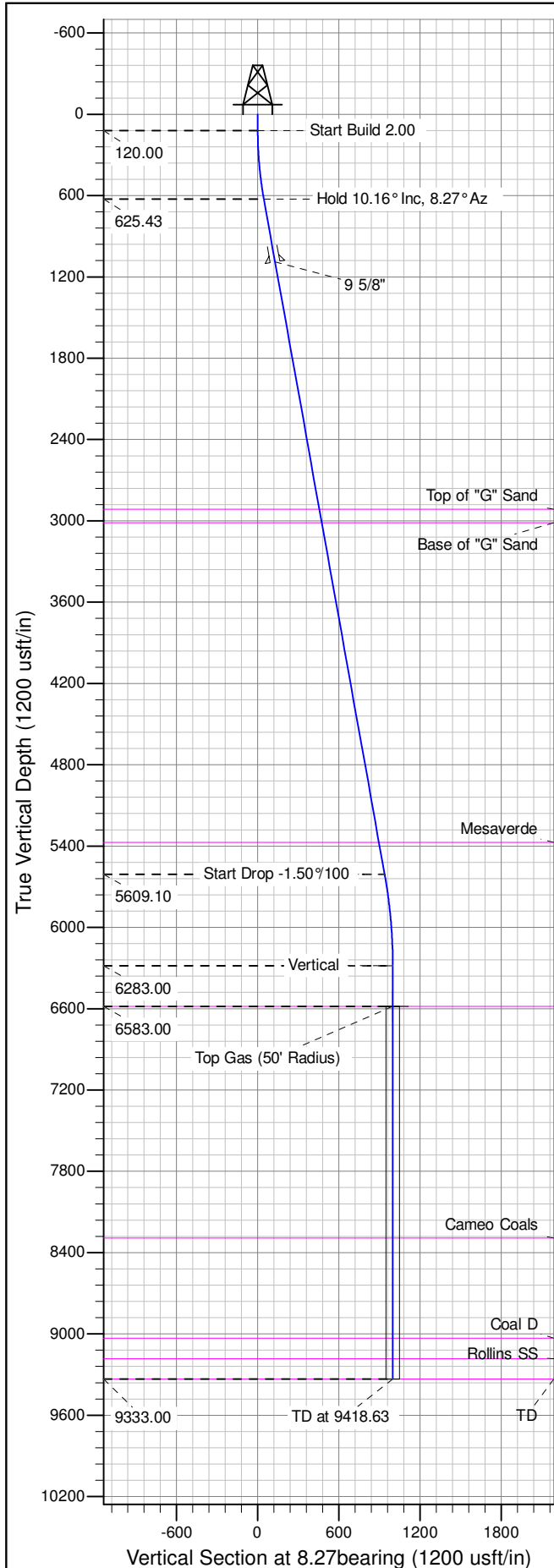
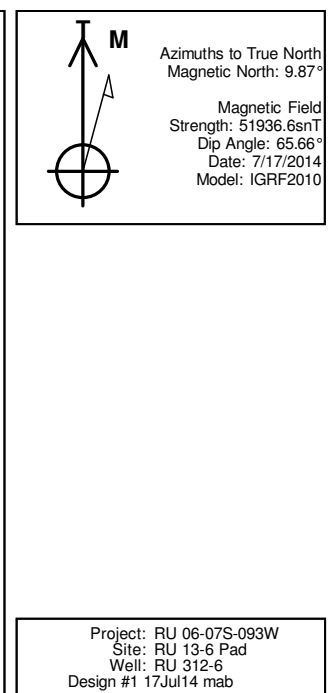
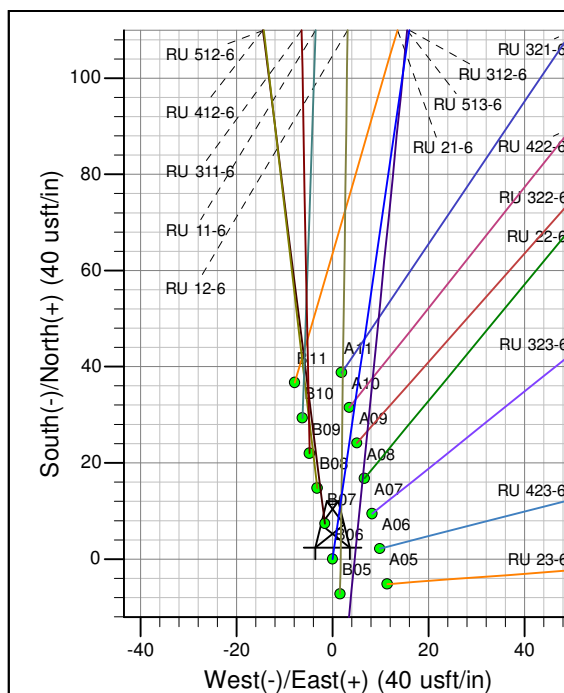
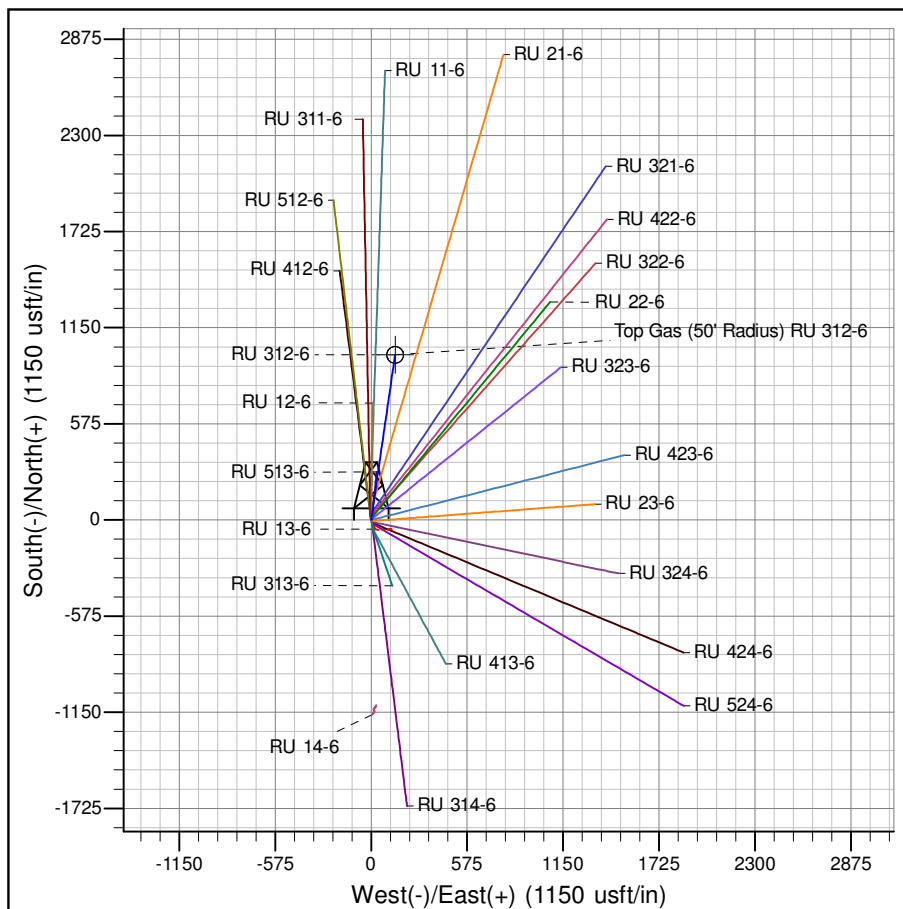




Well Name: RU 312-6  
Surface Location: RU 13-6 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 6985.00  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.00 0.00 1603440.40000 2343744.50000 39.467162 -107.824795 B06  
KELLY BUSHING @ 7011.00usft (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	
625.43	628.09	10.16	8.27	44.47	6.46	44.94	44.94	Hold 10.16° Inc, 8.27° Az	
5609.10	5691.18	10.16	8.27	928.45	134.96	938.20	938.20	Start Drop -1.50%/100	
6283.00	6368.63	0.00	0.00	987.74	143.58	998.12	998.12	Vertical	
6583.00	6668.63	0.00	0.00	987.74	143.58	998.12	998.12	Top Gas	
9333.00	9418.63	0.00	0.00	987.74	143.58	998.12	998.12	TD at 9418.63	



# **PICEANCE VLY NAD 83**

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

**RU 13-6 Pad**

**RU 312-6 - Slot B06**

**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 312-6 - Slot B06
<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 312-6	<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 312-6 - Slot B06		
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b> 1,603,440.40000 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 2,343,744.50000 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	0.00 usft
		<b>Latitude:</b>	39.467162
		<b>Longitude:</b>	-107.824796
		<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	8.27

<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	
628.09	10.16	8.27	625.43	44.47	6.46	2.00	2.00	0.00	8.27	
5,691.18	10.16	8.27	5,609.10	928.45	134.96	0.00	0.00	0.00	0.00	
6,368.63	0.00	0.00	6,283.00	987.74	143.58	1.50	-1.50	0.00	180.00	
6,668.63	0.00	0.00	6,583.00	987.74	143.58	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
9,418.63	0.00	0.00	9,333.00	987.74	143.58	0.00	0.00	0.00	0.00	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 312-6 - Slot B06
<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 312-6	<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	1,603,440.40000	2,343,744.50000	39.467162	-107.824796	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,440.40000	2,343,744.50000	39.467162	-107.824796	
<b>Start Build 2.00</b>										
200.00	1.60	8.27	199.99	1.11	0.16	1,603,441.50080	2,343,744.68889	39.467165	-107.824795	
400.00	5.60	8.27	399.55	13.53	1.97	1,603,453.87494	2,343,746.81226	39.467199	-107.824789	
600.00	9.60	8.27	597.76	39.70	5.77	1,603,479.93874	2,343,751.28473	39.467271	-107.824775	
628.09	10.16	8.27	625.43	44.47	6.46	1,603,484.68857	2,343,752.09979	39.467284	-107.824773	
<b>Hold 10.16° Inc, 8.27° Az</b>										
800.00	10.16	8.27	794.64	74.49	10.83	1,603,514.58069	2,343,757.22919	39.467367	-107.824757	
1,000.00	10.16	8.27	991.51	109.40	15.90	1,603,549.35627	2,343,763.19657	39.467463	-107.824739	
1,100.00	10.16	8.27	1,089.94	126.86	18.44	1,603,566.74406	2,343,766.18026	39.467511	-107.824730	
<b>9 5/8"</b>										
1,200.00	10.16	8.27	1,188.37	144.32	20.98	1,603,584.13185	2,343,769.16396	39.467559	-107.824721	
1,400.00	10.16	8.27	1,385.23	179.24	26.05	1,603,618.90743	2,343,775.13134	39.467654	-107.824703	
1,600.00	10.16	8.27	1,582.09	214.16	31.13	1,603,653.68300	2,343,781.09873	39.467750	-107.824685	
1,800.00	10.16	8.27	1,778.96	249.08	36.21	1,603,688.45858	2,343,787.06612	39.467846	-107.824667	
2,000.00	10.16	8.27	1,975.82	284.00	41.28	1,603,723.23416	2,343,793.03350	39.467942	-107.824649	
2,200.00	10.16	8.27	2,172.68	318.91	46.36	1,603,758.00974	2,343,799.00089	39.468038	-107.824631	
2,400.00	10.16	8.27	2,369.55	353.83	51.43	1,603,792.78531	2,343,804.96827	39.468134	-107.824613	
2,600.00	10.16	8.27	2,566.41	388.75	56.51	1,603,827.56089	2,343,810.93566	39.468230	-107.824595	
2,800.00	10.16	8.27	2,763.27	423.67	61.59	1,603,862.33646	2,343,816.90305	39.468325	-107.824577	
2,954.15	10.16	8.27	2,915.00	450.58	65.50	1,603,889.13916	2,343,821.50231	39.468399	-107.824564	
<b>Top of "G" Sand</b>										
3,000.00	10.16	8.27	2,960.13	458.59	66.66	1,603,897.11204	2,343,822.87043	39.468421	-107.824559	
3,055.74	10.16	8.27	3,015.00	468.32	68.08	1,603,906.80405	2,343,824.53355	39.468448	-107.824554	
<b>Base of "G" Sand</b>										
3,200.00	10.16	8.27	3,157.00	493.51	71.74	1,603,931.88762	2,343,828.83782	39.468517	-107.824541	
3,400.00	10.16	8.27	3,353.86	528.42	76.81	1,603,966.66320	2,343,834.80520	39.468613	-107.824524	
3,600.00	10.16	8.27	3,550.72	563.34	81.89	1,604,001.43878	2,343,840.77259	39.468709	-107.824506	
3,800.00	10.16	8.27	3,747.59	598.26	86.96	1,604,036.21436	2,343,846.73998	39.468805	-107.824488	
4,000.00	10.16	8.27	3,944.45	633.18	92.04	1,604,070.98993	2,343,852.70736	39.468901	-107.824470	
4,200.00	10.16	8.27	4,141.31	668.10	97.12	1,604,105.76551	2,343,858.67475	39.468996	-107.824452	
4,400.00	10.16	8.27	4,338.17	703.02	102.19	1,604,140.54109	2,343,864.64213	39.469092	-107.824434	
4,600.00	10.16	8.27	4,535.04	737.94	107.27	1,604,175.31667	2,343,870.60952	39.469188	-107.824416	
4,800.00	10.16	8.27	4,731.90	772.85	112.34	1,604,210.09224	2,343,876.57691	39.469284	-107.824398	
5,000.00	10.16	8.27	4,928.76	807.77	117.42	1,604,244.86781	2,343,882.54429	39.469380	-107.824380	
5,200.00	10.16	8.27	5,125.62	842.69	122.50	1,604,279.64339	2,343,888.51168	39.469476	-107.824362	
5,400.00	10.16	8.27	5,322.49	877.61	127.57	1,604,314.41897	2,343,894.47906	39.469572	-107.824344	
5,451.32	10.16	8.27	5,373.00	886.57	128.87	1,604,323.34203	2,343,896.01023	39.469596	-107.824339	
<b>Mesaverde</b>										
5,600.00	10.16	8.27	5,519.35	912.53	132.65	1,604,349.19455	2,343,900.44645	39.469667	-107.824326	
5,691.18	10.16	8.27	5,609.10	928.45	134.96	1,604,365.04857	2,343,903.16695	39.469711	-107.824318	
<b>Start Drop -1.50°/100</b>										
5,800.00	8.53	8.27	5,716.47	945.93	137.50	1,604,382.46392	2,343,906.15537	39.469759	-107.824309	
6,000.00	5.53	8.27	5,914.95	970.15	141.02	1,604,406.58324	2,343,910.29418	39.469826	-107.824296	
6,200.00	2.53	8.27	6,114.43	984.06	143.05	1,604,420.43226	2,343,912.67063	39.469864	-107.824289	
6,368.63	0.00	0.00	6,283.00	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
<b>Vertical</b>										
6,400.00	0.00	0.00	6,314.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
6,600.00	0.00	0.00	6,514.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
6,668.63	0.00	0.00	6,583.00	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
<b>Top Gas - Approx. Top Gas</b>										

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 312-6 - Slot B06
<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 312-6	<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	
6,800.00	0.00	0.00	6,714.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
7,000.00	0.00	0.00	6,914.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
7,200.00	0.00	0.00	7,114.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
7,400.00	0.00	0.00	7,314.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
7,600.00	0.00	0.00	7,514.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
7,800.00	0.00	0.00	7,714.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
8,000.00	0.00	0.00	7,914.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
8,200.00	0.00	0.00	8,114.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
8,378.63	0.00	0.00	8,293.00	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
Cameo Coals										
8,400.00	0.00	0.00	8,314.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
8,600.00	0.00	0.00	8,514.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
8,800.00	0.00	0.00	8,714.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
9,000.00	0.00	0.00	8,914.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
9,117.63	0.00	0.00	9,032.00	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
Coal D										
9,200.00	0.00	0.00	9,114.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
9,268.63	0.00	0.00	9,183.00	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
Rollins SS										
9,400.00	0.00	0.00	9,314.37	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
9,418.63	0.00	0.00	9,333.00	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
TD at 9418.63 - TD										

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	6,583.00	987.74	143.58	1,604,424.10000	2,343,913.30000	39.469874	-107.824287	
- plan hits target center										
- Circle (radius 50.00)										

Casing Points							Casing Diameter (in)	Hole Diameter (in)
Measured Depth (usft)	Vertical Depth (usft)	Name						
1,100.00	1,089.94	9 5/8"					9.625	13.500

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 312-6 - Slot B06
<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 312-6	<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)
	2,954.15	2,915.00	Top of "G" Sand			
	3,055.74	3,015.00	Base of "G" Sand			
	5,451.32	5,373.00	Mesaverde			
	6,668.63	6,583.00	Approx. Top Gas			
	8,378.63	8,293.00	Cameo Coals			
	9,117.63	9,032.00	Coal D			
	9,268.63	9,183.00	Rollins SS			
	9,418.63	9,333.00	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
	628.09	625.43	44.47	6.46	Hold 10.16° Inc, 8.27° Az
	5,691.18	5,609.10	928.45	134.96	Start Drop -1.50°/100
	6,368.63	6,283.00	987.74	143.58	Vertical
	6,668.63	6,583.00	987.74	143.58	Top Gas
	9,418.63	9,333.00	987.74	143.58	TD at 9418.63