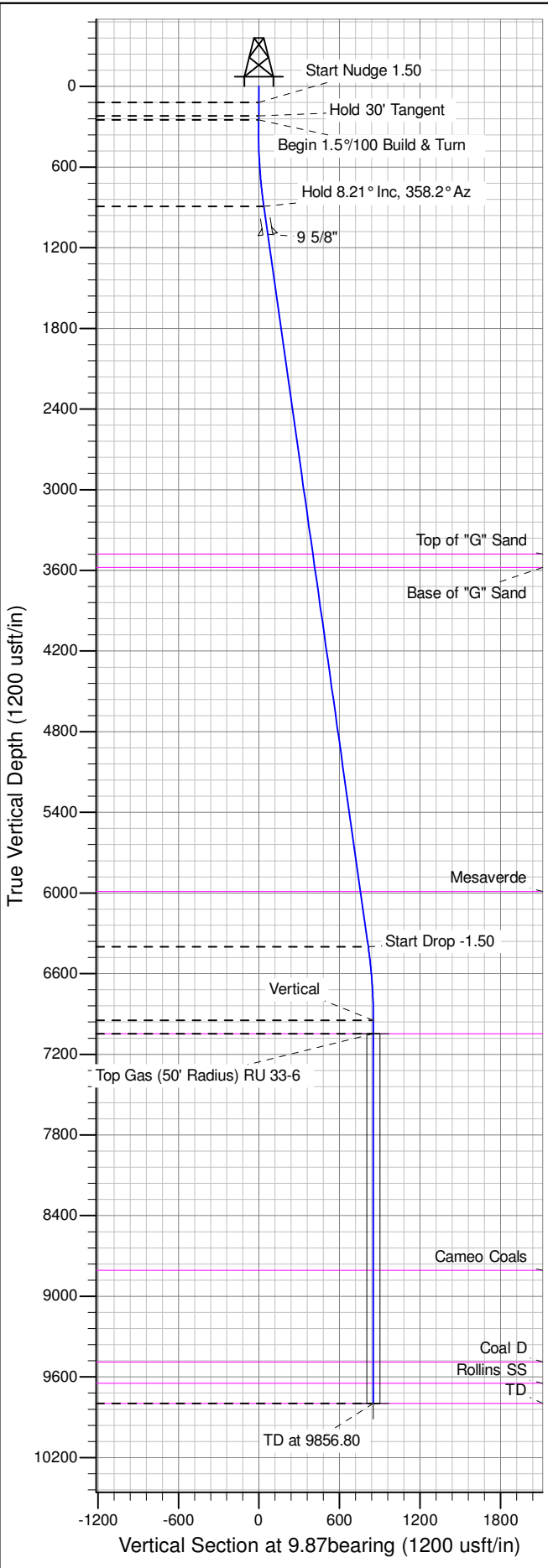
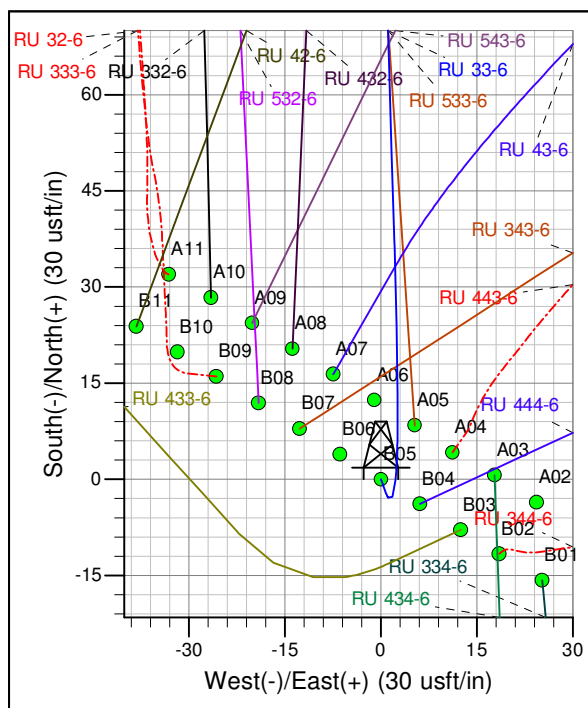
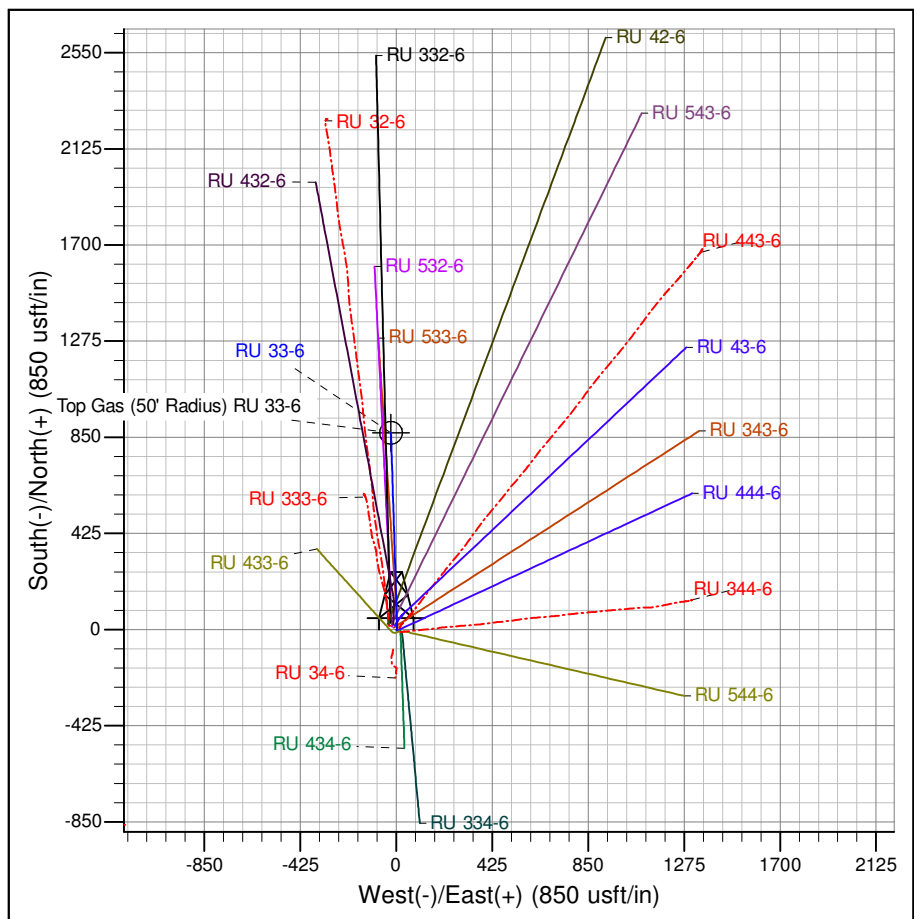




Well Name: RU 33-6  
Surface Location: RU 34-6 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 7537.00  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.00 0.00 1603588.40000 2346569.00000 39.46777 -107.81481 B05  
KELLY BUSHING @ 7563.00usft (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	0.00	Start Nudge 1.50
219.99	220.00	1.50	160.00	-1.23	0.45	-1.14	1.31	1.31	Hold 30' Tangent
249.98	250.00	1.50	160.00	-1.97	0.72	-1.82	2.09	2.09	Begin 1.5%/100 Build & Turn
891.00	892.92	8.21	358.20	36.08	2.16	35.92	43.47	43.47	Hold 8.21° Inc, 358.2° Az
6400.70	6459.63	8.21	358.20	830.38	-22.78	814.19	838.16	838.16	Start Drop -1.50
6946.00	7006.80	0.00	0.00	869.49	-24.00	852.50	877.29	877.29	Vertical
7046.00	7106.80	0.00	0.00	869.49	-24.00	852.50	877.29	877.29	Top Gas
9796.00	9856.80	0.00	0.00	869.49	-24.00	852.50	877.29	877.29	TD at 9856.80



Azimuths to True North  
Magnetic North: 10.59°

Magnetic Field  
Strength: 52537.3snT  
Dip Angle: 65.83°  
Date: 10/21/2008  
Model: IGRF2005-10

Project: RU 06-07S-093W  
Site: RU 34-6 Pad  
Well: RU 33-6  
Plan #4 08Jul14 mab



## **PICEANCE VLY NAD 83**

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

**RU 34-6 Pad**

**RU 33-6 - Slot B05**

**Wellbore #1**

**Plan: Plan #4 08Jul14 mab**

## **Standard Planning Report - Geographic**

**13 August, 2014**



**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 33-6 - Slot B05
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 34-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 33-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #4 08Jul14 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 34-6 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,603,613.20000 usft	<b>Latitude:</b> 39.46783
<b>From:</b> Map		<b>Easting:</b>	2,346,531.50000 usft	<b>Longitude:</b> -107.81494
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> -1.46 °

<b>Well</b>	RU 33-6 - Slot B05			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,603,588.40000 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,346,569.00000 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	
			<b>Ground Level:</b>	7,537.00 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>
	IGRF2005-10	10/21/2008	10.59	65.83	52,537

<b>Design</b>	Plan #4 08Jul14 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	9.87

<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	
220.00	1.50	160.00	219.99	-1.23	0.45	1.50	1.50	0.00	160.00	
250.00	1.50	160.00	249.98	-1.97	0.72	0.00	0.00	0.00	0.00	
892.92	8.21	358.20	891.00	36.08	2.16	1.50	1.04	-25.17	-164.56	
6,459.63	8.21	358.20	6,400.70	830.39	-22.78	0.00	0.00	0.00	0.00	
7,006.80	0.00	0.00	6,946.00	869.49	-24.00	1.50	-1.50	0.00	180.00	
9,856.80	0.00	0.00	9,796.00	869.49	-24.00	0.00	0.00	0.00	0.00	TD / PBHL RU 33-6



**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 33-6 - Slot B05
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 34-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 33-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #4 08Jul14 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	1,603,588.40000	2,346,569.00000	39.46777	-107.81481	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,588.40000	2,346,569.00000	39.46777	-107.81481	
Start Nudge 1.50										
200.00	1.20	160.00	199.99	-0.79	0.29	1,603,587.60578	2,346,569.26636	39.46777	-107.81481	
220.00	1.50	160.00	219.99	-1.23	0.45	1,603,587.15906	2,346,569.41618	39.46776	-107.81481	
Hold 30' Tangent										
250.00	1.50	160.00	249.98	-1.97	0.72	1,603,586.41454	2,346,569.66587	39.46776	-107.81481	
Begin 1.5°/100 Build & Turn										
400.00	0.90	21.84	399.96	-2.72	1.82	1,603,585.63240	2,346,570.75495	39.46776	-107.81480	
600.00	3.82	1.42	599.77	5.40	2.57	1,603,593.73543	2,346,571.70940	39.46778	-107.81480	
800.00	6.82	358.78	798.89	23.94	2.48	1,603,612.26890	2,346,572.09278	39.46783	-107.81480	
892.92	8.21	358.20	891.00	36.08	2.16	1,603,624.41445	2,346,572.07625	39.46787	-107.81480	
Hold 8.21° Inc, 358.2° Az										
1,000.00	8.21	358.20	996.99	51.36	1.68	1,603,639.70073	2,346,571.98603	39.46791	-107.81480	
1,104.07	8.21	358.20	1,100.00	66.21	1.21	1,603,654.55709	2,346,571.89835	39.46795	-107.81481	
9 5/8"										
1,200.00	8.21	358.20	1,194.94	79.90	0.78	1,603,668.25060	2,346,571.81754	39.46799	-107.81481	
1,400.00	8.21	358.20	1,392.90	108.44	-0.11	1,603,696.80047	2,346,571.64904	39.46807	-107.81481	
1,600.00	8.21	358.20	1,590.85	136.98	-1.01	1,603,725.35034	2,346,571.48054	39.46814	-107.81481	
1,800.00	8.21	358.20	1,788.80	165.51	-1.91	1,603,753.90021	2,346,571.31204	39.46822	-107.81482	
2,000.00	8.21	358.20	1,986.75	194.05	-2.80	1,603,782.45008	2,346,571.14355	39.46830	-107.81482	
2,200.00	8.21	358.20	2,184.70	222.59	-3.70	1,603,810.99994	2,346,570.97505	39.46838	-107.81482	
2,400.00	8.21	358.20	2,382.65	251.13	-4.59	1,603,839.54981	2,346,570.80655	39.46846	-107.81483	
2,600.00	8.21	358.20	2,580.61	279.66	-5.49	1,603,868.09968	2,346,570.63805	39.46854	-107.81483	
2,800.00	8.21	358.20	2,778.56	308.20	-6.38	1,603,896.64955	2,346,570.46956	39.46861	-107.81483	
3,000.00	8.21	358.20	2,976.51	336.74	-7.28	1,603,925.19942	2,346,570.30106	39.46869	-107.81484	
3,200.00	8.21	358.20	3,174.46	365.28	-8.18	1,603,953.74929	2,346,570.13256	39.46877	-107.81484	
3,400.00	8.21	358.20	3,372.41	393.81	-9.07	1,603,982.29916	2,346,569.96406	39.46885	-107.81484	
3,506.68	8.21	358.20	3,478.00	409.04	-9.55	1,603,997.52787	2,346,569.87419	39.46889	-107.81484	
Top of "G" Sand										
3,600.00	8.21	358.20	3,570.36	422.35	-9.97	1,604,010.84903	2,346,569.79557	39.46893	-107.81485	
3,607.72	8.21	358.20	3,578.00	423.45	-10.00	1,604,011.95053	2,346,569.78907	39.46893	-107.81485	
Base of "G" Sand										
3,800.00	8.21	358.20	3,768.31	450.89	-10.86	1,604,039.39890	2,346,569.62707	39.46901	-107.81485	
4,000.00	8.21	358.20	3,966.27	479.43	-11.76	1,604,067.94877	2,346,569.45857	39.46908	-107.81485	
4,200.00	8.21	358.20	4,164.22	507.96	-12.66	1,604,096.49864	2,346,569.29007	39.46916	-107.81485	
4,400.00	8.21	358.20	4,362.17	536.50	-13.55	1,604,125.04851	2,346,569.12158	39.46924	-107.81486	
4,600.00	8.21	358.20	4,560.12	565.04	-14.45	1,604,153.59838	2,346,568.95308	39.46932	-107.81486	
4,800.00	8.21	358.20	4,758.07	593.58	-15.34	1,604,182.14824	2,346,568.78458	39.46940	-107.81486	
5,000.00	8.21	358.20	4,956.02	622.11	-16.24	1,604,210.69811	2,346,568.61608	39.46948	-107.81487	
5,200.00	8.21	358.20	5,153.98	650.65	-17.14	1,604,239.24798	2,346,568.44759	39.46955	-107.81487	
5,400.00	8.21	358.20	5,351.93	679.19	-18.03	1,604,267.79785	2,346,568.27909	39.46963	-107.81487	
5,600.00	8.21	358.20	5,549.88	707.73	-18.93	1,604,296.34772	2,346,568.11059	39.46971	-107.81488	
5,800.00	8.21	358.20	5,747.83	736.26	-19.82	1,604,324.89759	2,346,567.94209	39.46979	-107.81488	
6,000.00	8.21	358.20	5,945.78	764.80	-20.72	1,604,353.44746	2,346,567.77360	39.46987	-107.81488	
6,042.66	8.21	358.20	5,988.00	770.89	-20.91	1,604,359.53656	2,346,567.73766	39.46988	-107.81488	
Mesaverde										
6,200.00	8.21	358.20	6,143.73	793.34	-21.61	1,604,381.99733	2,346,567.60510	39.46995	-107.81489	
6,400.00	8.21	358.20	6,341.68	821.88	-22.51	1,604,410.54720	2,346,567.43660	39.47002	-107.81489	
6,459.63	8.21	358.20	6,400.70	830.39	-22.78	1,604,419.05950	2,346,567.38636	39.47005	-107.81489	
Start Drop -1.50										
6,600.00	6.10	358.20	6,539.97	847.86	-23.33	1,604,436.54024	2,346,567.28320	39.47010	-107.81489	

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 33-6 - Slot B05
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 34-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 33-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #4 08Jul14 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	3.10	358.20	6,739.31	863.90	-23.83	1,604,452.58397	2,346,567.18851	39.47014	-107.81489
7,000.00	0.10	358.20	6,939.20	869.48	-24.00	1,604,458.17410	2,346,567.15551	39.47015	-107.81489
7,006.80	0.00	0.00	6,946.00	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
<b>Vertical</b>									
7,106.80	0.00	0.00	7,046.00	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
<b>Top Gas - Approx. Top Gas - Top Gas (50' Radius) RU 33-6</b>									
7,200.00	0.00	0.00	7,139.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
7,389.80	0.00	0.00	7,329.00	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
<b>Top Gas (25' Rad) RU 33-6 Revised 16nov10</b>									
7,400.00	0.00	0.00	7,339.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
7,600.00	0.00	0.00	7,539.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
7,800.00	0.00	0.00	7,739.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
8,000.00	0.00	0.00	7,939.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
8,200.00	0.00	0.00	8,139.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
8,400.00	0.00	0.00	8,339.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
8,600.00	0.00	0.00	8,539.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
8,800.00	0.00	0.00	8,739.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
8,867.80	0.00	0.00	8,807.00	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
<b>Cameo Coals</b>									
9,000.00	0.00	0.00	8,939.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
9,200.00	0.00	0.00	9,139.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
9,400.00	0.00	0.00	9,339.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
9,549.80	0.00	0.00	9,489.00	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
<b>Coal D</b>									
9,600.00	0.00	0.00	9,539.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
9,706.80	0.00	0.00	9,646.00	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
<b>Rollins SS</b>									
9,800.00	0.00	0.00	9,739.20	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
9,856.80	0.00	0.00	9,796.00	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
<b>TD at 9856.80 - TD - TD / PBHL RU 33-6</b>									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Top Gas (50' Radius) RL - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,046.00	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489
TD / PBHL RU 33-6 - plan hits target center - Point	0.00	0.00	9,796.00	869.49	-24.00	1,604,458.18014	2,346,567.15548	39.47015	-107.81489

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,104.07	1,100.00	9 5/8"	9.625	13.500	



<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well RU 33-6 - Slot B05
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Project:</b>	RU 06-07S-093W	<b>MD Reference:</b>	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
<b>Site:</b>	RU 34-6 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RU 33-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #4 08Jul14 mab		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
3,506.68	3,478.00	Top of "G" Sand				
3,607.72	3,578.00	Base of "G" Sand				
6,042.66	5,988.00	Mesaverde				
7,106.80	7,046.00	Approx. Top Gas				
8,867.80	8,807.00	Cameo Coals				
9,549.80	9,489.00	Coal D				
9,706.80	9,646.00	Rollins SS				
9,856.80	9,796.00	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 Nudge 1.50	
220.00	219.99	-1.23	0.45	Hold 30' Tangent	
250.00	249.98	-1.97	0.72	Begin 1.5°/100 Build & Turn	
892.92	891.00	36.08	2.16	Hold 8.21° Inc, 358.2° Az	
6,459.63	6,400.70	830.39	-22.78	Start Drop -1.50	
7,006.80	6,946.00	869.49	-24.00	Vertical	
7,106.80	7,046.00	869.49	-24.00	Top Gas	
9,856.80	9,796.00	869.49	-24.00	TD at 9856.80	