

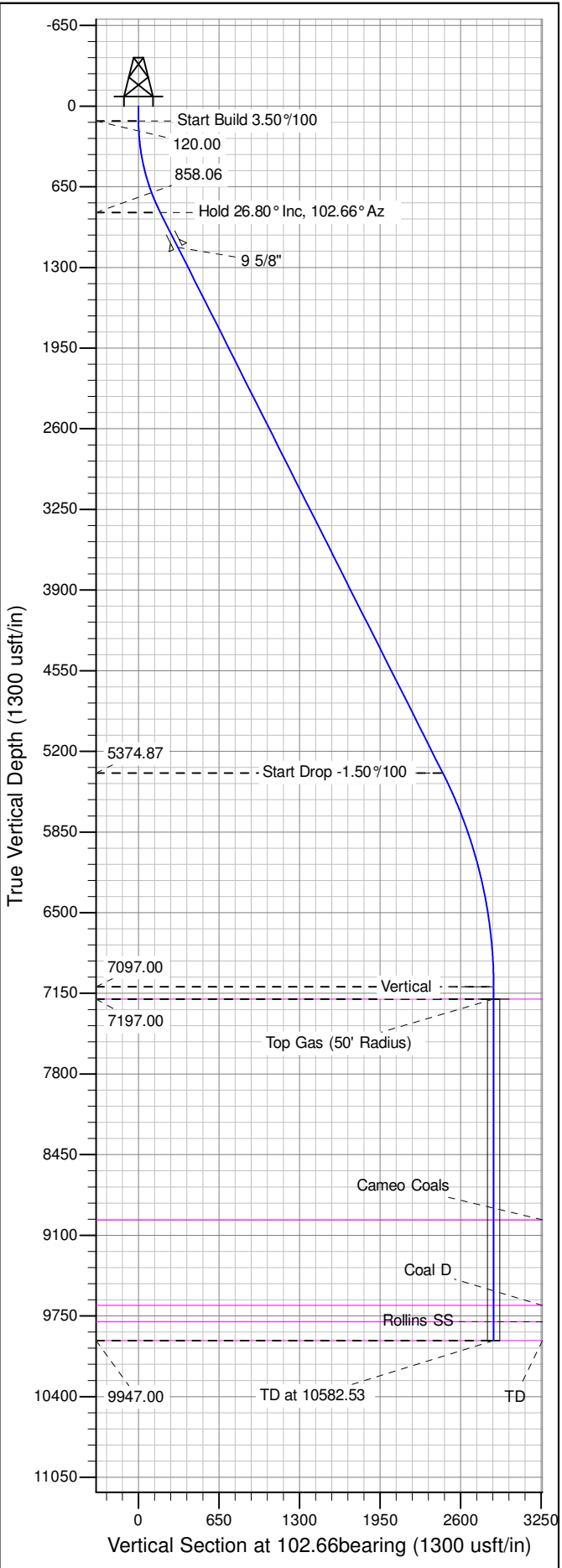


Well Name: RU 42-8
 Surface Location: RU 21-8 Pad

North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 7736.00

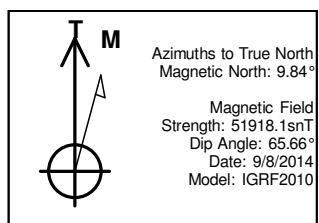
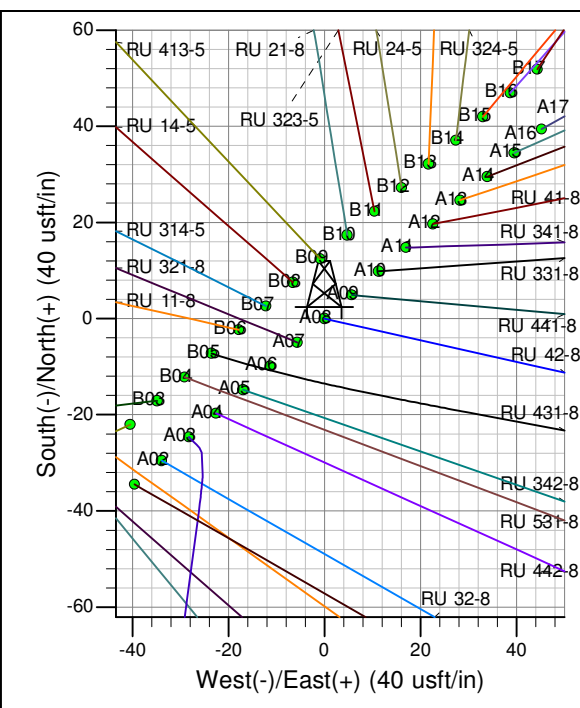
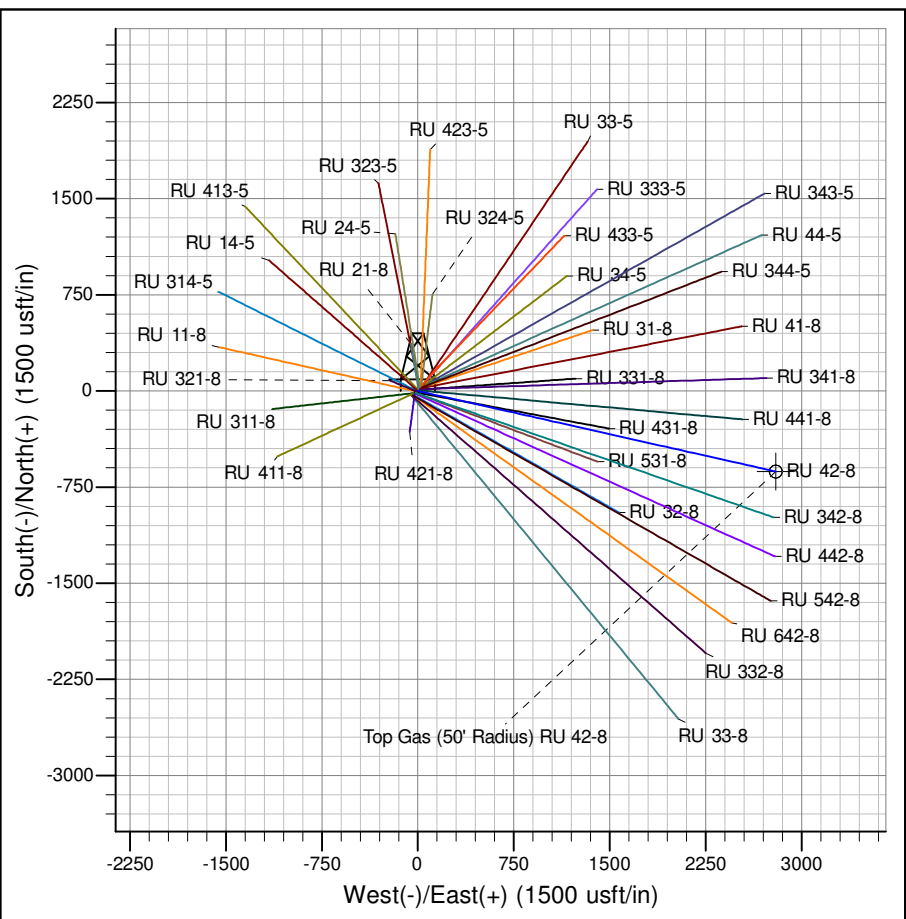
+N/-S 0.00 +E/-W 0.00 Northing 1602664.67 Easting 2350503.59 Latitude 39.46551 Longitude -107.80079 Slot A09

KELLY BUSHING @ 7762.00usft (Nabors 576 (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 3.50%/100
858.06	885.67	26.80	102.66	-38.53	171.55	175.82	175.82	Hold 26.80° Inc, 102.66° Az
5374.87	5945.97	26.80	102.66	-538.48	2397.54	2457.27	2457.27	Start Drop -1.50%/100
7097.00	7732.53	0.00	0.00	-628.38	2797.81	2867.51	2867.51	Vertical
7197.00	7832.53	0.00	0.00	-628.38	2797.81	2867.51	2867.51	Top Gas
9947.00	10582.53	0.00	0.00	-628.38	2797.81	2867.51	2867.51	TD at 10582.53



Project: RU 08-07S-093W
 Site: RU 21-8 Pad
 Well: RU 42-8
 Design #1 08Sep14 mab

PICEANCE VLY NAD 83

RU 08-07S-093W

RU 21-8 Pad

RU 42-8 - Slot A09

Wellbore #1

Plan: Design #1 08Sep14 mab

Standard Planning Report - Geographic

04 November, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 42-8 - Slot A09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)
Project:	RU 08-07S-093W	MD Reference:	KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)
Site:	RU 21-8 Pad	North Reference:	True
Well:	RU 42-8	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 08Sep14 mab		

Project	RU 08-07S-093W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	RU 21-8 Pad				
Site Position:		Northing:	1,602,707.70000 usft	Latitude:	39.46563
From:	Map	Easting:	2,350,555.60000 usft	Longitude:	-107.80061
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	-1.45 °

Well	RU 42-8 - Slot A09					
Well Position	+N/-S	0.00 usft	Northing:	1,602,664.67398 usft	Latitude:	39.46551
	+E/-W	0.00 usft	Easting:	2,350,503.59027 usft	Longitude:	-107.80079
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft	Ground Level:	7,736.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/8/2014	9.84	65.66	51,918

Design	Design #1 08Sep14 mab			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (bearing)
	0.00	0.00	0.00	102.66

Plan Sections										
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	
885.67	26.80	102.66	858.06	-38.53	171.55	3.50	3.50	0.00	102.66	
5,945.97	26.80	102.66	5,374.87	-538.48	2,397.54	0.00	0.00	0.00	0.00	
7,732.53	0.00	0.00	7,097.00	-628.38	2,797.81	1.50	-1.50	0.00	180.00	
7,832.53	0.00	0.00	7,197.00	-628.38	2,797.81	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
10,582.53	0.00	0.00	9,947.00	-628.38	2,797.81	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 42-8 - Slot A09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)
Project:	RU 08-07S-093W	MD Reference:	KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)
Site:	RU 21-8 Pad	North Reference:	True
Well:	RU 42-8	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 08Sep14 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	1,602,664.67398	2,350,503.59027	39.46551	-107.80079	
120.00	0.00	0.00	120.00	0.00	0.00	1,602,664.67398	2,350,503.59027	39.46551	-107.80079	
Start Build 3.50°/100										
200.00	2.80	102.66	199.97	-0.43	1.91	1,602,664.19755	2,350,505.48569	39.46551	-107.80079	
400.00	9.80	102.66	398.64	-5.23	23.31	1,602,658.85074	2,350,526.75721	39.46549	-107.80071	
600.00	16.80	102.66	593.15	-15.31	68.17	1,602,647.64157	2,350,571.35136	39.46546	-107.80055	
800.00	23.80	102.66	780.61	-30.51	135.83	1,602,630.73712	2,350,638.60334	39.46542	-107.80031	
885.67	26.80	102.66	858.06	-38.53	171.55	1,602,621.81344	2,350,674.10496	39.46540	-107.80019	
Hold 26.80° Inc, 102.66° Az										
1,000.00	26.80	102.66	960.11	-49.82	221.84	1,602,609.24760	2,350,724.09642	39.46537	-107.80001	
1,200.00	26.80	102.66	1,138.63	-69.58	309.82	1,602,587.26614	2,350,811.54664	39.46532	-107.79970	
9 5/8"										
1,400.00	26.80	102.66	1,317.15	-89.34	397.80	1,602,565.28467	2,350,898.99687	39.46526	-107.79939	
1,600.00	26.80	102.66	1,495.67	-109.10	485.78	1,602,543.30320	2,350,986.44710	39.46521	-107.79907	
1,800.00	26.80	102.66	1,674.19	-128.86	573.75	1,602,521.32172	2,351,073.89733	39.46515	-107.79876	
2,000.00	26.80	102.66	1,852.71	-148.62	661.73	1,602,499.34025	2,351,161.34755	39.46510	-107.79845	
2,200.00	26.80	102.66	2,031.23	-168.38	749.71	1,602,477.35878	2,351,248.79778	39.46504	-107.79814	
2,400.00	26.80	102.66	2,209.75	-188.14	837.69	1,602,455.37731	2,351,336.24801	39.46499	-107.79783	
2,600.00	26.80	102.66	2,388.27	-207.90	925.67	1,602,433.39584	2,351,423.69824	39.46494	-107.79752	
2,800.00	26.80	102.66	2,566.78	-227.66	1,013.65	1,602,411.41437	2,351,511.14847	39.46488	-107.79720	
3,000.00	26.80	102.66	2,745.30	-247.42	1,101.63	1,602,389.43289	2,351,598.59869	39.46483	-107.79689	
3,200.00	26.80	102.66	2,923.82	-267.18	1,189.61	1,602,367.45142	2,351,686.04892	39.46477	-107.79658	
3,400.00	26.80	102.66	3,102.34	-286.94	1,277.58	1,602,345.46995	2,351,773.49915	39.46472	-107.79627	
3,600.00	26.80	102.66	3,280.86	-306.70	1,365.56	1,602,323.48848	2,351,860.94938	39.46466	-107.79596	
3,800.00	26.80	102.66	3,459.38	-326.46	1,453.54	1,602,301.50701	2,351,948.39960	39.46461	-107.79565	
4,000.00	26.80	102.66	3,637.90	-346.22	1,541.52	1,602,279.52554	2,352,035.84983	39.46456	-107.79533	
4,200.00	26.80	102.66	3,816.42	-365.98	1,629.50	1,602,257.54406	2,352,123.30007	39.46450	-107.79502	
4,400.00	26.80	102.66	3,994.94	-385.74	1,717.48	1,602,235.56259	2,352,210.75030	39.46445	-107.79471	
4,600.00	26.80	102.66	4,173.46	-405.50	1,805.46	1,602,213.58112	2,352,298.20053	39.46439	-107.79440	
4,800.00	26.80	102.66	4,351.98	-425.26	1,893.44	1,602,191.59966	2,352,385.65075	39.46434	-107.79409	
5,000.00	26.80	102.66	4,530.50	-445.02	1,981.42	1,602,169.61819	2,352,473.10098	39.46428	-107.79378	
5,200.00	26.80	102.66	4,709.02	-464.78	2,069.39	1,602,147.63672	2,352,560.55121	39.46423	-107.79346	
5,400.00	26.80	102.66	4,887.54	-484.54	2,157.37	1,602,125.65524	2,352,648.00144	39.46418	-107.79315	
5,600.00	26.80	102.66	5,066.06	-504.30	2,245.35	1,602,103.67377	2,352,735.45166	39.46412	-107.79284	
5,800.00	26.80	102.66	5,244.58	-524.06	2,333.33	1,602,081.69230	2,352,822.90189	39.46407	-107.79253	
5,945.97	26.80	102.66	5,374.87	-538.48	2,397.54	1,602,065.64950	2,352,886.72595	39.46403	-107.79230	
Start Drop -1.50°/100										
6,000.00	25.99	102.66	5,423.27	-543.75	2,420.98	1,602,059.79419	2,352,910.02050	39.46401	-107.79222	
6,200.00	22.99	102.66	5,605.26	-561.91	2,501.85	1,602,039.58735	2,352,990.41057	39.46396	-107.79193	
6,400.00	19.99	102.66	5,791.34	-577.96	2,573.32	1,602,021.73008	2,353,061.45324	39.46392	-107.79168	
6,600.00	16.99	102.66	5,980.99	-591.86	2,635.20	1,602,006.27132	2,353,122.95379	39.46388	-107.79146	
6,800.00	13.99	102.66	6,173.71	-603.56	2,687.30	1,601,993.25343	2,353,174.74365	39.46385	-107.79128	
7,000.00	10.99	102.66	6,368.95	-613.04	2,729.49	1,601,982.71209	2,353,216.68088	39.46382	-107.79113	
7,200.00	7.99	102.66	6,566.20	-620.26	2,761.65	1,601,974.67621	2,353,248.65051	39.46380	-107.79101	
7,400.00	4.99	102.66	6,764.89	-625.21	2,783.70	1,601,969.16781	2,353,270.56494	39.46379	-107.79093	
7,600.00	1.99	102.66	6,964.50	-627.88	2,795.57	1,601,966.20198	2,353,282.36408	39.46378	-107.79089	
7,732.53	0.00	0.00	7,097.00	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
Vertical										
7,800.00	0.00	0.00	7,164.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
7,832.53	0.00	0.00	7,197.00	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
Top Gas - Approx. Top Gas										
8,000.00	0.00	0.00	7,364.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 42-8 - Slot A09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)
Project:	RU 08-07S-093W	MD Reference:	KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)
Site:	RU 21-8 Pad	North Reference:	True
Well:	RU 42-8	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 08Sep14 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	
8,200.00	0.00	0.00	7,564.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
8,400.00	0.00	0.00	7,764.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
8,600.00	0.00	0.00	7,964.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
8,800.00	0.00	0.00	8,164.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
9,000.00	0.00	0.00	8,364.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
9,200.00	0.00	0.00	8,564.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
9,400.00	0.00	0.00	8,764.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
9,600.00	0.00	0.00	8,964.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
9,611.53	0.00	0.00	8,976.00	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
Cameo Coals										
9,800.00	0.00	0.00	9,164.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
10,000.00	0.00	0.00	9,364.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
10,200.00	0.00	0.00	9,564.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
10,301.53	0.00	0.00	9,666.00	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
Coal D										
10,400.00	0.00	0.00	9,764.47	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
10,432.53	0.00	0.00	9,797.00	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
Rollins SS										
10,582.53	0.00	0.00	9,947.00	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	
TD at 10582.53 - TD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Top Gas (50' Radius) RL - hit/miss target - Shape - plan hits target center - Circle (radius 50.00)	0.00	358.56	7,197.00	-628.38	2,797.81	1,601,965.64158	2,353,284.59355	39.46378	-107.79088	

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)		
1,200.00	1,138.63	9 5/8"	9.625	13.500		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
7,832.53	7,197.00	Approx. Top Gas				
9,611.53	8,976.00	Cameo Coals				
10,301.53	9,666.00	Coal D				
10,432.53	9,797.00	Rollins SS				
10,582.53	9,947.00	TD				

WPX
Planning Report - Geographic

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Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)
Project:	RU 08-07S-093W	MD Reference:	KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)
Site:	RU 21-8 Pad	North Reference:	True
Well:	RU 42-8	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 08Sep14 mab		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
120.00	120.00	0.00	0.00	Start Build 3.50°/100
885.67	858.06	-38.53	171.55	Hold 26.80° Inc, 102.66° Az
5,945.97	5,374.87	-538.48	2,397.54	Start Drop -1.50°/100
7,732.53	7,097.00	-628.38	2,797.81	Vertical
7,832.53	7,197.00	-628.38	2,797.81	Top Gas
10,582.53	9,947.00	-628.38	2,797.81	TD at 10582.53