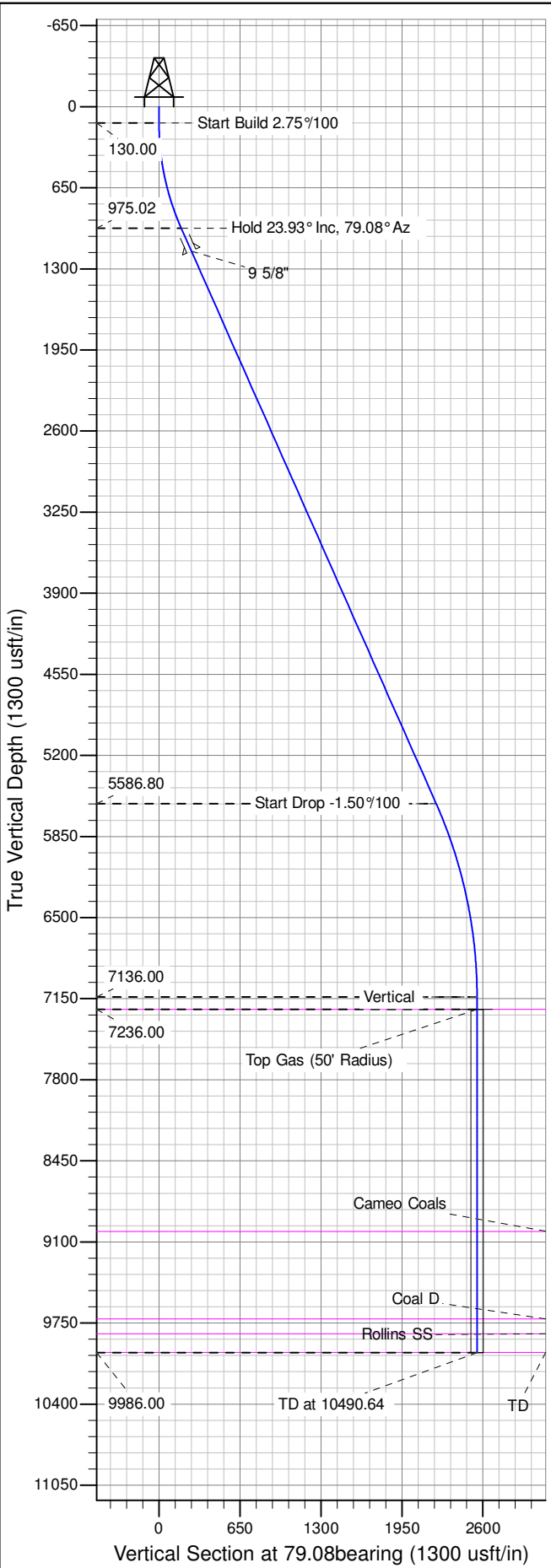
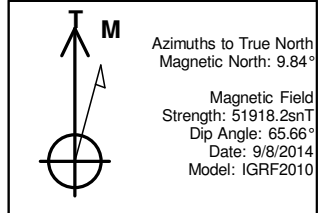
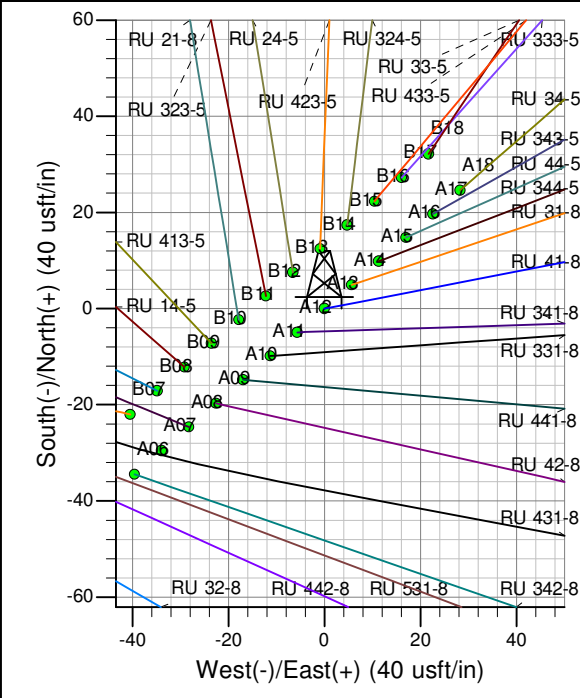
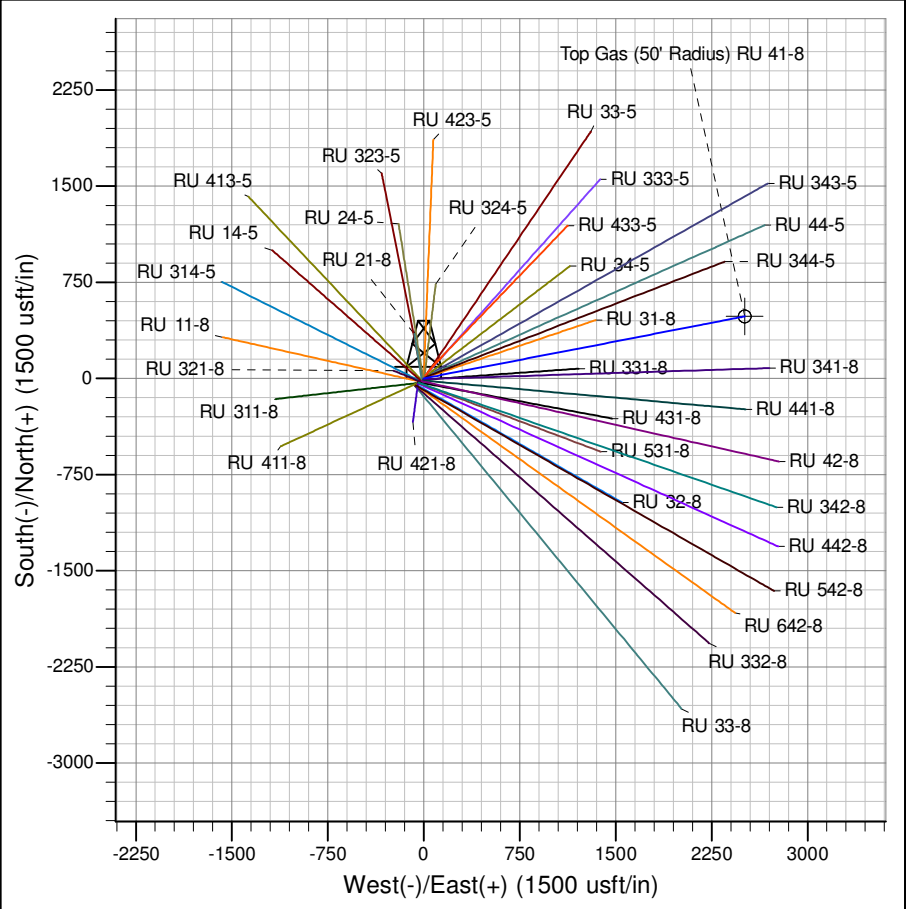




Well Name: RU 41-8
Surface Location: RU 21-8 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 7736.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1602683.80 2350526.71 39.46556 -107.80071 A13
KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
130.00	130.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build	2.75°/100
975.02	1000.09	23.93	79.08	33.93	175.81	179.06	179.06	Hold	23.93° Inc, 79.08° Az
5586.80	6045.47	23.93	79.08	421.69	2185.05	2225.36	2225.36	Start Drop	-1.50°/100
7136.00	7640.64	0.00	0.00	483.89	2507.37	2553.63	2553.63	Vertical	
7236.00	7740.64	0.00	0.00	483.89	2507.37	2553.63	2553.63	Top Gas	
9986.00	10490.64	0.00	0.00	483.89	2507.37	2553.63	2553.63	TD at	10490.64



Azimuths to True North
Magnetic North: 9.84°

Magnetic Field
Strength: 51918.2snT
Dip Angle: 65.66°
Date: 9/8/2014
Model: IGRF2010

Project: RU 08-07S-093W
Site: RU 21-8 Pad
Well: RU 41-8
Design #1 08Sep14 mab

PICEANCE VLY NAD 83

RU 08-07S-093W

RU 21-8 Pad

RU 41-8 - Slot A13

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 41-8 - Slot A13
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 41-8	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 41-8 - Slot A13			
Well Position	+N/-S	0.00 usft	Northing:	1,602,683.79663 usft
	+E/-W	0.00 usft	Easting:	2,350,526.70573 usft
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	79.08

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	
130.00	0.00	0.00	130.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.09	23.93	79.08	975.02	33.93	175.81	2.75	2.75	0.00	79.08	
6,045.47	23.93	79.08	5,586.80	421.69	2,185.05	0.00	0.00	0.00	0.00	
7,640.64	0.00	0.00	7,136.00	483.89	2,507.37	1.50	-1.50	0.00	180.00	
7,740.64	0.00	0.00	7,236.00	483.89	2,507.37	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
10,490.64	0.00	0.00	9,986.00	483.89	2,507.37	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 41-8 - Slot A13
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 41-8	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	1,602,683.79663	2,350,526.70573	39.46556	-107.80071	
130.00	0.00	0.00	130.00	0.00	0.00	1,602,683.79663	2,350,526.70573	39.46556	-107.80071	
Start Build 2.75°/100										
200.00	1.93	79.08	199.99	0.22	1.15	1,602,683.99013	2,350,527.86550	39.46556	-107.80071	
400.00	7.43	79.08	399.24	3.31	17.15	1,602,686.67164	2,350,543.93781	39.46557	-107.80065	
600.00	12.93	79.08	596.02	10.00	51.83	1,602,692.48369	2,350,578.77379	39.46559	-107.80053	
800.00	18.43	79.08	788.51	20.24	104.87	1,602,701.37277	2,350,632.05268	39.46562	-107.80034	
1,000.00	23.93	79.08	974.94	33.92	175.78	1,602,713.25703	2,350,703.28392	39.46565	-107.80009	
1,000.09	23.93	79.08	975.02	33.93	175.81	1,602,713.26314	2,350,703.32053	39.46565	-107.80009	
Hold 23.93° Inc, 79.08° Az										
1,200.00	23.93	79.08	1,157.75	49.29	255.42	1,602,726.60597	2,350,783.29410	39.46570	-107.79981	
9 5/8"										
1,400.00	23.93	79.08	1,340.56	64.66	335.07	1,602,739.95491	2,350,863.30430	39.46574	-107.79953	
1,600.00	23.93	79.08	1,523.37	80.03	414.72	1,602,753.30386	2,350,943.31450	39.46578	-107.79925	
1,800.00	23.93	79.08	1,706.18	95.41	494.36	1,602,766.65280	2,351,023.32470	39.46582	-107.79896	
2,000.00	23.93	79.08	1,889.00	110.78	574.01	1,602,780.00174	2,351,103.33490	39.46586	-107.79868	
2,200.00	23.93	79.08	2,071.81	126.15	653.65	1,602,793.35069	2,351,183.34509	39.46591	-107.79840	
2,400.00	23.93	79.08	2,254.62	141.52	733.30	1,602,806.69963	2,351,263.35528	39.46595	-107.79812	
2,600.00	23.93	79.08	2,437.43	156.89	812.95	1,602,820.04857	2,351,343.36548	39.46599	-107.79783	
2,800.00	23.93	79.08	2,620.24	172.26	892.59	1,602,833.39752	2,351,423.37568	39.46603	-107.79755	
3,000.00	23.93	79.08	2,803.06	187.63	972.24	1,602,846.74646	2,351,503.38588	39.46608	-107.79727	
3,200.00	23.93	79.08	2,985.87	203.00	1,051.89	1,602,860.09540	2,351,583.39607	39.46612	-107.79699	
3,400.00	23.93	79.08	3,168.68	218.37	1,131.53	1,602,873.44435	2,351,663.40627	39.46616	-107.79671	
3,600.00	23.93	79.08	3,351.49	233.74	1,211.18	1,602,886.79329	2,351,743.41647	39.46620	-107.79642	
3,800.00	23.93	79.08	3,534.30	249.11	1,290.83	1,602,900.14223	2,351,823.42667	39.46624	-107.79614	
4,000.00	23.93	79.08	3,717.11	264.48	1,370.47	1,602,913.49118	2,351,903.43686	39.46629	-107.79586	
4,200.00	23.93	79.08	3,899.93	279.85	1,450.12	1,602,926.84012	2,351,983.44705	39.46633	-107.79558	
4,400.00	23.93	79.08	4,082.74	295.22	1,529.77	1,602,940.18907	2,352,063.45725	39.46637	-107.79530	
4,600.00	23.93	79.08	4,265.55	310.60	1,609.41	1,602,953.53801	2,352,143.46745	39.46641	-107.79501	
4,800.00	23.93	79.08	4,448.36	325.97	1,689.06	1,602,966.88695	2,352,223.47765	39.46646	-107.79473	
5,000.00	23.93	79.08	4,631.17	341.34	1,768.71	1,602,980.23590	2,352,303.48785	39.46650	-107.79445	
5,200.00	23.93	79.08	4,813.99	356.71	1,848.35	1,602,993.58483	2,352,383.49804	39.46654	-107.79417	
5,400.00	23.93	79.08	4,996.80	372.08	1,928.00	1,603,006.93377	2,352,463.50824	39.46658	-107.79389	
5,600.00	23.93	79.08	5,179.61	387.45	2,007.65	1,603,020.28272	2,352,543.51843	39.46662	-107.79360	
5,800.00	23.93	79.08	5,362.42	402.82	2,087.29	1,603,033.63166	2,352,623.52863	39.46667	-107.79332	
6,000.00	23.93	79.08	5,545.23	418.19	2,166.94	1,603,046.98060	2,352,703.53883	39.46671	-107.79304	
6,045.47	23.93	79.08	5,586.80	421.69	2,185.05	1,603,050.01555	2,352,721.72953	39.46672	-107.79297	
Start Drop -1.50°/100										
6,200.00	21.61	79.08	5,729.27	433.02	2,243.76	1,603,059.85661	2,352,780.71435	39.46675	-107.79277	
6,400.00	18.61	79.08	5,917.06	446.05	2,311.27	1,603,071.17141	2,352,848.53243	39.46678	-107.79253	
6,600.00	15.61	79.08	6,108.19	457.19	2,369.04	1,603,080.85337	2,352,906.56362	39.46682	-107.79232	
6,800.00	12.61	79.08	6,302.13	466.43	2,416.91	1,603,088.87593	2,352,954.64884	39.46684	-107.79215	
7,000.00	9.61	79.08	6,498.36	473.73	2,454.74	1,603,095.21711	2,352,992.65630	39.46686	-107.79202	
7,200.00	6.61	79.08	6,696.34	479.08	2,482.44	1,603,099.85954	2,353,020.48182	39.46688	-107.79192	
7,400.00	3.61	79.08	6,895.52	482.45	2,499.93	1,603,102.79048	2,353,038.04914	39.46688	-107.79186	
7,600.00	0.61	79.08	7,095.36	483.85	2,507.16	1,603,104.00190	2,353,045.31010	39.46689	-107.79183	
7,640.64	0.00	0.00	7,136.00	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
Vertical										
7,740.64	0.00	0.00	7,236.00	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
Top Gas - Approx. Top Gas										
7,800.00	0.00	0.00	7,295.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
8,000.00	0.00	0.00	7,495.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 41-8 - Slot A13
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 41-8	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	7,695.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
8,400.00	0.00	0.00	7,895.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
8,600.00	0.00	0.00	8,095.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
8,800.00	0.00	0.00	8,295.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
9,000.00	0.00	0.00	8,495.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
9,200.00	0.00	0.00	8,695.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
9,400.00	0.00	0.00	8,895.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
9,520.64	0.00	0.00	9,016.00	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
Cameo Coals										
9,600.00	0.00	0.00	9,095.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
9,800.00	0.00	0.00	9,295.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
10,000.00	0.00	0.00	9,495.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
10,200.00	0.00	0.00	9,695.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
10,220.64	0.00	0.00	9,716.00	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
Coal D										
10,340.64	0.00	0.00	9,836.00	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
Rollins SS										
10,400.00	0.00	0.00	9,895.36	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
10,490.63	0.00	0.00	9,985.99	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
TD										
10,490.64	0.00	0.00	9,986.00	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
TD at 10490.64										

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	358.55	7,236.00	483.89	2,507.37	1,603,104.03748	2,353,045.52333	39.46689	-107.79183	
- plan hits target center										
- Circle (radius 50.00)										

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (in)	Hole Diameter (in)	
1,200.00	1,157.75	9 5/8"		9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
7,740.64	7,236.00	Approx. Top Gas				
9,520.64	9,016.00	Cameo Coals				
10,220.64	9,716.00	Coal D				
10,340.64	9,836.00	Rollins SS				
10,490.63	9,985.99	TD		0.00		

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 41-8 - Slot A13
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 41-8	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)	
130.00	130.00	0.00	0.00	Start Build 2.75°/100
1,000.09	975.02	33.93	175.81	Hold 23.93° Inc, 79.08° Az
6,045.47	5,586.80	421.69	2,185.05	Start Drop -1.50°/100
7,640.64	7,136.00	483.89	2,507.37	Vertical
7,740.64	7,236.00	483.89	2,507.37	Top Gas
10,490.64	9,986.00	483.89	2,507.37	TD at 10490.64