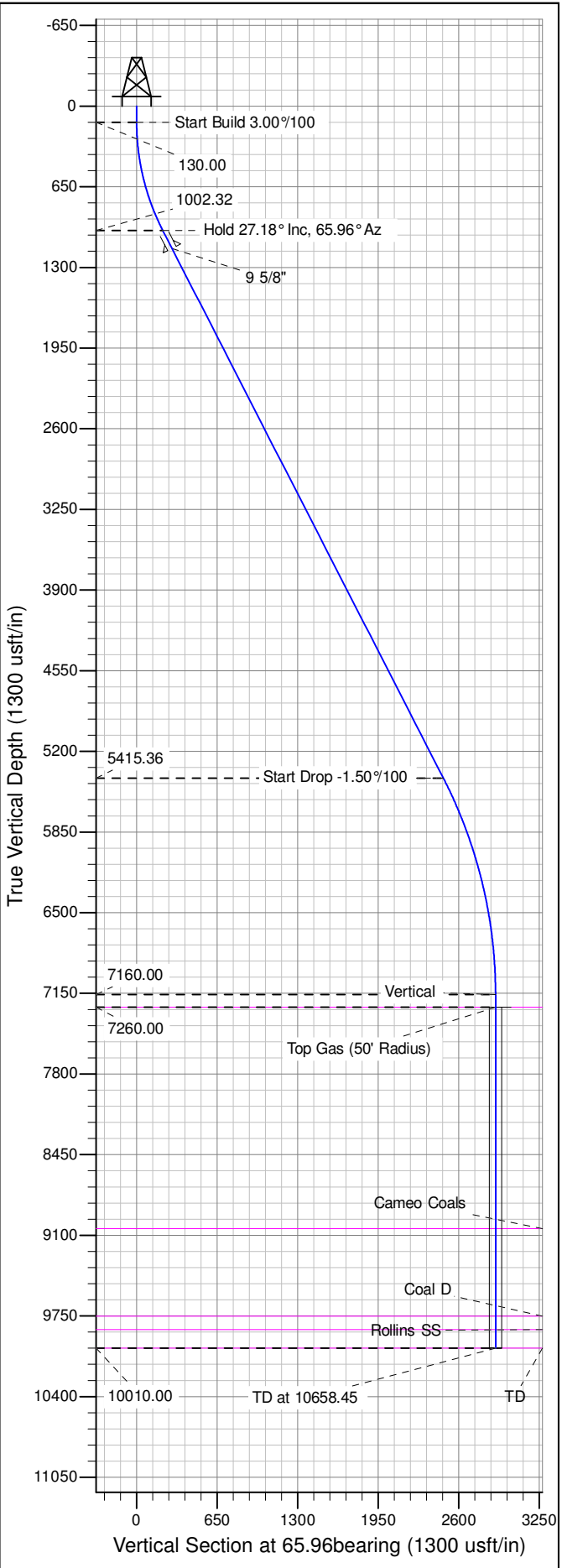
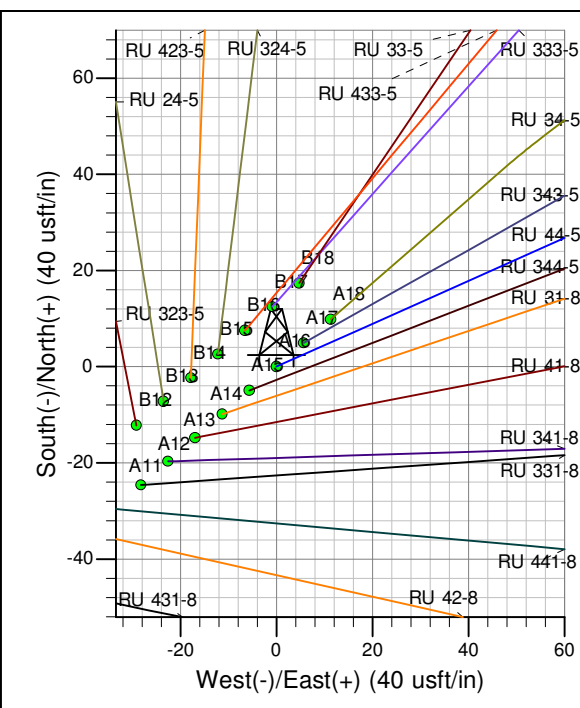
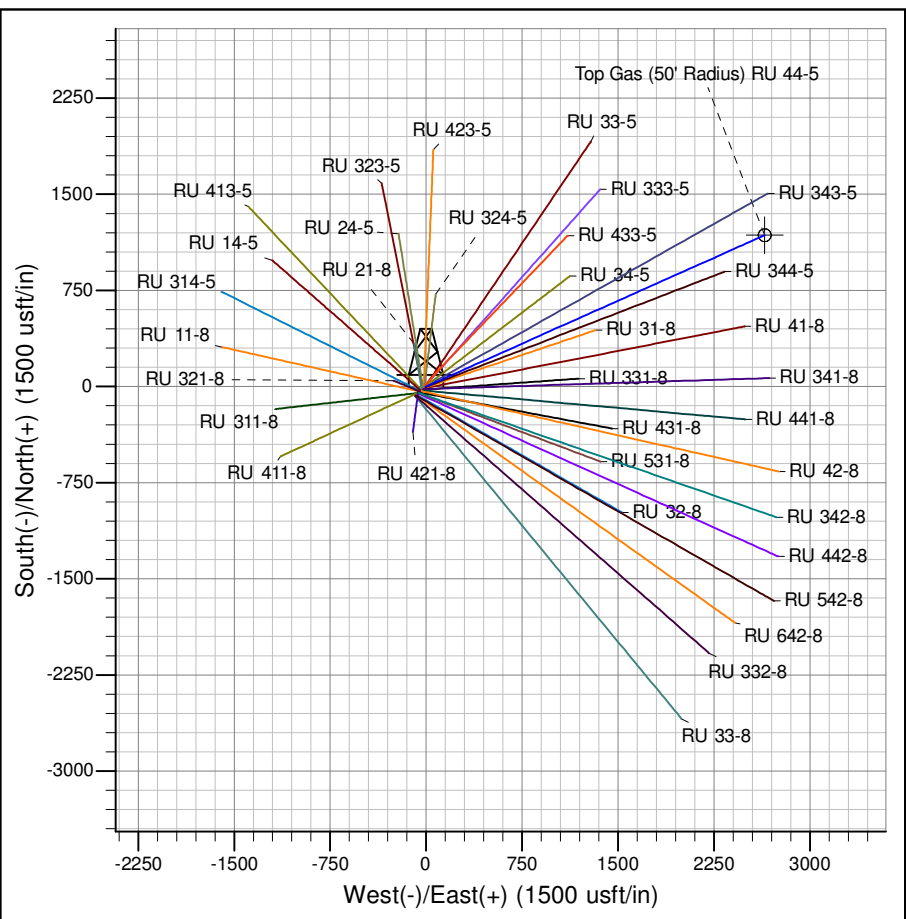




Well Name: RU 44-5
Surface Location: RU 21-8 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 7736.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1602698.14 2350544.04 39.46560 -107.80065 A16
KELLY BUSHING @ 7762.00usft (Nabors 576 (26' 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	3.00°/100
1002.32	1035.91	27.18	65.96	85.90	192.56	210.85	210.85	Hold	27.18° Inc, 65.96° Az
5415.36	5996.63	27.18	65.96	1008.93	2261.81	2476.64	2476.64	Start Drop	-1.50°/100
7160.00	7808.45	0.00	0.00	1180.72	2646.94	2898.34	2898.34	Vertical	
7260.00	7908.45	0.00	0.00	1180.72	2646.94	2898.34	2898.34	Top Gas	
10010.00	10658.45	0.00	0.00	1180.72	2646.94	2898.34	2898.34	TD at	10658.45



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 44-5
Design #1 08Sep14 mab

PICEANCE VLY NAD 83

RU 08-07S-093W

RU 21-8 Pad

RU 44-5 - Slot A16

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 44-5 - Slot A16
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 44-5	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 44-5 - Slot A16			
Well Position	+N/-S	0.00 usft	Northing:	1,602,698.13864 usft
	+E/-W	0.00 usft	Easting:	2,350,544.04230 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	65.96

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	
1,035.91	27.18	65.96	1,002.32	85.90	192.56	3.00	3.00	0.00	65.96	
5,996.63	27.18	65.96	5,415.36	1,008.93	2,261.81	0.00	0.00	0.00	0.00	
7,808.45	0.00	0.00	7,160.00	1,180.72	2,646.94	1.50	-1.50	0.00	180.00	
7,908.45	0.00	0.00	7,260.00	1,180.72	2,646.94	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
10,658.45	0.00	0.00	10,010.00	1,180.72	2,646.94	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 44-5 - Slot A16
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 44-5	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	1,602,698.13864	2,350,544.04230	39.46560	-107.80065
130.00	0.00	0.00	130.00	0.00	0.00	1,602,698.13864	2,350,544.04230	39.46560	-107.80065
Start Build 3.00°/100									
200.00	2.10	65.96	199.98	0.52	1.17	1,602,698.63135	2,350,545.22657	39.46560	-107.80065
400.00	8.10	65.96	399.10	7.76	17.40	1,602,705.45748	2,350,561.63397	39.46562	-107.80059
600.00	14.10	65.96	595.27	23.44	52.55	1,602,720.24113	2,350,597.16815	39.46567	-107.80047
800.00	20.10	65.96	786.34	47.39	106.23	1,602,742.82030	2,350,651.43979	39.46573	-107.80028
1,000.00	26.10	65.96	970.22	79.34	177.86	1,602,772.94762	2,350,723.85427	39.46582	-107.80002
1,035.91	27.18	65.96	1,002.32	85.90	192.56	1,602,779.13210	2,350,738.71937	39.46584	-107.79997
Hold 27.18° Inc, 65.96° Az									
1,200.00	27.18	65.96	1,148.29	116.43	261.01	1,602,807.92111	2,350,807.91707	39.46592	-107.79973
9 5/8"									
1,400.00	27.18	65.96	1,326.21	153.64	344.44	1,602,843.01033	2,350,892.25804	39.46602	-107.79943
1,600.00	27.18	65.96	1,504.13	190.86	427.86	1,602,878.09955	2,350,976.59901	39.46613	-107.79914
1,800.00	27.18	65.96	1,682.05	228.07	511.29	1,602,913.18877	2,351,060.93998	39.46623	-107.79884
2,000.00	27.18	65.96	1,859.97	265.28	594.71	1,602,948.27799	2,351,145.28095	39.46633	-107.79855
2,200.00	27.18	65.96	2,037.89	302.50	678.14	1,602,983.36721	2,351,229.62192	39.46643	-107.79825
2,400.00	27.18	65.96	2,215.81	339.71	761.56	1,603,018.45642	2,351,313.96289	39.46653	-107.79796
2,600.00	27.18	65.96	2,393.73	376.92	844.99	1,603,053.54564	2,351,398.30386	39.46664	-107.79766
2,800.00	27.18	65.96	2,571.65	414.14	928.41	1,603,088.63486	2,351,482.64483	39.46674	-107.79737
3,000.00	27.18	65.96	2,749.57	451.35	1,011.84	1,603,123.72408	2,351,566.98580	39.46684	-107.79707
3,200.00	27.18	65.96	2,927.49	488.57	1,095.26	1,603,158.81330	2,351,651.32677	39.46694	-107.79677
3,400.00	27.18	65.96	3,105.41	525.78	1,178.69	1,603,193.90252	2,351,735.66774	39.46704	-107.79648
3,600.00	27.18	65.96	3,283.33	562.99	1,262.12	1,603,228.99174	2,351,820.00871	39.46715	-107.79618
3,800.00	27.18	65.96	3,461.25	600.21	1,345.54	1,603,264.08096	2,351,904.34968	39.46725	-107.79589
4,000.00	27.18	65.96	3,639.17	637.42	1,428.97	1,603,299.17018	2,351,988.69065	39.46735	-107.79559
4,200.00	27.18	65.96	3,817.09	674.63	1,512.39	1,603,334.25940	2,352,073.03162	39.46745	-107.79530
4,400.00	27.18	65.96	3,995.01	711.85	1,595.82	1,603,369.34862	2,352,157.37259	39.46756	-107.79500
4,600.00	27.18	65.96	4,172.93	749.06	1,679.24	1,603,404.43783	2,352,241.71356	39.46766	-107.79471
4,800.00	27.18	65.96	4,350.84	786.27	1,762.67	1,603,439.52705	2,352,326.05453	39.46776	-107.79441
5,000.00	27.18	65.96	4,528.76	823.49	1,846.09	1,603,474.61627	2,352,410.39550	39.46786	-107.79412
5,200.00	27.18	65.96	4,706.68	860.70	1,929.52	1,603,509.70549	2,352,494.73647	39.46796	-107.79382
5,400.00	27.18	65.96	4,884.60	897.92	2,012.94	1,603,544.79471	2,352,579.07744	39.46807	-107.79352
5,600.00	27.18	65.96	5,062.52	935.13	2,096.37	1,603,579.88393	2,352,663.41841	39.46817	-107.79323
5,800.00	27.18	65.96	5,240.44	972.34	2,179.79	1,603,614.97315	2,352,747.75938	39.46827	-107.79293
5,996.63	27.18	65.96	5,415.36	1,008.93	2,261.81	1,603,649.47065	2,352,830.67806	39.46837	-107.79264
Start Drop -1.50°/100									
6,000.00	27.13	65.96	5,418.36	1,009.56	2,263.22	1,603,650.06187	2,352,832.09912	39.46837	-107.79264
6,200.00	24.13	65.96	5,598.67	1,044.79	2,342.21	1,603,683.28511	2,352,911.95501	39.46847	-107.79236
6,400.00	21.13	65.96	5,783.25	1,076.13	2,412.47	1,603,712.83807	2,352,982.98893	39.46856	-107.79211
6,600.00	18.13	65.96	5,971.61	1,103.50	2,473.81	1,603,738.63973	2,353,045.00620	39.46863	-107.79189
6,800.00	15.13	65.96	6,163.23	1,126.81	2,526.07	1,603,760.61938	2,353,097.83681	39.46869	-107.79171
7,000.00	12.13	65.96	6,357.58	1,146.00	2,569.10	1,603,778.71678	2,353,141.33597	39.46875	-107.79155
7,200.00	9.13	65.96	6,554.12	1,161.02	2,602.78	1,603,792.88230	2,353,175.38446	39.46879	-107.79143
7,400.00	6.13	65.96	6,752.33	1,171.84	2,627.02	1,603,803.07714	2,353,199.88894	39.46882	-107.79135
7,600.00	3.13	65.96	6,951.66	1,178.41	2,641.75	1,603,809.27336	2,353,214.78225	39.46884	-107.79130
7,800.00	0.13	65.96	7,151.55	1,180.72	2,646.93	1,603,811.45396	2,353,220.02357	39.46884	-107.79128
7,808.45	0.00	0.00	7,160.00	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128
Vertical									
7,908.45	0.00	0.00	7,260.00	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128
Top Gas - Approx. Top Gas									
8,000.00	0.00	0.00	7,351.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 44-5 - Slot A16
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 44-5	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	7,551.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
8,400.00	0.00	0.00	7,751.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
8,600.00	0.00	0.00	7,951.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
8,800.00	0.00	0.00	8,151.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
9,000.00	0.00	0.00	8,351.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
9,200.00	0.00	0.00	8,551.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
9,400.00	0.00	0.00	8,751.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
9,600.00	0.00	0.00	8,951.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
9,694.45	0.00	0.00	9,046.00	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
Cameo Coals										
9,800.00	0.00	0.00	9,151.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
10,000.00	0.00	0.00	9,351.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
10,200.00	0.00	0.00	9,551.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
10,399.45	0.00	0.00	9,751.00	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
Coal D										
10,400.00	0.00	0.00	9,751.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
10,508.45	0.00	0.00	9,860.00	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
Rollins SS										
10,600.00	0.00	0.00	9,951.55	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
10,658.45	0.00	0.00	10,010.00	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
TD at 10658.45 - 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	358.55	7,260.00	1,180.72	2,646.94	1,603,811.45755	2,353,220.03220	39.46884	-107.79128	
- 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	1,148.29	9 5/8"			9.625	13.500

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
7,908.45	7,260.00	Approx. Top Gas				
9,694.45	9,046.00	Cameo Coals				
10,399.45	9,751.00	Coal D				
10,508.45	9,860.00	Rollins SS				
10,658.45	10,010.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 44-5 - Slot A16
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 44-5	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 3.00°/100
1,035.91	1,002.32	85.90	192.56	Hold 27.18° Inc, 65.96° Az
5,996.63	5,415.36	1,008.93	2,261.81	Start Drop -1.50°/100
7,808.45	7,160.00	1,180.72	2,646.94	Vertical
7,908.45	7,260.00	1,180.72	2,646.94	Top Gas
10,658.45	10,010.00	1,180.72	2,646.94	TD at 10658.45