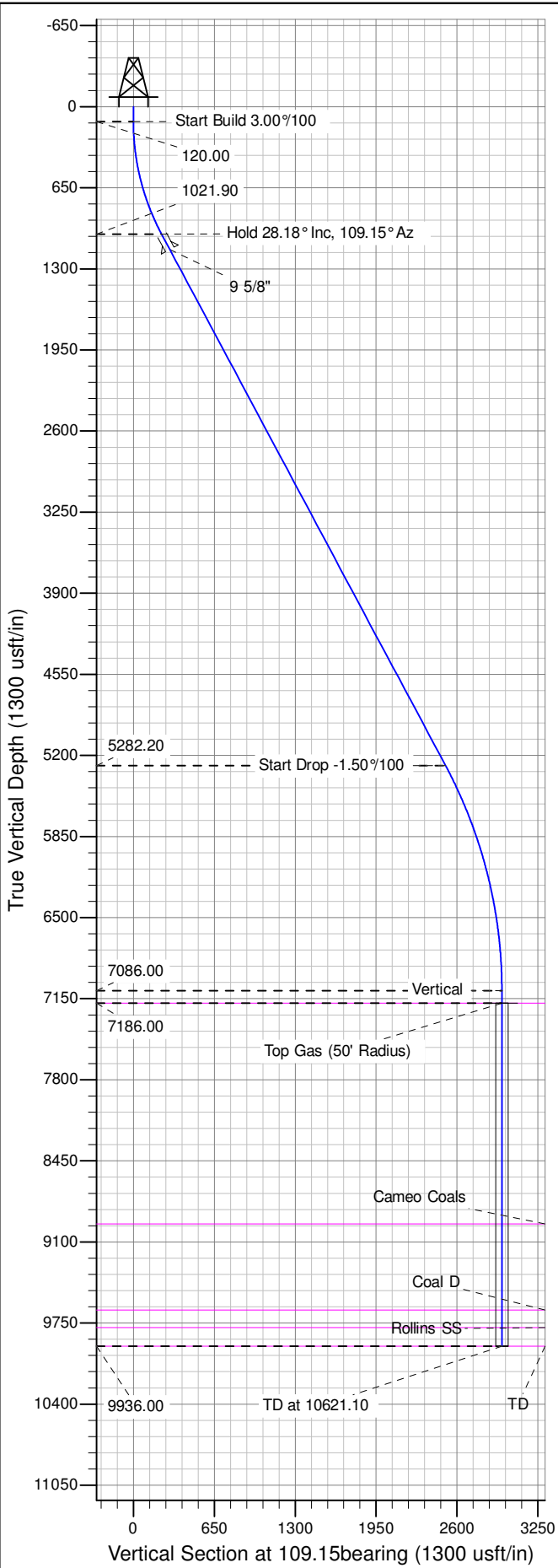
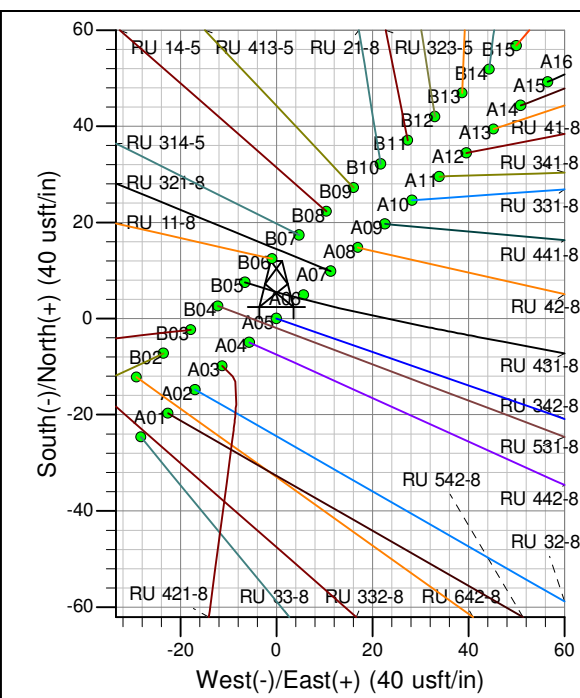
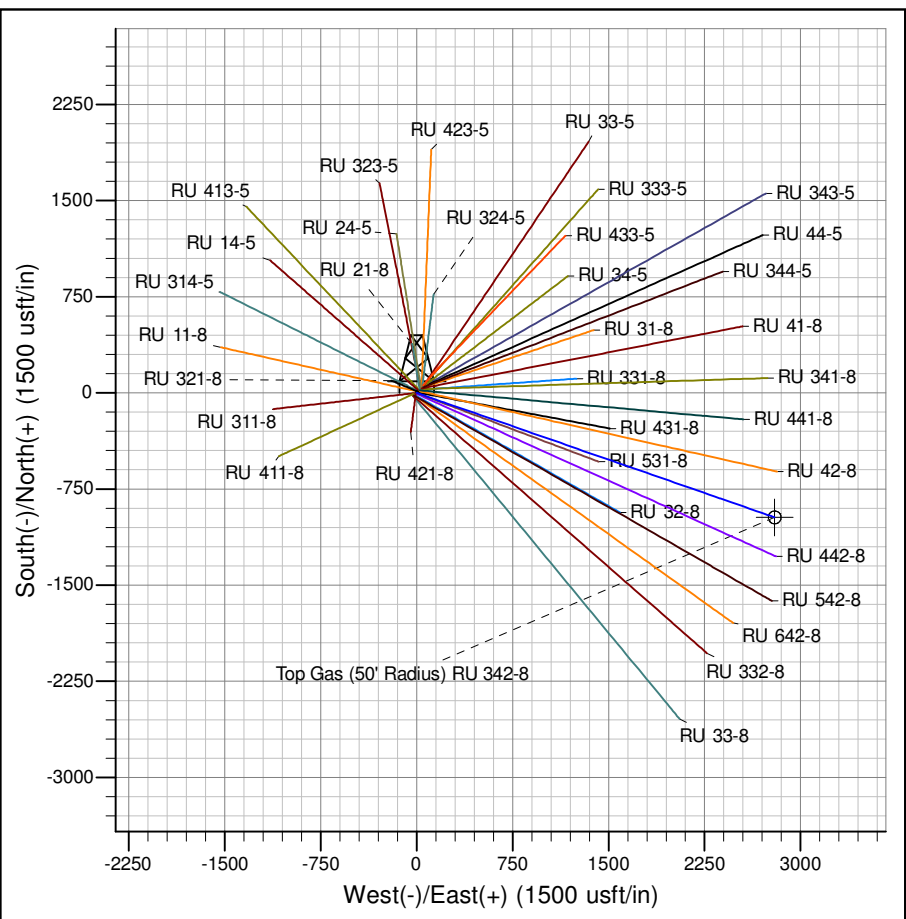




Well Name: RU 342-8
Surface Location: RU 21-8 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 7736.00
+N/-S 0.00 +E/-W 0.00 Northing 1602650.33 Easting 2350486.25 Latitude 39.46546 Longitude -107.80085 Slot A06
KELLY BUSHING @ 7762.00usft (Nabors 576 (26' 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 3.00%/100	
1021.90	1059.31	28.18	109.15	-74.25	213.85	226.37	226.37	Hold 28.18° Inc, 109.15° Az	
5282.20	5892.47	28.18	109.15	-822.87	2369.96	2508.75	2508.75	Start Drop -1.50%/100	
7086.00	7771.10	0.00	0.00	-971.37	2797.65	2961.49	2961.49	Vertical	
7186.00	7871.10	0.00	0.00	-971.37	2797.65	2961.49	2961.49	Top Gas	
9936.00	10621.10	0.00	0.00	-971.37	2797.65	2961.49	2961.49	TD at 10621.10	



Azimuths to True North
Magnetic North: 9.84°

Magnetic Field
Strength: 51918.1snT
Dip Angle: 65.66°
Date: 9/8/2014
Model: IGRF2010

Project: RU 08-07S-093W
Site: RU 21-8 Pad
Well: RU 342-8
Design #1 08Sep14 mab

PICEANCE VLY NAD 83

RU 08-07S-093W

RU 21-8 Pad

RU 342-8 - Slot A06

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 342-8 - Slot A06
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 342-8	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 342-8 - Slot A06				
Well Position	+N/-S	0.00 usft	Northing:	1,602,650.33202 usft	Latitude: 39.46547
	+E/-W	0.00 usft	Easting:	2,350,486.25365 usft	Longitude: -107.80085
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	109.15

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	
1,059.31	28.18	109.15	1,021.90	-74.25	213.85	3.00	3.00	0.00	109.15	
5,892.47	28.18	109.15	5,282.20	-822.87	2,369.96	0.00	0.00	0.00	0.00	
7,771.10	0.00	0.00	7,086.00	-971.37	2,797.65	1.50	-1.50	0.00	180.00	
7,871.10	0.00	0.00	7,186.00	-971.37	2,797.65	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
10,621.10	0.00	0.00	9,936.00	-971.37	2,797.65	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 342-8 - Slot A06
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 342-8	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	1,602,650.33202	2,350,486.25365	39.46547	-107.80085
120.00	0.00	0.00	120.00	0.00	0.00	1,602,650.33202	2,350,486.25365	39.46547	-107.80085
Start Build 3.00°/100									
200.00	2.40	109.15	199.98	-0.55	1.58	1,602,649.74263	2,350,487.82182	39.46546	-107.80085
400.00	8.40	109.15	399.00	-6.72	19.35	1,602,643.12385	2,350,505.43214	39.46545	-107.80079
600.00	14.40	109.15	594.96	-19.68	56.68	1,602,629.22231	2,350,542.41939	39.46541	-107.80065
800.00	20.40	109.15	785.72	-39.29	113.16	1,602,608.19033	2,350,598.37834	39.46536	-107.80045
1,000.00	26.40	109.15	969.19	-65.33	188.16	1,602,580.25833	2,350,672.69589	39.46529	-107.80019
1,059.31	28.18	109.15	1,021.90	-74.25	213.85	1,602,570.69115	2,350,698.15089	39.46526	-107.80010
Hold 28.18° Inc, 109.15° Az									
1,200.00	28.18	109.15	1,145.91	-96.04	276.61	1,602,547.31742	2,350,760.34041	39.46520	-107.79987
9 5/8"									
1,400.00	28.18	109.15	1,322.21	-127.02	365.83	1,602,514.08932	2,350,848.74906	39.46512	-107.79956
1,600.00	28.18	109.15	1,498.50	-158.00	455.05	1,602,480.86122	2,350,937.15772	39.46503	-107.79924
1,800.00	28.18	109.15	1,674.80	-188.98	544.27	1,602,447.63312	2,351,025.56637	39.46495	-107.79893
2,000.00	28.18	109.15	1,851.09	-219.95	633.49	1,602,414.40502	2,351,113.97502	39.46486	-107.79861
2,200.00	28.18	109.15	2,027.39	-250.93	722.72	1,602,381.17692	2,351,202.38366	39.46478	-107.79829
2,400.00	28.18	109.15	2,203.68	-281.91	811.94	1,602,347.94882	2,351,290.79231	39.46469	-107.79798
2,600.00	28.18	109.15	2,379.97	-312.89	901.16	1,602,314.72072	2,351,379.20096	39.46461	-107.79766
2,800.00	28.18	109.15	2,556.27	-343.87	990.38	1,602,281.49262	2,351,467.60962	39.46452	-107.79735
3,000.00	28.18	109.15	2,732.56	-374.85	1,079.60	1,602,248.26452	2,351,556.01826	39.46444	-107.79703
3,200.00	28.18	109.15	2,908.86	-405.83	1,168.83	1,602,215.03642	2,351,644.42691	39.46435	-107.79671
3,400.00	28.18	109.15	3,085.15	-436.80	1,258.05	1,602,181.80833	2,351,732.83556	39.46427	-107.79640
3,600.00	28.18	109.15	3,261.45	-467.78	1,347.27	1,602,148.58023	2,351,821.24421	39.46418	-107.79608
3,800.00	28.18	109.15	3,437.74	-498.76	1,436.49	1,602,115.35213	2,351,909.65286	39.46410	-107.79577
4,000.00	28.18	109.15	3,614.04	-529.74	1,525.71	1,602,082.12403	2,351,998.06151	39.46401	-107.79545
4,200.00	28.18	109.15	3,790.33	-560.72	1,614.93	1,602,048.89593	2,352,086.47016	39.46393	-107.79513
4,400.00	28.18	109.15	3,966.63	-591.70	1,704.16	1,602,015.66783	2,352,174.87881	39.46384	-107.79482
4,600.00	28.18	109.15	4,142.92	-622.68	1,793.38	1,601,982.43973	2,352,263.28746	39.46376	-107.79450
4,800.00	28.18	109.15	4,319.22	-653.65	1,882.60	1,601,949.21163	2,352,351.69610	39.46367	-107.79419
5,000.00	28.18	109.15	4,495.51	-684.63	1,971.82	1,601,915.98353	2,352,440.10475	39.46359	-107.79387
5,200.00	28.18	109.15	4,671.80	-715.61	2,061.04	1,601,882.75543	2,352,528.51341	39.46350	-107.79355
5,400.00	28.18	109.15	4,848.10	-746.59	2,150.26	1,601,849.52733	2,352,616.92206	39.46342	-107.79324
5,600.00	28.18	109.15	5,024.39	-777.57	2,239.49	1,601,816.29923	2,352,705.33071	39.46333	-107.79292
5,800.00	28.18	109.15	5,200.69	-808.55	2,328.71	1,601,783.07114	2,352,793.73935	39.46325	-107.79261
5,892.47	28.18	109.15	5,282.20	-822.87	2,369.96	1,601,767.70801	2,352,834.61540	39.46321	-107.79246
Start Drop -1.50°/100									
6,000.00	26.57	109.15	5,377.69	-839.09	2,416.66	1,601,750.31475	2,352,880.89296	39.46316	-107.79230
6,200.00	23.57	109.15	5,558.83	-866.88	2,496.70	1,601,720.50724	2,352,960.20059	39.46309	-107.79201
6,400.00	20.57	109.15	5,744.16	-891.52	2,567.67	1,601,694.07591	2,353,030.52535	39.46302	-107.79176
6,600.00	17.57	109.15	5,933.16	-912.94	2,629.38	1,601,671.09321	2,353,091.67448	39.46296	-107.79154
6,800.00	14.57	109.15	6,125.33	-931.10	2,681.67	1,601,651.62214	2,353,143.48036	39.46291	-107.79136
7,000.00	11.57	109.15	6,320.13	-945.93	2,724.38	1,601,635.71606	2,353,185.80101	39.46287	-107.79121
7,200.00	8.57	109.15	6,517.03	-957.39	2,757.40	1,601,623.41857	2,353,218.52044	39.46284	-107.79109
7,400.00	5.57	109.15	6,715.49	-965.46	2,780.64	1,601,614.76338	2,353,241.54896	39.46281	-107.79101
7,600.00	2.57	109.15	6,914.96	-970.11	2,794.03	1,601,609.77421	2,353,254.82344	39.46280	-107.79096
7,771.10	0.00	0.00	7,086.00	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
Vertical									
7,800.00	0.00	0.00	7,114.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
7,871.10	0.00	0.00	7,186.00	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
Top Gas - Approx. Top Gas									
8,000.00	0.00	0.00	7,314.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 342-8 - Slot A06
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 342-8	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	7,514.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
8,400.00	0.00	0.00	7,714.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
8,600.00	0.00	0.00	7,914.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
8,800.00	0.00	0.00	8,114.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
9,000.00	0.00	0.00	8,314.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
9,200.00	0.00	0.00	8,514.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
9,400.00	0.00	0.00	8,714.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
9,600.00	0.00	0.00	8,914.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
9,641.10	0.00	0.00	8,956.00	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
Cameo Coals									
9,800.00	0.00	0.00	9,114.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
10,000.00	0.00	0.00	9,314.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
10,200.00	0.00	0.00	9,514.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
10,331.10	0.00	0.00	9,646.00	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
Coal D									
10,400.00	0.00	0.00	9,714.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
10,471.10	0.00	0.00	9,786.00	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
Rollins SS									
10,600.00	0.00	0.00	9,914.90	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
10,621.10	0.00	0.00	9,936.00	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095
TD at 10621.10 - TD									

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	358.56	7,186.00	-971.37	2,797.65	1,601,608.42626	2,353,258.40987	39.46280	-107.79095

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,200.00	1,145.91	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
7,871.10	7,186.00	Approx. Top Gas				
9,641.10	8,956.00	Cameo Coals				
10,331.10	9,646.00	Coal D				
10,471.10	9,786.00	Rollins SS				
10,621.10	9,936.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 342-8 - Slot A06
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 342-8	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 3.00°/100
1,059.31	1,021.90	-74.25	213.85	Hold 28.18° Inc, 109.15° Az
5,892.47	5,282.20	-822.87	2,369.96	Start Drop -1.50°/100
7,771.10	7,086.00	-971.37	2,797.65	Vertical
7,871.10	7,186.00	-971.37	2,797.65	Top Gas
10,621.10	9,936.00	-971.37	2,797.65	TD at 10621.10