

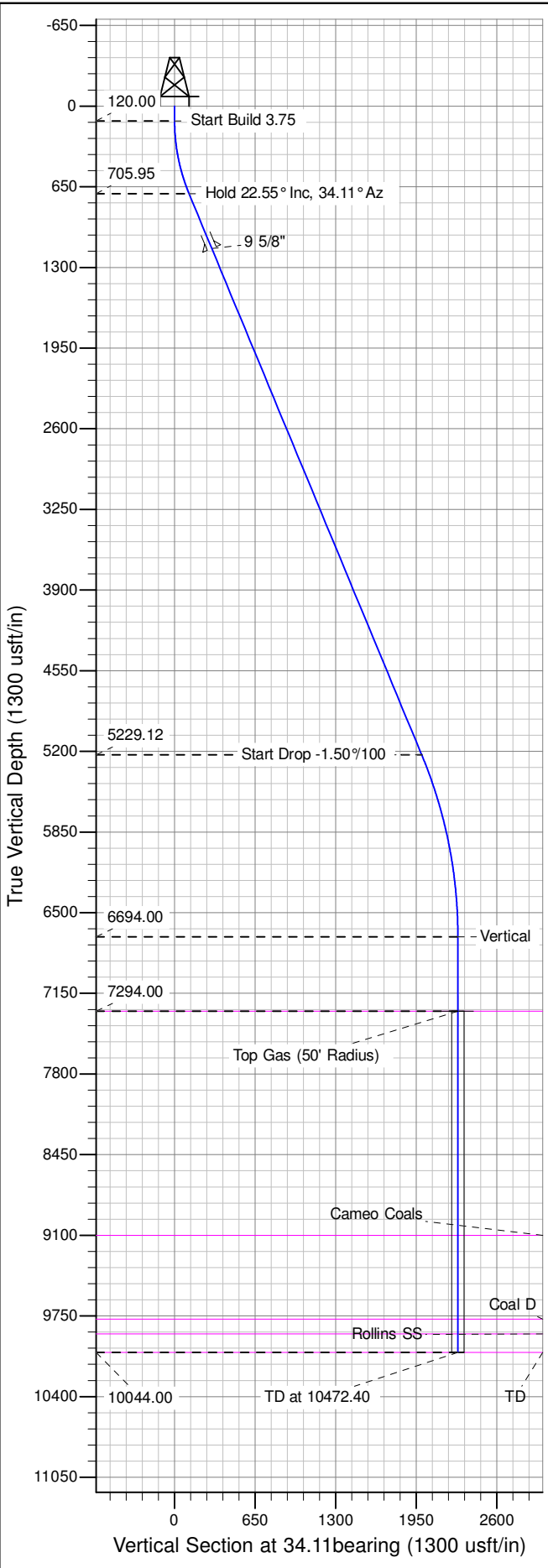


Well Name: RU 33-5
 Surface Location: RU 21-8 Pad

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

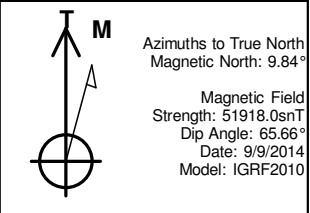
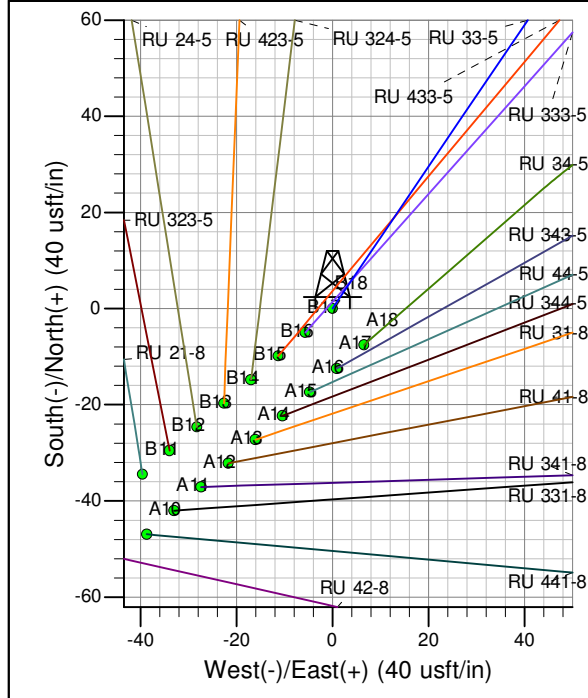
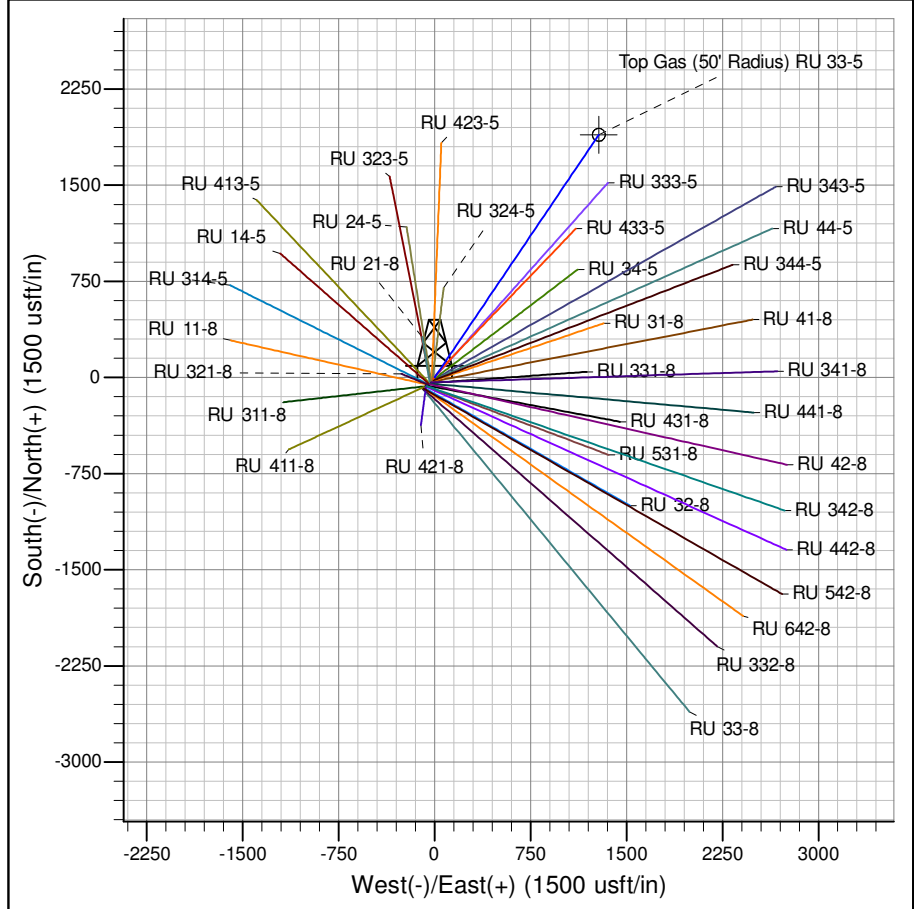
+N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.00 0.00 1602715.41 2350549.23 39.46565 -107.80063 B18

KELLY BUSHING @ 7762.00usft (Nabors 576 (26' RKB) mab)



ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	V Sect	Departure	Annotation
120.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.75
705.95	721.36	22.55	34.11	96.72	65.52	116.82	116.82	Hold 22.55° Inc, 34.11° Az
5229.12	5619.01	22.55	34.11	1651.81	1118.89	1995.09	1995.09	Start Drop -1.50%/100
6694.00	7122.40	0.00	0.00	1893.62	1282.68	2287.15	2287.15	Vertical
7294.00	7722.40	0.00	0.00	1893.62	1282.68	2287.15	2287.15	Top Gas
10044.00	10472.40	0.00	0.00	1893.62	1282.68	2287.15	2287.15	TD at 10472.40



Project: RU 08-07S-093W
 Site: RU 21-8 Pad
 Well: RU 33-5
 Design #1 09Sep14 mab

PICEANCE VLY NAD 83

RU 08-07S-093W

RU 21-8 Pad

RU 33-5 - Slot B18

Wellbore #1

Plan: Design #1 09Sep14 mab

Standard Planning Report - Geographic

04 November, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 33-5 - Slot B18
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 33-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 09Sep14 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 33-5 - Slot B18					
Well Position	+N/-S	0.00 usft	Northing:	1,602,715.40513 usft	Latitude:	39.46565
	+E/-W	0.00 usft	Easting:	2,350,549.22576 usft	Longitude:	-107.80064
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	9/9/2014	9.84	65.66	51,918

Design	Design #1 09Sep14 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	34.11

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	
721.36	22.55	34.11	705.95	96.72	65.52	3.75	3.75	0.00	34.11	
5,619.01	22.55	34.11	5,229.12	1,651.81	1,118.89	0.00	0.00	0.00	0.00	
7,122.40	0.00	0.00	6,694.00	1,893.62	1,282.68	1.50	-1.50	0.00	180.00	
7,722.40	0.00	0.00	7,294.00	1,893.62	1,282.68	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
10,472.40	0.00	0.00	10,044.00	1,893.62	1,282.68	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 33-5 - Slot B18
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 33-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 09Sep14 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	1,602,715.40513	2,350,549.22576	39.46565	-107.80064	
120.00	0.00	0.00	120.00	0.00	0.00	1,602,715.40513	2,350,549.22576	39.46565	-107.80064	
Start Build 3.75										
200.00	3.00	34.11	199.96	1.73	1.17	1,602,717.10847	2,350,550.44360	39.46565	-107.80063	
400.00	10.50	34.11	398.44	21.18	14.35	1,602,736.21745	2,350,564.10595	39.46571	-107.80059	
600.00	18.00	34.11	592.14	61.91	41.94	1,602,776.23653	2,350,592.71840	39.46582	-107.80049	
721.36	22.55	34.11	705.95	96.72	65.52	1,602,810.43766	2,350,617.17119	39.46591	-107.80041	
Hold 22.55° Inc, 34.11° Az										
800.00	22.55	34.11	778.58	121.69	82.43	1,602,834.97164	2,350,634.71225	39.46598	-107.80035	
1,000.00	22.55	34.11	963.29	185.20	125.45	1,602,897.36549	2,350,679.32199	39.46616	-107.80019	
1,200.00	22.55	34.11	1,148.00	248.70	168.46	1,602,959.75934	2,350,723.93173	39.46633	-107.80004	
9 5/8"										
1,400.00	22.55	34.11	1,332.70	312.20	211.48	1,603,022.15317	2,350,768.54146	39.46651	-107.79989	
1,600.00	22.55	34.11	1,517.41	375.71	254.49	1,603,084.54702	2,350,813.15120	39.46668	-107.79974	
1,800.00	22.55	34.11	1,702.12	439.21	297.51	1,603,146.94087	2,350,857.76095	39.46685	-107.79958	
2,000.00	22.55	34.11	1,886.83	502.71	340.52	1,603,209.33472	2,350,902.37069	39.46703	-107.79943	
2,200.00	22.55	34.11	2,071.54	566.22	383.54	1,603,271.72856	2,350,946.98043	39.46720	-107.79928	
2,400.00	22.55	34.11	2,256.24	629.72	426.56	1,603,334.12241	2,350,991.59017	39.46738	-107.79913	
2,600.00	22.55	34.11	2,440.95	693.22	469.57	1,603,396.51625	2,351,036.19991	39.46755	-107.79897	
2,800.00	22.55	34.11	2,625.66	756.73	512.59	1,603,458.91010	2,351,080.80965	39.46773	-107.79882	
3,000.00	22.55	34.11	2,810.37	820.23	555.60	1,603,521.30394	2,351,125.41939	39.46790	-107.79867	
3,200.00	22.55	34.11	2,995.07	883.73	598.62	1,603,583.69779	2,351,170.02912	39.46808	-107.79852	
3,400.00	22.55	34.11	3,179.78	947.24	641.63	1,603,646.09164	2,351,214.63886	39.46825	-107.79836	
3,600.00	22.55	34.11	3,364.49	1,010.74	684.65	1,603,708.48549	2,351,259.24860	39.46842	-107.79821	
3,800.00	22.55	34.11	3,549.20	1,074.24	727.66	1,603,770.87933	2,351,303.85834	39.46860	-107.79806	
4,000.00	22.55	34.11	3,733.91	1,137.75	770.68	1,603,833.27317	2,351,348.46808	39.46877	-107.79791	
4,200.00	22.55	34.11	3,918.61	1,201.25	813.70	1,603,895.66702	2,351,393.07783	39.46895	-107.79776	
4,400.00	22.55	34.11	4,103.32	1,264.75	856.71	1,603,958.06087	2,351,437.68757	39.46912	-107.79760	
4,600.00	22.55	34.11	4,288.03	1,328.26	899.73	1,604,020.45471	2,351,482.29731	39.46930	-107.79745	
4,800.00	22.55	34.11	4,472.74	1,391.76	942.74	1,604,082.84856	2,351,526.90705	39.46947	-107.79730	
5,000.00	22.55	34.11	4,657.44	1,455.27	985.76	1,604,145.24241	2,351,571.51678	39.46964	-107.79715	
5,200.00	22.55	34.11	4,842.15	1,518.77	1,028.77	1,604,207.63625	2,351,616.12652	39.46982	-107.79699	
5,400.00	22.55	34.11	5,026.86	1,582.27	1,071.79	1,604,270.03009	2,351,660.73626	39.46999	-107.79684	
5,600.00	22.55	34.11	5,211.57	1,645.78	1,114.80	1,604,332.42394	2,351,705.34600	39.47017	-107.79669	
5,619.01	22.55	34.11	5,229.12	1,651.81	1,118.89	1,604,338.35342	2,351,709.58540	39.47018	-107.79667	
Start Drop -1.50°/100										
5,800.00	19.84	34.11	5,397.86	1,705.98	1,155.58	1,604,391.57574	2,351,747.63778	39.47033	-107.79654	
6,000.00	16.84	34.11	5,587.68	1,758.07	1,190.87	1,604,442.75167	2,351,784.22704	39.47048	-107.79642	
6,200.00	13.84	34.11	5,780.54	1,801.85	1,220.53	1,604,485.77595	2,351,814.98812	39.47060	-107.79631	
6,400.00	10.84	34.11	5,975.90	1,837.23	1,244.49	1,604,520.53066	2,351,839.83669	39.47069	-107.79623	
6,600.00	7.84	34.11	6,173.23	1,864.09	1,262.68	1,604,546.92053	2,351,858.70467	39.47077	-107.79616	
6,800.00	4.84	34.11	6,371.98	1,882.36	1,275.06	1,604,564.87323	2,351,871.54032	39.47082	-107.79612	
7,000.00	1.84	34.11	6,571.62	1,891.99	1,281.59	1,604,574.33957	2,351,878.30846	39.47084	-107.79610	
7,122.40	0.00	0.00	6,694.00	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
Vertical										
7,200.00	0.00	0.00	6,771.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
7,400.00	0.00	0.00	6,971.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
7,600.00	0.00	0.00	7,171.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
7,722.40	0.00	0.00	7,294.00	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
Top Gas - Approx. Top Gas										
7,800.00	0.00	0.00	7,371.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
8,000.00	0.00	0.00	7,571.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 33-5 - Slot B18
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 33-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 09Sep14 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	7,771.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
8,400.00	0.00	0.00	7,971.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
8,600.00	0.00	0.00	8,171.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
8,800.00	0.00	0.00	8,371.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
9,000.00	0.00	0.00	8,571.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
9,200.00	0.00	0.00	8,771.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
9,400.00	0.00	0.00	8,971.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
9,529.40	0.00	0.00	9,101.00	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
Cameo Coals										
9,600.00	0.00	0.00	9,171.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
9,800.00	0.00	0.00	9,371.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
10,000.00	0.00	0.00	9,571.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
10,200.00	0.00	0.00	9,771.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
10,203.40	0.00	0.00	9,775.00	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
Coal D										
10,322.40	0.00	0.00	9,894.00	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
Rollins SS										
10,400.00	0.00	0.00	9,971.60	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
10,472.40	0.00	0.00	10,044.00	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	
TD at 10472.40 - 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	358.55	7,294.00	1,893.62	1,282.68	1,604,575.93475	2,351,879.44897	39.47085	-107.79609	

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)		
1,200.00	1,148.00	9 5/8"	9.625	13.500		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
7,722.40	7,294.00	Approx. Top Gas				
9,529.40	9,101.00	Cameo Coals				
10,203.40	9,775.00	Coal D				
10,322.40	9,894.00	Rollins SS				
10,472.40	10,044.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 33-5 - Slot B18
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 33-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 09Sep14 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 3.75
721.36	705.95	96.72	65.52	Hold 22.55° Inc, 34.11° Az
5,619.01	5,229.12	1,651.81	1,118.89	Start Drop -1.50°/100
7,122.40	6,694.00	1,893.62	1,282.68	Vertical
7,722.40	7,294.00	1,893.62	1,282.68	Top Gas
10,472.40	10,044.00	1,893.62	1,282.68	TD at 10472.40