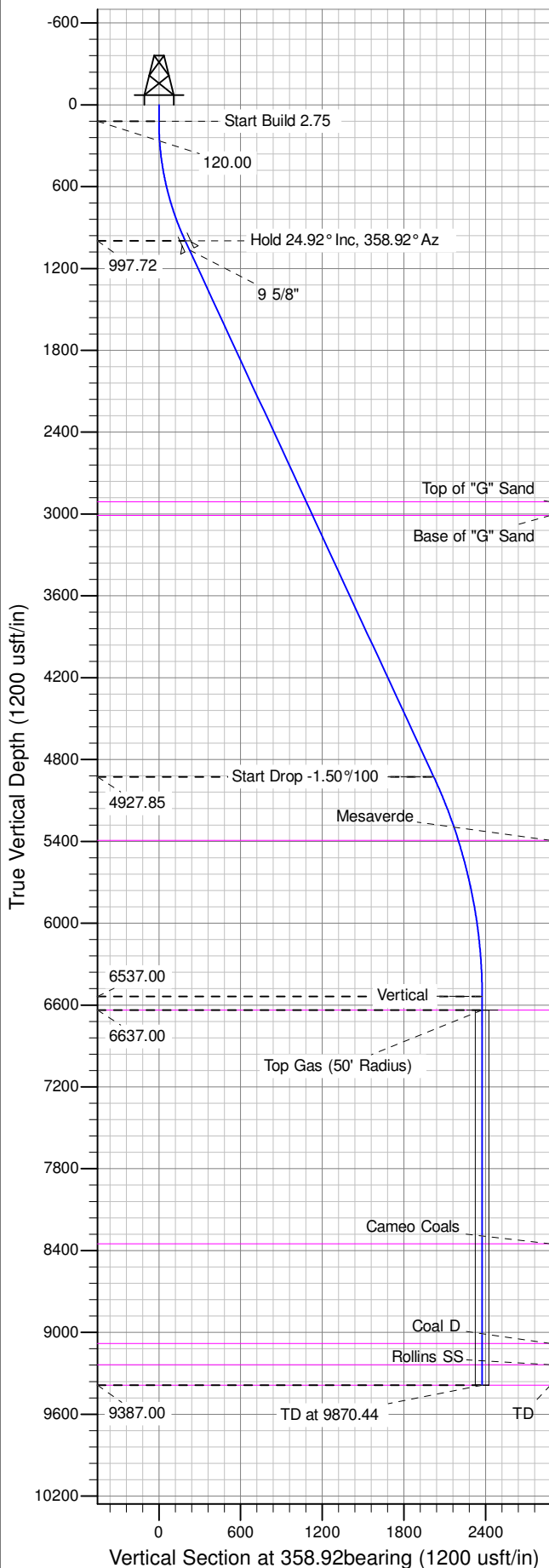




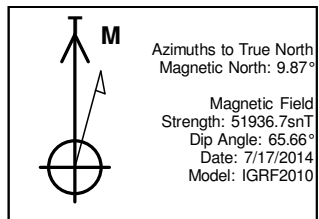
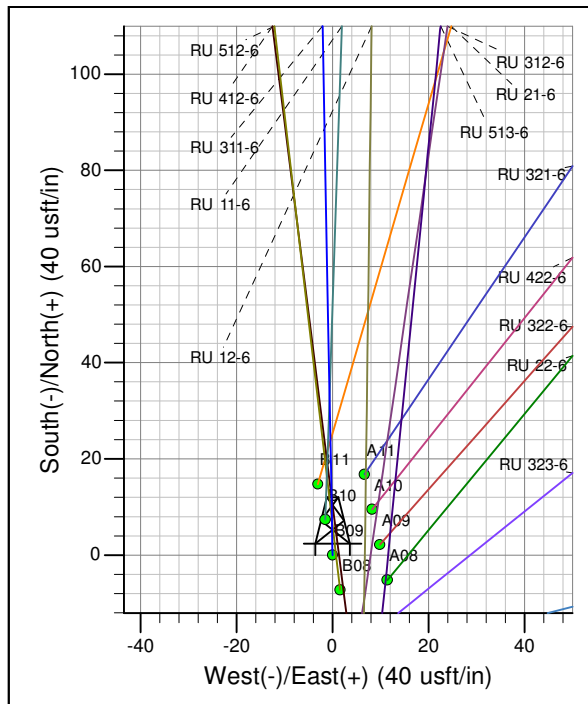
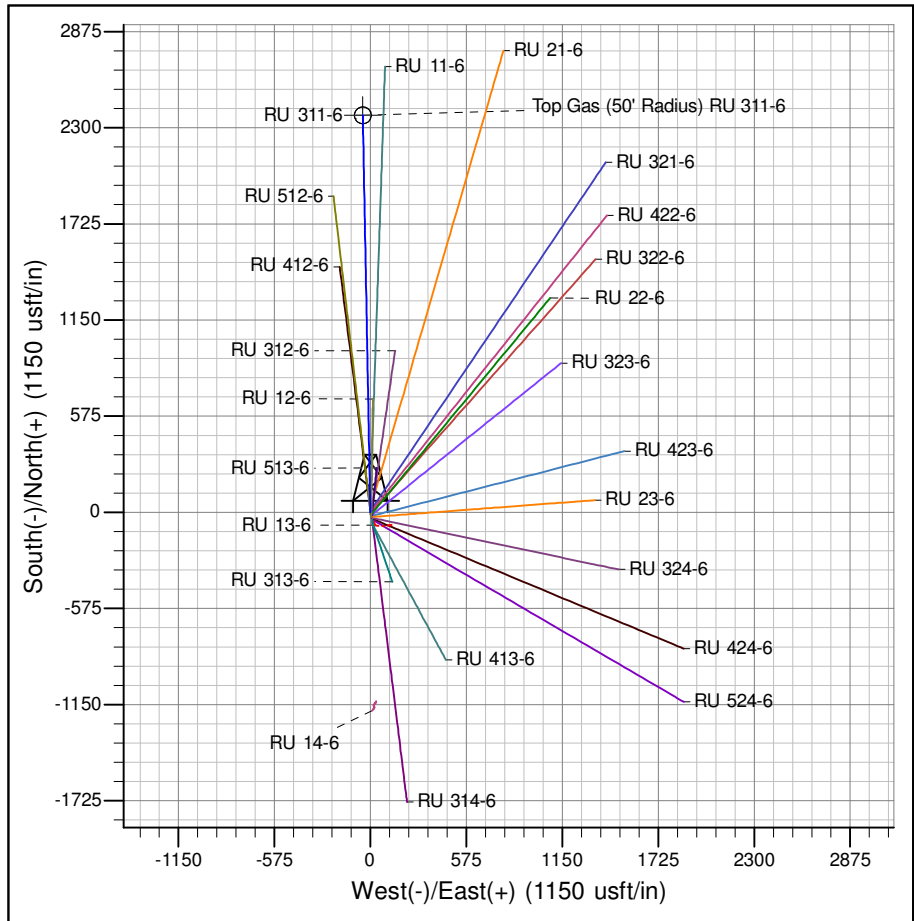
Well Name: RU 311-6
Surface Location: RU 13-6 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6985.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1603462.50000	2343740.30000	39.467223	-107.824812	B09

KELLY BUSHING @ 7011.00usft (Nabors 574 (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 2.75	
997.72	1026.00	24.92	358.92	193.87	-3.66	193.90	193.90	Hold 24.92° Inc, 358.92° Az	
4927.85	5359.43	24.92	358.92	2019.11	-38.16	2019.47	2019.47	Start Drop -1.50°/100	
6537.00	7020.44	0.00	0.00	2374.53	-44.87	2374.96	2374.96	Vertical	
6637.00	7120.44	0.00	0.00	2374.53	-44.87	2374.96	2374.96	Top Gas	
9387.00	9870.44	0.00	0.00	2374.53	-44.87	2374.96	2374.96	TD at 9870.44	



Azimuths to True North
Magnetic North: 9.87°

Magnetic Field
Strength: 51936.7snT
Dip Angle: 65.66°
Date: 7/17/2014
Model: IGRF2010

Project: RU 06-07S-093W
Site: RU 13-6 Pad
Well: RU 311-6
Design #1 17Jul14 mab

PICEANCE VLY NAD 83

RU 06-07S-093W

RU 13-6 Pad

RU 311-6 - Slot B09

Wellbore #1

Plan: Design #1 17Jul14 mab

Standard Planning Report - Geographic

16 September, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 311-6 - Slot B09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 311-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 mab		

Project	RU 06-07S-093W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site	RU 13-6 Pad		
Site Position:		Northing:	1,603,405.40000 usft
From:	Map	Easting:	2,343,761.30000 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	39.467067
		Longitude:	-107.824733
		Grid Convergence:	-1.47 °

Well	RU 311-6 - Slot B09		
Well Position	+N/-S	0.00 usft	Northing: 1,603,462.50000 usft
	+E/-W	0.00 usft	Easting: 2,343,740.30000 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	39.467223
		Longitude:	-107.824812
		Ground Level:	6,985.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/17/2014	9.87	65.66	51,937

Design	Design #1 17Jul14 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	358.92	

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	
1,026.00	24.92	358.92	997.72	193.87	-3.66	2.75	2.75	0.00	358.92	
5,359.43	24.92	358.92	4,927.85	2,019.11	-38.16	0.00	0.00	0.00	0.00	
7,020.44	0.00	0.00	6,537.00	2,374.53	-44.87	1.50	-1.50	0.00	180.00	
7,120.44	0.00	0.00	6,637.00	2,374.53	-44.87	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
9,870.44	0.00	0.00	9,387.00	2,374.53	-44.87	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 311-6 - Slot B09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 311-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 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	1,603,462.50000	2,343,740.30000	39.467223	-107.824812	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,462.50000	2,343,740.30000	39.467223	-107.824812	
Start Build 2.75										
200.00	2.20	358.92	199.98	1.54	-0.03	1,603,464.03560	2,343,740.31028	39.467227	-107.824813	
400.00	7.70	358.92	399.16	18.78	-0.35	1,603,481.28510	2,343,740.42577	39.467274	-107.824814	
600.00	13.20	358.92	595.77	55.04	-1.04	1,603,517.54426	2,343,740.66854	39.467374	-107.824816	
800.00	18.70	358.92	787.99	109.97	-2.08	1,603,572.47921	2,343,741.03634	39.467525	-107.824820	
1,000.00	24.20	358.92	974.07	183.06	-3.46	1,603,645.58413	2,343,741.52580	39.467725	-107.824825	
1,026.00	24.92	358.92	997.72	193.87	-3.66	1,603,656.39052	2,343,741.59815	39.467755	-107.824825	
Hold 24.92° Inc, 358.92° Az										
1,100.00	24.92	358.92	1,064.83	225.04	-4.25	1,603,687.56138	2,343,741.80685	39.467840	-107.824828	
9 5/8"										
1,200.00	24.92	358.92	1,155.52	267.16	-5.05	1,603,729.68606	2,343,742.08889	39.467956	-107.824830	
1,400.00	24.92	358.92	1,336.91	351.40	-6.64	1,603,813.93543	2,343,742.65296	39.468187	-107.824836	
1,600.00	24.92	358.92	1,518.30	435.64	-8.23	1,603,898.18480	2,343,743.21704	39.468419	-107.824842	
1,800.00	24.92	358.92	1,699.68	519.88	-9.82	1,603,982.43418	2,343,743.78111	39.468650	-107.824847	
2,000.00	24.92	358.92	1,881.07	604.12	-11.42	1,604,066.68355	2,343,744.34519	39.468881	-107.824853	
2,200.00	24.92	358.92	2,062.46	688.36	-13.01	1,604,150.93293	2,343,744.90926	39.469112	-107.824859	
2,400.00	24.92	358.92	2,243.84	772.60	-14.60	1,604,235.18230	2,343,745.47334	39.469344	-107.824864	
2,600.00	24.92	358.92	2,425.23	856.84	-16.19	1,604,319.43167	2,343,746.03741	39.469575	-107.824870	
2,800.00	24.92	358.92	2,606.61	941.08	-17.78	1,604,403.68105	2,343,746.60149	39.469806	-107.824875	
3,000.00	24.92	358.92	2,788.00	1,025.32	-19.38	1,604,487.93042	2,343,747.16556	39.470037	-107.824881	
3,135.62	24.92	358.92	2,911.00	1,082.44	-20.46	1,604,545.06002	2,343,747.54806	39.470194	-107.824885	
Top of "G" Sand										
3,200.00	24.92	358.92	2,969.39	1,109.56	-20.97	1,604,572.17980	2,343,747.72964	39.470269	-107.824887	
3,245.88	24.92	358.92	3,011.00	1,128.88	-21.33	1,604,591.50741	2,343,747.85904	39.470322	-107.824888	
Base of "G" Sand										
3,400.00	24.92	358.92	3,150.77	1,193.79	-22.56	1,604,656.42916	2,343,748.29371	39.470500	-107.824892	
3,600.00	24.92	358.92	3,332.16	1,278.03	-24.15	1,604,740.67854	2,343,748.85779	39.470731	-107.824898	
3,800.00	24.92	358.92	3,513.55	1,362.27	-25.74	1,604,824.92791	2,343,749.42186	39.470963	-107.824904	
4,000.00	24.92	358.92	3,694.93	1,446.51	-27.34	1,604,909.17729	2,343,749.98594	39.471194	-107.824909	
4,200.00	24.92	358.92	3,876.32	1,530.75	-28.93	1,604,993.42665	2,343,750.55001	39.471425	-107.824915	
4,400.00	24.92	358.92	4,057.71	1,614.99	-30.52	1,605,077.67603	2,343,751.11409	39.471656	-107.824921	
4,600.00	24.92	358.92	4,239.09	1,699.23	-32.11	1,605,161.92540	2,343,751.67816	39.471888	-107.824926	
4,800.00	24.92	358.92	4,420.48	1,783.47	-33.70	1,605,246.17478	2,343,752.24224	39.472119	-107.824932	
5,000.00	24.92	358.92	4,601.87	1,867.71	-35.30	1,605,330.42415	2,343,752.80631	39.472350	-107.824937	
5,200.00	24.92	358.92	4,783.25	1,951.95	-36.89	1,605,414.67352	2,343,753.37039	39.472581	-107.824943	
5,359.43	24.92	358.92	4,927.85	2,019.11	-38.16	1,605,481.83406	2,343,753.82005	39.472766	-107.824948	
Start Drop -1.50°/100										
5,400.00	24.31	358.92	4,964.73	2,036.00	-38.48	1,605,498.72721	2,343,753.93315	39.472812	-107.824949	
5,600.00	21.31	358.92	5,149.07	2,113.50	-39.94	1,605,576.23753	2,343,754.45211	39.473025	-107.824954	
5,800.00	18.31	358.92	5,337.22	2,181.25	-41.22	1,605,643.99452	2,343,754.90576	39.473211	-107.824958	
5,858.61	17.43	358.92	5,393.00	2,199.23	-41.56	1,605,661.97418	2,343,755.02614	39.473260	-107.824960	
Mesaverde										
6,000.00	15.31	358.92	5,528.66	2,239.06	-42.31	1,605,701.81245	2,343,755.29287	39.473370	-107.824962	
6,200.00	12.31	358.92	5,722.86	2,286.78	-43.21	1,605,749.53285	2,343,755.61237	39.473501	-107.824966	
6,400.00	9.31	358.92	5,919.29	2,324.26	-43.92	1,605,787.02491	2,343,755.86339	39.473604	-107.824968	
6,600.00	6.31	358.92	6,117.41	2,351.42	-44.44	1,605,814.18589	2,343,756.04524	39.473678	-107.824970	
6,800.00	3.31	358.92	6,316.68	2,368.18	-44.75	1,605,830.94134	2,343,756.15743	39.473724	-107.824971	
7,000.00	0.31	358.92	6,516.56	2,374.48	-44.87	1,605,837.24532	2,343,756.19963	39.473741	-107.824971	
7,020.44	0.00	0.00	6,537.00	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971	
Vertical										

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 311-6 - Slot B09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 311-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 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
7,120.44	0.00	0.00	6,637.00	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
Top Gas - Approx. Top Gas									
7,200.00	0.00	0.00	6,716.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
7,400.00	0.00	0.00	6,916.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
7,600.00	0.00	0.00	7,116.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
7,800.00	0.00	0.00	7,316.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
8,000.00	0.00	0.00	7,516.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
8,200.00	0.00	0.00	7,716.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
8,400.00	0.00	0.00	7,916.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
8,600.00	0.00	0.00	8,116.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
8,800.00	0.00	0.00	8,316.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
8,834.44	0.00	0.00	8,351.00	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
Cameo Coals									
9,000.00	0.00	0.00	8,516.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
9,200.00	0.00	0.00	8,716.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
9,400.00	0.00	0.00	8,916.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
9,565.44	0.00	0.00	9,082.00	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
Coal D									
9,600.00	0.00	0.00	9,116.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
9,720.44	0.00	0.00	9,237.00	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
Rollins SS									
9,800.00	0.00	0.00	9,316.56	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
9,870.44	0.00	0.00	9,387.00	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971
TD at 9870.44 - 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	0.00	6,637.00	2,374.53	-44.87	1,605,837.30000	2,343,756.20000	39.473742	-107.824971

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,064.83	9 5/8"	9.625	13.500	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 311-6 - Slot B09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 311-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 mab		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
3,135.62	2,911.00	Top of "G" Sand				
3,245.88	3,011.00	Base of "G" Sand				
5,858.61	5,393.00	Mesaverde				
7,120.44	6,637.00	Approx. Top Gas				
8,834.44	8,351.00	Cameo Coals				
9,565.44	9,082.00	Coal D				
9,720.44	9,237.00	Rollins SS				
9,870.44	9,387.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
120.00	120.00	0.00	0.00	Start Build 2.75	
1,026.00	997.72	193.87	-3.66	Hold 24.92° Inc, 358.92° Az	
5,359.43	4,927.85	2,019.11	-38.16	Start Drop -1.50°/100	
7,020.44	6,537.00	2,374.53	-44.87	Vertical	
7,120.44	6,637.00	2,374.53	-44.87	Top Gas	
9,870.44	9,387.00	2,374.53	-44.87	TD at 9870.44	