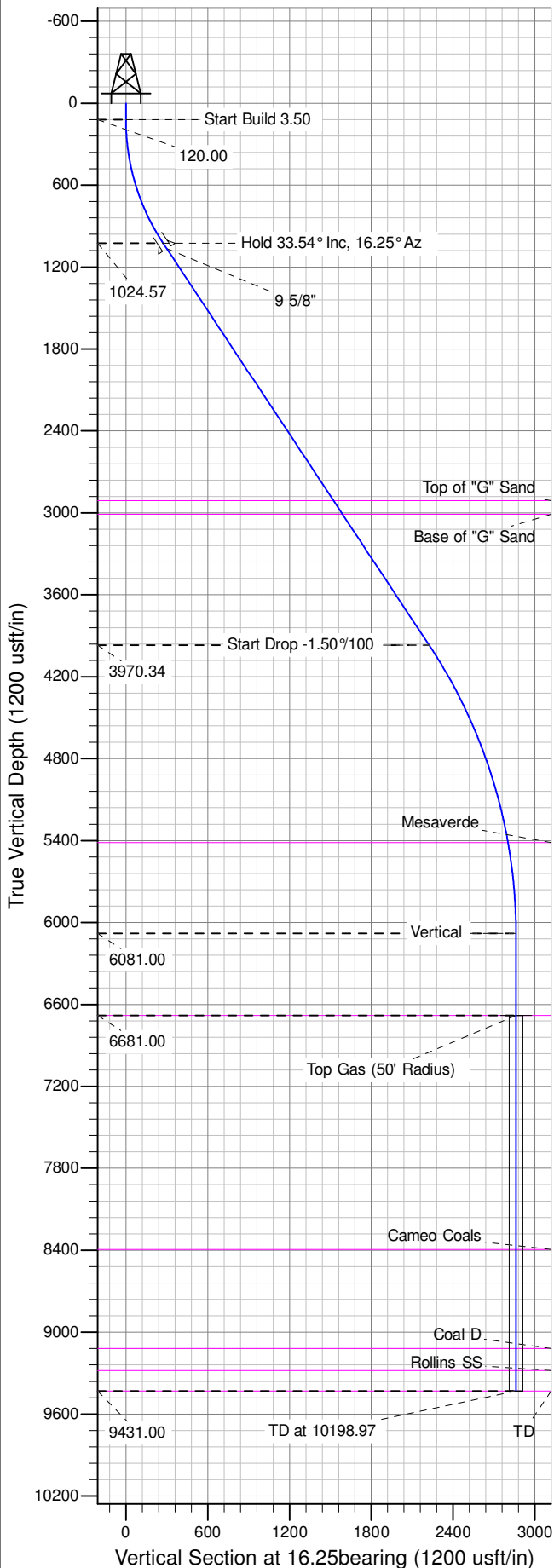
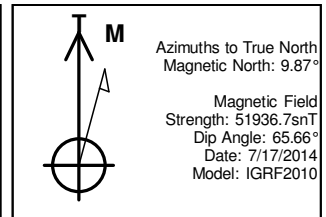
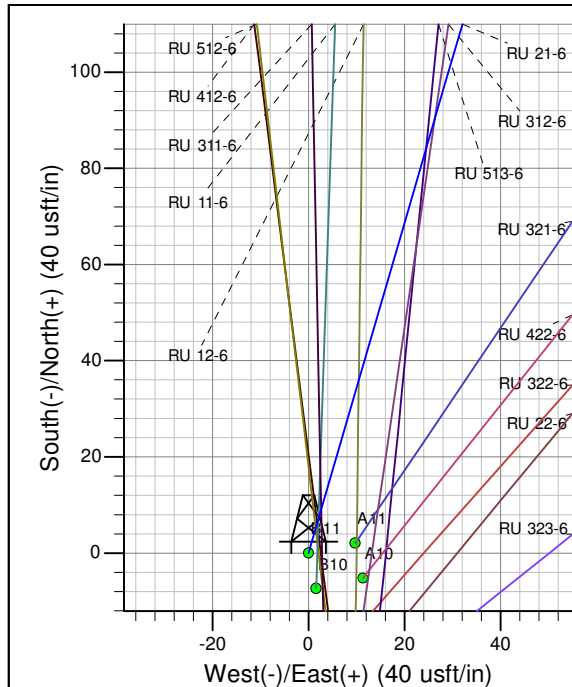
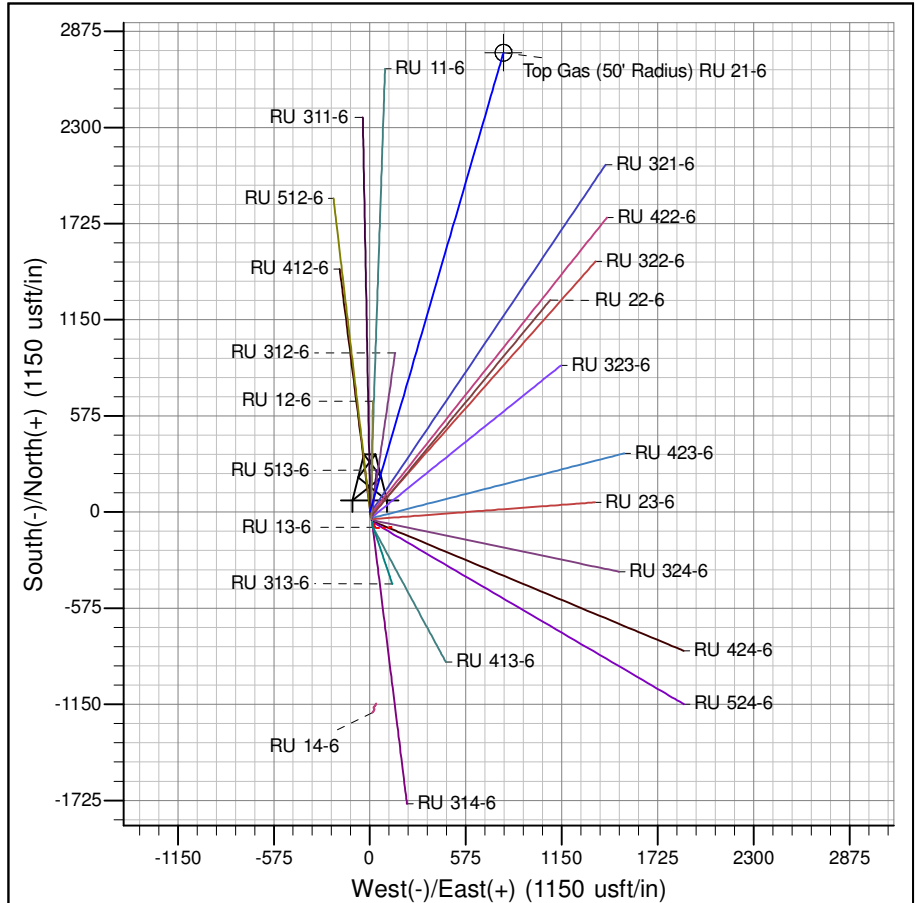




Well Name: RU 21-6
Surface Location: RU 13-6 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6985.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1603477.30000 2343737.60000 39.467263 -107.824823 B11
KELLY BUSHING @ 7011.00usft (Nabors 574 (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 3.50	
1024.57	1078.38	33.54	16.25	261.72	76.31	272.62	272.62	Hold 33.54° Inc, 16.25° Az	
3970.34	4612.75	33.54	16.25	2136.63	622.95	2225.60	2225.60	Start Drop -1.50%/100	
6081.00	6848.97	0.00	0.00	2747.31	801.00	2861.70	2861.70	Vertical	
6681.00	7448.97	0.00	0.00	2747.31	801.00	2861.70	2861.70	Top Gas	
9431.00	10198.97	0.00	0.00	2747.31	801.00	2861.70	2861.70	TD at 10198.97	



Project: RU 06-07S-093W
Site: RU 13-6 Pad
Well: RU 21-6
Design #1 17Jul14 mab

PICEANCE VLY NAD 83

RU 06-07S-093W

RU 13-6 Pad

RU 21-6 - Slot B11

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 21-6 - Slot B11
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 21-6	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 21-6 - Slot B11		
Well Position	+N/-S	0.00 usft	Northing: 1,603,477.30000 usft
	+E/-W	0.00 usft	Easting: 2,343,737.60000 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	39.467263
		Longitude:	-107.824823
		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	16.25	

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	
1,078.38	33.54	16.25	1,024.57	261.72	76.31	3.50	3.50	0.00	16.25	
4,612.75	33.54	16.25	3,970.34	2,136.63	622.95	0.00	0.00	0.00	0.00	
6,848.97	0.00	0.00	6,081.00	2,747.31	801.00	1.50	-1.50	0.00	180.00	
7,448.97	0.00	0.00	6,681.00	2,747.31	801.00	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
10,198.97	0.00	0.00	9,431.00	2,747.31	801.00	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 21-6 - Slot B11
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 21-6	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	1,603,477.30000	2,343,737.60000	39.467263	-107.824823	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,477.30000	2,343,737.60000	39.467263	-107.824823	
Start Build 3.50										
200.00	2.80	16.25	199.97	1.88	0.55	1,603,479.16156	2,343,738.19484	39.467268	-107.824821	
400.00	9.80	16.25	398.64	22.93	6.69	1,603,500.05317	2,343,744.87053	39.467326	-107.824800	
600.00	16.80	16.25	593.15	67.08	19.56	1,603,543.85085	2,343,758.86560	39.467447	-107.824754	
800.00	23.80	16.25	780.61	133.65	38.97	1,603,609.90168	2,343,779.97143	39.467630	-107.824685	
1,000.00	30.80	16.25	958.23	221.66	64.63	1,603,697.22099	2,343,807.87338	39.467872	-107.824594	
1,078.38	33.54	16.25	1,024.57	261.72	76.31	1,603,736.97081	2,343,820.57501	39.467982	-107.824553	
Hold 33.54° Inc, 16.25° Az										
1,128.38	33.54	16.25	1,066.24	288.24	84.04	1,603,763.28561	2,343,828.98362	39.468054	-107.824526	
9 5/8"										
1,200.00	33.54	16.25	1,125.93	326.24	95.12	1,603,800.98114	2,343,841.02882	39.468159	-107.824486	
1,400.00	33.54	16.25	1,292.62	432.33	126.05	1,603,906.24653	2,343,874.66524	39.468450	-107.824377	
1,600.00	33.54	16.25	1,459.32	538.43	156.98	1,604,011.51193	2,343,908.30166	39.468741	-107.824267	
1,800.00	33.54	16.25	1,626.01	644.52	187.92	1,604,116.77732	2,343,941.93809	39.469033	-107.824158	
2,000.00	33.54	16.25	1,792.70	750.62	218.85	1,604,222.04271	2,343,975.57451	39.469324	-107.824048	
2,200.00	33.54	16.25	1,959.40	856.72	249.78	1,604,327.30810	2,344,009.21093	39.469615	-107.823939	
2,400.00	33.54	16.25	2,126.09	962.81	280.72	1,604,432.57349	2,344,042.84734	39.469906	-107.823829	
2,600.00	33.54	16.25	2,292.79	1,068.91	311.65	1,604,537.83889	2,344,076.48376	39.470198	-107.823719	
2,800.00	33.54	16.25	2,459.48	1,175.01	342.58	1,604,643.10427	2,344,110.12018	39.470489	-107.823610	
3,000.00	33.54	16.25	2,626.17	1,281.10	373.52	1,604,748.36967	2,344,143.75661	39.470780	-107.823500	
3,200.00	33.54	16.25	2,792.87	1,387.20	404.45	1,604,853.63506	2,344,177.39303	39.471071	-107.823391	
3,341.74	33.54	16.25	2,911.00	1,462.39	426.37	1,604,928.23573	2,344,201.23087	39.471278	-107.823313	
Top of "G" Sand										
3,400.00	33.54	16.25	2,959.56	1,493.29	435.38	1,604,958.90045	2,344,211.02945	39.471363	-107.823281	
3,461.72	33.54	16.25	3,011.00	1,526.04	444.93	1,604,991.38479	2,344,221.40947	39.471453	-107.823247	
Base of "G" Sand										
3,600.00	33.54	16.25	3,126.25	1,599.39	466.32	1,605,064.16584	2,344,244.66587	39.471654	-107.823172	
3,800.00	33.54	16.25	3,292.95	1,705.49	497.25	1,605,169.43123	2,344,278.30229	39.471945	-107.823062	
4,000.00	33.54	16.25	3,459.64	1,811.58	528.18	1,605,274.69663	2,344,311.93871	39.472236	-107.822952	
4,200.00	33.54	16.25	3,626.33	1,917.68	559.12	1,605,379.96201	2,344,345.57514	39.472528	-107.822843	
4,400.00	33.54	16.25	3,793.03	2,023.78	590.05	1,605,485.22741	2,344,379.21156	39.472819	-107.822733	
4,600.00	33.54	16.25	3,959.72	2,129.87	620.98	1,605,590.49280	2,344,412.84798	39.473110	-107.822624	
4,612.75	33.54	16.25	3,970.34	2,136.63	622.95	1,605,597.20145	2,344,414.99165	39.473129	-107.822617	
Start Drop -1.50°/100										
4,800.00	30.73	16.25	4,128.89	2,232.26	650.83	1,605,692.07562	2,344,445.30766	39.473391	-107.822518	
5,000.00	27.73	16.25	4,303.39	2,326.02	678.17	1,605,785.10360	2,344,475.03376	39.473649	-107.822421	
5,200.00	24.73	16.25	4,482.77	2,410.89	702.91	1,605,869.30491	2,344,501.93938	39.473882	-107.822333	
5,400.00	21.73	16.25	4,666.53	2,486.62	725.00	1,605,944.44875	2,344,525.95078	39.474090	-107.822255	
5,600.00	18.73	16.25	4,854.16	2,553.02	744.35	1,606,010.32915	2,344,547.00215	39.474272	-107.822187	
5,800.00	15.73	16.25	5,045.16	2,609.90	760.94	1,606,066.76555	2,344,565.03579	39.474428	-107.822128	
6,000.00	12.73	16.25	5,239.00	2,657.11	774.70	1,606,113.60324	2,344,580.00227	39.474558	-107.822079	
6,179.55	10.04	16.25	5,415.00	2,691.14	784.63	1,606,147.36917	2,344,590.79181	39.474651	-107.822044	
Mesaverde										
6,200.00	9.73	16.25	5,435.14	2,694.52	785.61	1,606,150.71386	2,344,591.86057	39.474660	-107.822040	
6,400.00	6.73	16.25	5,633.06	2,722.01	793.63	1,606,177.99567	2,344,600.57818	39.474736	-107.822012	
6,600.00	3.73	16.25	5,832.20	2,739.53	798.73	1,606,195.37392	2,344,606.13122	39.474784	-107.821994	
6,800.00	0.73	16.25	6,032.03	2,747.01	800.91	1,606,202.80096	2,344,608.50445	39.474805	-107.821986	
6,848.97	0.00	0.00	6,081.00	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986	
Vertical										
7,000.00	0.00	0.00	6,232.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 21-6 - Slot B11
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 21-6	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
7,200.00	0.00	0.00	6,432.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
7,400.00	0.00	0.00	6,632.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
7,448.97	0.00	0.00	6,681.00	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
Top Gas - Approx. Top Gas									
7,600.00	0.00	0.00	6,832.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
7,800.00	0.00	0.00	7,032.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
8,000.00	0.00	0.00	7,232.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
8,200.00	0.00	0.00	7,432.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
8,400.00	0.00	0.00	7,632.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
8,600.00	0.00	0.00	7,832.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
8,800.00	0.00	0.00	8,032.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
9,000.00	0.00	0.00	8,232.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
9,162.97	0.00	0.00	8,395.00	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
Cameo Coals									
9,200.00	0.00	0.00	8,432.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
9,400.00	0.00	0.00	8,632.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
9,600.00	0.00	0.00	8,832.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
9,800.00	0.00	0.00	9,032.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
9,886.97	0.00	0.00	9,119.00	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
Coal D									
10,000.00	0.00	0.00	9,232.03	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
10,048.97	0.00	0.00	9,281.00	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
Rollins SS									
10,198.97	0.00	0.00	9,431.00	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
TD at 10198.97 - 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	0.00	6,681.00	2,747.31	801.00	1,606,203.10000	2,344,608.60000	39.474805	-107.821986
- plan hits target center									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (in)	Hole Diameter (in)
1,128.38	1,066.24	9 5/8"		9.625	13.500

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 21-6 - Slot B11
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 21-6	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)
	3,341.74	2,911.00	Top of "G" Sand			
	3,461.72	3,011.00	Base of "G" Sand			
	6,179.55	5,415.00	Mesaverde			
	7,448.97	6,681.00	Approx. Top Gas			
	9,162.97	8,395.00	Cameo Coals			
	9,886.97	9,119.00	Coal D			
	10,048.97	9,281.00	Rollins SS			
	10,198.97	9,431.00	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 3.50
	1,078.38	1,024.57	261.72	76.31	Hold 33.54° Inc, 16.25° Az
	4,612.75	3,970.34	2,136.63	622.95	Start Drop -1.50°/100
	6,848.97	6,081.00	2,747.31	801.00	Vertical
	7,448.97	6,681.00	2,747.31	801.00	Top Gas
	10,198.97	9,431.00	2,747.31	801.00	TD at 10198.97