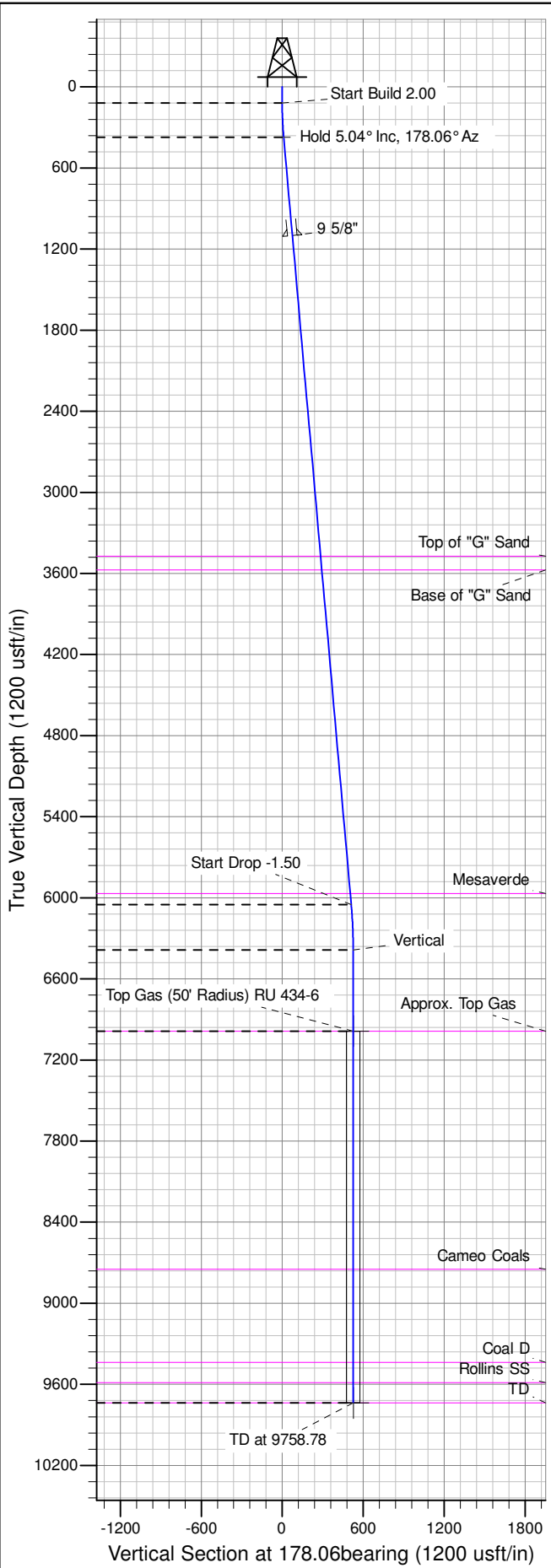
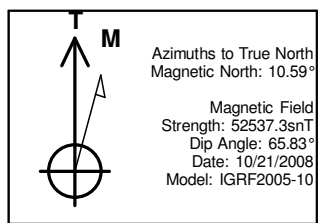
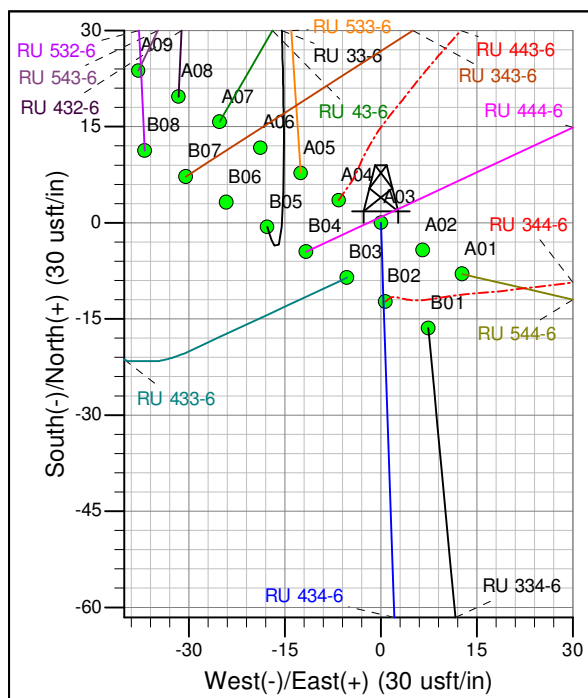
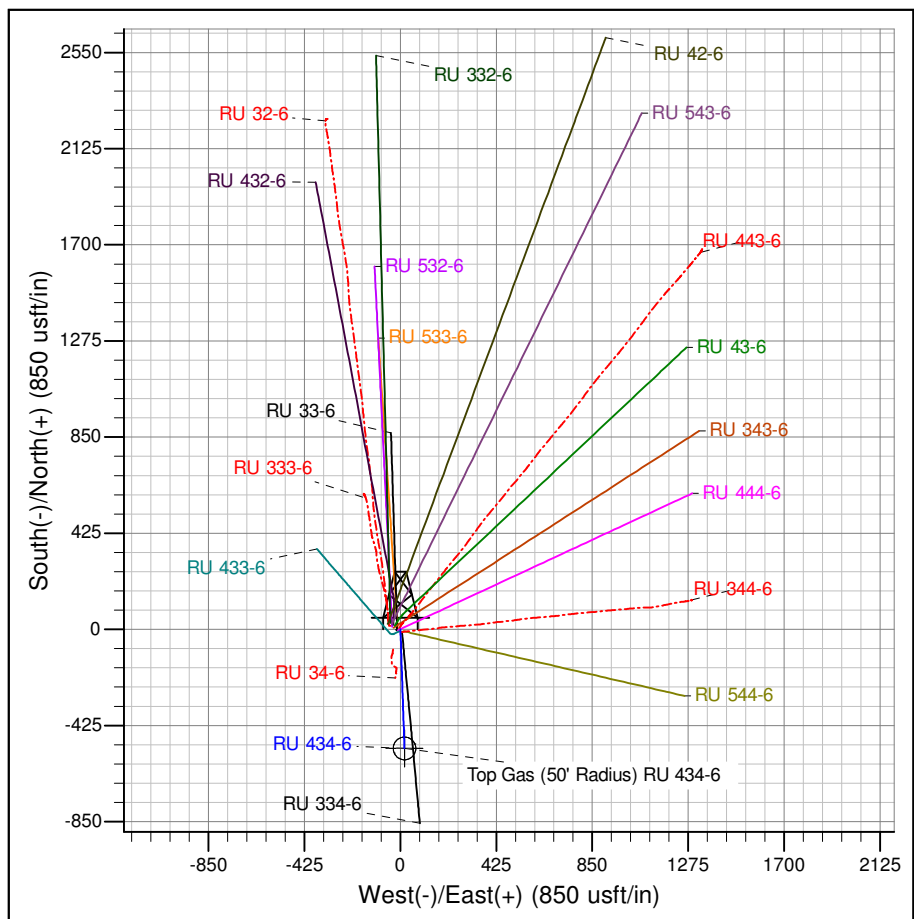




Well Name: RU 434-6
Surface Location: RU 34-6 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 7537.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1603588.60000 2346586.80000 39.46777 -107.81474 A03
KELLY BUSHING @ 7563.00usft (Nabors 574 (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 2.00	178.06° Az
371.58	371.90	5.04	178.06	-11.06	0.37	11.07	11.07	Hold 5.04° Inc, 178.06° Az	
6050.56	6072.91	5.04	178.06	-511.42	17.29	511.71	511.71	Start Drop -1.50	
6386.00	6408.78	0.00	0.00	-526.17	17.79	526.47	526.47	Vertical	
6986.00	7008.78	0.00	0.00	-526.17	17.79	526.47	526.47	Top Gas	
9736.00	9758.78	0.00	0.00	-526.17	17.79	526.47	526.47	TD at 9758.78	



Project: RU 06-07S-093W
Site: RU 34-6 Pad
Well: RU 434-6
Plan #4 08Jul14 mab



PICEANCE VLY NAD 83

RU 06-07S-093W

RU 34-6 Pad

RU 434-6 - Slot A03

Wellbore #1

Plan: Plan #4 08Jul14 mab

Standard Planning Report - Geographic

14 August, 2014



WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 434-6 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 34-6 Pad	North Reference:	True
Well:	RU 434-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 08Jul14 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 34-6 Pad			
Site Position:		Northing:	1,603,613.20000 usft	Latitude: 39.46783
From: Map		Easting:	2,346,531.50000 usft	Longitude: -107.81494
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.46 °

Well	RU 434-6 - Slot A03				
Well Position	+N/-S	0.00 usft	Northing:	1,603,588.60000 usft	Latitude: 39.46777
	+E/-W	0.00 usft	Easting:	2,346,586.80000 usft	Longitude: -107.81475
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level: 7,537.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	10/21/2008	10.59	65.83	52,537

Design	Plan #4 08Jul14 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	178.06

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	
371.90	5.04	178.06	371.58	-11.06	0.37	2.00	2.00	0.00	178.06	
6,072.91	5.04	178.06	6,050.56	-511.42	17.29	0.00	0.00	0.00	0.00	
6,408.78	0.00	0.00	6,386.00	-526.17	17.79	1.50	-1.50	0.00	180.00	
7,008.78	0.00	0.00	6,986.00	-526.17	17.79	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
9,758.78	0.00	0.00	9,736.00	-526.17	17.79	0.00	0.00	0.00	0.00	



WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 434-6 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 34-6 Pad	North Reference:	True
Well:	RU 434-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 08Jul14 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	1,603,588.60000	2,346,586.80000	39.46777	-107.81475	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,588.60000	2,346,586.80000	39.46777	-107.81475	
Start Build 2.00										
200.00	1.60	178.06	199.99	-1.12	0.04	1,603,587.48315	2,346,586.80929	39.46777	-107.81475	
371.90	5.04	178.06	371.58	-11.06	0.37	1,603,577.53312	2,346,586.89207	39.46774	-107.81475	
Hold 5.04° Inc, 178.06° Az										
400.00	5.04	178.06	399.57	-13.53	0.46	1,603,575.06579	2,346,586.91259	39.46773	-107.81475	
600.00	5.04	178.06	598.79	-31.08	1.05	1,603,557.50377	2,346,587.05870	39.46768	-107.81474	
800.00	5.04	178.06	798.02	-48.63	1.64	1,603,539.94175	2,346,587.20480	39.46764	-107.81474	
1,000.00	5.04	178.06	997.25	-66.19	2.24	1,603,522.37973	2,346,587.35090	39.46759	-107.81474	
1,103.15	5.04	178.06	1,100.00	-75.24	2.54	1,603,513.32215	2,346,587.42626	39.46756	-107.81474	
9 5/8"										
1,200.00	5.04	178.06	1,196.48	-83.74	2.83	1,603,504.81771	2,346,587.49701	39.46754	-107.81474	
1,400.00	5.04	178.06	1,395.70	-101.29	3.42	1,603,487.25569	2,346,587.64311	39.46749	-107.81473	
1,600.00	5.04	178.06	1,594.93	-118.85	4.02	1,603,469.69367	2,346,587.78921	39.46744	-107.81473	
1,800.00	5.04	178.06	1,794.16	-136.40	4.61	1,603,452.13165	2,346,587.93532	39.46739	-107.81473	
2,000.00	5.04	178.06	1,993.39	-153.95	5.21	1,603,434.56962	2,346,588.08142	39.46735	-107.81473	
2,200.00	5.04	178.06	2,192.61	-171.51	5.80	1,603,417.00760	2,346,588.22752	39.46730	-107.81473	
2,400.00	5.04	178.06	2,391.84	-189.06	6.39	1,603,399.44558	2,346,588.37363	39.46725	-107.81472	
2,600.00	5.04	178.06	2,591.07	-206.61	6.99	1,603,381.88357	2,346,588.51973	39.46720	-107.81472	
2,800.00	5.04	178.06	2,790.29	-224.17	7.58	1,603,364.32155	2,346,588.66583	39.46715	-107.81472	
3,000.00	5.04	178.06	2,989.52	-241.72	8.17	1,603,346.75953	2,346,588.81194	39.46711	-107.81472	
3,200.00	5.04	178.06	3,188.75	-259.27	8.77	1,603,329.19751	2,346,588.95804	39.46706	-107.81472	
3,400.00	5.04	178.06	3,387.98	-276.83	9.36	1,603,311.63549	2,346,589.10415	39.46701	-107.81471	
3,485.35	5.04	178.06	3,473.00	-284.32	9.61	1,603,304.14064	2,346,589.16650	39.46699	-107.81471	
Top of "G" Sand										
3,585.74	5.04	178.06	3,573.00	-293.13	9.91	1,603,295.32557	2,346,589.23983	39.46696	-107.81471	
Base of "G" Sand										
3,600.00	5.04	178.06	3,587.20	-294.38	9.95	1,603,294.07347	2,346,589.25025	39.46696	-107.81471	
3,800.00	5.04	178.06	3,786.43	-311.93	10.55	1,603,276.51145	2,346,589.39635	39.46691	-107.81471	
4,000.00	5.04	178.06	3,985.66	-329.49	11.14	1,603,258.94942	2,346,589.54246	39.46686	-107.81471	
4,200.00	5.04	178.06	4,184.89	-347.04	11.73	1,603,241.38740	2,346,589.68856	39.46682	-107.81471	
4,400.00	5.04	178.06	4,384.11	-364.59	12.33	1,603,223.82538	2,346,589.83466	39.46677	-107.81470	
4,600.00	5.04	178.06	4,583.34	-382.15	12.92	1,603,206.26336	2,346,589.98077	39.46672	-107.81470	
4,800.00	5.04	178.06	4,782.57	-399.70	13.51	1,603,188.70134	2,346,590.12687	39.46667	-107.81470	
5,000.00	5.04	178.06	4,981.80	-417.25	14.11	1,603,171.13932	2,346,590.27297	39.46662	-107.81470	
5,200.00	5.04	178.06	5,181.02	-434.81	14.70	1,603,153.57730	2,346,590.41908	39.46658	-107.81469	
5,400.00	5.04	178.06	5,380.25	-452.36	15.30	1,603,136.01528	2,346,590.56518	39.46653	-107.81469	
5,600.00	5.04	178.06	5,579.48	-469.92	15.89	1,603,118.45326	2,346,590.71128	39.46648	-107.81469	
5,800.00	5.04	178.06	5,778.70	-487.47	16.48	1,603,100.89124	2,346,590.85739	39.46643	-107.81469	
5,990.03	5.04	178.06	5,968.00	-504.15	17.05	1,603,084.20473	2,346,590.99621	39.46639	-107.81469	
Mesaverde										
6,000.00	5.04	178.06	5,977.93	-505.02	17.08	1,603,083.32922	2,346,591.00349	39.46638	-107.81469	
6,072.91	5.04	178.06	6,050.56	-511.42	17.29	1,603,076.92667	2,346,591.05675	39.46637	-107.81469	
Start Drop -1.50										
6,200.00	3.13	178.06	6,177.32	-520.47	17.60	1,603,067.87489	2,346,591.13206	39.46634	-107.81468	
6,400.00	0.13	178.06	6,377.22	-526.16	17.79	1,603,062.18093	2,346,591.17943	39.46632	-107.81468	
6,408.78	0.00	0.00	6,386.00	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468	
Vertical										
6,600.00	0.00	0.00	6,577.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468	
6,800.00	0.00	0.00	6,777.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468	
7,000.00	0.00	0.00	6,977.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468	



WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 434-6 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 34-6 Pad	North Reference:	True
Well:	RU 434-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 08Jul14 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
7,008.78	0.00	0.00	6,986.00	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
Top Gas - Approx. Top Gas									
7,200.00	0.00	0.00	7,177.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
7,400.00	0.00	0.00	7,377.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
7,600.00	0.00	0.00	7,577.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
7,800.00	0.00	0.00	7,777.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
8,000.00	0.00	0.00	7,977.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
8,200.00	0.00	0.00	8,177.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
8,400.00	0.00	0.00	8,377.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
8,600.00	0.00	0.00	8,577.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
8,771.78	0.00	0.00	8,749.00	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
Cameo Coals									
8,800.00	0.00	0.00	8,777.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
9,000.00	0.00	0.00	8,977.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
9,200.00	0.00	0.00	9,177.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
9,400.00	0.00	0.00	9,377.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
9,460.78	0.00	0.00	9,438.00	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
Coal D									
9,600.00	0.00	0.00	9,577.22	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
9,608.78	0.00	0.00	9,586.00	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
Rollins SS									
9,758.78	0.00	0.00	9,736.00	-526.17	17.79	1,603,062.17083	2,346,591.17951	39.46632	-107.81468
TD at 9758.78 - 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	0.00	0.00	6,986.00	-526.44	18.00	1,603,061.89779	2,346,591.38661	39.46632	-107.81468
- plan misses target center by 0.34usft at 7008.78usft MD (6986.00 TVD, -526.17 N, 17.79 E)									
- Circle (radius 50.00)									
TD / PBHL RU 434-6	0.00	0.00	9,736.00	-526.44	18.00	1,603,061.89779	2,346,591.38661	39.46632	-107.81468
- plan misses target center by 0.34usft at 9758.78usft MD (9736.00 TVD, -526.17 N, 17.79 E)									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,103.15	1,100.00	9 5/8"	9.625	13.500	



Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 434-6 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7563.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 34-6 Pad	North Reference:	True
Well:	RU 434-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 08Jul14 mab		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
3,485.35	3,473.00	Top of "G" Sand				
3,585.74	3,573.00	Base of "G" Sand				
5,990.03	5,968.00	Mesaverde				
7,008.78	6,986.00	Approx. Top Gas				
8,771.78	8,749.00	Cameo Coals				
9,460.78	9,438.00	Coal D				
9,608.78	9,586.00	Rollins SS				
9,758.78	9,736.00	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 2.00	
371.90	371.58	-11.06	0.37	Hold 5.04° Inc, 178.06° Az	
6,072.91	6,050.56	-511.42	17.29	Start Drop -1.50	
6,408.78	6,386.00	-526.17	17.79	Vertical	
7,008.78	6,986.00	-526.17	17.79	Top Gas	
9,758.78	9,736.00	-526.17	17.79	TD at 9758.78	