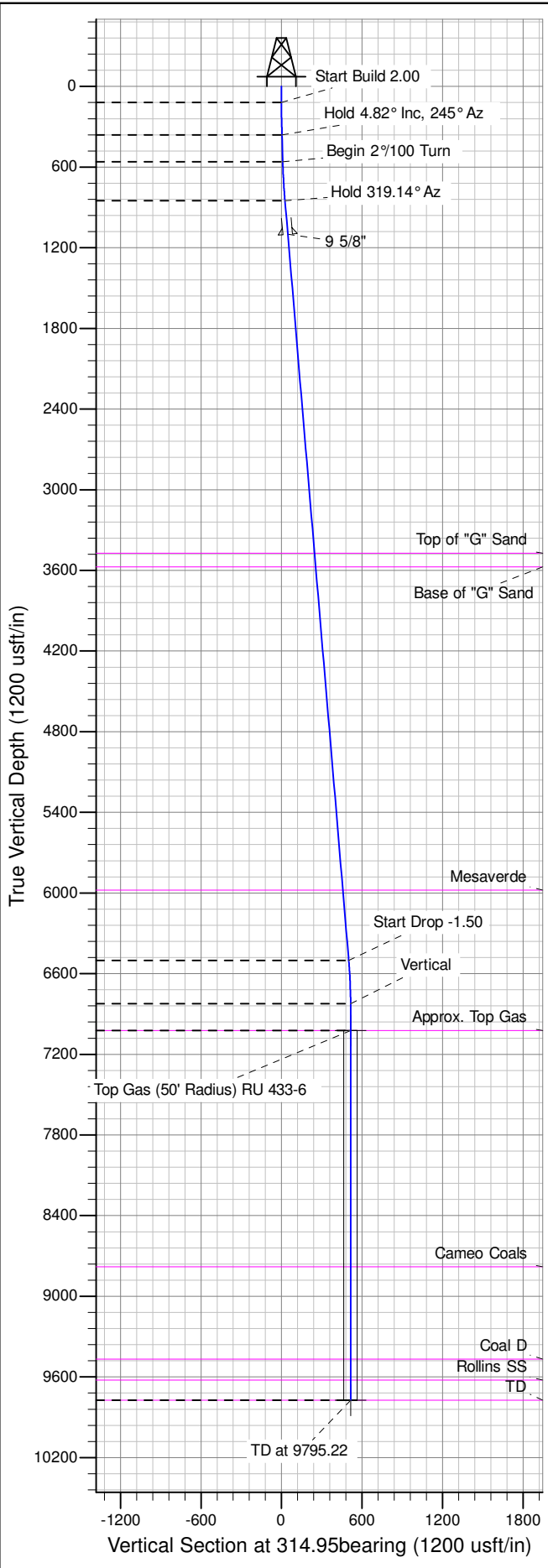
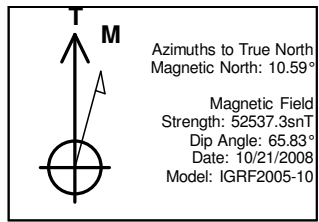
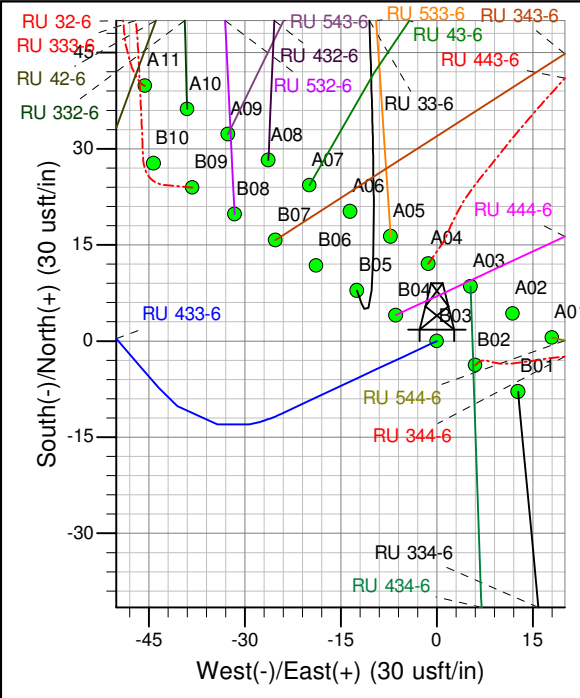
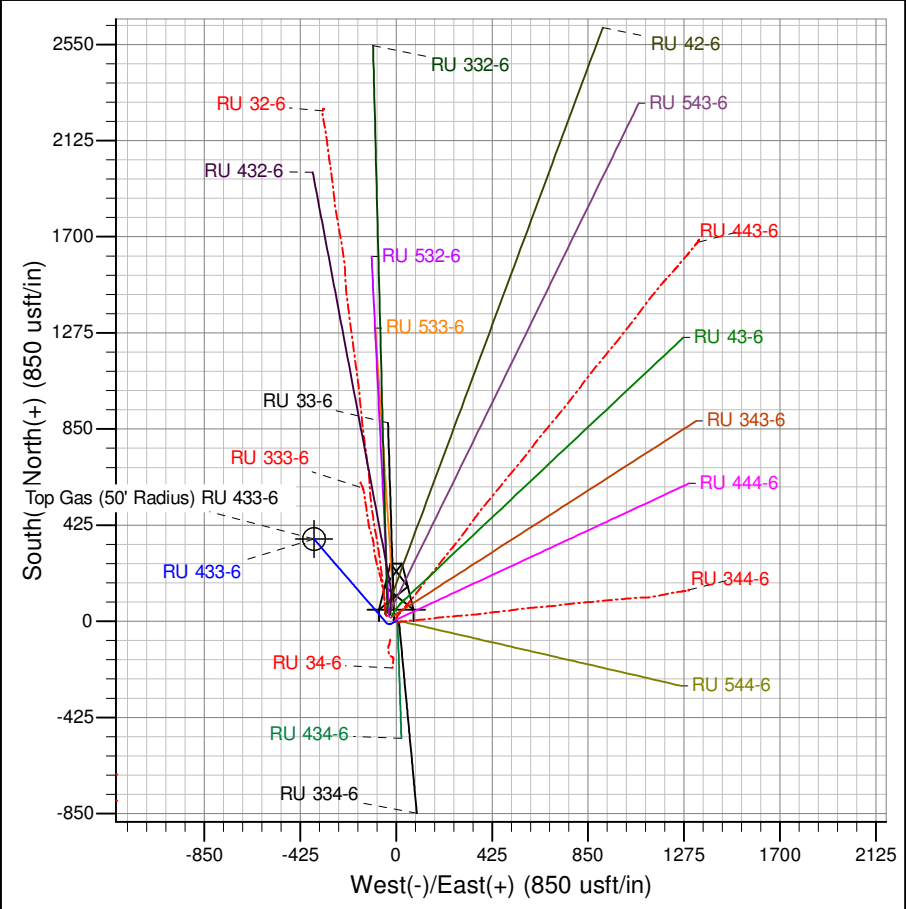




Well Name: RU 433-6
Surface Location: RU 34-6 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 7537.00
+N/-S 0.00 +E/-W 0.00 Northing 1603580.20000 Easting 2346581.30000 Latitude 39.46774 Longitude -107.81476 Slot B03
KELLY BUSHING @ 7563.00usft (Nabors 574 (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	0.00	Start Build 2.00	
360.72	361.00	4.82	245.00	-4.28	-9.18	3.47	10.13	10.13	Hold 4.82° Inc, 245° Az	
560.01	561.00	4.82	245.00	-11.38	-24.41	9.23	26.94	26.94	Begin 2°/100 Turn	
849.62	851.39	4.82	319.14	-7.31	-43.47	25.60	48.43	48.43	Hold 319.14° Az	
6501.93	6523.77	4.82	319.14	353.31	-355.39	501.13	525.23	525.23	Start Drop -1.50	
6823.00	6845.22	0.00	0.00	363.54	-364.23	514.61	538.75	538.75	Vertical	
7023.00	7045.22	0.00	137.93	363.54	-364.23	514.61	538.75	538.75	Top Gas	
9773.00	9795.22	0.01	137.93	363.34	-364.05	514.34	539.02	539.02	TD at 9795.22	



Project: RU 06-07S-093W
Site: RU 34-6 Pad
Well: RU 433-6
Plan #4 08Jul14 mab



PICEANCE VLY NAD 83

RU 06-07S-093W

RU 34-6 Pad

RU 433-6 - Slot B03

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 433-6 - Slot B03
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 433-6	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 433-6 - Slot B03					
Well Position	+N/-S	0.00 usft	Northing:	1,603,580.20000 usft	Latitude:	39.46775
	+E/-W	0.00 usft	Easting:	2,346,581.30000 usft	Longitude:	-107.81477
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	314.95

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	
361.00	4.82	245.00	360.72	-4.28	-9.18	2.00	2.00	0.00	245.00	
561.00	4.82	245.00	560.01	-11.38	-24.41	0.00	0.00	0.00	0.00	
851.39	4.82	319.14	849.62	-7.31	-43.47	2.00	0.00	25.53	126.96	
6,523.77	4.82	319.14	6,501.93	353.31	-355.39	0.00	0.00	0.00	0.00	
6,845.22	0.00	0.00	6,823.00	363.54	-364.23	1.50	-1.50	0.00	180.00	
9,795.22	0.01	137.93	9,773.00	363.34	-364.05	0.00	0.00	4.68	137.93	TD / PBHL RU 433-6



WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 433-6 - Slot B03
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 433-6	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	1,603,580.20000	2,346,581.30000	39.46775	-107.81477	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,580.20000	2,346,581.30000	39.46775	-107.81477	
Start Build 2.00										
200.00	1.60	245.00	199.99	-0.47	-1.01	1,603,579.75392	2,346,580.27606	39.46774	-107.81477	
361.00	4.82	245.00	360.72	-4.28	-9.18	1,603,576.15392	2,346,572.01243	39.46773	-107.81480	
Hold 4.82° Inc, 245° Az										
400.00	4.82	245.00	399.58	-5.67	-12.15	1,603,574.84517	2,346,569.00827	39.46773	-107.81481	
561.00	4.82	245.00	560.01	-11.38	-24.41	1,603,569.44239	2,346,556.60648	39.46771	-107.81485	
Begin 2°/100 Turn										
600.00	4.40	253.16	598.88	-12.51	-27.33	1,603,568.39166	2,346,553.66350	39.46771	-107.81486	
800.00	4.28	308.08	798.39	-10.12	-40.55	1,603,571.11423	2,346,540.51052	39.46772	-107.81491	
851.39	4.82	319.14	849.62	-7.31	-43.47	1,603,574.00455	2,346,537.66018	39.46773	-107.81492	
Hold 319.14° Az										
1,000.00	4.82	319.14	997.70	2.14	-51.64	1,603,583.65733	2,346,529.73177	39.46775	-107.81495	
1,102.66	4.82	319.14	1,100.00	8.67	-57.29	1,603,590.32531	2,346,524.25496	39.46777	-107.81497	
9 5/8"										
1,200.00	4.82	319.14	1,197.00	14.86	-62.64	1,603,596.64774	2,346,519.06197	39.46779	-107.81499	
1,400.00	4.82	319.14	1,396.29	27.57	-73.64	1,603,609.63814	2,346,508.39218	39.46782	-107.81503	
1,600.00	4.82	319.14	1,595.58	40.29	-84.64	1,603,622.62854	2,346,497.72238	39.46786	-107.81507	
1,800.00	4.82	319.14	1,794.87	53.00	-95.63	1,603,635.61894	2,346,487.05258	39.46789	-107.81510	
2,000.00	4.82	319.14	1,994.16	65.72	-106.63	1,603,648.60935	2,346,476.38278	39.46793	-107.81514	
2,200.00	4.82	319.14	2,193.46	78.43	-117.63	1,603,661.59975	2,346,465.71299	39.46796	-107.81518	
2,400.00	4.82	319.14	2,392.75	91.15	-128.63	1,603,674.59015	2,346,455.04319	39.46800	-107.81522	
2,600.00	4.82	319.14	2,592.04	103.86	-139.62	1,603,687.58055	2,346,444.37339	39.46803	-107.81526	
2,800.00	4.82	319.14	2,791.33	116.58	-150.62	1,603,700.57096	2,346,433.70360	39.46807	-107.81530	
3,000.00	4.82	319.14	2,990.63	129.29	-161.62	1,603,713.56136	2,346,423.03380	39.46810	-107.81534	
3,200.00	4.82	319.14	3,189.92	142.01	-172.62	1,603,726.55176	2,346,412.36400	39.46814	-107.81538	
3,400.00	4.82	319.14	3,389.21	154.72	-183.62	1,603,739.54216	2,346,401.69421	39.46817	-107.81542	
3,484.09	4.82	319.14	3,473.00	160.07	-188.24	1,603,745.00384	2,346,397.20821	39.46819	-107.81543	
Top of "G" Sand										
3,584.44	4.82	319.14	3,573.00	166.45	-193.76	1,603,751.52211	2,346,391.85437	39.46820	-107.81545	
Base of "G" Sand										
3,600.00	4.82	319.14	3,588.50	167.44	-194.61	1,603,752.53257	2,346,391.02442	39.46821	-107.81545	
3,800.00	4.82	319.14	3,787.79	180.15	-205.61	1,603,765.52297	2,346,380.35462	39.46824	-107.81549	
4,000.00	4.82	319.14	3,987.09	192.87	-216.61	1,603,778.51337	2,346,369.68482	39.46828	-107.81553	
4,200.00	4.82	319.14	4,186.38	205.58	-227.61	1,603,791.50376	2,346,359.01503	39.46831	-107.81557	
4,400.00	4.82	319.14	4,385.67	218.30	-238.60	1,603,804.49417	2,346,348.34523	39.46835	-107.81561	
4,600.00	4.82	319.14	4,584.96	231.01	-249.60	1,603,817.48457	2,346,337.67543	39.46838	-107.81565	
4,800.00	4.82	319.14	4,784.26	243.73	-260.60	1,603,830.47497	2,346,327.00564	39.46841	-107.81569	
5,000.00	4.82	319.14	4,983.55	256.44	-271.60	1,603,843.46537	2,346,316.33584	39.46845	-107.81573	
5,200.00	4.82	319.14	5,182.84	269.16	-282.60	1,603,856.45578	2,346,305.66604	39.46848	-107.81577	
5,400.00	4.82	319.14	5,382.13	281.87	-293.59	1,603,869.44618	2,346,294.99624	39.46852	-107.81581	
5,600.00	4.82	319.14	5,581.42	294.59	-304.59	1,603,882.43658	2,346,284.32645	39.46855	-107.81584	
5,800.00	4.82	319.14	5,780.72	307.30	-315.59	1,603,895.42698	2,346,273.65665	39.46859	-107.81588	
5,997.98	4.82	319.14	5,978.00	319.89	-326.48	1,603,908.28648	2,346,263.09437	39.46862	-107.81592	
Mesaverde										
6,000.00	4.82	319.14	5,980.01	320.02	-326.59	1,603,908.41739	2,346,262.98685	39.46862	-107.81592	
6,200.00	4.82	319.14	6,179.30	332.73	-337.58	1,603,921.40779	2,346,252.31706	39.46866	-107.81596	
6,400.00	4.82	319.14	6,378.59	345.44	-348.58	1,603,934.39819	2,346,241.64726	39.46869	-107.81600	
6,523.77	4.82	319.14	6,501.93	353.31	-355.39	1,603,942.43751	2,346,235.04408	39.46872	-107.81602	
Start Drop -1.50										
6,600.00	3.68	319.14	6,577.94	357.59	-359.08	1,603,946.80264	2,346,231.45874	39.46873	-107.81604	



Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 433-6 - Slot B03
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 433-6	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	
6,800.00	0.68	319.14	6,777.78	363.34	-364.06	1,603,952.67626	2,346,226.63438	39.46874	-107.81606	
6,845.22	0.00	0.00	6,823.00	363.54	-364.23	1,603,952.88314	2,346,226.46446	39.46874	-107.81606	
Vertical										
7,000.00	0.00	137.93	6,977.78	363.54	-364.23	1,603,952.88281	2,346,226.46474	39.46874	-107.81606	
7,045.22	0.00	137.93	7,023.00	363.54	-364.23	1,603,952.88215	2,346,226.46531	39.46874	-107.81606	
Top Gas - Approx. Top Gas										
7,200.00	0.00	137.93	7,177.78	363.54	-364.23	1,603,952.88045	2,346,226.46677	39.46874	-107.81606	
7,400.00	0.00	137.93	7,377.78	363.53	-364.23	1,603,952.87623	2,346,226.47039	39.46874	-107.81606	
7,600.00	0.00	137.93	7,577.78	363.53	-364.22	1,603,952.87015	2,346,226.47560	39.46874	-107.81606	
7,800.00	0.00	137.93	7,777.78	363.52	-364.21	1,603,952.86221	2,346,226.48240	39.46874	-107.81606	
8,000.00	0.00	137.93	7,977.78	363.51	-364.20	1,603,952.85242	2,346,226.49080	39.46874	-107.81606	
8,200.00	0.00	137.93	8,177.78	363.50	-364.19	1,603,952.84078	2,346,226.50079	39.46874	-107.81606	
8,400.00	0.01	137.93	8,377.78	363.48	-364.18	1,603,952.82727	2,346,226.51236	39.46874	-107.81606	
8,600.00	0.01	137.93	8,577.78	363.47	-364.17	1,603,952.81191	2,346,226.52553	39.46874	-107.81606	
8,800.00	0.01	137.93	8,777.78	363.45	-364.15	1,603,952.79470	2,346,226.54030	39.46874	-107.81606	
8,802.22	0.01	137.93	8,780.00	363.45	-364.15	1,603,952.79426	2,346,226.54067	39.46874	-107.81606	
Cameo Coals										
9,000.00	0.01	137.93	8,977.78	363.43	-364.14	1,603,952.77562	2,346,226.55665	39.46874	-107.81606	
9,200.00	0.01	137.93	9,177.78	363.41	-364.12	1,603,952.75469	2,346,226.57460	39.46874	-107.81606	
9,400.00	0.01	137.93	9,377.78	363.39	-364.10	1,603,952.73191	2,346,226.59413	39.46874	-107.81606	
9,489.22	0.01	137.93	9,467.00	363.38	-364.09	1,603,952.72089	2,346,226.60358	39.46874	-107.81606	
Coal D										
9,600.00	0.01	137.93	9,577.78	363.37	-364.08	1,603,952.70727	2,346,226.61526	39.46874	-107.81606	
9,645.22	0.01	137.93	9,623.00	363.36	-364.07	1,603,952.70115	2,346,226.62051	39.46874	-107.81606	
Rollins SS										
9,795.22	0.01	137.93	9,773.00	363.34	-364.05	1,603,952.68119	2,346,226.63762	39.46874	-107.81606	
TD at 9795.22 - 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 misses target center by 0.26usft at 7045.22usft MD (7023.00 TVD, 363.54 N, -364.23 E) - Circle (radius 50.00)	0.00	0.00	7,023.00	363.34	-364.05	1,603,952.68119	2,346,226.63762	39.46874	-107.81606	
TD / PBHL RU 433-6 - plan hits target center - Point	0.00	0.00	9,773.00	363.34	-364.05	1,603,952.68119	2,346,226.63762	39.46874	-107.81606	

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,102.66	1,100.00	9 5/8"	9.625	13.500	



Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 433-6 - Slot B03
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 433-6	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)	
3,484.09	3,473.00	Top of "G" Sand				
3,584.44	3,573.00	Base of "G" Sand				
5,997.98	5,978.00	Mesaverde				
7,045.22	7,023.00	Approx. Top Gas				
8,802.22	8,780.00	Cameo Coals				
9,489.22	9,467.00	Coal D				
9,645.22	9,623.00	Rollins SS				
9,795.22	9,773.00	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	
361.00	360.72	-4.28	-9.18	Hold 4.82° Inc, 245° Az	
561.00	560.01	-11.38	-24.41	Begin 2°/100 Turn	
851.39	849.62	-7.31	-43.47	Hold 319.14° Az	
6,523.77	6,501.93	353.31	-355.39	Start Drop -1.50	
6,845.22	6,823.00	363.54	-364.23	Vertical	
7,045.22	7,023.00	363.54	-364.23	Top Gas	
9,795.22	9,773.00	363.34	-364.05	TD at 9795.22	