

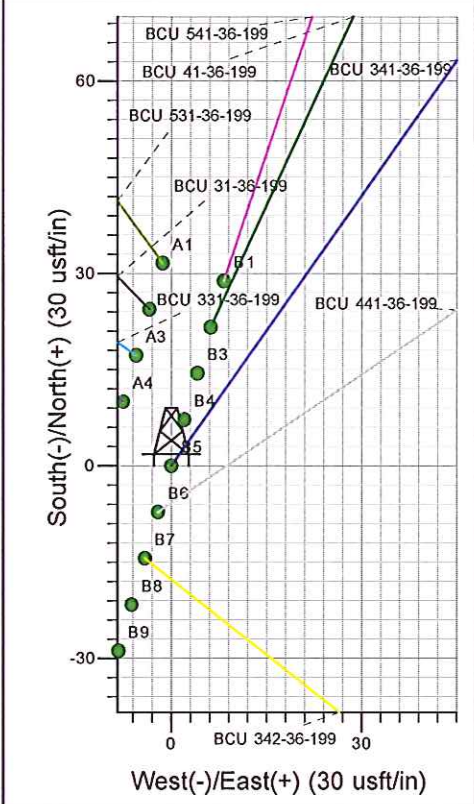
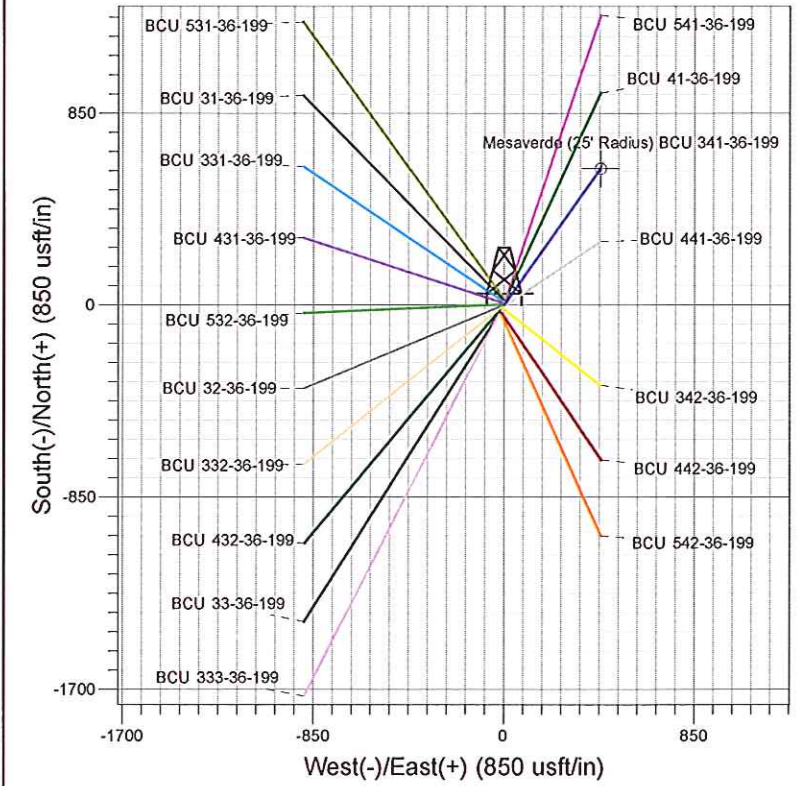
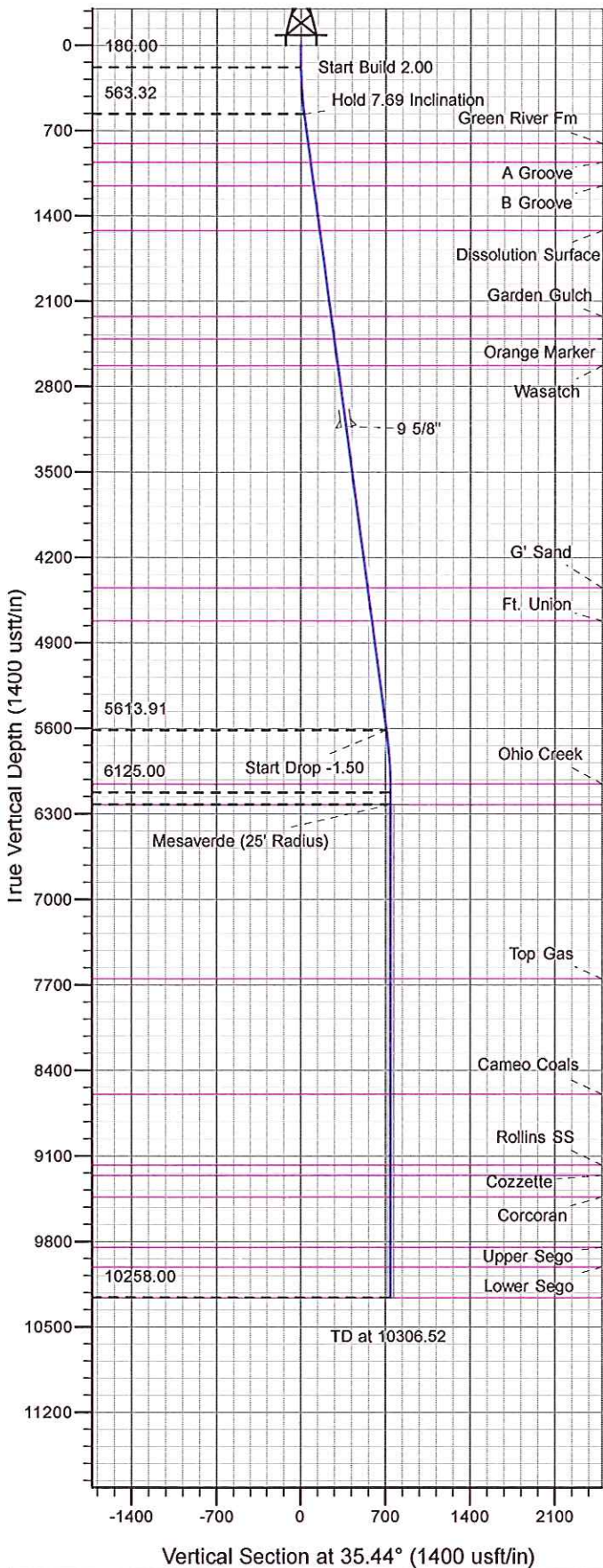


341-36-199

Surface Location: BCU 442-36-199
 North American Datum 1983, US State Plane 1983, Colorado Central Zone
 Ground Elevation: 6868.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1808110.40	2174536.50	40.01531	-108.44736	B5

KELLY BUSHING @ 6889.00usft



Project: BC 36-01N-R99W
 Site: BCU 442-36-199
 Well: BCU 341-36-199
 Design #1 1Mar12 kjs

T Azimuths to True North
M Magnetic North: 10.53°

Magnetic Field
 Strength: 52393.3snT
 Dip Angle: 66.06°
 Date: 3/1/2012
 Model: IGRF2010

ANNOTATIONS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
180.00	0.00	0.00	180.00	0.00	0.00	0.00	0.00	Start Build 2.00
564.47	7.69	35.44	563.32	20.99	14.94	25.76	25.76	Hold 7.69 Inclinatio
5660.89	7.69	35.44	5613.91	576.59	410.30	707.67	707.67	Start Drop -1.50
6173.52	0.00	0.00	6125.00	604.57	430.22	742.02	742.02	Vertical
6273.52	0.00	0.00	6225.00	604.57	430.22	742.02	742.02	Mesaverde
10306.52	0.00	0.00	10258.00	604.57	430.22	742.02	742.02	TD at 10306.52



PICEANCE HL NAD 83

BC 36-01N-R99W

BCU 442-36-199

BCU 341-36-199 - Slot B5

Wellbore #1

Plan: Design #1 1Mar12 kjs

Standard Planning Report - Geographic

31 August, 2012



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well BCU 341-36-199 - Slot B5
Company:	PICEANCE HL NAD 83	TVD Reference:	KELLY BUSHING @ 6889.00usft
Project:	BC 36-01N-R99W	MD Reference:	KELLY BUSHING @ 6889.00usft
Site:	BCU 442-36-199	North Reference:	True
Well:	BCU 341-36-199	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 1Mar12 kjs		

Project	BC 36-01N-R99W, Rio Blanco, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	BCU 442-36-199				
Site Position:		Northing:	1,808,142.00 usft	Latitude:	40.01540
From:	Map	Easting:	2,174,536.30 usft	Longitude:	-108.44736
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	-1.86 °

Well	BCU 341-36-199 - Slot B5					
Well Position	+N/-S	0.00 usft	Northing:	1,808,110.40 usft	Latitude:	40.01532
	+E/-W	0.00 usft	Easting:	2,174,536.50 usft	Longitude:	-108.44736
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	6,868.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/1/2012	10.53	66.06	52,393

Design	Design #1 1Mar12 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	35.44

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	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	
180.00	0.00	0.00	180.00	0.00	0.00	0.00	0.00	0.00	0.00	
564.47	7.69	35.44	563.32	20.99	14.94	2.00	2.00	0.00	35.44	
5,660.89	7.69	35.44	5,613.91	576.59	410.30	0.00	0.00	0.00	0.00	
6,173.52	0.00	0.00	6,125.00	604.57	430.22	1.50	-1.50	0.00	180.00	
6,273.52	0.00	0.00	6,225.00	604.57	430.22	0.00	0.00	0.00	0.00	Mesaverde (25' Radiu
10,306.52	0.00	0.00	10,258.00	604.57	430.22	0.00	0.00	0.00	0.00	



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well BCU 341-36-199 - Slot B5
Company:	PICEANCE HL NAD 83	TVD Reference:	KELLY BUSHING @ 6889.00usft
Project:	BC 36-01N-R99W	MD Reference:	KELLY BUSHING @ 6889.00usft
Site:	BCU 442-36-199	North Reference:	True
Well:	BCU 341-36-199	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 1Mar12 kjs		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	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	1,808,110.40	2,174,536.50	40.01532	-108.44736	
180.00	0.00	0.00	180.00	0.00	0.00	1,808,110.40	2,174,536.50	40.01532	-108.44736	
Start Build 2.00										
500.00	6.40	35.44	499.33	14.55	10.35	1,808,124.60	2,174,547.32	40.01536	-108.44732	
564.47	7.69	35.44	563.32	20.99	14.94	1,808,130.89	2,174,552.11	40.01537	-108.44731	
Hold 7.69 Inclination										
808.35	7.69	35.44	805.00	47.58	33.85	1,808,156.85	2,174,571.88	40.01545	-108.44724	
Green River Fm										
963.74	7.69	35.44	959.00	64.52	45.91	1,808,173.39	2,174,584.48	40.01549	-108.44720	
A Groove										
1,000.00	7.69	35.44	994.93	68.47	48.72	1,808,177.25	2,174,587.42	40.01550	-108.44719	
1,157.49	7.69	35.44	1,151.00	85.64	60.94	1,808,194.02	2,174,600.18	40.01555	-108.44714	
B Groove										
1,500.00	7.69	35.44	1,490.43	122.98	87.51	1,808,230.47	2,174,627.95	40.01565	-108.44705	
1,530.84	7.69	35.44	1,521.00	126.34	89.90	1,808,233.76	2,174,630.45	40.01566	-108.44704	
Dissolution Surface										
2,000.00	7.69	35.44	1,985.94	177.49	126.30	1,808,283.70	2,174,668.49	40.01580	-108.44691	
2,243.25	7.69	35.44	2,227.00	204.01	145.17	1,808,309.59	2,174,688.21	40.01588	-108.44684	
Garden Gulch										
2,426.90	7.69	35.44	2,409.00	224.03	159.42	1,808,329.14	2,174,703.10	40.01593	-108.44679	
Orange Marker										
2,500.00	7.69	35.44	2,481.44	232.00	165.09	1,808,336.92	2,174,709.03	40.01595	-108.44677	
2,648.90	7.69	35.44	2,629.00	248.23	176.64	1,808,352.77	2,174,721.10	40.01600	-108.44673	
Wasatch										
3,000.00	7.69	35.44	2,976.95	286.50	203.88	1,808,390.14	2,174,749.56	40.01610	-108.44663	
3,153.43	7.69	35.44	3,129.00	303.23	215.78	1,808,406.47	2,174,762.00	40.01615	-108.44659	
9 5/8"										
3,500.00	7.69	35.44	3,472.45	341.01	242.67	1,808,443.36	2,174,790.10	40.01625	-108.44649	
4,000.00	7.69	35.44	3,967.95	395.52	281.45	1,808,496.58	2,174,830.63	40.01640	-108.44636	
4,485.41	7.69	35.44	4,449.00	448.44	319.11	1,808,548.25	2,174,869.99	40.01655	-108.44622	
G' Sand										
4,500.00	7.69	35.44	4,463.46	450.03	320.24	1,808,549.81	2,174,871.17	40.01655	-108.44622	
4,757.86	7.69	35.44	4,719.00	478.14	340.25	1,808,577.25	2,174,892.08	40.01663	-108.44615	
Ft. Union										
5,000.00	7.69	35.44	4,958.96	504.54	359.03	1,808,603.03	2,174,911.71	40.01670	-108.44608	
5,500.00	7.69	35.44	5,454.47	559.05	397.82	1,808,656.25	2,174,952.24	40.01685	-108.44594	
5,660.89	7.69	35.44	5,613.91	576.59	410.30	1,808,673.38	2,174,965.29	40.01690	-108.44590	
Start Drop -1.50										
6,000.00	2.60	35.44	5,951.54	601.36	427.93	1,808,697.57	2,174,983.71	40.01697	-108.44583	
6,103.51	1.05	35.44	6,055.00	604.05	429.84	1,808,700.19	2,174,985.71	40.01697	-108.44583	
Ohio Creek										
6,173.52	0.00	0.00	6,125.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
Vertical										
6,273.52	0.00	0.00	6,225.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
Mesaverde - Mesaverde										
6,500.00	0.00	0.00	6,451.48	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
7,000.00	0.00	0.00	6,951.48	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
7,500.00	0.00	0.00	7,451.48	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
7,696.52	0.00	0.00	7,648.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
Top Gas										
8,000.00	0.00	0.00	7,951.48	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
8,500.00	0.00	0.00	8,451.48	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well BCU 341-36-199 - Slot B5
Company:	PICEANCE HL NAD 83	TVD Reference:	KELLY BUSHING @ 6889.00usft
Project:	BC 36-01N-R99W	MD Reference:	KELLY BUSHING @ 6889.00usft
Site:	BCU 442-36-199	North Reference:	True
Well:	BCU 341-36-199	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 1Mar12 kjs		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
8,643.52	0.00	0.00	8,595.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
Cameo Coals										
9,000.00	0.00	0.00	8,951.48	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
9,221.52	0.00	0.00	9,173.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
Rollins SS										
9,305.52	0.00	0.00	9,257.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
Cozette										
9,483.52	0.00	0.00	9,435.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
Corcoran										
9,500.00	0.00	0.00	9,451.48	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
9,893.52	0.00	0.00	9,845.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
Upper Segro										
10,000.00	0.00	0.00	9,951.48	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
10,056.52	0.00	0.00	10,008.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
Lower Segro										
10,306.52	0.00	0.00	10,258.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	
TD at 10306.52 - TD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Mesaverde (25' Radius) - hit/miss target - Shape - plan hits target center - Circle (radius 25.00)	0.00	0.00	6,225.00	604.57	430.22	1,808,700.70	2,174,986.10	40.01698	-108.44582	

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)		
3,153.43	3,129.00	9 5/8"	9.625	14.750		



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well BCU 341-36-199 - Slot B5
Company:	PICEANCE HL NAD 83	TVD Reference:	KELLY BUSHING @ 6889.00usft
Project:	BC 36-01N-R99W	MD Reference:	KELLY BUSHING @ 6889.00usft
Site:	BCU 442-36-199	North Reference:	True
Well:	BCU 341-36-199	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 1Mar12 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
808.35	805.00	Green River Fm				
963.74	959.00	A Groove				
1,157.49	1,151.00	B Groove				
1,530.84	1,521.00	Dissolution Surface				
2,243.25	2,227.00	Garden Gulch				
2,426.90	2,409.00	Orange Marker				
2,648.90	2,629.00	Wasatch				
4,485.41	4,449.00	G' Sand				
4,757.86	4,719.00	Ft. Union				
6,103.51	6,055.00	Ohio Creek				
6,273.52	6,225.00	Mesaverde				
7,696.52	7,648.00	Top Gas				
8,643.52	8,595.00	Cameo Coals				
9,221.52	9,173.00	Rollins SS				
9,305.52	9,257.00	Cozzette				
9,483.52	9,435.00	Corcoran				
9,893.52	9,845.00	Upper Segó				
10,056.52	10,008.00	Lower Segó				
10,306.52	10,258.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
180.00	180.00	0.00	0.00	Start Build 2.00	
564.47	563.32	20.99	14.94	Hold 7.69 Incline	
5,660.89	5,613.91	576.59	410.30	Start Drop -1.50	
6,173.52	6,125.00	604.57	430.22	Vertical	
6,273.52	6,225.00	604.57	430.22	Mesaverde	
10,306.52	10,258.00	604.57	430.22	TD at 10306.52	