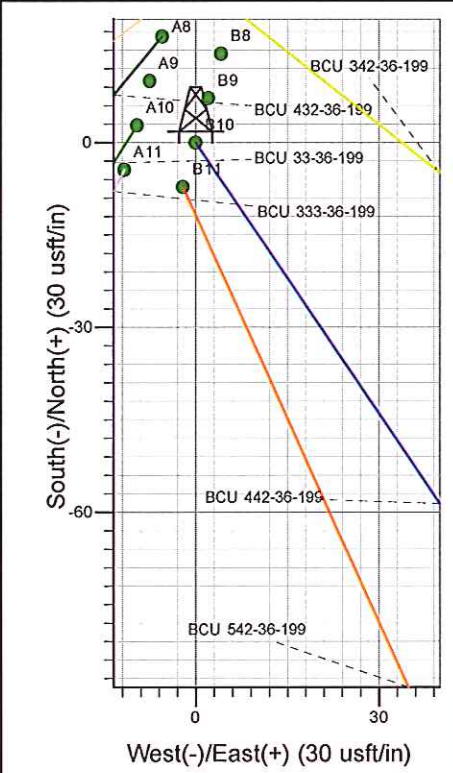
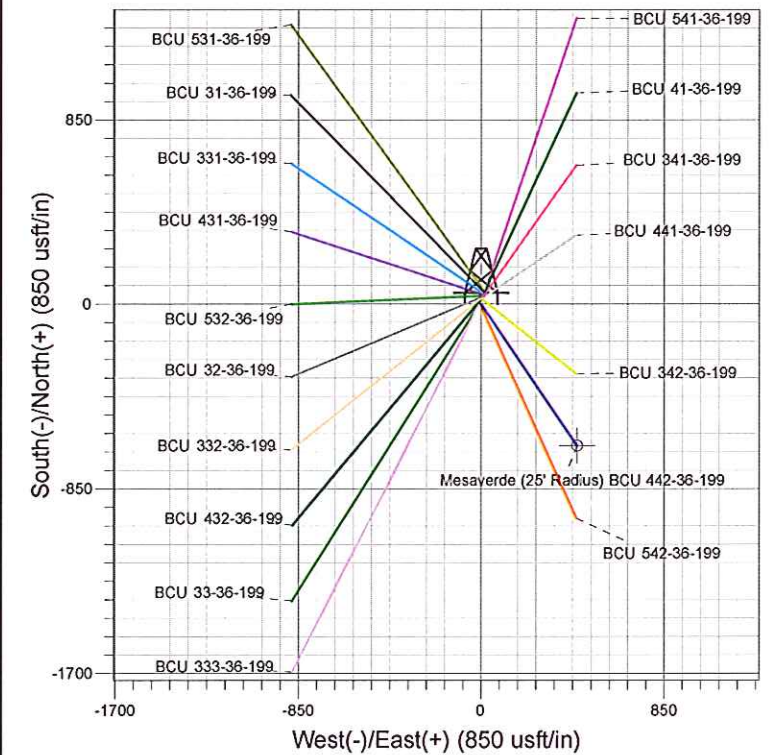
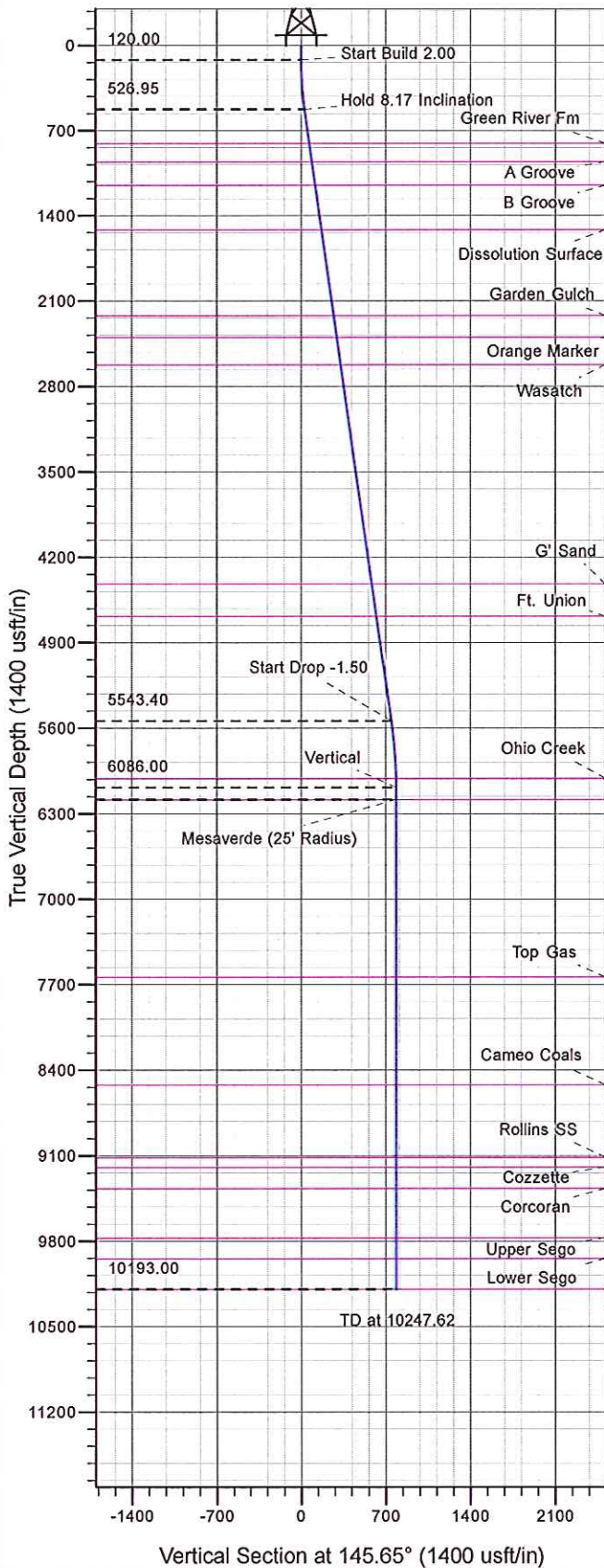




Well Name: BCU 442-36-199
 Surface Location: BCU 442-36-199
 North American Datum 1983 , US State Plane 1983, Colorado Central Zone
 Ground Elevation: 6868.00
 +N/-S 0.00 +E/-W 0.00 Northing 1808074.71 Easting 2174525.00 Latitude 40.01522 Longitude -108.44739 Slot B10
 KELLY BUSHING @ 6889.00usft



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

M Azimuths to True North
 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
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	Start Build 2.00
528.33	8.17	145.65	526.95	-23.99	16.39	29.05	29.05	Hold 8.17 Inclination
5596.17	8.17	145.65	5543.40	-618.35	422.57	748.95	748.95	Start Drop -1.50
6140.62	0.00	0.00	6086.00	-650.33	444.43	787.69	787.69	Vertical
6240.62	0.00	0.00	6186.00	-650.33	444.43	787.69	787.69	Mesaverde
10247.62	0.00	0.00	10193.00	-650.33	444.43	787.69	787.69	TD at 10247.62



PICEANCE HL NAD 83

BC 36-01N-R99W

BCU 442-36-199

BCU 442-36-199 - Slot B10

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 442-36-199 - Slot B10
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 442-36-199	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 442-36-199 - Slot B10					
Well Position	+N/-S	0.00 usft	Northing:	1,808,074.71 usft	Latitude:	40.01522
	+E/-W	0.00 usft	Easting:	2,174,525.00 usft	Longitude:	-108.44740
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	145.65

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	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
528.33	8.17	145.65	526.95	-23.99	16.39	2.00	2.00	0.00	145.65	
5,596.17	8.17	145.65	5,543.40	-618.35	422.57	0.00	0.00	0.00	0.00	
6,140.62	0.00	0.00	6,086.00	-650.33	444.43	1.50	-1.50	0.00	180.00	
6,240.62	0.00	0.00	6,186.00	-650.33	444.43	0.00	0.00	0.00	0.00	Mesaverde (25' Radiu
10,247.62	0.00	0.00	10,193.00	-650.33	444.43	0.00	0.00	0.00	0.00	



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well BCU 442-36-199 - Slot B10
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 442-36-199	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	1,808,074.71	2,174,525.00	40.01522	-108.44740	
120.00	0.00	0.00	120.00	0.00	0.00	1,808,074.71	2,174,525.00	40.01522	-108.44740	
Start Build 2.00										
500.00	7.60	145.65	498.89	-20.78	14.20	1,808,053.48	2,174,538.52	40.01516	-108.44735	
528.33	8.17	145.65	526.95	-23.99	16.39	1,808,050.20	2,174,540.60	40.01515	-108.44734	
Hold 8.17 Inclination										
809.23	8.17	145.65	805.00	-56.93	38.91	1,808,016.55	2,174,562.04	40.01506	-108.44726	
Green River Fm										
963.80	8.17	145.65	958.00	-75.06	51.29	1,807,998.03	2,174,573.83	40.01501	-108.44721	
A Groove										
1,000.00	8.17	145.65	993.84	-79.30	54.20	1,807,993.69	2,174,576.59	40.01500	-108.44720	
1,157.76	8.17	145.65	1,150.00	-97.81	66.84	1,807,974.78	2,174,588.63	40.01495	-108.44716	
B Groove										
1,500.00	8.17	145.65	1,488.77	-137.94	94.27	1,807,933.78	2,174,614.74	40.01484	-108.44706	
1,528.52	8.17	145.65	1,517.00	-141.29	96.56	1,807,930.36	2,174,616.92	40.01483	-108.44705	
Dissolution Surface										
2,000.00	8.17	145.65	1,983.69	-196.59	134.34	1,807,873.87	2,174,652.90	40.01468	-108.44692	
2,239.74	8.17	145.65	2,221.00	-224.70	153.56	1,807,845.14	2,174,671.19	40.01460	-108.44685	
Garden Gulch										
2,419.56	8.17	145.65	2,399.00	-245.79	167.97	1,807,823.60	2,174,684.91	40.01454	-108.44680	
Orange Marker										
2,500.00	8.17	145.65	2,478.62	-255.23	174.42	1,807,813.96	2,174,691.05	40.01452	-108.44677	
2,645.85	8.17	145.65	2,623.00	-272.33	186.11	1,807,796.48	2,174,702.18	40.01447	-108.44673	
Wasatch										
3,000.00	8.17	145.65	2,973.55	-313.87	214.49	1,807,754.05	2,174,729.20	40.01436	-108.44663	
3,150.98	8.17	145.65	3,123.00	-331.57	226.59	1,807,735.96	2,174,740.72	40.01431	-108.44659	
9 5/8"										
3,500.00	8.17	145.65	3,468.48	-372.51	254.57	1,807,694.14	2,174,767.35	40.01419	-108.44649	
4,000.00	8.17	145.65	3,963.41	-431.15	294.64	1,807,634.23	2,174,805.50	40.01403	-108.44635	
4,459.24	8.17	145.65	4,418.00	-485.01	331.45	1,807,579.20	2,174,840.54	40.01389	-108.44621	
G' Sand										
4,500.00	8.17	145.65	4,458.34	-489.79	334.72	1,807,574.32	2,174,843.65	40.01387	-108.44620	
4,728.98	8.17	145.65	4,685.00	-516.65	353.07	1,807,546.88	2,174,861.12	40.01380	-108.44614	
Ft. Union										
5,000.00	8.17	145.65	4,953.27	-548.43	374.79	1,807,514.41	2,174,881.80	40.01371	-108.44606	
5,500.00	8.17	145.65	5,448.20	-607.07	414.87	1,807,454.50	2,174,919.95	40.01355	-108.44592	
5,596.17	8.17	145.65	5,543.40	-618.35	422.57	1,807,442.97	2,174,927.29	40.01352	-108.44589	
Start Drop -1.50										
6,000.00	2.11	145.65	5,945.42	-648.20	442.97	1,807,412.48	2,174,946.71	40.01344	-108.44582	
6,064.61	1.14	145.65	6,010.00	-649.71	444.00	1,807,410.94	2,174,947.69	40.01343	-108.44581	
Ohio Creek										
6,140.62	0.00	0.00	6,086.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
Vertical										
6,240.62	0.00	0.00	6,186.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
Mesaverde - Mesaverde										
6,500.00	0.00	0.00	6,445.38	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
7,000.00	0.00	0.00	6,945.38	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
7,500.00	0.00	0.00	7,445.38	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
7,692.62	0.00	0.00	7,638.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
Top Gas										
8,000.00	0.00	0.00	7,945.38	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
8,500.00	0.00	0.00	8,445.38	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well BCU 442-36-199 - Slot B10
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 442-36-199	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	
8,574.62	0.00	0.00	8,520.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
Cameo Coals										
9,000.00	0.00	0.00	8,945.38	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
9,168.62	0.00	0.00	9,114.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
Rollins SS										
9,248.62	0.00	0.00	9,194.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
Cozzette										
9,422.62	0.00	0.00	9,368.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
Corcoran										
9,500.00	0.00	0.00	9,445.38	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
9,826.62	0.00	0.00	9,772.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
Upper Segro										
9,997.62	0.00	0.00	9,943.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
Lower Segro										
10,000.00	0.00	0.00	9,945.38	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
10,247.62	0.00	0.00	10,193.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
TD at 10247.62 - 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)	0.00	0.00	6,186.00	-650.33	444.43	1,807,410.30	2,174,948.10	40.01343	-108.44581	
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 25.00)										

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)		
3,150.98	3,123.00	9 5/8"	9.625	14.750		



WPX Energy
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well BCU 442-36-199 - Slot B10
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 442-36-199	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 (°)
809.23	805.00	Green River Fm			
963.80	958.00	A Groove			
1,157.76	1,150.00	B Groove			
1,528.52	1,517.00	Dissolution Surface			
2,239.74	2,221.00	Garden Gulch			
2,419.56	2,399.00	Orange Marker			
2,645.85	2,623.00	Wasatch			
4,459.24	4,418.00	G' Sand			
4,728.98	4,685.00	Ft. Union			
6,064.61	6,010.00	Ohio Creek			
6,240.62	6,186.00	Mesaverde			
7,692.62	7,638.00	Top Gas			
8,574.62	8,520.00	Cameo Coals			
9,168.62	9,114.00	Rollins SS			
9,248.62	9,194.00	Cozzette			
9,422.62	9,368.00	Corcoran			
9,826.62	9,772.00	Upper Segó			
9,997.62	9,943.00	Lower Segó			
10,247.62	10,193.00	TD			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
120.00	120.00	0.00	0.00	Start Build 2.00
528.33	526.95	-23.99	16.39	Hold 8.17 Inclination
5,596.17	5,543.40	-618.35	422.57	Start Drop -1.50
6,140.62	6,086.00	-650.33	444.43	Vertical
6,240.62	6,186.00	-650.33	444.43	Mesaverde
10,247.62	10,193.00	-650.33	444.43	TD at 10247.62