

Axia Energy

Mesa County, Colorado
Kimball Creek 14-2D1-995 Pad
Kimball Creek 14-406D-995

Wellbore #1

Plan: plan1 10aug10 rbw

Standard Planning Report

17 August, 2010



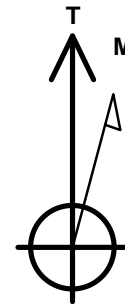
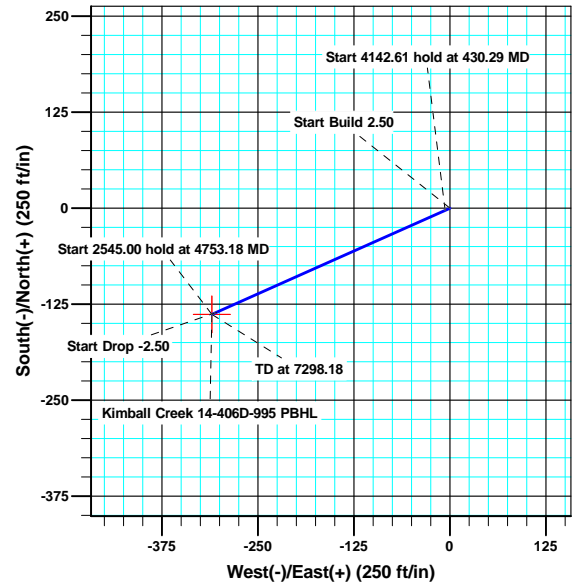
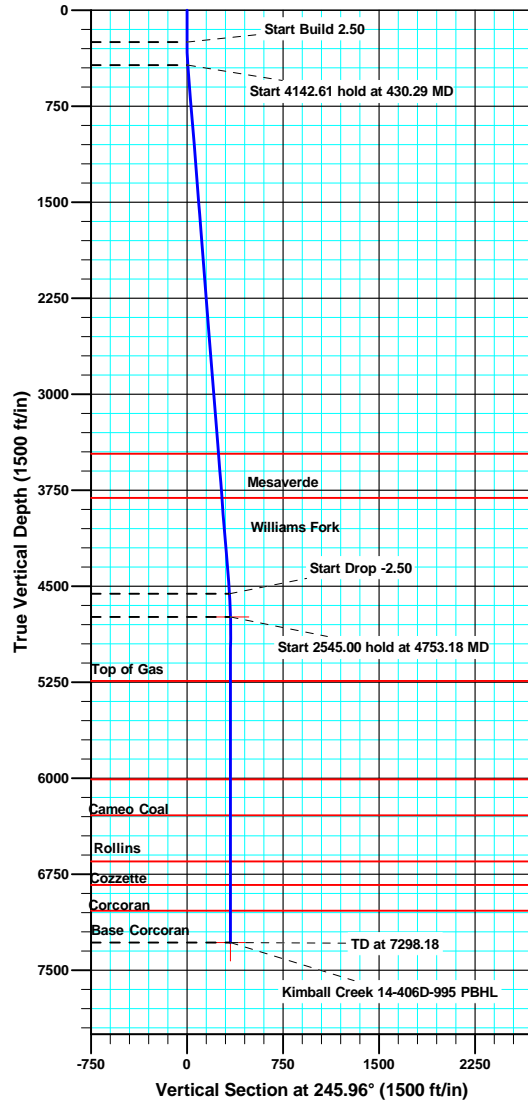
Kimball Creek 14-2D1-995 Pad

WELL DETAILS: Kimball Creek 14-406D-995

North American Datum 1983 , US State Plane 1983 , Colorado Central Zone

+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 1536040.99 2305683.60 39° 16' 45.95 N 107° 57' 11.22 W

Ground Level: 6874.00



Azimuths to True North
Magnetic North: 10.41°

Magnetic Field
Strength: 52215.6snT
Dip Angle: 65.59°
Date: 8/10/2010
Model: IGRF2010

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	Start Build 2.50
430.29	4.51	245.96	430.10	-2.89	-6.47	7.09	7.09	Start 4142.61 hold at 430.29 MD
4572.90	4.51	245.96	4559.90	-135.51	-303.77	332.63	332.63	Start Drop -2.50
4753.18	0.00	0.00	4740.00	-138.40	-310.25	339.72	339.72	Start 2545.00 hold at 4753.18 MD
7298.18	0.00	0.00	7285.00	-138.40	-310.25	339.72	339.72	TD at 7298.18

Database:	CompassVM	Local Co-ordinate Reference:	Well Kimball Creek 14-406D-995
Company:	Axia Energy	TVD Reference:	KB @ 6890.00ft
Project:	Mesa County, Colorado	MD Reference:	KB @ 6890.00ft
Site:	Kimball Creek 14-2D1-995 Pad	North Reference:	True
Well:	Kimball Creek 14-406D-995	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 10aug10 rbw		

Project	Mesa County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	Kimball Creek 14-2D1-995 Pad			
Site Position:		Northing:	1,536,040.99 usft	Latitude: 39° 16' 45.95 N
From:	Lat/Long	Easting:	2,305,683.60 usft	Longitude: 107° 57' 11.22 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence: -1.55 °

Well	Kimball Creek 14-406D-995			
Well Position	+N/-S	0.00 ft	Northing:	1,536,040.99 usft
	+E/-W	0.00 ft	Easting:	2,305,683.60 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:		Ground Level: 6,874.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/10/2010	10.41	65.59	52,216

Design	plan1 10aug10 rbw			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	245.96

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
430.29	4.51	245.96	430.10	-2.89	-6.47	2.50	2.50	0.00	245.96	
4,572.90	4.51	245.96	4,559.90	-135.51	-303.77	0.00	0.00	0.00	0.00	
4,753.18	0.00	0.00	4,740.00	-138.40	-310.25	2.50	-2.50	0.00	180.00	Kimball Creek 14-406
7,298.18	0.00	0.00	7,285.00	-138.40	-310.25	0.00	0.00	0.00	0.00	Kimball Creek 14-406

Database:	CompassVM	Local Co-ordinate Reference:	Well Kimball Creek 14-406D-995
Company:	Axia Energy	TVD Reference:	KB @ 6890.00ft
Project:	Mesa County, Colorado	MD Reference:	KB @ 6890.00ft
Site:	Kimball Creek 14-2D1-995 Pad	North Reference:	True
Well:	Kimball Creek 14-406D-995	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 10aug10 rbw		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.50									
300.00	1.25	245.96	300.00	-0.22	-0.50	0.55	2.50	2.50	0.00
400.00	3.75	245.96	399.89	-2.00	-4.48	4.91	2.50	2.50	0.00
430.29	4.51	245.96	430.10	-2.89	-6.47	7.09	2.50	2.50	0.00
Start 4142.61 hold at 430.29 MD									
500.00	4.51	245.96	499.60	-5.12	-11.48	12.57	0.00	0.00	0.00
600.00	4.51	245.96	599.29	-8.32	-18.65	20.42	0.00	0.00	0.00
700.00	4.51	245.96	698.98	-11.52	-25.83	28.28	0.00	0.00	0.00
800.00	4.51	245.96	798.67	-14.72	-33.01	36.14	0.00	0.00	0.00
900.00	4.51	245.96	898.36	-17.93	-40.18	44.00	0.00	0.00	0.00
1,000.00	4.51	245.96	998.05	-21.13	-47.36	51.86	0.00	0.00	0.00
1,100.00	4.51	245.96	1,097.74	-24.33	-54.54	59.72	0.00	0.00	0.00
1,200.00	4.51	245.96	1,197.43	-27.53	-61.71	67.57	0.00	0.00	0.00
1,300.00	4.51	245.96	1,297.12	-30.73	-68.89	75.43	0.00	0.00	0.00
1,400.00	4.51	245.96	1,396.82	-33.93	-76.07	83.29	0.00	0.00	0.00
1,500.00	4.51	245.96	1,496.51	-37.13	-83.24	91.15	0.00	0.00	0.00
1,600.00	4.51	245.96	1,596.20	-40.34	-90.42	99.01	0.00	0.00	0.00
1,700.00	4.51	245.96	1,695.89	-43.54	-97.60	106.87	0.00	0.00	0.00
1,800.00	4.51	245.96	1,795.58	-46.74	-104.77	114.72	0.00	0.00	0.00
1,900.00	4.51	245.96	1,895.27	-49.94	-111.95	122.58	0.00	0.00	0.00
2,000.00	4.51	245.96	1,994.96	-53.14	-119.13	130.44	0.00	0.00	0.00
2,100.00	4.51	245.96	2,094.65	-56.34	-126.30	138.30	0.00	0.00	0.00
2,200.00	4.51	245.96	2,194.34	-59.55	-133.48	146.16	0.00	0.00	0.00
2,300.00	4.51	245.96	2,294.03	-62.75	-140.66	154.02	0.00	0.00	0.00
2,400.00	4.51	245.96	2,393.72	-65.95	-147.83	161.87	0.00	0.00	0.00
2,500.00	4.51	245.96	2,493.41	-69.15	-155.01	169.73	0.00	0.00	0.00
2,600.00	4.51	245.96	2,593.10	-72.35	-162.19	177.59	0.00	0.00	0.00
2,700.00	4.51	245.96	2,692.80	-75.55	-169.36	185.45	0.00	0.00	0.00
2,800.00	4.51	245.96	2,792.49	-78.75	-176.54	193.31	0.00	0.00	0.00
2,900.00	4.51	245.96	2,892.18	-81.96	-183.72	201.17	0.00	0.00	0.00
3,000.00	4.51	245.96	2,991.87	-85.16	-190.89	209.03	0.00	0.00	0.00
3,100.00	4.51	245.96	3,091.56	-88.36	-198.07	216.88	0.00	0.00	0.00
3,200.00	4.51	245.96	3,191.25	-91.56	-205.25	224.74	0.00	0.00	0.00
3,300.00	4.51	245.96	3,290.94	-94.76	-212.42	232.60	0.00	0.00	0.00
3,400.00	4.51	245.96	3,390.63	-97.96	-219.60	240.46	0.00	0.00	0.00
3,474.60	4.51	245.96	3,465.00	-100.35	-224.95	246.32	0.00	0.00	0.00
Mesaverde									
3,500.00	4.51	245.96	3,490.32	-101.17	-226.78	248.32	0.00	0.00	0.00
3,600.00	4.51	245.96	3,590.01	-104.37	-233.95	256.18	0.00	0.00	0.00
3,700.00	4.51	245.96	3,689.70	-107.57	-241.13	264.03	0.00	0.00	0.00
3,800.00	4.51	245.96	3,789.39	-110.77	-248.31	271.89	0.00	0.00	0.00
3,820.67	4.51	245.96	3,810.00	-111.43	-249.79	273.52	0.00	0.00	0.00
Williams Fork									
3,900.00	4.51	245.96	3,889.08	-113.97	-255.48	279.75	0.00	0.00	0.00
4,000.00	4.51	245.96	3,988.77	-117.17	-262.66	287.61	0.00	0.00	0.00
4,100.00	4.51	245.96	4,088.47	-120.37	-269.83	295.47	0.00	0.00	0.00
4,200.00	4.51	245.96	4,188.16	-123.58	-277.01	303.33	0.00	0.00	0.00
4,300.00	4.51	245.96	4,287.85	-126.78	-284.19	311.18	0.00	0.00	0.00
4,400.00	4.51	245.96	4,387.54	-129.98	-291.36	319.04	0.00	0.00	0.00
4,500.00	4.51	245.96	4,487.23	-133.18	-298.54	326.90	0.00	0.00	0.00
4,572.90	4.51	245.96	4,559.90	-135.51	-303.77	332.63	0.00	0.00	0.00
Start Drop -2.50									

Database:	CompassVM	Local Co-ordinate Reference:	Well Kimball Creek 14-406D-995
Company:	Axia Energy	TVD Reference:	KB @ 6890.00ft
Project:	Mesa County, Colorado	MD Reference:	KB @ 6890.00ft
Site:	Kimball Creek 14-2D1-995 Pad	North Reference:	True
Well:	Kimball Creek 14-406D-995	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 10aug10 rbw		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,600.00	3.83	245.96	4,586.93	-136.32	-305.57	334.60	2.50	-2.50	0.00
4,700.00	1.33	245.96	4,686.82	-138.15	-309.68	339.10	2.50	-2.50	0.00
4,753.18	0.00	0.00	4,740.00	-138.40	-310.25	339.72	2.50	-2.50	0.00
Start 2545.00 hold at 4753.18 MD									
4,800.00	0.00	0.00	4,786.82	-138.40	-310.25	339.72	0.00	0.00	0.00
4,900.00	0.00	0.00	4,886.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,000.00	0.00	0.00	4,986.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,100.00	0.00	0.00	5,086.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,200.00	0.00	0.00	5,186.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,253.18	0.00	0.00	5,240.00	-138.40	-310.25	339.72	0.00	0.00	0.00
Top of Gas									
5,300.00	0.00	0.00	5,286.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,400.00	0.00	0.00	5,386.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,500.00	0.00	0.00	5,486.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,600.00	0.00	0.00	5,586.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,700.00	0.00	0.00	5,686.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,800.00	0.00	0.00	5,786.82	-138.40	-310.25	339.72	0.00	0.00	0.00
5,900.00	0.00	0.00	5,886.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,000.00	0.00	0.00	5,986.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,023.18	0.00	0.00	6,010.00	-138.40	-310.25	339.72	0.00	0.00	0.00
Cameo Coal									
6,100.00	0.00	0.00	6,086.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,200.00	0.00	0.00	6,186.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,300.00	0.00	0.00	6,286.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,303.18	0.00	0.00	6,290.00	-138.40	-310.25	339.72	0.00	0.00	0.00
Rollins									
6,400.00	0.00	0.00	6,386.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,500.00	0.00	0.00	6,486.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,600.00	0.00	0.00	6,586.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,663.18	0.00	0.00	6,650.00	-138.40	-310.25	339.72	0.00	0.00	0.00
Cozzette									
6,700.00	0.00	0.00	6,686.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,800.00	0.00	0.00	6,786.82	-138.40	-310.25	339.72	0.00	0.00	0.00
6,848.18	0.00	0.00	6,835.00	-138.40	-310.25	339.72	0.00	0.00	0.00
Corcoran									
6,900.00	0.00	0.00	6,886.82	-138.40	-310.25	339.72	0.00	0.00	0.00
7,000.00	0.00	0.00	6,986.82	-138.40	-310.25	339.72	0.00	0.00	0.00
7,048.18	0.00	0.00	7,035.00	-138.40	-310.25	339.72	0.00	0.00	0.00
Base Corcoran									
7,100.00	0.00	0.00	7,086.82	-138.40	-310.25	339.72	0.00	0.00	0.00
7,200.00	0.00	0.00	7,186.82	-138.40	-310.25	339.72	0.00	0.00	0.00
7,298.18	0.00	0.00	7,285.00	-138.40	-310.25	339.72	0.00	0.00	0.00
TD at 7298.18									

Database:	CompassVM	Local Co-ordinate Reference:	Well Kimball Creek 14-406D-995
Company:	Axia Energy	TVD Reference:	KB @ 6890.00ft
Project:	Mesa County, Colorado	MD Reference:	KB @ 6890.00ft
Site:	Kimball Creek 14-2D1-995 Pad	North Reference:	True
Well:	Kimball Creek 14-406D-995	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 10aug10 rbw		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
Kimball Creek 14-406D- - plan hits target center - Point	0.00	0.00	4,740.00	-138.40	-310.25	1,535,911.02	2,305,369.73	39° 16' 44.58 N	107° 57' 15.17 W
Kimball Creek 14-406D- - plan hits target center - Point	0.00	0.00	7,285.00	-138.40	-310.25	1,535,911.02	2,305,369.73	39° 16' 44.58 N	107° 57' 15.17 W

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
3,474.60	3,465.00	Mesaverde		0.00	
3,820.67	3,810.00	Williams Fork		0.00	
5,253.18	5,240.00	Top of Gas		0.00	
6,023.18	6,010.00	Cameo Coal		0.00	
6,303.18	6,290.00	Rollins		0.00	
6,663.18	6,650.00	Cozzette		0.00	
6,848.18	6,835.00	Corcoran		0.00	
7,048.18	7,035.00	Base Corcoran		0.00	

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
250.00	250.00	0.00	0.00	Start Build 2.50
430.29	430.10	-2.89	-6.47	Start 4142.61 hold at 430.29 MD
4,572.90	4,559.90	-135.51	-303.77	Start Drop -2.50
4,753.18	4,740.00	-138.40	-310.25	Start 2545.00 hold at 4753.18 MD
7,298.18	7,285.00	-138.40	-310.25	TD at 7298.18