

Axia Energy

Mesa County, Colorado
Kimball Creek 23-4C-995 Pad
Kimball Creek 23-214MD-995

Wellbore #1

Plan: plan1 08sept10 rbw

Standard Planning Report

08 September, 2010

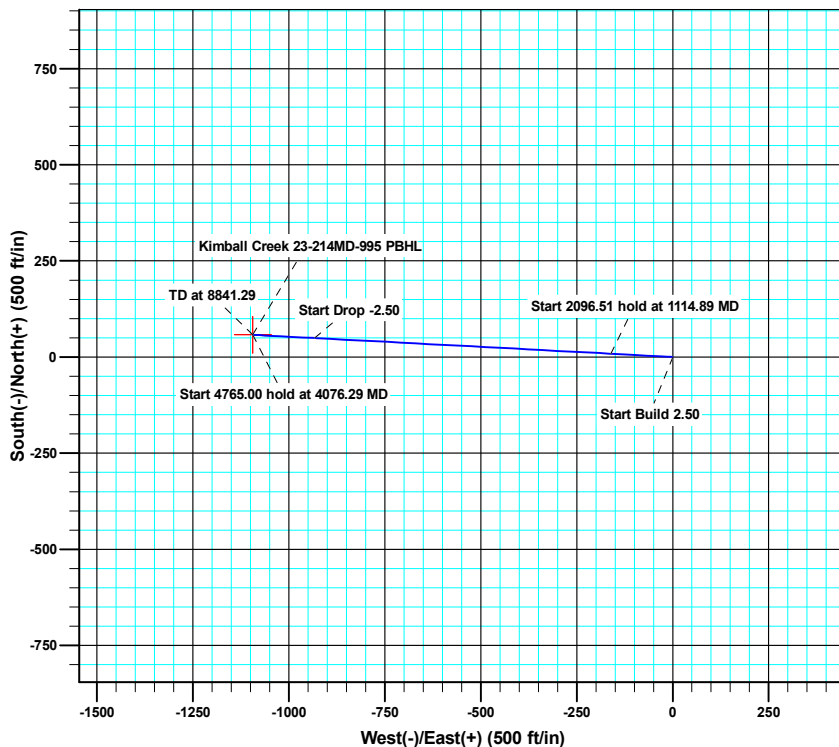
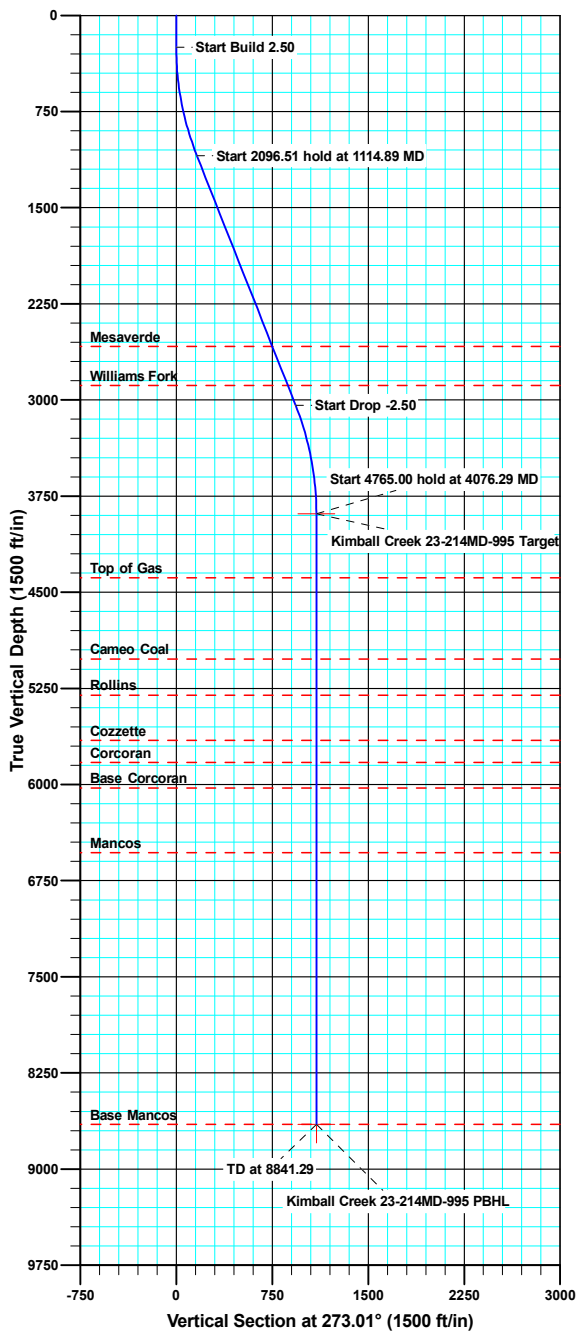




WELL DETAILS: Kimball Creek 23-214MD-995

Ground Level: 6367.00

North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 +N/-S +E/-W Northing Easting Latitude Longitude
 0.00 0.00 1527967.69 2303769.94 39° 15' 25.67 N 107° 57' 32.77 W



Azimuths to True North
 Magnetic North: 10.40°

Magnetic Field
 Strength: 52198.6snT
 Dip Angle: 65.57°
 Date: 09/08/2010
 Model: IGRF2010



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
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	
1114.89	21.62	273.01	1094.51	8.48	-161.05	2.50	273.01	161.27	
3211.40	21.62	273.01	3043.49	49.10	-932.51	0.00	0.00	933.80	
4076.29	0.00	0.00	3888.00	57.58	-1093.56	2.50	180.00	1095.07	Kimball Creek 23-214MD-995 Target
8841.29	0.00	0.00	8653.00	57.58	-1093.56	0.00	0.00	1095.07	Kimball Creek 23-214MD-995 PBHL

Database:	CompassVM	Local Co-ordinate Reference:	Well Kimball Creek 23-214MD-995
Company:	Axia Energy	TVD Reference:	KB @ 6383.00ft
Project:	Mesa County, Colorado	MD Reference:	KB @ 6383.00ft
Site:	Kimball Creek 23-4C-995 Pad	North Reference:	True
Well:	Kimball Creek 23-214MD-995	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 08sept10 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 23-4C-995 Pad			
Site Position:		Northing:	1,527,967.87 usft	Latitude: 39° 15' 25.68 N
From:	Lat/Long	Easting:	2,303,777.31 usft	Longitude: 107° 57' 32.68 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence: -1.55 °

Well	Kimball Creek 23-214MD-995			
Well Position	+N/-S	-0.37 ft	Northing:	1,527,967.70 usft
	+E/-W	-7.36 ft	Easting:	2,303,769.94 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Latitude: 39° 15' 25.67 N
				Longitude: 107° 57' 32.77 W
				Ground Level: 6,367.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/8/2010	10.40	65.57	52,199

Design	plan1 08sept10 rbw			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	273.01

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	
1,114.89	21.62	273.01	1,094.51	8.48	-161.05	2.50	2.50	0.00	273.01	
3,211.40	21.62	273.01	3,043.49	49.10	-932.51	0.00	0.00	0.00	0.00	
4,076.29	0.00	0.00	3,888.00	57.58	-1,093.56	2.50	-2.50	0.00	180.00	Kimball Creek 23-214
8,841.29	0.00	0.00	8,653.00	57.58	-1,093.56	0.00	0.00	0.00	0.00	Kimball Creek 23-214

Database:	CompassVM	Local Co-ordinate Reference:	Well Kimball Creek 23-214MD-995
Company:	Axia Energy	TVD Reference:	KB @ 6383.00ft
Project:	Mesa County, Colorado	MD Reference:	KB @ 6383.00ft
Site:	Kimball Creek 23-4C-995 Pad	North Reference:	True
Well:	Kimball Creek 23-214MD-995	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 08sept10 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	273.01	300.00	0.03	-0.54	0.55	2.50	2.50	0.00
400.00	3.75	273.01	399.89	0.26	-4.90	4.91	2.50	2.50	0.00
500.00	6.25	273.01	499.50	0.72	-13.60	13.62	2.50	2.50	0.00
600.00	8.75	273.01	598.64	1.40	-26.64	26.67	2.50	2.50	0.00
700.00	11.25	273.01	697.11	2.32	-43.98	44.04	2.50	2.50	0.00
800.00	13.75	273.01	794.74	3.45	-65.59	65.68	2.50	2.50	0.00
900.00	16.25	273.01	891.32	4.81	-91.43	91.56	2.50	2.50	0.00
1,000.00	18.75	273.01	986.69	6.40	-121.46	121.63	2.50	2.50	0.00
1,100.00	21.25	273.01	1,080.65	8.19	-155.61	155.83	2.50	2.50	0.00
1,114.89	21.62	273.01	1,094.51	8.48	-161.05	161.27	2.50	2.50	0.00
Start 2096.51 hold at 1114.89 MD									
1,200.00	21.62	273.01	1,173.63	10.13	-192.36	192.63	0.00	0.00	0.00
1,300.00	21.62	273.01	1,266.59	12.07	-229.16	229.48	0.00	0.00	0.00
1,400.00	21.62	273.01	1,359.55	14.00	-265.96	266.33	0.00	0.00	0.00
1,500.00	21.62	273.01	1,452.52	15.94	-302.76	303.18	0.00	0.00	0.00
1,600.00	21.62	273.01	1,545.48	17.88	-339.55	340.02	0.00	0.00	0.00
1,700.00	21.62	273.01	1,638.44	19.82	-376.35	376.87	0.00	0.00	0.00
1,800.00	21.62	273.01	1,731.41	21.75	-413.15	413.72	0.00	0.00	0.00
1,900.00	21.62	273.01	1,824.37	23.69	-449.95	450.57	0.00	0.00	0.00
2,000.00	21.62	273.01	1,917.33	25.63	-486.74	487.42	0.00	0.00	0.00
2,100.00	21.62	273.01	2,010.30	27.57	-523.54	524.27	0.00	0.00	0.00
2,200.00	21.62	273.01	2,103.26	29.50	-560.34	561.12	0.00	0.00	0.00
2,300.00	21.62	273.01	2,196.22	31.44	-597.14	597.96	0.00	0.00	0.00
2,400.00	21.62	273.01	2,289.19	33.38	-633.94	634.81	0.00	0.00	0.00
2,500.00	21.62	273.01	2,382.15	35.32	-670.73	671.66	0.00	0.00	0.00
2,600.00	21.62	273.01	2,475.11	37.25	-707.53	708.51	0.00	0.00	0.00
2,700.00	21.62	273.01	2,568.08	39.19	-744.33	745.36	0.00	0.00	0.00
2,716.05	21.62	273.01	2,583.00	39.50	-750.23	751.27	0.00	0.00	0.00
Mesaverde									
2,800.00	21.62	273.01	2,661.04	41.13	-781.13	782.21	0.00	0.00	0.00
2,900.00	21.62	273.01	2,754.00	43.07	-817.92	819.06	0.00	0.00	0.00
3,000.00	21.62	273.01	2,846.97	45.00	-854.72	855.90	0.00	0.00	0.00
3,044.14	21.62	273.01	2,888.00	45.86	-870.96	872.17	0.00	0.00	0.00
Williams Fork									
3,100.00	21.62	273.01	2,939.93	46.94	-891.52	892.75	0.00	0.00	0.00
3,200.00	21.62	273.01	3,032.89	48.88	-928.32	929.60	0.00	0.00	0.00
3,211.40	21.62	273.01	3,043.49	49.10	-932.51	933.80	0.00	0.00	0.00
Start Drop -2.50									
3,300.00	19.41	273.01	3,126.47	50.73	-963.52	964.85	2.50	-2.50	0.00
3,400.00	16.91	273.01	3,221.48	52.37	-994.63	996.01	2.50	-2.50	0.00
3,500.00	14.41	273.01	3,317.76	53.79	-1,021.58	1,023.00	2.50	-2.50	0.00
3,600.00	11.91	273.01	3,415.13	54.99	-1,044.31	1,045.76	2.50	-2.50	0.00
3,700.00	9.41	273.01	3,513.40	55.96	-1,062.78	1,064.25	2.50	-2.50	0.00
3,800.00	6.91	273.01	3,612.38	56.70	-1,076.95	1,078.44	2.50	-2.50	0.00
3,900.00	4.41	273.01	3,711.88	57.22	-1,086.79	1,088.29	2.50	-2.50	0.00
4,000.00	1.91	273.01	3,811.72	57.51	-1,092.29	1,093.80	2.50	-2.50	0.00
4,076.29	0.00	0.00	3,888.00	57.58	-1,093.56	1,095.07	2.50	-2.50	0.00
Start 4765.00 hold at 4076.29 MD - Kimball Creek 23-214MD-995 Target									
4,100.00	0.00	0.00	3,911.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
4,200.00	0.00	0.00	4,011.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
4,300.00	0.00	0.00	4,111.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00

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Company:	Axia Energy	TVD Reference:	KB @ 6383.00ft
Project:	Mesa County, Colorado	MD Reference:	KB @ 6383.00ft
Site:	Kimball Creek 23-4C-995 Pad	North Reference:	True
Well:	Kimball Creek 23-214MD-995	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 08sept10 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)
4,400.00	0.00	0.00	4,211.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
4,500.00	0.00	0.00	4,311.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
4,576.29	0.00	0.00	4,388.00	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
Top of Gas									
4,600.00	0.00	0.00	4,411.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
4,700.00	0.00	0.00	4,511.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
4,800.00	0.00	0.00	4,611.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
4,900.00	0.00	0.00	4,711.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,000.00	0.00	0.00	4,811.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,100.00	0.00	0.00	4,911.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,200.00	0.00	0.00	5,011.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,211.29	0.00	0.00	5,023.00	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
Cameo Coal									
5,300.00	0.00	0.00	5,111.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,400.00	0.00	0.00	5,211.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,491.29	0.00	0.00	5,303.00	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
Rollins									
5,500.00	0.00	0.00	5,311.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,600.00	0.00	0.00	5,411.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,700.00	0.00	0.00	5,511.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,800.00	0.00	0.00	5,611.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
5,844.29	0.00	0.00	5,656.00	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
Cozzette									
5,900.00	0.00	0.00	5,711.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,000.00	0.00	0.00	5,811.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,016.29	0.00	0.00	5,828.00	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
Corcoran									
6,100.00	0.00	0.00	5,911.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,200.00	0.00	0.00	6,011.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,216.29	0.00	0.00	6,028.00	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
Base Corcoran									
6,300.00	0.00	0.00	6,111.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,400.00	0.00	0.00	6,211.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,500.00	0.00	0.00	6,311.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,600.00	0.00	0.00	6,411.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,700.00	0.00	0.00	6,511.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,721.29	0.00	0.00	6,533.00	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
Mancos									
6,800.00	0.00	0.00	6,611.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
6,900.00	0.00	0.00	6,711.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,000.00	0.00	0.00	6,811.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,100.00	0.00	0.00	6,911.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,200.00	0.00	0.00	7,011.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,300.00	0.00	0.00	7,111.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,400.00	0.00	0.00	7,211.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,500.00	0.00	0.00	7,311.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,600.00	0.00	0.00	7,411.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,700.00	0.00	0.00	7,511.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,800.00	0.00	0.00	7,611.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
7,900.00	0.00	0.00	7,711.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
8,000.00	0.00	0.00	7,811.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
8,100.00	0.00	0.00	7,911.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
8,200.00	0.00	0.00	8,011.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00

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Project:	Mesa County, Colorado	MD Reference:	KB @ 6383.00ft
Site:	Kimball Creek 23-4C-995 Pad	North Reference:	True
Well:	Kimball Creek 23-214MD-995	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 08sept10 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)
8,300.00	0.00	0.00	8,111.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
8,400.00	0.00	0.00	8,211.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
8,500.00	0.00	0.00	8,311.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
8,600.00	0.00	0.00	8,411.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
8,700.00	0.00	0.00	8,511.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
8,800.00	0.00	0.00	8,611.71	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
8,841.29	0.00	0.00	8,653.00	57.58	-1,093.56	1,095.07	0.00	0.00	0.00
TD at 8841.29 - Base Mancos - Kimball Creek 23-214MD-995 PBHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Kimball Creek 23-214MI - plan hits target center - Point	0.00	0.00	3,888.00	57.58	-1,093.56	1,528,054.85	2,302,678.35	39° 15' 26.24 N	107° 57' 46.67 W
Kimball Creek 23-214MI - plan hits target center - Point	0.00	0.00	8,653.00	57.58	-1,093.56	1,528,054.85	2,302,678.35	39° 15' 26.24 N	107° 57' 46.67 W

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,716.05	2,583.00	Mesaverde		0.00		
3,044.14	2,888.00	Williams Fork		0.00		
4,576.29	4,388.00	Top of Gas		0.00		
5,211.29	5,023.00	Cameo Coal		0.00		
5,491.29	5,303.00	Rollins		0.00		
5,844.29	5,656.00	Cozzette		0.00		
6,016.29	5,828.00	Corcoran		0.00		
6,216.29	6,028.00	Base Corcoran		0.00		
6,721.29	6,533.00	Mancos		0.00		
8,841.29	8,653.00	Base Mancos		0.00		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
250.00	250.00	0.00	0.00	Start Build 2.50
1,114.89	1,094.51	8.48	-161.05	Start 2096.51 hold at 1114.89 MD
3,211.40	3,043.49	49.10	-932.51	Start Drop -2.50
4,076.29	3,888.00	57.58	-1,093.56	Start 4765.00 hold at 4076.29 MD
8,841.29	8,653.00	57.58	-1,093.56	TD at 8841.29