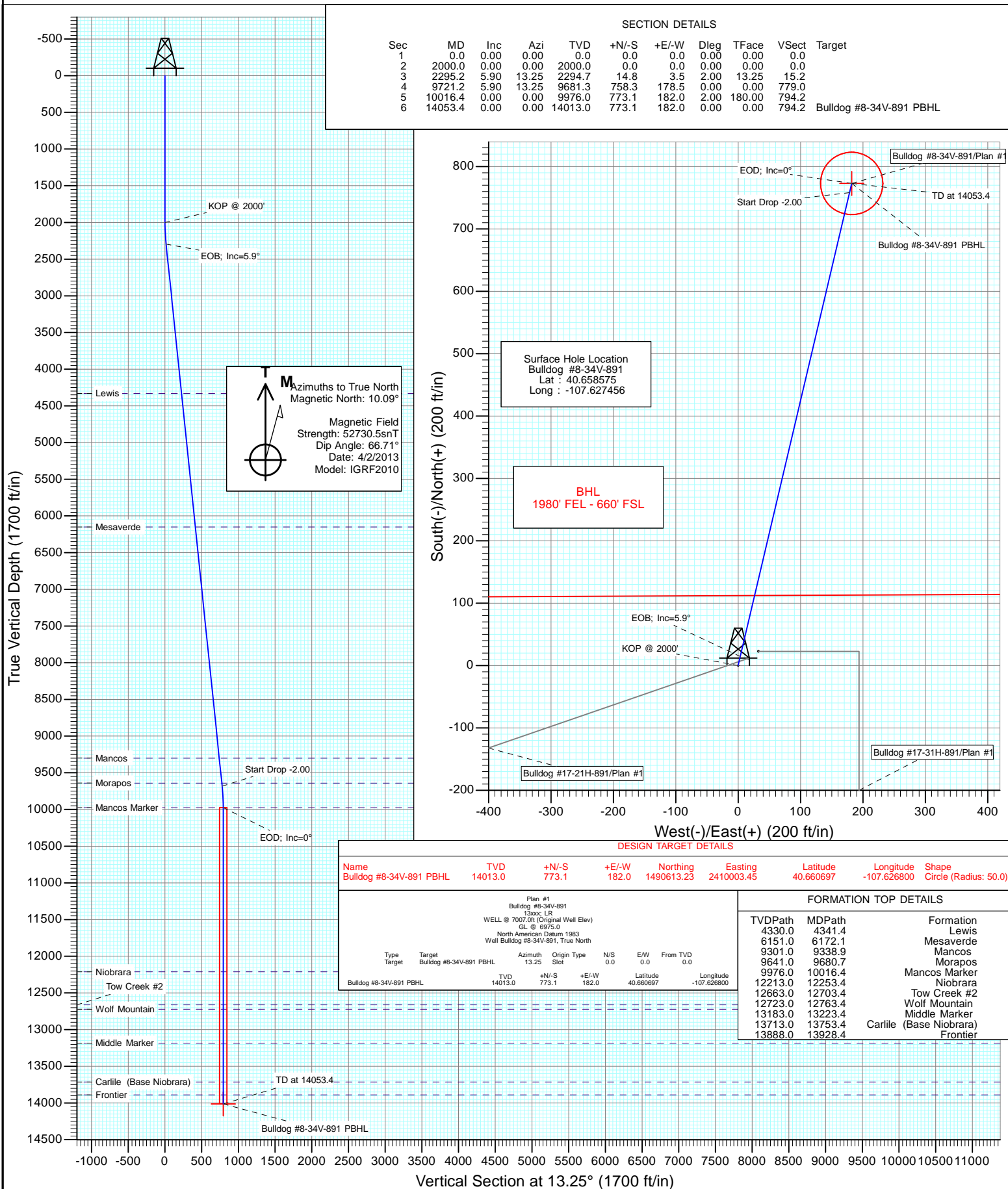




Project: Moffat County, CO
Site: SEC 17-T8N-R91W
Well: Bulldog #8-34V-891
Wellbore: DD
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Company:	Axia Energy	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Project:	Moffat County, CO	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site:	SEC 17-T8N-R91W	North Reference:	True
Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Project	Moffat County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		SEC 17-T8N-R91W			
Site Position:		Northing:	1,489,855.99 ft	Latitude:	40.658607
From:	Lat/Long	Easting:	2,409,819.60 ft	Longitude:	-107.627397
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.37 °

Well	Bulldog #8-34V-891					
Well Position	+N/-S	0.0 ft	Northing:	1,489,844.72 ft	Latitude:	40.658575
	+E/-W	0.0 ft	Easting:	2,409,802.96 ft	Longitude:	-107.627456
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,975.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/2/2013	10.09	66.71	52,731

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	13.25	

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,295.2	5.90	13.25	2,294.7	14.8	3.5	2.00	2.00	0.00	13.25	
9,721.2	5.90	13.25	9,681.3	758.3	178.5	0.00	0.00	0.00	0.00	
10,016.4	0.00	0.00	9,976.0	773.1	182.0	2.00	-2.00	0.00	180.00	
14,053.4	0.00	0.00	14,013.0	773.1	182.0	0.00	0.00	0.00	0.00	Bulldog #8-34V-891 F

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Company:	Axia Energy	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Project:	Moffat County, CO	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site:	SEC 17-T8N-R91W	North Reference:	True
Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	KOP @ 2000'
2,100.0	2.00	13.25	2,100.0	1.7	0.4	1.7	2.00	2.00	
2,200.0	4.00	13.25	2,199.8	6.8	1.6	7.0	2.00	2.00	
2,295.2	5.90	13.25	2,294.7	14.8	3.5	15.2	2.00	2.00	EOB; Inc=5.9°
2,300.0	5.90	13.25	2,299.5	15.3	3.6	15.7	0.00	0.00	
2,400.0	5.90	13.25	2,398.9	25.3	6.0	26.0	0.00	0.00	
2,500.0	5.90	13.25	2,498.4	35.3	8.3	36.3	0.00	0.00	
2,600.0	5.90	13.25	2,597.9	45.3	10.7	46.5	0.00	0.00	
2,700.0	5.90	13.25	2,697.3	55.3	13.0	56.8	0.00	0.00	
2,800.0	5.90	13.25	2,796.8	65.3	15.4	67.1	0.00	0.00	
2,900.0	5.90	13.25	2,896.3	75.3	17.7	77.4	0.00	0.00	
3,000.0	5.90	13.25	2,995.7	85.4	20.1	87.7	0.00	0.00	
3,100.0	5.90	13.25	3,095.2	95.4	22.5	98.0	0.00	0.00	
3,200.0	5.90	13.25	3,194.7	105.4	24.8	108.3	0.00	0.00	
3,300.0	5.90	13.25	3,294.1	115.4	27.2	118.5	0.00	0.00	
3,400.0	5.90	13.25	3,393.6	125.4	29.5	128.8	0.00	0.00	
3,500.0	5.90	13.25	3,493.1	135.4	31.9	139.1	0.00	0.00	
3,600.0	5.90	13.25	3,592.6	145.4	34.2	149.4	0.00	0.00	
3,700.0	5.90	13.25	3,692.0	155.4	36.6	159.7	0.00	0.00	
3,800.0	5.90	13.25	3,791.5	165.5	39.0	170.0	0.00	0.00	
3,900.0	5.90	13.25	3,891.0	175.5	41.3	180.3	0.00	0.00	
4,000.0	5.90	13.25	3,990.4	185.5	43.7	190.6	0.00	0.00	
4,100.0	5.90	13.25	4,089.9	195.5	46.0	200.8	0.00	0.00	
4,200.0	5.90	13.25	4,189.4	205.5	48.4	211.1	0.00	0.00	
4,300.0	5.90	13.25	4,288.8	215.5	50.7	221.4	0.00	0.00	
4,341.4	5.90	13.25	4,330.0	219.7	51.7	225.7	0.00	0.00	Lewis
4,400.0	5.90	13.25	4,388.3	225.5	53.1	231.7	0.00	0.00	
4,500.0	5.90	13.25	4,487.8	235.5	55.5	242.0	0.00	0.00	
4,600.0	5.90	13.25	4,587.3	245.6	57.8	252.3	0.00	0.00	
4,700.0	5.90	13.25	4,686.7	255.6	60.2	262.6	0.00	0.00	
4,800.0	5.90	13.25	4,786.2	265.6	62.5	272.8	0.00	0.00	
4,900.0	5.90	13.25	4,885.7	275.6	64.9	283.1	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Company:	Axia Energy	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Project:	Moffat County, CO	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site:	SEC 17-T8N-R91W	North Reference:	True
Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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)	Comments / Formations
5,000.0	5.90	13.25	4,985.1	285.6	67.2	293.4	0.00	0.00	
5,100.0	5.90	13.25	5,084.6	295.6	69.6	303.7	0.00	0.00	
5,200.0	5.90	13.25	5,184.1	305.6	72.0	314.0	0.00	0.00	
5,300.0	5.90	13.25	5,283.5	315.6	74.3	324.3	0.00	0.00	
5,400.0	5.90	13.25	5,383.0	325.7	76.7	334.6	0.00	0.00	
5,500.0	5.90	13.25	5,482.5	335.7	79.0	344.8	0.00	0.00	
5,600.0	5.90	13.25	5,581.9	345.7	81.4	355.1	0.00	0.00	
5,700.0	5.90	13.25	5,681.4	355.7	83.7	365.4	0.00	0.00	
5,800.0	5.90	13.25	5,780.9	365.7	86.1	375.7	0.00	0.00	
5,900.0	5.90	13.25	5,880.4	375.7	88.4	386.0	0.00	0.00	
6,000.0	5.90	13.25	5,979.8	385.7	90.8	396.3	0.00	0.00	
6,100.0	5.90	13.25	6,079.3	395.7	93.2	406.6	0.00	0.00	
6,172.1	5.90	13.25	6,151.0	403.0	94.9	414.0	0.00	0.00	Mesaverde
6,200.0	5.90	13.25	6,178.8	405.8	95.5	416.8	0.00	0.00	
6,300.0	5.90	13.25	6,278.2	415.8	97.9	427.1	0.00	0.00	
6,400.0	5.90	13.25	6,377.7	425.8	100.2	437.4	0.00	0.00	
6,500.0	5.90	13.25	6,477.2	435.8	102.6	447.7	0.00	0.00	
6,600.0	5.90	13.25	6,576.6	445.8	104.9	458.0	0.00	0.00	
6,700.0	5.90	13.25	6,676.1	455.8	107.3	468.3	0.00	0.00	
6,800.0	5.90	13.25	6,775.6	465.8	109.7	478.6	0.00	0.00	
6,900.0	5.90	13.25	6,875.1	475.8	112.0	488.8	0.00	0.00	
7,000.0	5.90	13.25	6,974.5	485.9	114.4	499.1	0.00	0.00	
7,100.0	5.90	13.25	7,074.0	495.9	116.7	509.4	0.00	0.00	
7,200.0	5.90	13.25	7,173.5	505.9	119.1	519.7	0.00	0.00	
7,300.0	5.90	13.25	7,272.9	515.9	121.4	530.0	0.00	0.00	
7,400.0	5.90	13.25	7,372.4	525.9	123.8	540.3	0.00	0.00	
7,500.0	5.90	13.25	7,471.9	535.9	126.2	550.6	0.00	0.00	
7,600.0	5.90	13.25	7,571.3	545.9	128.5	560.8	0.00	0.00	
7,700.0	5.90	13.25	7,670.8	555.9	130.9	571.1	0.00	0.00	
7,800.0	5.90	13.25	7,770.3	565.9	133.2	581.4	0.00	0.00	
7,900.0	5.90	13.25	7,869.7	576.0	135.6	591.7	0.00	0.00	
8,000.0	5.90	13.25	7,969.2	586.0	137.9	602.0	0.00	0.00	
8,100.0	5.90	13.25	8,068.7	596.0	140.3	612.3	0.00	0.00	
8,200.0	5.90	13.25	8,168.2	606.0	142.7	622.6	0.00	0.00	
8,300.0	5.90	13.25	8,267.6	616.0	145.0	632.9	0.00	0.00	
8,400.0	5.90	13.25	8,367.1	626.0	147.4	643.1	0.00	0.00	
8,500.0	5.90	13.25	8,466.6	636.0	149.7	653.4	0.00	0.00	
8,600.0	5.90	13.25	8,566.0	646.0	152.1	663.7	0.00	0.00	
8,700.0	5.90	13.25	8,665.5	656.1	154.4	674.0	0.00	0.00	
8,800.0	5.90	13.25	8,765.0	666.1	156.8	684.3	0.00	0.00	
8,900.0	5.90	13.25	8,864.4	676.1	159.2	694.6	0.00	0.00	
9,000.0	5.90	13.25	8,963.9	686.1	161.5	704.9	0.00	0.00	
9,100.0	5.90	13.25	9,063.4	696.1	163.9	715.1	0.00	0.00	
9,200.0	5.90	13.25	9,162.9	706.1	166.2	725.4	0.00	0.00	
9,300.0	5.90	13.25	9,262.3	716.1	168.6	735.7	0.00	0.00	
9,338.9	5.90	13.25	9,301.0	720.0	169.5	739.7	0.00	0.00	Mancos
9,400.0	5.90	13.25	9,361.8	726.1	170.9	746.0	0.00	0.00	
9,500.0	5.90	13.25	9,461.3	736.2	173.3	756.3	0.00	0.00	
9,600.0	5.90	13.25	9,560.7	746.2	175.7	766.6	0.00	0.00	
9,680.7	5.90	13.25	9,641.0	754.2	177.6	774.9	0.00	0.00	Morapos
9,700.0	5.90	13.25	9,660.2	756.2	178.0	776.9	0.00	0.00	
9,721.2	5.90	13.25	9,681.3	758.3	178.5	779.0	0.00	0.00	Start Drop -2.00

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Company:	Axia Energy	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Project:	Moffat County, CO	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site:	SEC 17-T8N-R91W	North Reference:	True
Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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)	Comments / Formations
9,800.0	4.33	13.25	9,759.8	765.1	180.1	786.1	2.00	-2.00	
9,900.0	2.33	13.25	9,859.6	770.8	181.5	791.9	2.00	-2.00	
10,000.0	0.33	13.25	9,959.6	773.1	182.0	794.2	2.00	-2.00	
10,016.4	0.00	0.00	9,976.0	773.1	182.0	794.2	2.00	-2.00	EOD; Inc=0° - Mancos Marker
10,100.0	0.00	0.00	10,059.6	773.1	182.0	794.2	0.00	0.00	
10,200.0	0.00	0.00	10,159.6	773.1	182.0	794.2	0.00	0.00	
10,300.0	0.00	0.00	10,259.6	773.1	182.0	794.2	0.00	0.00	
10,400.0	0.00	0.00	10,359.6	773.1	182.0	794.2	0.00	0.00	
10,500.0	0.00	0.00	10,459.6	773.1	182.0	794.2	0.00	0.00	
10,600.0	0.00	0.00	10,559.6	773.1	182.0	794.2	0.00	0.00	
10,700.0	0.00	0.00	10,659.6	773.1	182.0	794.2	0.00	0.00	
10,800.0	0.00	0.00	10,759.6	773.1	182.0	794.2	0.00	0.00	
10,900.0	0.00	0.00	10,859.6	773.1	182.0	794.2	0.00	0.00	
11,000.0	0.00	0.00	10,959.6	773.1	182.0	794.2	0.00	0.00	
11,100.0	0.00	0.00	11,059.6	773.1	182.0	794.2	0.00	0.00	
11,200.0	0.00	0.00	11,159.6	773.1	182.0	794.2	0.00	0.00	
11,300.0	0.00	0.00	11,259.6	773.1	182.0	794.2	0.00	0.00	
11,400.0	0.00	0.00	11,359.6	773.1	182.0	794.2	0.00	0.00	
11,500.0	0.00	0.00	11,459.6	773.1	182.0	794.2	0.00	0.00	
11,600.0	0.00	0.00	11,559.6	773.1	182.0	794.2	0.00	0.00	
11,700.0	0.00	0.00	11,659.6	773.1	182.0	794.2	0.00	0.00	
11,800.0	0.00	0.00	11,759.6	773.1	182.0	794.2	0.00	0.00	
11,900.0	0.00	0.00	11,859.6	773.1	182.0	794.2	0.00	0.00	
12,000.0	0.00	0.00	11,959.6	773.1	182.0	794.2	0.00	0.00	
12,100.0	0.00	0.00	12,059.6	773.1	182.0	794.2	0.00	0.00	
12,200.0	0.00	0.00	12,159.6	773.1	182.0	794.2	0.00	0.00	
12,253.4	0.00	0.00	12,213.0	773.1	182.0	794.2	0.00	0.00	Niobrara
12,300.0	0.00	0.00	12,259.6	773.1	182.0	794.2	0.00	0.00	
12,400.0	0.00	0.00	12,359.6	773.1	182.0	794.2	0.00	0.00	
12,500.0	0.00	0.00	12,459.6	773.1	182.0	794.2	0.00	0.00	
12,600.0	0.00	0.00	12,559.6	773.1	182.0	794.2	0.00	0.00	
12,700.0	0.00	0.00	12,659.6	773.1	182.0	794.2	0.00	0.00	
12,703.4	0.00	0.00	12,663.0	773.1	182.0	794.2	0.00	0.00	Tow Creek #2
12,763.4	0.00	0.00	12,723.0	773.1	182.0	794.2	0.00	0.00	Wolf Mountain
12,800.0	0.00	0.00	12,759.6	773.1	182.0	794.2	0.00	0.00	
12,900.0	0.00	0.00	12,859.6	773.1	182.0	794.2	0.00	0.00	
13,000.0	0.00	0.00	12,959.6	773.1	182.0	794.2	0.00	0.00	
13,100.0	0.00	0.00	13,059.6	773.1	182.0	794.2	0.00	0.00	
13,200.0	0.00	0.00	13,159.6	773.1	182.0	794.2	0.00	0.00	
13,223.4	0.00	0.00	13,183.0	773.1	182.0	794.2	0.00	0.00	Middle Marker
13,300.0	0.00	0.00	13,259.6	773.1	182.0	794.2	0.00	0.00	
13,400.0	0.00	0.00	13,359.6	773.1	182.0	794.2	0.00	0.00	
13,500.0	0.00	0.00	13,459.6	773.1	182.0	794.2	0.00	0.00	
13,600.0	0.00	0.00	13,559.6	773.1	182.0	794.2	0.00	0.00	
13,700.0	0.00	0.00	13,659.6	773.1	182.0	794.2	0.00	0.00	
13,753.4	0.00	0.00	13,713.0	773.1	182.0	794.2	0.00	0.00	Carlile (Base Niobrara)
13,800.0	0.00	0.00	13,759.6	773.1	182.0	794.2	0.00	0.00	
13,900.0	0.00	0.00	13,859.6	773.1	182.0	794.2	0.00	0.00	
13,928.4	0.00	0.00	13,888.0	773.1	182.0	794.2	0.00	0.00	Frontier
14,000.0	0.00	0.00	13,959.6	773.1	182.0	794.2	0.00	0.00	
14,053.4	0.00	0.00	14,013.0	773.1	182.0	794.2	0.00	0.00	TD at 14053.4 - Bulldog #8-34V-891 PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Company:	Axia Energy	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Project:	Moffat County, CO	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site:	SEC 17-T8N-R91W	North Reference:	True
Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Bulldog #8-34V-891 PB† - plan hits target center - Circle (radius 50.0)	0.00	0.00	14,013.0	773.1	182.0	1,490,613.23	2,410,003.45	40.660697	-107.626800

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
4,341.4	4,330.0	Lewis				
6,172.1	6,151.0	Mesaverde				
9,338.9	9,301.0	Mancos				
9,680.7	9,641.0	Morapos				
10,016.4	9,976.0	Mancos Marker				
12,253.4	12,213.0	Niobrara				
12,703.4	12,663.0	Tow Creek #2				
12,763.4	12,723.0	Wolf Mountain				
13,223.4	13,183.0	Middle Marker				
13,753.4	13,713.0	Carlile (Base Niobrara)				
13,928.4	13,888.0	Frontier				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	Comment	
2,000.0	2,000.0	0.0	0.0	KOP @ 2000'	
2,295.2	2,294.7	14.8	3.5	EOB; Inc=5.9°	
9,721.2	9,681.3	758.3	178.5	Start Drop -2.00	
10,016.4	9,976.0	773.1	182.0	EOD; Inc=0°	
14,053.4	14,013.0	773.1	182.0	TD at 14053.4	

Axia Energy

Moffat County, CO

SEC 17-T8N-R91W

Bulldog #8-34V-891

DD

Plan #1

Anticollision Report

02 April, 2013

Anticollision Report

Company:	Axia Energy	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Project:	Moffat County, CO	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Reference Site:	SEC 17-T8N-R91W	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	4/2/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	14,053.4	Plan #1 (DD)	MWD	Geolink MWD

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SEC 17-T8N-R91W						
Bulldog #17-21H-891 - Hz - Plan #1	2,295.0	2,294.5	13.3	5.3	1.676	CC
Bulldog #17-21H-891 - Hz - Plan #1	2,300.0	2,299.5	13.3	5.3	1.673	ES, SF
Bulldog #17-31H-891 - Hz - Plan #1	2,437.6	2,436.3	26.6	18.2	3.153	CC, ES, SF

Anticollision Report

Company:	Axia Energy	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Project:	Moffat County, CO	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Reference Site:	SEC 17-T8N-R91W	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 17-T8N-R91W - Bulldog #17-21H-891 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	54.53	11.7	16.4	20.1					
100.0	100.0	100.0	100.0	0.1	0.1	54.53	11.7	16.4	20.1	19.9	0.24	84.675		
200.0	200.0	200.0	200.0	0.3	0.3	54.53	11.7	16.4	20.1	19.5	0.59	34.273		
300.0	300.0	300.0	300.0	0.5	0.5	54.53	11.7	16.4	20.1	19.2	0.94	21.485		
400.0	400.0	400.0	400.0	0.6	0.6	54.53	11.7	16.4	20.1	18.8	1.28	15.647		
500.0	500.0	500.0	500.0	0.8	0.8	54.53	11.7	16.4	20.1	18.5	1.63	12.303		
600.0	600.0	600.0	600.0	1.0	1.0	54.53	11.7	16.4	20.1	18.1	1.98	10.137		
700.0	700.0	700.0	700.0	1.2	1.2	54.53	11.7	16.4	20.1	17.8	2.33	8.620		
800.0	800.0	800.0	800.0	1.3	1.3	54.53	11.7	16.4	20.1	17.4	2.68	7.497		
900.0	900.0	900.0	900.0	1.5	1.5	54.53	11.7	16.4	20.1	17.1	3.03	6.634		
1,000.0	1,000.0	1,000.0	1,000.0	1.7	1.7	54.53	11.7	16.4	20.1	16.7	3.38	5.948		
1,100.0	1,100.0	1,100.0	1,100.0	1.9	1.9	54.53	11.7	16.4	20.1	16.4	3.73	5.391		
1,200.0	1,200.0	1,200.0	1,200.0	2.0	2.0	54.53	11.7	16.4	20.1	16.0	4.08	4.930		
1,300.0	1,300.0	1,300.0	1,300.0	2.2	2.2	54.53	11.7	16.4	20.1	15.7	4.43	4.541		
1,400.0	1,400.0	1,400.0	1,400.0	2.4	2.4	54.53	11.7	16.4	20.1	15.3	4.78	4.209		
1,500.0	1,500.0	1,500.0	1,500.0	2.6	2.6	54.53	11.7	16.4	20.1	15.0	5.12	3.922		
1,600.0	1,600.0	1,600.0	1,600.0	2.7	2.7	54.53	11.7	16.4	20.1	14.6	5.47	3.672		
1,700.0	1,700.0	1,700.0	1,700.0	2.9	2.9	54.53	11.7	16.4	20.1	14.3	5.82	3.452		
1,800.0	1,800.0	1,800.0	1,800.0	3.1	3.1	54.53	11.7	16.4	20.1	13.9	6.17	3.257		
1,900.0	1,900.0	1,900.0	1,900.0	3.3	3.3	54.53	11.7	16.4	20.1	13.6	6.52	3.082		
2,000.0	2,000.0	2,000.0	2,000.0	3.4	3.4	54.53	11.7	16.4	20.1	13.2	6.87	2.926		
2,100.0	2,100.0	2,100.0	2,100.0	3.6	3.6	44.81	11.7	16.4	18.8	11.6	7.22	2.608		
2,200.0	2,199.8	2,199.8	2,199.8	3.8	3.8	58.57	11.7	16.4	15.6	8.0	7.57	2.055		
2,295.0	2,294.5	2,294.5	2,294.5	4.0	3.9	89.98	11.7	16.4	13.3	5.3	7.91	1.676 CC		
2,300.0	2,299.5	2,299.5	2,299.5	4.0	4.0	92.52	11.7	16.4	13.3	5.3	7.93	1.673 ES, SF		
2,400.0	2,398.9	2,398.9	2,398.9	4.2	4.1	129.20	11.7	16.4	17.1	8.9	8.27	2.072		
2,500.0	2,498.4	2,498.4	2,498.4	4.4	4.3	147.78	11.7	16.4	25.0	16.4	8.61	2.900		
2,600.0	2,597.9	2,597.9	2,597.9	4.6	4.5	157.02	11.7	16.4	34.1	25.2	8.95	3.812		
2,700.0	2,697.3	2,697.3	2,697.3	4.8	4.7	162.28	11.7	16.4	43.8	34.5	9.30	4.710		
2,800.0	2,796.8	2,796.8	2,796.8	5.0	4.8	165.62	11.7	16.4	53.7	44.0	9.64	5.568		
2,900.0	2,896.3	2,896.3	2,896.3	5.2	5.0	167.92	11.7	16.4	63.7	53.7	9.99	6.378		
3,000.0	2,995.7	2,995.7	2,995.7	5.4	5.2	169.59	11.7	16.4	73.8	63.5	10.33	7.140		
3,100.0	3,095.2	3,095.2	3,095.2	5.6	5.3	170.86	11.7	16.4	83.9	73.2	10.68	7.857		
3,200.0	3,194.7	3,194.7	3,194.7	5.9	5.5	171.86	11.7	16.4	94.1	83.1	11.03	8.532		
3,300.0	3,294.1	3,294.1	3,294.1	6.1	5.7	172.66	11.7	16.4	104.3	92.9	11.38	9.167		
3,400.0	3,393.6	3,393.6	3,393.6	6.3	5.9	173.31	11.7	16.4	114.5	102.8	11.72	9.767		
3,500.0	3,493.1	3,493.1	3,493.1	6.6	6.0	173.86	11.7	16.4	124.7	112.7	12.07	10.332		
3,600.0	3,592.6	3,592.6	3,592.6	6.8	6.2	174.33	11.7	16.4	135.0	122.5	12.42	10.867		
3,700.0	3,692.0	3,692.0	3,692.0	7.0	6.4	174.73	11.7	16.4	145.2	132.4	12.77	11.373		
3,800.0	3,791.5	3,791.5	3,791.5	7.3	6.6	175.08	11.7	16.4	155.4	142.3	13.11	11.853		
3,900.0	3,891.0	3,891.0	3,891.0	7.5	6.7	175.39	11.7	16.4	165.7	152.2	13.46	12.308		
4,000.0	3,990.4	3,990.4	3,990.4	7.7	6.9	175.65	11.7	16.4	175.9	162.1	13.81	12.741		
4,100.0	4,089.9	4,089.9	4,089.9	8.0	7.1	175.89	11.7	16.4	186.2	172.1	14.16	13.153		
4,200.0	4,189.4	4,189.4	4,189.4	8.2	7.3	176.11	11.7	16.4	196.5	182.0	14.50	13.545		
4,300.0	4,288.8	4,288.8	4,288.8	8.4	7.4	176.30	11.7	16.4	206.7	191.9	14.85	13.919		
4,400.0	4,388.3	4,388.3	4,388.3	8.7	7.6	176.48	11.7	16.4	217.0	201.8	15.20	14.276		
4,500.0	4,487.8	4,487.8	4,487.8	8.9	7.8	176.64	11.7	16.4	227.3	211.7	15.55	14.617		
4,600.0	4,587.3	4,587.3	4,587.3	9.2	8.0	176.78	11.7	16.4	237.5	221.6	15.90	14.943		
4,700.0	4,686.7	4,686.7	4,686.7	9.4	8.1	176.92	11.7	16.4	247.8	231.6	16.24	15.256		
4,800.0	4,786.2	4,786.2	4,786.2	9.6	8.3	177.04	11.7	16.4	258.1	241.5	16.59	15.555		
4,900.0	4,885.7	4,885.7	4,885.7	9.9	8.5	177.15	11.7	16.4	268.4	251.4	16.94	15.842		
5,000.0	4,985.1	4,985.1	4,985.1	10.1	8.6	177.26	11.7	16.4	278.6	261.3	17.29	16.118		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Axia Energy	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Project:	Moffat County, CO	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Reference Site:	SEC 17-T8N-R91W	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 17-T8N-R91W - Bulldog #17-21H-891 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,084.6	5,084.6	5,084.6	10.4	8.8	177.35	11.7	16.4	288.9	271.3	17.63	16.383		
5,200.0	5,184.1	5,184.1	5,184.1	10.6	9.0	177.45	11.7	16.4	299.2	281.2	17.98	16.637		
5,300.0	5,283.5	5,283.5	5,283.5	10.8	9.2	177.53	11.7	16.4	309.5	291.1	18.33	16.882		
5,400.0	5,383.0	5,383.0	5,383.0	11.1	9.3	177.61	11.7	16.4	319.7	301.1	18.68	17.118		
5,500.0	5,482.5	5,482.5	5,482.5	11.3	9.5	177.68	11.7	16.4	330.0	311.0	19.03	17.346		
5,600.0	5,581.9	5,581.9	5,581.9	11.6	9.7	177.75	11.7	16.4	340.3	320.9	19.37	17.565		
5,700.0	5,681.4	5,681.4	5,681.4	11.8	9.9	177.82	11.7	16.4	350.6	330.8	19.72	17.776		
5,800.0	5,780.9	5,780.9	5,780.9	12.1	10.0	177.88	11.7	16.4	360.8	340.8	20.07	17.980		
5,900.0	5,880.4	5,880.4	5,880.4	12.3	10.2	177.94	11.7	16.4	371.1	350.7	20.42	18.178		
6,000.0	5,979.8	5,979.8	5,979.8	12.6	10.4	178.00	11.7	16.4	381.4	360.6	20.76	18.368		
6,100.0	6,079.3	6,079.3	6,079.3	12.8	10.6	178.05	11.7	16.4	391.7	370.6	21.11	18.553		
6,200.0	6,178.8	6,178.8	6,178.8	13.0	10.7	178.10	11.7	16.4	402.0	380.5	21.46	18.731		
6,300.0	6,278.2	6,278.2	6,278.2	13.3	10.9	178.15	11.7	16.4	412.2	390.4	21.81	18.904		
6,400.0	6,377.7	6,377.7	6,377.7	13.5	11.1	178.19	11.7	16.4	422.5	400.4	22.16	19.071		
6,500.0	6,477.2	6,477.2	6,477.2	13.8	11.2	178.23	11.7	16.4	432.8	410.3	22.50	19.233		
6,600.0	6,576.6	6,576.6	6,576.6	14.0	11.4	178.28	11.7	16.4	443.1	420.2	22.85	19.390		
6,700.0	6,676.1	6,676.1	6,676.1	14.3	11.6	178.31	11.7	16.4	453.4	430.2	23.20	19.543		
6,800.0	6,775.6	6,775.6	6,775.6	14.5	11.8	178.35	11.7	16.4	463.6	440.1	23.55	19.691		
6,900.0	6,875.1	6,875.1	6,875.1	14.8	11.9	178.39	11.7	16.4	473.9	450.0	23.89	19.835		
7,000.0	6,974.5	6,974.5	6,974.5	15.0	12.1	178.42	11.7	16.4	484.2	460.0	24.24	19.974		
7,100.0	7,074.0	7,074.0	7,074.0	15.3	12.3	178.46	11.7	16.4	494.5	469.9	24.59	20.110		

Anticollision Report

Company:	Axia Energy	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Project:	Moffat County, CO	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Reference Site:	SEC 17-T8N-R91W	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 17-T8N-R91W - Bulldog #17-31H-891 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	54.97	22.9	32.7	40.0					
100.0	100.0	100.0	100.0	0.1	0.1	54.97	22.9	32.7	40.0	39.7	0.24	168.436		
200.0	200.0	200.0	200.0	0.3	0.3	54.97	22.9	32.7	40.0	39.4	0.59	68.176		
300.0	300.0	300.0	300.0	0.5	0.5	54.97	22.9	32.7	40.0	39.0	0.94	42.737		
400.0	400.0	400.0	400.0	0.6	0.6	54.97	22.9	32.7	40.0	38.7	1.28	31.124		
500.0	500.0	500.0	500.0	0.8	0.8	54.97	22.9	32.7	40.0	38.3	1.63	24.474		
600.0	600.0	600.0	600.0	1.0	1.0	54.97	22.9	32.7	40.0	38.0	1.98	20.165		
700.0	700.0	700.0	700.0	1.2	1.2	54.97	22.9	32.7	40.0	37.6	2.33	17.146		
800.0	800.0	800.0	800.0	1.3	1.3	54.97	22.9	32.7	40.0	37.3	2.68	14.914		
900.0	900.0	900.0	900.0	1.5	1.5	54.97	22.9	32.7	40.0	37.0	3.03	13.195		
1,000.0	1,000.0	1,000.0	1,000.0	1.7	1.7	54.97	22.9	32.7	40.0	36.6	3.38	11.832		
1,100.0	1,100.0	1,100.0	1,100.0	1.9	1.9	54.97	22.9	32.7	40.0	36.3	3.73	10.724		
1,200.0	1,200.0	1,200.0	1,200.0	2.0	2.0	54.97	22.9	32.7	40.0	35.9	4.08	9.806		
1,300.0	1,300.0	1,300.0	1,300.0	2.2	2.2	54.97	22.9	32.7	40.0	35.6	4.43	9.033		
1,400.0	1,400.0	1,400.0	1,400.0	2.4	2.4	54.97	22.9	32.7	40.0	35.2	4.78	8.373		
1,500.0	1,500.0	1,500.0	1,500.0	2.6	2.6	54.97	22.9	32.7	40.0	34.9	5.12	7.802		
1,600.0	1,600.0	1,600.0	1,600.0	2.7	2.7	54.97	22.9	32.7	40.0	34.5	5.47	7.305		
1,700.0	1,700.0	1,700.0	1,700.0	2.9	2.9	54.97	22.9	32.7	40.0	34.2	5.82	6.867		
1,800.0	1,800.0	1,800.0	1,800.0	3.1	3.1	54.97	22.9	32.7	40.0	33.8	6.17	6.478		
1,900.0	1,900.0	1,900.0	1,900.0	3.3	3.3	54.97	22.9	32.7	40.0	33.5	6.52	6.131		
2,000.0	2,000.0	2,000.0	2,000.0	3.4	3.4	54.97	22.9	32.7	40.0	33.1	6.87	5.820		
2,100.0	2,100.0	2,100.0	2,100.0	3.6	3.6	43.46	22.9	32.7	38.7	31.5	7.22	5.361		
2,200.0	2,199.8	2,199.8	2,199.8	3.8	3.8	49.40	22.9	32.7	35.1	27.5	7.56	4.637		
2,300.0	2,299.5	2,299.5	2,299.5	4.0	4.0	62.12	22.9	32.7	30.1	22.2	7.92	3.804		
2,400.0	2,398.9	2,398.9	2,398.9	4.2	4.1	81.78	22.9	32.7	26.9	18.6	8.30	3.240		
2,437.6	2,436.3	2,436.3	2,436.3	4.2	4.2	90.00	22.9	32.7	26.6	18.2	8.44	3.153 CC, ES, SF		
2,500.0	2,498.4	2,498.4	2,498.4	4.4	4.3	103.50	22.9	32.7	27.4	18.7	8.67	3.158		
2,600.0	2,597.9	2,597.9	2,597.9	4.6	4.5	121.99	22.9	32.7	31.4	22.4	9.02	3.484		
2,700.0	2,697.3	2,697.3	2,697.3	4.8	4.7	135.26	22.9	32.7	37.9	28.5	9.36	4.051		
2,800.0	2,796.8	2,796.8	2,796.8	5.0	4.8	144.34	22.9	32.7	45.8	36.1	9.69	4.725		
2,900.0	2,896.3	2,896.3	2,896.3	5.2	5.0	150.65	22.9	32.7	54.5	44.5	10.03	5.432		
3,000.0	2,995.7	2,995.7	2,995.7	5.4	5.2	155.18	22.9	32.7	63.7	53.3	10.37	6.138		
3,100.0	3,095.2	3,095.0	3,095.0	5.6	5.3	157.95	22.9	33.5	73.3	62.5	10.72	6.835		
3,200.0	3,194.7	3,194.3	3,194.3	5.9	5.5	158.89	22.9	36.0	83.2	72.1	11.07	7.515		
3,300.0	3,294.1	3,293.6	3,293.5	6.1	5.7	158.57	22.9	40.3	93.4	81.9	11.43	8.170		
3,400.0	3,393.6	3,392.8	3,392.5	6.3	5.9	157.38	22.9	46.2	103.8	92.0	11.80	8.801		
3,500.0	3,493.1	3,492.2	3,491.6	6.6	6.1	155.91	22.9	53.1	114.5	102.3	12.17	9.407		
3,600.0	3,592.6	3,591.5	3,590.8	6.8	6.2	154.69	22.9	60.1	125.2	112.6	12.54	9.980		
3,700.0	3,692.0	3,690.9	3,689.9	7.0	6.4	153.67	22.9	67.0	136.0	123.0	12.92	10.521		
3,800.0	3,791.5	3,790.3	3,789.1	7.3	6.6	152.80	22.9	73.9	146.8	133.5	13.30	11.033		
3,900.0	3,891.0	3,889.7	3,888.2	7.5	6.8	152.04	22.9	80.9	157.6	143.9	13.68	11.516		
4,000.0	3,990.4	3,989.1	3,987.3	7.7	7.0	151.38	22.9	87.8	168.4	154.4	14.07	11.974		
4,100.0	4,089.9	4,088.5	4,086.5	8.0	7.2	150.81	22.9	94.7	179.3	164.9	14.45	12.407		
4,200.0	4,189.4	4,187.9	4,185.6	8.2	7.4	150.30	22.9	101.7	190.2	175.4	14.84	12.817		
4,300.0	4,288.8	4,287.3	4,284.8	8.4	7.6	149.84	22.9	108.6	201.1	185.9	15.23	13.206		
4,400.0	4,388.3	4,386.7	4,383.9	8.7	7.7	149.43	22.9	115.5	212.0	196.4	15.62	13.576		
4,500.0	4,487.8	4,486.1	4,483.1	8.9	7.9	149.06	22.9	122.5	223.0	206.9	16.01	13.927		
4,600.0	4,587.3	4,585.5	4,582.2	9.2	8.1	148.73	22.9	129.4	233.9	217.5	16.40	14.262		
4,700.0	4,686.7	4,684.9	4,681.4	9.4	8.3	148.42	22.9	136.3	244.8	228.0	16.79	14.580		
4,800.0	4,786.2	4,784.2	4,780.5	9.6	8.5	148.14	22.9	143.3	255.8	238.6	17.19	14.883		
4,900.0	4,885.7	4,883.6	4,879.7	9.9	8.7	147.89	22.9	150.2	266.7	249.1	17.58	15.172		
5,000.0	4,985.1	4,983.0	4,978.8	10.1	8.9	147.65	22.9	157.1	277.7	259.7	17.98	15.448		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Axia Energy	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Project:	Moffat County, CO	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Reference Site:	SEC 17-T8N-R91W	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 17-T8N-R91W - Bulldog #17-31H-891 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
5,100.0	5,084.6	5,082.4	5,078.0	10.4	9.1	147.43	22.9	164.1	288.6	270.3	18.37	15.712		
5,200.0	5,184.1	5,181.8	5,177.1	10.6	9.3	147.23	22.9	171.0	299.6	280.8	18.77	15.964		
5,300.0	5,283.5	5,281.2	5,276.3	10.8	9.5	147.04	22.9	177.9	310.6	291.4	19.16	16.206		
5,400.0	5,383.0	5,382.0	5,376.8	11.1	9.7	146.94	22.9	184.5	321.4	301.8	19.56	16.433		
5,500.0	5,482.5	5,483.4	5,478.1	11.3	9.9	147.13	22.9	189.4	331.7	311.7	19.94	16.634		
5,600.0	5,581.9	5,584.8	5,579.5	11.6	10.1	147.59	22.9	192.5	341.3	321.0	20.30	16.812		
5,700.0	5,681.4	5,686.3	5,681.0	11.8	10.3	148.30	22.9	193.8	350.5	329.8	20.65	16.971		
5,800.0	5,780.9	5,786.2	5,780.9	12.1	10.4	149.16	22.9	193.9	359.3	338.3	20.99	17.117		
5,900.0	5,880.4	5,885.7	5,880.4	12.3	10.6	149.98	22.9	193.9	368.2	346.9	21.33	17.262		
6,000.0	5,979.8	5,985.1	5,979.8	12.6	10.8	150.76	22.9	193.9	377.1	355.5	21.67	17.406		
6,100.0	6,079.3	6,084.6	6,079.3	12.8	10.9	151.51	22.9	193.9	386.2	364.2	22.01	17.549		
6,200.0	6,178.8	6,184.1	6,178.8	13.0	11.1	152.22	22.9	193.9	395.2	372.9	22.34	17.690		
6,300.0	6,278.2	6,283.5	6,278.2	13.3	11.3	152.89	22.9	193.9	404.4	381.7	22.68	17.829		
6,400.0	6,377.7	6,383.0	6,377.7	13.5	11.4	153.54	22.9	193.9	413.6	390.6	23.02	17.967		
6,500.0	6,477.2	6,482.5	6,477.2	13.8	11.6	154.16	22.9	193.9	422.8	399.5	23.36	18.103		
6,600.0	6,576.6	6,581.9	6,576.6	14.0	11.8	154.76	22.9	193.9	432.1	408.4	23.69	18.238		
6,700.0	6,676.1	6,681.4	6,676.1	14.3	11.9	155.33	22.9	193.9	441.4	417.4	24.03	18.370		
6,800.0	6,775.6	6,780.9	6,775.6	14.5	12.1	155.87	22.9	193.9	450.8	426.4	24.37	18.500		
6,900.0	6,875.1	6,880.4	6,875.1	14.8	12.3	156.39	22.9	193.9	460.2	435.5	24.71	18.628		
7,000.0	6,974.5	6,979.8	6,974.5	15.0	12.4	156.90	22.9	193.9	469.7	444.6	25.04	18.754		
7,100.0	7,074.0	7,079.3	7,074.0	15.3	12.6	157.38	22.9	193.9	479.2	453.8	25.38	18.878		
7,200.0	7,173.5	7,178.8	7,173.5	15.5	12.8	157.84	22.9	193.9	488.7	463.0	25.72	19.000		
7,300.0	7,272.9	7,278.2	7,272.9	15.8	13.0	158.29	22.9	193.9	498.2	472.2	26.06	19.120		

Anticollision Report

Company:	Axia Energy	Local Co-ordinate Reference:	Well Bulldog #8-34V-891
Project:	Moffat County, CO	TVD Reference:	WELL @ 7007.0ft (Original Well Elev)
Reference Site:	SEC 17-T8N-R91W	MD Reference:	WELL @ 7007.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bulldog #8-34V-891	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 7007.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Bulldog #8-34V-891
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: -1.37°

