

BILL BARRETT CORP

WELD COUNTY, COLORADO

Anschutz State 5-62-25

Anschutz State 5-62-25-0108BH

Wellbore #1

Plan: Design #1

Standard Planning Report

18 July, 2013



Bill Barrett Corporation

COMPANY DETAILS: BILL BARRETT CORP

Calculation Method: Minimum Curvature
Error System: ISCWSA
Scan Method: Closest Approach 3D
Error Surface: Elliptical Conic
Warning Method: Error Ratio

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Anschutz State 5-62-25-0108BH, True North
Vertical (TVD) Reference: KB @ 4601.0ft (Original Well Elev)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: KB @ 4601.0ft (Original Well Elev)
Calculation Method: Minimum Curvature

WELL DETAILS: Anschutz State 5-62-25-0108BH

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1381779.29	3339905.1840° 22'	29.881 N	104° 16' 47.899 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.0	
3	1814.0	13.71	346.54	1805.3	105.9	-25.3	1.50	346.54	-3.3	
4	4546.0	13.71	346.54	4459.5	735.6	-176.0	0.00	0.00	-23.1	
5	5231.6	0.00	0.00	5138.5	815.0	-195.0	2.00	180.00	-25.6	
6	5731.6	0.00	0.00	5638.5	815.0	-195.0	0.00	0.00	-25.6	
7	6482.7	90.13	88.35	6116.0	828.8	283.4	12.00	88.35	445.6	AS 0108BH LP
8	10801.2	90.13	88.35	6106.2	952.9	4600.1	0.00	0.00	4697.8	AS 0108BH PBHL

PROJECT DETAILS: WELD COUNTY, COLORADO

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

FORMATION TOP DETAILS

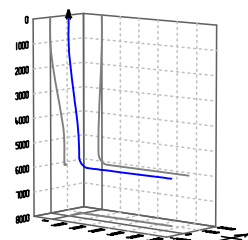
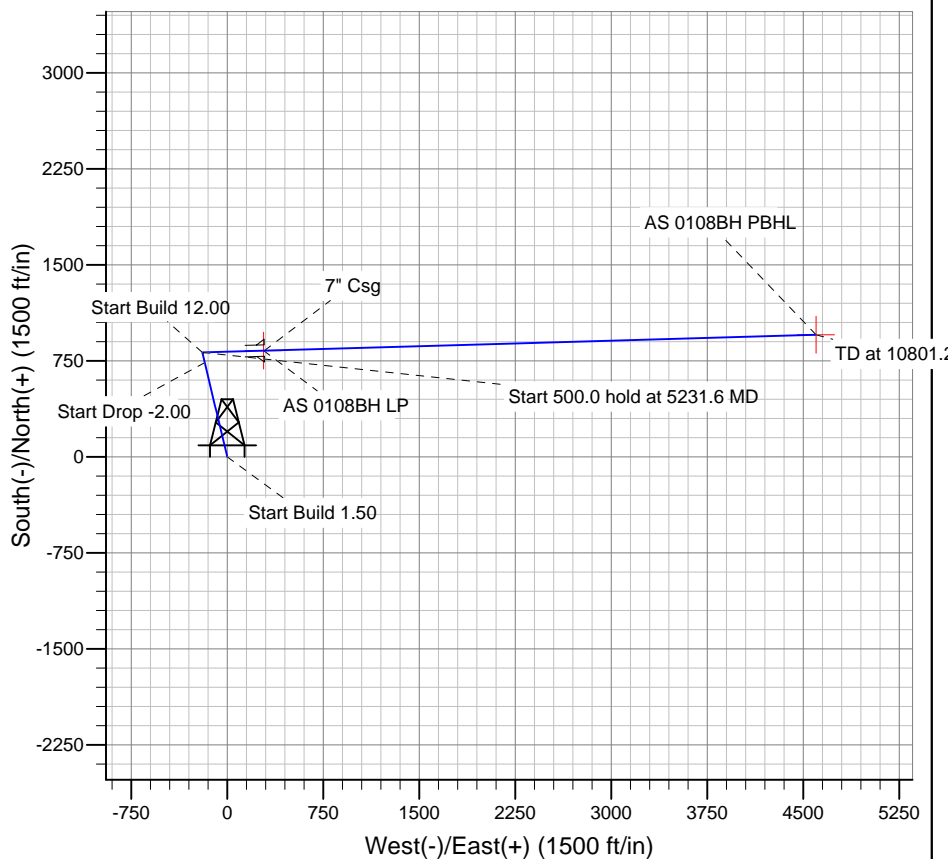
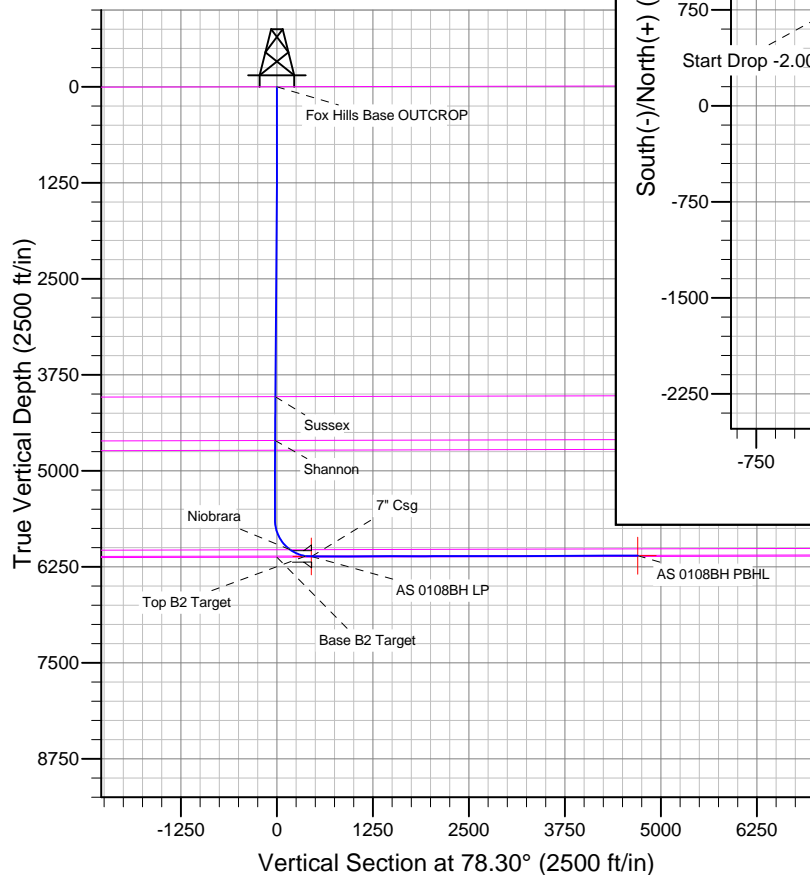
TVDPATH	MDPATH	FORMATION
		Base B2 Target
		Fox Hills Base OUTCROP
4035.3	4109.4	Sussex
4605.4	4695.3	Shannon
4733.4	4825.1	Sharon Springs
6027.9	6187.0	Niobrara
6110.5	6409.1	Top B2 Target

CASING DETAILS

TVD	MD	Name	Size
6115.9	6490.0	7" Csg	7

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
AS 0108BH PBHL	6106.0	953.4	4600.0	Point
AS 0108BH LP	6116.0	828.8	283.9	Point



Azimuths to True North
Magnetic North: 8.32°

Magnetic Field
Strength: 52951.0snT
Dip Angle: 67.04°
Date: 7/16/2013
Model: IGRF2010

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Anschutz State 5-62-25-0108BH
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4601.0ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4601.0ft (Original Well Elev)
Site:	Anschutz State 5-62-25	North Reference:	True
Well:	Anschutz State 5-62-25-0108BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	WELD COUNTY, COLORADO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Anschutz State 5-62-25			
Site Position: From:		Northing:	1,381,779.29ft	Latitude:	40° 22' 29.881 N
	Lat/Long	Easting:	3,339,905.18ft	Longitude:	104° 16' 47.899 W
	Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:

Well	Anschutz State 5-62-25-0108BH					
Well Position	+N-S	0.0 ft	Northing:	1,381,779.29 ft	Latitude:	40° 22' 29.881 N
	+E-W	0.0 ft	Easting:	3,339,905.18 ft	Longitude:	104° 16' 47.899 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,581.0ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/16/2013	8.32	67.04	52,951

Design	Design #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	78.30	

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	
900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,814.0	13.71	346.54	1,805.3	105.9	-25.3	1.50	1.50	0.00	346.54	
4,546.0	13.71	346.54	4,459.5	735.6	-176.0	0.00	0.00	0.00	0.00	
5,231.6	0.00	0.00	5,138.5	815.0	-195.0	2.00	-2.00	0.00	180.00	
5,731.6	0.00	0.00	5,638.5	815.0	-195.0	0.00	0.00	0.00	0.00	
6,482.7	90.13	88.35	6,116.0	828.8	283.4	12.00	12.00	0.00	88.35	AS 0108BH LP
10,801.2	90.13	88.35	6,106.2	952.9	4,600.1	0.00	0.00	0.00	0.00	AS 0108BH PBHL

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Planning Report

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Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4601.0ft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4601.0ft (Original Well Elev)
Site:	Anschutz State 5-62-25	North Reference:	True
Well:	Anschutz State 5-62-25-0108BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	1.50	346.54	1,000.0	1.3	-0.3	0.0	1.50	1.50	0.00
1,100.0	3.00	346.54	1,099.9	5.1	-1.2	-0.2	1.50	1.50	0.00
1,200.0	4.50	346.54	1,199.7	11.5	-2.7	-0.4	1.50	1.50	0.00
1,300.0	6.00	346.54	1,299.3	20.4	-4.9	-0.6	1.50	1.50	0.00
1,400.0	7.50	346.54	1,398.6	31.8	-7.6	-1.0	1.50	1.50	0.00
1,500.0	9.00	346.54	1,497.5	45.7	-10.9	-1.4	1.50	1.50	0.00
1,600.0	10.50	346.54	1,596.1	62.2	-14.9	-2.0	1.50	1.50	0.00
1,700.0	12.00	346.54	1,694.2	81.2	-19.4	-2.6	1.50	1.50	0.00
1,800.0	13.50	346.54	1,791.7	102.6	-24.6	-3.2	1.50	1.50	0.00
1,814.0	13.71	346.54	1,805.3	105.9	-25.3	-3.3	1.50	1.50	0.00
1,900.0	13.71	346.54	1,888.9	125.7	-30.1	-4.0	0.00	0.00	0.00
2,000.0	13.71	346.54	1,986.0	148.7	-35.6	-4.7	0.00	0.00	0.00
2,100.0	13.71	346.54	2,083.2	171.8	-41.1	-5.4	0.00	0.00	0.00
2,200.0	13.71	346.54	2,180.3	194.8	-46.6	-6.1	0.00	0.00	0.00
2,300.0	13.71	346.54	2,277.5	217.9	-52.1	-6.9	0.00	0.00	0.00
2,400.0	13.71	346.54	2,374.6	240.9	-57.6	-7.6	0.00	0.00	0.00
2,500.0	13.71	346.54	2,471.8	264.0	-63.2	-8.3	0.00	0.00	0.00
2,600.0	13.71	346.54	2,568.9	287.0	-68.7	-9.0	0.00	0.00	0.00
2,700.0	13.71	346.54	2,666.1	310.1	-74.2	-9.8	0.00	0.00	0.00
2,800.0	13.71	346.54	2,763.2	333.1	-79.7	-10.5	0.00	0.00	0.00
2,900.0	13.71	346.54	2,860.4	356.2	-85.2	-11.2	0.00	0.00	0.00
3,000.0	13.71	346.54	2,957.5	379.2	-90.7	-11.9	0.00	0.00	0.00
3,100.0	13.71	346.54	3,054.7	402.3	-96.3	-12.6	0.00	0.00	0.00
3,200.0	13.71	346.54	3,151.8	425.3	-101.8	-13.4	0.00	0.00	0.00
3,300.0	13.71	346.54	3,249.0	448.4	-107.3	-14.1	0.00	0.00	0.00
3,400.0	13.71	346.54	3,346.1	471.4	-112.8	-14.8	0.00	0.00	0.00
3,500.0	13.71	346.54	3,443.3	494.5	-118.3	-15.5	0.00	0.00	0.00
3,600.0	13.71	346.54	3,540.4	517.5	-123.8	-16.3	0.00	0.00	0.00
3,700.0	13.71	346.54	3,637.6	540.6	-129.3	-17.0	0.00	0.00	0.00
3,800.0	13.71	346.54	3,734.7	563.6	-134.9	-17.7	0.00	0.00	0.00
3,900.0	13.71	346.54	3,831.9	586.7	-140.4	-18.4	0.00	0.00	0.00
4,000.0	13.71	346.54	3,929.0	609.7	-145.9	-19.2	0.00	0.00	0.00
4,100.0	13.71	346.54	4,026.2	632.8	-151.4	-19.9	0.00	0.00	0.00
4,109.4	13.71	346.54	4,035.3	635.0	-151.9	-20.0	0.00	0.00	0.00
Sussex									
4,200.0	13.71	346.54	4,123.3	655.8	-156.9	-20.6	0.00	0.00	0.00
4,300.0	13.71	346.54	4,220.5	678.9	-162.4	-21.3	0.00	0.00	0.00
4,400.0	13.71	346.54	4,317.6	701.9	-168.0	-22.1	0.00	0.00	0.00
4,500.0	13.71	346.54	4,414.8	725.0	-173.5	-22.8	0.00	0.00	0.00
4,546.0	13.71	346.54	4,459.5	735.6	-176.0	-23.1	0.00	0.00	0.00
4,600.0	12.63	346.54	4,512.0	747.6	-178.9	-23.5	2.00	-2.00	0.00
4,695.3	10.73	346.54	4,605.4	766.3	-183.4	-24.1	2.00	-2.00	0.00
Shannon									
4,700.0	10.63	346.54	4,610.0	767.2	-183.6	-24.1	2.00	-2.00	0.00

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Project:	WELD COUNTY, COLORADO	MD Reference:	KB @ 4601.0ft (Original Well Elev)
Site:	Anschutz State 5-62-25	North Reference:	True
Well:	Anschutz State 5-62-25-0108BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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)	Turn Rate (°/100ft)
4,800.0	8.63	346.54	4,708.6	783.4	-187.5	-24.6	2.00	-2.00	0.00
4,825.1	8.13	346.54	4,733.4	787.0	-188.3	-24.7	2.00	-2.00	0.00
Sharon Springs									
4,900.0	6.63	346.54	4,807.7	796.4	-190.5	-25.0	2.00	-2.00	0.00
5,000.0	4.63	346.54	4,907.2	805.9	-192.8	-25.3	2.00	-2.00	0.00
5,100.0	2.63	346.54	5,007.0	812.1	-194.3	-25.5	2.00	-2.00	0.00
5,200.0	0.63	346.54	5,106.9	814.8	-195.0	-25.6	2.00	-2.00	0.00
5,231.6	0.00	0.00	5,138.5	815.0	-195.0	-25.6	2.00	-2.00	0.00
5,300.0	0.00	0.00	5,206.9	815.0	-195.0	-25.6	0.00	0.00	0.00
5,400.0	0.00	0.00	5,306.9	815.0	-195.0	-25.6	0.00	0.00	0.00
5,500.0	0.00	0.00	5,406.9	815.0	-195.0	-25.6	0.00	0.00	0.00
5,600.0	0.00	0.00	5,506.9	815.0	-195.0	-25.6	0.00	0.00	0.00
5,700.0	0.00	0.00	5,606.9	815.0	-195.0	-25.6	0.00	0.00	0.00
5,731.6	0.00	0.00	5,638.5	815.0	-195.0	-25.6	0.00	0.00	0.00
5,800.0	8.21	88.35	5,706.7	815.1	-190.1	-20.8	12.00	12.00	0.00
5,900.0	20.21	88.35	5,803.5	815.8	-165.6	3.3	12.00	12.00	0.00
6,000.0	32.21	88.35	5,893.0	817.1	-121.5	46.7	12.00	12.00	0.00
6,100.0	44.21	88.35	5,971.4	818.9	-59.8	107.5	12.00	12.00	0.00
6,187.0	54.65	88.35	6,027.9	820.8	6.1	172.5	12.00	12.00	0.00
Niobrara									
6,200.0	56.21	88.35	6,035.3	821.1	16.8	183.1	12.00	12.00	0.00
6,300.0	68.21	88.35	6,081.9	823.6	105.1	270.0	12.00	12.00	0.00
6,400.0	80.21	88.35	6,109.0	826.4	201.1	364.6	12.00	12.00	0.00
6,409.1	81.30	88.35	6,110.5	826.7	210.1	373.4	12.00	12.00	0.00
Top B2 Target									
6,482.7	90.13	88.35	6,116.0	828.8	283.4	445.6	12.00	12.00	0.00
6,483.2	90.13	88.35	6,116.0	828.8	283.9	446.1	0.00	0.00	0.00
AS 0108BH LP									
6,490.0	90.13	88.35	6,115.9	829.0	290.7	452.8	0.00	0.00	0.00
7" Csg									
6,500.0	90.13	88.35	6,115.9	829.3	300.7	462.6	0.00	0.00	0.00
6,600.0	90.13	88.35	6,115.7	832.1	400.6	561.1	0.00	0.00	0.00
6,700.0	90.13	88.35	6,115.5	835.0	500.6	659.6	0.00	0.00	0.00
6,800.0	90.13	88.35	6,115.2	837.9	600.6	758.0	0.00	0.00	0.00
6,900.0	90.13	88.35	6,115.0	840.8	700.5	856.5	0.00	0.00	0.00
7,000.0	90.13	88.35	6,114.8	843.6	800.5	955.0	0.00	0.00	0.00
7,100.0	90.13	88.35	6,114.6	846.5	900.4	1,053.4	0.00	0.00	0.00
7,200.0	90.13	88.35	6,114.3	849.4	1,000.4	1,151.9	0.00	0.00	0.00
7,300.0	90.13	88.35	6,114.1	852.3	1,100.4	1,250.4	0.00	0.00	0.00
7,400.0	90.13	88.35	6,113.9	855.1	1,200.3	1,348.8	0.00	0.00	0.00
7,500.0	90.13	88.35	6,113.7	858.0	1,300.3	1,447.3	0.00	0.00	0.00
7,600.0	90.13	88.35	6,113.4	860.9	1,400.2	1,545.7	0.00	0.00	0.00
7,700.0	90.13	88.35	6,113.2	863.8	1,500.2	1,644.2	0.00	0.00	0.00
7,800.0	90.13	88.35	6,113.0	866.6	1,600.1	1,742.7	0.00	0.00	0.00
7,900.0	90.13	88.35	6,112.7	869.5	1,700.1	1,841.1	0.00	0.00	0.00
8,000.0	90.13	88.35	6,112.5	872.4	1,800.1	1,939.6	0.00	0.00	0.00
8,100.0	90.13	88.35	6,112.3	875.3	1,900.0	2,038.1	0.00	0.00	0.00
8,200.0	90.13	88.35	6,112.1	878.1	2,000.0	2,136.5	0.00	0.00	0.00
8,300.0	90.13	88.35	6,111.8	881.0	2,099.9	2,235.0	0.00	0.00	0.00
8,400.0	90.13	88.35	6,111.6	883.9	2,199.9	2,333.5	0.00	0.00	0.00
8,500.0	90.13	88.35	6,111.4	886.8	2,299.9	2,431.9	0.00	0.00	0.00
8,600.0	90.13	88.35	6,111.2	889.6	2,399.8	2,530.4	0.00	0.00	0.00
8,700.0	90.13	88.35	6,110.9	892.5	2,499.8	2,628.8	0.00	0.00	0.00

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Site:	Anschutz State 5-62-25	North Reference:	True
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Wellbore:	Wellbore #1		
Design:	Design #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)	Turn Rate (°/100ft)	
8,800.0	90.13	88.35	6,110.7	895.4	2,599.7	2,727.3	0.00	0.00	0.00	
8,900.0	90.13	88.35	6,110.5	898.3	2,699.7	2,825.8	0.00	0.00	0.00	
9,000.0	90.13	88.35	6,110.3	901.1	2,799.7	2,924.2	0.00	0.00	0.00	
9,100.0	90.13	88.35	6,110.0	904.0	2,899.6	3,022.7	0.00	0.00	0.00	
9,200.0	90.13	88.35	6,109.8	906.9	2,999.6	3,121.2	0.00	0.00	0.00	
9,300.0	90.13	88.35	6,109.6	909.8	3,099.5	3,219.6	0.00	0.00	0.00	
9,400.0	90.13	88.35	6,109.3	912.6	3,199.5	3,318.1	0.00	0.00	0.00	
9,500.0	90.13	88.35	6,109.1	915.5	3,299.4	3,416.6	0.00	0.00	0.00	
9,600.0	90.13	88.35	6,108.9	918.4	3,399.4	3,515.0	0.00	0.00	0.00	
9,700.0	90.13	88.35	6,108.7	921.3	3,499.4	3,613.5	0.00	0.00	0.00	
9,800.0	90.13	88.35	6,108.4	924.1	3,599.3	3,711.9	0.00	0.00	0.00	
9,900.0	90.13	88.35	6,108.2	927.0	3,699.3	3,810.4	0.00	0.00	0.00	
10,000.0	90.13	88.35	6,108.0	929.9	3,799.2	3,908.9	0.00	0.00	0.00	
10,100.0	90.13	88.35	6,107.8	932.8	3,899.2	4,007.3	0.00	0.00	0.00	
10,200.0	90.13	88.35	6,107.5	935.6	3,999.2	4,105.8	0.00	0.00	0.00	
10,300.0	90.13	88.35	6,107.3	938.5	4,099.1	4,204.3	0.00	0.00	0.00	
10,400.0	90.13	88.35	6,107.1	941.4	4,199.1	4,302.7	0.00	0.00	0.00	
10,500.0	90.13	88.35	6,106.8	944.3	4,299.0	4,401.2	0.00	0.00	0.00	
10,600.0	90.13	88.35	6,106.6	947.1	4,399.0	4,499.7	0.00	0.00	0.00	
10,700.0	90.13	88.35	6,106.4	950.0	4,498.9	4,598.1	0.00	0.00	0.00	
10,800.0	90.13	88.35	6,106.2	952.9	4,598.9	4,696.6	0.00	0.00	0.00	
10,801.1	90.13	88.35	6,106.2	952.9	4,600.0	4,697.7	0.00	0.00	0.00	
AS 0108BH PBHL										
10,801.2	90.13	88.35	6,106.2	952.9	4,600.1	4,697.8	0.00	0.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,490.0	6,115.9	7" Csg	7	8-3/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	0.0	Fox Hills Base OUTCROP		-0.13	88.35	
4,109.4	4,035.0	Sussex		-0.13	88.35	
4,695.3	4,605.0	Shannon		-0.13	88.35	
4,825.1	4,733.0	Sharon Springs		-0.13	88.35	
6,187.0	6,028.0	Niobrara		-0.13	88.35	
6,409.1	6,111.0	Top B2 Target		-0.13	88.35	
	6,126.0	Base B2 Target		-0.13	88.35	