



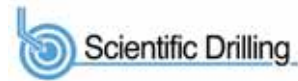
PROJECT DETAILS: Weld County, CO NAD 83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level
Local North: True

Project: Weld County, CO NAD 83
Site: Anschutz Equus Farms 4-62-28 NWSW Pad
Well: Anschutz Equus Farms 4-62-29-4148C2
Wellbore: OH
Design: Plan 1



Azinuths to True North
Magnetic North: 8.28°



Magnetic Field
Strength: 52595.0snT
Dip Angle: 66.94°
Date: 10/5/2015
Model: BGGM2015

Plan: Plan 1 (Anschutz Equus Farms 4-62-29-4148C2/OH)

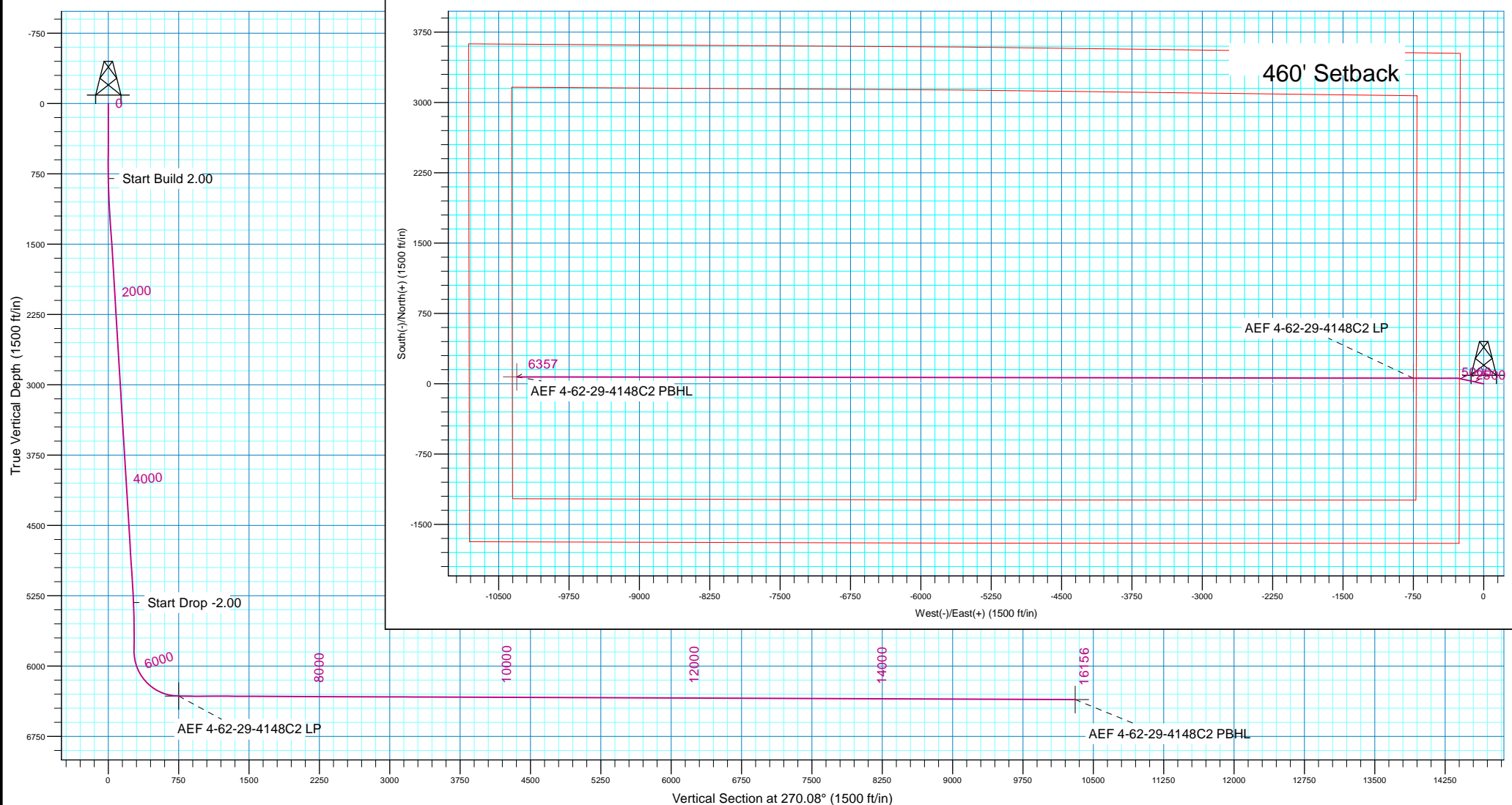
Created By: Julie Cruse Date: 5 October 2015

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00
977.70	3.55	282.14	977.59	1.16	-5.39	2.00	282.14	5.39
5330.90	3.55	282.14	5322.41	57.90	-269.20	0.00	0.00	269.28
5508.60	0.00	0.00	5500.00	59.06	-274.59	2.00	180.00	274.67
5851.14	0.00	0.00	5842.54	59.06	-274.59	0.00	0.00	274.67
6599.29	89.78	270.08	6320.00	59.72	-750.21	12.00	270.08	750.29
16155.96	89.78	270.08	6357.00	72.99	-10306.79	0.00	0.00	10306.88

WELL DETAILS: Anschutz Equus Farms 4-62-29-4148C2

GL 4628' & KB 16' @ 4644.00ft 4628.00
Northing Easting Latitude Longitude
1347082.18 3324300.41 40° 16' 49.100 N 104° 20' 15.390 W



Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz Equus Farms 4-62-28 NWSW Pad

Anschutz Equus Farms 4-62-29-4148C2

OH

Plan: Plan 1

Standard Planning Report

05 October, 2015



Scientific Drilling

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-29-4148C2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4628' & KB 16' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4628' & KB 16' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28 NWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-29-4148C2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Project	Weld County, CO NAD 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Anschutz Equus Farms 4-62-28 NWSW Pad			
Site Position:		Northing:	1,347,052.84 usft	Latitude:	40° 16' 48.810 N
From:	Lat/Long	Easting:	3,324,300.02 usft	Longitude:	104° 20' 15.400 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.75 °

Well	Anschutz Equus Farms 4-62-29-4148C2, 1696' FSL 250' FWL Sec 28 T4N R62W					
Well Position	+N/-S	29.34 ft	Northing:	1,347,082.18 usft	Latitude:	40° 16' 49.100 N
	+E/-W	0.78 ft	Easting:	3,324,300.41 usft	Longitude:	104° 20' 15.390 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,628.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2015	10/5/2015	8.27	66.94	52,595

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	270.08

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	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
977.70	3.55	282.14	977.59	1.16	-5.39	2.00	2.00	0.00	282.14	
5,330.90	3.55	282.14	5,322.41	57.90	-269.20	0.00	0.00	0.00	0.00	
5,508.60	0.00	0.00	5,500.00	59.06	-274.59	2.00	-2.00	0.00	180.00	
5,851.14	0.00	0.00	5,842.54	59.06	-274.59	0.00	0.00	0.00	0.00	
6,599.29	89.78	270.08	6,320.00	59.72	-750.21	12.00	12.00	-12.02	270.08	
16,155.96	89.78	270.08	6,357.00	72.99	-10,306.79	0.00	0.00	0.00	0.00	AEF 4-62-29-4148C2

Scientific Drilling

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-29-4148C2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4628' & KB 16' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4628' & KB 16' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28 NWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-29-4148C2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Fox Hills									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	2.00	282.14	899.98	0.37	-1.71	1.71	2.00	2.00	0.00
977.70	3.55	282.14	977.59	1.16	-5.39	5.39	2.00	2.00	0.00
1,000.00	3.55	282.14	999.84	1.45	-6.74	6.74	0.00	0.00	0.00
1,100.00	3.55	282.14	1,099.65	2.75	-12.80	12.80	0.00	0.00	0.00
1,200.00	3.55	282.14	1,199.46	4.06	-18.86	18.86	0.00	0.00	0.00
1,300.00	3.55	282.14	1,299.27	5.36	-24.92	24.93	0.00	0.00	0.00
1,400.00	3.55	282.14	1,399.07	6.66	-30.98	30.99	0.00	0.00	0.00
1,500.00	3.55	282.14	1,498.88	7.97	-37.04	37.05	0.00	0.00	0.00
1,600.00	3.55	282.14	1,598.69	9.27	-43.10	43.11	0.00	0.00	0.00
1,700.00	3.55	282.14	1,698.50	10.57	-49.16	49.17	0.00	0.00	0.00
1,800.00	3.55	282.14	1,798.30	11.88	-55.22	55.24	0.00	0.00	0.00
1,900.00	3.55	282.14	1,898.11	13.18	-61.28	61.30	0.00	0.00	0.00
2,000.00	3.55	282.14	1,997.92	14.48	-67.34	67.36	0.00	0.00	0.00
2,100.00	3.55	282.14	2,097.73	15.79	-73.40	73.42	0.00	0.00	0.00
2,200.00	3.55	282.14	2,197.54	17.09	-79.46	79.49	0.00	0.00	0.00
2,300.00	3.55	282.14	2,297.34	18.39	-85.52	85.55	0.00	0.00	0.00
2,400.00	3.55	282.14	2,397.15	19.70	-91.58	91.61	0.00	0.00	0.00
2,500.00	3.55	282.14	2,496.96	21.00	-97.64	97.67	0.00	0.00	0.00
2,600.00	3.55	282.14	2,596.77	22.30	-103.70	103.73	0.00	0.00	0.00
2,700.00	3.55	282.14	2,696.57	23.61	-109.76	109.80	0.00	0.00	0.00
2,800.00	3.55	282.14	2,796.38	24.91	-115.82	115.86	0.00	0.00	0.00
2,900.00	3.55	282.14	2,896.19	26.22	-121.88	121.92	0.00	0.00	0.00
3,000.00	3.55	282.14	2,996.00	27.52	-127.94	127.98	0.00	0.00	0.00
3,100.00	3.55	282.14	3,095.80	28.82	-134.00	134.04	0.00	0.00	0.00
3,200.00	3.55	282.14	3,195.61	30.13	-140.06	140.11	0.00	0.00	0.00
3,300.00	3.55	282.14	3,295.42	31.43	-146.12	146.17	0.00	0.00	0.00
3,400.00	3.55	282.14	3,395.23	32.73	-152.19	152.23	0.00	0.00	0.00
3,500.00	3.55	282.14	3,495.04	34.04	-158.25	158.29	0.00	0.00	0.00
3,600.00	3.55	282.14	3,594.84	35.34	-164.31	164.35	0.00	0.00	0.00
3,700.00	3.55	282.14	3,694.65	36.64	-170.37	170.42	0.00	0.00	0.00
3,800.00	3.55	282.14	3,794.46	37.95	-176.43	176.48	0.00	0.00	0.00
3,900.00	3.55	282.14	3,894.27	39.25	-182.49	182.54	0.00	0.00	0.00
4,000.00	3.55	282.14	3,994.07	40.55	-188.55	188.60	0.00	0.00	0.00
4,100.00	3.55	282.14	4,093.88	41.86	-194.61	194.67	0.00	0.00	0.00
4,200.00	3.55	282.14	4,193.69	43.16	-200.67	200.73	0.00	0.00	0.00
4,300.00	3.55	282.14	4,293.50	44.46	-206.73	206.79	0.00	0.00	0.00
4,340.58	3.55	282.14	4,334.00	44.99	-209.19	209.25	0.00	0.00	0.00
Sussex									
4,400.00	3.55	282.14	4,393.30	45.77	-212.79	212.85	0.00	0.00	0.00
4,500.00	3.55	282.14	4,493.11	47.07	-218.85	218.91	0.00	0.00	0.00
4,600.00	3.55	282.14	4,592.92	48.37	-224.91	224.98	0.00	0.00	0.00
4,700.00	3.55	282.14	4,692.73	49.68	-230.97	231.04	0.00	0.00	0.00
4,800.00	3.55	282.14	4,792.54	50.98	-237.03	237.10	0.00	0.00	0.00

Scientific Drilling

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-29-4148C2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4628' & KB 16' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4628' & KB 16' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28 NSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-29-4148C2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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)	Turn Rate (°/100ft)	
4,900.00	3.55	282.14	4,892.34	52.28	-243.09	243.16	0.00	0.00	0.00	
5,000.00	3.55	282.14	4,992.15	53.59	-249.15	249.22	0.00	0.00	0.00	
5,100.00	3.55	282.14	5,091.96	54.89	-255.21	255.29	0.00	0.00	0.00	
5,192.22	3.55	282.14	5,184.00	56.09	-260.80	260.88	0.00	0.00	0.00	
Shannon										
5,200.00	3.55	282.14	5,191.77	56.20	-261.27	261.35	0.00	0.00	0.00	
5,300.00	3.55	282.14	5,291.57	57.50	-267.33	267.41	0.00	0.00	0.00	
5,330.90	3.55	282.14	5,322.41	57.90	-269.20	269.28	0.00	0.00	0.00	
5,400.00	2.17	282.14	5,391.43	58.63	-272.58	272.66	2.00	-2.00	0.00	
5,500.00	0.17	282.14	5,491.40	59.06	-274.58	274.66	2.00	-2.00	0.00	
5,508.60	0.00	0.00	5,500.00	59.06	-274.59	274.67	2.00	-2.00	0.00	
5,600.00	0.00	0.00	5,591.40	59.06	-274.59	274.67	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,691.40	59.06	-274.59	274.67	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,791.40	59.06	-274.59	274.67	0.00	0.00	0.00	
5,851.14	0.00	0.00	5,842.54	59.06	-274.59	274.67	0.00	0.00	0.00	
5,900.00	5.86	270.08	5,891.32	59.06	-277.09	277.17	12.00	12.00	0.00	
6,000.00	17.86	270.08	5,989.00	59.09	-297.61	297.69	12.00	12.00	0.00	
6,074.68	26.82	270.08	6,058.00	59.13	-325.97	326.05	12.00	12.00	0.00	
Sharon Springs										
6,100.00	29.86	270.08	6,080.28	59.15	-337.99	338.07	12.00	12.00	0.00	
6,136.24	34.21	270.08	6,111.00	59.17	-357.21	357.29	12.00	12.00	0.00	
Niobrara										
6,193.09	41.03	270.08	6,156.00	59.22	-391.89	391.98	12.00	12.00	0.00	
A Chalk										
6,200.00	41.86	270.08	6,161.18	59.23	-396.47	396.55	12.00	12.00	0.00	
6,268.90	50.13	270.08	6,209.00	59.30	-445.98	446.07	12.00	12.00	0.00	
A Marl										
6,300.00	53.86	270.08	6,228.15	59.33	-470.49	470.57	12.00	12.00	0.00	
6,400.00	65.86	270.08	6,278.26	59.45	-556.81	556.89	12.00	12.00	0.00	
6,465.97	73.78	270.08	6,301.00	59.54	-618.69	618.77	12.00	12.00	0.00	
Top "B" Target										
6,500.00	77.86	270.08	6,309.33	59.58	-651.67	651.75	12.00	12.00	0.00	
6,599.29	89.78	270.08	6,320.00	59.72	-750.21	750.29	12.00	12.00	0.00	
AEF 4-62-29-4148C2 LP										
6,600.00	89.78	270.08	6,320.00	59.72	-750.91	751.00	0.01	0.01	0.00	
6,700.00	89.78	270.08	6,320.39	59.86	-850.91	851.00	0.00	0.00	0.00	
6,800.00	89.78	270.08	6,320.78	60.00	-950.91	951.00	0.00	0.00	0.00	
6,900.00	89.78	270.08	6,321.17	60.14	-1,050.91	1,050.99	0.00	0.00	0.00	
7,000.00	89.78	270.08	6,321.55	60.28	-1,150.91	1,150.99	0.00	0.00	0.00	
7,100.00	89.78	270.08	6,321.94	60.42	-1,250.91	1,250.99	0.00	0.00	0.00	
7,200.00	89.78	270.08	6,322.33	60.55	-1,350.91	1,350.99	0.00	0.00	0.00	
7,300.00	89.78	270.08	6,322.71	60.69	-1,450.91	1,450.99	0.00	0.00	0.00	
7,400.00	89.78	270.08	6,323.10	60.83	-1,550.91	1,550.99	0.00	0.00	0.00	
7,500.00	89.78	270.08	6,323.49	60.97	-1,650.91	1,650.99	0.00	0.00	0.00	
7,600.00	89.78	270.08	6,323.88	61.11	-1,750.91	1,750.99	0.00	0.00	0.00	
7,700.00	89.78	270.08	6,324.26	61.25	-1,850.91	1,850.99	0.00	0.00	0.00	
7,800.00	89.78	270.08	6,324.65	61.39	-1,950.90	1,950.99	0.00	0.00	0.00	
7,890.45	89.78	270.08	6,325.00	61.51	-2,041.36	2,041.44	0.00	0.00	0.00	
Base "B" Target										
7,900.00	89.78	270.08	6,325.04	61.53	-2,050.90	2,050.99	0.00	0.00	0.00	
8,000.00	89.78	270.08	6,325.42	61.67	-2,150.90	2,150.99	0.00	0.00	0.00	
8,100.00	89.78	270.08	6,325.81	61.80	-2,250.90	2,250.99	0.00	0.00	0.00	
8,200.00	89.78	270.08	6,326.20	61.94	-2,350.90	2,350.99	0.00	0.00	0.00	

Scientific Drilling

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-29-4148C2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4628' & KB 16' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4628' & KB 16' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28 NSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-29-4148C2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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)	Turn Rate (°/100ft)
8,300.00	89.78	270.08	6,326.59	62.08	-2,450.90	2,450.98	0.00	0.00	0.00
8,400.00	89.78	270.08	6,326.97	62.22	-2,550.90	2,550.98	0.00	0.00	0.00
8,500.00	89.78	270.08	6,327.36	62.36	-2,650.90	2,650.98	0.00	0.00	0.00
8,600.00	89.78	270.08	6,327.75	62.50	-2,750.90	2,750.98	0.00	0.00	0.00
8,700.00	89.78	270.08	6,328.13	62.64	-2,850.90	2,850.98	0.00	0.00	0.00
8,800.00	89.78	270.08	6,328.52	62.78	-2,950.90	2,950.98	0.00	0.00	0.00
8,900.00	89.78	270.08	6,328.91	62.91	-3,050.90	3,050.98	0.00	0.00	0.00
9,000.00	89.78	270.08	6,329.30	63.05	-3,150.89	3,150.98	0.00	0.00	0.00
9,100.00	89.78	270.08	6,329.68	63.19	-3,250.89	3,250.98	0.00	0.00	0.00
9,200.00	89.78	270.08	6,330.07	63.33	-3,350.89	3,350.98	0.00	0.00	0.00
9,300.00	89.78	270.08	6,330.46	63.47	-3,450.89	3,450.98	0.00	0.00	0.00
9,400.00	89.78	270.08	6,330.84	63.61	-3,550.89	3,550.98	0.00	0.00	0.00
9,500.00	89.78	270.08	6,331.23	63.75	-3,650.89	3,650.98	0.00	0.00	0.00
9,600.00	89.78	270.08	6,331.62	63.89	-3,750.89	3,750.97	0.00	0.00	0.00
9,700.00	89.78	270.08	6,332.01	64.03	-3,850.89	3,850.97	0.00	0.00	0.00
9,800.00	89.78	270.08	6,332.39	64.16	-3,950.89	3,950.97	0.00	0.00	0.00
9,900.00	89.78	270.08	6,332.78	64.30	-4,050.89	4,050.97	0.00	0.00	0.00
10,000.00	89.78	270.08	6,333.17	64.44	-4,150.89	4,150.97	0.00	0.00	0.00
10,100.00	89.78	270.08	6,333.55	64.58	-4,250.89	4,250.97	0.00	0.00	0.00
10,200.00	89.78	270.08	6,333.94	64.72	-4,350.88	4,350.97	0.00	0.00	0.00
10,300.00	89.78	270.08	6,334.33	64.86	-4,450.88	4,450.97	0.00	0.00	0.00
10,400.00	89.78	270.08	6,334.72	65.00	-4,550.88	4,550.97	0.00	0.00	0.00
10,500.00	89.78	270.08	6,335.10	65.14	-4,650.88	4,650.97	0.00	0.00	0.00
10,600.00	89.78	270.08	6,335.49	65.28	-4,750.88	4,750.97	0.00	0.00	0.00
10,700.00	89.78	270.08	6,335.88	65.41	-4,850.88	4,850.97	0.00	0.00	0.00
10,800.00	89.78	270.08	6,336.26	65.55	-4,950.88	4,950.97	0.00	0.00	0.00
10,900.00	89.78	270.08	6,336.65	65.69	-5,050.88	5,050.97	0.00	0.00	0.00
11,000.00	89.78	270.08	6,337.04	65.83	-5,150.88	5,150.96	0.00	0.00	0.00
11,100.00	89.78	270.08	6,337.43	65.97	-5,250.88	5,250.96	0.00	0.00	0.00
11,200.00	89.78	270.08	6,337.81	66.11	-5,350.88	5,350.96	0.00	0.00	0.00
11,300.00	89.78	270.08	6,338.20	66.25	-5,450.87	5,450.96	0.00	0.00	0.00
11,400.00	89.78	270.08	6,338.59	66.39	-5,550.87	5,550.96	0.00	0.00	0.00
11,500.00	89.78	270.08	6,338.97	66.52	-5,650.87	5,650.96	0.00	0.00	0.00
11,600.00	89.78	270.08	6,339.36	66.66	-5,750.87	5,750.96	0.00	0.00	0.00
11,700.00	89.78	270.08	6,339.75	66.80	-5,850.87	5,850.96	0.00	0.00	0.00
11,800.00	89.78	270.08	6,340.14	66.94	-5,950.87	5,950.96	0.00	0.00	0.00
11,900.00	89.78	270.08	6,340.52	67.08	-6,050.87	6,050.96	0.00	0.00	0.00
12,000.00	89.78	270.08	6,340.91	67.22	-6,150.87	6,150.96	0.00	0.00	0.00
12,100.00	89.78	270.08	6,341.30	67.36	-6,250.87	6,250.96	0.00	0.00	0.00
12,200.00	89.78	270.08	6,341.68	67.50	-6,350.87	6,350.96	0.00	0.00	0.00
12,300.00	89.78	270.08	6,342.07	67.64	-6,450.87	6,450.95	0.00	0.00	0.00
12,400.00	89.78	270.08	6,342.46	67.77	-6,550.87	6,550.95	0.00	0.00	0.00
12,500.00	89.78	270.08	6,342.85	67.91	-6,650.86	6,650.95	0.00	0.00	0.00
12,600.00	89.78	270.08	6,343.23	68.05	-6,750.86	6,750.95	0.00	0.00	0.00
12,700.00	89.78	270.08	6,343.62	68.19	-6,850.86	6,850.95	0.00	0.00	0.00
12,800.00	89.78	270.08	6,344.01	68.33	-6,950.86	6,950.95	0.00	0.00	0.00
12,900.00	89.78	270.08	6,344.39	68.47	-7,050.86	7,050.95	0.00	0.00	0.00
13,000.00	89.78	270.08	6,344.78	68.61	-7,150.86	7,150.95	0.00	0.00	0.00
13,100.00	89.78	270.08	6,345.17	68.75	-7,250.86	7,250.95	0.00	0.00	0.00
13,200.00	89.78	270.08	6,345.56	68.88	-7,350.86	7,350.95	0.00	0.00	0.00
13,300.00	89.78	270.08	6,345.94	69.02	-7,450.86	7,450.95	0.00	0.00	0.00
13,400.00	89.78	270.08	6,346.33	69.16	-7,550.86	7,550.95	0.00	0.00	0.00
13,500.00	89.78	270.08	6,346.72	69.30	-7,650.86	7,650.95	0.00	0.00	0.00
13,600.00	89.78	270.08	6,347.10	69.44	-7,750.86	7,750.94	0.00	0.00	0.00

Scientific Drilling

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-29-4148C2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4628' & KB 16' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4628' & KB 16' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28 NSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-29-4148C2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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)	Turn Rate (°/100ft)
13,700.00	89.78	270.08	6,347.49	69.58	-7,850.85	7,850.94	0.00	0.00	0.00
13,800.00	89.78	270.08	6,347.88	69.72	-7,950.85	7,950.94	0.00	0.00	0.00
13,900.00	89.78	270.08	6,348.27	69.86	-8,050.85	8,050.94	0.00	0.00	0.00
14,000.00	89.78	270.08	6,348.65	70.00	-8,150.85	8,150.94	0.00	0.00	0.00
14,100.00	89.78	270.08	6,349.04	70.13	-8,250.85	8,250.94	0.00	0.00	0.00
14,200.00	89.78	270.08	6,349.43	70.27	-8,350.85	8,350.94	0.00	0.00	0.00
14,300.00	89.78	270.08	6,349.81	70.41	-8,450.85	8,450.94	0.00	0.00	0.00
14,400.00	89.78	270.08	6,350.20	70.55	-8,550.85	8,550.94	0.00	0.00	0.00
14,500.00	89.78	270.08	6,350.59	70.69	-8,650.85	8,650.94	0.00	0.00	0.00
14,600.00	89.78	270.08	6,350.98	70.83	-8,750.85	8,750.94	0.00	0.00	0.00
14,700.00	89.78	270.08	6,351.36	70.97	-8,850.85	8,850.94	0.00	0.00	0.00
14,800.00	89.78	270.08	6,351.75	71.11	-8,950.85	8,950.94	0.00	0.00	0.00
14,900.00	89.78	270.08	6,352.14	71.25	-9,050.84	9,050.94	0.00	0.00	0.00
15,000.00	89.78	270.08	6,352.52	71.38	-9,150.84	9,150.93	0.00	0.00	0.00
15,100.00	89.78	270.08	6,352.91	71.52	-9,250.84	9,250.93	0.00	0.00	0.00
15,200.00	89.78	270.08	6,353.30	71.66	-9,350.84	9,350.93	0.00	0.00	0.00
15,300.00	89.78	270.08	6,353.69	71.80	-9,450.84	9,450.93	0.00	0.00	0.00
15,400.00	89.78	270.08	6,354.07	71.94	-9,550.84	9,550.93	0.00	0.00	0.00
15,500.00	89.78	270.08	6,354.46	72.08	-9,650.84	9,650.93	0.00	0.00	0.00
15,600.00	89.78	270.08	6,354.85	72.22	-9,750.84	9,750.93	0.00	0.00	0.00
15,700.00	89.78	270.08	6,355.23	72.36	-9,850.84	9,850.93	0.00	0.00	0.00
15,800.00	89.78	270.08	6,355.62	72.49	-9,950.84	9,950.93	0.00	0.00	0.00
15,900.00	89.78	270.08	6,356.01	72.63	-10,050.84	10,050.93	0.00	0.00	0.00
16,000.00	89.78	270.08	6,356.40	72.77	-10,150.84	10,150.93	0.00	0.00	0.00
16,100.00	89.78	270.08	6,356.78	72.91	-10,250.83	10,250.93	0.00	0.00	0.00
16,155.96	89.78	270.08	6,357.00	72.99	-10,306.79	10,306.88	0.00	0.00	0.00
AEF 4-62-29-4148C2 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									
AEF 4-62-29-4148C2 LF	0.00	0.00	6,320.00	59.72	-750.21	1,347,132.06	3,323,549.49	40° 16' 49.690 N	104° 20' 25.070 W
- plan hits target center									
- Point									
AEF 4-62-29-4148C2 PE	0.00	0.00	6,357.00	72.99	-10,306.79	1,347,020.06	3,313,993.57	40° 16' 49.800 N	104° 22' 28.380 W
- plan hits target center									
- Point									

Scientific Drilling

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-29-4148C2
Company:	Bill Barrett Corp.	TVD Reference:	GL 4628' & KB 16' @ 4644.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4628' & KB 16' @ 4644.00ft
Site:	Anschutz Equus Farms 4-62-28 NWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-29-4148C2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
16.00	16.00	Base of Fox Hills		0.00		
4,340.58	4,334.00	Sussex		0.00		
5,192.22	5,184.00	Shannon		0.00		
6,074.68	6,058.00	Sharon Springs		0.00		
6,136.24	6,111.00	Niobrara		0.00		
6,193.09	6,156.00	A Chalk		0.00		
6,268.90	6,209.00	A Marl		0.00		
6,465.97	6,301.00	Top "B" Target		0.00		
7,890.45	6,325.00	Base "B" Target		0.00		