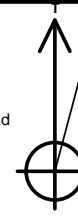




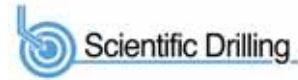
PROJECT DETAILS: Weld County, CO NAD 83

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\_27 SWSW Pad  
Well: Anschutz Equus Farms 4-62-29-5649B2  
Wellbore: OH  
Design: Plan 1



Azinuths to True North  
Magnetic North: 8.27°



Magnetic Field  
Strength: 52593.1snT  
Dip Angle: 66.94°  
Date: 10/6/2015  
Model: BGGM2015

Plan: Plan 1 (Anschutz Equus Farms 4-62-29-5649B2/OH)

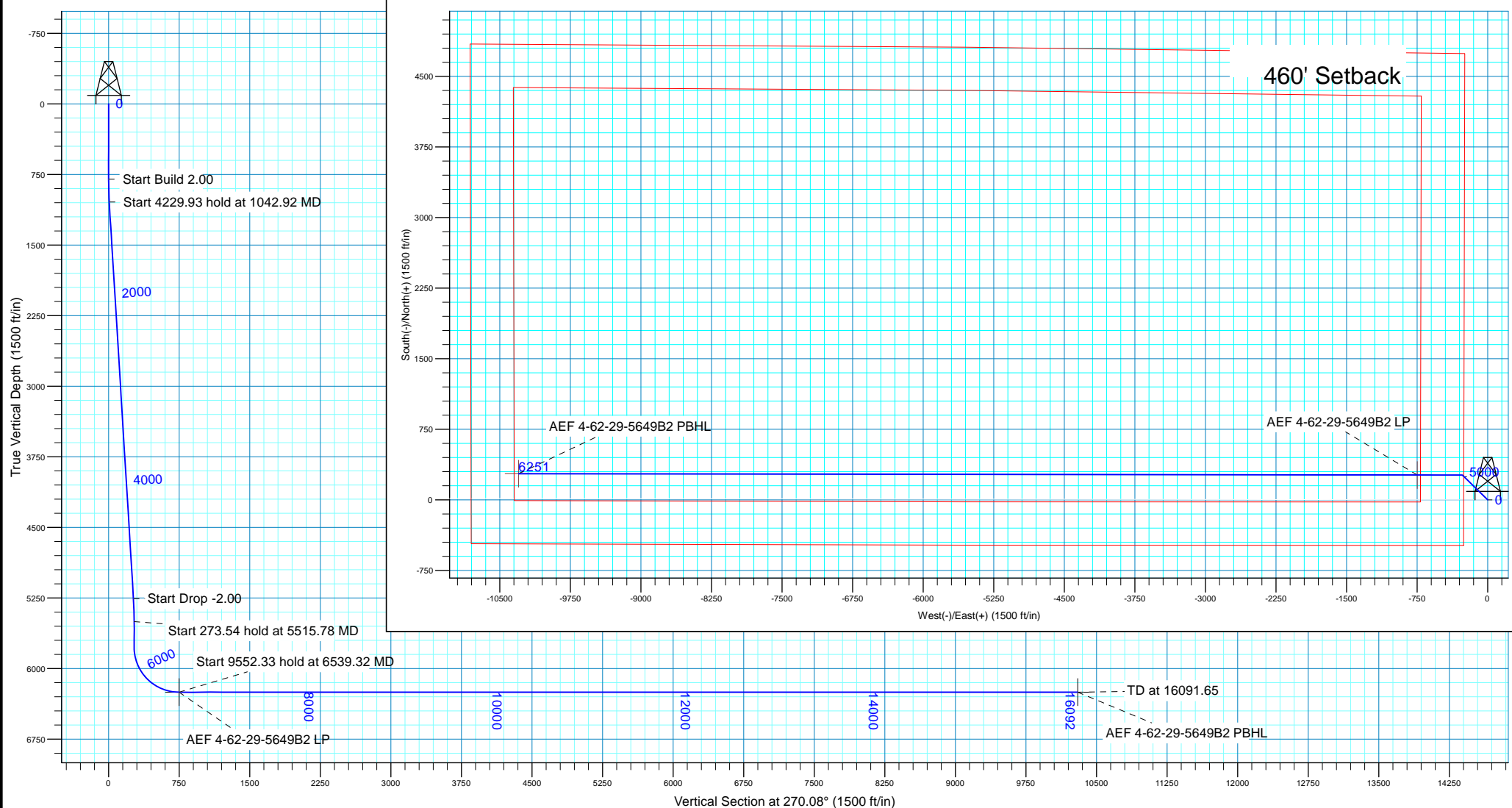
Created By: Julie Cruse Date: 6 October 2015

### 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
1042.92	4.86	314.28	1042.63	7.19	-7.37	2.00	314.28	7.38
5272.86	4.86	314.28	5257.37	257.30	-263.86	0.00	0.00	264.22
5515.78	0.00	0.00	5500.00	264.49	-271.23	2.00	180.00	271.60
5789.32	0.00	0.00	5773.54	264.49	-271.23	0.00	0.00	271.60
6539.32	90.00	270.08	6251.00	265.15	-748.69	12.00	270.08	749.06
16091.65	90.00	270.08	6251.00	278.42	-10301.01	0.00	0.00	10301.39

### WELL DETAILS: Anschutz Equus Farms 4-62-29-5649B2

GL 4630' & KB 16' @ 4646.00ft 4630.00  
Northing Easting Latitude Longitude  
1345862.87 3324312.52 40° 16' 37.050 N 104° 20' 15.440 W



# **Bill Barrett Corp.**

**Weld County, CO NAD 83**

**Anschutz Equus Farms 4-62-28\_27 SWSW Pad**

**Anschutz Equus Farms 4-62-29-5649B2**

**OH**

**Plan: Plan 1**

## **Standard Planning Report**

**06 October, 2015**



# Scientific Drilling

## Planning Report

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-29-5649B2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-28_27 SWSW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-29-5649B2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1		

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

Site		Anschutz Equus Farms 4-62-28_27 SWSW Pad			
Site Position:		Northing:	1,345,937.78 usft	Latitude:	40° 16' 37.790 N
From:	Lat/Long	Easting:	3,324,312.31 usft	Longitude:	104° 20' 15.430 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.75 °

Well	Anschutz Equus Farms 4-62-29-5649B2, 476' FSL 250' FWL Sec 28 T4N R62W					
Well Position	+N/-S	-74.90 ft	Northing:	1,345,862.87 usft	Latitude:	40° 16' 37.050 N
	+E/-W	-0.78 ft	Easting:	3,324,312.52 usft	Longitude:	104° 20' 15.440 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,630.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2015	10/6/2015	8.27	66.94	52,593

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

<b>Plan Sections</b>										
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	
1,042.92	4.86	314.28	1,042.63	7.19	-7.37	2.00	2.00	0.00	314.28	
5,272.86	4.86	314.28	5,257.37	257.30	-263.86	0.00	0.00	0.00	0.00	
5,515.78	0.00	0.00	5,500.00	264.49	-271.23	2.00	-2.00	0.00	180.00	
5,789.32	0.00	0.00	5,773.54	264.49	-271.23	0.00	0.00	0.00	0.00	
6,539.32	90.00	270.08	6,251.00	265.15	-748.69	12.00	12.00	-11.99	270.08	
16,091.65	90.00	270.08	6,251.00	278.42	-10,301.02	0.00	0.00	0.00	0.00	AEF 4-62-29-5649B2

# Scientific Drilling

## Planning Report

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-29-5649B2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-28_27 SWSW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-29-5649B2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
<b>Base of Fox Hills</b>									
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	314.28	899.98	1.22	-1.25	1.25	2.00	2.00	0.00
1,000.00	4.00	314.28	999.84	4.87	-5.00	5.00	2.00	2.00	0.00
1,042.92	4.86	314.28	1,042.63	7.19	-7.37	7.38	2.00	2.00	0.00
1,100.00	4.86	314.28	1,099.50	10.56	-10.83	10.85	0.00	0.00	0.00
1,200.00	4.86	314.28	1,199.14	16.47	-16.89	16.92	0.00	0.00	0.00
1,300.00	4.86	314.28	1,298.79	22.39	-22.96	22.99	0.00	0.00	0.00
1,400.00	4.86	314.28	1,398.43	28.30	-29.02	29.06	0.00	0.00	0.00
1,500.00	4.86	314.28	1,498.07	34.21	-35.09	35.13	0.00	0.00	0.00
1,600.00	4.86	314.28	1,597.71	40.13	-41.15	41.20	0.00	0.00	0.00
1,700.00	4.86	314.28	1,697.35	46.04	-47.21	47.28	0.00	0.00	0.00
1,800.00	4.86	314.28	1,796.99	51.95	-53.28	53.35	0.00	0.00	0.00
1,900.00	4.86	314.28	1,896.63	57.87	-59.34	59.42	0.00	0.00	0.00
2,000.00	4.86	314.28	1,996.27	63.78	-65.40	65.49	0.00	0.00	0.00
2,100.00	4.86	314.28	2,095.91	69.69	-71.47	71.56	0.00	0.00	0.00
2,200.00	4.86	314.28	2,195.55	75.60	-77.53	77.64	0.00	0.00	0.00
2,300.00	4.86	314.28	2,295.19	81.52	-83.59	83.71	0.00	0.00	0.00
2,400.00	4.86	314.28	2,394.83	87.43	-89.66	89.78	0.00	0.00	0.00
2,500.00	4.86	314.28	2,494.47	93.34	-95.72	95.85	0.00	0.00	0.00
2,600.00	4.86	314.28	2,594.11	99.26	-101.79	101.92	0.00	0.00	0.00
2,700.00	4.86	314.28	2,693.76	105.17	-107.85	108.00	0.00	0.00	0.00
2,800.00	4.86	314.28	2,793.40	111.08	-113.91	114.07	0.00	0.00	0.00
2,900.00	4.86	314.28	2,893.04	117.00	-119.98	120.14	0.00	0.00	0.00
3,000.00	4.86	314.28	2,992.68	122.91	-126.04	126.21	0.00	0.00	0.00
3,100.00	4.86	314.28	3,092.32	128.82	-132.10	132.28	0.00	0.00	0.00
3,200.00	4.86	314.28	3,191.96	134.73	-138.17	138.36	0.00	0.00	0.00
3,300.00	4.86	314.28	3,291.60	140.65	-144.23	144.43	0.00	0.00	0.00
3,400.00	4.86	314.28	3,391.24	146.56	-150.30	150.50	0.00	0.00	0.00
3,500.00	4.86	314.28	3,490.88	152.47	-156.36	156.57	0.00	0.00	0.00
3,600.00	4.86	314.28	3,590.52	158.39	-162.42	162.64	0.00	0.00	0.00
3,700.00	4.86	314.28	3,690.16	164.30	-168.49	168.72	0.00	0.00	0.00
3,800.00	4.86	314.28	3,789.80	170.21	-174.55	174.79	0.00	0.00	0.00
3,900.00	4.86	314.28	3,889.44	176.13	-180.61	180.86	0.00	0.00	0.00
4,000.00	4.86	314.28	3,989.08	182.04	-186.68	186.93	0.00	0.00	0.00
4,100.00	4.86	314.28	4,088.72	187.95	-192.74	193.00	0.00	0.00	0.00
4,200.00	4.86	314.28	4,188.37	193.87	-198.81	199.08	0.00	0.00	0.00
4,300.00	4.86	314.28	4,288.01	199.78	-204.87	205.15	0.00	0.00	0.00
4,334.12	4.86	314.28	4,322.00	201.80	-206.94	207.22	0.00	0.00	0.00
<b>Sussex</b>									
4,400.00	4.86	314.28	4,387.65	205.69	-210.93	211.22	0.00	0.00	0.00
4,500.00	4.86	314.28	4,487.29	211.60	-217.00	217.29	0.00	0.00	0.00
4,600.00	4.86	314.28	4,586.93	217.52	-223.06	223.36	0.00	0.00	0.00
4,700.00	4.86	314.28	4,686.57	223.43	-229.12	229.44	0.00	0.00	0.00

# Scientific Drilling

## Planning Report

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-29-5649B2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-28_27 SWSW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-29-5649B2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)
4,800.00	4.86	314.28	4,786.21	229.34	-235.19	235.51	0.00	0.00	0.00
4,900.00	4.86	314.28	4,885.85	235.26	-241.25	241.58	0.00	0.00	0.00
5,000.00	4.86	314.28	4,985.49	241.17	-247.32	247.65	0.00	0.00	0.00
5,100.00	4.86	314.28	5,085.13	247.08	-253.38	253.72	0.00	0.00	0.00
5,187.18	4.86	314.28	5,172.00	252.24	-258.67	259.02	0.00	0.00	0.00
<b>Shannon</b>									
5,200.00	4.86	314.28	5,184.77	253.00	-259.44	259.80	0.00	0.00	0.00
5,272.86	4.86	314.28	5,257.37	257.30	-263.86	264.22	0.00	0.00	0.00
5,300.00	4.32	314.28	5,284.42	258.82	-265.41	265.78	2.00	-2.00	0.00
5,400.00	2.32	314.28	5,384.25	262.86	-269.56	269.92	2.00	-2.00	0.00
5,500.00	0.32	314.28	5,484.22	264.46	-271.20	271.57	2.00	-2.00	0.00
5,515.78	0.00	0.00	5,500.00	264.49	-271.23	271.60	2.00	-2.00	0.00
5,600.00	0.00	0.00	5,584.22	264.49	-271.23	271.60	0.00	0.00	0.00
5,700.00	0.00	0.00	5,684.22	264.49	-271.23	271.60	0.00	0.00	0.00
5,789.32	0.00	0.00	5,773.54	264.49	-271.23	271.60	0.00	0.00	0.00
5,800.00	1.28	270.08	5,784.22	264.49	-271.35	271.72	12.00	12.00	0.00
5,900.00	13.28	270.08	5,883.23	264.51	-284.00	284.37	12.00	12.00	0.00
6,000.00	25.28	270.08	5,977.45	264.55	-316.96	317.33	12.00	12.00	0.00
6,079.28	34.79	270.08	6,046.00	264.61	-356.60	356.97	12.00	12.00	0.00
<b>Sharon Springs</b>									
6,100.00	37.28	270.08	6,062.76	264.63	-368.79	369.16	12.00	12.00	0.00
6,147.42	42.97	270.08	6,099.00	264.67	-399.34	399.71	12.00	12.00	0.00
<b>Niobrara</b>									
6,200.00	49.28	270.08	6,135.42	264.72	-437.22	437.59	12.00	12.00	0.00
6,213.37	50.89	270.08	6,144.00	264.73	-447.48	447.85	12.00	12.00	0.00
<b>A Chalk</b>									
6,226.27	52.43	270.08	6,152.00	264.75	-457.59	457.96	12.00	12.00	0.00
<b>A Marl</b>									
6,300.00	61.28	270.08	6,192.27	264.83	-519.27	519.64	12.00	12.00	0.00
6,310.03	62.49	270.08	6,197.00	264.85	-528.12	528.49	12.00	12.00	0.00
<b>Top "B" Target</b>									
6,400.00	73.28	270.08	6,230.82	264.96	-611.34	611.71	12.00	12.00	0.00
6,441.41	78.25	270.08	6,241.00	265.02	-651.46	651.83	12.00	12.00	0.00
<b>Base "B" Target</b>									
6,500.00	85.28	270.08	6,249.39	265.10	-709.42	709.79	12.00	12.00	0.00
6,539.31	90.00	270.08	6,251.00	265.15	-748.69	749.06	12.00	12.00	0.00
<b>AEF 4-62-29-5649B2 LP</b>									
6,539.32	90.00	270.08	6,251.00	265.15	-748.69	749.06	12.00	12.00	0.00
6,600.00	90.00	270.08	6,251.00	265.24	-809.37	809.74	0.00	0.00	0.00
6,700.00	90.00	270.08	6,251.00	265.38	-909.37	909.74	0.00	0.00	0.00
6,800.00	90.00	270.08	6,251.00	265.51	-1,009.37	1,009.74	0.00	0.00	0.00
6,900.00	90.00	270.08	6,251.00	265.65	-1,109.37	1,109.74	0.00	0.00	0.00
7,000.00	90.00	270.08	6,251.00	265.79	-1,209.37	1,209.74	0.00	0.00	0.00
7,100.00	90.00	270.08	6,251.00	265.93	-1,309.37	1,309.74	0.00	0.00	0.00
7,200.00	90.00	270.08	6,251.00	266.07	-1,409.37	1,409.74	0.00	0.00	0.00
7,300.00	90.00	270.08	6,251.00	266.21	-1,509.37	1,509.74	0.00	0.00	0.00
7,400.00	90.00	270.08	6,251.00	266.35	-1,609.37	1,609.74	0.00	0.00	0.00
7,500.00	90.00	270.08	6,251.00	266.49	-1,709.37	1,709.74	0.00	0.00	0.00
7,600.00	90.00	270.08	6,251.00	266.63	-1,809.37	1,809.74	0.00	0.00	0.00
7,700.00	90.00	270.08	6,251.00	266.76	-1,909.37	1,909.74	0.00	0.00	0.00
7,800.00	90.00	270.08	6,251.00	266.90	-2,009.37	2,009.74	0.00	0.00	0.00
7,900.00	90.00	270.08	6,251.00	267.04	-2,109.37	2,109.74	0.00	0.00	0.00

# Scientific Drilling

## Planning Report

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-29-5649B2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-28_27 SWSW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-29-5649B2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)	
8,000.00	90.00	270.08	6,251.00	267.18	-2,209.37	2,209.74	0.00	0.00	0.00	
8,100.00	90.00	270.08	6,251.00	267.32	-2,309.37	2,309.74	0.00	0.00	0.00	
8,200.00	90.00	270.08	6,251.00	267.46	-2,409.37	2,409.74	0.00	0.00	0.00	
8,300.00	90.00	270.08	6,251.00	267.60	-2,509.37	2,509.74	0.00	0.00	0.00	
8,400.00	90.00	270.08	6,251.00	267.74	-2,609.37	2,609.74	0.00	0.00	0.00	
8,500.00	90.00	270.08	6,251.00	267.88	-2,709.37	2,709.74	0.00	0.00	0.00	
8,600.00	90.00	270.08	6,251.00	268.01	-2,809.37	2,809.74	0.00	0.00	0.00	
8,700.00	90.00	270.08	6,251.00	268.15	-2,909.37	2,909.74	0.00	0.00	0.00	
8,800.00	90.00	270.08	6,251.00	268.29	-3,009.37	3,009.74	0.00	0.00	0.00	
8,900.00	90.00	270.08	6,251.00	268.43	-3,109.37	3,109.74	0.00	0.00	0.00	
9,000.00	90.00	270.08	6,251.00	268.57	-3,209.37	3,209.74	0.00	0.00	0.00	
9,100.00	90.00	270.08	6,251.00	268.71	-3,309.37	3,309.74	0.00	0.00	0.00	
9,200.00	90.00	270.08	6,251.00	268.85	-3,409.37	3,409.74	0.00	0.00	0.00	
9,300.00	90.00	270.08	6,251.00	268.99	-3,509.37	3,509.74	0.00	0.00	0.00	
9,400.00	90.00	270.08	6,251.00	269.13	-3,609.37	3,609.74	0.00	0.00	0.00	
9,500.00	90.00	270.08	6,251.00	269.26	-3,709.37	3,709.74	0.00	0.00	0.00	
9,600.00	90.00	270.08	6,251.00	269.40	-3,809.37	3,809.74	0.00	0.00	0.00	
9,700.00	90.00	270.08	6,251.00	269.54	-3,909.37	3,909.74	0.00	0.00	0.00	
9,800.00	90.00	270.08	6,251.00	269.68	-4,009.37	4,009.74	0.00	0.00	0.00	
9,900.00	90.00	270.08	6,251.00	269.82	-4,109.37	4,109.74	0.00	0.00	0.00	
10,000.00	90.00	270.08	6,251.00	269.96	-4,209.37	4,209.74	0.00	0.00	0.00	
10,100.00	90.00	270.08	6,251.00	270.10	-4,309.37	4,309.74	0.00	0.00	0.00	
10,200.00	90.00	270.08	6,251.00	270.24	-4,409.37	4,409.74	0.00	0.00	0.00	
10,300.00	90.00	270.08	6,251.00	270.38	-4,509.37	4,509.74	0.00	0.00	0.00	
10,400.00	90.00	270.08	6,251.00	270.51	-4,609.37	4,609.74	0.00	0.00	0.00	
10,500.00	90.00	270.08	6,251.00	270.65	-4,709.37	4,709.74	0.00	0.00	0.00	
10,600.00	90.00	270.08	6,251.00	270.79	-4,809.37	4,809.74	0.00	0.00	0.00	
10,700.00	90.00	270.08	6,251.00	270.93	-4,909.37	4,909.74	0.00	0.00	0.00	
10,800.00	90.00	270.08	6,251.00	271.07	-5,009.37	5,009.74	0.00	0.00	0.00	
10,900.00	90.00	270.08	6,251.00	271.21	-5,109.37	5,109.74	0.00	0.00	0.00	
11,000.00	90.00	270.08	6,251.00	271.35	-5,209.37	5,209.74	0.00	0.00	0.00	
11,100.00	90.00	270.08	6,251.00	271.49	-5,309.37	5,309.74	0.00	0.00	0.00	
11,200.00	90.00	270.08	6,251.00	271.62	-5,409.37	5,409.74	0.00	0.00	0.00	
11,300.00	90.00	270.08	6,251.00	271.76	-5,509.37	5,509.74	0.00	0.00	0.00	
11,400.00	90.00	270.08	6,251.00	271.90	-5,609.37	5,609.74	0.00	0.00	0.00	
11,500.00	90.00	270.08	6,251.00	272.04	-5,709.37	5,709.74	0.00	0.00	0.00	
11,600.00	90.00	270.08	6,251.00	272.18	-5,809.37	5,809.74	0.00	0.00	0.00	
11,700.00	90.00	270.08	6,251.00	272.32	-5,909.37	5,909.74	0.00	0.00	0.00	
11,800.00	90.00	270.08	6,251.00	272.46	-6,009.37	6,009.74	0.00	0.00	0.00	
11,900.00	90.00	270.08	6,251.00	272.60	-6,109.37	6,109.74	0.00	0.00	0.00	
12,000.00	90.00	270.08	6,251.00	272.74	-6,209.37	6,209.74	0.00	0.00	0.00	
12,100.00	90.00	270.08	6,251.00	272.87	-6,309.37	6,309.74	0.00	0.00	0.00	
12,200.00	90.00	270.08	6,251.00	273.01	-6,409.37	6,409.74	0.00	0.00	0.00	
12,300.00	90.00	270.08	6,251.00	273.15	-6,509.37	6,509.74	0.00	0.00	0.00	
12,400.00	90.00	270.08	6,251.00	273.29	-6,609.37	6,609.74	0.00	0.00	0.00	
12,500.00	90.00	270.08	6,251.00	273.43	-6,709.37	6,709.74	0.00	0.00	0.00	
12,600.00	90.00	270.08	6,251.00	273.57	-6,809.37	6,809.74	0.00	0.00	0.00	
12,700.00	90.00	270.08	6,251.00	273.71	-6,909.37	6,909.74	0.00	0.00	0.00	
12,800.00	90.00	270.08	6,251.00	273.85	-7,009.37	7,009.74	0.00	0.00	0.00	
12,900.00	90.00	270.08	6,251.00	273.99	-7,109.37	7,109.74	0.00	0.00	0.00	
13,000.00	90.00	270.08	6,251.00	274.12	-7,209.37	7,209.74	0.00	0.00	0.00	
13,100.00	90.00	270.08	6,251.00	274.26	-7,309.37	7,309.74	0.00	0.00	0.00	
13,200.00	90.00	270.08	6,251.00	274.40	-7,409.37	7,409.74	0.00	0.00	0.00	

# Scientific Drilling

## Planning Report

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-29-5649B2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-28_27 SWSW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-29-5649B2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)
13,300.00	90.00	270.08	6,251.00	274.54	-7,509.37	7,509.74	0.00	0.00	0.00
13,400.00	90.00	270.08	6,251.00	274.68	-7,609.37	7,609.74	0.00	0.00	0.00
13,500.00	90.00	270.08	6,251.00	274.82	-7,709.37	7,709.74	0.00	0.00	0.00
13,600.00	90.00	270.08	6,251.00	274.96	-7,809.37	7,809.74	0.00	0.00	0.00
13,700.00	90.00	270.08	6,251.00	275.10	-7,909.37	7,909.74	0.00	0.00	0.00
13,800.00	90.00	270.08	6,251.00	275.24	-8,009.37	8,009.74	0.00	0.00	0.00
13,900.00	90.00	270.08	6,251.00	275.37	-8,109.37	8,109.74	0.00	0.00	0.00
14,000.00	90.00	270.08	6,251.00	275.51	-8,209.37	8,209.74	0.00	0.00	0.00
14,100.00	90.00	270.08	6,251.00	275.65	-8,309.37	8,309.74	0.00	0.00	0.00
14,200.00	90.00	270.08	6,251.00	275.79	-8,409.37	8,409.74	0.00	0.00	0.00
14,300.00	90.00	270.08	6,251.00	275.93	-8,509.37	8,509.74	0.00	0.00	0.00
14,400.00	90.00	270.08	6,251.00	276.07	-8,609.37	8,609.74	0.00	0.00	0.00
14,500.00	90.00	270.08	6,251.00	276.21	-8,709.37	8,709.74	0.00	0.00	0.00
14,600.00	90.00	270.08	6,251.00	276.35	-8,809.37	8,809.74	0.00	0.00	0.00
14,700.00	90.00	270.08	6,251.00	276.48	-8,909.37	8,909.74	0.00	0.00	0.00
14,800.00	90.00	270.08	6,251.00	276.62	-9,009.37	9,009.74	0.00	0.00	0.00
14,900.00	90.00	270.08	6,251.00	276.76	-9,109.37	9,109.74	0.00	0.00	0.00
15,000.00	90.00	270.08	6,251.00	276.90	-9,209.37	9,209.74	0.00	0.00	0.00
15,100.00	90.00	270.08	6,251.00	277.04	-9,309.37	9,309.74	0.00	0.00	0.00
15,200.00	90.00	270.08	6,251.00	277.18	-9,409.37	9,409.74	0.00	0.00	0.00
15,300.00	90.00	270.08	6,251.00	277.32	-9,509.37	9,509.74	0.00	0.00	0.00
15,400.00	90.00	270.08	6,251.00	277.46	-9,609.37	9,609.74	0.00	0.00	0.00
15,500.00	90.00	270.08	6,251.00	277.60	-9,709.37	9,709.74	0.00	0.00	0.00
15,600.00	90.00	270.08	6,251.00	277.73	-9,809.37	9,809.74	0.00	0.00	0.00
15,700.00	90.00	270.08	6,251.00	277.87	-9,909.37	9,909.74	0.00	0.00	0.00
15,800.00	90.00	270.08	6,251.00	278.01	-10,009.37	10,009.74	0.00	0.00	0.00
15,900.00	90.00	270.08	6,251.00	278.15	-10,109.37	10,109.74	0.00	0.00	0.00
16,000.00	90.00	270.08	6,251.00	278.29	-10,209.36	10,209.74	0.00	0.00	0.00
16,091.65	90.00	270.08	6,251.00	278.42	-10,301.02	10,301.39	0.00	0.00	0.00
AEF 4-62-29-5649B2 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 4-62-29-5649B2 PE - plan hits target center - Point	0.00	0.00	6,251.00	278.42	-10,301.02	1,346,006.24	3,314,008.76	40° 16' 39.780 N	104° 22' 28.350 W
AEF 4-62-29-5649B2 LF - plan hits target center - Point	0.00	0.00	6,251.00	265.15	-748.69	1,346,118.19	3,323,560.43	40° 16' 39.670 N	104° 20' 25.100 W

# Scientific Drilling

## Planning Report

<b>Database:</b>	Casper District	<b>Local Co-ordinate Reference:</b>	Well Anschutz Equus Farms 4-62-29-5649B2
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Project:</b>	Weld County, CO NAD 83	<b>MD Reference:</b>	GL 4630' & KB 16' @ 4646.00ft
<b>Site:</b>	Anschutz Equus Farms 4-62-28_27 SWSW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Anschutz Equus Farms 4-62-29-5649B2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
16.00	16.00	Base of Fox Hills		0.00		
4,334.12	4,322.00	Sussex		0.00		
5,187.18	5,172.00	Shannon		0.00		
6,079.28	6,046.00	Sharon Springs		0.00		
6,147.42	6,099.00	Niobrara		0.00		
6,213.37	6,144.00	A Chalk		0.00		
6,226.27	6,152.00	A Marl		0.00		
6,310.03	6,197.00	Top "B" Target		0.00		
6,441.41	6,241.00	Base "B" Target		0.00		