

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 4-62-20_21 NWNW Pad
 Well: Anschutz Equus Farms 4-62-20-0108C2B
 Wellbore: OH
 Design: Plan 1



Azimuths to True North
 Magnetic North: 8.29°

Magnetic Field
 Strength: 52607.2snT
 Dip Angle: 66.96°
 Date: 9/23/2015
 Model: BGGM2015

Plan: Plan 1 (Anschutz Equus Farms 4-62-20-0108C2B/OH)

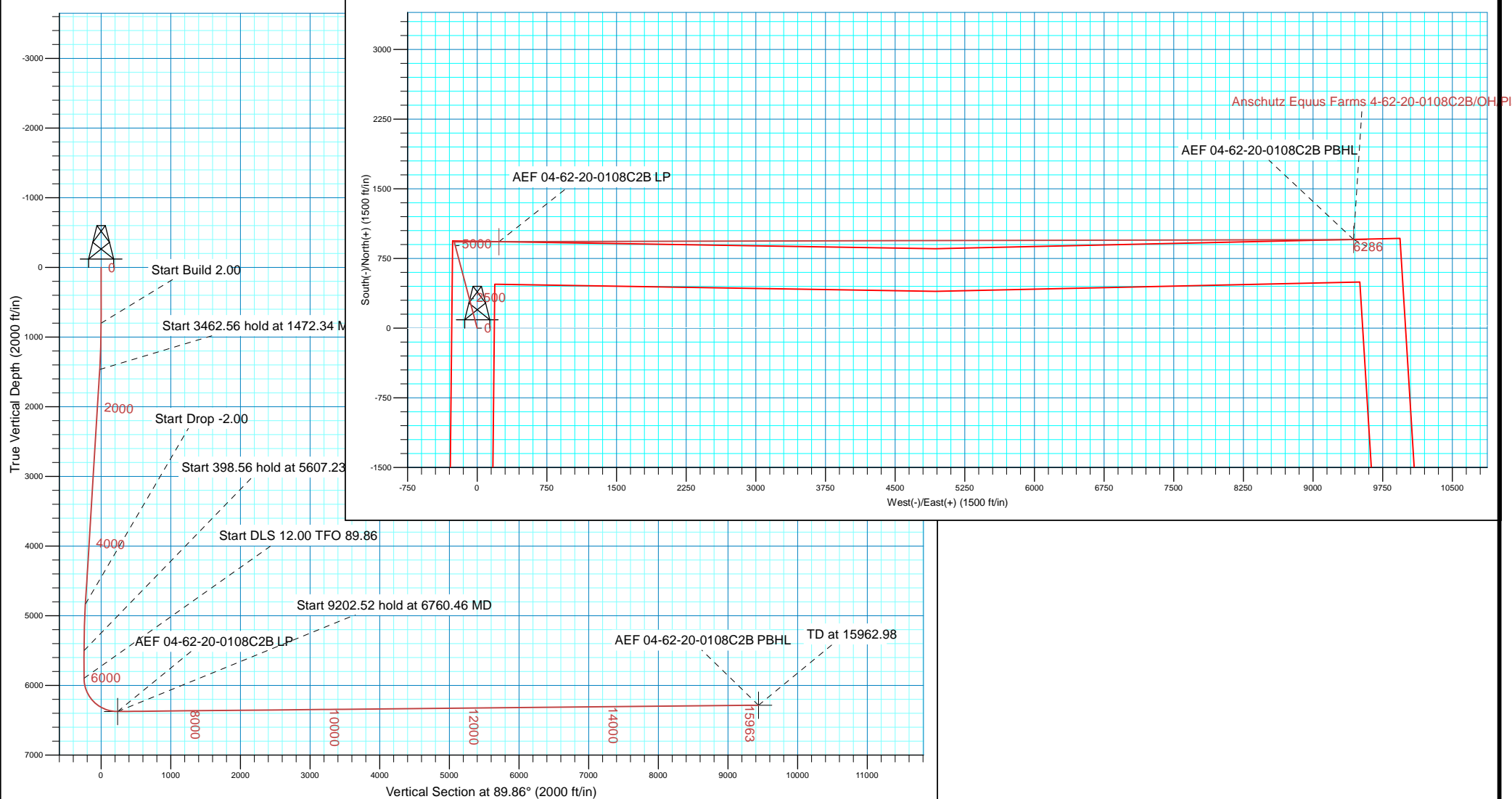
Created By: Seth Burstad Date: 9-23-2015

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
1472.34	13.45	345.11	1466.18	75.90	-20.18	2.00	345.11	-20.00
4934.89	13.45	345.11	4833.82	854.04	-227.12	0.00	0.00	-225.03
5607.23	0.00	0.00	5500.00	929.93	-247.30	2.00	180.00	-245.03
6005.79	0.00	0.00	5898.56	929.93	-247.30	0.00	0.00	-245.03
6760.46	90.56	89.86	6376.00	931.14	234.83	12.00	89.86	237.11
15962.98	90.56	89.86	6286.00	954.06	9436.89	0.00	0.00	9439.19

WELL DETAILS: Anschutz Equus Farms 4-62-20-0108C2B

+N/-S	+E/-W	Northing	Ground Level: Easting	4603.00 Latitude	Longitude
0.00	0.00	1355097.67	3318971.53	40° 18' 8.989 N	104° 21' 22.810 W





Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz Equus Farms 4-62-20_21 NWNW Pad

Anschutz Equus Farms 4-62-20-0108C2B

OH

Plan: Plan 1

Standard Planning Report

23 September, 2015



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-20-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4603' & KB 16' @ 4619.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4603' & KB 16' @ 4619.00ft
Site:	Anschutz Equus Farms 4-62-20_21 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-20-0108C2B	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 4-62-20_21 NWNW Pad		
Site Position:		Northing:	1,355,007.69 usft
From:	Lat/Long	Easting:	3,318,971.86 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Grid Convergence:	0.74 °

Well	Anschutz Equus Farms 4-62-20-0108C2B, 936' FNL 275' FWL sec 20 T4N R62W		
Well Position	+N/-S	89.96 ft	Northing: 1,355,097.66 usft
	+E/-W	0.84 ft	Easting: 3,318,971.54 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Ground Level:	4,603.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2015	9/23/2015	8.29	66.96	52,607

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	89.86

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	
1,472.34	13.45	345.11	1,466.18	75.90	-20.18	2.00	2.00	0.00	345.11	
4,934.89	13.45	345.11	4,833.82	854.04	-227.12	0.00	0.00	0.00	0.00	
5,607.23	0.00	0.00	5,500.00	929.93	-247.30	2.00	-2.00	0.00	180.00	
6,005.79	0.00	0.00	5,898.56	929.93	-247.30	0.00	0.00	0.00	0.00	
6,760.46	90.56	89.86	6,376.00	931.14	234.83	12.00	12.00	11.91	89.86	
15,962.98	90.56	89.86	6,286.00	954.07	9,436.89	0.00	0.00	0.00	0.00	AEF 04-62-20-0108C

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-20-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4603' & KB 16' @ 4619.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4603' & KB 16' @ 4619.00ft
Site:	Anschutz Equus Farms 4-62-20_21 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-20-0108C2B	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
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
Start Build 2.00									
900.00	2.00	345.11	899.98	1.69	-0.45	-0.44	2.00	2.00	0.00
1,000.00	4.00	345.11	999.84	6.74	-1.79	-1.78	2.00	2.00	0.00
1,100.00	6.00	345.11	1,099.45	15.17	-4.03	-4.00	2.00	2.00	0.00
1,200.00	8.00	345.11	1,198.70	26.94	-7.17	-7.10	2.00	2.00	0.00
1,300.00	10.00	345.11	1,297.47	42.06	-11.19	-11.08	2.00	2.00	0.00
1,400.00	12.00	345.11	1,395.62	60.50	-16.09	-15.94	2.00	2.00	0.00
1,472.34	13.45	345.11	1,466.18	75.90	-20.18	-20.00	2.00	2.00	0.00
Start 3462.56 hold at 1472.34 MD									
1,500.00	13.45	345.11	1,493.09	82.11	-21.84	-21.64	0.00	0.00	0.00
1,600.00	13.45	345.11	1,590.35	104.59	-27.81	-27.56	0.00	0.00	0.00
1,700.00	13.45	345.11	1,687.60	127.06	-33.79	-33.48	0.00	0.00	0.00
1,800.00	13.45	345.11	1,784.86	149.53	-39.77	-39.40	0.00	0.00	0.00
1,900.00	13.45	345.11	1,882.12	172.00	-45.74	-45.32	0.00	0.00	0.00
2,000.00	13.45	345.11	1,979.38	194.48	-51.72	-51.24	0.00	0.00	0.00
2,100.00	13.45	345.11	2,076.64	216.95	-57.69	-57.16	0.00	0.00	0.00
2,200.00	13.45	345.11	2,173.90	239.42	-63.67	-63.09	0.00	0.00	0.00
2,300.00	13.45	345.11	2,271.16	261.90	-69.65	-69.01	0.00	0.00	0.00
2,400.00	13.45	345.11	2,368.41	284.37	-75.62	-74.93	0.00	0.00	0.00
2,500.00	13.45	345.11	2,465.67	306.84	-81.60	-80.85	0.00	0.00	0.00
2,600.00	13.45	345.11	2,562.93	329.32	-87.58	-86.77	0.00	0.00	0.00
2,700.00	13.45	345.11	2,660.19	351.79	-93.55	-92.69	0.00	0.00	0.00
2,800.00	13.45	345.11	2,757.45	374.26	-99.53	-98.61	0.00	0.00	0.00
2,900.00	13.45	345.11	2,854.71	396.74	-105.50	-104.54	0.00	0.00	0.00
3,000.00	13.45	345.11	2,951.97	419.21	-111.48	-110.46	0.00	0.00	0.00
3,100.00	13.45	345.11	3,049.23	441.68	-117.46	-116.38	0.00	0.00	0.00
3,200.00	13.45	345.11	3,146.48	464.15	-123.43	-122.30	0.00	0.00	0.00
3,300.00	13.45	345.11	3,243.74	486.63	-129.41	-128.22	0.00	0.00	0.00
3,400.00	13.45	345.11	3,341.00	509.10	-135.39	-134.14	0.00	0.00	0.00
3,500.00	13.45	345.11	3,438.26	531.57	-141.36	-140.06	0.00	0.00	0.00
3,600.00	13.45	345.11	3,535.52	554.05	-147.34	-145.98	0.00	0.00	0.00
3,700.00	13.45	345.11	3,632.78	576.52	-153.32	-151.91	0.00	0.00	0.00
3,800.00	13.45	345.11	3,730.04	598.99	-159.29	-157.83	0.00	0.00	0.00
3,900.00	13.45	345.11	3,827.29	621.47	-165.27	-163.75	0.00	0.00	0.00
4,000.00	13.45	345.11	3,924.55	643.94	-171.24	-169.67	0.00	0.00	0.00
4,100.00	13.45	345.11	4,021.81	666.41	-177.22	-175.59	0.00	0.00	0.00
4,200.00	13.45	345.11	4,119.07	688.89	-183.20	-181.51	0.00	0.00	0.00
4,300.00	13.45	345.11	4,216.33	711.36	-189.17	-187.43	0.00	0.00	0.00
4,400.00	13.45	345.11	4,313.59	733.83	-195.15	-193.36	0.00	0.00	0.00
4,500.00	13.45	345.11	4,410.85	756.30	-201.13	-199.28	0.00	0.00	0.00
4,600.00	13.45	345.11	4,508.11	778.78	-207.10	-205.20	0.00	0.00	0.00
4,700.00	13.45	345.11	4,605.36	801.25	-213.08	-211.12	0.00	0.00	0.00
4,714.02	13.45	345.11	4,619.00	804.40	-213.92	-211.95	0.00	0.00	0.00

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Company:	Bill Barrett Corp.	TVD Reference:	GL 4603' & KB 16' @ 4619.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4603' & KB 16' @ 4619.00ft
Site:	Anschutz Equus Farms 4-62-20_21 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-20-0108C2B	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)
BASE OF FOX HILLS									
4,800.00	13.45	345.11	4,702.62	823.72	-219.06	-217.04	0.00	0.00	0.00
4,900.00	13.45	345.11	4,799.88	846.20	-225.03	-222.96	0.00	0.00	0.00
4,906.29	13.45	345.11	4,806.00	847.61	-225.41	-223.34	0.00	0.00	0.00
SHANNON									
4,934.89	13.45	345.11	4,833.82	854.04	-227.12	-225.03	0.00	0.00	0.00
Start Drop -2.00									
5,000.00	12.14	345.11	4,897.31	867.97	-230.82	-228.70	2.00	-2.00	0.00
5,100.00	10.14	345.11	4,995.42	886.65	-235.79	-233.62	2.00	-2.00	0.00
5,200.00	8.14	345.11	5,094.14	902.01	-239.87	-237.67	2.00	-2.00	0.00
5,300.00	6.14	345.11	5,193.36	914.03	-243.07	-240.84	2.00	-2.00	0.00
5,400.00	4.14	345.11	5,292.95	922.69	-245.37	-243.12	2.00	-2.00	0.00
5,500.00	2.14	345.11	5,392.79	927.99	-246.78	-244.52	2.00	-2.00	0.00
5,600.00	0.14	345.11	5,492.77	929.93	-247.30	-245.02	2.00	-2.00	0.00
5,607.23	0.00	0.00	5,500.00	929.93	-247.30	-245.03	2.00	-2.00	0.00
Start 398.56 hold at 5607.23 MD									
5,700.00	0.00	0.00	5,592.77	929.93	-247.30	-245.03	0.00	0.00	0.00
5,800.00	0.00	0.00	5,692.77	929.93	-247.30	-245.03	0.00	0.00	0.00
5,900.00	0.00	0.00	5,792.77	929.93	-247.30	-245.03	0.00	0.00	0.00
6,000.00	0.00	0.00	5,892.77	929.93	-247.30	-245.03	0.00	0.00	0.00
6,005.79	0.00	0.00	5,898.56	929.93	-247.30	-245.03	0.00	0.00	0.00
Start DLS 12.00 TFO 89.86									
6,100.00	11.31	89.86	5,992.16	929.96	-238.04	-235.76	12.00	12.00	0.00
6,152.53	17.61	89.86	6,043.00	929.99	-224.93	-222.66	12.00	12.00	0.00
SHARON SPRINGS									
6,200.00	23.31	89.86	6,087.46	930.03	-208.34	-206.07	12.00	12.00	0.00
6,287.25	33.78	89.86	6,164.00	930.13	-166.72	-164.44	12.00	12.00	0.00
NIORARA									
6,300.00	35.31	89.86	6,174.50	930.15	-159.49	-157.21	12.00	12.00	0.00
6,342.44	40.40	89.86	6,208.00	930.22	-133.46	-131.18	12.00	12.00	0.00
A CHALK									
6,400.00	47.31	89.86	6,249.48	930.32	-93.60	-91.33	12.00	12.00	0.00
6,428.23	50.69	89.86	6,268.00	930.37	-72.30	-70.03	12.00	12.00	0.00
B CHALK									
6,457.77	54.24	89.86	6,286.00	930.43	-48.88	-46.60	12.00	12.00	0.00
TD (HORIZONTAL)									
6,500.00	59.31	89.86	6,309.13	930.52	-13.57	-11.29	12.00	12.00	0.00
6,600.00	71.31	89.86	6,350.83	930.74	77.12	79.40	12.00	12.00	0.00
6,620.55	73.77	89.86	6,357.00	930.79	96.73	99.00	12.00	12.00	0.00
TOP "C" TARGET									
6,700.00	83.31	89.86	6,372.77	930.99	174.50	176.77	12.00	12.00	0.00
6,760.46	90.56	89.86	6,376.00	931.14	234.83	237.11	12.00	12.00	0.00
Start 9202.52 hold at 6760.46 MD									
6,761.27	90.59	89.86	6,376.00	931.14	235.64	237.91	3.71	3.71	0.00
LANDING POINT									
6,800.00	90.56	89.86	6,375.62	931.23	274.37	276.65	0.08	-0.08	0.00
6,900.00	90.56	89.86	6,374.64	931.48	374.37	376.64	0.00	0.00	0.00
7,000.00	90.56	89.86	6,373.66	931.73	474.36	476.64	0.00	0.00	0.00
7,100.00	90.56	89.86	6,372.68	931.98	574.36	576.63	0.00	0.00	0.00
7,200.00	90.56	89.86	6,371.70	932.23	674.35	676.63	0.00	0.00	0.00

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Project:	Weld County, CO NAD 83	MD Reference:	GL 4603' & KB 16' @ 4619.00ft
Site:	Anschutz Equus Farms 4-62-20_21 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-20-0108C2B	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)
7,300.00	90.56	89.86	6,370.73	932.48	774.35	776.62	0.00	0.00	0.00
7,400.00	90.56	89.86	6,369.75	932.73	874.34	876.62	0.00	0.00	0.00
7,500.00	90.56	89.86	6,368.77	932.98	974.33	976.61	0.00	0.00	0.00
7,600.00	90.56	89.86	6,367.79	933.23	1,074.33	1,076.61	0.00	0.00	0.00
7,700.00	90.56	89.86	6,366.81	933.48	1,174.32	1,176.60	0.00	0.00	0.00
7,800.00	90.56	89.86	6,365.84	933.73	1,274.32	1,276.60	0.00	0.00	0.00
7,900.00	90.56	89.86	6,364.86	933.98	1,374.31	1,376.59	0.00	0.00	0.00
8,000.00	90.56	89.86	6,363.88	934.23	1,474.31	1,476.59	0.00	0.00	0.00
8,100.00	90.56	89.86	6,362.90	934.47	1,574.30	1,576.58	0.00	0.00	0.00
8,200.00	90.56	89.86	6,361.92	934.72	1,674.30	1,676.58	0.00	0.00	0.00
8,300.00	90.56	89.86	6,360.95	934.97	1,774.29	1,776.57	0.00	0.00	0.00
8,400.00	90.56	89.86	6,359.97	935.22	1,874.29	1,876.57	0.00	0.00	0.00
8,500.00	90.56	89.86	6,358.99	935.47	1,974.28	1,976.56	0.00	0.00	0.00
8,600.00	90.56	89.86	6,358.01	935.72	2,074.28	2,076.56	0.00	0.00	0.00
8,700.00	90.56	89.86	6,357.03	935.97	2,174.27	2,176.55	0.00	0.00	0.00
8,800.00	90.56	89.86	6,356.06	936.22	2,274.27	2,276.55	0.00	0.00	0.00
8,900.00	90.56	89.86	6,355.08	936.47	2,374.26	2,376.54	0.00	0.00	0.00
9,000.00	90.56	89.86	6,354.10	936.72	2,474.26	2,476.54	0.00	0.00	0.00
9,100.00	90.56	89.86	6,353.12	936.97	2,574.25	2,576.54	0.00	0.00	0.00
9,200.00	90.56	89.86	6,352.14	937.22	2,674.25	2,676.53	0.00	0.00	0.00
9,300.00	90.56	89.86	6,351.17	937.47	2,774.24	2,776.53	0.00	0.00	0.00
9,400.00	90.56	89.86	6,350.19	937.71	2,874.24	2,876.52	0.00	0.00	0.00
9,500.00	90.56	89.86	6,349.21	937.96	2,974.23	2,976.52	0.00	0.00	0.00
9,600.00	90.56	89.86	6,348.23	938.21	3,074.23	3,076.51	0.00	0.00	0.00
9,700.00	90.56	89.86	6,347.25	938.46	3,174.22	3,176.51	0.00	0.00	0.00
9,800.00	90.56	89.86	6,346.27	938.71	3,274.22	3,276.50	0.00	0.00	0.00
9,900.00	90.56	89.86	6,345.30	938.96	3,374.21	3,376.50	0.00	0.00	0.00
10,000.00	90.56	89.86	6,344.32	939.21	3,474.21	3,476.49	0.00	0.00	0.00
10,100.00	90.56	89.86	6,343.34	939.46	3,574.20	3,576.49	0.00	0.00	0.00
10,200.00	90.56	89.86	6,342.36	939.71	3,674.20	3,676.48	0.00	0.00	0.00
10,300.00	90.56	89.86	6,341.38	939.96	3,774.19	3,776.48	0.00	0.00	0.00
10,400.00	90.56	89.86	6,340.41	940.21	3,874.19	3,876.47	0.00	0.00	0.00
10,500.00	90.56	89.86	6,339.43	940.46	3,974.18	3,976.47	0.00	0.00	0.00
10,600.00	90.56	89.86	6,338.45	940.71	4,074.18	4,076.46	0.00	0.00	0.00
10,700.00	90.56	89.86	6,337.47	940.95	4,174.17	4,176.46	0.00	0.00	0.00
10,800.00	90.56	89.86	6,336.49	941.20	4,274.17	4,276.45	0.00	0.00	0.00
10,900.00	90.56	89.86	6,335.52	941.45	4,374.16	4,376.45	0.00	0.00	0.00
11,000.00	90.56	89.86	6,334.54	941.70	4,474.16	4,476.44	0.00	0.00	0.00
11,100.00	90.56	89.86	6,333.56	941.95	4,574.15	4,576.44	0.00	0.00	0.00
11,200.00	90.56	89.86	6,332.58	942.20	4,674.15	4,676.43	0.00	0.00	0.00
11,300.00	90.56	89.86	6,331.60	942.45	4,774.14	4,776.43	0.00	0.00	0.00
11,400.00	90.56	89.86	6,330.63	942.70	4,874.14	4,876.43	0.00	0.00	0.00
11,500.00	90.56	89.86	6,329.65	942.95	4,974.13	4,976.42	0.00	0.00	0.00
11,600.00	90.56	89.86	6,328.67	943.20	5,074.13	5,076.42	0.00	0.00	0.00
11,700.00	90.56	89.86	6,327.69	943.45	5,174.12	5,176.41	0.00	0.00	0.00
11,800.00	90.56	89.86	6,326.71	943.70	5,274.12	5,276.41	0.00	0.00	0.00
11,900.00	90.56	89.86	6,325.74	943.95	5,374.11	5,376.40	0.00	0.00	0.00
12,000.00	90.56	89.86	6,324.76	944.19	5,474.11	5,476.40	0.00	0.00	0.00
12,100.00	90.56	89.86	6,323.78	944.44	5,574.10	5,576.39	0.00	0.00	0.00
12,200.00	90.56	89.86	6,322.80	944.69	5,674.10	5,676.39	0.00	0.00	0.00
12,300.00	90.56	89.86	6,321.82	944.94	5,774.09	5,776.38	0.00	0.00	0.00
12,400.00	90.56	89.86	6,320.85	945.19	5,874.09	5,876.38	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-20-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4603' & KB 16' @ 4619.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4603' & KB 16' @ 4619.00ft
Site:	Anschutz Equus Farms 4-62-20_21 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-20-0108C2B	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)
12,500.00	90.56	89.86	6,319.87	945.44	5,974.08	5,976.37	0.00	0.00	0.00
12,600.00	90.56	89.86	6,318.89	945.69	6,074.08	6,076.37	0.00	0.00	0.00
12,700.00	90.56	89.86	6,317.91	945.94	6,174.07	6,176.36	0.00	0.00	0.00
12,800.00	90.56	89.86	6,316.93	946.19	6,274.07	6,276.36	0.00	0.00	0.00
12,900.00	90.56	89.86	6,315.96	946.44	6,374.06	6,376.35	0.00	0.00	0.00
13,000.00	90.56	89.86	6,314.98	946.69	6,474.05	6,476.35	0.00	0.00	0.00
13,100.00	90.56	89.86	6,314.00	946.94	6,574.05	6,576.34	0.00	0.00	0.00
13,200.00	90.56	89.86	6,313.02	947.19	6,674.04	6,676.34	0.00	0.00	0.00
13,300.00	90.56	89.86	6,312.04	947.43	6,774.04	6,776.33	0.00	0.00	0.00
13,400.00	90.56	89.86	6,311.07	947.68	6,874.03	6,876.33	0.00	0.00	0.00
13,500.00	90.56	89.86	6,310.09	947.93	6,974.03	6,976.32	0.00	0.00	0.00
13,600.00	90.56	89.86	6,309.11	948.18	7,074.02	7,076.32	0.00	0.00	0.00
13,700.00	90.56	89.86	6,308.13	948.43	7,174.02	7,176.32	0.00	0.00	0.00
13,800.00	90.56	89.86	6,307.15	948.68	7,274.01	7,276.31	0.00	0.00	0.00
13,900.00	90.56	89.86	6,306.18	948.93	7,374.01	7,376.31	0.00	0.00	0.00
14,000.00	90.56	89.86	6,305.20	949.18	7,474.00	7,476.30	0.00	0.00	0.00
14,100.00	90.56	89.86	6,304.22	949.43	7,574.00	7,576.30	0.00	0.00	0.00
14,200.00	90.56	89.86	6,303.24	949.68	7,673.99	7,676.29	0.00	0.00	0.00
14,300.00	90.56	89.86	6,302.26	949.93	7,773.99	7,776.29	0.00	0.00	0.00
14,400.00	90.56	89.86	6,301.29	950.18	7,873.98	7,876.28	0.00	0.00	0.00
14,500.00	90.56	89.86	6,300.31	950.43	7,973.98	7,976.28	0.00	0.00	0.00
14,600.00	90.56	89.86	6,299.33	950.68	8,073.97	8,076.27	0.00	0.00	0.00
14,700.00	90.56	89.86	6,298.35	950.92	8,173.97	8,176.27	0.00	0.00	0.00
14,800.00	90.56	89.86	6,297.37	951.17	8,273.96	8,276.26	0.00	0.00	0.00
14,900.00	90.56	89.86	6,296.40	951.42	8,373.96	8,376.26	0.00	0.00	0.00
15,000.00	90.56	89.86	6,295.42	951.67	8,473.95	8,476.25	0.00	0.00	0.00
15,100.00	90.56	89.86	6,294.44	951.92	8,573.95	8,576.25	0.00	0.00	0.00
15,200.00	90.56	89.86	6,293.46	952.17	8,673.94	8,676.24	0.00	0.00	0.00
15,300.00	90.56	89.86	6,292.48	952.42	8,773.94	8,776.24	0.00	0.00	0.00
15,400.00	90.56	89.86	6,291.51	952.67	8,873.93	8,876.23	0.00	0.00	0.00
15,500.00	90.56	89.86	6,290.53	952.92	8,973.93	8,976.23	0.00	0.00	0.00
15,600.00	90.56	89.86	6,289.55	953.17	9,073.92	9,076.22	0.00	0.00	0.00
15,700.00	90.56	89.86	6,288.57	953.42	9,173.92	9,176.22	0.00	0.00	0.00
15,800.00	90.56	89.86	6,287.59	953.67	9,273.91	9,276.21	0.00	0.00	0.00
15,900.00	90.56	89.86	6,286.62	953.92	9,373.91	9,376.21	0.00	0.00	0.00
15,962.98	90.56	89.86	6,286.00	954.07	9,436.89	9,439.19	0.00	0.00	0.00
TD at 15962.98									

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 04-62-20-0108C2B	0.00	0.00	6,286.00	954.07	9,436.89	1,356,173.36	3,328,395.31	40° 18' 18.400 N	104° 19' 21.000 W
- plan hits target center									
- Point									
AEF 04-62-20-0108C2B	0.00	0.00	6,376.00	931.14	234.83	1,356,031.75	3,319,194.34	40° 18' 18.191 N	104° 21' 19.778 W
- plan misses target center by 0.01ft at 6760.46ft MD (6376.00 TVD, 931.14 N, 234.83 E)									
- Point									

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-20-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4603' & KB 16' @ 4619.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4603' & KB 16' @ 4619.00ft
Site:	Anschutz Equus Farms 4-62-20_21 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-20-0108C2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
15,962.98	6,286.00	7"	7.000	8.750	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,714.02	4,619.00	BASE OF FOX HILLS		0.00		
4,906.29	4,806.00	SHANNON		0.00		
6,152.53	6,043.00	SHARON SPRINGS		0.00		
6,287.25	6,164.00	NIOBRARA		0.00		
6,342.44	6,208.00	A CHALK		0.00		
6,428.23	6,268.00	B CHALK		0.00		
6,457.77	6,286.00	TD (HORIZONTAL)		0.00		
6,620.55	6,357.00	TOP "C" TARGET		0.00		
6,761.27	6,376.00	LANDING POINT		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
800.00	800.00	0.00	0.00	Start Build 2.00	
1,472.34	1,466.18	75.90	-20.18	Start 3462.56 hold at 1472.34 MD	
4,934.89	4,833.82	854.04	-227.12	Start Drop -2.00	
5,607.23	5,500.00	929.93	-247.30	Start 398.56 hold at 5607.23 MD	
6,005.79	5,898.56	929.93	-247.30	Start DLS 12.00 TFO 89.86	
6,760.46	6,376.00	931.14	234.83	Start 9202.52 hold at 6760.46 MD	
15,962.98	6,286.00	954.07	9,436.89	TD at 15962.98	