

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 NWNW Pad
 Well: Anschutz Equus Farms 4-62-28-0108C2B
 Wellbore: OH
 Design: Plan 1



Azinuths to True North
 Magnetic North: 8.22°

Magnetic Field
 Strength: 52509.6snT
 Dip Angle: 66.90°
 Date: 6/10/2016
 Model: BGGM2016

Plan: Plan 1 (Anschutz Equus Farms 4-62-28-0108C2B/OH)

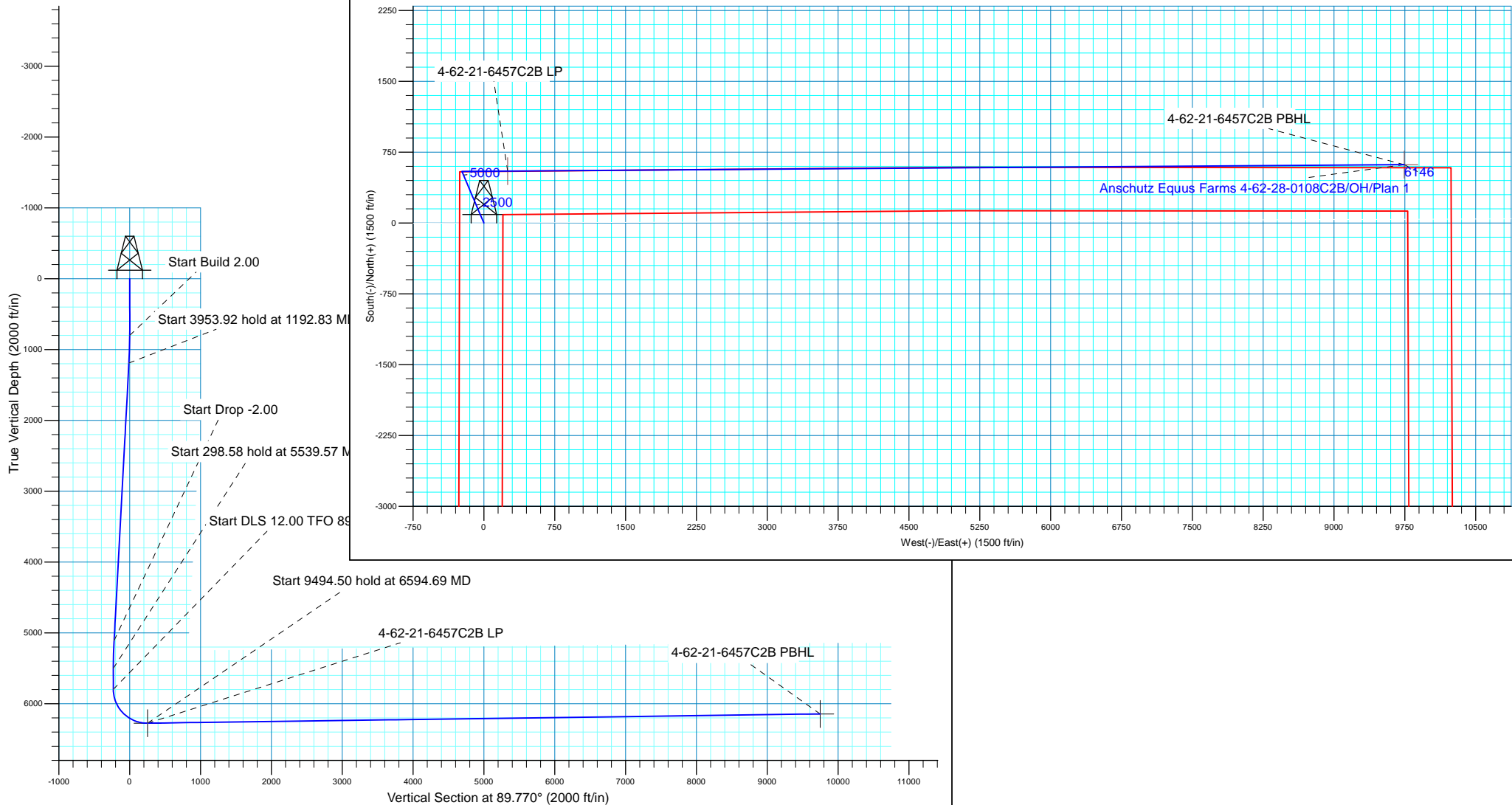
Created By: Seth Burstad Date: 6-10-2016

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.000	0.00	0.01	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	0.01	0.00	0.00	0.00	0.00
1192.83	7.86	336.981	1191.60	24.76	-10.51	2.00	336.98	-10.42
5146.75	7.86	336.981	5108.40	522.20	-221.86	0.00	0.00	-219.76
5539.57	0.00	0.000	5500.00	546.95	-232.37	2.00	180.00	-230.17
5838.15	0.00	0.000	5798.58	546.95	-232.37	0.00	0.00	-230.17
6594.69	90.78	89.584	6276.00	550.46	251.62	12.00	89.58	253.83
16089.19	90.78	89.584	6146.00	619.40	9744.98	0.00	0.00	9747.39

WELL DETAILS: Anschutz Equus Farms 4-62-28-0108C2B

		GL 4572' & KB 16' @ 4588.00ft		4572.00	Longitude
+N/-S	+E/-W	Northing	Easting	Latitude	
0.01	0.00	1350062.07	3324268.41	40° 17' 18.550 N	104° 20' 15.299 W





Bill Barrett Corp.

Weld County, CO NAD 83

Anschuts Equus Farms 4-62-28 NWNW Pad

Anschutz Equus Farms 4-62-28-0108C2B

OH

Plan: Plan 1

Standard Planning Report

10 June, 2016



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4572' & KB 16' @ 4588.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4572' & KB 16' @ 4588.00ft
Site:	Anschuts Equus Farms 4-62-28 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-0108C2B	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		Anschuts Equus Farms 4-62-28 NWNW Pad			
Site Position:		Northing:	1,350,001.24 usft	Latitude:	40° 17' 17.948 N
From:	Lat/Long	Easting:	3,324,269.21 usft	Longitude:	104° 20' 15.299 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.75 °

Well	Anschutz Equus Farms 4-62-28-0108C2B, 549' FNL 250' FWL Sec 28 T4N R62W					
Well Position	+N/-S	60.84 ft	Northing:	1,350,062.07 usft	Latitude:	40° 17' 18.550 N
	+E/-W	0.00 ft	Easting:	3,324,268.42 usft	Longitude:	104° 20' 15.299 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,572.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	6/10/2016	8.22	66.90	52,510

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	0.01	0.00	89.770

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	0.000	0.00	0.01	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.000	800.00	0.01	0.00	0.00	0.00	0.00	0.00	
1,192.83	7.86	336.981	1,191.60	24.76	-10.51	2.00	2.00	0.00	336.98	
5,146.75	7.86	336.981	5,108.40	522.20	-221.86	0.00	0.00	0.00	0.00	
5,539.57	0.00	0.000	5,500.00	546.95	-232.37	2.00	-2.00	0.00	180.00	
5,838.15	0.00	0.000	5,798.58	546.95	-232.37	0.00	0.00	0.00	0.00	
6,594.69	90.78	89.584	6,276.00	550.46	251.62	12.00	12.00	11.84	89.58	
16,089.19	90.78	89.584	6,146.00	619.40	9,744.98	0.00	0.00	0.00	0.00	4-62-21-6457C2B PB

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4572' & KB 16' @ 4588.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4572' & KB 16' @ 4588.00ft
Site:	Anschutz Equus Farms 4-62-28 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-0108C2B	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	0.000	0.00	0.01	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.000	100.00	0.01	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.000	200.00	0.01	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.000	300.00	0.01	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.000	400.00	0.01	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.000	500.00	0.01	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.000	600.00	0.01	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.000	700.00	0.01	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.000	800.00	0.01	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
900.00	2.00	336.981	899.98	1.62	-0.68	-0.68	2.00	2.00	0.00	
1,000.00	4.00	336.981	999.84	6.44	-2.73	-2.70	2.00	2.00	0.00	
1,100.00	6.00	336.981	1,099.45	14.46	-6.14	-6.08	2.00	2.00	0.00	
1,192.83	7.86	336.981	1,191.60	24.76	-10.51	-10.42	2.00	2.00	0.00	
Start 3953.92 hold at 1192.83 MD										
1,200.00	7.86	336.981	1,198.70	25.66	-10.90	-10.80	0.00	0.00	0.00	
1,300.00	7.86	336.981	1,297.76	38.25	-16.24	-16.09	0.00	0.00	0.00	
1,400.00	7.86	336.981	1,396.83	50.83	-21.59	-21.38	0.00	0.00	0.00	
1,500.00	7.86	336.981	1,495.89	63.41	-26.93	-26.68	0.00	0.00	0.00	
1,600.00	7.86	336.981	1,594.95	75.99	-32.28	-31.97	0.00	0.00	0.00	
1,700.00	7.86	336.981	1,694.01	88.57	-37.62	-37.27	0.00	0.00	0.00	
1,800.00	7.86	336.981	1,793.07	101.15	-42.97	-42.56	0.00	0.00	0.00	
1,900.00	7.86	336.981	1,892.13	113.73	-48.31	-47.86	0.00	0.00	0.00	
2,000.00	7.86	336.981	1,991.19	126.31	-53.66	-53.15	0.00	0.00	0.00	
2,100.00	7.86	336.981	2,090.25	138.89	-59.00	-58.45	0.00	0.00	0.00	
2,200.00	7.86	336.981	2,189.32	151.47	-64.35	-63.74	0.00	0.00	0.00	
2,300.00	7.86	336.981	2,288.38	164.05	-69.69	-69.04	0.00	0.00	0.00	
2,400.00	7.86	336.981	2,387.44	176.64	-75.04	-74.33	0.00	0.00	0.00	
2,500.00	7.86	336.981	2,486.50	189.22	-80.38	-79.62	0.00	0.00	0.00	
2,600.00	7.86	336.981	2,585.56	201.80	-85.73	-84.92	0.00	0.00	0.00	
2,700.00	7.86	336.981	2,684.62	214.38	-91.07	-90.21	0.00	0.00	0.00	
2,800.00	7.86	336.981	2,783.68	226.96	-96.42	-95.51	0.00	0.00	0.00	
2,900.00	7.86	336.981	2,882.75	239.54	-101.76	-100.80	0.00	0.00	0.00	
3,000.00	7.86	336.981	2,981.81	252.12	-107.11	-106.10	0.00	0.00	0.00	
3,100.00	7.86	336.981	3,080.87	264.70	-112.45	-111.39	0.00	0.00	0.00	
3,200.00	7.86	336.981	3,179.93	277.28	-117.80	-116.69	0.00	0.00	0.00	
3,300.00	7.86	336.981	3,278.99	289.86	-123.15	-121.98	0.00	0.00	0.00	
3,400.00	7.86	336.981	3,378.05	302.44	-128.49	-127.28	0.00	0.00	0.00	
3,500.00	7.86	336.981	3,477.11	315.03	-133.84	-132.57	0.00	0.00	0.00	
3,600.00	7.86	336.981	3,576.18	327.61	-139.18	-137.86	0.00	0.00	0.00	
3,700.00	7.86	336.981	3,675.24	340.19	-144.53	-143.16	0.00	0.00	0.00	
3,800.00	7.86	336.981	3,774.30	352.77	-149.87	-148.45	0.00	0.00	0.00	
3,900.00	7.86	336.981	3,873.36	365.35	-155.22	-153.75	0.00	0.00	0.00	
4,000.00	7.86	336.981	3,972.42	377.93	-160.56	-159.04	0.00	0.00	0.00	
4,100.00	7.86	336.981	4,071.48	390.51	-165.91	-164.34	0.00	0.00	0.00	
4,200.00	7.86	336.981	4,170.54	403.09	-171.25	-169.63	0.00	0.00	0.00	
4,300.00	7.86	336.981	4,269.60	415.67	-176.60	-174.93	0.00	0.00	0.00	
4,322.61	7.86	336.981	4,292.00	418.52	-177.80	-176.12	0.00	0.00	0.00	
SUSSEX										
4,400.00	7.86	336.981	4,368.67	428.25	-181.94	-180.22	0.00	0.00	0.00	
4,500.00	7.86	336.981	4,467.73	440.83	-187.29	-185.51	0.00	0.00	0.00	
4,600.00	7.86	336.981	4,566.79	453.41	-192.63	-190.81	0.00	0.00	0.00	
4,621.41	7.86	336.981	4,588.00	456.11	-193.78	-191.94	0.00	0.00	0.00	

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4572' & KB 16' @ 4588.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4572' & KB 16' @ 4588.00ft
Site:	Anschutz Equus Farms 4-62-28 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-0108C2B	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									
4,700.00	7.86	336.981	4,665.85	466.00	-197.98	-196.10	0.00	0.00	0.00
4,800.00	7.86	336.981	4,764.91	478.58	-203.32	-201.40	0.00	0.00	0.00
4,900.00	7.86	336.981	4,863.97	491.16	-208.67	-206.69	0.00	0.00	0.00
5,000.00	7.86	336.981	4,963.03	503.74	-214.01	-211.99	0.00	0.00	0.00
5,100.00	7.86	336.981	5,062.10	516.32	-219.36	-217.28	0.00	0.00	0.00
5,146.75	7.86	336.981	5,108.40	522.20	-221.86	-219.76	0.00	0.00	0.00
Start Drop -2.00									
5,180.63	7.18	336.981	5,142.00	526.28	-223.59	-221.47	2.00	-2.00	0.00
SHANNON									
5,200.00	6.79	336.981	5,161.22	528.45	-224.51	-222.39	2.00	-2.00	0.00
5,300.00	4.79	336.981	5,260.71	537.74	-228.46	-226.29	2.00	-2.00	0.00
5,400.00	2.79	336.981	5,360.48	543.82	-231.04	-228.86	2.00	-2.00	0.00
5,500.00	0.79	336.981	5,460.43	546.70	-232.26	-230.07	2.00	-2.00	0.00
5,539.57	0.00	0.000	5,500.00	546.95	-232.37	-230.17	2.00	-2.00	0.00
Start 298.58 hold at 5539.57 MD									
5,600.00	0.00	0.000	5,560.43	546.95	-232.37	-230.17	0.00	0.00	0.00
5,700.00	0.00	0.000	5,660.43	546.95	-232.37	-230.17	0.00	0.00	0.00
5,800.00	0.00	0.000	5,760.43	546.95	-232.37	-230.17	0.00	0.00	0.00
5,838.15	0.00	0.000	5,798.58	546.95	-232.37	-230.17	0.00	0.00	0.00
Start DLS 12.00 TFO 89.58									
5,900.00	7.42	89.584	5,860.25	546.98	-228.37	-226.17	12.00	12.00	0.00
6,000.00	19.42	89.584	5,957.35	547.15	-205.20	-203.00	12.00	12.00	0.00
6,063.89	27.09	89.584	6,016.00	547.33	-180.00	-177.80	12.00	12.00	0.00
SHARON SPRINGS									
6,100.00	31.42	89.584	6,047.50	547.46	-162.35	-160.15	12.00	12.00	0.00
6,125.63	34.50	89.584	6,069.00	547.56	-148.41	-146.21	12.00	12.00	0.00
NIOBRARA									
6,182.71	41.35	89.584	6,114.00	547.81	-113.35	-111.15	12.00	12.00	0.00
A CHALK									
6,200.00	43.42	89.584	6,126.77	547.90	-101.70	-99.50	12.00	12.00	0.00
6,227.22	46.69	89.584	6,146.00	548.04	-82.43	-80.23	12.00	12.00	0.00
TD (HORIZONTAL)									
6,258.98	50.50	89.584	6,167.00	548.21	-58.62	-56.42	12.00	12.00	0.00
B CHALK									
6,300.00	55.42	89.584	6,191.70	548.45	-25.89	-23.69	12.00	12.00	0.00
6,400.00	67.42	89.584	6,239.45	549.09	61.77	63.97	12.00	12.00	0.00
6,460.19	74.64	89.584	6,259.00	549.50	118.65	120.85	12.00	12.00	0.00
TOP "C" TARGET									
6,500.00	79.42	89.584	6,267.93	549.78	157.43	159.64	12.00	12.00	0.00
6,594.69	90.78	89.584	6,276.00	550.46	251.62	253.83	12.00	12.00	0.00
Start 9494.50 hold at 6594.69 MD									
6,594.70	90.79	89.584	6,276.00	550.46	251.62	253.83	11.97	11.97	0.00
LANDING POINT									
6,600.00	90.78	89.584	6,275.93	550.50	256.93	259.14	0.01	-0.01	0.00
6,700.00	90.78	89.584	6,274.56	551.23	356.92	359.13	0.00	0.00	0.00
6,800.00	90.78	89.584	6,273.19	551.96	456.90	459.12	0.00	0.00	0.00
6,900.00	90.78	89.584	6,271.82	552.68	556.89	559.11	0.00	0.00	0.00
7,000.00	90.78	89.584	6,270.45	553.41	656.88	659.10	0.00	0.00	0.00
7,100.00	90.78	89.584	6,269.08	554.13	756.87	759.09	0.00	0.00	0.00
7,200.00	90.78	89.584	6,267.71	554.86	856.86	859.08	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4572' & KB 16' @ 4588.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4572' & KB 16' @ 4588.00ft
Site:	Anschutz Equus Farms 4-62-28 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-0108C2B	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	90.78	89.584	6,266.34	555.59	956.84	959.07	0.00	0.00	0.00	
7,400.00	90.78	89.584	6,264.97	556.31	1,056.83	1,059.06	0.00	0.00	0.00	
7,500.00	90.78	89.584	6,263.60	557.04	1,156.82	1,159.05	0.00	0.00	0.00	
7,600.00	90.78	89.584	6,262.24	557.76	1,256.81	1,259.04	0.00	0.00	0.00	
7,700.00	90.78	89.584	6,260.87	558.49	1,356.80	1,359.03	0.00	0.00	0.00	
7,800.00	90.78	89.584	6,259.50	559.22	1,456.78	1,459.02	0.00	0.00	0.00	
7,900.00	90.78	89.584	6,258.13	559.94	1,556.77	1,559.01	0.00	0.00	0.00	
8,000.00	90.78	89.584	6,256.76	560.67	1,656.76	1,659.00	0.00	0.00	0.00	
8,100.00	90.78	89.584	6,255.39	561.39	1,756.75	1,758.99	0.00	0.00	0.00	
8,200.00	90.78	89.584	6,254.02	562.12	1,856.74	1,858.98	0.00	0.00	0.00	
8,300.00	90.78	89.584	6,252.65	562.85	1,956.72	1,958.97	0.00	0.00	0.00	
8,400.00	90.78	89.584	6,251.28	563.57	2,056.71	2,058.96	0.00	0.00	0.00	
8,500.00	90.78	89.584	6,249.91	564.30	2,156.70	2,158.95	0.00	0.00	0.00	
8,600.00	90.78	89.584	6,248.54	565.02	2,256.69	2,258.94	0.00	0.00	0.00	
8,700.00	90.78	89.584	6,247.17	565.75	2,356.68	2,358.93	0.00	0.00	0.00	
8,800.00	90.78	89.584	6,245.80	566.48	2,456.66	2,458.92	0.00	0.00	0.00	
8,900.00	90.78	89.584	6,244.44	567.20	2,556.65	2,558.91	0.00	0.00	0.00	
9,000.00	90.78	89.584	6,243.07	567.93	2,656.64	2,658.90	0.00	0.00	0.00	
9,100.00	90.78	89.584	6,241.70	568.66	2,756.63	2,758.89	0.00	0.00	0.00	
9,200.00	90.78	89.584	6,240.33	569.38	2,856.62	2,858.88	0.00	0.00	0.00	
9,300.00	90.78	89.584	6,238.96	570.11	2,956.60	2,958.87	0.00	0.00	0.00	
9,400.00	90.78	89.584	6,237.59	570.83	3,056.59	3,058.86	0.00	0.00	0.00	
9,500.00	90.78	89.584	6,236.22	571.56	3,156.58	3,158.85	0.00	0.00	0.00	
9,600.00	90.78	89.584	6,234.85	572.29	3,256.57	3,258.84	0.00	0.00	0.00	
9,700.00	90.78	89.584	6,233.48	573.01	3,356.56	3,358.83	0.00	0.00	0.00	
9,800.00	90.78	89.584	6,232.11	573.74	3,456.54	3,458.82	0.00	0.00	0.00	
9,900.00	90.78	89.584	6,230.74	574.46	3,556.53	3,558.81	0.00	0.00	0.00	
10,000.00	90.78	89.584	6,229.37	575.19	3,656.52	3,658.80	0.00	0.00	0.00	
10,100.00	90.78	89.584	6,228.01	575.92	3,756.51	3,758.79	0.00	0.00	0.00	
10,200.00	90.78	89.584	6,226.64	576.64	3,856.50	3,858.78	0.00	0.00	0.00	
10,300.00	90.78	89.584	6,225.27	577.37	3,956.48	3,958.77	0.00	0.00	0.00	
10,400.00	90.78	89.584	6,223.90	578.09	4,056.47	4,058.76	0.00	0.00	0.00	
10,500.00	90.78	89.584	6,222.53	578.82	4,156.46	4,158.75	0.00	0.00	0.00	
10,600.00	90.78	89.584	6,221.16	579.55	4,256.45	4,258.74	0.00	0.00	0.00	
10,700.00	90.78	89.584	6,219.79	580.27	4,356.44	4,358.73	0.00	0.00	0.00	
10,800.00	90.78	89.584	6,218.42	581.00	4,456.42	4,458.72	0.00	0.00	0.00	
10,900.00	90.78	89.584	6,217.05	581.72	4,556.41	4,558.71	0.00	0.00	0.00	
11,000.00	90.78	89.584	6,215.68	582.45	4,656.40	4,658.70	0.00	0.00	0.00	
11,100.00	90.78	89.584	6,214.31	583.18	4,756.39	4,758.69	0.00	0.00	0.00	
11,200.00	90.78	89.584	6,212.94	583.90	4,856.38	4,858.68	0.00	0.00	0.00	
11,300.00	90.78	89.584	6,211.57	584.63	4,956.36	4,958.67	0.00	0.00	0.00	
11,400.00	90.78	89.584	6,210.21	585.36	5,056.35	5,058.66	0.00	0.00	0.00	
11,500.00	90.78	89.584	6,208.84	586.08	5,156.34	5,158.65	0.00	0.00	0.00	
11,600.00	90.78	89.584	6,207.47	586.81	5,256.33	5,258.64	0.00	0.00	0.00	
11,700.00	90.78	89.584	6,206.10	587.53	5,356.32	5,358.63	0.00	0.00	0.00	
11,800.00	90.78	89.584	6,204.73	588.26	5,456.30	5,458.62	0.00	0.00	0.00	
11,900.00	90.78	89.584	6,203.36	588.99	5,556.29	5,558.61	0.00	0.00	0.00	
12,000.00	90.78	89.584	6,201.99	589.71	5,656.28	5,658.60	0.00	0.00	0.00	
12,100.00	90.78	89.584	6,200.62	590.44	5,756.27	5,758.59	0.00	0.00	0.00	
12,200.00	90.78	89.584	6,199.25	591.16	5,856.26	5,858.58	0.00	0.00	0.00	
12,300.00	90.78	89.584	6,197.88	591.89	5,956.24	5,958.57	0.00	0.00	0.00	
12,400.00	90.78	89.584	6,196.51	592.62	6,056.23	6,058.56	0.00	0.00	0.00	
12,500.00	90.78	89.584	6,195.14	593.34	6,156.22	6,158.55	0.00	0.00	0.00	

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4572' & KB 16' @ 4588.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4572' & KB 16' @ 4588.00ft
Site:	Anschutz Equus Farms 4-62-28 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-0108C2B	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)	
12,600.00	90.78	89.584	6,193.77	594.07	6,256.21	6,258.54	0.00	0.00	0.00	
12,700.00	90.78	89.584	6,192.41	594.79	6,356.20	6,358.53	0.00	0.00	0.00	
12,800.00	90.78	89.584	6,191.04	595.52	6,456.18	6,458.52	0.00	0.00	0.00	
12,900.00	90.78	89.584	6,189.67	596.25	6,556.17	6,558.51	0.00	0.00	0.00	
13,000.00	90.78	89.584	6,188.30	596.97	6,656.16	6,658.50	0.00	0.00	0.00	
13,100.00	90.78	89.584	6,186.93	597.70	6,756.15	6,758.49	0.00	0.00	0.00	
13,200.00	90.78	89.584	6,185.56	598.42	6,856.14	6,858.48	0.00	0.00	0.00	
13,300.00	90.78	89.584	6,184.19	599.15	6,956.12	6,958.47	0.00	0.00	0.00	
13,400.00	90.78	89.584	6,182.82	599.88	7,056.11	7,058.46	0.00	0.00	0.00	
13,500.00	90.78	89.584	6,181.45	600.60	7,156.10	7,158.45	0.00	0.00	0.00	
13,600.00	90.78	89.584	6,180.08	601.33	7,256.09	7,258.44	0.00	0.00	0.00	
13,700.00	90.78	89.584	6,178.71	602.06	7,356.08	7,358.43	0.00	0.00	0.00	
13,800.00	90.78	89.584	6,177.34	602.78	7,456.06	7,458.42	0.00	0.00	0.00	
13,900.00	90.78	89.584	6,175.97	603.51	7,556.05	7,558.41	0.00	0.00	0.00	
14,000.00	90.78	89.584	6,174.61	604.23	7,656.04	7,658.40	0.00	0.00	0.00	
14,100.00	90.78	89.584	6,173.24	604.96	7,756.03	7,758.39	0.00	0.00	0.00	
14,200.00	90.78	89.584	6,171.87	605.69	7,856.02	7,858.38	0.00	0.00	0.00	
14,300.00	90.78	89.584	6,170.50	606.41	7,956.00	7,958.37	0.00	0.00	0.00	
14,400.00	90.78	89.584	6,169.13	607.14	8,055.99	8,058.36	0.00	0.00	0.00	
14,500.00	90.78	89.584	6,167.76	607.86	8,155.98	8,158.35	0.00	0.00	0.00	
14,600.00	90.78	89.584	6,166.39	608.59	8,255.97	8,258.34	0.00	0.00	0.00	
14,700.00	90.78	89.584	6,165.02	609.32	8,355.96	8,358.33	0.00	0.00	0.00	
14,800.00	90.78	89.584	6,163.65	610.04	8,455.94	8,458.32	0.00	0.00	0.00	
14,900.00	90.78	89.584	6,162.28	610.77	8,555.93	8,558.31	0.00	0.00	0.00	
15,000.00	90.78	89.584	6,160.91	611.49	8,655.92	8,658.30	0.00	0.00	0.00	
15,100.00	90.78	89.584	6,159.54	612.22	8,755.91	8,758.29	0.00	0.00	0.00	
15,200.00	90.78	89.584	6,158.18	612.95	8,855.90	8,858.28	0.00	0.00	0.00	
15,300.00	90.78	89.584	6,156.81	613.67	8,955.88	8,958.27	0.00	0.00	0.00	
15,400.00	90.78	89.584	6,155.44	614.40	9,055.87	9,058.26	0.00	0.00	0.00	
15,500.00	90.78	89.584	6,154.07	615.12	9,155.86	9,158.25	0.00	0.00	0.00	
15,600.00	90.78	89.584	6,152.70	615.85	9,255.85	9,258.24	0.00	0.00	0.00	
15,700.00	90.78	89.584	6,151.33	616.58	9,355.84	9,358.23	0.00	0.00	0.00	
15,800.00	90.78	89.584	6,149.96	617.30	9,455.82	9,458.23	0.00	0.00	0.00	
15,900.00	90.78	89.584	6,148.59	618.03	9,555.81	9,558.22	0.00	0.00	0.00	
16,000.00	90.78	89.584	6,147.22	618.75	9,655.80	9,658.21	0.00	0.00	0.00	
16,089.19	90.78	89.584	6,146.00	619.40	9,744.98	9,747.39	0.00	0.00	0.00	
TD at 16089.19										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
4-62-21-6457C2B PBHL - hit/miss target - Shape - Point	0.00	0.000	6,146.00	619.40	9,744.98	1,350,809.14	3,334,004.42	40° 17' 24.652 N	104° 18' 9.540 W	
4-62-21-6457C2B LP - plan misses target center by 0.01ft at 6594.70ft MD (6276.00 TVD, 550.46 N, 251.62 E) - Point	0.00	0.000	6,276.00	550.46	251.62	1,350,615.76	3,324,512.80	40° 17' 23.989 N	104° 20' 12.052 W	

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-0108C2B
Company:	Bill Barrett Corp.	TVD Reference:	GL 4572' & KB 16' @ 4588.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4572' & KB 16' @ 4588.00ft
Site:	Anschuts Equus Farms 4-62-28 NWNW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-0108C2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,322.61	4,292.00	SUSSEX		0.00		
4,621.41	4,588.00	BASE OF FOX HILLS		0.00		
5,180.63	5,142.00	SHANNON		0.00		
6,063.89	6,016.00	SHARON SPRINGS		0.00		
6,125.63	6,069.00	NIOBRARA		0.00		
6,182.71	6,114.00	A CHALK		0.00		
6,227.22	6,146.00	TD (HORIZONTAL)		0.00		
6,258.98	6,167.00	B CHALK		0.00		
6,460.19	6,259.00	TOP "C" TARGET		0.00		
6,594.70	6,276.00	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	0.01	0.00	Start Build 2.00	
1,192.83	1,191.60	24.76	-10.51	Start 3953.92 hold at 1192.83 MD	
5,146.75	5,108.40	522.20	-221.86	Start Drop -2.00	
5,539.57	5,500.00	546.95	-232.37	Start 298.58 hold at 5539.57 MD	
5,838.15	5,798.58	546.95	-232.37	Start DLS 12.00 TFO 89.58	
6,594.69	6,276.00	550.46	251.62	Start 9494.50 hold at 6594.69 MD	
16,089.19	6,146.00	619.40	9,744.98	TD at 16089.19	