

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 4-62-28-6457CB
 Wellbore: OH
 Design: Plan 2



Azimuths to True North
 Magnetic North: 8.27°



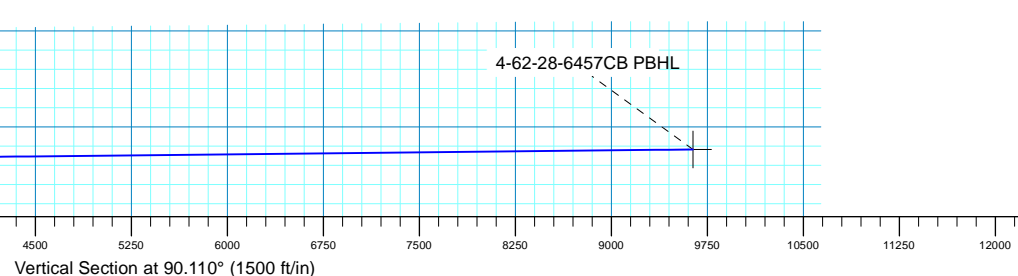
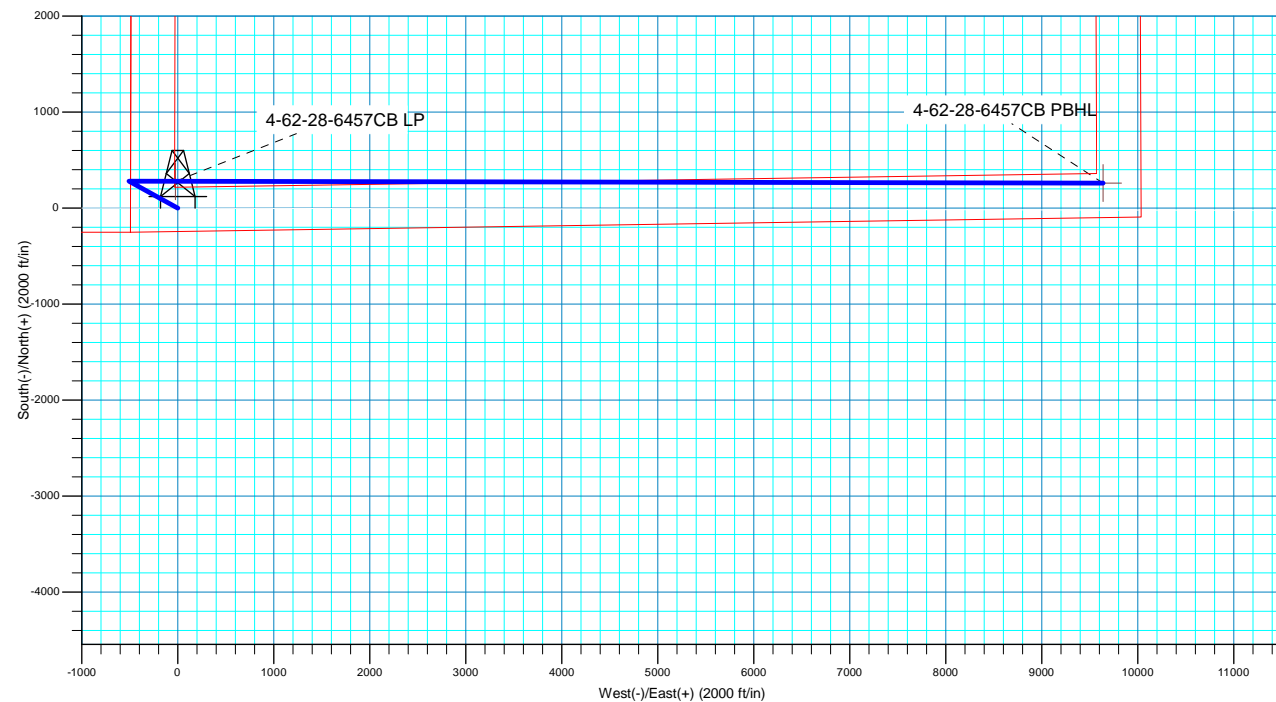
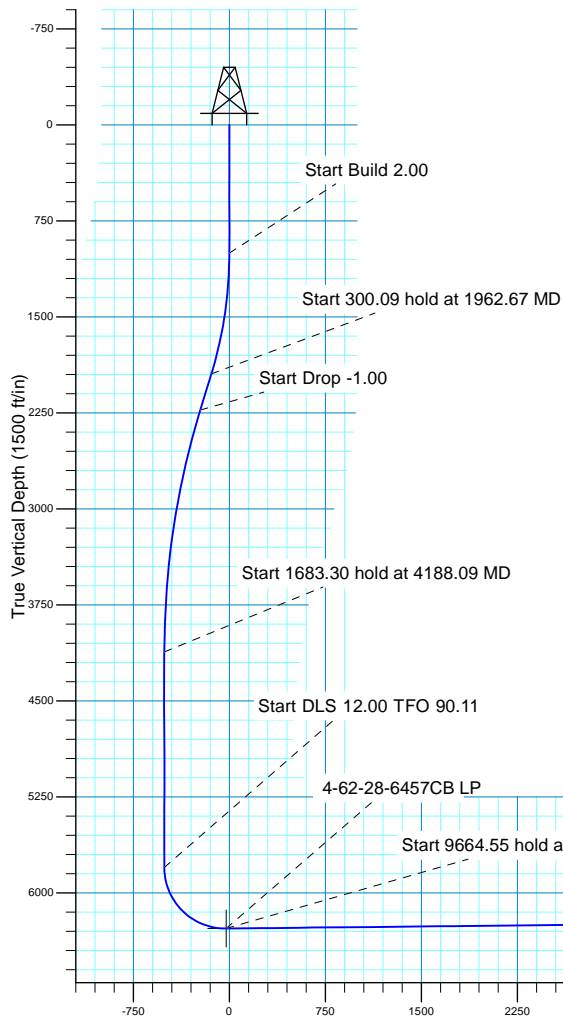
Magnetic Field
 Strength: 52360.5nT
 Dip Angle: 66.93°
 Date: 7/19/2017
 Model: HDGM

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
1000.00	0.00	0.000	1000.00	0.00	0.00	0.00	0.00	0.00
1962.67	19.25	298.925	1944.65	77.50	-140.24	2.00	298.92	-140.39
2262.75	19.25	298.925	2227.96	125.36	-226.85	0.00	0.00	-227.09
4188.09	0.00	0.000	4117.26	280.35	-507.33	1.00	180.00	-507.87
5871.39	0.00	0.000	5800.56	280.35	-507.33	0.00	0.00	-507.87
6626.43	90.60	90.110	6278.00	279.43	-24.83	12.00	90.11	-25.36
16290.98	90.60	90.110	6176.00	260.92	9639.17	0.00	0.00	9638.65

WELL DETAILS: Anschutz Equus Farms 4-62-28-6457CB

		GL 4635' & KB 20' @ 4655.00ft		4635.00	Longitude
+N/-S	+E/-W	Northing	Easting	Latitude	
0.00	0.00	1345635.25	3324551.08	40° 16' 34.770 N	104° 20' 12.401 W





Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz Equus Farms 4-62-28_27 SWSW Pad

Anschutz Equus Farms 4-62-28-6457CB

OH

Plan: Plan 2

Standard Planning Report

20 July, 2017



Scientific Drilling

www.scientificdrilling.com



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-6457CB
Company:	Bill Barrett Corp.	TVD Reference:	GL 4635' & KB 20' @ 4655.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4635' & KB 20' @ 4655.00ft
Site:	Anschutz Equus Farms 4-62-28_27 SWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-6457CB	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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_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 4-62-28-6457CB, 242' FSL 486' FWL Sec 28 T4N R62W					
Well Position	+N/-S	-305.63 ft	Northing:	1,345,635.25 usft	Latitude:	40° 16' 34.770 N
	+E/-W	234.78 ft	Easting:	3,324,551.08 usft	Longitude:	104° 20' 12.401 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,635.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/3/2017	8.28	66.95	52,386
	HDGM	7/19/2017	8.27	66.93	52,361

Design	Plan 2			
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	90.110

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	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,962.67	19.25	298.925	1,944.65	77.50	-140.24	2.00	2.00	0.00	298.92	
2,262.75	19.25	298.925	2,227.96	125.36	-226.85	0.00	0.00	0.00	0.00	
4,188.09	0.00	0.000	4,117.26	280.35	-507.33	1.00	-1.00	0.00	180.00	
5,871.39	0.00	0.000	5,800.56	280.35	-507.33	0.00	0.00	0.00	0.00	
6,626.43	90.60	90.110	6,278.00	279.43	-24.83	12.00	12.00	11.93	90.11	
16,290.98	90.60	90.110	6,176.00	260.92	9,639.17	0.00	0.00	0.00	0.00	4-62-28-6457CB PB†

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-6457CB
Company:	Bill Barrett Corp.	TVD Reference:	GL 4635' & KB 20' @ 4655.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4635' & KB 20' @ 4655.00ft
Site:	Anschutz Equus Farms 4-62-28_27 SWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-6457CB	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,100.00	2.00	298.925	1,099.98	0.84	-1.53	-1.53	2.00	2.00	0.00
1,200.00	4.00	298.925	1,199.84	3.38	-6.11	-6.11	2.00	2.00	0.00
1,300.00	6.00	298.925	1,299.45	7.59	-13.74	-13.75	2.00	2.00	0.00
1,400.00	8.00	298.925	1,398.70	13.48	-24.40	-24.43	2.00	2.00	0.00
1,500.00	10.00	298.925	1,497.47	21.05	-38.09	-38.13	2.00	2.00	0.00
1,600.00	12.00	298.925	1,595.62	30.28	-54.79	-54.85	2.00	2.00	0.00
1,700.00	14.00	298.925	1,693.06	41.16	-74.48	-74.56	2.00	2.00	0.00
1,800.00	16.00	298.925	1,789.64	53.68	-97.13	-97.24	2.00	2.00	0.00
1,900.00	18.00	298.925	1,885.27	67.82	-122.72	-122.85	2.00	2.00	0.00
1,962.67	19.25	298.925	1,944.65	77.50	-140.24	-140.39	2.00	2.00	0.00
Start 300.09 hold at 1962.67 MD									
2,000.00	19.25	298.925	1,979.90	83.45	-151.02	-151.18	0.00	0.00	0.00
2,100.00	19.25	298.925	2,074.30	99.40	-179.88	-180.07	0.00	0.00	0.00
2,200.00	19.25	298.925	2,168.71	115.35	-208.74	-208.96	0.00	0.00	0.00
2,262.75	19.25	298.925	2,227.96	125.36	-226.85	-227.09	0.00	0.00	0.00
Start Drop -1.00									
2,300.00	18.88	298.925	2,263.16	131.24	-237.50	-237.75	1.00	-1.00	0.00
2,400.00	17.88	298.925	2,358.05	146.49	-265.10	-265.38	1.00	-1.00	0.00
2,500.00	16.88	298.925	2,453.49	160.94	-291.24	-291.55	1.00	-1.00	0.00
2,600.00	15.88	298.925	2,549.43	174.58	-315.93	-316.26	1.00	-1.00	0.00
2,700.00	14.88	298.925	2,645.84	187.41	-339.14	-339.50	1.00	-1.00	0.00
2,800.00	13.88	298.925	2,742.71	199.42	-360.88	-361.26	1.00	-1.00	0.00
2,900.00	12.88	298.925	2,839.99	210.61	-381.13	-381.54	1.00	-1.00	0.00
3,000.00	11.88	298.925	2,937.67	220.98	-399.90	-400.32	1.00	-1.00	0.00
3,100.00	10.88	298.925	3,035.70	230.53	-417.17	-417.61	1.00	-1.00	0.00
3,200.00	9.88	298.925	3,134.06	239.24	-432.94	-433.40	1.00	-1.00	0.00
3,300.00	8.88	298.925	3,232.72	247.13	-447.21	-447.68	1.00	-1.00	0.00
3,400.00	7.88	298.925	3,331.65	254.18	-459.97	-460.45	1.00	-1.00	0.00
3,500.00	6.88	298.925	3,430.82	260.39	-471.21	-471.71	1.00	-1.00	0.00
3,600.00	5.88	298.925	3,530.20	265.77	-480.94	-481.45	1.00	-1.00	0.00
3,700.00	4.88	298.925	3,629.76	270.30	-489.14	-489.66	1.00	-1.00	0.00
3,800.00	3.88	298.925	3,729.47	274.00	-495.83	-496.36	1.00	-1.00	0.00
3,900.00	2.88	298.925	3,829.29	276.85	-500.99	-501.52	1.00	-1.00	0.00
4,000.00	1.88	298.925	3,929.20	278.86	-504.63	-505.16	1.00	-1.00	0.00
4,100.00	0.88	298.925	4,029.17	280.02	-506.74	-507.27	1.00	-1.00	0.00
4,188.09	0.00	0.000	4,117.26	280.35	-507.33	-507.87	1.00	-1.00	0.00
Start 1683.30 hold at 4188.09 MD									
4,200.00	0.00	0.000	4,129.17	280.35	-507.33	-507.87	0.00	0.00	0.00
4,300.00	0.00	0.000	4,229.17	280.35	-507.33	-507.87	0.00	0.00	0.00
4,400.00	0.00	0.000	4,329.17	280.35	-507.33	-507.87	0.00	0.00	0.00
4,500.00	0.00	0.000	4,429.17	280.35	-507.33	-507.87	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-6457CB
Company:	Bill Barrett Corp.	TVD Reference:	GL 4635' & KB 20' @ 4655.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4635' & KB 20' @ 4655.00ft
Site:	Anschutz Equus Farms 4-62-28_27 SWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-6457CB	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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)
4,600.00	0.00	0.000	4,529.17	280.35	-507.33	-507.87	0.00	0.00	0.00
4,700.00	0.00	0.000	4,629.17	280.35	-507.33	-507.87	0.00	0.00	0.00
4,800.00	0.00	0.000	4,729.17	280.35	-507.33	-507.87	0.00	0.00	0.00
4,900.00	0.00	0.000	4,829.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,000.00	0.00	0.000	4,929.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,100.00	0.00	0.000	5,029.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,200.00	0.00	0.000	5,129.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,300.00	0.00	0.000	5,229.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,400.00	0.00	0.000	5,329.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,500.00	0.00	0.000	5,429.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,600.00	0.00	0.000	5,529.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,700.00	0.00	0.000	5,629.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,800.00	0.00	0.000	5,729.17	280.35	-507.33	-507.87	0.00	0.00	0.00
5,871.39	0.00	0.000	5,800.56	280.35	-507.33	-507.87	0.00	0.00	0.00
Start DLS 12.00 TFO 90.11									
5,900.00	3.43	90.110	5,829.15	280.35	-506.47	-507.01	12.00	12.00	0.00
6,000.00	15.43	90.110	5,927.62	280.32	-490.11	-490.65	12.00	12.00	0.00
6,100.00	27.43	90.110	6,020.54	280.25	-453.64	-454.18	12.00	12.00	0.00
6,200.00	39.43	90.110	6,103.84	280.14	-398.64	-399.18	12.00	12.00	0.00
6,300.00	51.43	90.110	6,173.88	280.01	-327.53	-328.07	12.00	12.00	0.00
6,400.00	63.43	90.110	6,227.61	279.84	-243.41	-243.94	12.00	12.00	0.00
6,500.00	75.43	90.110	6,262.68	279.67	-149.95	-150.49	12.00	12.00	0.00
6,600.00	87.43	90.110	6,277.55	279.48	-51.25	-51.79	12.00	12.00	0.00
6,626.43	90.60	90.110	6,278.00	279.43	-24.83	-25.36	12.00	12.00	0.00
Start 9664.55 hold at 6626.43 MD									
6,700.00	90.60	90.110	6,277.22	279.28	48.74	48.20	0.00	0.00	0.00
6,800.00	90.60	90.110	6,276.17	279.09	148.73	148.20	0.00	0.00	0.00
6,900.00	90.60	90.110	6,275.11	278.90	248.73	248.19	0.00	0.00	0.00
7,000.00	90.60	90.110	6,274.06	278.71	348.72	348.19	0.00	0.00	0.00
7,100.00	90.60	90.110	6,273.00	278.52	448.72	448.18	0.00	0.00	0.00
7,200.00	90.60	90.110	6,271.94	278.33	548.71	548.18	0.00	0.00	0.00
7,300.00	90.60	90.110	6,270.89	278.14	648.71	648.17	0.00	0.00	0.00
7,400.00	90.60	90.110	6,269.83	277.94	748.70	748.16	0.00	0.00	0.00
7,500.00	90.60	90.110	6,268.78	277.75	848.69	848.16	0.00	0.00	0.00
7,600.00	90.60	90.110	6,267.72	277.56	948.69	948.15	0.00	0.00	0.00
7,700.00	90.60	90.110	6,266.67	277.37	1,048.68	1,048.15	0.00	0.00	0.00
7,800.00	90.60	90.110	6,265.61	277.18	1,148.68	1,148.14	0.00	0.00	0.00
7,900.00	90.60	90.110	6,264.56	276.99	1,248.67	1,248.14	0.00	0.00	0.00
8,000.00	90.60	90.110	6,263.50	276.80	1,348.67	1,348.13	0.00	0.00	0.00
8,100.00	90.60	90.110	6,262.45	276.60	1,448.66	1,448.13	0.00	0.00	0.00
8,200.00	90.60	90.110	6,261.39	276.41	1,548.65	1,548.12	0.00	0.00	0.00
8,300.00	90.60	90.110	6,260.34	276.22	1,648.65	1,648.11	0.00	0.00	0.00
8,400.00	90.60	90.110	6,259.28	276.03	1,748.64	1,748.11	0.00	0.00	0.00
8,500.00	90.60	90.110	6,258.22	275.84	1,848.64	1,848.10	0.00	0.00	0.00
8,600.00	90.60	90.110	6,257.17	275.65	1,948.63	1,948.10	0.00	0.00	0.00
8,700.00	90.60	90.110	6,256.11	275.45	2,048.62	2,048.09	0.00	0.00	0.00
8,800.00	90.60	90.110	6,255.06	275.26	2,148.62	2,148.09	0.00	0.00	0.00
8,900.00	90.60	90.110	6,254.00	275.07	2,248.61	2,248.08	0.00	0.00	0.00
9,000.00	90.60	90.110	6,252.95	274.88	2,348.61	2,348.08	0.00	0.00	0.00
9,100.00	90.60	90.110	6,251.89	274.69	2,448.60	2,448.07	0.00	0.00	0.00
9,200.00	90.60	90.110	6,250.84	274.50	2,548.60	2,548.06	0.00	0.00	0.00
9,300.00	90.60	90.110	6,249.78	274.31	2,648.59	2,648.06	0.00	0.00	0.00
9,400.00	90.60	90.110	6,248.73	274.11	2,748.58	2,748.05	0.00	0.00	0.00

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Company:	Bill Barrett Corp.	TVD Reference:	GL 4635' & KB 20' @ 4655.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4635' & KB 20' @ 4655.00ft
Site:	Anschutz Equus Farms 4-62-28_27 SWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-6457CB	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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)
9,500.00	90.60	90.110	6,247.67	273.92	2,848.58	2,848.05	0.00	0.00	0.00
9,600.00	90.60	90.110	6,246.62	273.73	2,948.57	2,948.04	0.00	0.00	0.00
9,700.00	90.60	90.110	6,245.56	273.54	3,048.57	3,048.04	0.00	0.00	0.00
9,800.00	90.60	90.110	6,244.50	273.35	3,148.56	3,148.03	0.00	0.00	0.00
9,900.00	90.60	90.110	6,243.45	273.16	3,248.56	3,248.03	0.00	0.00	0.00
10,000.00	90.60	90.110	6,242.39	272.96	3,348.55	3,348.02	0.00	0.00	0.00
10,100.00	90.60	90.110	6,241.34	272.77	3,448.54	3,448.01	0.00	0.00	0.00
10,200.00	90.60	90.110	6,240.28	272.58	3,548.54	3,548.01	0.00	0.00	0.00
10,300.00	90.60	90.110	6,239.23	272.39	3,648.53	3,648.00	0.00	0.00	0.00
10,400.00	90.60	90.110	6,238.17	272.20	3,748.53	3,748.00	0.00	0.00	0.00
10,500.00	90.60	90.110	6,237.12	272.01	3,848.52	3,847.99	0.00	0.00	0.00
10,600.00	90.60	90.110	6,236.06	271.82	3,948.52	3,947.99	0.00	0.00	0.00
10,700.00	90.60	90.110	6,235.01	271.62	4,048.51	4,047.98	0.00	0.00	0.00
10,800.00	90.60	90.110	6,233.95	271.43	4,148.50	4,147.98	0.00	0.00	0.00
10,900.00	90.60	90.110	6,232.90	271.24	4,248.50	4,247.97	0.00	0.00	0.00
11,000.00	90.60	90.110	6,231.84	271.05	4,348.49	4,347.96	0.00	0.00	0.00
11,100.00	90.60	90.110	6,230.78	270.86	4,448.49	4,447.96	0.00	0.00	0.00
11,200.00	90.60	90.110	6,229.73	270.67	4,548.48	4,547.95	0.00	0.00	0.00
11,300.00	90.60	90.110	6,228.67	270.47	4,648.48	4,647.95	0.00	0.00	0.00
11,400.00	90.60	90.110	6,227.62	270.28	4,748.47	4,747.94	0.00	0.00	0.00
11,500.00	90.60	90.110	6,226.56	270.09	4,848.46	4,847.94	0.00	0.00	0.00
11,600.00	90.60	90.110	6,225.51	269.90	4,948.46	4,947.93	0.00	0.00	0.00
11,700.00	90.60	90.110	6,224.45	269.71	5,048.45	5,047.93	0.00	0.00	0.00
11,800.00	90.60	90.110	6,223.40	269.52	5,148.45	5,147.92	0.00	0.00	0.00
11,900.00	90.60	90.110	6,222.34	269.33	5,248.44	5,247.91	0.00	0.00	0.00
12,000.00	90.60	90.110	6,221.29	269.13	5,348.44	5,347.91	0.00	0.00	0.00
12,100.00	90.60	90.110	6,220.23	268.94	5,448.43	5,447.90	0.00	0.00	0.00
12,200.00	90.60	90.110	6,219.18	268.75	5,548.42	5,547.90	0.00	0.00	0.00
12,300.00	90.60	90.110	6,218.12	268.56	5,648.42	5,647.89	0.00	0.00	0.00
12,400.00	90.60	90.110	6,217.06	268.37	5,748.41	5,747.89	0.00	0.00	0.00
12,500.00	90.60	90.110	6,216.01	268.18	5,848.41	5,847.88	0.00	0.00	0.00
12,600.00	90.60	90.110	6,214.95	267.98	5,948.40	5,947.88	0.00	0.00	0.00
12,700.00	90.60	90.110	6,213.90	267.79	6,048.39	6,047.87	0.00	0.00	0.00
12,800.00	90.60	90.110	6,212.84	267.60	6,148.39	6,147.86	0.00	0.00	0.00
12,900.00	90.60	90.110	6,211.79	267.41	6,248.38	6,247.86	0.00	0.00	0.00
13,000.00	90.60	90.110	6,210.73	267.22	6,348.38	6,347.85	0.00	0.00	0.00
13,100.00	90.60	90.110	6,209.68	267.03	6,448.37	6,447.85	0.00	0.00	0.00
13,200.00	90.60	90.110	6,208.62	266.84	6,548.37	6,547.84	0.00	0.00	0.00
13,300.00	90.60	90.110	6,207.57	266.64	6,648.36	6,647.84	0.00	0.00	0.00
13,400.00	90.60	90.110	6,206.51	266.45	6,748.35	6,747.83	0.00	0.00	0.00
13,500.00	90.60	90.110	6,205.46	266.26	6,848.35	6,847.83	0.00	0.00	0.00
13,600.00	90.60	90.110	6,204.40	266.07	6,948.34	6,947.82	0.00	0.00	0.00
13,700.00	90.60	90.110	6,203.34	265.88	7,048.34	7,047.81	0.00	0.00	0.00
13,800.00	90.60	90.110	6,202.29	265.69	7,148.33	7,147.81	0.00	0.00	0.00
13,900.00	90.60	90.110	6,201.23	265.50	7,248.33	7,247.80	0.00	0.00	0.00
14,000.00	90.60	90.110	6,200.18	265.30	7,348.32	7,347.80	0.00	0.00	0.00
14,100.00	90.60	90.110	6,199.12	265.11	7,448.31	7,447.79	0.00	0.00	0.00
14,200.00	90.60	90.110	6,198.07	264.92	7,548.31	7,547.79	0.00	0.00	0.00
14,300.00	90.60	90.110	6,197.01	264.73	7,648.30	7,647.78	0.00	0.00	0.00
14,400.00	90.60	90.110	6,195.96	264.54	7,748.30	7,747.77	0.00	0.00	0.00
14,500.00	90.60	90.110	6,194.90	264.35	7,848.29	7,847.77	0.00	0.00	0.00
14,600.00	90.60	90.110	6,193.85	264.15	7,948.29	7,947.76	0.00	0.00	0.00
14,700.00	90.60	90.110	6,192.79	263.96	8,048.28	8,047.76	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-28-6457CB
Company:	Bill Barrett Corp.	TVD Reference:	GL 4635' & KB 20' @ 4655.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4635' & KB 20' @ 4655.00ft
Site:	Anschutz Equus Farms 4-62-28_27 SWSW Pad	North Reference:	True
Well:	Anschutz Equus Farms 4-62-28-6457CB	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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)	
14,800.00	90.60	90.110	6,191.74	263.77	8,148.27	8,147.75	0.00	0.00	0.00	
14,900.00	90.60	90.110	6,190.68	263.58	8,248.27	8,247.75	0.00	0.00	0.00	
15,000.00	90.60	90.110	6,189.62	263.39	8,348.26	8,347.74	0.00	0.00	0.00	
15,100.00	90.60	90.110	6,188.57	263.20	8,448.26	8,447.74	0.00	0.00	0.00	
15,200.00	90.60	90.110	6,187.51	263.01	8,548.25	8,547.73	0.00	0.00	0.00	
15,300.00	90.60	90.110	6,186.46	262.81	8,648.25	8,647.72	0.00	0.00	0.00	
15,400.00	90.60	90.110	6,185.40	262.62	8,748.24	8,747.72	0.00	0.00	0.00	
15,500.00	90.60	90.110	6,184.35	262.43	8,848.23	8,847.71	0.00	0.00	0.00	
15,600.00	90.60	90.110	6,183.29	262.24	8,948.23	8,947.71	0.00	0.00	0.00	
15,700.00	90.60	90.110	6,182.24	262.05	9,048.22	9,047.70	0.00	0.00	0.00	
15,800.00	90.60	90.110	6,181.18	261.86	9,148.22	9,147.70	0.00	0.00	0.00	
15,900.00	90.60	90.110	6,180.13	261.66	9,248.21	9,247.69	0.00	0.00	0.00	
16,000.00	90.60	90.110	6,179.07	261.47	9,348.21	9,347.69	0.00	0.00	0.00	
16,100.00	90.60	90.110	6,178.02	261.28	9,448.20	9,447.68	0.00	0.00	0.00	
16,200.00	90.60	90.110	6,176.96	261.09	9,548.19	9,547.67	0.00	0.00	0.00	
16,290.98	90.60	90.110	6,176.00	260.92	9,639.17	9,638.65	0.00	0.00	0.00	
TD at 16290.98										

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										
4-62-28-6457CB PBHL	0.00	0.000	6,176.00	260.92	9,639.17	1,346,022.59	3,334,185.98	40° 16' 37.330 N	104° 18' 8.032 W	
- plan hits target center										
- Point										
4-62-28-6457CB LP	0.00	0.000	6,278.00	279.44	-24.83	1,345,914.34	3,324,522.58	40° 16' 37.531 N	104° 20' 12.721 W	
- plan misses target center by 0.01ft at 6626.42ft MD (6278.00 TVD, 279.43 N, -24.83 E)										
- Point										

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00	
1,962.67	1,944.65	77.50	-140.24	Start 300.09 hold at 1962.67 MD	
2,262.75	2,227.96	125.36	-226.85	Start Drop -1.00	
4,188.09	4,117.26	280.35	-507.33	Start 1683.30 hold at 4188.09 MD	
5,871.39	5,800.56	280.35	-507.33	Start DLS 12.00 TFO 90.11	
6,626.43	6,278.00	279.43	-24.83	Start 9664.55 hold at 6626.43 MD	
16,290.98	6,176.00	260.92	9,639.17	TD at 16290.98	