



Project: Weld County, CO NAD 83
Site: Anschutz Equus Farms 4-62-33_34 SNNW Pad [GOOD]
Well: Anschutz Equus Farms 4-62-32-2532C
Wellbore: OH
Design: OH

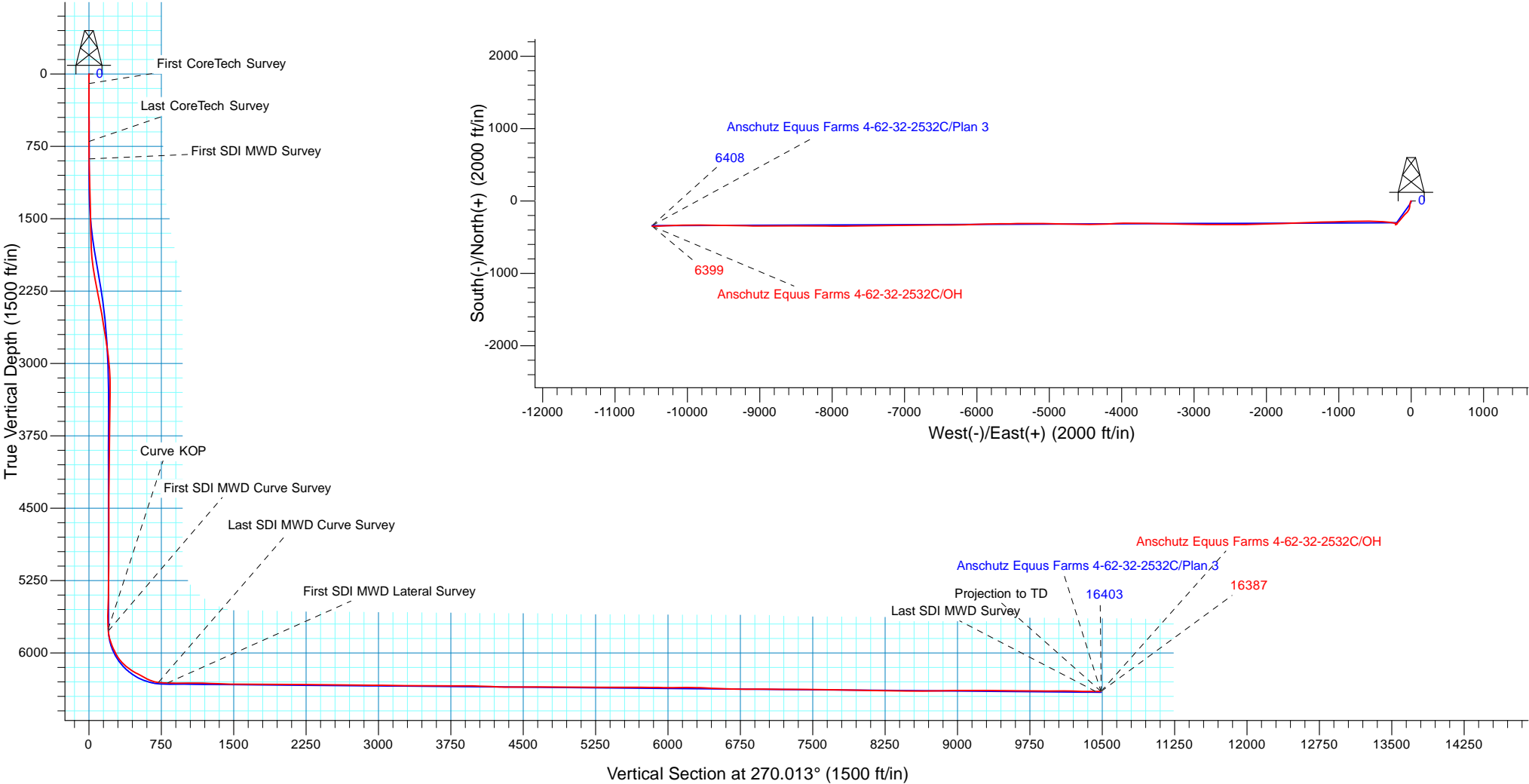


WELL DETAILS: Anschutz Equus Farms 4-62-32-2532C				
GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802) 4657.30				
Northing	Easting	Latitude	Longitude	
1343488.25	3324437.47	40° 16' 13.569 N	104° 20' 14.230 W	

Design: OH (Anschutz Equus Farms 4-62-32-2532C/OH)	
Created By: Seth Burstad	Date: 10-5-2017

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

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSection	Departure	Annotation	
100.00	100.00	0.16	124.530	-0.08	0.12	-0.12	0.14	First CoreTech Survey	
699.99	700.00	0.44	247.980	-1.18	-1.62	1.62	2.44	Last CoreTech Survey	
880.99	881.00	0.44	183.760	-2.14	-2.31	2.31	3.83	First SDI MWD Survey	
5756.50	5800.00	4.20	282.953	-313.76	-198.80	198.73	444.21	Curve KOP	
5772.44	5816.00	5.28	282.500	-313.47	-200.09	200.02	445.10	First SDI MWD Curve Survey	
6306.88	6616.00	83.44	269.930	-283.13	-720.29	720.23	967.82	Last SDI MWD Curve Survey	
6312.58	6709.00	89.53	269.820	-283.33	-813.07	813.01	1060.60	First SDI MWD Lateral Survey	
6399.44	16331.00	90.37	268.360	-347.88	-10431.50	10431.42	10681.33	Last SDI MWD Survey	
6399.07	16387.00	90.37	268.360	-349.49	-10487.48	10487.40	10737.33	Projection to TD	





Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz Equus Farms 4-62-33_34 SWNW Pad [GOOD]

Anschutz Equus Farms 4-62-32-2532C

OH

Design: OH

Standard Survey Report

05 October, 2017



Scientific Drilling

www.scientificdrilling.com



Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-32-2532C
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802)
Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad [GOOD]	MD Reference:	GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802)
Well:	Anschutz Equus Farms 4-62-32-2532C	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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 4-62-33_34 SWNW Pad [GOOD], Site Center : Anschutz Equus Farms 4-62-32-0916C				
Site Position:		Northing:	1,343,489.80 usft	Latitude:	40° 16' 13.580 N
From:	Lat/Long	Easting:	3,324,467.60 usft	Longitude:	104° 20' 13.841 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.75 °

Well	Anschutz Equus Farms 4-62-32-2532C, 1901' FNL 315' FWL Sec 33 T4N R62W					
Well Position	+N/-S	0.00 ft	Northing:	1,343,488.25 usft	Latitude:	40° 16' 13.569 N
	+E/-W	0.00 ft	Easting:	3,324,437.48 usft	Longitude:	104° 20' 14.230 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,657.30 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	4/13/2017	8.14	66.85	52,412
	HDGM	7/18/2017	8.27	66.93	52,363

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00		270.013

Survey Program	Date	10/5/2017			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	700.00	Survey #1 - Surface Gyro (OH)	Standard Keeper	Standard Wireline Keeper ver 1.0.2	
881.00	6,616.00	Survey #2 - Intermediate (OH)	OWSG MWD	OWSG MWD - Standard	
6,709.00	16,387.00	Survey #3 - Lateral (OH)	OWSG MWD	OWSG MWD - Standard	

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	0.16	124.530	100.00	-0.08	0.12	-0.12	0.16	0.16	0.00	
200.00	0.12	250.140	200.00	-0.19	0.13	-0.13	0.25	-0.04	125.61	
300.00	0.10	257.790	300.00	-0.25	-0.05	0.05	0.02	-0.02	7.65	
400.00	0.25	230.200	400.00	-0.41	-0.31	0.31	0.17	0.15	-27.59	
500.00	0.25	222.440	500.00	-0.71	-0.62	0.62	0.03	0.00	-7.76	
600.00	0.30	250.810	600.00	-0.95	-1.01	1.01	0.14	0.05	28.37	

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-32-2532C
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802)
Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad [GOOD]	MD Reference:	GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802)
Well:	Anschutz Equus Farms 4-62-32-2532C	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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)
700.00	0.44	247.980	699.99	-1.18	-1.62	1.62	0.14	0.14	-2.83
881.00	0.44	183.760	880.99	-2.14	-2.31	2.31	0.26	0.00	-35.48
First SDI MWD Survey									
972.00	0.30	222.410	971.99	-2.66	-2.49	2.49	0.31	-0.15	42.47
1,064.00	4.27	209.310	1,063.90	-5.83	-4.33	4.33	4.32	4.32	-14.24
1,155.00	4.13	209.550	1,154.65	-11.63	-7.61	7.60	0.16	-0.15	0.26
1,703.00	9.98	184.440	1,698.37	-76.21	-21.03	21.01	1.18	1.07	-4.58
1,794.00	11.38	188.550	1,787.80	-92.95	-22.97	22.95	1.75	1.54	4.52
1,885.00	12.48	202.510	1,876.85	-110.92	-28.07	28.05	3.38	1.21	15.34
1,977.00	14.03	210.670	1,966.40	-129.70	-37.57	37.54	2.64	1.68	8.87
2,068.00	14.87	221.570	2,054.54	-147.92	-50.95	50.91	3.12	0.92	11.98
2,159.00	15.71	223.620	2,142.32	-165.58	-67.19	67.16	1.10	0.92	2.25
2,251.00	15.68	222.990	2,230.89	-183.69	-84.26	84.22	0.19	-0.03	-0.68
2,342.00	14.84	220.740	2,318.68	-201.51	-100.25	100.21	1.13	-0.92	-2.47
2,435.00	15.23	221.860	2,408.50	-219.63	-116.18	116.13	0.52	0.42	1.20
2,529.00	15.12	221.720	2,499.22	-237.98	-132.58	132.52	0.12	-0.12	-0.15
2,623.00	14.72	220.190	2,590.05	-256.25	-148.44	148.38	0.60	-0.43	-1.63
2,717.00	13.95	219.870	2,681.12	-274.07	-163.41	163.35	0.82	-0.82	-0.34
2,811.00	13.84	220.070	2,772.37	-291.37	-177.91	177.85	0.13	-0.12	0.21
2,904.00	11.69	222.370	2,863.07	-306.85	-191.42	191.35	2.38	-2.31	2.47
2,998.00	8.09	233.120	2,955.66	-317.86	-203.14	203.07	4.29	-3.83	11.44
3,092.00	5.32	236.320	3,049.01	-324.25	-212.06	211.98	2.97	-2.95	3.40
3,186.00	2.36	227.640	3,142.79	-327.97	-217.11	217.04	3.20	-3.15	-9.23
3,280.00	0.36	278.050	3,236.76	-329.23	-218.84	218.76	2.29	-2.13	53.63
3,374.00	1.15	53.910	3,330.76	-328.63	-218.37	218.29	1.52	0.84	144.53
3,469.00	1.09	47.550	3,425.74	-327.46	-216.93	216.86	0.15	-0.06	-6.69
3,562.00	0.89	57.860	3,518.73	-326.48	-215.67	215.59	0.29	-0.22	11.09
3,656.00	0.71	57.760	3,612.72	-325.78	-214.55	214.48	0.19	-0.19	-0.11
3,750.00	0.62	67.150	3,706.71	-325.27	-213.59	213.52	0.15	-0.10	9.99
3,843.00	0.82	60.610	3,799.70	-324.75	-212.55	212.48	0.23	0.22	-7.03
3,937.00	0.95	60.390	3,893.69	-324.04	-211.29	211.21	0.14	0.14	-0.23
4,031.00	0.92	63.520	3,987.68	-323.31	-209.93	209.86	0.06	-0.03	3.33
4,125.00	0.74	47.710	4,081.67	-322.57	-208.81	208.74	0.31	-0.19	-16.82
4,220.00	0.70	47.950	4,176.66	-321.77	-207.92	207.85	0.04	-0.04	0.25
4,313.00	0.64	31.800	4,269.66	-320.95	-207.23	207.16	0.21	-0.06	-17.37
4,408.00	0.97	2.160	4,364.65	-319.69	-206.92	206.85	0.55	0.35	-31.20
4,502.00	0.85	350.420	4,458.63	-318.21	-207.00	206.93	0.24	-0.13	-12.49
4,595.00	0.60	2.630	4,551.63	-317.04	-207.10	207.02	0.31	-0.27	13.13
4,689.00	0.36	24.330	4,645.62	-316.28	-206.95	206.88	0.32	-0.26	23.09
4,783.00	0.26	27.660	4,739.62	-315.82	-206.73	206.66	0.11	-0.11	3.54
4,877.00	0.24	32.810	4,833.62	-315.47	-206.53	206.45	0.03	-0.02	5.48
4,971.00	0.29	81.730	4,927.62	-315.27	-206.18	206.11	0.24	0.05	52.04
5,066.00	0.37	79.720	5,022.62	-315.18	-205.64	205.57	0.09	0.08	-2.12

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Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad [GOOD]	MD Reference:	GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802)
Well:	Anschutz Equus Farms 4-62-32-2532C	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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)
5,159.00	0.54	87.700	5,115.62	-315.11	-204.91	204.84	0.19	0.18	8.58
5,253.00	0.69	80.880	5,209.61	-315.00	-203.91	203.84	0.18	0.16	-7.26
5,347.00	0.82	90.500	5,303.60	-314.92	-202.68	202.61	0.19	0.14	10.23
5,440.00	0.83	81.740	5,396.59	-314.83	-201.35	201.27	0.14	0.01	-9.42
5,534.00	0.80	74.180	5,490.58	-314.55	-200.04	199.97	0.12	-0.03	-8.04
5,628.00	1.08	89.160	5,584.57	-314.36	-198.52	198.45	0.39	0.30	15.94
5,722.00	1.08	92.130	5,678.55	-314.38	-196.75	196.68	0.06	0.00	3.16
5,800.00	4.20	282.953	5,756.50	-313.76	-198.80	198.73	6.75	4.00	-216.89
Curve KOP									
5,816.00	5.28	282.500	5,772.44	-313.47	-200.09	200.02	6.75	6.75	-2.83
First SDI MWD Curve Survey									
5,910.00	16.78	280.140	5,864.55	-310.14	-217.73	217.66	12.24	12.23	-2.51
6,004.00	24.86	283.000	5,952.34	-303.29	-250.40	250.33	8.66	8.60	3.04
6,097.00	31.31	279.590	6,034.35	-294.86	-293.32	293.25	7.14	6.94	-3.67
6,191.00	44.62	274.700	6,108.31	-288.05	-350.57	350.51	14.51	14.16	-5.20
6,285.00	55.70	272.770	6,168.44	-283.46	-422.49	422.42	11.89	11.79	-2.05
6,378.00	62.00	270.540	6,216.53	-281.21	-502.00	501.93	7.08	6.77	-2.40
6,472.00	61.05	268.790	6,261.35	-281.69	-584.62	584.55	1.92	-1.01	-1.86
6,566.00	74.08	269.560	6,297.15	-282.91	-671.31	671.24	13.88	13.86	0.82
6,616.00	83.44	269.930	6,306.88	-283.13	-720.29	720.23	18.73	18.72	0.74
Last SDI MWD Curve Survey									
6,709.00	89.53	269.820	6,312.58	-283.33	-813.07	813.01	6.55	6.55	-0.12
First SDI MWD Lateral Survey									
6,771.00	90.84	270.360	6,312.38	-283.23	-875.07	875.01	2.29	2.11	0.87
6,864.00	89.29	267.640	6,312.27	-284.85	-968.05	967.98	3.37	-1.67	-2.92
6,958.00	89.13	268.150	6,313.57	-288.31	-1,061.97	1,061.91	0.57	-0.17	0.54
7,052.00	89.10	268.590	6,315.02	-290.98	-1,155.92	1,155.86	0.47	-0.03	0.47
7,145.00	88.69	268.620	6,316.82	-293.24	-1,248.88	1,248.81	0.44	-0.44	0.03
7,239.00	88.09	268.050	6,319.46	-295.97	-1,342.80	1,342.73	0.88	-0.64	-0.61
7,333.00	87.65	268.020	6,322.95	-299.19	-1,436.68	1,436.61	0.47	-0.47	-0.03
7,427.00	90.54	268.630	6,324.43	-301.94	-1,530.62	1,530.55	3.14	3.07	0.65
7,521.00	89.93	267.830	6,324.05	-304.84	-1,624.57	1,624.50	1.07	-0.65	-0.85
7,615.00	89.73	267.870	6,324.33	-308.37	-1,718.51	1,718.44	0.22	-0.21	0.04
7,709.00	89.70	267.980	6,324.80	-311.77	-1,812.44	1,812.37	0.12	-0.03	0.12
7,803.00	89.16	268.810	6,325.73	-314.41	-1,906.40	1,906.33	1.05	-0.57	0.88
7,898.00	89.80	268.530	6,326.59	-316.61	-2,001.37	2,001.30	0.74	0.67	-0.29
7,992.00	89.06	267.180	6,327.53	-320.13	-2,095.30	2,095.22	1.64	-0.79	-1.44
8,086.00	88.93	268.850	6,329.18	-323.39	-2,189.22	2,189.15	1.78	-0.14	1.78
8,180.00	89.60	270.060	6,330.38	-324.28	-2,283.21	2,283.13	1.47	0.71	1.29
8,273.00	89.63	269.700	6,331.01	-324.47	-2,376.21	2,376.13	0.39	0.03	-0.39
8,368.00	90.13	270.130	6,331.21	-324.62	-2,471.21	2,471.13	0.69	0.53	0.45
8,462.00	90.67	270.010	6,330.55	-324.50	-2,565.20	2,565.13	0.59	0.57	-0.13
8,555.00	88.86	270.240	6,330.93	-324.30	-2,658.20	2,658.12	1.96	-1.95	0.25

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Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad [GOOD]	MD Reference:	GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802)
Well:	Anschutz Equus Farms 4-62-32-2532C	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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)
8,649.00	88.29	269.610	6,333.27	-324.42	-2,752.17	2,752.09	0.90	-0.61	-0.67
8,744.00	89.06	271.140	6,335.47	-323.80	-2,847.14	2,847.06	1.80	0.81	1.61
8,838.00	89.63	270.020	6,336.54	-322.85	-2,941.12	2,941.05	1.34	0.61	-1.19
8,932.00	90.47	270.740	6,336.46	-322.22	-3,035.12	3,035.05	1.18	0.89	0.77
9,026.00	88.89	270.580	6,336.98	-321.14	-3,129.11	3,129.04	1.69	-1.68	-0.17
9,119.00	88.59	271.060	6,339.03	-319.81	-3,222.08	3,222.00	0.61	-0.32	0.52
9,214.00	89.60	271.710	6,340.53	-317.51	-3,317.04	3,316.96	1.26	1.06	0.68
9,308.00	90.67	271.840	6,340.31	-314.60	-3,410.99	3,410.92	1.15	1.14	0.14
9,402.00	89.20	270.870	6,340.41	-312.38	-3,504.96	3,504.89	1.87	-1.56	-1.03
9,495.00	89.77	271.640	6,341.25	-310.34	-3,597.93	3,597.86	1.03	0.61	0.83
9,589.00	89.26	269.300	6,342.05	-309.57	-3,691.92	3,691.85	2.55	-0.54	-2.49
9,683.00	90.20	270.880	6,342.49	-309.42	-3,785.91	3,785.84	1.96	1.00	1.68
9,776.00	90.67	271.550	6,341.78	-307.45	-3,878.89	3,878.82	0.88	0.51	0.72
9,871.00	88.76	268.810	6,342.26	-307.15	-3,973.87	3,973.80	3.52	-2.01	-2.88
9,964.00	88.05	267.260	6,344.84	-310.34	-4,066.78	4,066.71	1.83	-0.76	-1.67
10,058.00	87.18	265.850	6,348.76	-315.98	-4,160.53	4,160.45	1.76	-0.93	-1.50
10,153.00	88.15	267.160	6,352.63	-321.77	-4,255.27	4,255.19	1.71	1.02	1.38
10,246.00	90.00	270.550	6,354.13	-323.63	-4,348.22	4,348.14	4.15	1.99	3.65
10,340.00	90.23	269.840	6,353.94	-323.31	-4,442.22	4,442.14	0.79	0.24	-0.76
10,431.00	90.70	269.570	6,353.20	-323.78	-4,533.21	4,533.14	0.60	0.52	-0.30
10,522.00	90.77	271.300	6,352.03	-323.09	-4,624.20	4,624.13	1.90	0.08	1.90
10,613.00	88.99	271.390	6,352.23	-320.95	-4,715.17	4,715.10	1.96	-1.96	0.10
10,705.00	89.40	271.920	6,353.52	-318.29	-4,807.12	4,807.05	0.73	0.45	0.58
10,796.00	89.30	271.220	6,354.55	-315.80	-4,898.08	4,898.01	0.78	-0.11	-0.77
10,887.00	90.70	271.610	6,354.55	-313.55	-4,989.05	4,988.98	1.60	1.54	0.43
10,979.00	89.50	270.060	6,354.39	-312.21	-5,081.04	5,080.97	2.13	-1.30	-1.68
11,069.00	89.53	270.180	6,355.15	-312.02	-5,171.03	5,170.96	0.14	0.03	0.13
11,160.00	89.40	269.840	6,356.00	-312.01	-5,262.03	5,261.96	0.40	-0.14	-0.37
11,252.00	89.26	269.390	6,357.08	-312.63	-5,354.02	5,353.95	0.51	-0.15	-0.49
11,343.00	89.43	269.660	6,358.12	-313.38	-5,445.01	5,444.94	0.35	0.19	0.30
11,434.00	89.80	269.050	6,358.73	-314.40	-5,536.00	5,535.93	0.78	0.41	-0.67
11,526.00	91.17	270.140	6,357.95	-315.05	-5,627.99	5,627.92	1.90	1.49	1.18
11,617.00	89.40	269.050	6,357.50	-315.70	-5,718.99	5,718.91	2.28	-1.95	-1.20
11,708.00	89.30	268.720	6,358.53	-317.47	-5,809.96	5,809.89	0.38	-0.11	-0.36
11,799.00	89.50	268.160	6,359.48	-319.95	-5,900.92	5,900.85	0.65	0.22	-0.62
11,891.00	89.83	268.000	6,360.02	-323.03	-5,992.87	5,992.80	0.40	0.36	-0.17
11,982.00	90.74	267.630	6,359.57	-326.50	-6,083.80	6,083.73	1.08	1.00	-0.41
12,073.00	89.66	269.080	6,359.25	-329.11	-6,174.76	6,174.68	1.99	-1.19	1.59
12,164.00	89.83	268.670	6,359.65	-330.90	-6,265.74	6,265.67	0.49	0.19	-0.45
12,256.00	87.42	269.760	6,361.86	-332.16	-6,357.70	6,357.62	2.87	-2.62	1.18
12,347.00	86.67	269.590	6,366.55	-332.67	-6,448.57	6,448.50	0.85	-0.82	-0.19
12,438.00	88.19	269.620	6,370.63	-333.30	-6,539.48	6,539.40	1.67	1.67	0.03

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-32-2532C
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802)
Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad [GOOD]	MD Reference:	GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802)
Well:	Anschutz Equus Farms 4-62-32-2532C	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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)
12,530.00	88.46	269.720	6,373.32	-333.83	-6,631.44	6,631.36	0.31	0.29	0.11
12,621.00	89.03	269.400	6,375.32	-334.53	-6,722.41	6,722.34	0.72	0.63	-0.35
12,713.00	89.87	269.620	6,376.20	-335.31	-6,814.40	6,814.33	0.94	0.91	0.24
12,804.00	90.57	269.460	6,375.85	-336.04	-6,905.40	6,905.32	0.79	0.77	-0.18
12,895.00	89.50	270.070	6,375.79	-336.42	-6,996.40	6,996.32	1.35	-1.18	0.67
12,987.00	89.56	269.920	6,376.55	-336.43	-7,088.39	7,088.32	0.18	0.07	-0.16
13,077.00	89.09	269.530	6,377.61	-336.86	-7,178.39	7,178.31	0.68	-0.52	-0.43
13,169.00	89.57	268.640	6,378.69	-338.33	-7,270.37	7,270.29	1.10	0.52	-0.97
13,260.00	89.43	267.690	6,379.48	-341.24	-7,361.32	7,361.24	1.06	-0.15	-1.04
13,351.00	89.36	269.790	6,380.44	-343.24	-7,452.28	7,452.21	2.31	-0.08	2.31
13,442.00	89.53	269.650	6,381.32	-343.69	-7,543.28	7,543.20	0.24	0.19	-0.15
13,533.00	89.93	268.960	6,381.75	-344.79	-7,634.27	7,634.19	0.88	0.44	-0.76
13,625.00	89.30	269.940	6,382.37	-345.67	-7,726.26	7,726.18	1.27	-0.68	1.07
13,717.00	89.26	269.750	6,383.52	-345.92	-7,818.25	7,818.18	0.21	-0.04	-0.21
13,808.00	89.13	269.360	6,384.80	-346.63	-7,909.24	7,909.16	0.45	-0.14	-0.43
13,899.00	88.66	270.940	6,386.56	-346.39	-8,000.22	8,000.14	1.81	-0.52	1.74
13,990.00	88.59	269.980	6,388.74	-345.66	-8,091.19	8,091.11	1.06	-0.08	-1.05
14,082.00	88.35	269.990	6,391.20	-345.68	-8,183.16	8,183.08	0.26	-0.26	0.01
14,174.00	89.30	271.550	6,393.09	-344.45	-8,275.13	8,275.05	1.99	1.03	1.70
14,265.00	89.50	269.900	6,394.04	-343.30	-8,366.11	8,366.03	1.83	0.22	-1.81
14,356.00	89.46	269.040	6,394.86	-344.14	-8,457.10	8,457.02	0.95	-0.04	-0.95
14,448.00	89.23	270.090	6,395.92	-344.84	-8,549.09	8,549.01	1.17	-0.25	1.14
14,538.00	90.67	270.820	6,395.99	-344.12	-8,639.09	8,639.01	1.79	1.60	0.81
14,629.00	90.94	270.560	6,394.72	-343.03	-8,730.07	8,729.99	0.41	0.30	-0.29
14,721.00	90.70	268.190	6,393.40	-344.03	-8,822.05	8,821.97	2.59	-0.26	-2.58
14,811.00	91.14	269.410	6,391.95	-345.91	-8,912.02	8,911.94	1.44	0.49	1.36
14,903.00	91.04	271.320	6,390.20	-345.33	-9,003.99	9,003.92	2.08	-0.11	2.08
14,993.00	89.90	270.440	6,389.47	-343.95	-9,093.98	9,093.90	1.60	-1.27	-0.98
15,085.00	90.23	270.390	6,389.36	-343.28	-9,185.98	9,185.90	0.36	0.36	-0.05
15,176.00	89.30	271.450	6,389.73	-341.82	-9,276.96	9,276.88	1.55	-1.02	1.16
15,267.00	90.17	271.240	6,390.15	-339.68	-9,367.93	9,367.86	0.98	0.96	-0.23
15,358.00	88.96	270.820	6,390.85	-338.05	-9,458.91	9,458.84	1.41	-1.33	-0.46
15,449.00	89.20	270.450	6,392.31	-337.04	-9,549.90	9,549.82	0.48	0.26	-0.41
15,541.00	88.59	270.860	6,394.08	-335.99	-9,641.87	9,641.80	0.80	-0.66	0.45
15,632.00	90.37	272.170	6,394.91	-333.58	-9,732.83	9,732.76	2.43	1.96	1.44
15,724.00	89.97	270.230	6,394.63	-331.65	-9,824.81	9,824.73	2.15	-0.43	-2.11
15,815.00	89.77	268.330	6,394.84	-332.80	-9,915.80	9,915.72	2.10	-0.22	-2.09
15,909.00	90.40	268.430	6,394.70	-335.46	-10,009.76	10,009.68	0.68	0.67	0.11
16,003.00	89.43	269.590	6,394.84	-337.08	-10,103.74	10,103.66	1.61	-1.03	1.23
16,097.00	88.46	267.380	6,396.57	-339.56	-10,197.68	10,197.61	2.57	-1.03	-2.35
16,191.00	89.03	267.800	6,398.63	-343.52	-10,291.58	10,291.50	0.75	0.61	0.45
16,285.00	89.87	268.440	6,399.53	-346.60	-10,385.52	10,385.44	1.12	0.89	0.68
16,331.00	90.37	268.360	6,399.44	-347.88	-10,431.50	10,431.42	1.10	1.09	-0.17

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Anschutz Equus Farms 4-62-32-2532C
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Site:	Anschutz Equus Farms 4-62-33_34 SWNW Pad [GOOD]	MD Reference:	GL 4657.3' & KB 20' @ 4677.30ft (Savanna 802)
Well:	Anschutz Equus Farms 4-62-32-2532C	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

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)
Last SDI MWD Survey									
16,387.00	90.37	268.360	6,399.07	-349.49	-10,487.48	10,487.40	0.00	0.00	0.00
Projection to TD									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
881.00	880.99	-2.14	-2.31	First SDI MWD Survey
5,800.00	5,756.50	-313.76	-198.80	Curve KOP
5,816.00	5,772.44	-313.47	-200.09	First SDI MWD Curve Survey
6,616.00	6,306.88	-283.13	-720.29	Last SDI MWD Curve Survey
6,709.00	6,312.58	-283.33	-813.07	First SDI MWD Lateral Survey
16,331.00	6,399.44	-347.88	-10,431.50	Last SDI MWD Survey
16,387.00	6,399.07	-349.49	-10,487.48	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
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