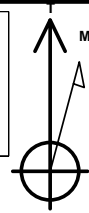


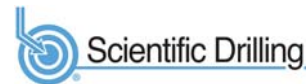
PROJECT DETAILS: Weld County, CO NAD 83

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 3-62-4_5 CE2 Pad [GOOD]
 Well: Anschutz Equus Farm 3-62-4-CE2-AD
 Wellbore: OH
 Design: Plan 2



Azimuths to True North
 Magnetic North: 8.25°



Magnetic Field
 Strength: 52328.4nT
 Dip Angle: 66.92°
 Date: 12/2/2017
 Model: HDGM

Plan: Plan 2 (Anschutz Equus Farm 3-62-4-CE2-AD/OH)

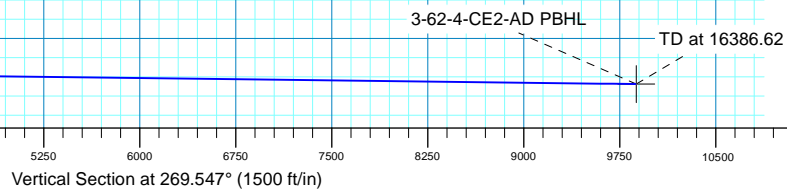
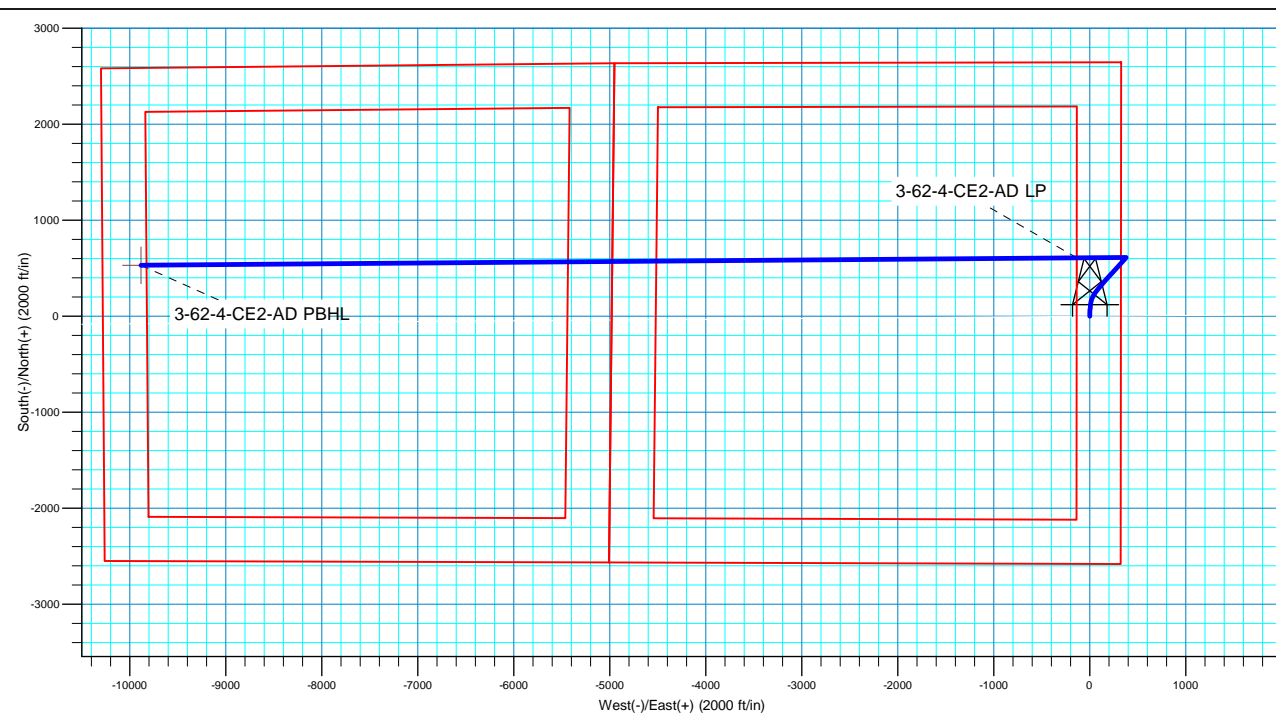
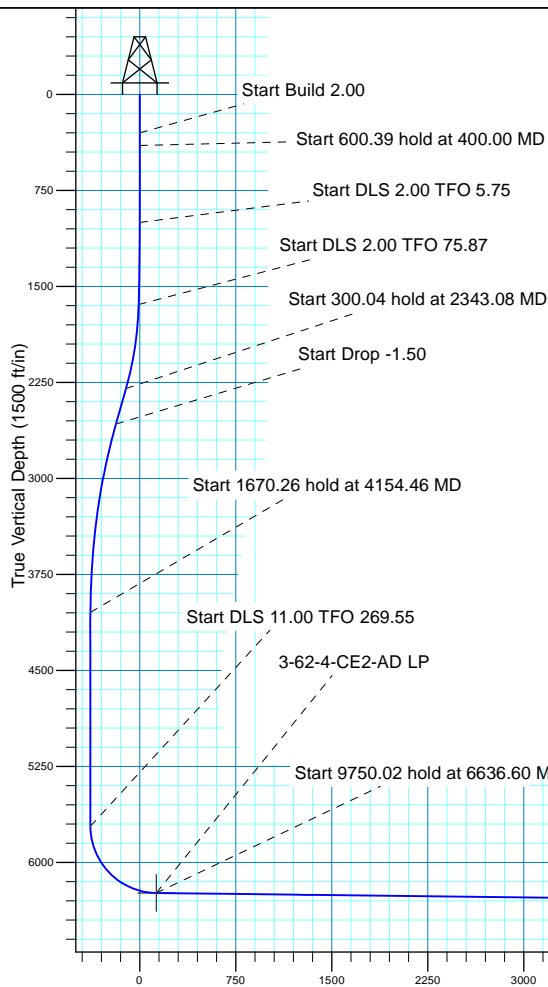
Created By: Seth Burstad Date: 12-02-2017

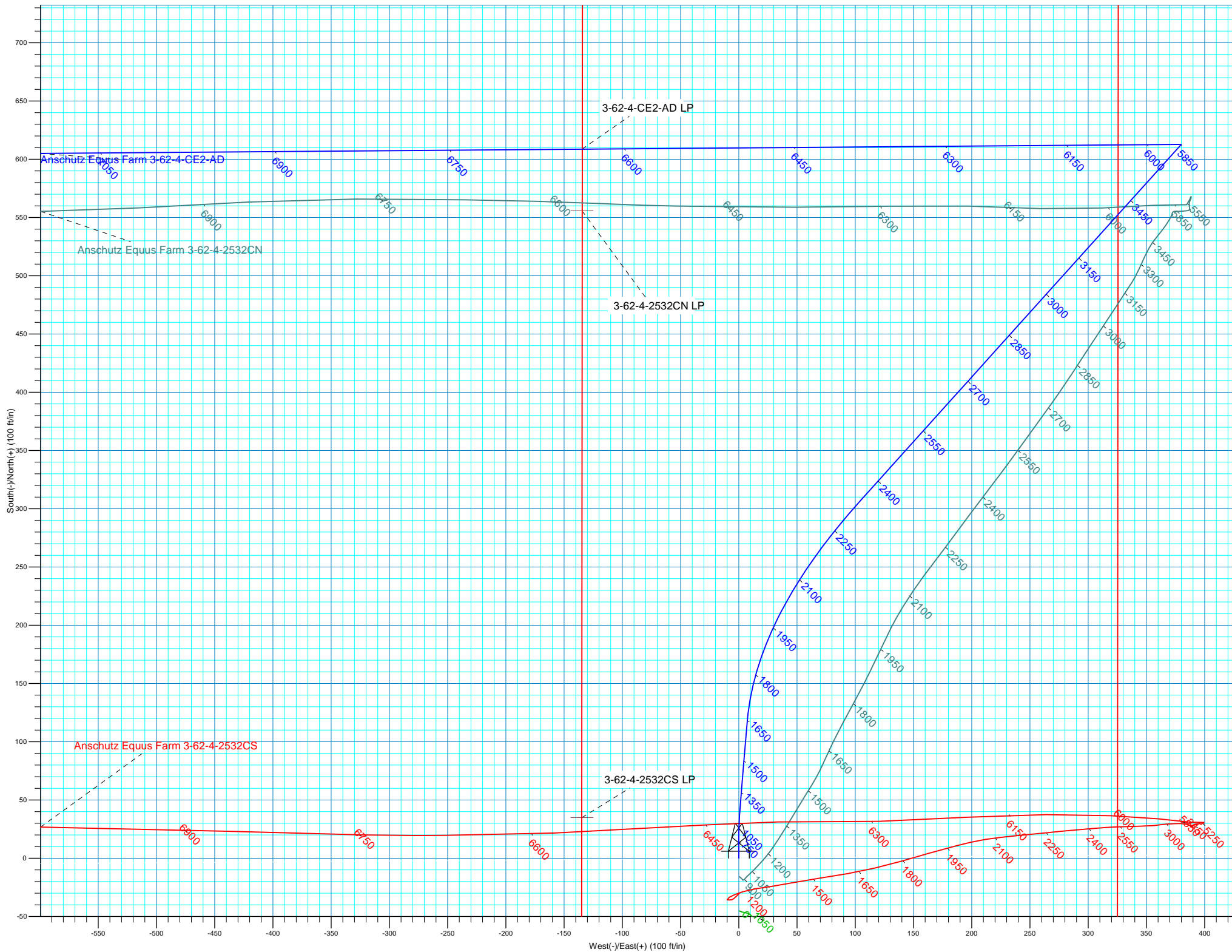
SECTION DETAILS

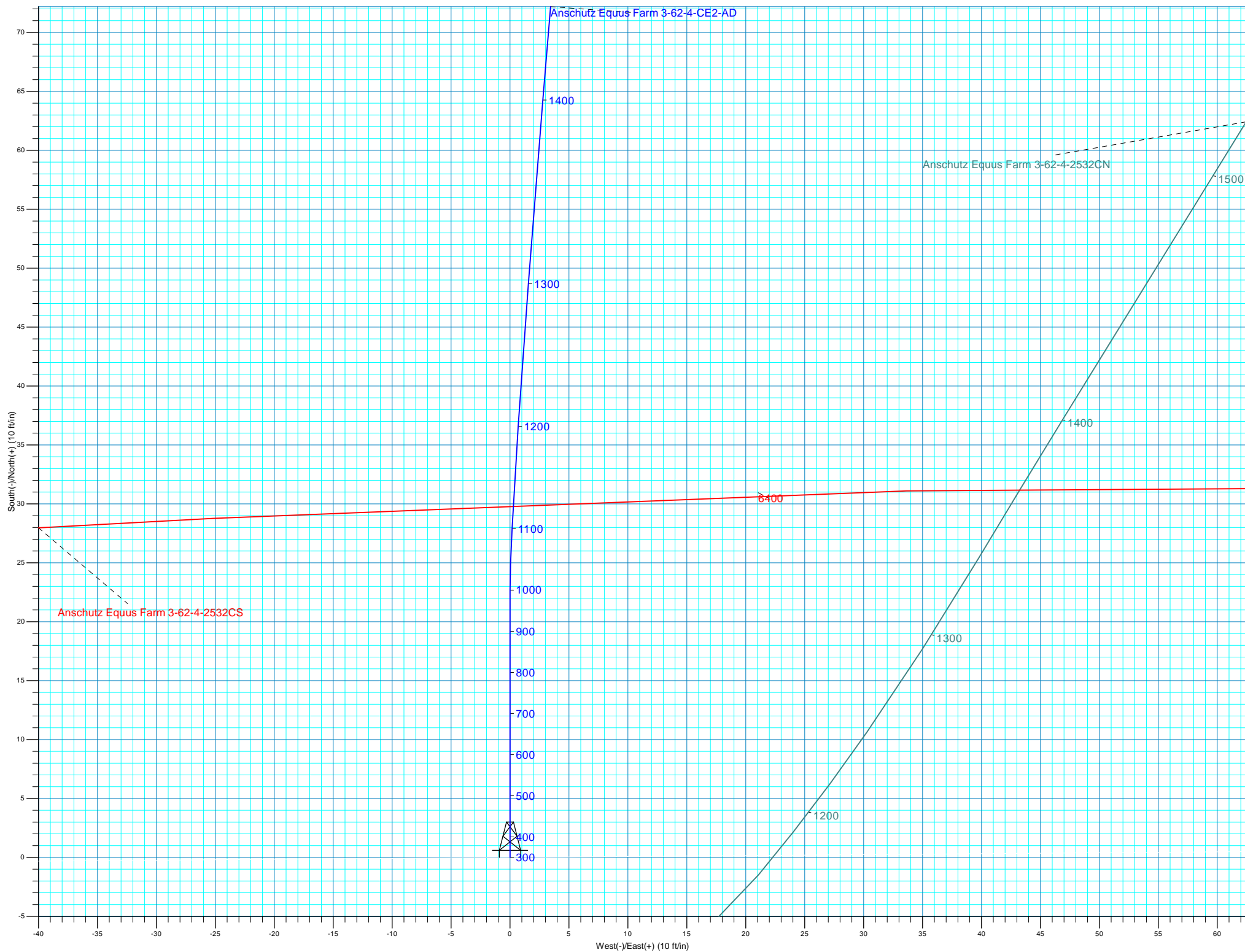
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	0.000	399.98	1.75	0.00	2.00	0.00	-0.01
1000.39	2.00	0.000	1000.00	22.70	0.00	0.00	0.00	-0.18
1650.82	15.00	5.000	1641.92	118.31	7.37	2.00	5.75	-8.30
2343.08	22.67	42.019	2298.84	307.59	104.95	2.00	75.87	-107.38
2643.12	22.67	42.019	2575.70	393.50	182.36	0.00	0.00	-185.46
4154.46	0.00	0.000	4047.91	612.75	379.90	1.50	180.00	-384.73
5824.72	0.00	0.000	5718.17	612.75	379.90	0.00	0.00	-384.73
6636.60	89.31	269.547	6239.00	608.68	-134.65	11.00	269.55	129.83
16386.62	89.31	269.547	6357.00	531.55	-9883.66	0.00	0.00	9879.15

WELL DETAILS: Anschutz Equus Farm 3-62-4-CE2-AD

+N/-S	+E/-W	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)	4612.60	Longitude
0.00	0.00	Northing	Easting	Latitude
0.00	0.00	1337858.39	3329197.15	40° 15' 17.316 N
				104° 19' 13.795 W









Bill Barrett Corporation

Bill Barrett Corp.

Weld County, CO NAD 83

Anschutz Equus Farms 3-62-4_5 CE2 Pad [GOOD]

Anschutz Equus Farm 3-62-4-CE2-AD

OH

Plan: Plan 2

Standard Planning Report

02 December, 2017



Scientific Drilling

www.scientificdrilling.com



Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-CE2-AD
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Site:	Anschutz Equus Farms 3-62-4_5 CE2 Pad [GOOD]	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-CE2-AD	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 3-62-4_5 CE2 Pad [GOOD], Site Center : Anschutz Equus Farm 3-62-4-2532CN			
Site Position:		Northing:	1,337,842.68 usft	Latitude:	40° 15' 17.161 N
From:	Lat/Long	Easting:	3,329,197.84 usft	Longitude:	104° 19' 13.789 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.76 °

Well	Anschutz Equus Farm 3-62-4-CE2-AD					
Well Position	+N/-S	15.71 ft	Northing:	1,337,858.39 usft	Latitude:	40° 15' 17.316 N
	+E/-W	-0.47 ft	Easting:	3,329,197.16 usft	Longitude:	104° 19' 13.795 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,612.60 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	12/2/2017	8.25	66.92	52,328

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	269.547

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	
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	2.00	0.000	399.98	1.75	0.00	2.00	2.00	0.00	0.00	
1,000.39	2.00	0.000	1,000.00	22.70	0.00	0.00	0.00	0.00	0.00	
1,650.82	15.00	5.000	1,641.92	118.31	7.37	2.00	2.00	0.77	5.75	
2,343.08	22.67	42.019	2,298.84	307.59	104.95	2.00	1.11	5.35	75.87	
2,643.12	22.67	42.019	2,575.70	393.50	182.36	0.00	0.00	0.00	0.00	
4,154.46	0.00	0.000	4,047.91	612.75	379.90	1.50	-1.50	0.00	180.00	
5,824.72	0.00	0.000	5,718.17	612.75	379.90	0.00	0.00	0.00	0.00	
6,636.60	89.31	269.547	6,239.00	608.68	-134.65	11.00	11.00	-11.14	269.55	
16,386.62	89.31	269.547	6,357.00	531.55	-9,883.66	0.00	0.00	0.00	0.00	3-62-4-CE2-AD PBHL

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-CE2-AD
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Site:	Anschutz Equus Farms 3-62-4_5 CE2 Pad [GOOD]	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-CE2-AD	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
Start Build 2.00									
400.00	2.00	0.000	399.98	1.75	0.00	-0.01	2.00	2.00	0.00
Start 600.39 hold at 400.00 MD									
500.00	2.00	0.000	499.92	5.24	0.00	-0.04	0.00	0.00	0.00
600.00	2.00	0.000	599.86	8.73	0.00	-0.07	0.00	0.00	0.00
700.00	2.00	0.000	699.80	12.22	0.00	-0.10	0.00	0.00	0.00
800.00	2.00	0.000	799.74	15.70	0.00	-0.12	0.00	0.00	0.00
900.00	2.00	0.000	899.68	19.19	0.00	-0.15	0.00	0.00	0.00
1,000.00	2.00	0.000	999.61	22.68	0.00	-0.18	0.00	0.00	0.00
1,000.39	2.00	0.000	1,000.00	22.70	0.00	-0.18	0.00	0.00	0.00
Start DLS 2.00 TFO 5.75									
1,100.00	3.99	2.872	1,099.47	27.90	0.17	-0.39	2.00	1.99	2.88
1,200.00	5.99	3.836	1,199.09	36.57	0.70	-0.99	2.00	2.00	0.96
1,300.00	7.98	4.319	1,298.34	48.70	1.57	-1.95	2.00	2.00	0.48
1,400.00	9.98	4.610	1,397.11	64.27	2.79	-3.30	2.00	2.00	0.29
1,500.00	11.98	4.804	1,495.27	83.26	4.35	-5.01	2.00	2.00	0.19
1,600.00	13.98	4.943	1,592.71	105.64	6.27	-7.10	2.00	2.00	0.14
1,650.82	15.00	5.000	1,641.92	118.31	7.37	-8.30	2.00	2.00	0.11
Start DLS 2.00 TFO 75.87									
1,700.00	15.27	8.624	1,689.39	131.05	8.89	-9.93	2.00	0.55	7.37
1,800.00	15.99	15.560	1,785.70	157.34	14.56	-15.81	2.00	0.72	6.94
1,900.00	16.91	21.839	1,881.62	184.11	23.67	-25.12	2.00	0.92	6.28
2,000.00	18.00	27.434	1,977.02	211.32	36.19	-37.86	2.00	1.09	5.59
2,100.00	19.23	32.372	2,071.79	238.94	52.13	-54.02	2.00	1.23	4.94
2,200.00	20.58	36.712	2,165.82	266.94	71.45	-73.56	2.00	1.35	4.34
2,300.00	22.02	40.522	2,258.99	295.28	94.14	-96.48	2.00	1.44	3.81
2,343.08	22.67	42.019	2,298.84	307.59	104.95	-107.38	2.00	1.50	3.47
Start 300.04 hold at 2343.08 MD									
2,400.00	22.67	42.019	2,351.36	323.89	119.63	-122.19	0.00	0.00	0.00
2,500.00	22.67	42.019	2,443.63	352.52	145.43	-148.22	0.00	0.00	0.00
2,600.00	22.67	42.019	2,535.91	381.16	171.23	-174.24	0.00	0.00	0.00
2,643.12	22.67	42.019	2,575.70	393.50	182.36	-185.46	0.00	0.00	0.00
Start Drop -1.50									
2,700.00	21.82	42.019	2,628.34	409.50	196.77	-200.00	1.50	-1.50	0.00
2,800.00	20.32	42.019	2,721.66	436.20	220.83	-224.27	1.50	-1.50	0.00
2,900.00	18.82	42.019	2,815.88	461.08	243.25	-246.89	1.50	-1.50	0.00
3,000.00	17.32	42.019	2,910.95	484.12	264.01	-267.83	1.50	-1.50	0.00
3,100.00	15.82	42.019	3,006.79	505.31	283.09	-287.08	1.50	-1.50	0.00
3,200.00	14.32	42.019	3,103.35	524.62	300.49	-304.63	1.50	-1.50	0.00
3,300.00	12.82	42.019	3,200.56	542.04	316.19	-320.47	1.50	-1.50	0.00
3,400.00	11.32	42.019	3,298.35	557.57	330.19	-334.59	1.50	-1.50	0.00
3,500.00	9.82	42.019	3,396.65	571.20	342.46	-346.97	1.50	-1.50	0.00
3,600.00	8.32	42.019	3,495.39	582.91	353.01	-357.61	1.50	-1.50	0.00
3,700.00	6.82	42.019	3,594.52	592.69	361.82	-366.50	1.50	-1.50	0.00
3,800.00	5.32	42.019	3,693.96	600.54	368.90	-373.64	1.50	-1.50	0.00
3,900.00	3.82	42.019	3,793.64	606.46	374.23	-379.01	1.50	-1.50	0.00
4,000.00	2.32	42.019	3,893.49	610.43	377.81	-382.62	1.50	-1.50	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-CE2-AD
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Site:	Anschutz Equus Farms 3-62-4_5 CE2 Pad [GOOD]	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-CE2-AD	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)
4,100.00	0.82	42.019	3,993.45	612.46	379.64	-384.47	1.50	-1.50	0.00
4,154.46	0.00	0.000	4,047.91	612.75	379.90	-384.73	1.50	-1.50	0.00
Start 1670.26 hold at 4154.46 MD									
4,200.00	0.00	0.000	4,093.45	612.75	379.90	-384.73	0.00	0.00	0.00
4,300.00	0.00	0.000	4,193.45	612.75	379.90	-384.73	0.00	0.00	0.00
4,400.00	0.00	0.000	4,293.45	612.75	379.90	-384.73	0.00	0.00	0.00
4,440.55	0.00	0.000	4,334.00	612.75	379.90	-384.73	0.00	0.00	0.00
Shannon									
4,500.00	0.00	0.000	4,393.45	612.75	379.90	-384.73	0.00	0.00	0.00
4,600.00	0.00	0.000	4,493.45	612.75	379.90	-384.73	0.00	0.00	0.00
4,700.00	0.00	0.000	4,593.45	612.75	379.90	-384.73	0.00	0.00	0.00
4,800.00	0.00	0.000	4,693.45	612.75	379.90	-384.73	0.00	0.00	0.00
4,900.00	0.00	0.000	4,793.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,000.00	0.00	0.000	4,893.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,100.00	0.00	0.000	4,993.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,200.00	0.00	0.000	5,093.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,300.00	0.00	0.000	5,193.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,400.00	0.00	0.000	5,293.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,500.00	0.00	0.000	5,393.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,600.00	0.00	0.000	5,493.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,700.00	0.00	0.000	5,593.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,800.00	0.00	0.000	5,693.45	612.75	379.90	-384.73	0.00	0.00	0.00
5,824.72	0.00	0.000	5,718.17	612.75	379.90	-384.73	0.00	0.00	0.00
Start DLS 11.00 TFO 269.55									
5,900.00	8.28	269.547	5,793.19	612.71	374.47	-379.30	11.00	11.00	0.00
5,997.71	19.03	269.547	5,888.00	612.52	351.44	-356.27	11.00	11.00	0.00
Sharon Springs									
6,000.00	19.28	269.547	5,890.16	612.52	350.69	-355.52	11.00	11.00	0.00
6,100.00	30.28	269.547	5,980.81	612.19	308.84	-313.67	11.00	11.00	0.00
6,113.05	31.72	269.547	5,992.00	612.13	302.12	-306.95	11.00	11.00	0.00
Niobrara									
6,166.57	37.60	269.547	6,036.00	611.89	271.70	-276.52	11.00	11.00	0.00
A Chalk									
6,172.91	38.30	269.547	6,041.00	611.86	267.80	-272.62	11.00	11.00	0.00
A Marl									
6,200.00	41.28	269.547	6,061.81	611.73	250.46	-255.29	11.00	11.00	0.00
6,228.91	44.46	269.547	6,083.00	611.57	230.79	-235.62	11.00	11.00	0.00
B Chalk									
6,294.82	51.71	269.547	6,127.00	611.18	181.78	-186.61	11.00	11.00	0.00
B Marl									
6,300.00	52.28	269.547	6,130.19	611.15	177.70	-182.53	11.00	11.00	0.00
6,400.00	63.28	269.547	6,183.42	610.48	93.23	-98.06	11.00	11.00	0.00
6,403.53	63.67	269.547	6,185.00	610.46	90.07	-94.89	11.00	11.00	0.00
Top C Chalk Target									
6,465.14	70.45	269.547	6,209.00	610.01	33.37	-38.20	11.00	11.00	0.00
Base C Chalk Target									
6,500.00	74.28	269.547	6,219.56	609.75	0.16	-4.98	11.00	11.00	0.00
6,600.00	85.28	269.547	6,237.28	608.97	-98.10	93.28	11.00	11.00	0.00
6,636.39	89.28	269.547	6,239.00	608.68	-134.44	129.62	11.00	11.00	0.00
Landing Point									

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-CE2-AD
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Site:	Anschutz Equus Farms 3-62-4_5 CE2 Pad [GOOD]	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-CE2-AD	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)
6,636.60	89.31	269.547	6,239.00	608.68	-134.65	129.83	11.00	11.00	0.00
Start 9750.02 hold at 6636.60 MD									
6,700.00	89.31	269.547	6,239.77	608.18	-198.05	193.23	0.00	0.00	0.00
6,800.00	89.31	269.547	6,240.98	607.39	-298.04	293.22	0.00	0.00	0.00
6,900.00	89.31	269.547	6,242.19	606.60	-398.03	393.22	0.00	0.00	0.00
7,000.00	89.31	269.547	6,243.40	605.80	-498.01	493.21	0.00	0.00	0.00
7,100.00	89.31	269.547	6,244.61	605.01	-598.00	593.20	0.00	0.00	0.00
7,200.00	89.31	269.547	6,245.82	604.22	-697.99	693.19	0.00	0.00	0.00
7,300.00	89.31	269.547	6,247.03	603.43	-797.98	793.19	0.00	0.00	0.00
7,400.00	89.31	269.547	6,248.24	602.64	-897.97	893.18	0.00	0.00	0.00
7,500.00	89.31	269.547	6,249.45	601.85	-997.96	993.17	0.00	0.00	0.00
7,600.00	89.31	269.547	6,250.66	601.06	-1,097.95	1,093.17	0.00	0.00	0.00
7,700.00	89.31	269.547	6,251.87	600.27	-1,197.94	1,193.16	0.00	0.00	0.00
7,800.00	89.31	269.547	6,253.08	599.48	-1,297.93	1,293.15	0.00	0.00	0.00
7,900.00	89.31	269.547	6,254.29	598.69	-1,397.92	1,393.14	0.00	0.00	0.00
8,000.00	89.31	269.547	6,255.50	597.89	-1,497.91	1,493.14	0.00	0.00	0.00
8,100.00	89.31	269.547	6,256.71	597.10	-1,597.90	1,593.13	0.00	0.00	0.00
8,200.00	89.31	269.547	6,257.92	596.31	-1,697.89	1,693.12	0.00	0.00	0.00
8,300.00	89.31	269.547	6,259.13	595.52	-1,797.88	1,793.11	0.00	0.00	0.00
8,400.00	89.31	269.547	6,260.34	594.73	-1,897.87	1,893.11	0.00	0.00	0.00
8,500.00	89.31	269.547	6,261.55	593.94	-1,997.86	1,993.10	0.00	0.00	0.00
8,600.00	89.31	269.547	6,262.76	593.15	-2,097.85	2,093.09	0.00	0.00	0.00
8,700.00	89.31	269.547	6,263.97	592.36	-2,197.84	2,193.08	0.00	0.00	0.00
8,800.00	89.31	269.547	6,265.18	591.57	-2,297.83	2,293.08	0.00	0.00	0.00
8,900.00	89.31	269.547	6,266.40	590.77	-2,397.82	2,393.07	0.00	0.00	0.00
9,000.00	89.31	269.547	6,267.61	589.98	-2,497.81	2,493.06	0.00	0.00	0.00
9,100.00	89.31	269.547	6,268.82	589.19	-2,597.80	2,593.06	0.00	0.00	0.00
9,200.00	89.31	269.547	6,270.03	588.40	-2,697.78	2,693.05	0.00	0.00	0.00
9,300.00	89.31	269.547	6,271.24	587.61	-2,797.77	2,793.04	0.00	0.00	0.00
9,400.00	89.31	269.547	6,272.45	586.82	-2,897.76	2,893.03	0.00	0.00	0.00
9,500.00	89.31	269.547	6,273.66	586.03	-2,997.75	2,993.03	0.00	0.00	0.00
9,600.00	89.31	269.547	6,274.87	585.24	-3,097.74	3,093.02	0.00	0.00	0.00
9,700.00	89.31	269.547	6,276.08	584.45	-3,197.73	3,193.01	0.00	0.00	0.00
9,800.00	89.31	269.547	6,277.29	583.66	-3,297.72	3,293.00	0.00	0.00	0.00
9,900.00	89.31	269.547	6,278.50	582.86	-3,397.71	3,393.00	0.00	0.00	0.00
10,000.00	89.31	269.547	6,279.71	582.07	-3,497.70	3,492.99	0.00	0.00	0.00
10,100.00	89.31	269.547	6,280.92	581.28	-3,597.69	3,592.98	0.00	0.00	0.00
10,200.00	89.31	269.547	6,282.13	580.49	-3,697.68	3,692.98	0.00	0.00	0.00
10,300.00	89.31	269.547	6,283.34	579.70	-3,797.67	3,792.97	0.00	0.00	0.00
10,400.00	89.31	269.547	6,284.55	578.91	-3,897.66	3,892.96	0.00	0.00	0.00
10,500.00	89.31	269.547	6,285.76	578.12	-3,997.65	3,992.95	0.00	0.00	0.00
10,600.00	89.31	269.547	6,286.97	577.33	-4,097.64	4,092.95	0.00	0.00	0.00
10,700.00	89.31	269.547	6,288.18	576.54	-4,197.63	4,192.94	0.00	0.00	0.00
10,800.00	89.31	269.547	6,289.39	575.74	-4,297.62	4,292.93	0.00	0.00	0.00
10,900.00	89.31	269.547	6,290.60	574.95	-4,397.61	4,392.92	0.00	0.00	0.00
11,000.00	89.31	269.547	6,291.81	574.16	-4,497.60	4,492.92	0.00	0.00	0.00
11,100.00	89.31	269.547	6,293.02	573.37	-4,597.59	4,592.91	0.00	0.00	0.00
11,200.00	89.31	269.547	6,294.23	572.58	-4,697.58	4,692.90	0.00	0.00	0.00
11,300.00	89.31	269.547	6,295.44	571.79	-4,797.57	4,792.89	0.00	0.00	0.00
11,400.00	89.31	269.547	6,296.65	571.00	-4,897.55	4,892.89	0.00	0.00	0.00
11,500.00	89.31	269.547	6,297.86	570.21	-4,997.54	4,992.88	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-CE2-AD
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Site:	Anschutz Equus Farms 3-62-4_5 CE2 Pad [GOOD]	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-CE2-AD	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)
11,600.00	89.31	269.547	6,299.07	569.42	-5,097.53	5,092.87	0.00	0.00	0.00
11,700.00	89.31	269.547	6,300.28	568.63	-5,197.52	5,192.87	0.00	0.00	0.00
11,800.00	89.31	269.547	6,301.49	567.83	-5,297.51	5,292.86	0.00	0.00	0.00
11,900.00	89.31	269.547	6,302.70	567.04	-5,397.50	5,392.85	0.00	0.00	0.00
12,000.00	89.31	269.547	6,303.91	566.25	-5,497.49	5,492.84	0.00	0.00	0.00
12,100.00	89.31	269.547	6,305.12	565.46	-5,597.48	5,592.84	0.00	0.00	0.00
12,200.00	89.31	269.547	6,306.33	564.67	-5,697.47	5,692.83	0.00	0.00	0.00
12,300.00	89.31	269.547	6,307.54	563.88	-5,797.46	5,792.82	0.00	0.00	0.00
12,400.00	89.31	269.547	6,308.75	563.09	-5,897.45	5,892.81	0.00	0.00	0.00
12,500.00	89.31	269.547	6,309.96	562.30	-5,997.44	5,992.81	0.00	0.00	0.00
12,600.00	89.31	269.547	6,311.17	561.51	-6,097.43	6,092.80	0.00	0.00	0.00
12,700.00	89.31	269.547	6,312.38	560.72	-6,197.42	6,192.79	0.00	0.00	0.00
12,800.00	89.31	269.547	6,313.59	559.92	-6,297.41	6,292.78	0.00	0.00	0.00
12,900.00	89.31	269.547	6,314.80	559.13	-6,397.40	6,392.78	0.00	0.00	0.00
13,000.00	89.31	269.547	6,316.01	558.34	-6,497.39	6,492.77	0.00	0.00	0.00
13,100.00	89.31	269.547	6,317.22	557.55	-6,597.38	6,592.76	0.00	0.00	0.00
13,200.00	89.31	269.547	6,318.43	556.76	-6,697.37	6,692.76	0.00	0.00	0.00
13,300.00	89.31	269.547	6,319.64	555.97	-6,797.36	6,792.75	0.00	0.00	0.00
13,400.00	89.31	269.547	6,320.86	555.18	-6,897.35	6,892.74	0.00	0.00	0.00
13,500.00	89.31	269.547	6,322.07	554.39	-6,997.34	6,992.73	0.00	0.00	0.00
13,600.00	89.31	269.547	6,323.28	553.60	-7,097.32	7,092.73	0.00	0.00	0.00
13,700.00	89.31	269.547	6,324.49	552.80	-7,197.31	7,192.72	0.00	0.00	0.00
13,800.00	89.31	269.547	6,325.70	552.01	-7,297.30	7,292.71	0.00	0.00	0.00
13,900.00	89.31	269.547	6,326.91	551.22	-7,397.29	7,392.70	0.00	0.00	0.00
14,000.00	89.31	269.547	6,328.12	550.43	-7,497.28	7,492.70	0.00	0.00	0.00
14,100.00	89.31	269.547	6,329.33	549.64	-7,597.27	7,592.69	0.00	0.00	0.00
14,200.00	89.31	269.547	6,330.54	548.85	-7,697.26	7,692.68	0.00	0.00	0.00
14,300.00	89.31	269.547	6,331.75	548.06	-7,797.25	7,792.67	0.00	0.00	0.00
14,400.00	89.31	269.547	6,332.96	547.27	-7,897.24	7,892.67	0.00	0.00	0.00
14,500.00	89.31	269.547	6,334.17	546.48	-7,997.23	7,992.66	0.00	0.00	0.00
14,600.00	89.31	269.547	6,335.38	545.69	-8,097.22	8,092.65	0.00	0.00	0.00
14,700.00	89.31	269.547	6,336.59	544.89	-8,197.21	8,192.65	0.00	0.00	0.00
14,800.00	89.31	269.547	6,337.80	544.10	-8,297.20	8,292.64	0.00	0.00	0.00
14,900.00	89.31	269.547	6,339.01	543.31	-8,397.19	8,392.63	0.00	0.00	0.00
15,000.00	89.31	269.547	6,340.22	542.52	-8,497.18	8,492.62	0.00	0.00	0.00
15,100.00	89.31	269.547	6,341.43	541.73	-8,597.17	8,592.62	0.00	0.00	0.00
15,200.00	89.31	269.547	6,342.64	540.94	-8,697.16	8,692.61	0.00	0.00	0.00
15,300.00	89.31	269.547	6,343.85	540.15	-8,797.15	8,792.60	0.00	0.00	0.00
15,400.00	89.31	269.547	6,345.06	539.36	-8,897.14	8,892.59	0.00	0.00	0.00
15,500.00	89.31	269.547	6,346.27	538.57	-8,997.13	8,992.59	0.00	0.00	0.00
15,600.00	89.31	269.547	6,347.48	537.77	-9,097.12	9,092.58	0.00	0.00	0.00
15,700.00	89.31	269.547	6,348.69	536.98	-9,197.11	9,192.57	0.00	0.00	0.00
15,800.00	89.31	269.547	6,349.90	536.19	-9,297.10	9,292.57	0.00	0.00	0.00
15,900.00	89.31	269.547	6,351.11	535.40	-9,397.08	9,392.56	0.00	0.00	0.00
16,000.00	89.31	269.547	6,352.32	534.61	-9,497.07	9,492.55	0.00	0.00	0.00
16,100.00	89.31	269.547	6,353.53	533.82	-9,597.06	9,592.54	0.00	0.00	0.00
16,200.00	89.31	269.547	6,354.74	533.03	-9,697.05	9,692.54	0.00	0.00	0.00
16,300.00	89.31	269.547	6,355.95	532.24	-9,797.04	9,792.53	0.00	0.00	0.00
16,386.62	89.31	269.547	6,357.00	531.55	-9,883.66	9,879.15	0.00	0.00	0.00
TD at 16386.62 - TD (Horizontal)									

Database:	Casper District	Local Co-ordinate Reference:	Well Anschutz Equus Farm 3-62-4-CE2-AD
Company:	Bill Barrett Corp.	TVD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Project:	Weld County, CO NAD 83	MD Reference:	GL 4612.6' & KB 20' @ 4632.60ft (Savanna 802)
Site:	Anschutz Equus Farms 3-62-4_5 CE2 Pad [GOOD]	North Reference:	True
Well:	Anschutz Equus Farm 3-62-4-CE2-AD	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
3-62-4-CE2-AD LP	0.00	0.000	6,239.00	608.69	-134.65	1,338,465.23	3,329,054.42	40° 15' 23.332 N	104° 19' 15.532 W
- plan misses target center by 0.01ft at 6636.60ft MD (6239.00 TVD, 608.68 N, -134.65 E)									
- Point									
3-62-4-CE2-AD PBHL	0.00	0.000	6,357.00	531.55	-9,883.66	1,338,258.43	3,319,307.33	40° 15' 22.550 N	104° 21' 21.280 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
4,440.55	4,334.00	Shannon				
5,997.71	5,888.00	Sharon Springs				
6,113.05	5,992.00	Niobrara				
6,166.57	6,036.00	A Chalk				
6,172.91	6,041.00	A Marl				
6,228.91	6,083.00	B Chalk				
6,294.82	6,127.00	B Marl				
6,403.53	6,185.00	Top C Chalk Target				
6,465.14	6,209.00	Base C Chalk Target				
6,636.39	6,239.00	Landing Point				
16,386.62	6,357.00	TD (Horizontal)				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W		
		(ft)	(ft)	Comment	
300.00	300.00	0.00	0.00	Start Build 2.00	
400.00	399.98	1.75	0.00	Start 600.39 hold at 400.00 MD	
1,000.39	1,000.00	22.70	0.00	Start DLS 2.00 TFO 5.75	
1,650.82	1,641.92	118.31	7.37	Start DLS 2.00 TFO 75.87	
2,343.08	2,298.84	307.59	104.95	Start 300.04 hold at 2343.08 MD	
2,643.12	2,575.70	393.50	182.36	Start Drop -1.50	
4,154.46	4,047.91	612.75	379.90	Start 1670.26 hold at 4154.46 MD	
5,824.72	5,718.17	612.75	379.90	Start DLS 11.00 TFO 269.55	
6,636.60	6,239.00	608.68	-134.65	Start 9750.02 hold at 6636.60 MD	
16,386.62	6,357.00	531.55	-9,883.66	TD at 16386.62	