



Bill Barrett Corporation

Bill Barrett Corp.

Weld Co., CO

Sec.17-T6N-R61W

Greasewood #7-17H

Wellbore #1

Plan: Design #1

Standard Planning Report

13 August, 2013

Archer



Bill Barrett Corp.
Project: Weld Co., CO
Site: Sec.17-T6N-R61W
Well: Greasewood #7-17H
Wellbore: Wellbore #1
Design: Design #1
Lat: 40° 29' 37.770 N
Long: 104° 14' 31.400 W
Pad GL: 4693.00
KB: WELL @ 4709.00usft

Archer

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00°
1037.84	2.76	240.54	1037.79	-1.63	-2.89	2.00	240.54	-2.87	Start 4108.71' hold at 1037.84 MD
5146.55	2.76	240.54	5141.74	-98.81	-174.96	0.00	0.00	-173.83	Start Drop -2.00°
5284.40	0.00	0.00	5279.54	-100.44	-177.85	2.00	180.00	-176.69	Start 500.00' hold at 5284.40 MD
5784.40	0.00	0.00	5779.54	-100.44	-177.85	0.00	0.00	-176.69	KOP / Start Build 12.00°
6534.40	90.00	89.43	6257.00	-95.66	299.59	12.00	89.43	300.66	EOC / Start 4313.35' hold at 6534.40 MD
10847.75	90.00	89.43	6257.00	-52.52	4612.73	0.00	0.00	4613.03	TD at 10847.75

WELL DETAILS: Greasewood #7-17H

+N-S	+E-W	Northing	Ground Level: Easting	4693.00 Latitude	Longitude	Slot
0.00	0.00	1425222.470	3349853.940	40° 29' 37.770 N	104° 14' 31.400 W	

WELLBORE TARGET DETAILS (LAT/LONG)

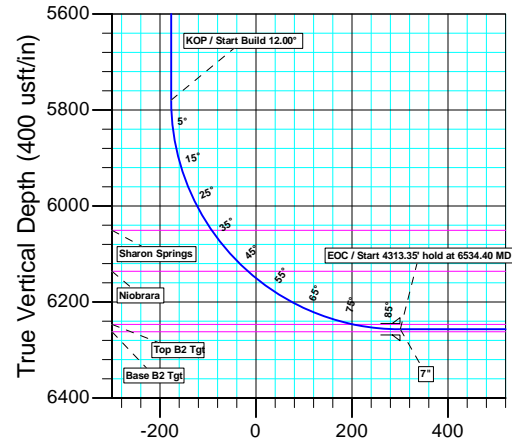
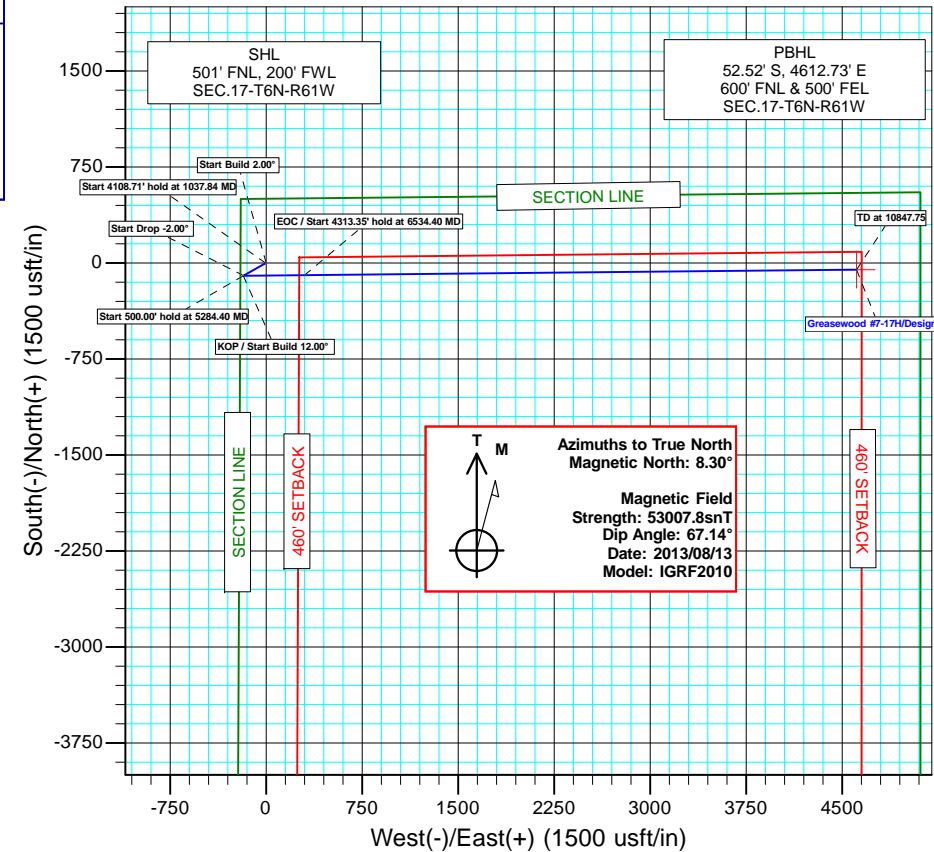
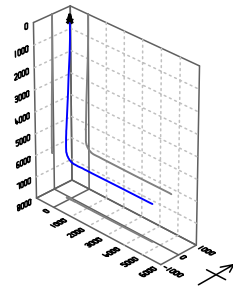
Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape Point
Greasewood 7-17H PBHL	6257.00	-52.52	4612.73	40° 29' 37.247 N	104° 13' 31.694 W	

CASING DETAILS

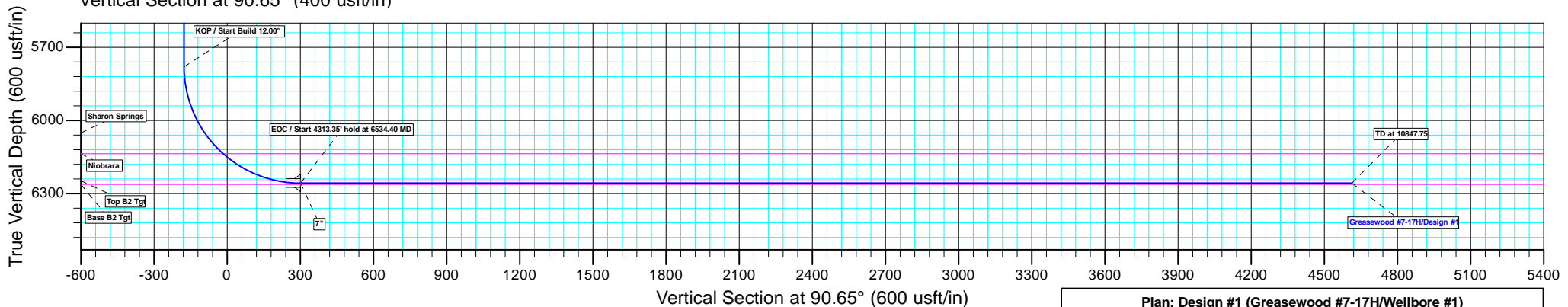
TVD	MD	Name
800.00	800.00	9 5/8"
6257.00	6534.40	7"

PROJECT DETAILS: Weld Co., CO

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level



Vertical Section at 90.65° (400 usft/in)



Vertical Section at 90.65° (600 usft/in)

Plan: Design #1 (Greasewood #7-17H/Wellbore #1)

Created By: Bret Wolford

Date: 12:00, August 13 2013

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Greasewood #7-17H
Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4709.00usft
Project:	Weld Co., CO	MD Reference:	WELL @ 4709.00usft
Site:	Sec.17-T6N-R61W	North Reference:	True
Well:	Greasewood #7-17H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Weld Co., CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Sec.17-T6N-R61W			
Site Position:		Northing:	1,425,222.470 usft	Latitude:	40° 29' 37.770 N
From:	Map	Easting:	3,349,853.940 usft	Longitude:	104° 14' 31.400 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.81 °

Well	Greasewood #7-17H					
Well Position	+N/-S	0.00 usft	Northing:	1,425,222.470 usft	Latitude:	40° 29' 37.770 N
	+E/-W	0.00 usft	Easting:	3,349,853.940 usft	Longitude:	104° 14' 31.400 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,693.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/13/13	8.30	67.14	53,008

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	6,257.00	0.00	0.00	90.65

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,037.84	2.76	240.54	1,037.79	-1.63	-2.89	2.00	2.00	0.00	240.54	
5,146.55	2.76	240.54	5,141.74	-98.81	-174.96	0.00	0.00	0.00	0.00	
5,284.40	0.00	0.00	5,279.54	-100.44	-177.85	2.00	-2.00	0.00	180.00	
5,784.40	0.00	0.00	5,779.54	-100.44	-177.85	0.00	0.00	0.00	0.00	
6,534.40	90.00	89.43	6,257.00	-95.66	299.59	12.00	12.00	0.00	89.43	Greasewood 7-17H P
10,847.75	90.00	89.43	6,257.00	-52.52	4,612.73	0.00	0.00	0.00	0.00	Greasewood 7-17H P

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Greasewood #7-17H
Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4709.00usft
Project:	Weld Co., CO	MD Reference:	WELL @ 4709.00usft
Site:	Sec.17-T6N-R61W	North Reference:	True
Well:	Greasewood #7-17H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
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
9 5/8"									
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	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	2.00	240.54	999.98	-0.86	-1.52	-1.51	2.00	2.00	0.00
Start 4108.71' hold at 1037.84 MD									
1,037.84	2.76	240.54	1,037.79	-1.63	-2.89	-2.87	2.00	2.00	0.00
1,100.00	2.76	240.54	1,099.87	-3.10	-5.49	-5.45	0.00	0.00	0.00
1,200.00	2.76	240.54	1,199.76	-5.47	-9.68	-9.62	0.00	0.00	0.00
1,300.00	2.76	240.54	1,299.64	-7.83	-13.87	-13.78	0.00	0.00	0.00
1,400.00	2.76	240.54	1,399.53	-10.20	-18.05	-17.94	0.00	0.00	0.00
1,500.00	2.76	240.54	1,499.41	-12.56	-22.24	-22.10	0.00	0.00	0.00
1,600.00	2.76	240.54	1,599.30	-14.93	-26.43	-26.26	0.00	0.00	0.00
1,700.00	2.76	240.54	1,699.18	-17.29	-30.62	-30.42	0.00	0.00	0.00
1,800.00	2.76	240.54	1,799.06	-19.66	-34.81	-34.58	0.00	0.00	0.00
1,900.00	2.76	240.54	1,898.95	-22.02	-38.99	-38.74	0.00	0.00	0.00
2,000.00	2.76	240.54	1,998.83	-24.39	-43.18	-42.90	0.00	0.00	0.00
2,100.00	2.76	240.54	2,098.72	-26.75	-47.37	-47.06	0.00	0.00	0.00
2,200.00	2.76	240.54	2,198.60	-29.12	-51.56	-51.22	0.00	0.00	0.00
2,300.00	2.76	240.54	2,298.49	-31.48	-55.75	-55.39	0.00	0.00	0.00
2,400.00	2.76	240.54	2,398.37	-33.85	-59.94	-59.55	0.00	0.00	0.00
2,500.00	2.76	240.54	2,498.25	-36.21	-64.12	-63.71	0.00	0.00	0.00
2,600.00	2.76	240.54	2,598.14	-38.58	-68.31	-67.87	0.00	0.00	0.00
2,700.00	2.76	240.54	2,698.02	-40.94	-72.50	-72.03	0.00	0.00	0.00
2,800.00	2.76	240.54	2,797.91	-43.31	-76.69	-76.19	0.00	0.00	0.00
2,900.00	2.76	240.54	2,897.79	-45.67	-80.88	-80.35	0.00	0.00	0.00
3,000.00	2.76	240.54	2,997.68	-48.04	-85.06	-84.51	0.00	0.00	0.00
3,100.00	2.76	240.54	3,097.56	-50.40	-89.25	-88.67	0.00	0.00	0.00
3,200.00	2.76	240.54	3,197.44	-52.77	-93.44	-92.83	0.00	0.00	0.00
3,300.00	2.76	240.54	3,297.33	-55.13	-97.63	-96.99	0.00	0.00	0.00
3,400.00	2.76	240.54	3,397.21	-57.50	-101.82	-101.15	0.00	0.00	0.00
3,500.00	2.76	240.54	3,497.10	-59.87	-106.00	-105.32	0.00	0.00	0.00
3,600.00	2.76	240.54	3,596.98	-62.23	-110.19	-109.48	0.00	0.00	0.00
3,700.00	2.76	240.54	3,696.87	-64.60	-114.38	-113.64	0.00	0.00	0.00
3,800.00	2.76	240.54	3,796.75	-66.96	-118.57	-117.80	0.00	0.00	0.00
3,900.00	2.76	240.54	3,896.63	-69.33	-122.76	-121.96	0.00	0.00	0.00
4,000.00	2.76	240.54	3,996.52	-71.69	-126.94	-126.12	0.00	0.00	0.00
4,100.00	2.76	240.54	4,096.40	-74.06	-131.13	-130.28	0.00	0.00	0.00
Terry/Sussex									
4,115.62	2.76	240.54	4,112.00	-74.43	-131.79	-130.93	0.00	0.00	0.00
4,200.00	2.76	240.54	4,196.29	-76.42	-135.32	-134.44	0.00	0.00	0.00
4,300.00	2.76	240.54	4,296.17	-78.79	-139.51	-138.60	0.00	0.00	0.00
4,400.00	2.76	240.54	4,396.06	-81.15	-143.70	-142.76	0.00	0.00	0.00
4,500.00	2.76	240.54	4,495.94	-83.52	-147.88	-146.92	0.00	0.00	0.00
4,600.00	2.76	240.54	4,595.82	-85.88	-152.07	-151.09	0.00	0.00	0.00
Shannon									

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Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4709.00usft
Project:	Weld Co., CO	MD Reference:	WELL @ 4709.00usft
Site:	Sec.17-T6N-R61W	North Reference:	True
Well:	Greasewood #7-17H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,666.25	2.76	240.54	4,662.00	-87.45	-154.85	-153.84	0.00	0.00	0.00
4,700.00	2.76	240.54	4,695.71	-88.25	-156.26	-155.25	0.00	0.00	0.00
4,800.00	2.76	240.54	4,795.59	-90.61	-160.45	-159.41	0.00	0.00	0.00
4,900.00	2.76	240.54	4,895.48	-92.98	-164.64	-163.57	0.00	0.00	0.00
5,000.00	2.76	240.54	4,995.36	-95.34	-168.83	-167.73	0.00	0.00	0.00
5,100.00	2.76	240.54	5,095.25	-97.71	-173.01	-171.89	0.00	0.00	0.00
Start Drop -2.00°									
5,146.55	2.76	240.54	5,141.74	-98.81	-174.96	-173.83	0.00	0.00	0.00
5,200.00	1.69	240.54	5,195.15	-99.83	-176.77	-175.62	2.00	-2.00	0.00
Start 500.00' hold at 5284.40 MD									
5,284.40	0.00	0.00	5,279.54	-100.44	-177.85	-176.69	2.00	-2.00	0.00
5,300.00	0.00	0.00	5,295.14	-100.44	-177.85	-176.69	0.00	0.00	0.00
5,400.00	0.00	0.00	5,395.14	-100.44	-177.85	-176.69	0.00	0.00	0.00
5,500.00	0.00	0.00	5,495.14	-100.44	-177.85	-176.69	0.00	0.00	0.00
5,600.00	0.00	0.00	5,595.14	-100.44	-177.85	-176.69	0.00	0.00	0.00
5,700.00	0.00	0.00	5,695.14	-100.44	-177.85	-176.69	0.00	0.00	0.00
KOP / Start Build 12.00°									
5,784.40	0.00	0.00	5,779.54	-100.44	-177.85	-176.69	0.00	0.00	0.00
5,800.00	1.87	89.43	5,795.14	-100.44	-177.60	-176.44	12.00	12.00	0.00
5,825.00	4.87	89.43	5,820.09	-100.42	-176.12	-174.97	12.00	12.00	0.00
5,850.00	7.87	89.43	5,844.93	-100.39	-173.35	-172.20	12.00	12.00	0.00
5,875.00	10.87	89.43	5,869.60	-100.35	-169.28	-168.13	12.00	12.00	0.00
5,900.00	13.87	89.43	5,894.01	-100.30	-163.92	-162.77	12.00	12.00	0.00
5,925.00	16.87	89.43	5,918.11	-100.23	-157.30	-156.15	12.00	12.00	0.00
5,950.00	19.87	89.43	5,941.84	-100.16	-149.42	-148.27	12.00	12.00	0.00
5,975.00	22.87	89.43	5,965.12	-100.06	-140.31	-139.16	12.00	12.00	0.00
6,000.00	25.87	89.43	5,987.89	-99.96	-130.00	-128.85	12.00	12.00	0.00
6,025.00	28.87	89.43	6,010.08	-99.85	-118.50	-117.36	12.00	12.00	0.00
6,050.00	31.87	89.43	6,031.65	-99.72	-105.86	-104.72	12.00	12.00	0.00
Sharon Springs									
6,073.14	34.65	89.43	6,051.00	-99.59	-93.17	-92.03	12.00	12.00	0.00
6,075.00	34.87	89.43	6,052.53	-99.58	-92.11	-90.98	12.00	12.00	0.00
6,100.00	37.87	89.43	6,072.65	-99.43	-77.29	-76.15	12.00	12.00	0.00
6,125.00	40.87	89.43	6,091.98	-99.28	-61.44	-60.30	12.00	12.00	0.00
6,150.00	43.87	89.43	6,110.44	-99.11	-44.59	-43.46	12.00	12.00	0.00
6,175.00	46.87	89.43	6,128.00	-98.93	-26.80	-25.67	12.00	12.00	0.00
Niobrara									
6,186.85	48.29	89.43	6,136.00	-98.84	-18.05	-16.92	12.00	12.00	0.00
6,200.00	49.87	89.43	6,144.61	-98.74	-8.12	-6.99	12.00	12.00	0.00
6,225.00	52.87	89.43	6,160.21	-98.55	11.41	12.53	12.00	12.00	0.00
6,250.00	55.87	89.43	6,174.78	-98.34	31.73	32.85	12.00	12.00	0.00
6,275.00	58.87	89.43	6,188.25	-98.13	52.78	53.89	12.00	12.00	0.00
6,300.00	61.87	89.43	6,200.61	-97.92	74.51	75.62	12.00	12.00	0.00
6,325.00	64.87	89.43	6,211.81	-97.69	96.85	97.96	12.00	12.00	0.00
6,350.00	67.87	89.43	6,221.83	-97.46	119.75	120.85	12.00	12.00	0.00
6,375.00	70.87	89.43	6,230.64	-97.23	143.15	144.24	12.00	12.00	0.00
6,400.00	73.87	89.43	6,238.21	-96.99	166.97	168.06	12.00	12.00	0.00
6,425.00	76.87	89.43	6,244.52	-96.75	191.15	192.24	12.00	12.00	0.00
Top B2 Tgt									
6,436.51	78.25	89.43	6,247.00	-96.64	202.39	203.48	12.00	12.00	0.00
6,450.00	79.87	89.43	6,249.56	-96.50	215.64	216.72	12.00	12.00	0.00
6,475.00	82.87	89.43	6,253.31	-96.26	240.35	241.43	12.00	12.00	0.00
6,500.00	85.87	89.43	6,255.76	-96.01	265.23	266.30	12.00	12.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Greasewood #7-17H
Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4709.00usft
Project:	Weld Co., CO	MD Reference:	WELL @ 4709.00usft
Site:	Sec.17-T6N-R61W	North Reference:	True
Well:	Greasewood #7-17H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,525.00	88.87	89.43	6,256.91	-95.76	290.20	291.27	12.00	12.00	0.00	
EOC / Start 4313.35' hold at 6534.40 MD - 7"										
6,534.40	90.00	89.43	6,257.00	-95.66	299.59	300.66	12.00	12.00	0.00	
6,600.00	90.00	89.43	6,257.00	-95.01	365.19	366.25	0.00	0.00	0.00	
6,700.00	90.00	89.43	6,257.00	-94.01	465.19	466.23	0.00	0.00	0.00	
6,800.00	90.00	89.43	6,257.00	-93.01	565.18	566.20	0.00	0.00	0.00	
6,900.00	90.00	89.43	6,257.00	-92.01	665.18	666.18	0.00	0.00	0.00	
7,000.00	90.00	89.43	6,257.00	-91.01	765.17	766.16	0.00	0.00	0.00	
7,100.00	90.00	89.43	6,257.00	-90.01	865.17	866.13	0.00	0.00	0.00	
7,200.00	90.00	89.43	6,257.00	-89.01	965.16	966.11	0.00	0.00	0.00	
7,300.00	90.00	89.43	6,257.00	-88.01	1,065.16	1,066.09	0.00	0.00	0.00	
7,400.00	90.00	89.43	6,257.00	-87.01	1,165.15	1,166.07	0.00	0.00	0.00	
7,500.00	90.00	89.43	6,257.00	-86.01	1,265.15	1,266.04	0.00	0.00	0.00	
7,600.00	90.00	89.43	6,257.00	-85.01	1,365.14	1,366.02	0.00	0.00	0.00	
7,700.00	90.00	89.43	6,257.00	-84.01	1,465.14	1,466.00	0.00	0.00	0.00	
7,800.00	90.00	89.43	6,257.00	-83.00	1,565.13	1,565.97	0.00	0.00	0.00	
7,900.00	90.00	89.43	6,257.00	-82.00	1,665.13	1,665.95	0.00	0.00	0.00	
8,000.00	90.00	89.43	6,257.00	-81.00	1,765.12	1,765.93	0.00	0.00	0.00	
8,100.00	90.00	89.43	6,257.00	-80.00	1,865.12	1,865.91	0.00	0.00	0.00	
8,200.00	90.00	89.43	6,257.00	-79.00	1,965.11	1,965.88	0.00	0.00	0.00	
8,300.00	90.00	89.43	6,257.00	-78.00	2,065.11	2,065.86	0.00	0.00	0.00	
8,400.00	90.00	89.43	6,257.00	-77.00	2,165.10	2,165.84	0.00	0.00	0.00	
8,500.00	90.00	89.43	6,257.00	-76.00	2,265.10	2,265.81	0.00	0.00	0.00	
8,600.00	90.00	89.43	6,257.00	-75.00	2,365.09	2,365.79	0.00	0.00	0.00	
8,700.00	90.00	89.43	6,257.00	-74.00	2,465.09	2,465.77	0.00	0.00	0.00	
8,800.00	90.00	89.43	6,257.00	-73.00	2,565.08	2,565.75	0.00	0.00	0.00	
8,900.00	90.00	89.43	6,257.00	-72.00	2,665.08	2,665.72	0.00	0.00	0.00	
9,000.00	90.00	89.43	6,257.00	-71.00	2,765.07	2,765.70	0.00	0.00	0.00	
9,100.00	90.00	89.43	6,257.00	-70.00	2,865.07	2,865.68	0.00	0.00	0.00	
9,200.00	90.00	89.43	6,257.00	-69.00	2,965.06	2,965.65	0.00	0.00	0.00	
9,300.00	90.00	89.43	6,257.00	-68.00	3,065.06	3,065.63	0.00	0.00	0.00	
9,400.00	90.00	89.43	6,257.00	-67.00	3,165.05	3,165.61	0.00	0.00	0.00	
9,500.00	90.00	89.43	6,257.00	-66.00	3,265.05	3,265.59	0.00	0.00	0.00	
9,600.00	90.00	89.43	6,257.00	-65.00	3,365.04	3,365.56	0.00	0.00	0.00	
9,700.00	90.00	89.43	6,257.00	-64.00	3,465.04	3,465.54	0.00	0.00	0.00	
9,800.00	90.00	89.43	6,257.00	-63.00	3,565.03	3,565.52	0.00	0.00	0.00	
9,900.00	90.00	89.43	6,257.00	-62.00	3,665.03	3,665.49	0.00	0.00	0.00	
10,000.00	90.00	89.43	6,257.00	-61.00	3,765.02	3,765.47	0.00	0.00	0.00	
10,100.00	90.00	89.43	6,257.00	-60.00	3,865.02	3,865.45	0.00	0.00	0.00	
10,200.00	90.00	89.43	6,257.00	-59.00	3,965.01	3,965.43	0.00	0.00	0.00	
10,300.00	90.00	89.43	6,257.00	-58.00	4,065.01	4,065.40	0.00	0.00	0.00	
10,400.00	90.00	89.43	6,257.00	-57.00	4,165.00	4,165.38	0.00	0.00	0.00	
10,500.00	90.00	89.43	6,257.00	-56.00	4,265.00	4,265.36	0.00	0.00	0.00	
10,600.00	90.00	89.43	6,257.00	-55.00	4,364.99	4,365.33	0.00	0.00	0.00	
10,700.00	90.00	89.43	6,257.00	-54.00	4,464.99	4,465.31	0.00	0.00	0.00	
10,800.00	90.00	89.43	6,257.00	-53.00	4,564.98	4,565.29	0.00	0.00	0.00	
TD at 10847.75										
10,847.75	90.00	89.43	6,257.00	-52.52	4,612.73	4,613.03	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Greasewood #7-17H
Company:	Bill Barrett Corp.	TVD Reference:	WELL @ 4709.00usft
Project:	Weld Co., CO	MD Reference:	WELL @ 4709.00usft
Site:	Sec.17-T6N-R61W	North Reference:	True
Well:	Greasewood #7-17H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Greasewood 7-17H PBH	0.00	0.00	6,257.00	-52.52	4,612.73	1,425,235.390	3,354,466.950	40° 29' 37.247 N	104° 13' 31.694 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
4,115.62	4,112.00	Terry/Sussex		0.00		
4,666.25	4,662.00	Shannon		0.00		
6,073.14	6,051.00	Sharon Springs		0.00		
6,186.85	6,136.00	Niobrara		0.00		
6,436.51	6,247.00	Top B2 Tgt		0.00		

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
(usft)	(usft)	(usft)	(usft)		
900.00	900.00	0.00	0.00	Start Build 2.00°	
1,037.84	1,037.79	-1.63	-2.89	Start 4108.71' hold at 1037.84 MD	
5,146.55	5,141.74	-98.81	-174.96	Start Drop -2.00°	
5,284.40	5,279.54	-100.44	-177.85	Start 500.00' hold at 5284.40 MD	
5,784.40	5,779.54	-100.44	-177.85	KOP / Start Build 12.00°	
6,534.40	6,257.00	-95.66	299.59	EOC / Start 4313.35' hold at 6534.40 MD	
10,847.75	6,257.00	-52.52	4,612.73	TD at 10847.75	