



Weatherford®

Drilling Services

Proposal



Bill Barrett Corporation

Bill Barrett Corporation
MCAFEE 16H-12-38-17
Montezuma County, Colorado
Well File: PLAN 1
March 18, 2009

Weatherford International Ltd.

2000 Oil Drive
Casper, Wyoming 82604
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Project: MONTEZUMA COUNTY, COLORADO
Site: MCAFEE 16H-12-38-17
Well: MCAFEE 16H-12-38-17
Wellbore: MCAFEE 16H-12-38-17
Design: Design #1
Lat: 37° 33' 35.280 N
Long: 108° 40' 0.444 W
GL: 7121.00
KB: WELL @ 7137.00ft (Original Well Elev)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5202.58	0.00	0.00	5202.58	0.00	0.00	0.00	0.00	0.00	Start Build 12.00
5959.35	90.81	350.00	5680.00	476.87	-84.09	12.00	350.00	479.20	Start DLS 3.00 TFO 89.94
6284.59	90.81	359.76	5675.38	800.39	-113.08	3.00	89.94	803.44	Start 3423.66 hold at 6284.59 MD
9708.25	90.81	359.76	5626.98	4223.68	-127.52	0.00	0.00	4225.61	TD at 9708.25

WELL DETAILS: MCAFEE 16H-12-38-17

Ground Level: 7121.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	340757.72	1082211.22	37° 33' 35.280 N	108° 40' 0.444 W	

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL MCAFEE 16H-12-38-17	5626.98	4223.68	-127.52	37° 34' 17.040 N	108° 40' 2.028 W	Point



Azimuths to True North
Magnetic North: 10.64°

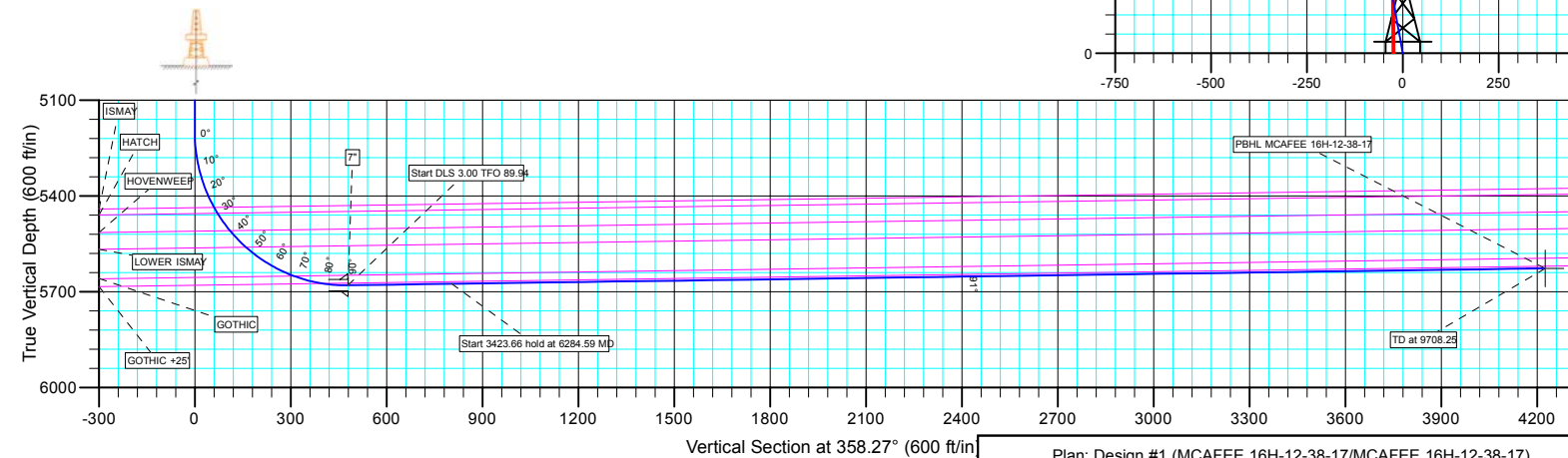
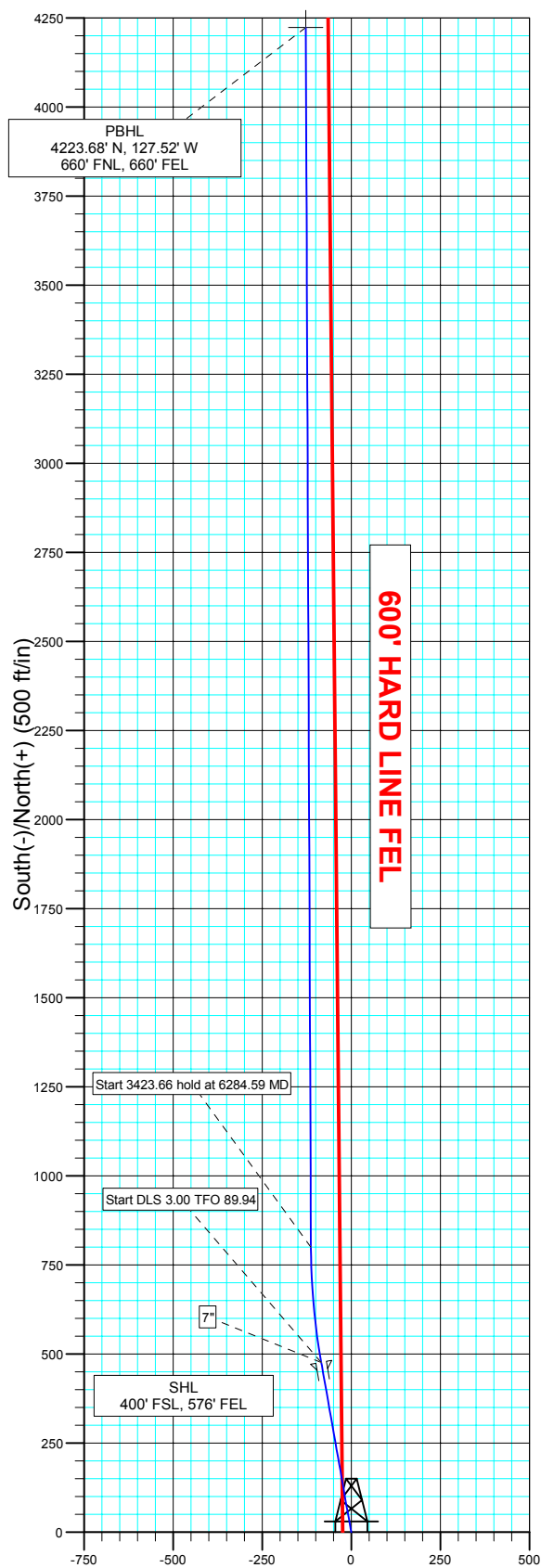
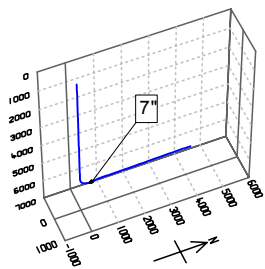
Magnetic Field
Strength: 51258.1snT
Dip Angle: 64.09°
Date: 3/18/2009
Model: BGGM2008

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1178.50	1178.50	ENTRADA
1919.00	1919.00	CHINLE
4085.00	4085.00	HERMOSA
5436.15	5446.64	ISMAY
5454.50	5467.95	HATCH
5508.95	5535.21	HOVENWEEP
5560.75	5607.60	LOWER ISMAY
5650.65	5784.15	GOTHIC
5674.37	5878.89	GOTHIC +25'



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Plan: Design #1 (MCAFEE 16H-12-38-17/MCAFEE 16H-12-38-17)

Created By: TRACY WILLIAMS Date: 13:41, March 18 2009



Bill Barrett Corporation

BILL BARRETT CORP

MONTEZUMA COUNTY, COLORADO

MCAFEE 16H-12-38-17

MCAFEE 16H-12-38-17

MCAFEE 16H-12-38-17

Plan: Design #1

Standard Planning Report

18 March, 2009



Weatherford®

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well MCAFEE 16H-12-38-17
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 7137.00ft (Original Well Elev)
Project:	MONTEZUMA COUNTY, COLORADO	MD Reference:	WELL @ 7137.00ft (Original Well Elev)
Site:	MCAFEE 16H-12-38-17	North Reference:	True
Well:	MCAFEE 16H-12-38-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	MCAFEE 16H-12-38-17		
Design:	Design #1		

Project	MONTEZUMA COUNTY, COLORADO		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado South 503		

Site	MCAFEE 16H-12-38-17		
Site Position:		Northing:	340,757.72 ft
From:	Lat/Long	Easting:	1,082,211.22 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	37° 33' 35.280 N
		Longitude:	108° 40' 0.444 W
		Grid Convergence:	-1.94 °

Well	MCAFEE 16H-12-38-17		
Well Position	+N/-S	0.00 ft	Northing: 340,757.72 ft
	+E/-W	0.00 ft	Easting: 1,082,211.22 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	37° 33' 35.280 N
		Longitude:	108° 40' 0.444 W
		Ground Level:	7,121.00 ft

Wellbore	MCAFEE 16H-12-38-17				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2008	3/18/2009	10.64	64.10	51,258

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	5,626.98	0.00	0.00	358.27

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,202.58	0.00	0.00	5,202.58	0.00	0.00	0.00	0.00	0.00	0.00	
5,959.35	90.81	350.00	5,680.00	476.87	-84.09	12.00	12.00	0.00	350.00	
6,284.59	90.81	359.76	5,675.38	800.39	-113.08	3.00	0.00	3.00	89.94	PBHL MCAFEE 16I
9,708.25	90.81	359.76	5,626.98	4,223.68	-127.52	0.00	0.00	0.00	0.00	PBHL MCAFEE 16I

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well MCAFEE 16H-12-38-17
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 7137.00ft (Original Well Elev)
Project:	MONTEZUMA COUNTY, COLORADO	MD Reference:	WELL @ 7137.00ft (Original Well Elev)
Site:	MCAFEE 16H-12-38-17	North Reference:	True
Well:	MCAFEE 16H-12-38-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	MCAFEE 16H-12-38-17		
Design:	Design #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	0.00	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
800.00	0.00	0.00	800.00	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
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
ENTRADA									
1,178.50	0.00	0.00	1,178.50	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
CHINLE									
1,919.00	0.00	0.00	1,919.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
HERMOSA									
4,085.00	0.00	0.00	4,085.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well MCAFEE 16H-12-38-17
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 7137.00ft (Original Well Elev)
Project:	MONTEZUMA COUNTY, COLORADO	MD Reference:	WELL @ 7137.00ft (Original Well Elev)
Site:	MCAFEE 16H-12-38-17	North Reference:	True
Well:	MCAFEE 16H-12-38-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	MCAFEE 16H-12-38-17		
Design:	Design #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)
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 12.00									
5,202.58	0.00	0.00	5,202.58	0.00	0.00	0.00	0.00	0.00	0.00
5,225.00	2.69	350.00	5,224.99	0.52	-0.09	0.52	12.00	12.00	0.00
5,250.00	5.69	350.00	5,249.92	2.32	-0.41	2.33	12.00	12.00	0.00
5,275.00	8.69	350.00	5,274.72	5.40	-0.95	5.42	12.00	12.00	0.00
5,300.00	11.69	350.00	5,299.33	9.75	-1.72	9.80	12.00	12.00	0.00
5,325.00	14.69	350.00	5,323.66	15.37	-2.71	15.45	12.00	12.00	0.00
5,350.00	17.69	350.00	5,347.67	22.24	-3.92	22.34	12.00	12.00	0.00
5,375.00	20.69	350.00	5,371.28	30.33	-5.35	30.47	12.00	12.00	0.00
5,400.00	23.69	350.00	5,394.42	39.62	-6.99	39.82	12.00	12.00	0.00
5,425.00	26.69	350.00	5,417.04	50.10	-8.83	50.35	12.00	12.00	0.00
ISMAY									
5,446.64	29.29	350.00	5,436.15	60.10	-10.60	60.40	12.00	12.00	0.00
5,450.00	29.69	350.00	5,439.07	61.73	-10.88	62.03	12.00	12.00	0.00
HATCH									
5,467.95	31.84	350.00	5,454.50	70.77	-12.48	71.12	12.00	12.00	0.00
5,475.00	32.69	350.00	5,460.46	74.48	-13.13	74.84	12.00	12.00	0.00
5,500.00	35.69	350.00	5,481.14	88.31	-15.57	88.74	12.00	12.00	0.00
5,525.00	38.69	350.00	5,501.05	103.19	-18.20	103.70	12.00	12.00	0.00
HOVENWEEP									
5,535.21	39.92	350.00	5,508.95	109.56	-19.32	110.10	12.00	12.00	0.00
5,550.00	41.69	350.00	5,520.14	119.08	-21.00	119.66	12.00	12.00	0.00
5,575.00	44.69	350.00	5,538.37	135.93	-23.97	136.59	12.00	12.00	0.00
5,600.00	47.69	350.00	5,555.67	153.69	-27.10	154.44	12.00	12.00	0.00
LOWER ISMAY									
5,607.60	48.60	350.00	5,560.75	159.27	-28.08	160.05	12.00	12.00	0.00
5,625.00	50.69	350.00	5,572.01	172.33	-30.39	173.17	12.00	12.00	0.00
5,650.00	53.69	350.00	5,587.34	191.78	-33.82	192.71	12.00	12.00	0.00
5,675.00	56.69	350.00	5,601.60	211.99	-37.38	213.02	12.00	12.00	0.00
5,700.00	59.69	350.00	5,614.78	232.91	-41.07	234.04	12.00	12.00	0.00
5,725.00	62.69	350.00	5,626.83	254.48	-44.87	255.72	12.00	12.00	0.00
5,750.00	65.69	350.00	5,637.71	276.64	-48.78	277.99	12.00	12.00	0.00
5,775.00	68.69	350.00	5,647.40	299.33	-52.78	300.79	12.00	12.00	0.00
GOTHIC									
5,784.15	69.79	350.00	5,650.65	307.76	-54.27	309.26	12.00	12.00	0.00
5,800.00	71.69	350.00	5,655.87	322.49	-56.86	324.06	12.00	12.00	0.00
5,825.00	74.69	350.00	5,663.10	346.06	-61.02	347.74	12.00	12.00	0.00
5,850.00	77.69	350.00	5,669.07	369.96	-65.23	371.76	12.00	12.00	0.00
5,875.00	80.69	350.00	5,673.76	394.14	-69.50	396.06	12.00	12.00	0.00
GOTHIC +25'									
5,878.89	81.16	350.00	5,674.37	397.93	-70.17	399.86	12.00	12.00	0.00
5,900.00	83.69	350.00	5,677.15	418.53	-73.80	420.57	12.00	12.00	0.00
5,925.00	86.69	350.00	5,679.25	443.06	-78.12	445.22	12.00	12.00	0.00
5,950.00	89.69	350.00	5,680.04	467.67	-82.46	469.95	12.00	12.00	0.00
Start DLS 3.00 TFO 89.94 - 7"									
5,959.35	90.81	350.00	5,680.00	476.88	-84.09	479.20	12.00	12.00	0.00
6,000.00	90.81	351.22	5,679.42	516.98	-90.72	519.48	3.00	0.00	3.00
6,100.00	90.81	354.22	5,678.00	616.15	-103.39	618.99	3.00	0.00	3.00

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Project:	MONTEZUMA COUNTY, COLORADO	MD Reference:	WELL @ 7137.00ft (Original Well Elev)
Site:	MCAFEE 16H-12-38-17	North Reference:	True
Well:	MCAFEE 16H-12-38-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	MCAFEE 16H-12-38-17		
Design:	Design #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)
6,200.00	90.81	357.22	5,676.58	715.85	-110.85	718.87	3.00	0.00	3.00
Start 3423.66 hold at 6284.59 MD									
6,284.59	90.81	359.76	5,675.38	800.39	-113.08	803.44	3.00	0.00	3.00
6,300.00	90.81	359.76	5,675.17	815.80	-113.14	818.85	0.00	0.00	0.00
6,400.00	90.81	359.76	5,673.75	915.79	-113.57	918.80	0.00	0.00	0.00
6,500.00	90.81	359.76	5,672.34	1,015.78	-113.99	1,018.76	0.00	0.00	0.00
6,600.00	90.81	359.76	5,670.92	1,115.77	-114.41	1,118.72	0.00	0.00	0.00
6,700.00	90.81	359.76	5,669.51	1,215.76	-114.83	1,218.67	0.00	0.00	0.00
6,800.00	90.81	359.76	5,668.10	1,315.75	-115.25	1,318.63	0.00	0.00	0.00
6,900.00	90.81	359.76	5,666.68	1,415.74	-115.67	1,418.58	0.00	0.00	0.00
7,000.00	90.81	359.76	5,665.27	1,515.73	-116.10	1,518.54	0.00	0.00	0.00
7,100.00	90.81	359.76	5,663.86	1,615.72	-116.52	1,618.50	0.00	0.00	0.00
7,200.00	90.81	359.76	5,662.44	1,715.71	-116.94	1,718.45	0.00	0.00	0.00
7,300.00	90.81	359.76	5,661.03	1,815.69	-117.36	1,818.41	0.00	0.00	0.00
7,400.00	90.81	359.76	5,659.62	1,915.68	-117.78	1,918.37	0.00	0.00	0.00
7,500.00	90.81	359.76	5,658.20	2,015.67	-118.21	2,018.32	0.00	0.00	0.00
7,600.00	90.81	359.76	5,656.79	2,115.66	-118.63	2,118.28	0.00	0.00	0.00
7,700.00	90.81	359.76	5,655.37	2,215.65	-119.05	2,218.23	0.00	0.00	0.00
7,800.00	90.81	359.76	5,653.96	2,315.64	-119.47	2,318.19	0.00	0.00	0.00
7,900.00	90.81	359.76	5,652.55	2,415.63	-119.89	2,418.15	0.00	0.00	0.00
8,000.00	90.81	359.76	5,651.13	2,515.62	-120.32	2,518.10	0.00	0.00	0.00
8,100.00	90.81	359.76	5,649.72	2,615.61	-120.74	2,618.06	0.00	0.00	0.00
8,200.00	90.81	359.76	5,648.31	2,715.60	-121.16	2,718.02	0.00	0.00	0.00
8,300.00	90.81	359.76	5,646.89	2,815.59	-121.58	2,817.97	0.00	0.00	0.00
8,400.00	90.81	359.76	5,645.48	2,915.58	-122.00	2,917.93	0.00	0.00	0.00
8,500.00	90.81	359.76	5,644.06	3,015.56	-122.43	3,017.89	0.00	0.00	0.00
8,600.00	90.81	359.76	5,642.65	3,115.55	-122.85	3,117.84	0.00	0.00	0.00
8,700.00	90.81	359.76	5,641.24	3,215.54	-123.27	3,217.80	0.00	0.00	0.00
8,800.00	90.81	359.76	5,639.82	3,315.53	-123.69	3,317.75	0.00	0.00	0.00
8,900.00	90.81	359.76	5,638.41	3,415.52	-124.11	3,417.71	0.00	0.00	0.00
9,000.00	90.81	359.76	5,637.00	3,515.51	-124.54	3,517.67	0.00	0.00	0.00
9,100.00	90.81	359.76	5,635.58	3,615.50	-124.96	3,617.62	0.00	0.00	0.00
9,200.00	90.81	359.76	5,634.17	3,715.49	-125.38	3,717.58	0.00	0.00	0.00
9,300.00	90.81	359.76	5,632.76	3,815.48	-125.80	3,817.54	0.00	0.00	0.00
9,400.00	90.81	359.76	5,631.34	3,915.47	-126.22	3,917.49	0.00	0.00	0.00
9,500.00	90.81	359.76	5,629.93	4,015.46	-126.65	4,017.45	0.00	0.00	0.00
9,600.00	90.81	359.76	5,628.51	4,115.44	-127.07	4,117.40	0.00	0.00	0.00
TD at 9708.25 - PBHL MCAFEE 16H-12-38-17									
9,708.25	90.81	359.76	5,626.98	4,223.68	-127.52	4,225.61	0.00	0.00	0.00

Wellbore Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL MCAFEE 16H- - plan hits target center - Point	0.00	0.00	5,626.98	4,223.68	-127.52	344,983.29	1,082,226.93	37° 34' 17.040 N	108° 40' 2.028 W

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well MCAFEE 16H-12-38-17
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 7137.00ft (Original Well Elev)
Project:	MONTEZUMA COUNTY, COLORADO	MD Reference:	WELL @ 7137.00ft (Original Well Elev)
Site:	MCAFEE 16H-12-38-17	North Reference:	True
Well:	MCAFEE 16H-12-38-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	MCAFEE 16H-12-38-17		
Design:	Design #1		

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
5,959.35	5,680.00	7"	7	7-1/2

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,178.50	1,178.50	ENTRADA		-0.81	359.76	
1,919.00	1,919.00	CHINLE		-0.81	359.76	
4,085.00	4,085.00	HERMOSA		-0.81	359.76	
5,446.64	5,437.00	ISMAY		-0.81	359.76	
5,467.95	5,455.50	HATCH		-0.81	359.76	
5,535.21	5,510.50	HOVENWEEP		-0.81	359.76	
5,607.60	5,563.00	LOWER ISMAY		-0.81	359.76	
5,784.15	5,655.00	GOTHIC		-0.81	359.76	
5,878.89	5,680.00	GOTHIC +25'		-0.81	359.76	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
5,202.58	5,202.58	0.00	0.00	Start Build 12.00	
5,959.35	5,680.00	476.87	-84.09	Start DLS 3.00 TFO 89.94	
6,284.59	5,675.38	800.39	-113.08	Start 3423.66 hold at 6284.59 MD	
9,708.25	5,626.98	4,223.68	-127.52	TD at 9708.25	