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# **BILL BARRETT CORPORATION E-BILL**

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**FEDERAL 43B-33-691  
MAMM CREEK  
Garfield County , Colorado**

**Cement Surface Casing**  
**14-Dec-2011**

**Job Site Documents**

## The Road to Excellence Starts with Safety

<b>Sold To #:</b> 343492		<b>Ship To #:</b> 2896407		<b>Quote #:</b>		<b>Sales Order #:</b> 9132783	
<b>Customer:</b> BILL BARRETT CORPORATION E-BILL				<b>Customer Rep:</b> Lauer, Casey			
<b>Well Name:</b> FEDERAL			<b>Well #:</b> 43B-33-691			<b>API/UWI #:</b> 05-045-20863	
<b>Field:</b> MAMM CREEK		<b>City (SAP):</b> SILT		<b>County/Parish:</b> Garfield			<b>State:</b> Colorado
<b>Lat:</b> N 39.479 deg. OR N 39 deg. 28 min. 45.206 secs.				<b>Long:</b> W 107.553 deg. OR W -108 deg. 26 min. 47.71 secs.			
<b>Contractor:</b> PROPETRO			<b>Rig/Platform Name/Num:</b> PROPETRO				
<b>Job Purpose:</b> Cement Surface Casing							
<b>Well Type:</b> Development Well			<b>Job Type:</b> Cement Surface Casing				
<b>Sales Person:</b> FLING, MATTHEW			<b>Srvc Supervisor:</b> SLAUGHTER, JESSE			<b>MBU ID Emp #:</b> 454315	

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BRENNECKE, ANDREW Bailey	2	486345	REEVES, BRANDON W	2	287883	SLAUGHTER, JESSE Dean	2	454315
SPARKS, CLIFFORD Paul	2	502476						

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10551730C	120 mile	10973571	120 mile	11021972	120 mile	11027039	120 mile
11583931	120 mile						

### Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
12-14-2011	2	2						

<b>TOTAL</b>	Total is the sum of each column separately							
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### Job

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	14 - Dec - 2011	17:00	MST
Form Type	BHST		Job Started	14 - Dec - 2011	18:11	MST
Job depth MD	868.4 ft	Job Depth TVD	868.4 ft	Job Completed	14 - Dec - 2011	18:54
Water Depth		Wk Ht Above Floor	1. ft	Departed Loc		
Perforation Depth (MD)	From	To				

### Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
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### Sales/Rental/3<sup>rd</sup> Party (HES)

Description	Qty	Qty uom	Depth	Supplier
R/A DENSOMETER W/CHART RECORDER,/JOB,ZI	1	JOB		
ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI	1	JOB		
PORT. DATA ACQUIS. W/OPTICEM RT W/HES	1	EA		
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		

### Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9.625	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9.625	1	HES
Stage Tool										Centralizers			

### Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

### Fluid Data

<b>Stage/Plug #: 1</b>
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Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	WATER SPACER	FRESH WATER	20.00	bbl	8.34	.0	.0	4	
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)	125.0	sacks	12.3	2.38	13.77	6	13.77
	0.25 lbm	POLY-E-FLAKE (101216940)							
	13.77 Gal	FRESH WATER							
3	Tail Cement	SWIFTCES (TM) SYSTEM (452990)	125.0	sacks	14.2	1.43	6.85	6	6.85
	0.25 lbm	POLY-E-FLAKE (101216940)							
	6.85 Gal	FRESH WATER							
4	DISPLACEMENT	FRESH WATER	63.7	bbl	8.4			6	
Calculated Values		Pressures		Volumes					
Displacement	63.7	Shut In: Instant		Lost Returns	NO	Cement Slurry	84.8	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	20	Actual Displacement	63.7	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	169
Rates									
Circulating		Mixing	6	Displacement	6	Avg. Job			6
Cement Left In Pipe	Amount	0 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

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<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> FLING, MATTHEW		<b>Srv Supervisor:</b> SLAUGHTER, JESSE	<b>MBU ID Emp #:</b> 454315

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	12/14/2011 17:00							TD 890 FT, TP 868.41 FT, SHOE 44.68 FT, CSG 9 5/8 IN 36 LB/FT, HOLE 12 3/8 IN
Arrive At Loc	12/14/2011 17:10							CREW STAYED ON LOCATION FROM PREVIOUS JOB
Assessment Of Location Safety Meeting	12/14/2011 17:20							WITH ALL HES PERSONNEL
Other	12/14/2011 17:30							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	12/14/2011 17:40							WITH ALL HES PERSONNEL
Rig-Up Equipment	12/14/2011 17:50							
Pre-Job Safety Meeting	12/14/2011 18:00							WITH ALL PERSONNEL ON LOCATION
Start Job	12/14/2011 18:11							
Other	12/14/2011 18:11		2	2			.0	FILL LINES WITH FRESH WATER
Test Lines	12/14/2011 18:14							
Pump Spacer 1	12/14/2011 18:16		4	20			20.0	FRESH WATER
Pump Lead Cement	12/14/2011 18:23		6	53			110.0	125 SKS AT 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Pump Tail Cement	12/14/2011 18:31		6	31.8			116.0	125 SKS AT 14.2 PPG, 1.43 FT3/SK, 6.85 GAL/SK
Shutdown	12/14/2011 18:36							
Drop Top Plug	12/14/2011 18:37							PLUG LAUNCHED

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Displacement	12/14/2011 18:38		6	53.7			230.0	FRESH WATER
Slow Rate	12/14/2011 18:47		6	10			240.0	SLOW RATE 10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	12/14/2011 18:51		3		63.7		1072.0	PLUG BUMPED
Check Floats	12/14/2011 18:53							FLOATS HOLDING. HES RETURNED 1 BBL H2O TO PUMP
End Job	12/14/2011 18:54							PIPE WAS STATIC DURING JOB, GOOD CIRCULATION THROUGHOUT JOB, HES RETURNED 20 BBL CEMENT TO SURFACE
Pre-Rig Down Safety Meeting	12/14/2011 19:00							WITH ALL HES PERSONNEL
Rig-Down Equipment	12/14/2011 19:10							
Crew Leave Location	12/14/2011 19:20							HES CREW WILL STAY ON LOCATION FOR THE NEXT JOB
Comment	12/14/2011 19:21							THANK YOU FOR USING HALLIBURTON CEMENT DEPARTMENT. JESSE SLAUGHTER AND CREW.