

BILL BARRETT CORPORATION E-BILL  
DO NOT MAIL-1099 18TH ST,STE 2300W  
DENVER, Colorado

FEDERAL 32B-20-691

**Pro Petro**

## **Post Job Summary**

# **Cement Surface Casing**

Prepared for: JOSH H.  
Date Prepared: 6.3.2011  
Version: 1

Service Supervisor: ARNOLD, EDWARD

Submitted by:

**HALLIBURTON**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 343492	<b>Ship To #:</b> 2855775	<b>Quote #:</b>	<b>Sales Order #:</b> 8107305
<b>Customer:</b> BILL BARRETT CORPORATION E-BILL		<b>Customer Rep:</b> Henderson, Josh	
<b>Well Name:</b> FEDERAL		<b>Well #:</b> 32B-20-691	<b>API/UWI #:</b> 05-045-19678
<b>Field:</b> MAMM CREEK	<b>City (SAP):</b> UNKNOWN	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Lat:</b> N 39.513 deg. OR N 39 deg. 30 min. 47.945 secs.		<b>Long:</b> W 107.575 deg. OR W -108 deg. 25 min. 30.119 secs.	
<b>Contractor:</b> Pro Petro		<b>Rig/Platform Name/Num:</b> Pro Petro	
<b>Job Purpose:</b> Cement Surface Casing			
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> METLI, MARSHALL		<b>Srvc Supervisor:</b> ARNOLD, EDWARD	<b>MBU ID Emp #:</b> 439784

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ANDREWS, ANTHONY Michael	16	321604	ARNOLD, EDWARD John	16	439784	BRENNECKE, ANDREW Bailey	16	486345
CUNNINGHAM, TANNER Wade	16	445660						

**Equipment**

HES Unit #	Distance-1 way						
10551730C	120 mile	10592964	120 mile	10722398	120 mile	10744549	120 mile
10829465	120 mile	10973571	120 mile	11139330	120 mile		

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
6.3.2011	16	3						
<b>TOTAL</b>	<i>Total is the sum of each column separately</i>							

**Job**

**Job Times**

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone	
<b>Formation Depth (MD)</b>			<b>On Location</b>	03 - Jun - 2011	04:30	MST	
<b>Form Type</b>		<b>BHST</b>	<b>Job Started</b>	03 - Jun - 2011	08:00	MST	
<b>Job depth MD</b>	850. ft	<b>Job Depth TVD</b>	850. ft	<b>Job Started</b>	03 - Jun - 2011	09:09	MST
<b>Water Depth</b>		<b>Wk Ht Above Floor</b>	. ft	<b>Job Completed</b>	03 - Jun - 2011	10:22	MST
<b>Perforation Depth (MD)</b>	<b>From</b>	<b>To</b>	<b>Departed Loc</b>				

**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
Open Hole				12.325				.	850.		
Surface Pipe	Unknown		9.625	8.921	36.		J-55	.	831.3		

**Sales/Rental/3<sup>rd</sup> Party (HES)**

Description	Qty	Qty uom	Depth	Supplier
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**

Stage/Plug #: 1

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		10.00	bbl	.	.0	.0	5	
2	VersaCem Lead Cement	VERSACEM (TM) SYSTEM (452010)	200.0	sacks	12.3	2.38	13.75	5	13.75
	13.75 Gal	FRESH WATER							
3	SwiftCem Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	120.0	sacks	14.2	1.43	6.85	5	6.85
	6.85 Gal	FRESH WATER							
4	Displacement		60.00	bbl	.	.0	.0	4	
Calculated Values		Pressures			Volumes				
Displacement	60.7	Shut In: Instant		Lost Returns		Cement Slurry	115.2	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	25	Actual Displacement	60.7	Treatment	
Frac Gradient		15 Min		Spacers	10	Load and Breakdown		Total Job	185.9
Rates									
Circulating		Mixing	5	Displacement	4	Avg. Job			4.5
Cement Left In Pipe	Amount	44.4 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
<b>The Information Stated Herein Is Correct</b>				Customer Representative Signature					

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<b>Field:</b> MAMM CREEK	<b>City (SAP):</b> UNKNOWN	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Legal Description:</b>			
<b>Lat:</b> N 39.513 deg. OR N 39 deg. 30 min. 47.945 secs.		<b>Long:</b> W 107.575 deg. OR W -108 deg. 25 min. 30.119 secs.	
<b>Contractor:</b> Pro Petro		<b>Rig/Platform Name/Num:</b> Pro Petro	
<b>Job Purpose:</b> Cement Surface Casing			<b>Ticket Amount:</b>
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> METLI, MARSHALL		<b>Srvc Supervisor:</b> ARNOLD, EDWARD	<b>MBU ID Emp #:</b> 439784

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	06/03/2011 04:30							
Pre-Convoy Safety Meeting	06/03/2011 05:45							Including entire cement crew
Arrive At Loc	06/03/2011 08:00							Rig running casing.
Assessment Of Location Safety Meeting	06/03/2011 08:05							Water test: PH 7; Hardness 120; So4 <200; Fe 0; KCl 250; Chlorides 0; Temp 60 deg; TDS 600.
Pre-Rig Up Safety Meeting	06/03/2011 08:10							Including entire cement crew
Rig-Up Equipment	06/03/2011 08:15							1 Elite # 2; 1 660 bulk truck; 1 hard line from pump to well head; 1 line to upright. 9.625" screw in head #B0679 Pump Truck And Top Out Truck already on location.
Rig-Up Completed	06/03/2011 08:45							
Pre-Job Safety Meeting	06/03/2011 08:50							Including everyone on location
Start Job	06/03/2011 09:09							TD 850; TP 831.3; SJ 44.4; OH 12.375"; CASING 9.625" 36# J-55.
Other	06/03/2011 09:15		2	2			12.0	Fill lines with fresh water.
Pressure Test	06/03/2011 09:21						2330.0	PSI test good, no leaks.
Pump Spacer 1	06/03/2011 09:25		5	10			129.0	10 BBL fresh water.
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

Sold To # : 343492

Ship To # :2855775

Quote # :

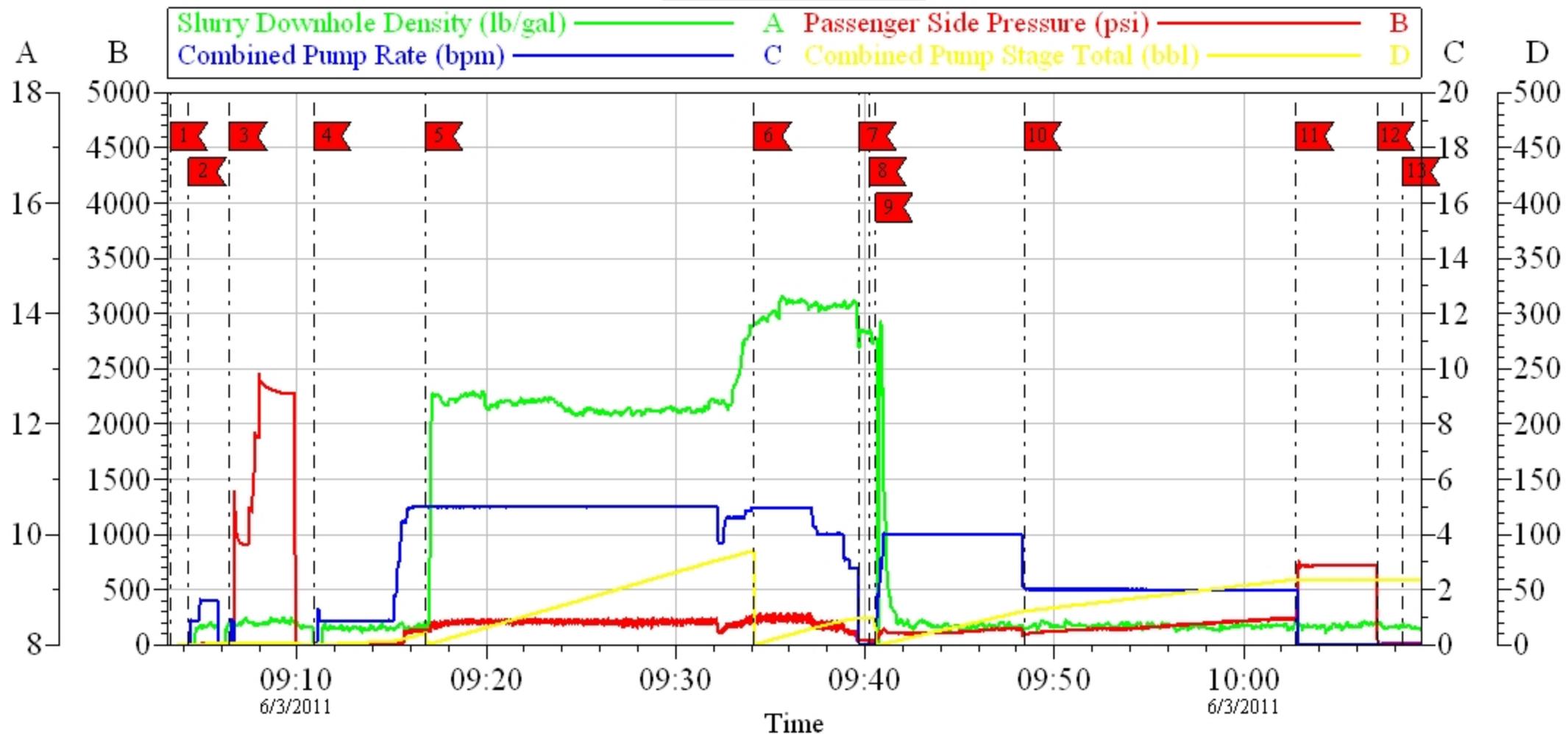
Sales Order # : 8107305

		#	Stage	Total	Tubing	Casing	
Pump Lead Cement	06/03/2011 09:30		5	84.7		230.0	200 SKs Lead cement, 12.3 ppg; 2.38 cf3; 13.75 gal/sk.
Pump Tail Cement	06/03/2011 09:48		5	30.5		100.0	120 SKs Tail cement, 14.2 ppg; 1.43 cf3; 6.88 gal/sk.
Shutdown	06/03/2011 09:53						
Drop Plug	06/03/2011 09:54						Plug left container.
Pump Displacement	06/03/2011 09:55		4	30		148.0	Fresh Water Displacement
Slow Rate	06/03/2011 10:02		2	30.7		240.0	Slow rate last ten BBLs
Bump Plug	06/03/2011 10:17				60.7	740.0	Bumped plug took 500 psi over.
Check Floats	06/03/2011 10:21						Floats held. 1 BBL back.
End Job	06/03/2011 10:22						
Pre-Rig Down Safety Meeting	06/03/2011 12:00						Including entire cement crew. Wait to rig down to see if Top Out was needed.
Standby - Other - see comments	06/03/2011 12:30						Wait on location for next job.
Other	06/03/2011 12:30						Thank You for using Halliburton. Ed Arnold and crew.

# Bill Barrett

9.625 Surface

Federal 32B-20-691



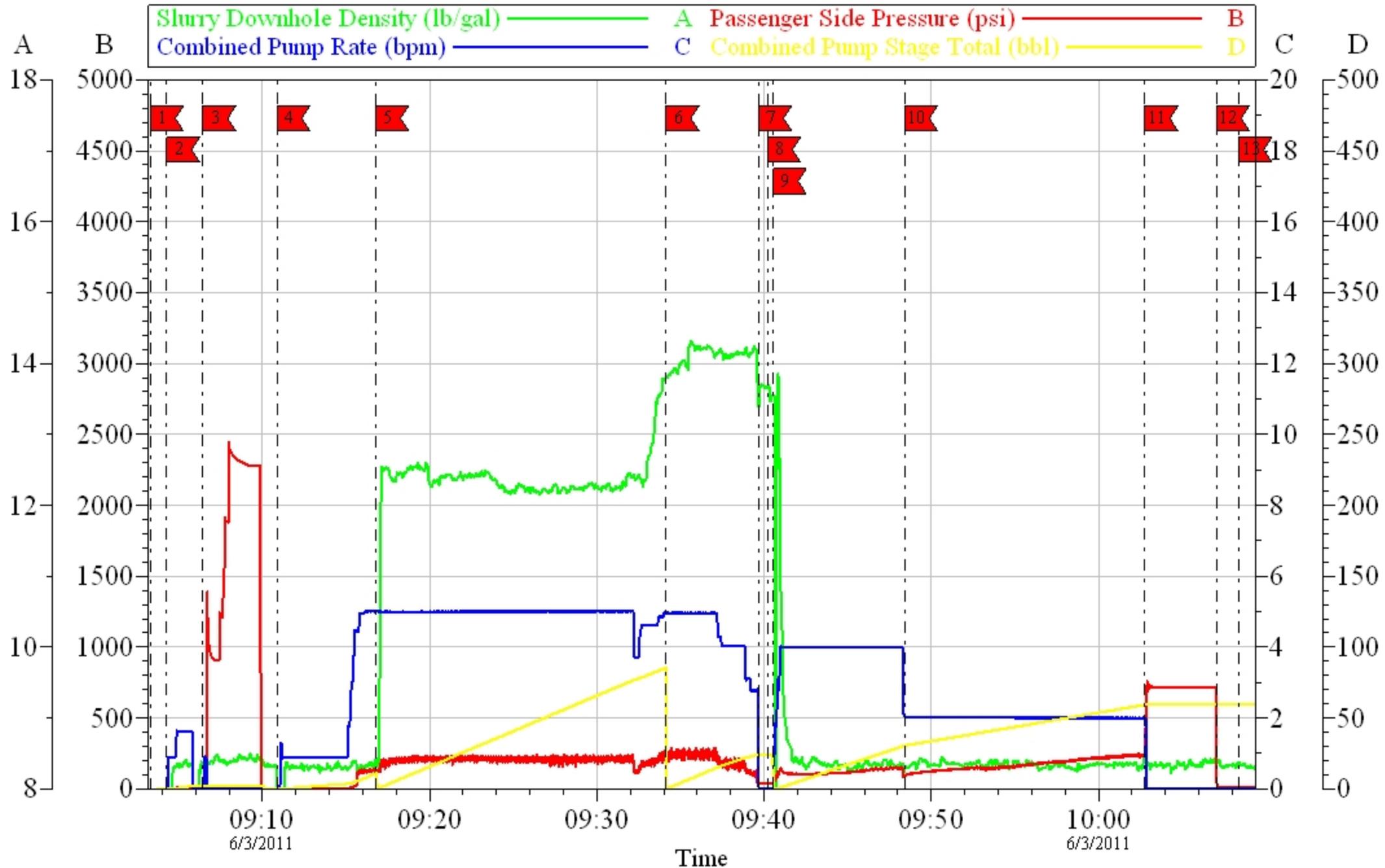
Local Event Log					
1	Start Job	09:03:19	2	Fill Lines	09:04:18
			3	Test Lines	09:06:27
4	H2O Spacer	09:10:53	5	Lead Cenment	09:16:47
6	Tail Cement	09:34:08	7	Shut Down	09:39:42
8	Drop Plug	09:40:13	9	H2O Displacement	09:40:33
10	Slow Rate	09:48:25	11	Bump Plug	10:02:47
12	Check Floats	10:07:03	13	End Job	10:08:24

Customer: Bill Barrett	Job Date: 03-Jun-2011	Sales Order #: 09:03:44
Well Description: Federal 32-B-20-691	Type: 9.625 Surface	ADC Used: Yes
Co Rep: Josh Henderson	Cement Super: Ed Arnold	Elite # 2: Tenner Cunningham

# Bill Barrett

9.625 Surface

Federal 32B-20-691



Customer: Bill Barrett  
Well Description: Federal 32-B-20-691  
Co Rep: Josh Henderson

Job Date: 03-Jun-2011  
Type: 9.625 Surface  
Cement Super: Ed Arnold

Sales Order #: 09:03:44  
ADC Used: Yes  
Elite # 2: Tenner Cunningham

OptiCem v6.4.10  
06-Jun-11 17:16

EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job					
4	FILL LINES	2				
6	Test Lines	3000.0				
9	H2O Spacer	10.0				
13	LEAD CEMENT	84.8	200	12.3	2.38	13.75
15	TAIL CEMENT	30.6	120	14.2	1.43	6.85
11	SHUTDOWN					
32	DROP TOP PLUG					
25	DISPLACEMENT	60.8				
1085	SLOW RATE	50.8	2 BBL/MIN			
26	LAND PLUG	209.7				
511	CHECK FLOATS	709.7				
2	END JOB		<b>Do Not Overdisplace</b>			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH		FLOAT COLLAR	BBL/FT	H2O REQ.
60.83	831.3	44.40		786.90	0.0773	206
		<b>9 5/8 SURFACE</b>				
PSI to Lift	0.00					
CALCULATED PSI LAND		210		TOTAL FLUID PUMPED		188
Collapse	2320	Burst	3560		SO#	8107305

# HALLIBURTON

## Water Analysis Report

Company: Bill Barrett  
Submitted by: Ed Arnold  
Attention: J.TROUT  
Lease: FEDERAL  
Well #: 32B-20-691

Date: 6/3/2011  
Date Rec.: 6/3/2011  
S.O.#: 8107305  
Job Type: Surface

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>250 Mg / L</b>
Calcium (Ca)	<i>500</i>	<b>120 Mg / L</b>
Iron (FE2)	<i>300</i>	<b>0 Mg / L</b>
Chlorides (Cl)	<i>3000</i>	<b>0 Mg / L</b>
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>&lt;200 Mg / L</b>
Chlorine (Cl <sub>2</sub> )		<b>0 Mg / L</b>
Temp	<i>40-80</i>	<b>60 Deg</b>
Total Dissolved Solids		<b>600 Mg / L</b>

Respectfully: Ed Arnold

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

NOTICE:

This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or

<b>Sales Order #:</b> 8107305	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 6/3/2011
<b>Customer:</b> BILL BARRETT CORPORATION E-BILL		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> JOSH HENDERSON		<b>API / UWI: (leave blank if unknown)</b> 05-045-19678
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 32B-20-691
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b> No	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

### CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	6/3/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	EDWARD ARNOLD (HX46731)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	JOSH HENDERSON
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	
Job DVA	Did we provide job DVA above our normal service today? Circle Y or N	No
Time	Please enter hours in decimal format to nearest quarter hour.	
Other	Enter short text for other efficiencies gained.	
Customer Initials	Customer's Initials	
Please provide details	Please describe how the job efficiencies were gained.	

<b>CUSTOMER SIGNATURE</b>
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<b>Sales Order #:</b> 8107305	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 6/3/2011
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<b>H2S Present:</b> No	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b>	6/3/2011
The date the survey was conducted	

Cementing KPI Survey	
<b>Type of Job</b>	0
Select the type of job. (Cementing or Non-Cementing)	
<b>Select the Maximum Deviation range for this Job</b>	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
<b>Total Operating Time (hours)</b>	3
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
<b>HSE Incident, Accident, Injury</b>	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
<b>Was the job purpose achieved?</b>	Yes
Was the job delivered correctly as per customer agreed design?	
<b>Operating Hours (Pumping Hours)</b>	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
<b>Customer Non-Productive Rig Time (hrs)</b>	0
Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
<b>Type of Rig Classification Job Was Performed</b>	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
<b>Number Of JSAs Performed</b>	5
Number Of Jsas Performed	
<b>Number of Unplanned Shutdowns</b>	0
Unplanned shutdown is when injection stops for any period of time.	
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes

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<b>Customer Representative:</b> JOSH HENDERSON		<b>API / UWI: (leave blank if unknown)</b> 05-045-19678
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 32B-20-691
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b> No	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b> Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	98
<b>Was Automated Density Control Used?</b> Was Automated Density Control (ADC) Used ?	Yes
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b> Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	99
<b>Nbr of Remedial Sqz Jobs Rqd - Competition</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
<b>Nbr of Remedial Plug Jobs Rqd - HES</b> Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0