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# **BILL BARRETT CORPORATION E-BILL**

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**EPPELY 24B-23-692  
MAMM CREEK  
Garfield County , Colorado**

**Cement Surface Casing**  
**29-Nov-2011**

**Post Job Summary**

## The Road to Excellence Starts with Safety

Sold To #: 343492	Ship To #: 2890425	Quote #:	Sales Order #: 9058429
Customer: BILL BARRETT CORPORATION E-BILL	Customer Rep: Lauer, Casey		
Well Name: EPPERLY	Well #: 24B-23-692	API/UWI #: 05-045-20952	
Field: MAMM CREEK	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Lat: N 39.512 deg. OR N 39 deg. 30 min. 42.293 secs.	Long: W 107.641 deg. OR W -108 deg. 21 min. 33.836 secs.		
Contractor: PROPETRO	Rig/Platform Name/Num: PROPETRO		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: METLI, MARSHALL	Srvc Supervisor: CHASTAIN, DERICK	MBU ID Emp #: 455848	

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CHASTAIN, DERICK Allan	11	455848	LESTER, LEVI William	11	474117	MAGERS, MICHAEL Gerard	11	339439

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10857016	120 mile	10867304	120 mile	10872429	120 mile	10951248	120 mile
10998054	120 mile						

## Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
10/28/2011	1	0	11/29/2011	10	2			

**TOTAL** Total is the sum of each column separately

## Job

Formation Name	Job	Job Times	Date	Time	Time Zone
Formation Depth (MD)	Top Bottom	Called Out			
Form Type	BHST	On Location			
Job depth MD	755. ft	Job Depth TVD	755. ft	Job Started	29 - Nov - 2011 07:53 MST
Water Depth		Wk Ht Above Floor	1. ft	Job Completed	29 - Nov - 2011 09:00 MST
Perforation Depth (MD)	From To	Departed Loc	29 - Nov - 2011 10:00	MST	

## 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				12.375				.	755.	.	755.
SURFACE CASING	Unknown		9.625	8.921	36.		J-55	.	737.5	.	737.5

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		
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		

## Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9 5/8	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9 5/8	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		20.00	bbl	8.34	.0	.0	4	
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)	120.0	sacks	12.3	2.38	13.77	5	13.77
	0.25 lbm	POLY-E-FLAKE (101216940)							
	13.77 Gal	FRESH WATER							
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	120.0	sacks	14.2	1.43	6.85	5	6.85
	0.25 lbm	POLY-E-FLAKE (101216940)							
	6.85 Gal	FRESH WATER							
4	DISPLACEMENT		54.00	bbl	8.33			6	
<b>Calculated Values</b>		<b>Pressures</b>		<b>Volumes</b>					
Displacement	54	Shut In: Instant		Lost Returns	0	Cement Slurry	81.5	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	34	Actual Displacement	54	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	156
<b>Rates</b>									
Circulating		Mixing	5	Displacement	6	Avg. Job			5
Cement Left In Pipe	Amount	38.1 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID		Frac ring # 2 @	ID		Frac Ring # 3 @	ID		Frac Ring # 4 @
The Information Stated Herein Is Correct				Customer Representative Signature					

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 343492	<b>Ship To #:</b> 2890425	<b>Quote #:</b>	<b>Sales Order #:</b> 9058429
<b>Customer:</b> BILL BARRETT CORPORATION E-BILL		<b>Customer Rep:</b> Lauer, Casey	
<b>Well Name:</b> EPPERLY	<b>Well #:</b> 24B-23-692	<b>API/UWI #:</b> 05-045-20952	
<b>Field:</b> MAMM CREEK	<b>City (SAP):</b> SILT	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Legal Description:</b>			
<b>Lat:</b> N 39.512 deg. OR N 39 deg. 30 min. 42.293 secs.		<b>Long:</b> W 107.641 deg. OR W -108 deg. 21 min. 33.836 secs.	
<b>Contractor:</b> PROPETRO		<b>Rig/Platform Name/Num:</b> PROPETRO	
<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> CHASTAIN, DERICK	<b>MBU ID Emp #:</b> 455848

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Arrive at Location from Service Center	11/28/2011 23:00							CREW ON LOCATION FROM PREVIOUS JOB
Pre-Rig Up Safety Meeting	11/29/2011 06:50							WITH ALL HES PERSONNEL
Rig-Up Equipment	11/29/2011 07:00							1 HT 400 PUMP, 1 660 BULK TRAILER, 1 F-450 PICK-UP, 1 PLUG CONTAINER
Pre-Job Safety Meeting	11/29/2011 07:45							WITH ALL PERSONNEL ON LOCATION
Start Job	11/29/2011 07:53							TD 755', TP 737.45', SJ 38.1', FC 699.35', 9 5/8" 36# CASING, 12 3/8" AIR DRILLED HOLE
Pump Water	11/29/2011 07:54		2	2			7.0	FILL LINES
Test Lines	11/29/2011 07:56							STAGED TEST AT 1550 PSI THEN TESTED TO 3720 PSI. HELD PRESSURE FOR 2 MIN, NO LEAKS
Pump Spacer 1	11/29/2011 07:59		4	20			50.0	PUMP FRESH WATER AT 2 BPM UNTIL TUB WEIGHED UP, THEN SPED RATE TO 4 BPM
Pump Lead Cement	11/29/2011 08:11		5	50.9			180.0	120 SKS, 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Shutdown	11/29/2011 08:24						.0	SHUT DOWN TO BUILD TUB
Pump Tail Cement	11/29/2011 08:35		5	30.6			190.0	120 SKS, 14.2 PPG, 1.43 FT3/SK, 6.85 GAL/SK. H2O RETURNS AT 21 AWAY ON TAIL.

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	11/29/2011 08:48						.0	
Drop Top Plug	11/29/2011 08:49							LAUNCH PLUG, VERIFY PLUG LEFT CONTAINER
Pump Displacement	11/29/2011 08:49		6	54			278.0	FRESH WATER. CEMENT RETURNS AT 20 AWAY ON DISPLACEMENT
Slow Rate	11/29/2011 08:57		3	44			218.0	SLOW RATE 10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	11/29/2011 09:00		3	54			780.0	PLUG BUMPED PLUG AT 218 PSI, PRESSURED UP TO 780 PSI
Check Floats	11/29/2011 09:02						.0	FLOAT HELD 1/2 BBL BACK TO TRUCK
End Job	11/29/2011 09:03							34 BBLS CEMENT TO SURFACE. NO DERRICK CHARGE, NO SUGAR USED, NO ADD HOURS CHARGED.
Pre-Rig Down Safety Meeting	11/29/2011 09:20							WITH ALL HES PERSONNEL
Rig-Down Equipment	11/29/2011 09:30							COMPLETELY RIG DOWN EQUIPMENT.
Pre-Convoy Safety Meeting	11/29/2011 09:55							WITH ALL HES PERSONNEL
Crew Leave Location	11/29/2011 10:00							
Comment	11/29/2011 10:00							THANK YOU FOR USING HALLIBURTON CEMENT DEPARTMENT. DERICK CHASTAIN AND CREW

# HALLIBURTON

## Water Analysis Report

Company: BILL BARRETT  
Submitted by: DERICK CHASTAIN  
Attention: J. Trout  
Lease: EPPERLY  
Well #: 24B-23-692

Date: 11/29/2011  
Date Rec.: 11/29/2011  
S.O.#: 9058429  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>6</i>
Potassium (K)	<i>5000</i>	<i>2000</i> Mg / L
Calcium (Ca)	<i>500</i>	<i>0</i> Mg / L
Iron (FE2)	<i>300</i>	<i>0</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>1000</i> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<i>500</i> Mg / L
Chlorine (Cl <sub>2</sub> )		<i>0</i> Mg / L
Temp	<i>40-80</i>	<i>45</i> Deg
Total Dissolved Solids		<i>200</i> Mg / L

Respectfully: DERICK CHASTAIN

Title: CEMENTING SUPERVISOR

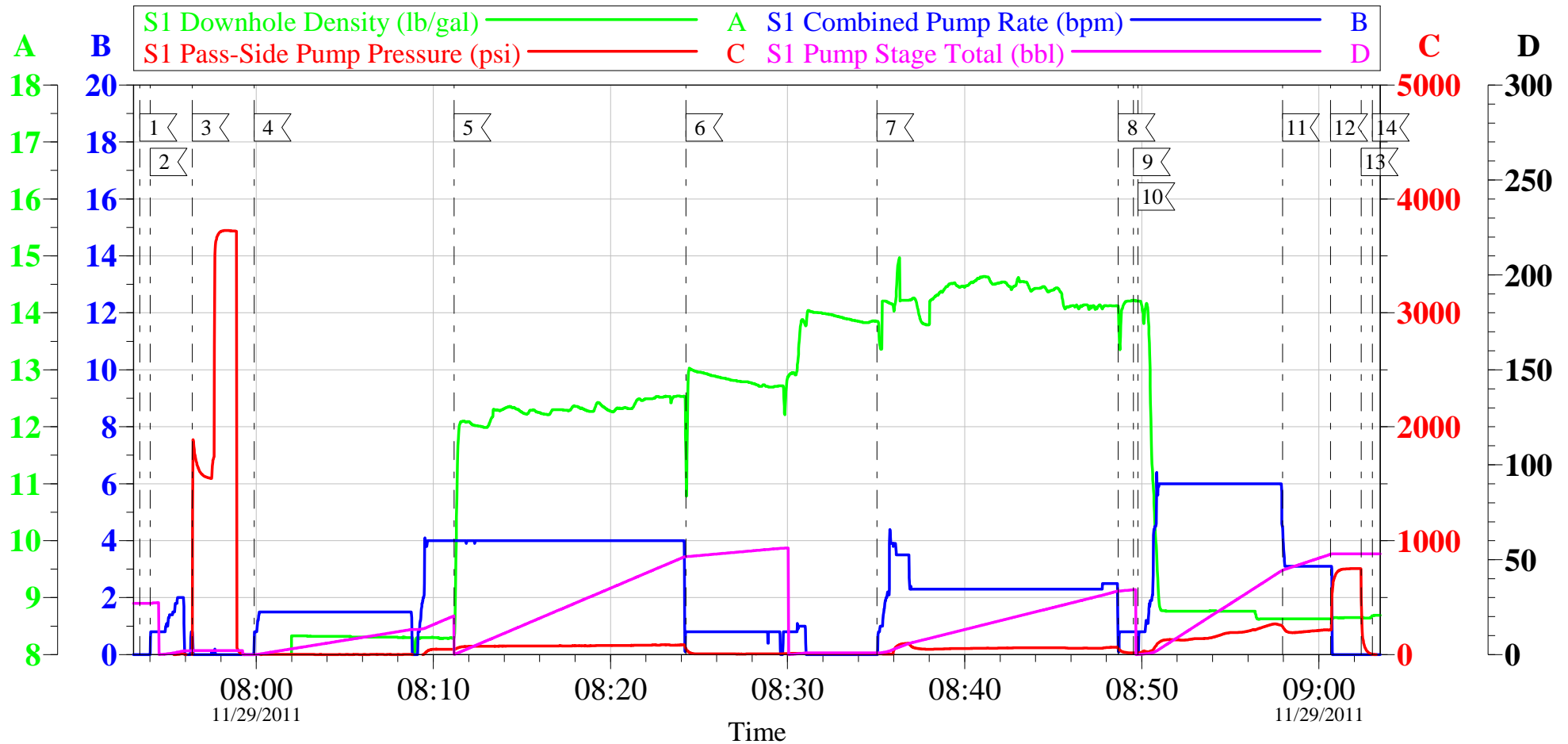
Location: Grand Junction, CO

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 c

# BILL BARRETT - EPPERLY 24B-23-692

## SURFACE CASING

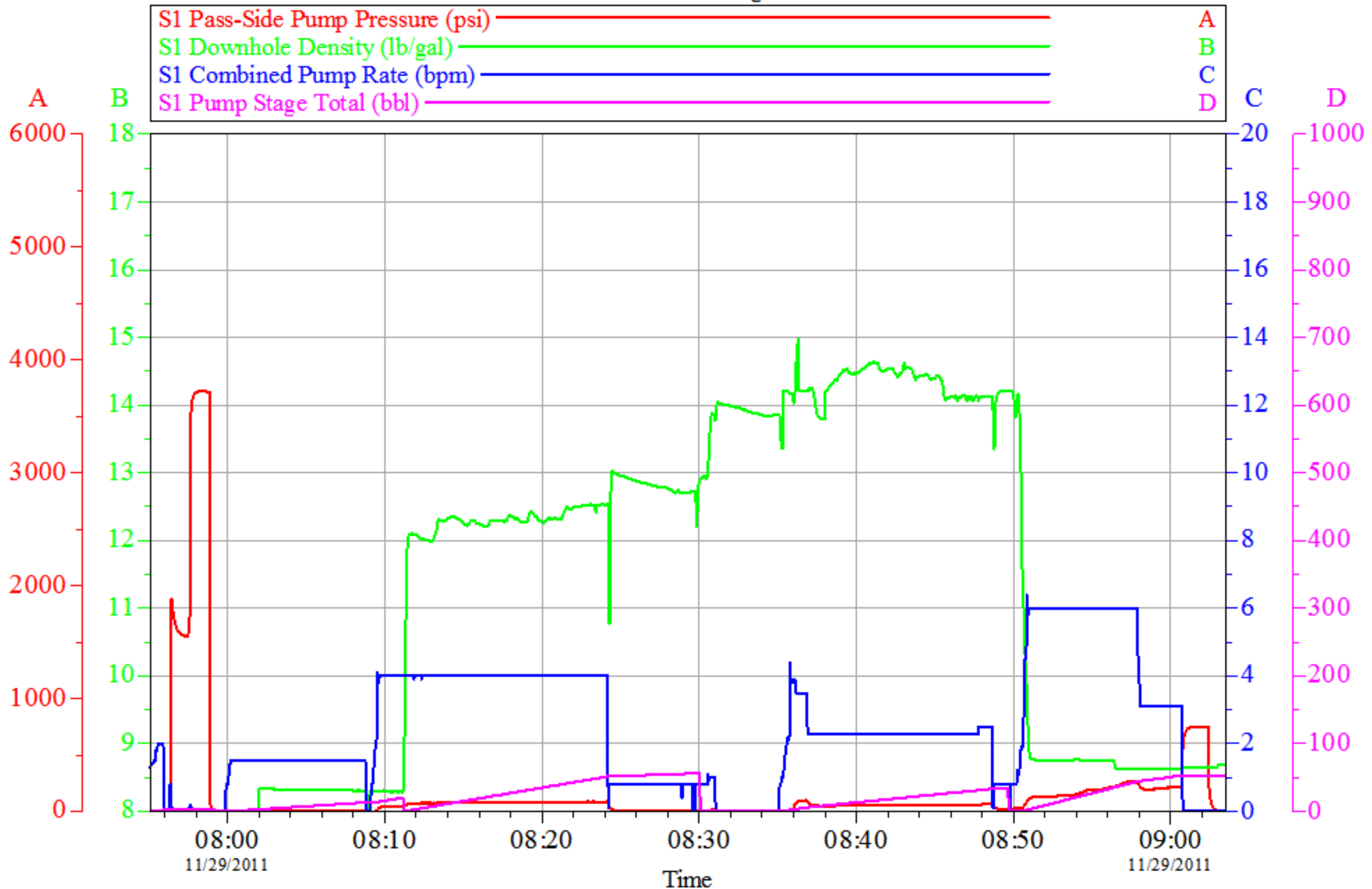


1	START JOB	07:53:26	2	FILL LINES	07:54:00	3	TEST LINES	07:56:23
4	PUMP SPACER	07:59:53	5	PUMP LEAD CEMENT	08:11:10	6	SHUTDOWN	08:24:15
7	PUMP TAIL CEMENT	08:35:03	8	SHUTDOWN	08:48:40	9	DROP PLUG	08:49:32
10	PUMP DISPLACEMENT	08:49:47	11	SLOW RATE	08:57:57	12	BUMP PLUG	09:00:40
13	CHECK FLOATS	09:02:23	14	END JOB	09:03:01			

Customer:	BILL BARRETT	Job Date:	29-Nov-2011	Sales Order #:	9058429
Well Description:	EPPERLY 24B-23-692	Job Type:	SURFACE	ADC Used:	YES
Customer Rep:	CASEY LAUER	Service Supervisor:	DERICK CHASTAIN	Pump #/Operator:	7 / MIKE MAGERS

# Bill Barrett Epperly 24B-23-692

Surface Casing



Customer: Bill Barrett  
Well Description: Epperly 24B-23-692  
Company Rep: Casey Lauer

Job Date: 29-Nov-2011  
Job Type: Surface  
Cement Supervisor: Derick Chastain

Sales Order #: 9058429  
ADC Used: yes  
Elite #X: 7 / Magers

OptiCem v6.4.6  
20-Dec-11 12:21



<b>Sales Order #:</b> 9058429	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 11/29/2011
<b>Customer:</b> BILL BARRETT CORPORATION E-BILL		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> CASEY LAUER		<b>API / UWI: (leave blank if unknown)</b> 05-045-20952
<b>Well Name:</b> EPPERLY		<b>Well Number:</b> 24B-23-692
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<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	11/29/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	DERICK CHASTAIN (HB23225)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	CASEY LAUER
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	NONE

CUSTOMER SIGNATURE

<b>Sales Order #:</b> 9058429	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 11/29/2011
<b>Customer:</b> BILL BARRETT CORPORATION E-BILL		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> CASEY LAUER		<b>API / UWI: (leave blank if unknown)</b> 05-045-20952
<b>Well Name:</b> EPPERLY		<b>Well Number:</b> 24B-23-692
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<b>H2S Present:</b>	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b> The date the survey was conducted	11/29/2011

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	2
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Operating Hours (Pumping Hours)</b> Total number of hours pumping fluid on this job. Enter in decimal format.	1
<b>Customer Non-Productive Rig Time (hrs)</b> 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.	0
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	2
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes

<b>Sales Order #:</b> 9058429	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 11/29/2011
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<b>Customer Representative:</b> CASEY LAUER		<b>API / UWI: (leave blank if unknown)</b> 05-045-20952
<b>Well Name:</b> EPPERLY		<b>Well Number:</b> 24B-23-692
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<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	95
<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	98
<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