

HALLIBURTON

Cementing Job Log

BILL BARRETT CORPORATION

**CBS 41D-21-692
MAMM CREEK
Garfield County , Colorado**

Cement Surface Casing
08-Nov-2011

Job Site Documents

Sold To # : 343492

Ship To # :2889246

Quote # :

Sales Order # : 90435

SUMMIT Version: 7.2.27

Tuesday, November 8, 2011

The Road to Excellence Starts with Safety

| | | | |
|--|--------------------|--|-------------------------|
| The Road to Excellence Starts With Safety | | | |
| Sold To #: 343492 | Ship To #: 2889246 | Quote #: | Sales Order #: 9043542 |
| Customer: BILL BARRETT CORPORATION E-BILL | | Customer Rep: Lauer, Casey | |
| Well Name: CBS | | Well #: 41D-21-692 | API/UWI #: 05-045-20123 |
| Field: MAMM CREEK | City (SAP): SILT | County/Parish: Garfield | State: Colorado |
| Lat: N 39.515 deg. OR N 39 deg. 30 min. 52.531 secs. | | Long: W 107.671 deg. OR W -108 deg. 19 min. 43.043 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: JAMISON, PRICE | MBU ID Emp #: 229155 |

Job Personnel

| HES Emp Name | Exp Hrs | Emp # | HES Emp Name | Exp Hrs | Emp # | HES Emp Name | Exp Hrs | Emp # |
|-------------------------|---------|--------|------------------|---------|--------|--------------------|---------|--------|
| DEUSSEN, EDWARD Eric | 11 | 485182 | JAMISON, PRICE W | 11 | 229155 | JENSEN, SHANE Lynn | 11 | 441759 |
| VANALSTYNE, TROY L | 11 | 420256 | | | | | | |

Equipment

| HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way |
|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
| 10205677 | 120 mile | 10784053 | 120 mile | 11560046 | 120 mile | 11562538 | 120 mile |
| 11583934 | 120 mile | | | | | | |

Job Hours

| Date | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours |
|---------|-------------------|-----------------|------|-------------------|-----------------|------|-------------------|-----------------|
| 11/8/11 | 11 | 3 | | | | | | |

| | | | | | | | | |
|-------|--|--|--|--|--|--|--|--|
| TOTAL | Total is the sum of each column separately | | | | | | | |
|-------|--|--|--|--|--|--|--|--|

Job

Job Times

| Formation Name | | | | | Date | Time | Time Zone |
|------------------------|----------|--|-------------------|---------|---------------|-----------------|-----------|
| Formation Depth (MD) | Top | | Bottom | | Called Out | 08 - Nov - 2011 | 07:00 MST |
| Form Type | BHST | | | | On Location | 08 - Nov - 2011 | 11:00 MST |
| Job depth MD | 829.5 ft | | Job Depth TVD | 840. ft | Job Started | 08 - Nov - 2011 | 20:05 MST |
| Water Depth | | | Wk Ht Above Floor | . ft | Job Completed | 08 - Nov - 2011 | 20:50 MST |
| Perforation Depth (MD) | From | | To | | Departed Loc | 08 - Nov - 2011 | 22:00 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 | | | | 12.25 | | | | . | 840. | . | 840. |
| SURFACE CASING | Unknown | | 9.625 | 8.921 | 36. | 8 RD | J-55 | . | 829.5 | . | 829.5 |

Sales/Rental/3rd 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 | | | |
| Float Shoe | | | | | Bridge Plug | | | | | Bottom Plug | | | |
| Float Collar | | | | | Retainer | | | | | SSR plug set | | | |
| Insert Float | | | | | | | | | | Plug Container | | | |
| 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 ³ /sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk |
|--|--------------|-------------------------------|-----------------|-----------------------------------|------------------------|---------------------------|------------------|--------------|------------------------|
| 1 | WATER SPACER | | 20.00 | bbl | 8.4 | .0 | .0 | 6.0 | |
| 2 | Lead Cement | VERSACEM (TM) SYSTEM (452010) | 120.0 | sacks | 12.3 | 2.38 | 13.77 | 6.0 | 13.77 |
| | 13.77 Gal | FRESH WATER | | | | | | | |
| 3 | Tail Cement | SWIFTCEM (TM) SYSTEM (452990) | 120.0 | sacks | 14.2 | 1.43 | 6.85 | 6.0 | 6.85 |
| | 6.85 Gal | FRESH WATER | | | | | | | |
| 4 | DISPLACEMENT | | 60.7 | bbl | 8.4 | | | 6.0 | |
| Calculated Values | | Pressures | | Volumes | | | | | |
| Displacement | 60.7 | Shut In: Instant | | Lost Returns | NO | Cement Slurry | 81.5 | Pad | |
| Top Of Cement | SURFACE | 5 Min | | Cement Returns | 25 | Actual Displacement | 60.7 | Treatment | |
| Frac Gradient | | 15 Min | | Spacers | 20 | Load and Breakdown | | Total Job | 160 |
| Rates | | | | | | | | | |
| Circulating | NONE | Mixing | 6 | Displacement | 6 | Avg. Job | | | 6 |
| Cement Left In Pipe | Amount | 44.63 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

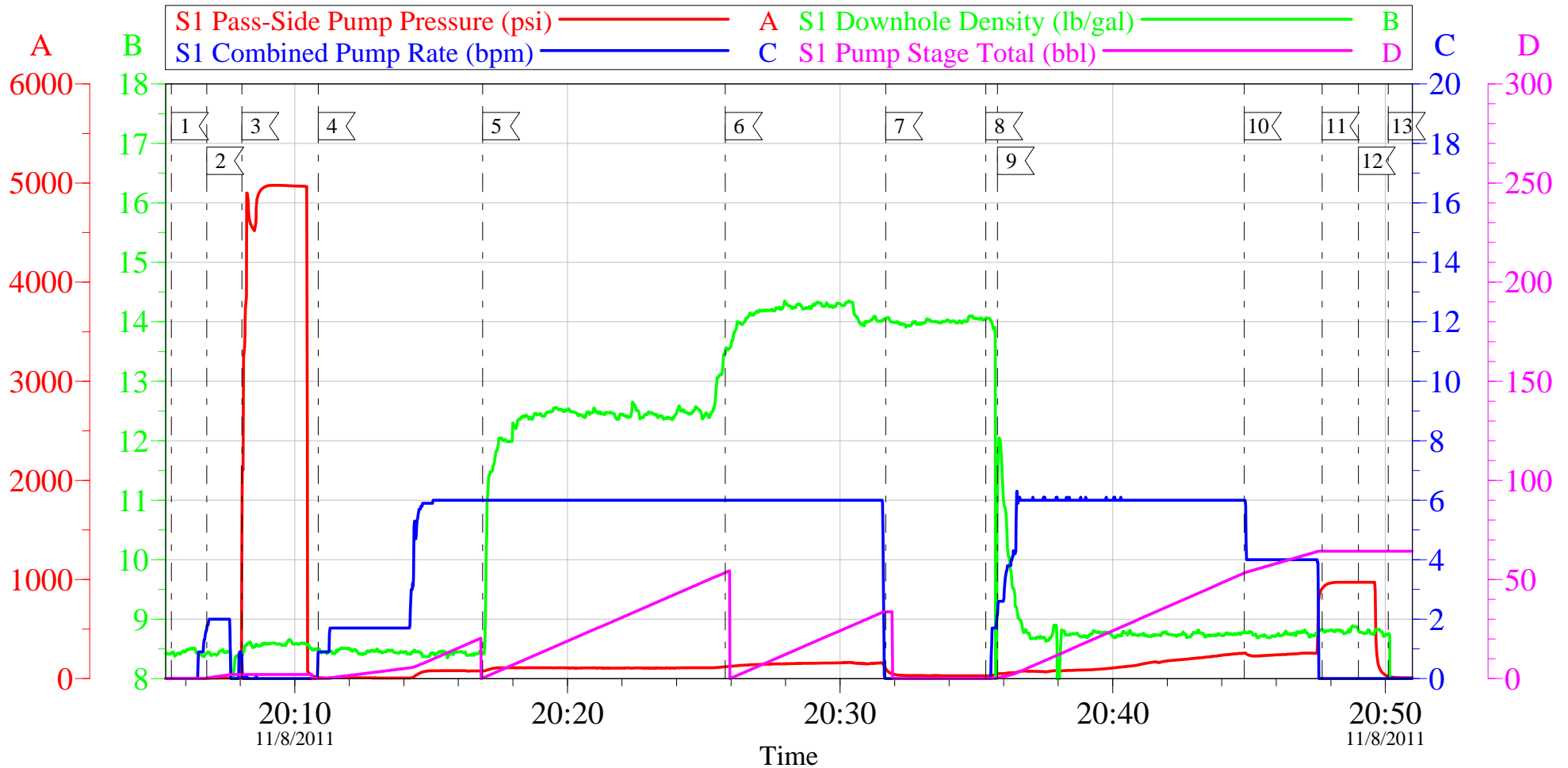
| | | | |
|---|---------------------------|---|-------------------------------|
| Sold To #: 343492 | Ship To #: 2889246 | Quote #: | Sales Order #: 9043542 |
| Customer: BILL BARRETT CORPORATION E-BILL | | Customer Rep: Lauer, Casey | |
| Well Name: CBS | Well #: 41D-21-692 | API/UWI #: 05-045-20123 | |
| Field: MAMM CREEK | City (SAP): SILT | County/Parish: Garfield | State: Colorado |
| Legal Description: | | | |
| Lat: N 39.515 deg. OR N 39 deg. 30 min. 52.531 secs. | | Long: W 107.671 deg. OR W -108 deg. 19 min. 43.043 secs. | |
| Contractor: PROPETRO | | Rig/Platform Name/Num: PROPETRO | |
| Job Purpose: Cement Surface Casing | | | Ticket Amount: |
| Well Type: Development Well | | Job Type: Cement Surface Casing | |
| Sales Person: METLI, MARSHALL | | Srv Supervisor: JAMISON, PRICE | MBU ID Emp #: 229155 |

| Activity Description | Date/Time | Cht # | Rate bbl/ min | Volume bbl | | Pressure psig | | Comments |
|--|---------------------|----------|---------------------|---------------|-------|------------------|------------|---|
| | | | | Stage | Total | Tubing | Casing | |
| Call Out | 11/08/2011 07:00 | | | | | | | TD 840 HOLE SIZE 12.25 TP 829.63 CASING 9.625 36 # J-55 SHOE JOINT 44.63 NO MUD AIR MIST DRILLED |
| Depart Yard Safety Meeting | 11/08/2011 09:20 | | | | | | | |
| Crew Leave Yard | 11/08/2011 09:30 | | | | | | | |
| Arrive At Loc | 11/08/2011 11:30 | | | | | | | |
| Assessment Of Location Safety Meeting | 11/08/2011 11:35 | | | | | | | |
| Pre-Rig Up Safety Meeting | 11/08/2011 19:30 | | | | | | | |
| Pre-Job Safety Meeting | 11/08/2011 19:45 | | | | | | | |
| Start Job | 11/08/2011 20:05 | | | | | | | |
| Prime Pumps | 11/08/2011 20:06 | | 2 | 2 | | | 7.0 | FRESH WATER |
| Test Lines | 11/08/2011 20:08 | | | | | | 5000. 0 | |
| Pump Spacer 1 | 11/08/2011 20:10 | | 6 | 20 | | | 81.0 | FRESH WATER |
| Pump Lead Cement | 11/08/2011 20:16 | | 6 | 50.9 | | | 110.0 | MIXED @ 12.3 PPG YIELD 2.38 WAT/REQ 13.77 120 SKS |
| Pump Tail Cement | 11/08/2011 20:25 | | 6 | 30.6 | | | 162.0 | MIXED @ 14.2 PPG YIELD 1.43 WAT/REQ 6.85 120 SKS |
| Shutdown | 11/08/2011 20:31 | | | | | | | |

| Activity Description | Date/Time | Cht # | Rate bbl/ min | Volume bbl | | Pressure psig | | Comments |
|---|---------------------|----------|---------------------|---------------|-------|------------------|--------|--|
| | | | | Stage | Total | Tubing | Casing | |
| Drop Plug | 11/08/2011 20:34 | | | | | | | |
| Pump Displacement | 11/08/2011 20:35 | | 6 | | | | | FRESH WATER |
| Slow Rate | 11/08/2011 20:44 | | 4 | 51 | | | 252.0 | |
| Bump Plug | 11/08/2011 20:47 | | 4 | 60.7 | | | 260.0 | PRESSURE UP TO 973 PSI |
| Check Floats | 11/08/2011 20:49 | | | | | | | FLOATS HELD |
| End Job | 11/08/2011 20:50 | | | | | | | CEMENT BACK TO SURFACE 25 BBLS |
| Post-Job Safety Meeting (Pre Rig-Down) | 11/08/2011 21:00 | | | | | | | GOT RETURNS ON DISPLACEMENT |
| Depart Location Safety Meeting | 11/08/2011 21:50 | | | | | | | CASING WAS NOT MOVED THROUGHOUT JOB |
| Crew Leave Location | 11/08/2011 22:00 | | | | | | | THANKS FOR USING HALLIBURTON BILL JAMISON & CREW |

BILL BARRETT- CBS 41-D-21-692

SURFACE



Local Event Log

| | | | | | |
|----------------------|----------|---------------|----------|----------------------|----------|
| 1 START JOB | 20:05:29 | 2 PRIME LINES | 20:06:46 | 3 TEST LINES | 20:08:04 |
| 4 WATER DISPLACEMENT | 20:10:52 | 5 LEAD CEMENT | 20:16:53 | 6 TAIL CEMENT | 20:25:47 |
| 7 SHUT DOWN | 20:31:40 | 8 DROP PLUG | 20:35:21 | 9 START DISPLACEMENT | 20:35:46 |
| 10 SLOW RATE | 20:44:50 | 11 BUMP PLUG | 20:47:41 | 12 CHECK FLOATS | 20:49:01 |
| 13 END JOB | 20:50:07 | | | | |

Customer: BILL BARRETT
Well Description: CBS 41D-21-692
Company Rep: CASEY LAUER

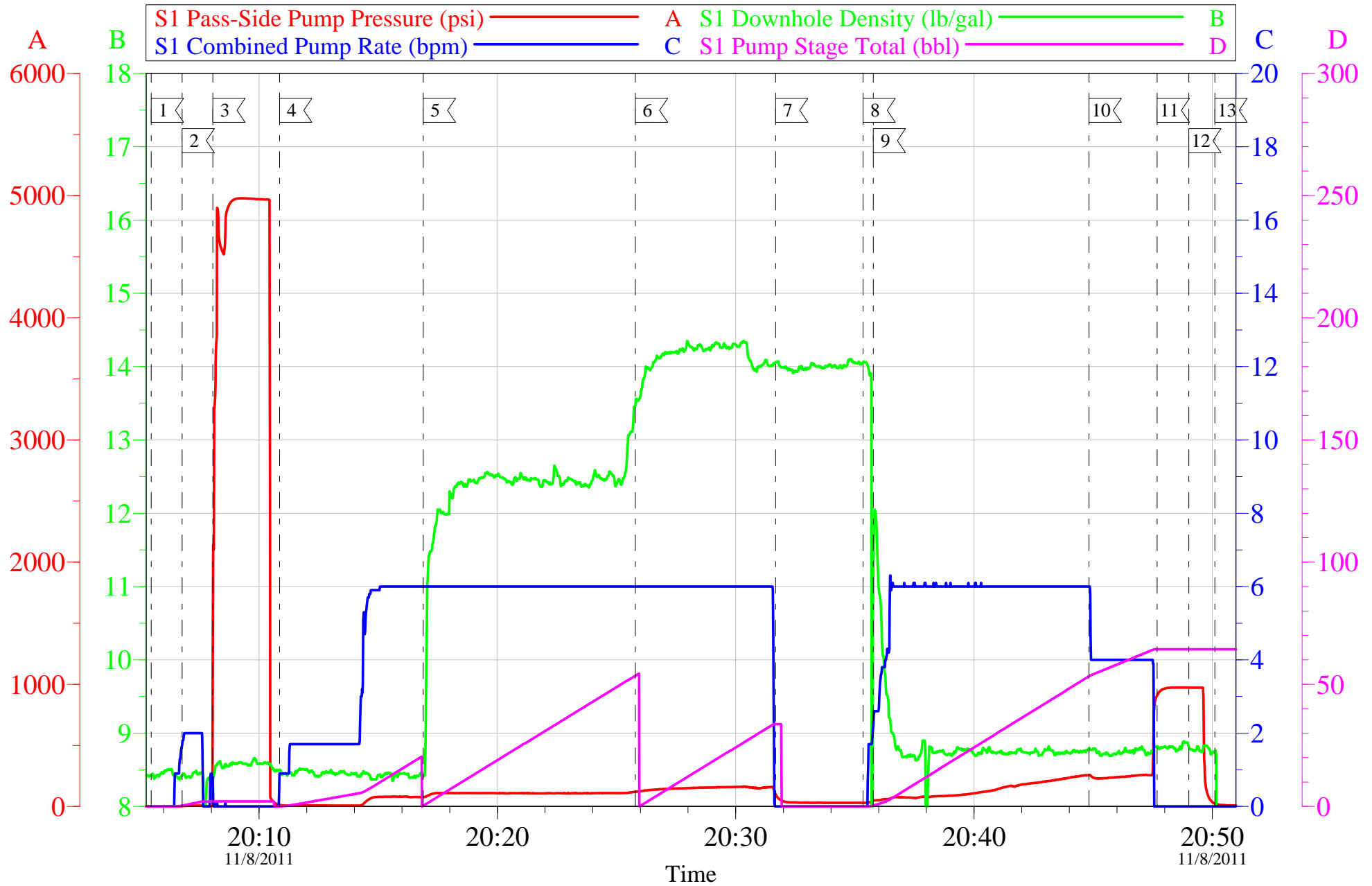
Job Date: 08-Nov-2011
Job Type: SURFACE
Cement Supervisor: BILL JAMISON

Sales Order #: 9043542
ADC Used: YES
Elite #X: 5/TROY VAVALSTYNE

OptiCem v6.4.9
12-Nov-11 09:56

BILL BARRETT- CBS 41-D-21-692

SURFACE



| | | | | | |
|-------------------|----------------|--------------------|--------------|----------------|-------------------|
| Customer: | BILL BARRETT | Job Date: | 08-Nov-2011 | Sales Order #: | 9043542 |
| Well Description: | CBS 41D-21-692 | Job Type: | SURFACE | ADC Used: | YES |
| Company Rep: | CASEY LAUER | Cement Supervisor: | BILL JAMISON | Elite #X: | 5/TROY VAVALSTYNE |

OptiCem v6.4.9
12-Nov-11 09:55

HALLIBURTON

Water Analysis Report

Company: BILL BARRETT

Submitted by: BILL JAMISON

Attention: JON TROUT

Lease CBS

Well # 41D-21-692

Date: 11/8/2011

Date Rec.: 11/8/2011

S.O.# 9043542

Job Type: 9 5/8" SURFACE

| | | |
|-----------------------------|--------------|--------------------|
| Specific Gravity | <i>MAX</i> | 1 |
| pH | <i>8</i> | 6.8 |
| Potassium (K) | <i>5000</i> | 450 Mg / L |
| Calcium (Ca) | <i>500</i> | 120 Mg / L |
| Iron (FE2) | <i>300</i> | 0 Mg / L |
| Chlorides (Cl) | <i>3000</i> | 0 Mg / L |
| Sulfates (SO ₄) | <i>1500</i> | -200 Mg / L |
| Chlorine (Cl ₂) | | 0 Mg / L |
| Temp | <i>40-80</i> | 40 Deg |
| Total Dissolved Solids | | 530 Mg / L |

Respectfully: BILL JAMISON

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

| | | |
|---|--|--|
| Sales Order #: 9043542 | Line Item: 10 | Survey Conducted Date: 11/8/2011 |
| Customer: BILL BARRETT CORPORATION E-BILL | | Job Type (BOM): CMT SURFACE CASING BOM |
| Customer Representative: CASEY LAUER | | API / UWI: (leave blank if unknown) 05-045-20123 |
| Well Name: CBS | | Well Number: 41D-21-692 |
| Well Type: Development Well | Well Country: United States of America | |
| H2S Present: No | Well State: Colorado | Well County: 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 | 11/8/2011 |
| Survey Interviewer | The survey interviewer is the person who initiated the survey. | PRICE JAMISON (HAL9235) |
| 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 |
|---------------------------|

| | | |
|---|--|--|
| Sales Order #: 9043542 | Line Item: 10 | Survey Conducted Date: 11/8/2011 |
| Customer: BILL BARRETT CORPORATION E-BILL | | Job Type (BOM): CMT SURFACE CASING BOM |
| Customer Representative: CASEY LAUER | | API / UWI: (leave blank if unknown) 05-045-20123 |
| Well Name: CBS | | Well Number: 41D-21-692 |
| Well Type: Development Well | Well Country: United States of America | |
| H2S Present: No | Well State: Colorado | Well County: Garfield |

KEY PERFORMANCE INDICATORS

| General | |
|---|-----------|
| Survey Conducted Date The date the survey was conducted | 11/8/2011 |

| Cementing KPI Survey | |
|--|-------------------------|
| Type of Job Select the type of job. (Cementing or Non-Cementing) | 0 |
| Select the Maximum Deviation range for this Job What is the highest deviation for the job you just completed? This may not be the maximum well deviation. | Vertical |
| Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format. | 3 |
| HSE Incident, Accident, Injury HSE Incident, Accident, Injury. This should be recordable incidents only. | No |
| Was the job purpose achieved? Was the job delivered correctly as per customer agreed design? | Yes |
| Operating Hours (Pumping Hours) Total number of hours pumping fluid on this job. Enter in decimal format. | 1 |
| Customer Non-Productive Rig Time (hrs) 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 |
| Type of Rig Classification Job Was Performed Type Of Rig (classification) Job Was Performed On | Drilling Rig (Portable) |
| Number Of JSAs Performed Number Of Jsas Performed | 5 |
| Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time. | 0 |
| Was this a Primary Cement Job (Yes / No) | Yes |

| | | |
|---|--|--|
| Sales Order #: 9043542 | Line Item: 10 | Survey Conducted Date: 11/8/2011 |
| Customer: BILL BARRETT CORPORATION E-BILL | | Job Type (BOM): CMT SURFACE CASING BOM |
| Customer Representative: CASEY LAUER | | API / UWI: (leave blank if unknown) 05-045-20123 |
| Well Name: CBS | | Well Number: 41D-21-692 |
| Well Type: Development Well | Well Country: United States of America | |
| H2S Present: No | Well State: Colorado | Well County: Garfield |

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