HALLIBURTON

BILL BARRETT CORPORATION E-BILL

KAUFMAN 22D-25-692
MAMM CREEK
Garfield County , Colorado

Cement Surface Casing

06-Dec-2011

Job Site Documents

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 343492	**Ship To #:** 2894937	**Quote #:**	**Sales Order #:** 9112124
Customer: BILL BARRETT CORPORATION E-BILL		**Customer Rep:** Lauer, Casey	
Well Name: KAUFMAN	**Well #:** 22D-25-692		**API/UWI #:** 05-045-21151
Field: MAMM CREEK	**City (SAP):** SILT	**County/Parish:** Garfield	**State:** Colorado
Lat: N 39.502 deg. OR N 39 deg. 30 min. 8.316 secs.		**Long:** W 107.618 deg. OR W -108 deg. 22 min. 53.634 secs.	
Contractor: PROPETRO	**Rig/Platform Name/Num:** PROPETRO		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: FLING, MATTHEW	**Srvc Supervisor:** ARNOLD, EDWARD	**MBU ID Emp #:** 439784	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ANDREWS, ANTHONY Michael	7	321604	ARNOLD, EDWARD John	7	439784	BRENNECKE, ANDREW Bailey	7	486345
RAMSEY, STANTON Michael	7	477609						

Equipment

HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*
10867304	120 mile	10998054	120 mile	11360871	120 mile	11542767	120 mile
11583933	120 mile						

Job Hours

Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours
12.5.2011	5	1	12.6.2011	2	1			
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name			
Formation Depth (MD)	**Top**		**Bottom**
Form Type		**BHST**	
Job depth MD	740. ft	**Job Depth TVD**	740. ft
Water Depth		**Wk Ht Above Floor**	. ft
Perforation Depth (MD)	*From*		**To**

Job Times

	Date	Time	Time Zone
Called Out	05 - Dec - 2011	14:00	MST
On Location			
Job Started	05 - Dec - 2011	23:05	MST
Job Completed	06 - Dec - 2011	00:02	MST
Departed Loc	06 - Dec - 2011	01:30	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				12.387				.	740.		
Surface Casing	Unknown		9.625	8.921	36.		J-55	.	721.9		

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**	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

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Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/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	VersaCem	VERSACEM (TM) SYSTEM (452010)	120.0	sacks	12.3	2.38	13.77	6	13.77
	0.25 lbm	POLY-E-FLAKE (101216940)							
	13.77 Gal	FRESH WATER							
3	SwiftCem	SWIFTCEM (TM) SYSTEM (452990)	120.0	sacks	14.2	1.43	6.85	6	6.85
	0.25 lbm	POLY-E-FLAKE (101216940)							
	6.85 Gal	FRESH WATER							
4	DISPLACEMENT		53.00	bbl	8.4			6	

Calculated Values		Pressures		Volumes					
Displacement	52.3	Shut In: Instant		Lost Returns		*Cement Slurry*	81.4	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	19	Actual Displacement	52.3	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	153.7

Rates

Circulating		*Mixing*	6	*Displacement*	6	Avg. Job	6

Cement Left In Pipe		Amount	***44.7 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***

HALLIBURTON

Cementing Job Log

The Road to Excellence Starts with Safety

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Field: MAMM CREEK	**City (SAP):** SILT	**County/Parish:** Garfield	**State:** Colorado
Legal Description:			
Lat: N 39.502 deg. OR N 39 deg. 30 min. 8.316 secs.		**Long:** W 107.618 deg. OR W -108 deg. 22 min. 53.634 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: FLING, MATTHEW	**Srvc Supervisor:** ARNOLD, EDWARD		**MBU ID Emp #:** 439784

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	12/05/2011 14:00							Crew on location from previous job. 1 DOT charge. all other trucks stayed on location. No add hours.
Assessment Of Location Safety Meeting	12/05/2011 14:30							Water; PH 7; KCL 250; So4 <200; Fe 3; Calcium 120; Chlorides 0; Temp 40; TDS 190.
Pre-Rig Up Safety Meeting	12/05/2011 22:30							Including entire cement crew.
Rig-Up Equipment	12/05/2011 22:35							1 Elite # 1; 1 660 bulk truck; 1 hard line to well head; 1 line to upright, 9 5/8" screw in head
Rig-Up Completed	12/05/2011 22:55							
Pre-Job Safety Meeting	12/05/2011 23:00							Including everyone on location.
Start Job	12/05/2011 23:05							TD 740; TP 721.92; SJ 44.75; OH 12 3/8; Casing 9.625" 36# J-55; Air Drilled Hole.
Pump Water	12/05/2011 23:06		2	2			.0	Fill lines with fresh water.
Test Lines	12/05/2011 23:09					1793.0		found leak on first try, bleed pressure off and fixed. Had to adjust valve on head to get good test. Good pressure test, no leaks.
Pump Spacer 1	12/05/2011 23:19		4	20			64.0	20 BBL fresh water spacer.
Pump Lead Cement	12/05/2011 23:26		6	50.8			97.0	120 sks Lead Cement, 12.3 ppg, 2.38 cf3, 13.77 gal/sk.

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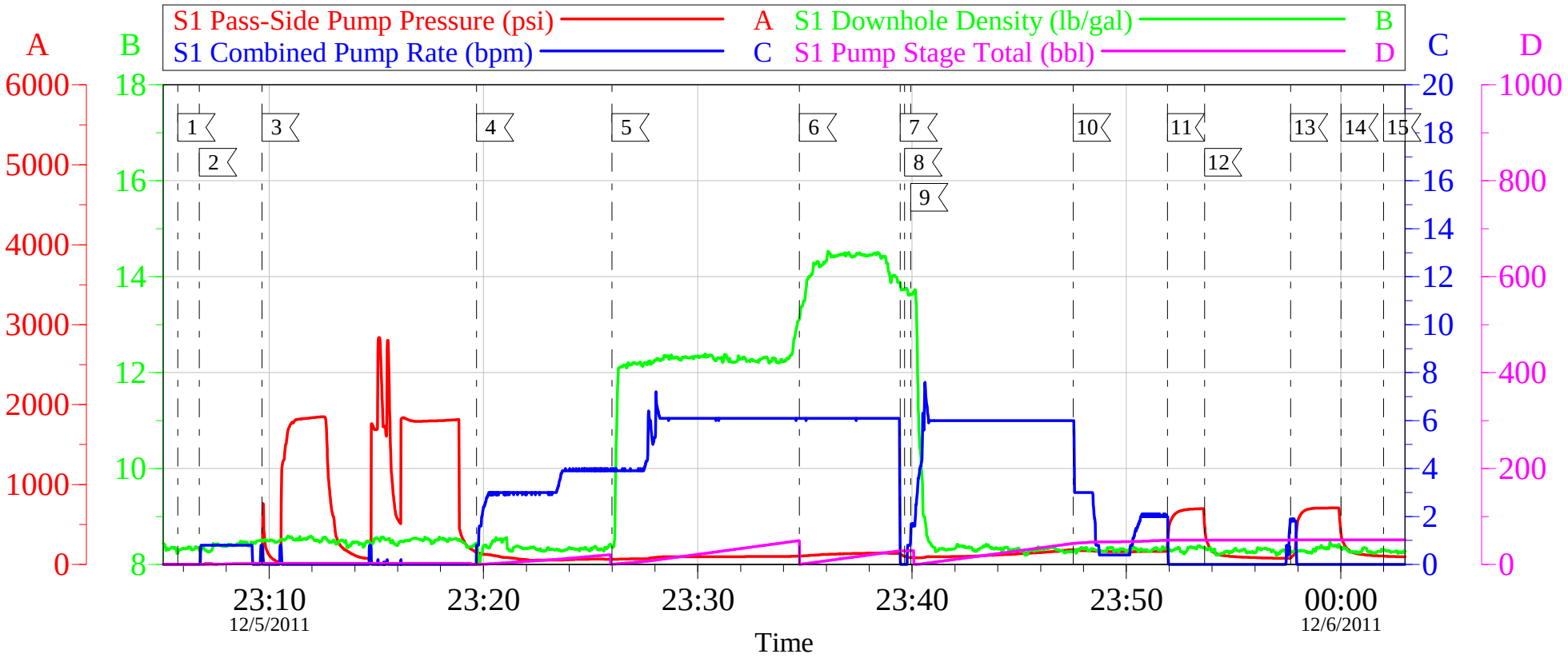
Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Tail Cement	12/05/2011 23:34		6	30.6			160.0	120 sks Tail Cement, 14.2 ppg, 1.43 cf3, 6.85 gal/sk.
Shutdown	12/05/2011 23:39							
Drop Plug	12/05/2011 23:39							Plug left container.
Pump Displacement	12/05/2011 23:39		6	42.3			175.0	Fresh water displacement.
Slow Rate	12/05/2011 23:47		3	10			163.0	Slow rate 10 BBL's prior to bumping the plug. 19 BBL's good cement to surface.
Bump Plug	12/05/2011 23:51				53.3		700.0	Bumped plug, took 500 PSI over.
Check Floats	12/05/2011 23:53							Floats did not hold.
Bump Plug	12/05/2011 23:57		2	0.5			690.0	Rebumped Plug.
Check Floats	12/06/2011 00:00							Floats were leaking, shut in well.
End Job	12/06/2011 00:02							
Pre-Rig Down Safety Meeting	12/06/2011 00:05							Including entire cement crew.
Rig-Down Equipment	12/06/2011 00:10							
Rig-Down Completed	12/06/2011 01:00							
Pre-Convoy Safety Meeting	12/06/2011 01:30							Including entire cement crew.
Crew Leave Location	12/06/2011 01:35							Crew leave location for Service Center to reload bulk trucks.
Other	12/06/2011 01:35							Thank You for using Halliburton. Ed Arnold and Crew.

BILL BARRETT KAUFMAN 22D-25-692

9 5/8" SURFACE



Local Event Log

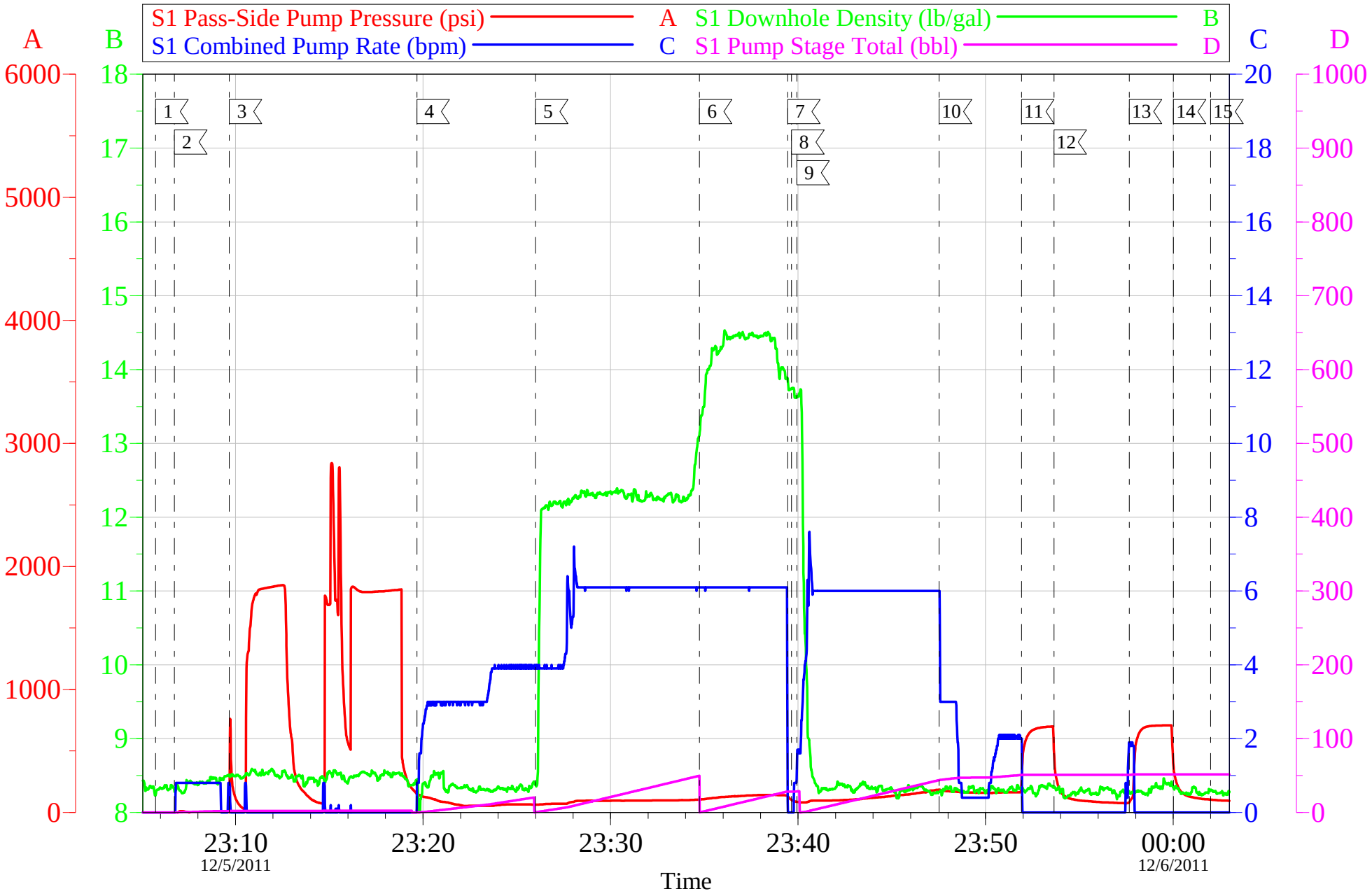
1	START JOB	12/5/2011 23:05:45	2	FILL LINES	12/5/2011 23:06:45
3	TEST LINES	12/5/2011 23:09:40	4	H20 SPACER	12/5/2011 23:19:40
5	LEAD CEMENT	12/5/2011 23:26:00	6	TAIL CEMENT	12/5/2011 23:34:44
7	SHUT DOWN	12/5/2011 23:39:26	8	DROP PLUG	12/5/2011 23:39:39
9	H2O DISPLACEMENT	12/5/2011 23:39:56	10	SLOW RATE	12/5/2011 23:47:31
11	BUMP PLUG	12/5/2011 23:51:55	12	CHECK FLOATS	12/5/2011 23:53:39
13	REBUMP PLUG	12/5/2011 23:57:40	14	CHECK FLOATS	12/6/2011 00:00:01
15	END JOB	12/6/2011 00:02:00			

Customer:	Bill Barrett	Job Date:	05-Dec-2011	Sales Order #:	9112124
Well Description:	Kaufman 22D-25-692	Job Type:	Surface	ADC Used:	Yes
Company Rep:	Cassey Lauer	Cement Supervisor:	Ed Arnold	Elite #1:	Andrew Brennecke

OptiCem v6.4.10
06-Dec-11 00:32

BILL BARRETT KAUFMAN 22D-25-692

9 5/8" SURFACE



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Well Description:	Kaufman 22D-25-692	Job Type:	Surface	ADC Used:	Yes
Company Rep:	Cassey Lauer	Cement Supervisor:	Ed Arnold	Elite #1:	Andrew Brennecke

OptiCem v6.4.10
06-Dec-11 00:33

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Water Analysis Report

Company:	Bill Barrett	**Date:**	12/5/2011
Submitted by:	ED ARNOLD	**Date Rec.:**	12/5/2011
Attention:	J.TROUT	**S.O.#**	9112124
Lease	Kaufman	**Job Type:**	Surface
Well #	22D-25-692		

Specific Gravity	*MAX*	1	
pH	*8*	7	
Potassium (K)	*5000*	250	Mg / L
Calcium (Ca)	*500*	120	Mg / L
Iron (FE2)	*300*	0	Mg / L
Chlorides (Cl)	*3000*	0	Mg / L
Sulfates (SO_4)	*1500*	<200	Mg / L
Chlorine (Cl_2)		0	Mg / L
Temp	*40-80*	40	Deg
Total Dissolved Solids		190	Mg / L

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Respectfully: ED ARNOLD

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

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CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
9112124	10	12/6/2011
Customer:		**Job Type (BOM):**
BILL BARRETT CORPORATION E-BILL		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
CASSEY LAUER		05-045-21151
Well Name:		**Well Number:**
KAUFMAN		22D-25-692
Well Type:	**Well Country:**	
Development Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
No	Colorado	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**	**12/6/2011**
Survey Interviewer	**The survey interviewer is the person who initiated the survey.**	**EDWARD ARNOLD (HX46731)**
Customer Participation	**Did the customer partipcipate in this survey? (Y/N)**	**Yes**
Customer Representative	**Enter the Customer representative name**	**CASSEY 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**	

CUSTOMER SIGNATURE

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CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
9112124	10	12/6/2011
Customer:		**Job Type (BOM):**
BILL BARRETT CORPORATION E-BILL		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
CASSEY LAUER		05-045-21151
Well Name:		**Well Number:**
KAUFMAN		22D-25-692
Well Type:	**Well Country:**	
Development Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
No	Colorado	Garfield

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	12/6/2011

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.	2
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

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CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
9112124	10	12/6/2011
Customer:		**Job Type (BOM):**
BILL BARRETT CORPORATION E-BILL		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
CASSEY LAUER		05-045-21151
Well Name:		**Well Number:**
KAUFMAN		22D-25-692
Well Type:	**Well Country:**	
Development Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
No	Colorado	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 cment mixed at designed density divided by total BBLs of cement multiplied by 100	97
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	97
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