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# **BILL BARRETT CORPORATION E-BILL**

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**FEDERAL 32C-20-691  
MAMM CREEK  
Garfield County , Colorado**

**Cement Surface Casing**  
**02-Jun-2011**

**Post Job Summary**

## The Road to Excellence Starts with Safety

Sold To #: 343492	Ship To #: 2855776	Quote #:	Sales Order #: 8106968
Customer: BILL BARRETT CORPORATION E-BILL	Customer Rep: Henderson, Josh		
Well Name: FEDERAL	Well #: 32C-20-691	API/UWI #: 05-045-19677	
Field: MAMM CREEK	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Lat: N 39.513 deg. OR N 39 deg. 30 min. 48.1 secs.	Long: W 107.575 deg. OR W -108 deg. 25 min. 30.158 secs.		
Contractor: Pro Petro	Rig/Platform Name/Num: Pro Petro		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: METLI, MARSHALL	Srv Supervisor: HUGENTOBLE, LOGAN	MBU ID Emp #: 447333	

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BROWN, TRAVIS A	8	396848	CHASTAIN, DERICK Allan	8	455848	DEUSSEN, EDWARD Eric	8	485182
HUGENTOBLE, LOGAN Mark	8	447333						

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10551730C	120 mile	10784080	120 mile	10804579	120 mile	10973571	120 mile
11259884	120 mile						

## Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
6/2/11	8	2						

TOTAL	Total is the sum of each column separately							
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Job				Job Times			
Formation Name				Date	Time	Time Zone	
Formation Depth (MD)	Top	Bottom		Called Out	02 - Jun - 2011	06:00	MST
Form Type		BHST		On Location	02 - Jun - 2011	06:00	MST
Job depth MD	850. ft	Job Depth TVD	850. ft	Job Started	02 - Jun - 2011	10:02	MST
Water Depth		Wk Ht Above Floor	2. ft	Job Completed	02 - Jun - 2011	11:16	MST
Perforation Depth (MD)	From	To		Departed Loc	02 - Jun - 2011	16:00	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
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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		20.00	bbl	.	.0	.0	.0	
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)	200.0	sacks	12.3	2.38	13.75		13.75
	13.75 Gal	FRESH WATER							
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	120.0	sacks	14.2	1.43	6.85		6.85
	6.85 Gal	FRESH WATER							
4	Displacement		61.00	bbl	.	.0	.0	.0	
<b>Calculated Values</b>		<b>Pressures</b>		<b>Volumes</b>					
Displacement	61	Shut In: Instant		Lost Returns		Cement Slurry	115	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	20	Actual Displacement	61	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
<b>Rates</b>									
Circulating		Mixing	5	Displacement	5	Avg. Job	5		
Cement Left In Pipe	Amount	44 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					

# JOB PROCEDURE PRO PETRO

## Pre-Planned Job Procedure Surface Pipe

EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job		DENSITY OVER RATE			
6	Test Lines	3000				
10	H2O Spacer	20.0		8.33		
	Lead Cement	84.8	200	12.3	2.38	13.75
15	Tail Cement	30.6	120	14.2	1.43	6.58
	Shut Down		500 psi over			
22	Drop Plug					
	Slow Rate	51.4				
23	Displace W/H2O	61.4				
26	Land Plug	203.0				
2	End Job					
			Do Not Overdisplace			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH		FLOAT COLLAR	BBL/FT	H2O REQ.
61.45	839.1	44.20		794.90	0.0773	181
PSI to Lift Pipe	414.9	*****Use Mud Scales on Each Tier*****				
Total Displacement	61.45					
CALCULATED DIFFERENTIAL PSI		203		TOTAL FLUID PUMPED		197
Collapse	1400	Burst	2270		SO#	8106869

*The Road to Excellence Starts with Safety*

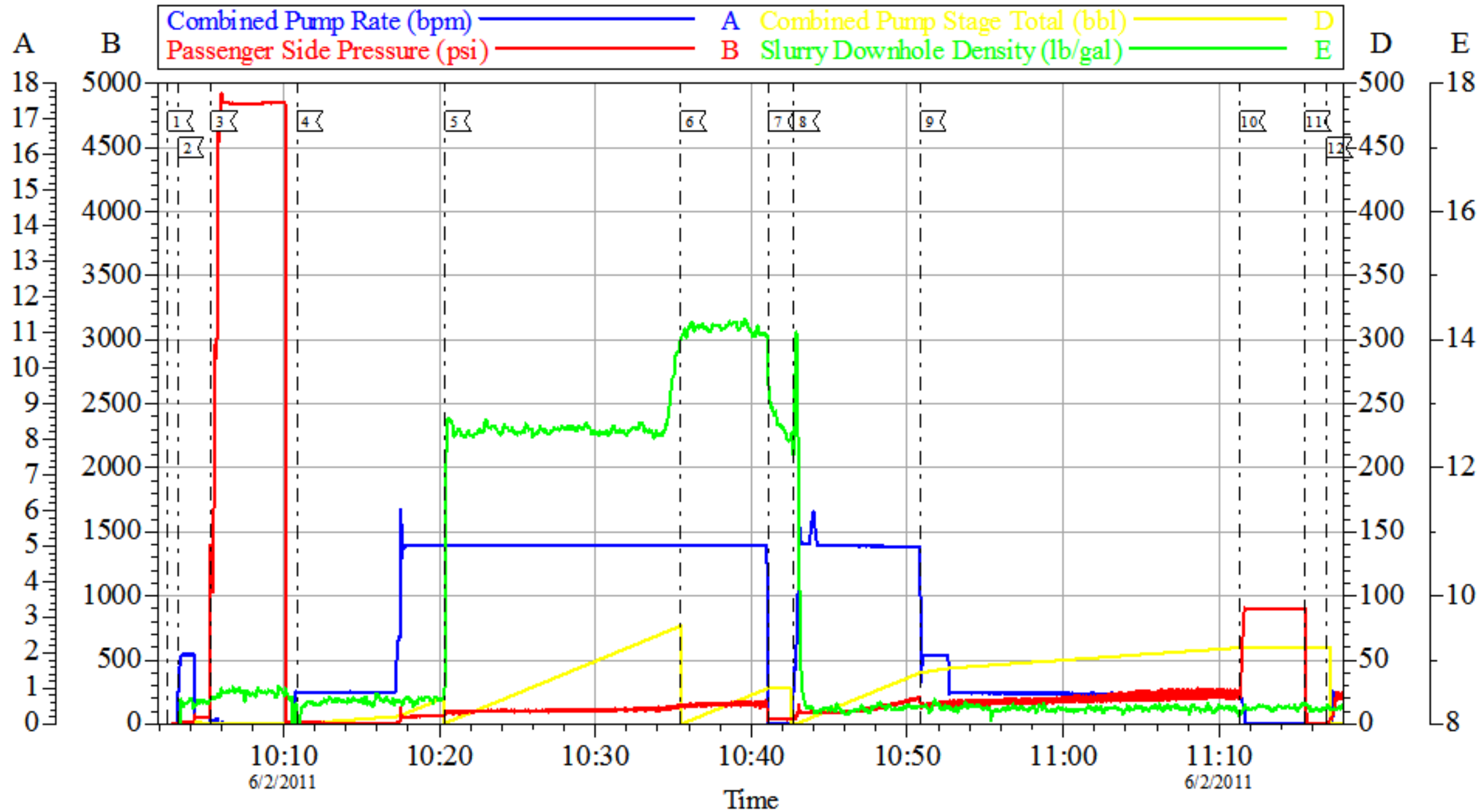
<b>Sold To #:</b> 343492	<b>Ship To #:</b> 2855776	<b>Quote #:</b>	<b>Sales Order #:</b> 8106968
<b>Customer:</b> BILL BARRETT CORPORATION E-BILL		<b>Customer Rep:</b> Henderson, Josh	
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<b>Legal Description:</b>			
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<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>Srv Supervisor:</b> HUGENTOBLE, LOGAN	<b>MBU ID Emp #:</b> 447333

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	06/02/2011 06:00							
Pre-Convoy Safety Meeting	06/02/2011 06:00							ALL HES EMPLOYEES
Arrive At Loc	06/02/2011 06:00							RIG STILL RUNNING CASING
Assessment Of Location Safety Meeting	06/02/2011 06:00							ALL HES EMPLOYEES
Rig-Up Equipment	06/02/2011 06:00							1 HT-400 PUMP TRUCK, 1 660 BULK TRUCK, 1 F-450 P/U, 1 PLUG CONTAINER
Pre-Job Safety Meeting	06/02/2011 09:45							ALL HES EMPLOYEES, RIG CREW, CO REP AND ANY 3RD PARTY VENDORS
Start Job	06/02/2011 10:02							TP 839.1 FT, TD 850 FT, FC 794.7 FT, HOLE 12.25", MUD WT AIR, RATE WILL BE 5, WILL BUMP 500 PSI OVER LAND PSI
Pump Water	06/02/2011 10:03		2	2			27.0	FILL LINES PRIOR TO PRESSURE TESTING LINES
Pressure Test	06/02/2011 10:05							NO LEAKS, KICK OUTS SET TO 3000 PSI FOR TEST.
Pump Spacer 1	06/02/2011 10:10		5	20			106.0	FRESH WATER
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Pump Lead Cement	06/02/2011 10:20		5	85			163.0	200 SKS VERSACEM CMT TO BE MIXED AT 12.3 PPG, 2.38 YIELD, 13.77 GAL/SK, CMT TO BE WEIGHED VIA PRESSURE BALANCED MUD SCALES WET AND DRY SAMPLES SUBMITTED.
Pump Tail Cement	06/02/2011 10:35		5	30			137.0	120 SKS SWIFTCM CMT TO BE MIXED AT 14.2 PPG, 1.43 YIELD, 6.85 GAL/SK, CMT TO BE WEIGHED VIA PRESSURE BALANCED MUD SCALES, WET AND DRY SAMPLES SUBMITTED,
Shutdown	06/02/2011 10:41							
Drop Plug	06/02/2011 10:41							PLUG LAUNCHED
Pump Displacement	06/02/2011 10:42		5	61			228.0	FRESH WATER
Slow Rate	06/02/2011 10:50		1				231.0	10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	06/02/2011 11:11						728.0	PLUG LANDED
Check Floats	06/02/2011 11:15							FLOATS HOLDING, 20 BBLS CEMENT TO SURFACE
End Job	06/02/2011 11:16							THANK YOU FOR USING HES LOGAN HUGENTOBLE AND CREW
Post-Job Safety Meeting (Pre Rig-Down)	06/02/2011 12:00							ALL HES EMPLOYEES
Rig-Down Equipment	06/02/2011 14:00							
Pre-Convoy Safety Meeting	06/02/2011 16:00							ALL HES EMPLOYEES
Crew Leave Location	06/02/2011 16:05							LOCATION CLEAN

# BILL BARRETT

## SURFACE



Local Event Log			
1	START JOB	10:02:35	2
2	FILL LINES	10:03:15	3
3	PRESSURE TEST	10:05:23	4
4	PUMP H2O SPACER	10:10:52	5
5	PUMP LEAD CEMENT	10:20:23	6
6	PUMP TAIL CEMENT	10:35:27	7
7	SHUT DOWN/DROP PLUG	10:41:06	8
8	PUMP DISPLACEMENT	10:42:44	9
9	SLOW RATE	10:50:51	10
10	BUMP PLUG	11:11:20	11
11	CHECK FLOATS	11:15:31	12
12	END JOB	11:16:55	

Customer:	BILL BARRETT	Job Date:	02-Jun-2011	Sales Order #:	8106968
Well Description:	32C-20-691	Job Type:	SURFACE	ADC Used:	YES
Company Rep:	JOSH HENDERSON	Cement Supervisor:	LOGAN HUGENTOBLE	Elite # 2 / Operator:	ED DEUSSEN

# HALLIBURTON

## Water Analysis Report

Company: BILL BARRETT

Submitted by: LOGAN HUGENTOBLER

Attention:

Lease FEDERAL

Well # 32C-20-691

Date: 6/2/2011

Date Rec.: 6/2/2011

S.O.# 8106968

Job Type: 9.625 SURFACE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>0</i> Mg / L
Calcium (Ca)	<i>500</i>	<i>250</i> Mg / L
Iron (FE2)	<i>300</i>	<i>0</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>0</i> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<i>below 200</i> Mg / L
Chlorine (Cl <sub>2</sub> )		<i>0</i> Mg / L
Temp	<i>40-80</i>	<i>62</i> Deg
Total Dissolved Solids		<i>470</i> Mg / L

Respectfully: LOGAN HUGENTOBLER

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



<b>Sales Order #:</b> 8106968	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 6/2/2011
<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> 05-045-19677
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 32C-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	6/2/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	LOGAN HUGENTOBLE (HB15210)
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.	

CUSTOMER SIGNATURE

<b>Sales Order #:</b> 8106968	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 6/2/2011
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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> The date the survey was conducted	6/2/2011

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.	8
<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.	2
<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	6
<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> 8106968	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 6/2/2011
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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	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