HALLIBURTON

WILLIAMS PRODUCTION RMT INC - EBUS

SP 431-14
PARACHUTE
Garfield County , Colorado

Cement Surface Casing

Post Job Report

HALLIBURTON

Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 300721	**Ship To #:** 2891550	**Quote #:**	**Sales Order #:** 8490153
Customer: WILLIAMS PRODUCTION RMT INC - EBUS		**Customer Rep:** SCHULTS, MIKE	
Well Name: SP	**Well #:** 431-14		**API/UWI #:** 05-045-19704
Field: PARACHUTE	**City (SAP):** PARACHUTE	**County/Parish:** Garfield	**State:** Colorado
Legal Description:			
Lat: N 39.438 deg. OR N 39 deg. 26 min. 17.282 secs.		**Long:** W 107.965 deg. OR W -108 deg. 2 min. 5.647 secs.	
Contractor: H&P 271	**Rig/Platform Name/Num:** H&P 271		
Job Purpose: Cement Surface Casing			**Ticket Amount:**
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: KOHL, KYLE	**Srvc Supervisor:** ROSS, CHARLES		**MBU ID Emp #:** 453128

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	11/20/2011 11:30							
Pre-Convoy Safety Meeting	11/20/2011 14:50							WITH ALL HES EE'S
Depart from Service Center or Other Site	11/20/2011 15:00							
Arrive at Location from Service Center	11/20/2011 17:23							
Assessment Of Location Safety Meeting	11/20/2011 17:43							WITH ALL HES EE'S
Pre-Rig Up Safety Meeting	11/20/2011 17:53							WITH ALL HES EE'S
Rig-Up Equipment	11/20/2011 18:00							1-F550 PICKUP, 1-ELITE PUMP TRUCK, 2-660 CEMENT BULK TRUCKS, 1-HARD LINE TO RIG AND WASH UP OUT TO THE CELLAR FROM MANIFOLD, 1- 9 5/8" PLUG CONTAINER.
Pre-Job Safety Meeting	11/20/2011 19:24							WITH ALL HES EE'S AND RIG CREW
Start Job	11/20/2011 19:38							TD 2418, 9 5/8 32.3# CASING SET @ 2403, SJ 44.0, FC 2359 MW# 9.8, RIG CIRCULATED 1 HR PRIOR TO CEMENT JOB, HEAD AND CASING CHAINED DOWN BECAUSE OF PSI TO LIFT
Pump Water	11/20/2011 19:38		2	2			24.0	FILL LINES, FRESH WATER
Test Lines	11/20/2011 19:40							TEST TO 3000 PSI

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Spacer 1	11/20/2011 19:49		4	20			96.0	FRESH WATER
Pump Lead Cement	11/20/2011 19:54		7	190.7			250.0	450 SKS OF VERSACEM PUMPED @ 12.3 PPG, YIELD 2.38, WATER 13.75
Pump Tail Cement	11/20/2011 20:26		7	60.1			245.0	160 SKS OF VERSACEM PUMPED @ 12.8 PPG, YIELD 2.11, WATER 11.75
Shutdown	11/20/2011 20:38							
Drop Plug	11/20/2011 20:47							TOP PLUG, PLUG WENT
Pump Displacement	11/20/2011 20:47		10	75			610.0	FRESH WATER
Slow Rate	11/20/2011 21:11		2	10.7			330.0	RATE SLOWED 10 BBL PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	11/20/2011 21:14		2		185.7		340.0	PLUG LANDED. PRESSURED UP TO 755 PSI.
Check Floats	11/20/2011 21:16							FLOATS HELD
End Job	11/20/2011 21:17							NO RETURNS UNTIL 40 BBL PUMPED, THEN GOOD RETURNS UNTIL SHUT DOWN. NO RETURNS ON DISPLACEMENT UNTIL 75 BBL PUMPED. LOST RETURNS AT 125 BBL PUMPED. NO MOVEMENT OF PIPE THROUGHOUT JOB.
Post-Job Safety Meeting (Pre Rig-Down)	11/20/2011 21:20							WITH ALL HES EE'S
Rig-Down Equipment	11/20/2011 21:25							WAITING ON TOP OUT INFORMATION FROM CO REP.
Comment	11/20/2011 23:38							INFORMED THAT WE WILL NOT BE DOING THE TOP OUT AT THIS TIME.
Pre-Convoy Safety Meeting	11/21/2011 00:15							WITH ALL HES EE'S
Activity Description	**Date/Time**	**Cht**	**Rate bbl/ min**	**Volume bbl**		**Pressure psig**		**Comments**

HALLIBURTON

Cementing Job Log

		#		Stage	Total	Tubing	Casing	
Depart Location for Service Center or Other Site	11/21/2011 00:20							THANKS FOR USING GRAND JUNCTION HALLIBURTON CEMENT DEPARTMENT, CHUCK ROSS AND CREW

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

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Contractor: H&P 271	**Rig/Platform Name/Num:** H&P 271		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: KOHL, KYLE	**Srvc Supervisor:** ROSS, CHARLES	**MBU ID Emp #:** 453128	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BATH, KYLE Thomas		477632	BECK, MICHAEL George		489151	ROMKEE, DALE Alan		488215
ROSS, CHARLES Raymond		453128						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10722398	60 mile	10867531	60 mile	10989685	60 mile	11139330	60 mile
11259881	60 mile	11560046	60 mile	11562538	60 mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	2418. ft	**Job Depth TVD**	2418. ft		
Water Depth		**Wk Ht Above Floor**	5.5 ft		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out	20 - Nov - 2011	11:30	MST
On Location	20 - Nov - 2011	17:23	MST
Job Started	20 - Nov - 2011	19:38	MST
Job Completed	20 - Nov - 2011	21:14	MST
Departed Loc	21 - Nov - 2011	00:20	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
13 1/2" OPEN HOLE				13.5				.	2418.		
9 5/8" SURFACE CASING	Unknown		9.625	9.001	32.3			.	2403.		

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**	

HALLIBURTON

Cementing Job Summary

Fluid Data

Stage/Plug #: 1

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	.0	
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)	450.0	sacks	12.3	2.38	13.75		13.75
	13.75 Gal	FRESH WATER							
3	Tail Cement	VERSACEM (TM) SYSTEM (452010)	160.0	sacks	12.8	2.11	11.75		11.75
	11.75 Gal	FRESH WATER							
4	Displacement Fluid		185.00	bbl	8.34	.0	.0	.0	

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

Rates

Circulating		Mixing		Displacement		Avg. Job	

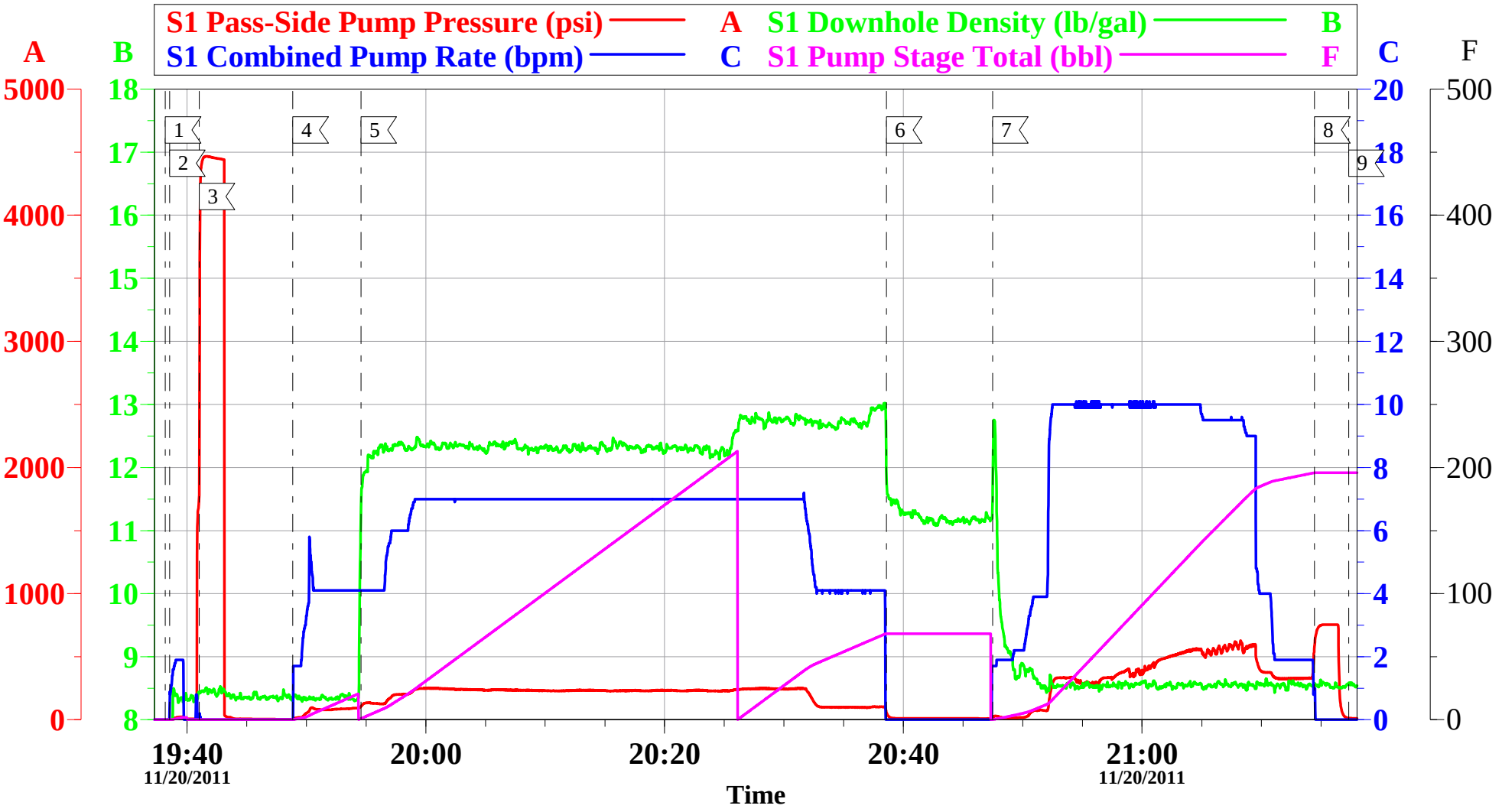
Cement Left In Pipe	Amount	44 ft	Reason	Shoe Joint

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

Williams - SP 431-14

Surface



Local Event Log

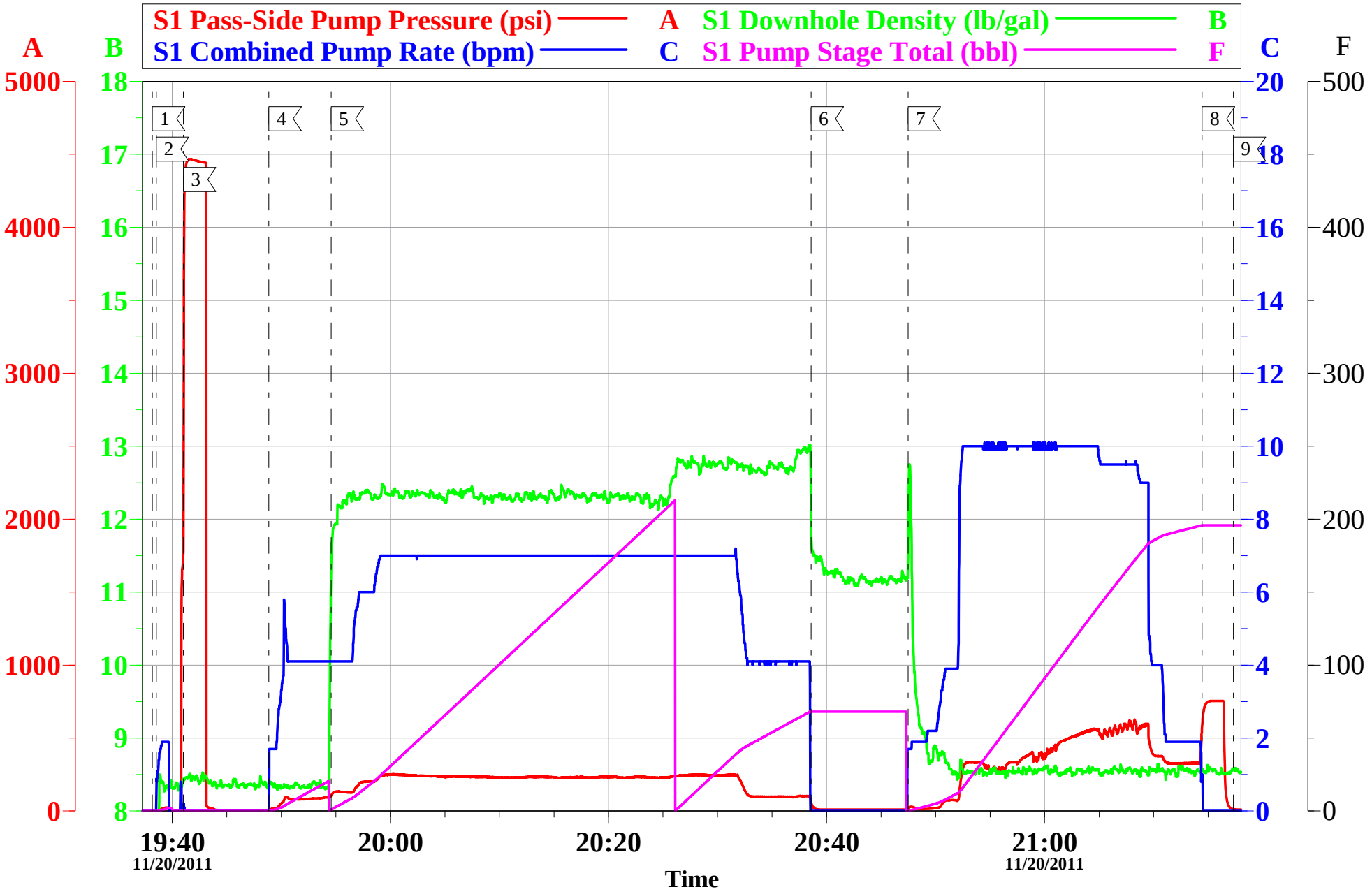
1	START JOB	19:38:11	2	FILL LINES	19:38:32	3	PRESSURE TEST	19:41:01
4	PUMP SPACER	19:48:51	5	PUMP CEMENT	19:54:34	6	SHUT DOWN	20:38:35
7	PUMP DISPLACEMENT	20:47:29	8	BUMP PLUG / SHUT DOWN	21:14:27	9	END JOB	21:17:18

Customer:	Williams	Job Date:	20-Nov-2011	Sales Order #:	8490153
Well Description:	SP 431-14	Job type:	Surface	ADC Used:	Yes
Customer Rep:	Mike Schultz	Service Supervisor:	Chuck Ross	Operator/ Pump:	Mike Beck

OptiCem v6.4.10
20-Nov-11 21:32

Williams - SP 431-14

Surface



Customer:	Williams	Job Date:	20-Nov-2011	Sales Order #:	8490153
Well Description:	SP 431-14	Job type:	Surface	ADC Used:	Yes
Customer Rep:	Mike Schultz	Service Supervisor:	Chuck Ross	Operator/ Pump:	Mike Beck

OptiCem v6.4.10
20-Nov-11 21:32

HALLIBURTON

Water Analysis Report

Company:	**WILLIAMS**	**Date:**	**11/20/2011**
Submitted by:	**CHUCK ROSS**	**Date Rec.:**	**11/20/2011**
Attention:	**JON TROUT**	**S.O.#**	**8490153**
Lease	**SP**	**Job Type:**	**9 5/8" SURFACE**
Well #	**431-14**		

Specific Gravity	***MAX***	**1**	
pH	***8***	**8**	
Potassium (K)	***5000***	**300**	**Mg / L**
Calcium (Ca)	***500***		**Mg / L**
Iron (FE2)	***300***	**15**	**Mg / L**
Chlorides (Cl)	***3000***	**0**	**Mg / L**
Sulfates (SO_4)	***1500***	**300**	**Mg / L**
Chlorine (Cl_2)		**NA**	**Mg / L**
Temp	***40-80***	**48**	**Deg**
Total Dissolved Solids		**490**	**Mg / L**

Respectfully: **CHUCK ROSS**

Title: **CEMENTING SUPERVISOR**

Location: **Grand Junction, CO**

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
8490153	10	11/20/2011
Customer:		**Job Type (BOM):**
WILLIAMS PRODUCTION RMT INC - EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
MIKE SCHULTS		05-045-19704
Well Name:		**Well Number:**
SP		431-14
Well Type:	**Well Country:**	
Development Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
	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**	**11/20/2011**
Survey Interviewer	**The survey interviewer is the person who initiated the survey.**	**CHARLES ROSS (HB20648)**
Customer Participation	**Did the customer partipcipate in this survey? (Y/N)**	**Yes**
Customer Representative	**Enter the Customer representative name**	**MIKE SCHULTS**
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

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
8490153	10	11/20/2011
Customer:		**Job Type (BOM):**
WILLIAMS PRODUCTION RMT INC - EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
MIKE SCHULTS		05-045-19704
Well Name:		**Well Number:**
SP		431-14
Well Type:	**Well Country:**	
Development Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
	Colorado	Garfield

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	11/20/2011

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.	Deviated
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	4.5
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.	1.58
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

HALLIBURTON

CUSTOMER SURVEY

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Customer Representative:		**API / UWI: (leave blank if unknown)**
MIKE SCHULTS		05-045-19704
Well Name:		**Well Number:**
SP		431-14
Well Type:	**Well Country:**	
Development Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
	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	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