HALLIBURTON

WILLIAMS PRODUCTION RMT INC - EBUS

PA 324-20
Parachute
Garfield County , Colorado

Cement Surface Casing

26-Nov-2011

Post Job Summary

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300721	**Ship To #:** 2891324	**Quote #:**	**Sales Order #:** 9068265
Customer: WILLIAMS PRODUCTION RMT INC - EBUS		**Customer Rep:** David, Buddy	
Well Name: PA	**Well #:** 324-20		**API/UWI #:**
Field: Parachute	**City (SAP):** PARACHUTE	**County/Parish:** Garfield	**State:** Colorado
Lat: N 39.504 deg. OR N 39 deg. 30 min. 14.08 secs.		**Long:** W 108.019 deg. OR W -109 deg. 58 min. 51.11 secs.	
Contractor: NABORS 577	**Rig/Platform Name/Num:** NABORS 577		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: MAYO, MARK	**Srvc Supervisor:** **ERIC CARTER**	**MBU ID Emp #:** **345598**	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BANKS, BRENT A	15	371353	CARTER, ERIC Earl	15	345598	JENKINS, DEMON Lashaun	15	457892
LINN, PAUL Andrew	15	479143						

Equipment

HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*
10713212	60 mile	10871245	60 mile	10897849	60 mile	10951247	60 mile
11021972	60 mile	11027039	60 mile	11360881	60 mile		

Job Hours

Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours
11/26/11	15	1						
TOTAL		*Total is the sum of each column separately*						

Job

Formation Name					
Formation Depth (MD)	**Top**	0	**Bottom**	**1345”**	
Form Type		**BHST**			
Job depth MD	1345. ft	**Job Depth TVD**	1345. ft		
Water Depth		**Wk Ht Above Floor**	5. ft		
Perforation Depth (MD)	*From*		**To**		

Job Times

	Date	Time	Time Zone
Called Out	26 - Nov - 2011	00:00	MST
On Location	26 - Nov - 2011	05:30	MST
Job Started	26 - Nov - 2011	18:28	MST
Job Completed	26 - Nov - 2011	19:29	MST
Departed Loc	26 - Nov - 2011	20:30	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				13.5				.	1345.		
SURFACE CASING	Unknown		9.625	9.001	32.3		H-40	.	1325.		

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*	

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	7	
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)	210.0	sacks	12.3	2.38	13.75	7.5	13.75
	13.75 Gal	FRESH WATER							
3	Tail Cement	VERSACEM (TM) SYSTEM (452010)	160.0	sacks	12.8	2.11	11.75	8	11.75
	11.75 Gal	FRESH WATER							
4	Displacement Fluid		100.9	bbl	8.34	.0	.0	10	

Calculated Values		Pressures		Volumes					
Displacement	100.9	Shut In: Instant		Lost Returns	NONE	*Cement Slurry*	149.1	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	5	Actual Displacement	100.9	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	270

Rates

Circulating	*RIG*	*Mixing*	8	*Displacement*	10	Avg. Job	9

Cement Left In Pipe Amount ***43.3 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

Sold To #: 300721	**Ship To #:** 2891324	**Quote #:**	**Sales Order #:** 9068265
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Well Name: PA	**Well #:** 324-20		**API/UWI #:**
Field: Parachute	**City (SAP):** PARACHUTE	**County/Parish:** Garfield	**State:** Colorado
Legal Description:			
Lat: N 39.504 deg. OR N 39 deg. 30 min. 14.08 secs.		**Long:** W 108.019 deg. OR W -109 deg. 58 min. 51.11 secs.	
Contractor: NABORS 577	**Rig/Platform Name/Num:** NABORS 577		
Job Purpose: Cement Surface Casing			**Ticket Amount:**
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: MAYO, MARK	**Srvc Supervisor:** **ERIC CARTER**		**MBU ID Emp #:** **345598**

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	11/26/2011 00:00							
Depart Yard Safety Meeting	11/26/2011 01:20							ATTENDED BY ALL HES CREW
Crew Leave Yard	11/26/2011 01:30							
Arrive At Loc	11/26/2011 05:30							RIG DRILLING
Assessment Of Location Safety Meeting	11/26/2011 16:30							ATTENDED BY ALL HES CREW
Other	11/26/2011 17:00							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	11/26/2011 17:20							ATTENDED BY ALL HES CREW
Rig-Up Equipment	11/26/2011 17:30							
Pre-Job Safety Meeting	11/26/2011 18:00							ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Start Job	11/26/2011 18:28							TP 1325', TD 1345', SJ 43.32', FC 1281.68', MW 9.6 PPG, PV 24, YP 20, CASING 9.625", 32.3#, H-40, HOLE 13.5"RIG CIRCULATED FOR 2 HRS PRIOR TO JOB AT 17.5 BBL/MIN
Other	11/26/2011 18:28		2	2			50.0	FILL LINES
Test Lines	11/26/2011 18:30						3050.0	PRESSURED UP TO PSI, PRESSURE HELD
Pump Spacer 1	11/26/2011 18:34		7	20			213.0	FRESH WATER
Pump Lead Cement	11/26/2011 18:42		7.5	89			310.0	210 SKS MIXED AT 12.3 PPG, 2.38 YIELD, 13.75 GL/SK

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Tail Cement	11/26/2011 18:53		8	60.1			330.0	160 SKS MIXED AT 12.8 PPG, 2.11 YIELD, 11.75 GL/SK
Shutdown	11/26/2011 19:00							
Drop Top Plug	11/26/2011 19:03							COMPANY REP VERIFIED THAT PLUG LAUNCHED
Pump Displacement	11/26/2011 19:05		10	90.9			540.0	FRESH WATER, COMPANY REP REQUESTED TO ADD 100 LBS BARACARBINATE IN FIRST 20 BBLS DISPLACEMENT
Slow Rate	11/26/2011 19:16		2	10			325.0	
Bump Plug	11/26/2011 19:23						805.0	PLUG LANDED
Check Floats	11/26/2011 19:29							FLOATS HELD
End Job	11/26/2011 19:29							GOOD CIRCULATION THROUGH OUT JOB, 5 BBLS CEMENT TO SURFACE, PIPE WAS NOT MOVED DURING JOB
Post-Job Safety Meeting (Pre Rig-Down)	11/26/2011 19:30							ATTENDED BY ALL HES CREW
Rig-Down Equipment	11/26/2011 19:35							
Depart Location Safety Meeting	11/26/2011 20:20							ATTENDED BY ALL HES CREW
Crew Leave Location	11/26/2011 20:30							THANK YOU FOR USING HALLIBURTON CEMENT, ERIC CARTER AND CREW.

HALLIBURTON

Water Analysis Report

Company:	WILLIAMS	**Date:**	11/26/2011
Submitted by:	ERIC CARTER	**Date Rec.:**	11/26/2011
Attention:	J.Trout	**S.O.#**	9068265
Lease	NAB 577	**Job Type:**	SURFACE
Well #	PA 324-20		

Specific Gravity	*MAX*	1	
pH	*8*	7	
Potassium (K)	*5000*	0	Mg / L
Hrdness	*500*	120	Mg / L
Iron (FE2)	*300*	0	Mg / L
Chlorides (Cl)	*3000*	500	Mg / L
Sulfates (SO_4)	*1500*	<200	Mg / L
Temp	*40-80*	53	Deg
Total Dissolved Solids		440	Mg / L

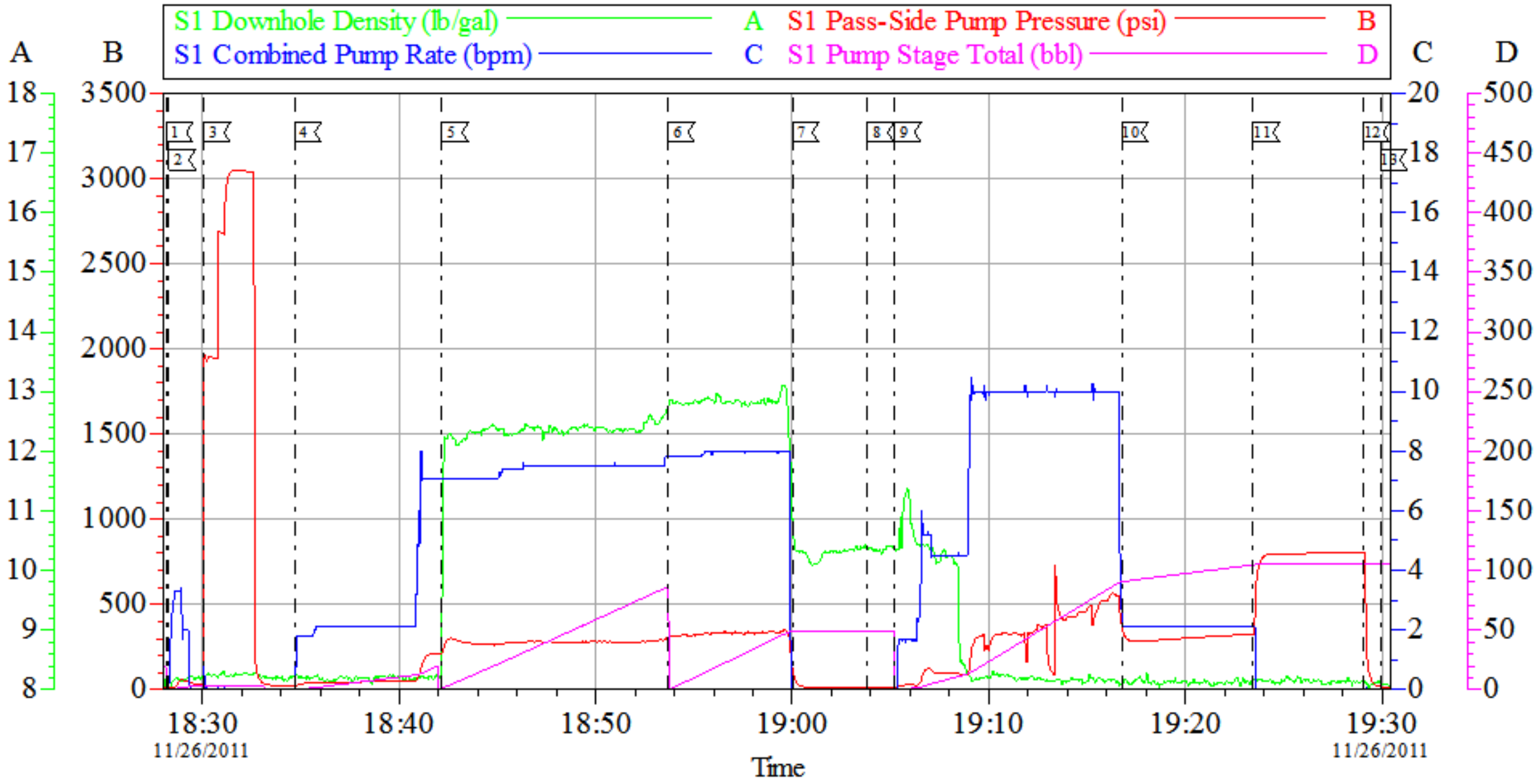
Respectfully: ERIC CARTER

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

WILLIAMS/PA 324-20

9.625" SURFACE



Local Event Log

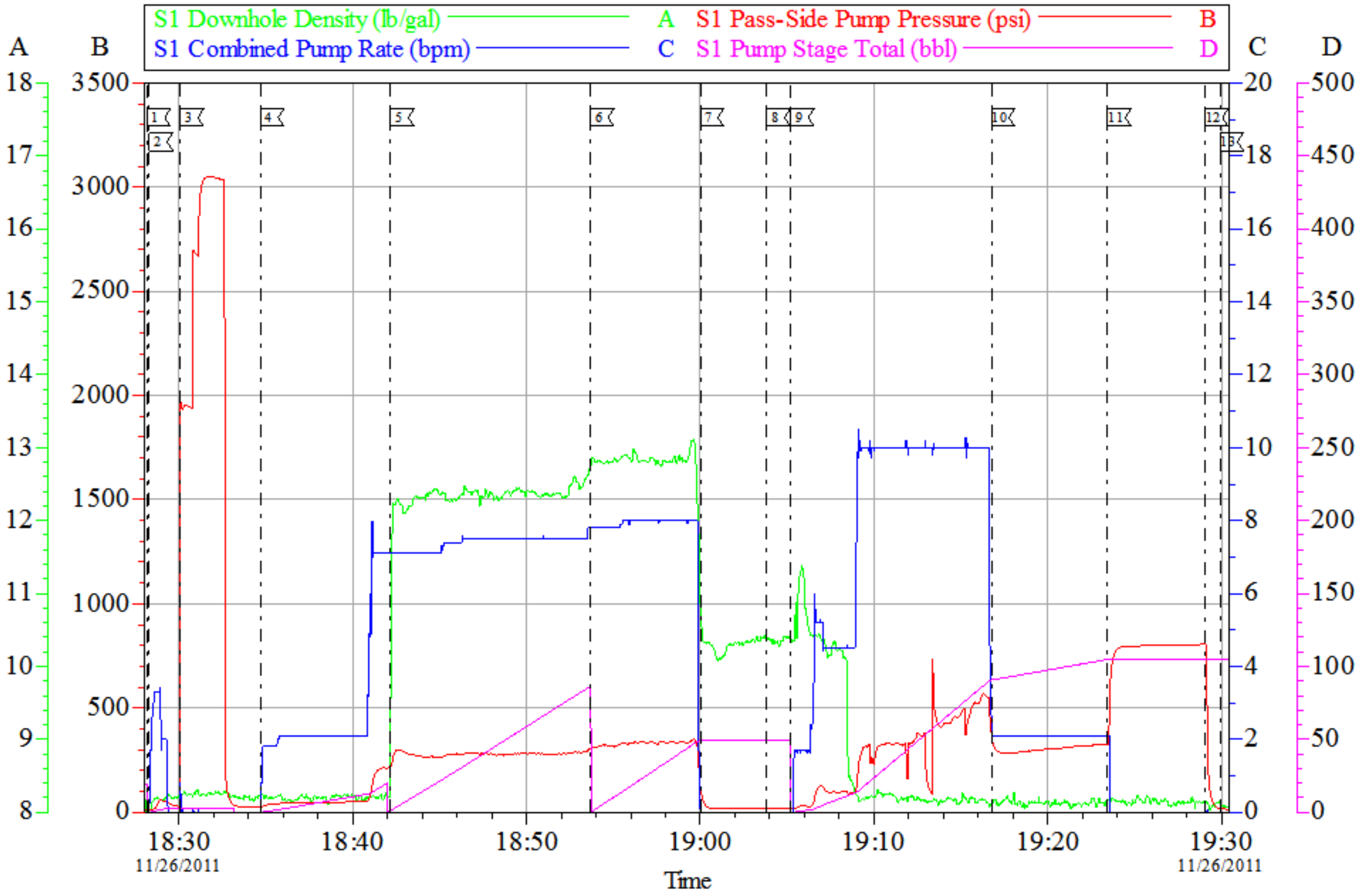
1	START JOB	18:28:10	2	FILL LINES	18:28:17	3	TEST LINES	18:30:04
4	PUMP H20 SPACER	18:34:41	5	PUMP LEAD CEMENT	18:42:11	6	PUMP TAIL CEMENT	18:53:41
7	SHUTDOWN	19:00:01	8	DROP TOP PLUG	19:03:50	9	PUMP H20 DISPLACEMENT	19:05:12
10	SLOW RATE	19:16:46	11	BUMP PLUG	19:23:28	12	CHECK FLOATS	19:29:03
13	END JOB	19:29:56						

Customer:	WILLIAMS PRODUCTION RMT INC - EBUS	Job Date:	26-Nov-2011	Sales Order #:	9068265
Well Description:	PA 324-20	Job Type:	SURFACE	ADC Used:	YES
Company Rep:	BUDDY DAVID	Cement Supervisor:	ERIC CARTER	Elite #/Operator:	8/BRENT BANKS

OptiCem v6.4.0
26-Nov-11 19:51

WILLIAMS/PA 324-20

9.625" SURFACE



Customer:	WILLIAMS PRODUCTION RMT INC - EBUS	Job Date:	26-Nov-2011	Sales Order #:	9068265
Well Description:	PA 324-20	Job Type:	SURFACE	ADC Used:	YES
Company Rep:	BUDDY DAVID	Cement Supervisor:	ERIC CARTER	Elite #/Operator:	8/BRENT BANKS

OptiCem v6.4.0
26-Nov-11 19:52

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
9068265	10	11/26/2011
Customer:		**Job Type (BOM):**
WILLIAMS PRODUCTION RMT INC - EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
BUDDY DAVID		AFEYK4FNB1JOWATHAAA
Well Name:		**Well Number:**
PA		324-20
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**	**11/26/2011**
Survey Interviewer	**The survey interviewer is the person who initiated the survey.**	**ERIC CARTER (HX15491)**
Customer Participation	**Did the customer partipcipate in this survey? (Y/N)**	**Yes**
Customer Representative	**Enter the Customer representative name**	**BUDDY DAVID**
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**	**CHECKED DVA**

CUSTOMER SIGNATURE

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
9068265	10	11/26/2011
Customer:		**Job Type (BOM):**
WILLIAMS PRODUCTION RMT INC - EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
BUDDY DAVID		AFEYK4FNB1JOWATHAAA
Well Name:		**Well Number:**
PA		324-20
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	11/26/2011

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

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
9068265	10	11/26/2011
Customer:		**Job Type (BOM):**
WILLIAMS PRODUCTION RMT INC - EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
BUDDY DAVID		AFEYK4FNB1JOWATHAAA
Well Name:		**Well Number:**
PA		324-20
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	92
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	92
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