

HALLIBURTON

WILLIAMS PRODUCTION RMT INC - EBUS

TR 412-1-698
TRAIL RIDGE
Garfield County , Colorado

Cement Surface Casing

05-Sep-2011

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 2870122	Quote #:	Sales Order #: 8371511
Customer: WILLIAMS PRODUCTION RMT INC - EBUS	Customer Rep: Geary, Scott		
Well Name: TR	Well #: 412-1-698	API/UWI #: 05-045-15972	
Field: TRAIL RIDGE	City (SAP): Parachute	County/Parish: Garfield	State: Colorado
Lat: N 39.562 deg. OR N 39 deg. 33 min. 41.53 secs.	Long: W 108.285 deg. OR W -109 deg. 42 min. 53.438 secs.		
Contractor: H&P Drilling	Rig/Platform Name/Num: H&P 278		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: KOHL, KYLE	Srv Supervisor: SMITH, CHRISTOPHER	MBU ID Emp #: 452619	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BONE, JEFFERSON Eldon	12	491216	FUCHS, ALEXANDER Arndt	12	479705	HAMMOND, DENNIS C	12	287025
HAYES, JESSE Doug	12	403601	SALAZAR, PAUL Omar	12	445614	SMITH, CHRISTOPHER Scott	12	452619

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10567589C	90 mile	10995025	90 mile	11164590	90 mile	11259882	90 mile
11710582	90 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
09.05.2011	12	4						

TOTAL Total is the sum of each column separately

Job

Formation Name	Top	Bottom	Form Type	Job depth MD	Water Depth	Perforation Depth (MD)	From	To	Date	Time	Time Zone
Formation Depth (MD)	0	2660	BHST	2660. ft	Wk Ht Above Floor	4. ft			04 - Sep - 2011	23:00	MST
Job Depth TVD		2660. ft	110 degF						05 - Sep - 2011	05:00	MST
Job Started									05 - Sep - 2011	14:15	MST
Job Completed									05 - Sep - 2011	18:17	MST
Departed Loc									05 - Sep - 2011	21:00	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
14 3/4" Open Hole				14.75				.	2700.		
9 5/8" Surface Casing	New		9.625	8.921	36.		J-55	.	2700.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI	1	JOB		
PORT. DATA ACQUIS. W/OPTICEM RT W/HES	1	EA		
R/A DENSOMETER W/CHART RECORDER,/JOB,ZI	1	JOB		
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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk			
1	Fresh Water				10.00	bbl	8.34	.0	.0	4				
2	Super Flush - XLC	SUPERFLUSH-XLC - SBM (549694)			50.00	bbl	11.	.0	.0	4				
3	Fresh Water				10.00	bbl	8.33	.0	.0	4				
4	ExtendaCem Lead Cement	EXTENDACEM (TM) SYSTEM (452981)			1100.0	sacks	12.3	2.23	12.21	4	12.21			
		12.21 Gal			FRESH WATER									
5	ExtendaCem Tail Cement	EXTENDACEM (TM) SYSTEM (452981)			250.0	sacks	12.6	2.07	11.04	4	11.04			
		11.04 Gal			FRESH WATER									
6	Displacement				206.00	bbl	8.34	.0	.0	4.5				
Calculated Values		Pressures			Volumes									
Displacement	206	Shut In: Instant			Lost Returns			Cement Slurry			529	Pad		
Top Of Cement		5 Min			Cement Returns			0	Actual Displacement			206	Treatment	
Frac Gradient		15 Min			Spacers			70	Load and Breakdown			Total Job 805		
Rates														
Circulating	13.9	Mixing			4	Displacement			4	Avg. Job			5	
Cement Left In Pipe	Amount	42.23 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									

11/22
250

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Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/04/2011 23:00							
Pre-Convoy Safety Meeting	09/05/2011 01:00							
Arrive at Location from Service Center	09/05/2011 05:00							RIG RUNNING CASING
Assessment Of Location Safety Meeting	09/05/2011 12:00							
Other	09/05/2011 12:30							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	09/05/2011 12:45							ALL HES PERSONNEL PRESENT, JSA SIGNED
Rig-Up Equipment	09/05/2011 13:00							
Pre-Job Safety Meeting	09/05/2011 13:30							ALL HES PERSONNEL PRESENT ALONG WITH RIG CREW AND COMP REP.
Start Job	09/05/2011 14:15							TD 2660', TP 2660', SJ 42.23', OH 14.75", CSG 9.625" 32.3# J55, MUD 9 PPG.
Test Lines	09/05/2011 14:20		0.5	0.5				ALL LINES HELD 3103 PSI
Pump Spacer 1	09/05/2011 14:24		4	10			74.0	H2O SPACER
Pump Spacer 2	09/05/2011 14:26		4	50			87.0	SUPERFLUSH XLC
Pump Spacer 1	09/05/2011 14:37		4	10			85.0	H2O SPACER
Pump Lead Cement	09/05/2011 14:40		4	437			230.0	1100 SKS, 12.3 PPG, 2.23 FT3/SK, 12.21 GAL/SK

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Tail Cement	09/05/2011 16:35		4	92			80.0	250 SKS, 12.6 PPG, 2.07 FT3/SK, 11.04 GAL/SK
Shutdown	09/05/2011 17:07							SHUTDOWN
Drop Top Plug	09/05/2011 17:07							PLUG WENT
Pump Displacement	09/05/2011 17:09		4.5	196			590.0	H2O
Slow Rate	09/05/2011 17:56		2	10			450.0	
Bump Plug	09/05/2011 17:56						1030.0	
Check Floats	09/05/2011 17:59							
Other	09/05/2011 18:05			10			31.0	CLEAR PARASITE, USED 6X5 TO PUMP, CLEARED LINE WITH 6BBL GONE.
End Job	09/05/2011 18:17							NO CIRCULATION DURING JOB, 0 BBLS OF CEMENT TO SURFACE, PIPE WAS NOT MOVED DURING JOB.
Rig-Down Equipment	09/05/2011 19:30							
Other	09/05/2011 19:59							THANK YOU FOR USING HALLIBURTON CEMENT, CHRIS SMITH AND CREW.

HALLIBURTON

Water Analysis Report

Company: WILLIAMS
Submitted by: CHRIS SMITH
Attention: LAB
Lease: TR
Well #: 412-1-698

Date: 9/5/2011
Date Rec.: 9/5/2011
S.O.#: 8371511
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7.4
Potassium (K)	<i>5000</i>	0 Mg / L
Calcium (Ca)	<i>500</i>	250 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)		NA Mg / L
Temp	<i>40-80</i>	70 Deg
Total Dissolved Solids		200 Mg / L

Respectfully: CHRIS SMITH

Title: CEMENTING SUPERVISOR

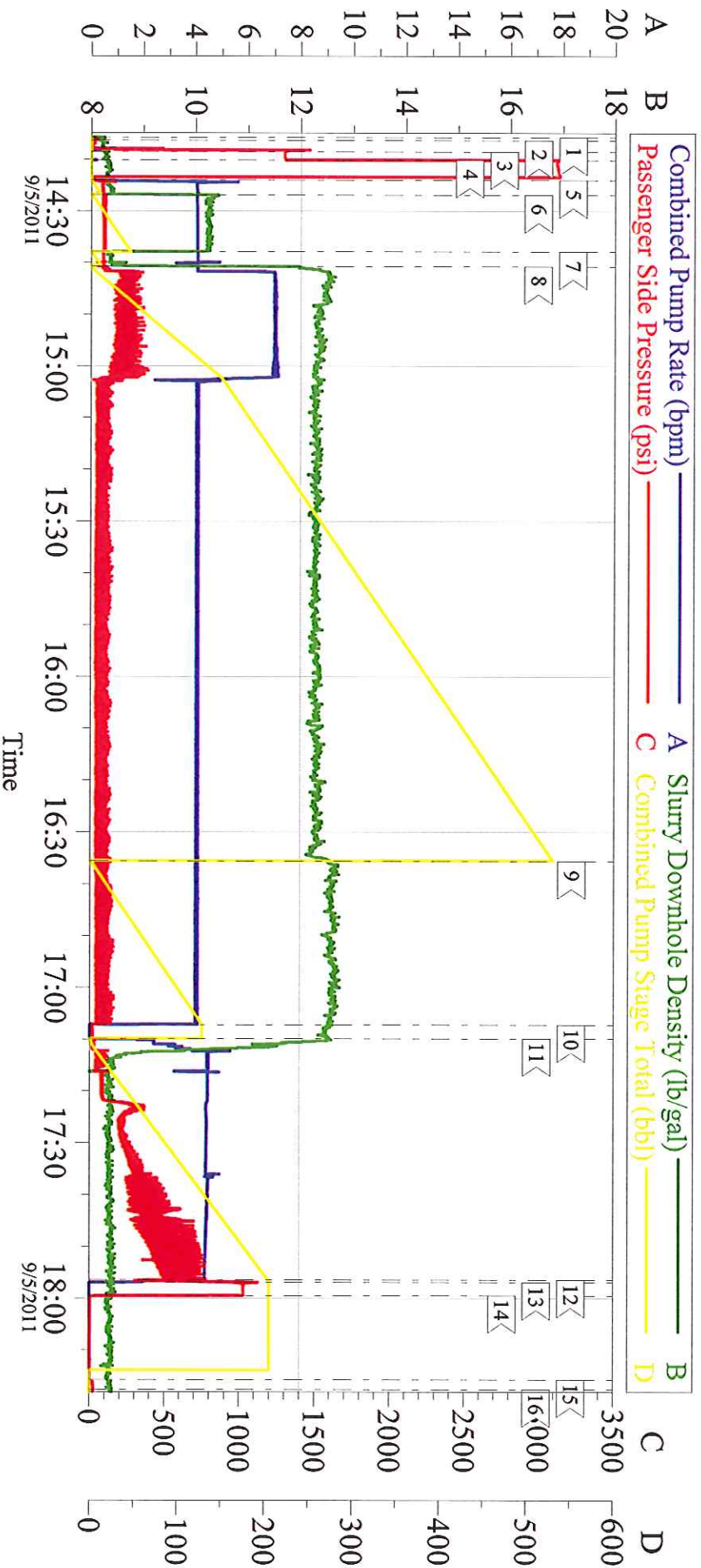
Location: Grand Junction, CO

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 its

WILLIAMS

9.625" SURFACE/ TR 412-1-698



Local Event Log

1 < SART JOB	14:15:46	2 < FILL LINES	14:16:22	3 < TEST LINES (LOW)	14:18:32
4 < TEST LINES (HIGH)	14:20:10	5 < H2O SPACER	14:24:03	6 < SUPERFLUSH	14:26:55
7 < H2O SPACER	14:37:52	8 < LEAD CEMENT	14:40:43	9 < TAIL CEMENT	16:35:35
10 < SHUTDOWN/ DROP PLUG	17:07:13	11 < H2O DISPLACEMENT	17:09:51	12 < SLOW RATE	17:56:27
13 < BUMP PLUG	17:56:54	14 < CHECK FLOATS	17:59:26	15 < CLEAR PARASITE	18:15:42
16 < END JOB	18:17:37				

Customer: Halliburton
Well Description: TR 412-1-698
Comp Rep: R. OAKS

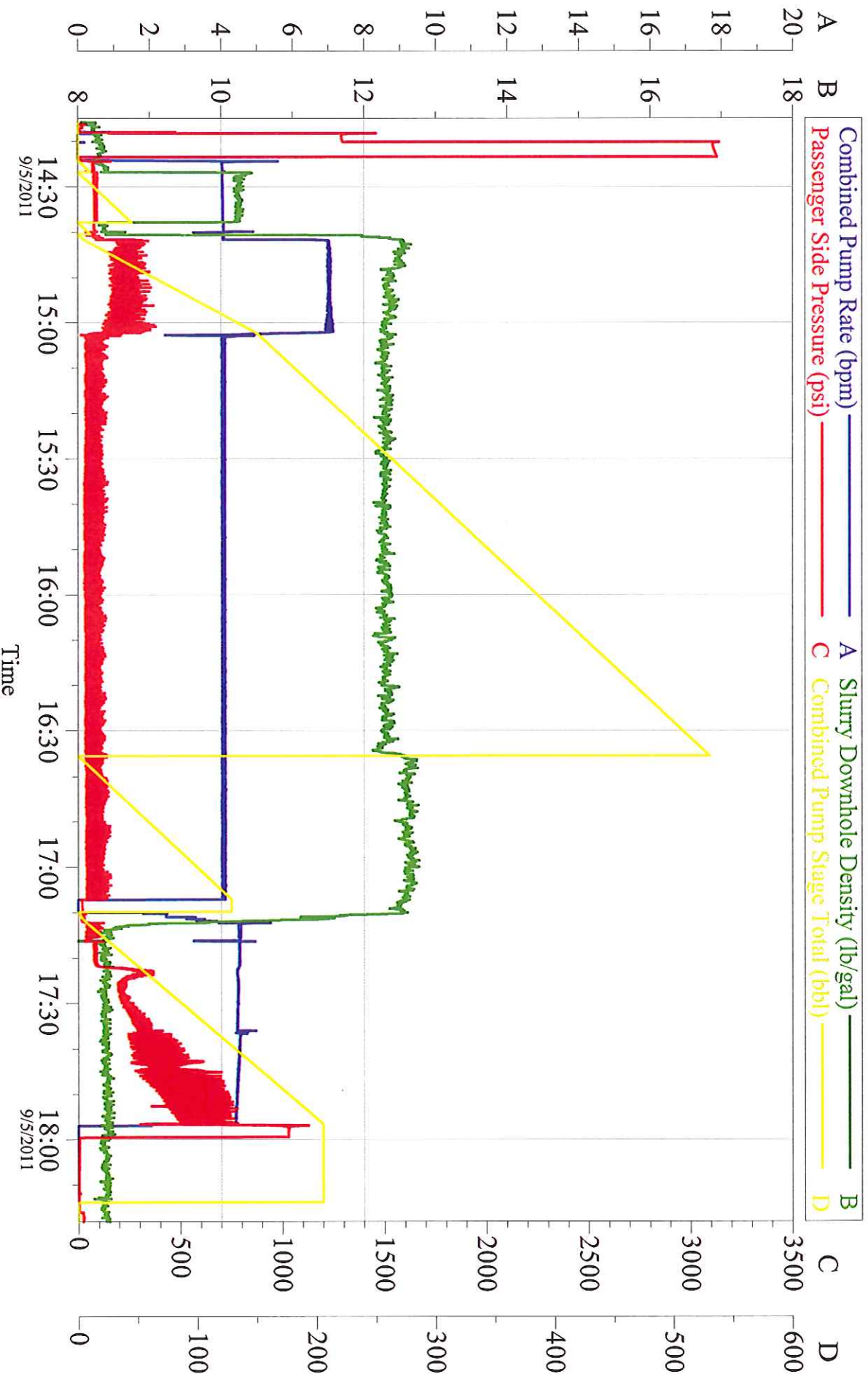
Job Date: 05-Sep-2011
Job Type: SURFACE
Supervisor: C. SMITH

Sales Order #: 8371511
ADC Used: YES
Elite/Operator: P. Salazar/E3

OptiCem v6.4.4
05-Sep-11 19:30

WILLIAMS

9.625" SURFACE/ TR 412-1-698



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Sales Order #: 8371511
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05-Sep-11 19:30