

**HALLIBURTON**

---

## **WILLIAMS PRODUCTION RMT INC - EBUS**

---

**GM 313-23  
GRAND VALLEY  
Garfield County , Colorado**

### **Cement Surface Casing**

**11-Jul-2011**

### **Job Site Documents**

*The Road to Excellence Starts with Safety*

Sold To #: 300721	Ship To #: 2862412	Quote #:	Sales Order #: 8255300
Customer: WILLIAMS PRODUCTION RMT INC - EBUS		Customer Rep: Moore, Frank	
Well Name: GM	Well #: 313-23	API/UWI #:	05-045-20471
Field: GRAND VALLEY	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Lat: N 39.506 deg.	OR N 39 deg. 30 min. 22.669 secs.	Long: W 108.083 deg.	OR W -109 deg. 55 min. 0.368 secs.
Contractor: NABORS 576	Rig/Platform Name/Num: NABORS 576		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: KOHL, KYLE	Srvc Supervisor: KUKUS, CRAIG	MBU ID Emp #:	369124

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BURKE, BRENDAN Patrick	4	487782	KUKUS, CRAIG A	4	369124	SMITH, DUSTIN Michael	4	418015
WYCKOFF, RYAN Scott	4	476117						

**Equipment**

HES Unit #	Distance-1 way						
10025118	60 mile	10567589C	60 mile	10741259	60 mile	10829469	60 mile
10995027	60 mile						

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
7/11/11	4	2						

**TOTAL** Total is the sum of each column separately

**Job**
**Job Times**

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone	
Formation Depth (MD)			On Location	11 - Jul - 2011	06:30	MST	
Form Type		BHST		11 - Jul - 2011	10:00	MST	
Job depth MD	802. ft	Job Depth TVD	802. ft	Job Started	11 - Jul - 2011	12:22	MST
Water Depth		Wk Ht Above Floor	4. ft	Job Completed	11 - Jul - 2011	13:01	MST
Perforation Depth (MD)	From	To	Departed Loc	11 - Jul - 2011	14:30	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
-------------	------------	-------------------	---------	-------	---------------	--------	-------	-----------	--------------	------------	---------------

**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 5/8	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9 5/8	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
-----------------	---------	------------	------------	-----	---------	------------------------	--------------	------------------	--------------	------------------------

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	Spacer				20.00	bbl	.	.0	.0	4	
2	VersaCem Tail	VERSACEM (TM) SYSTEM (452010)			235.0	sacks	12.8	2.11	13.75	7	13.75
	13.75 Gal	FRESH WATER									
3	Displacement Fluid				58.00	bbl	8.34	.0	.0	10	
Calculated Values		Pressures			Volumes						
Displacement	58	Shut In: Instant			Lost Returns	0	Cement Slurry	88	Pad		
Top Of Cement	SURFACE	5 Min			Cement Returns	10	Actual Displacement	59	Treatment		
Frac Gradient		15 Min			Spacers	20	Load and Breakdown		Total Job	167	
Rates											
Circulating	RIG	Mixing	7	Displacement		10	Avg. Job			8.5	
Cement Left In Pipe	Amount	40.06 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						

*The Road to Excellence Starts with Safety*

Sold To #:	300721	Ship To #:	2862412	Quote #:		Sales Order #:	8255300
Customer:	WILLIAMS PRODUCTION RMT INC - EBUS	Customer Rep:	Moore, Frank				
Well Name:	GM	Well #:	313-23			API/UWI #:	05-045-20471
Field:	GRAND VALLEY	City (SAP):	PARACHUTE	County/Parish:	Garfield	State:	Colorado
Legal Description:							
Lat: N 39.506 deg. OR N 39 deg. 30 min. 22.669 secs.				Long: W 108.083 deg. OR W -109 deg. 55 min. 0.368 secs.			
Contractor: NABORS 576		Rig/Platform Name/Num: NABORS 576					
Job Purpose: Cement Surface Casing				Ticket Amount:			
Well Type: Development Well		Job Type: Cement Surface Casing					
Sales Person: KOHL, KYLE		Srvc Supervisor: KUKUS, CRAIG				MBU ID Emp #: 369124	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	07/11/2011 06:00							
Depart Yard Safety Meeting	07/11/2011 08:00							SAFETY MEETING INVOLVING THE ENTIRE CMT CREW
Arrive At Loc	07/11/2011 10:00							RIG WAS RUNNING CSG
Assessment Of Location Safety Meeting	07/11/2011 10:10							ASSESSMENT OF LOCATION INVOLVING THE ENTIRE CMT CREW
Circulate Well	07/11/2011 11:15							RIG CIRCULATE WELL
Pre-Rig Up Safety Meeting	07/11/2011 11:25							SAFETY MEETING INVOLVING THE ENTIRE CMT CREW
Rig-Up Equipment	07/11/2011 11:30							RIG UP TO STAND PIPE AND WATER TO UP RIGHT/LAY OUT LINE TO WASH UP TO CELLAR
Pre-Job Safety Meeting	07/11/2011 12:00							SAFETY MEETING INVOLVING EVERYONE ON LOCATION
Start Job	07/11/2011 12:22							TD 802 FT TP 770.39 SJ 40.06 FT LANDING JOINT 38 FT OH 13.5 IN PIPE 9 5/8 IN 32.2 # MUD WT 10.0 #
Other	07/11/2011 12:22		2	2			30.0	FILL LINES WITH FRESH WATER
Pressure Test	07/11/2011 12:24		0.5			3800. 0		PRESSURE TEST GOOD
Pump Spacer 1	07/11/2011 12:27		4	20			83.0	FRESH WATER SPACER

Sold To # : 300721

Ship To # : 2862412

Quote # :

Sales Order # :

8255300

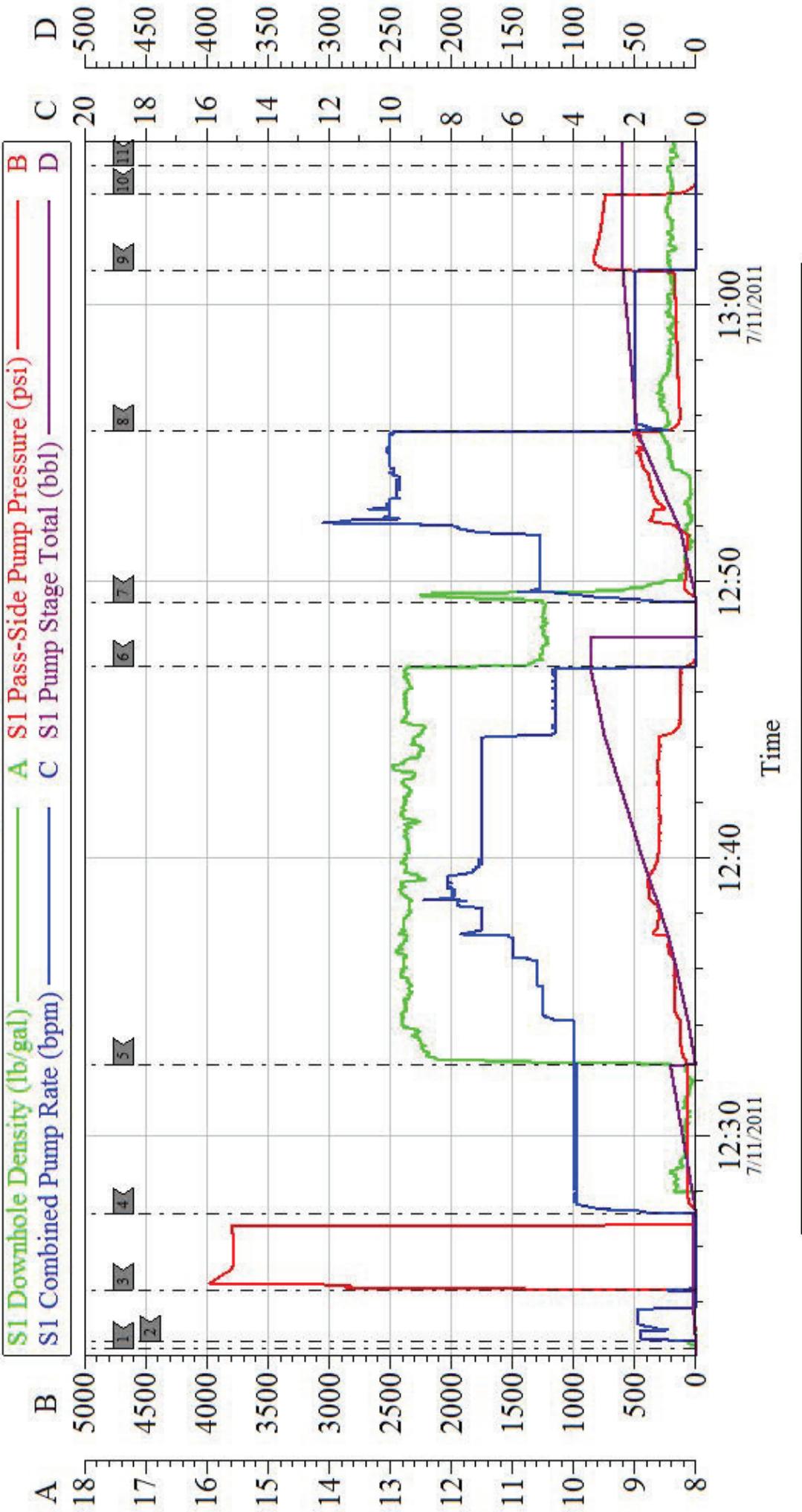
SUMMIT Version: 7.2.27

Monday, July 18, 2011 11:22:00

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Tail Cement	07/11/2011 12:32		7	88.3			384.0	PUMP 235 SKS TAIL CEMENT AT 12.8 PPG 2.11 Y 11.75 GAL/SK
Shutdown	07/11/2011 12:46							SHUT DOWN READY TUB FOR WASH UP ON TOP OF PLUG
Drop Top Plug	07/11/2011 12:48							PLUG LEFT THE PLUG CONTAINER
Pump Displacement	07/11/2011 12:49		10	57.5			377.0	PUMP FRESH WATER DISPLACEMENT
Slow Rate	07/11/2011 12:55		2	47			153.0	SLOW RATE LAST 10 BBLS
Bump Plug	07/11/2011 13:01		2	58			815.0	PLUG LANDED 189 PSI
Check Floats	07/11/2011 13:03							FLOATS HELD
End Job	07/11/2011 13:05							HAD GOOD RETURNS THRU OUT THE JOB AND GOT 10 BBLS CEMENT TO SURFACE
Pre-Rig Down Safety Meeting	07/11/2011 13:10							SAFETY MEETING INVOLVING THE ENTIRE CMT CREW
Rig-Down Equipment	07/11/2011 13:15							
Safety Meeting - Departing Location	07/11/2011 14:15							SAFETY MEETING INVOLVING THE ENTIRE CMT CREW
Comment	07/11/2011 14:30							THANK YOU FOR USING HALLIBURTON, CRAIG KUKUS AND CREW

EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job					
	FILL LINES	2		MAX	<u>1120</u>	
6	Test Lines	3500.0				
9	H2O Spacer	20.0		8.3		
13	LEAD CEMENT					
15	TAIL CEMENT	88.3	235	12.8	2.11	11.75
	SHUTDOWN					
	DROP TOP PLUG					
25	H2O DISPLACE	57.5		8.3		
	SLOW RATE	47.0	2 bbl	slow	2BBL	
	LAND PLUG	171.0	PLUS	500	OVER	
	CHECK FLOATS					
	END JOB		<b>Do Not Overdisplace</b>			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH	FLOAT COLLAR	BBL/FT	H2O REQ.	
57.50	770.39	40.06	730.33	0.0787	200	
PSI TO LIFT	290	<b>*****Use Mud Scales on Each Tier*****</b>				
Total Displacement	57.50					
CALCULATED PSI LAND		171	TOTAL FLUID PUMPED			166
Collapse	2270	Burst	1400	SO#	8255300	

# WILLIAMS PRODUCTION SURFACE



Local Event Log		
1	START JOB	12:22:18
2	PRIME LINES	12:22:32
3	PUMP TAIL CEMENT	12:24:25
4	PUMP H2O SPACER	12:27:09
5	PUMP H2O DISPLACEMENT	12:46:56
6	SLOW RATE	12:55:26
7	CHECK FLOATS	13:01:15
8	END JOB	13:05:00
9	PRESSURE TEST	
10	SHUT DOWN/DROP PLUG	
11	BUMP PLUG	

Customer: WILLIAMS PRODUCTION	Job Date: 11-Jul-2011	Sales Order #: 8255300
Well Description: GM 313-23	Job Type: SURFACE	ADC Used: YES
Company Rep: FRANK MOORE	Cement Supervisor: CRAIG KUKUS	Elite #/Operator: ELITE 3 BRENDAN BURKE