

HALLIBURTON

WILLIAMS PRODUCTION RMT INC - EBUS

**GM 412-23
GRAND VALLEY
Garfield County , Colorado**

Cement Surface Casing **17-Jul-2011**

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 2864461	Quote #:	Sales Order #: 8306337
Customer: WILLIAMS PRODUCTION RMT INC - EBUS	Customer Rep: Hartl, Al		
Well Name: GM	Well #: 412-23	API/UWI #: 05-045-20472	
Field: GRAND VALLEY	City (SAP): UNKNOWN	County/Parish: Garfield	State: Colorado
Lat: N 39.506 deg. OR N 39 deg. 30 min. 22.64 secs.	Long: W 108.083 deg. OR W -109 deg. 55 min. 0.458 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: SCOTT, KYLE	Srv Supervisor: ANGLESTEIN, TROY	MBU ID Emp #: 436099	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ANGLESTEIN, TROY Edward WM	5	436099	JENSEN, JESSE Robert	5	478774	KEANE, JOHN Donovon	5	486519
WALPOLE, DARREN Livingston	5	485294						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10551730C	60 mile	10867304	60 mile	10951250	60 mile	10973571	60 mile
10998054	60 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
7/17/2011	5	1						

TOTAL Total is the sum of each column separately

Job

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	17 - Jul - 2011	11:20	MST
Form Type	BHST		Job Started	17 - Jul - 2011	14:30	MST
Job depth MD	930. ft	Job Depth TVD	Job Completed	17 - Jul - 2011	17:28	MST
Water Depth		Wk Ht Above Floor	Departed Loc	17 - Jul - 2011	18:06	MST
Perforation Depth (MD)	From	To			19:30	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 SECTION				13.5				.	930.		
SURFACE CASING	Unknown		9.625	9.001	32.3		H-40	.	915.8		

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		
R/A DENSOMETER W/CHART RECORDER,/JOB,ZI	1	JOB		
ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI	1	JOB		
PORT. DAS W/CEMWIN;ACQUIRE W/HES, ZI	1	JOB		

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	%
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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 ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Water Ahead		20.00	bbl	8.33	.0	.0	6	
2	VersaCem Tail	VERSACEM (TM) SYSTEM (452010)	250.0	sacks	12.8	2.11	11.75	7	11.75
3	Displacement Fluid		69.00	bbl	8.34	.0	.0	10	
Calculated Values		Pressures		Volumes					
Displacement	68.7	Shut In: Instant		Lost Returns	0	Cement Slurry	93.9	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	18.7	Actual Displacement	68.7	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	160
Rates									
Circulating		Mixing	7	Displacement	10	Avg. Job			8
Cement Left In Pipe	Amount	42.47 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					

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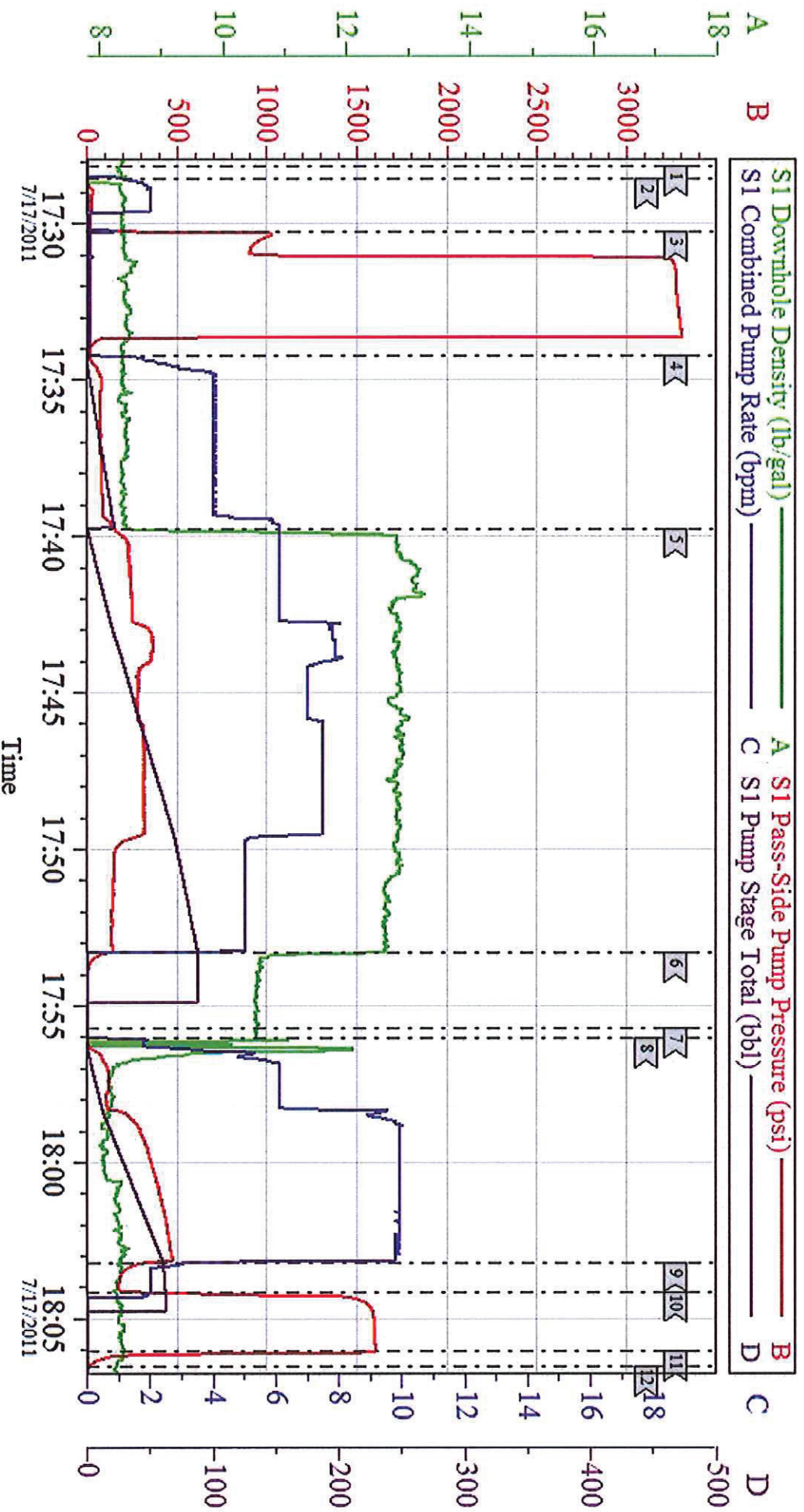
Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	07/17/2011 11:20							
Pre-Convoy Safety Meeting	07/17/2011 12:50							ALL HES EMPLOYEES
Arrive At Loc	07/17/2011 14:30							RIG STILL RUNNING CASING CIRCULATED FOR 1 HOUR
Assessment Of Location Safety Meeting	07/17/2011 14:45							ALL HES EMPLOYEES
Rig-Up Equipment	07/17/2011 16:00							1 HT 400 PUMP TRUCK, 1 660 BULK TRUCK, 1 9.625 QUICK LATCH PLUG CONTAINER, 1 F 450 P/U
Pre-Job Safety Meeting	07/17/2011 17:10							ALL HES EMPLOYEES, RIG CREW, CO REP.
Start Job	07/17/2011 17:28							9.625 CASING SET AT 915.79', FC 873.32', TD: 930', OPEN HOLE 13.5", MUD WT 10.2 PPG, 800 BBLS OF H2O ON LOCATION, WATER SAMPLE SUBMITTED.
Pump Water	07/17/2011 17:28		2	2			28.0	FILL LINES
Pressure Test	07/17/2011 17:30		0.5	0.5		3345. 0		NO LEAKS
Pump Spacer 1	07/17/2011 17:34		6	20			200.0	FRESH WATER
Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Cementing Job Log

Pump Tail Cement	07/17/2011 17:39		7	93.9			320.0	250 SKS VERSACEM CMT TO BE MIXED AT 12.8 PPG, 2.11 YIELD, 11.75 GAL/SK, CMT TO BE WEIGHED VIA PRESSURE BALANCED MUD SCALES. WET AND DRY SAMPLES SUBMITTED.
Shutdown	07/17/2011 17:53							FOR NO MORE THEN 5 MINUTES,
Drop Plug	07/17/2011 17:55							PLUG LAUNCHED
Pump Displacement	07/17/2011 17:56		10	68.7			480.0	FRESHWATER
Cement Returns to Surface	07/17/2011 18:01		10	50			480.0	18.7 BBLS OF CEMENT TO SURFACE.
Slow Rate	07/17/2011 18:03		2	58			200.0	10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	07/17/2011 18:04		2	68.7			220.0	PLUG LANDED AT 1620 HELD FOR TWO MINUTES
Check Floats	07/17/2011 18:06							FLOATS HOLDING, NO ANNULAR FLOW AT SHAKERS NOTED
End Job	07/17/2011 18:06							THANK YOU FOR USING HES FROM TROY ANGLESTEIN AND CREW.
Post-Job Safety Meeting (Pre Rig-Down)	07/17/2011 18:10							ALL HES EMPLOYEES
Rig-Down Equipment	07/17/2011 18:45							SAFELY
Pre-Convoy Safety Meeting	07/17/2011 19:20							ALL HES EMPLOYEES
Crew Leave Location	07/17/2011 19:30							SITE WAS AS CLEAN AS WHEN WE ARRIVED

EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job		0 <u>Max Psi</u>			
6	Test Lines	2500.0				
9	H2O Spacer	20.0				
15	Tail Cement	93.9	250	12.8	2.11	11.75
	Shut Down	0.0				
22	Drop Plug	0.0				
23	Displace with H2O	68.7	SLOW RATE TO 2 BPM			
26	Land Plug	183 PSI	<u>500 PSI Over</u>			
2	Release Psi / Job Over	0.0				
			Do Not Overdisplace			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH	FLOAT COLLAR	BBL/FT	H2O REQ.	
68.73	915.79	42.47	873.32	0.0787	159	
PSI to Lift Pipe	344	***** <u>Use Mud Scales on Each Tier</u> *****				
Total Displacement	68.73					
CALCULATED DIFFERENTIAL PSI		183	TOTAL FLUID PUMPED		183	
Collapse		Burst		SO#	8306337	

WILLIAMS GM 412-23 SURFACE



Local Event Log			
1 START JOB	17:28:09	2 FILL LINES	17:28:33
4 PUMP HD0 SPACER	17:34:13	5 PUMP TAIL CEMENT	17:59:45
7 DROP PLUG	17:55:43	8 PUMP DISPLACEMENT	17:56:02
10 BUMP PLUG	18:04:09	11 CHECK FLOATS	18:06:03
		12 END JOB	18:06:32
		3 TEST LINES	17:30:14
		6 SHUTDOWN	17:53:19
		9 SLOW RATE	18:03:12

Customer: WILLIAMS	Job Date: 17-Jul-2011	Sales Order #: 8306337
Well Description: GM 412-23	Job Type: SURFACE	ADC Used: YES
Company Rep: AL HARITL	Cement Supervisor: TROY ANGLESTEIN	Elite #: 2 JESSE JENSEN