

# HALLIBURTON

## Cementing Job Summary

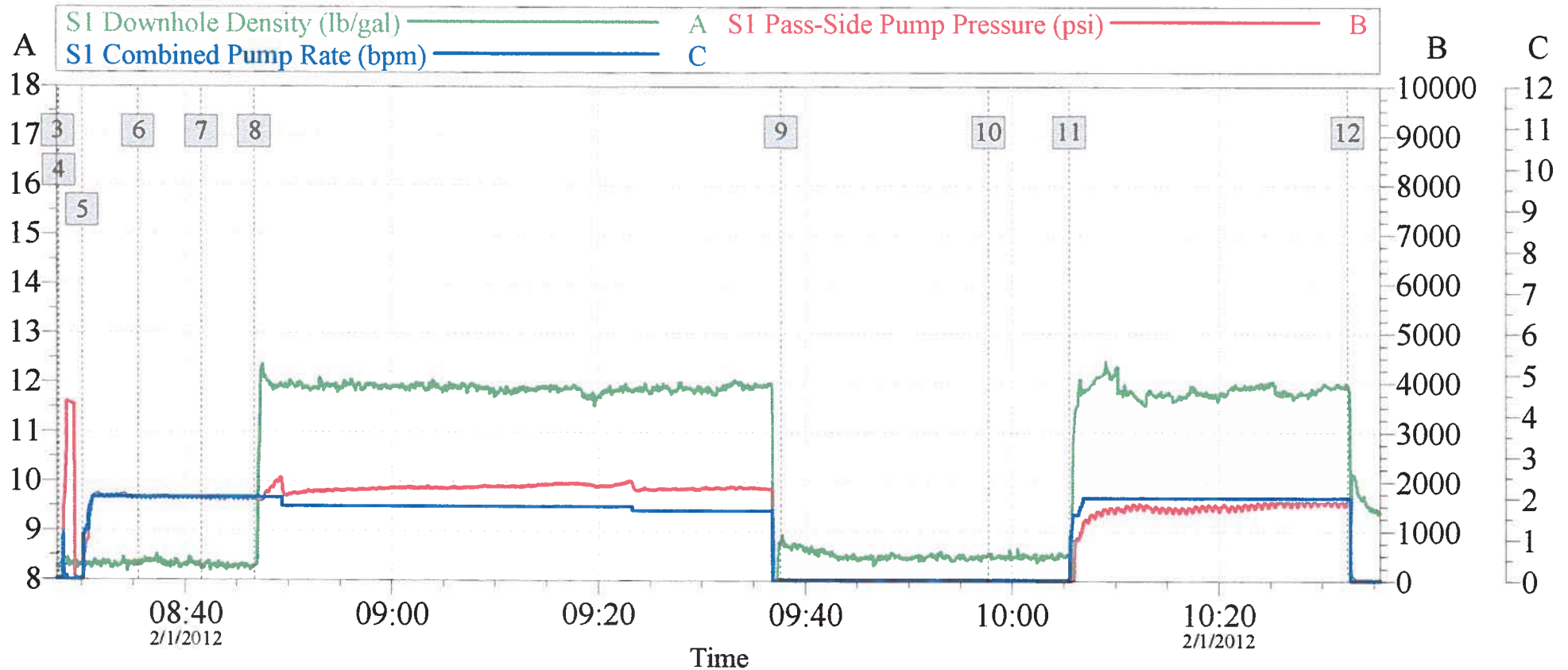
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	ClayWeb Water Spacer		10.00	bbl	8.33	.0	.0	2.0	
2	MUD FLUSH III	MUD FLUSH III - SBM (528788)	12.00	bbl	8.4	.0	.0	2.0	
3	ClayWeb Water Spacer		10.00	bbl	8.33	.0	.0	2.0	
59.525 gal/Mgal			CLAYWEB - TOTE (101985045)						
4	FILLCEM 11.8#	EXPANDACEM (TM) SYSTEM (452979)	382.0	sacks	11.8	2.06	11.25	2.0	11.25
11.25 Gal			FRESH WATER						
Calculated Values			Pressures			Volumes			
Displacement		Shut In: Instant	Lost Returns		Cement Slurry		Pad		
Top Of Cement		5 Min	Cement Returns	9.5BBL	Actual Displacement		Treatment		
Frac Gradient		15 Min	Spacers	32BBL	Load and Breakdown		Total Job		
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	0 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID	ID	ID
The Information Stated Herein Is Correct				Customer Representative Signature					

*The Road to Excellence Starts with Safety*

Sold To #:	304535	Ship To #:	2906336	Quote #:		Sales Order #:	9252043
Customer:	PDC ENERGY EBUS			Customer Rep:	ALVERADO, PHILLOP		
Well Name:	National Hog Farm	Well #:	21-9	API/UWI #:	05-123-20924-00		
Field:	WATTENBERG	City (SAP):	KERSEY	County/Parish:	Weld	State:	Colorado
Legal Description:							
Lat: N 0 deg.		OR N 0 deg.		0 min.		0 secs.	
Contractor:				Rig/Platform Name/Num:			
Job Purpose:				Recement Service			
Well Type:				Development Well			
Sales Person:				FLING, MATTHEW			
Srv Supervisor:				NIELSON, BRANDON			
MBU ID Emp #:				479703			

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl	Pressure psig	Comments		
				Stage	Total	Tubing	Casing	
Test Lines	02/01/2012 08:27							PRESSURE TEST TO 3500 PSI NO VISIBLE LEAKS
Pump Spacer 1	02/01/2012 08:30		2	10				FRESH WATER MIXED WITH CLAY WEB
Pump Spacer 2	02/01/2012 08:35		2	12				FRESH WATER MIXED WITH MUD FLUSH
Pump Spacer 1	02/01/2012 08:41		2	10				FRESH WATER MIXE WITH CLAY WEB
Pump Cement	02/01/2012 08:46		1.7	88				240 SKS FILLCEM MIXED @ 11.8 PPG WITH FRESH WATER
Pause	02/01/2012 09:37							WAIT FOR RIG TO PULL 44 JOINTS
Resume	02/01/2012 09:57							
Pump Cement	02/01/2012 10:05		2	52				1450.0
Pump Displacement	02/01/2012 10:32		2	0.5				1622.0
Shutdown	02/01/2012 10:33							
End Job	02/01/2012 10:35							

# PDC NATIONAL HOG FARM 21-9 RECEMENT



## Global Event Log

Intersection	SPPP	Intersection	SPPP	Intersection	SPPP
1 Starting Job	08:06:27 24.00	2 Start Job	08:25:24 26.00	3 Start Job	08:27:44 29.00
4 Test Lines	08:27:49 28.00	5 Pump Spacer 1	08:30:04 32.00	6 Pump Spacer 2	08:35:29 1671
7 Pump Spacer 1	08:41:35 1629	8 Pump Cement	08:46:43 1663	9 Pause	09:37:38 21.00
10 Resume	09:57:44 20.00	11 Pump Cement	10:05:32 22.00	12 Pump Displacement	10:32:25 1622
13 End Job	10:35:38 19.00	14 Ending Job	10:37:49 20.00		

Customer: PDC  
Well Description: RECEMENT

Job Date: 01-Feb-2012  
UWI: 05-123-20924-00

Sales Order #: 9252043

OptiCem v6.4.10  
01-Feb-12 10:41