

HALLIBURTON

iCem[®] Service

SRC ENERGY INC

Bost Farm 26N-8B-L Production

Sincerely,
Meghan Jacobs

Legal Notice

Disclaimer:

All information in this report is provided subject to the terms and conditions which govern the services provided by Halliburton. Halliburton personnel use their best efforts in gathering information and their best judgment in interpreting it, but any interpretation, research, analysis or recommendation furnished by Halliburton are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and empirical relationships and assumptions are not infallible, and with respect to which professionals in the industry may differ. iCem 3D Displacement results are used to understand how fluids intermix during a cement job. Simulation and 3D displacement results are not intended as and should not be used as a replacement for bond logs in determining top of cement. Current 3D model calculations are known to model more volume than the input volume for standard cases due to known calculation improvements required. For rotational cases, the modeled volume will be impacted by the same calculations impacting the standard cases, as well as additional constraints imposed to make the calculation time required operationally feasible. Therefore, until further notice, 3D displacement results should not be used for replacement of a bond log, or used as an identifier of top of cement. HALLIBURTON IS UNABLE TO GUARANTEE THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, OR JOB RECOMMENDATION and any interpretation or recommendation is not for use of or reliance upon by any third party. The customer has full responsibility for any of its decisions which are based on the information provided in this report.

Table of Contents

1.0 Cementing Job Summary 4

 1.1 Executive Summary4

2.0 Real-Time Job Summary 7

 2.1 Job Event Log7

3.0 Attachments..... 9

 3.1 Bost Farm 26N-8B-L Production – Job Chart with Events9

 3.2 Bost Farm 26N-8B-L Production – Job Chart without Events10

1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Bost Farm 26N-8B-L** cement **Production** casing job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

Approximately 38 bbls of cement were returned to surface.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

Halliburton Fort Lupton

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 359915	Ship To #: 3902187	Quote #: 0022506890	Sales Order #: 0905240997							
Customer: SRC ENERGY INC-EBUS		Customer Rep: Buddy Davis								
Well Name: BOST FARM	Well #: 26N-8B-L	API/UWI #: 05-123-47692-00								
Field: WATTENBERG	City (SAP): GREELEY	County/Parish: WELD	State: COLORADO							
Legal Description: NW NW-7-5N-66W-1297FNL-942FWL										
Contractor: PRECISION DRLG		Rig/Platform Name/Num: PRECISION 462								
Job BOM: 7523 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HB41307		Srv Supervisor: Kendall Broom - H194727								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST								
Job depth MD	17610ft	Job Depth TVD								
Water Depth		Wk Ht Above Floor								
Perforation Depth (MD)	From	To								
Well Data										
Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		9.625	8.921	36	LTC	J-55	0	1820	0	0
Casing		5.5	4.778	20	TXP-BTC	P110IC	0	17600	0	0
Open Hole Section			8.5				1808	17610	6467	7231
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5					Top Plug	5.5		HES	
Float Shoe	5.5			17600		Bottom Plug	5.5		HES	
Float Collar	5.5					SSR plug set	5.5		HES	
Insert Float	5.5					Plug Container	5.5	1	HES	
Stage Tool	5.5					Centralizers	5.5		HES	
Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Tuned Spacer III	Tuned Spacer III	40	bbl	11.5	3.84				
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	HalCem	HALCEM (TM) SYSTEM	440	sack	13.2	1.55		6	7.59	

last updated on 11/3/2018 12:01:03 PM

Page 1 of 3

HALLIBURTON

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	Gasstop B1	GASSTOP (TM) SYSTEM	768	sack	13.2	1.54		6	7.64
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
4	NeoCem	NeoCem TM	1175	sack	13.2	2.06		6	9.83
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
5	MMCR Displacement	MMCR Displacement	40	bbl	8.34				
0.20 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
6	Water	Water	278	bbl	8.33				
1 gal/Mgal		CLA-WEB - BULK (101985043)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
7	MMCR Displacement	MMCR Displacement	70	bbl	8.34				
0.20 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
Cement Left In Pipe		Amount	49 ft		Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride:		0 ppm		Mix Water Temperature:		55°F °C
Plug Bumped?		Yes	Bump Pressure:		3870		Floats Held?		Yes
Cement Returns:		31							
Comment									

2.0 Real-Time Job Summary

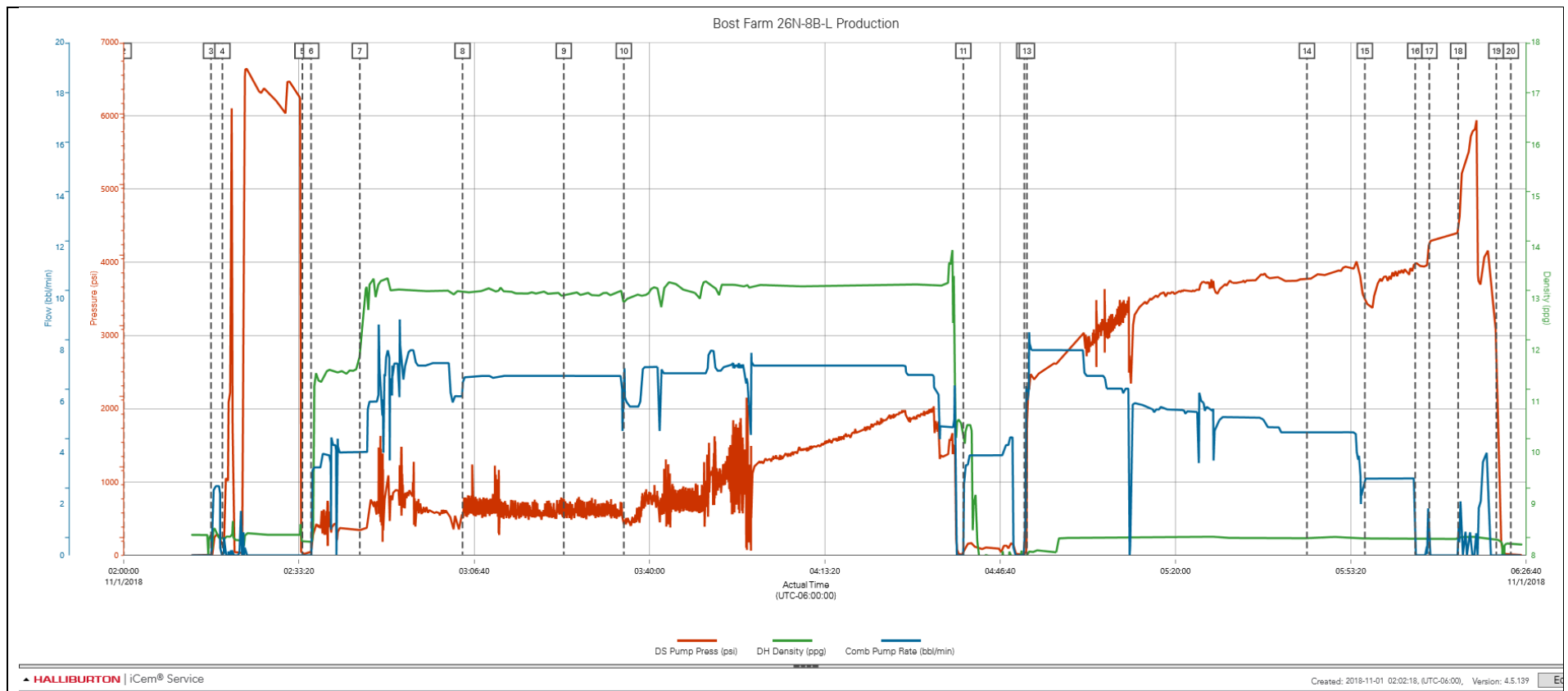
2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Truck 1 Density (ppg)	Truck 1 Pressure (psi)	Truck 1 Slurry Rate (bbl/min)	Comments
Event	1	Call Out	Call out	10/31/2018	03:00:00	USER				Call out for OL of 2000
Event	2	Pre-Job Safety Meeting	Pre-Job Safety Meeting	11/1/2018	02:00:00	USER				
Event	3	Start Job	Start Job	11/1/2018	02:16:37	COM4				
Event	4	Test Lines	Test Lines	11/1/2018	02:18:47	COM4				Pressure test lines to 6500psi
Event	5	Drop Bottom Plug	Drop Bottom Plug	11/1/2018	02:34:00	USER	8.27	28.00	0.00	
Event	6	Pump Spacer 1	Pump Spacer 1	11/1/2018	02:35:39	COM4	8.26	48.00	0.00	Pump 40bbls of TSIII with liquid surfactants
Stage	2	Next Stage	SRC TSIII 2485236/1	11/1/2018	02:35:42	USER	8.27	48.00	0.00	
Event	7	Pump Cap Cement	Pump Cap Cement	11/1/2018	02:44:55	COM4	11.90	350.00	4.00	Pump 440sks (121 bbls) of cap cement 1.55cuft/sk, 7.48gal/sk.
Stage	3	Next Stage	SRC Cap for Latex 2498333/8	11/1/2018	02:45:09	USER	12.22	344.00	4.00	
Event	8	Pump Lead Cement	Pump Lead Cement	11/1/2018	03:04:27	COM4	13.12	497.00	6.20	Pump 768sks (211bbls) of lead cement - 1.54cuft/sk, 7.45gal/sk.
Stage	4	Next Stage	13.2 SRC Latex 2498333/7	11/1/2018	03:06:51	USER	13.16	592.00	7.00	
Event	9	Check Weight	Check Weight	11/1/2018	03:23:42	COM4	13.06	568.00	7.00	
Event	10	Pump Tail Cement	Pump Tail Cement	11/1/2018	03:35:06	COM4	12.92	418.00	5.80	Pump 1175sks (430bbls) of tail cement - 2.06cuft/sk, 9.83gal/sk.
Stage	5	Next Stage	13.2 Thick NeoCem 2505308/6	11/1/2018	03:35:23	USER	12.99	415.00	6.00	
Event	11	Shutdown	Shutdown	11/1/2018	04:39:40	COM4	10.34	16.00	0.00	Wash up lines and pump truck
Stage	6	Next Stage	Water	11/1/2018	04:42:34	USER	8.07	108.00	3.90	

Event	12	Drop Top Plug	Drop Top Plug	11/1/2018	04:51:15	COM4	7.99	10.00	0.00	
Event	13	Pump Displacement	Pump Displacement	11/1/2018	04:51:45	COM4	7.99	1520.00	6.10	388bbls of fresh water displacement.
Event	14	Spacer Returns to Surface	Spacer Returns to Surface	11/1/2018	05:45:00	USER	8.33	3775.00	4.80	320bbls away of displacement, saw spacer to surface and diverted tanks.
Event	15	Cement Returns to Surface	Cement Returns to Surface	11/1/2018	05:56:00	USER	8.33	3517.00	3.00	350bbls away, cement returns to surface. 38bbls of cement total returned to surface.
Event	16	Bump Plug	Bump Plug	11/1/2018	06:05:35	COM4	8.33	3996.00	0.00	
Event	17	Check Tubing Or Casing Pressure	Check Tubing Or Casing Pressure	11/1/2018	06:08:16	USER	8.33	4269.00	0.00	10 minute casing test
Event	18	Other	Other	11/1/2018	06:13:45	USER	8.32	4412.00	1.20	Ruptured shoe sub; pumped 6bbl wet shoe
Event	19	Check Floats	Check Floats	11/1/2018	06:21:00	USER	8.31	2846.00	0.00	Check floats, approx. 4.5bbls back
Event	20	End Job	End Job	11/1/2018	06:23:45	COM4	8.22	8.00	0.00	Rig down location, travel safely back to location. Thank you from Kendall Broom and crew.

3.0 Attachments

3.1 Bost Farm 26N-8B-L Production – Job Chart with Events



3.2 Bost Farm 26N-8B-L Production – Job Chart without Events

