

HALLIBURTON

iCem[®] Service

SRC ENERGY INC-EBUS

Date: Friday, October 11, 2019

Bost Farm 13N-11B-L Production

Job Date: Monday, October 07, 2019

Sincerely,
Tyler Hill

Legal Notice

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Bost Farm 13N-11B-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 20 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 Ft. Lupton

The Road to Excellence Starts with Safety

Sold To #: 359915		Ship To #: 3982065		Quote #:		Sales Order #: 0906018273					
Customer: SRC ENERGY INC-EBUS				Customer Rep: Kaleb Ford							
Well Name: BOST FARM			Well #: 13N-11B-L			API/UWI #: 05-123-50254-00					
Field: WATTENBERG		City (SAP): GREELEY		County/Parish: WELD		State: COLORADO					
Legal Description: NW SW-7-5N-66W-2666FSL-1214FWL											
Contractor: PRECISION DRLG				Rig/Platform Name/Num: PRECISION 462							
Job BOM: 7523 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HB41307				Srv Supervisor: Michael Loughran							
Job											
Formation Name											
Formation Depth (MD)	Top		Bottom								
Form Type		BHST									
Job depth MD	17970ft	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	1851	0	1851	
Casing		5.5	4.778	20	TXP-BTC	P110IC	0	17970	0	6904	
Open Hole Section			8.5				1851	17990	1851	6904	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5					Top Plug	5.5	1	HES		
Float Shoe	5.5			17970		Bottom Plug	5.5	1	HES		
WSS	5.5			17862		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 Prime Cement Spacer Base - RKS/SE	TUNED PRIME CEMENT SPACER SYS	20	bbl	11.5	3.81		6	
1 lbm/bbl		FE-2, 2000 LB BAG - (1005549)							
147.49 lbm/bbl		BARITE, BULK (100003681)							
42 gal/bbl		FRESH WATER							
0.80 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)							
0.80 gal/bbl		MUSOL(R) A, 5 GAL PAIL (100064220)							
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	ElastiCem	ELASTICEM (TM) SYSTEM	1228	sack	13.2	1.57		8	7.52
0.40 %		SCR-100, 2000 LB BAG - (1005967)							
7.52 Gal		FRESH WATER							
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
3	NeoCem	NeoCem TM	1151	sack	13.2	2.04		8	9.79
0.09 %		SCR-100, 2000 LB BAG - (1005967)							
9.79 Gal		FRESH WATER							
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
4	MMCR Displacement	MMCR Displacement	20	bbl	8.34			10	
0.25 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/min	Total Mix Fluid Gal
5	Water	Water	306.5	bbl	8.33			9.5	
1.6020 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/min	Total Mix Fluid Gal
6	MMCR Displacement	MMCR Displacement	70	bbl	8.34			7	
0.2140 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							

Cement Left In Pipe	Amount	0 ft	Reason	Wet Shoe Joint	
Mix Water:	pH 7	Mix Water Chloride:	Less 200 ppm	Mix Water Temperature:	51 °F
Cement Temperature:		Plug Displaced by:	8.33 lb/gal	Disp. Temperature:	
Plug Bumped?	Yes	Bump Pressure:	3000 psi	Floats Held?	Yes
Cement Returns:		Returns Density:		Returns Temperature:	
Comment Good returns throughout job. Approx 20 bbl cement to surface, Plug bumped, 6 bbl wet shoe, Floats held, 3 bbl back to pump truck. Top Lead Cement = Surface, Estimated Top Tail Cement = 7608'					

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	10/7/2019	02:15:00	USER				Crew called out for on location time of 0800 hrs 10/7/2019
Event	2	Crew Leave Yard	Crew Leave Yard	10/7/2019	06:00:00	USER				Crew Leaves yard
Event	3	Arrive At Loc	Arrive At Loc	10/7/2019	07:15:00	USER				Arrive at location, Rig running casing, Meet with customer, TP 17970 20# P-110, TD 17990, 8.50 Hole, WSS 17862, TVD 6904, PC 1851' 9.625 J-55 36#, WF 10.3 OBM, Top and Bottom plug provided by customer, Water 51 Deg., PH 7, Chlorides and sulfates less than 200 ppm
Event	4	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	10/7/2019	07:25:00	USER				Pre rig up safety meeting
Event	5	Rig-Up Equipment	Rig-Up Equipment	10/7/2019	07:35:00	USER				Rig up all service lines and iron to buffer zone
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	10/7/2019	11:40:00	USER	8.29	0.00	40.00	Discuss job procedures, Discuss job hazards and hazards of Halliburton Equipment.
Event	7	Start Job	Start Job	10/7/2019	12:03:34	COM4	7.63	0.00	-19.00	Begin recording data
Event	8	Test Lines	Test Lines	10/7/2019	12:06:23	COM4	8.13	0.00	39.00	Test lines 6500 psi
Event	9	Drop Bottom Plug	Drop Bottom Plug	10/7/2019	12:10:51	COM4	8.22	0.00	2.00	Verified by Kaleb

Event	10	Pump Spacer 1	Pump Spacer 1	10/7/2019	12:11:00	COM4	8.23	0.00	11.00	80 bbls Tuned Prime spacer, 11.5ppg, 3.81 yield, 23.3 gal/sack, 65 gal Musol, 65 gal Dual spacer B, D-Air
Event	11	Pump Lead Cement	Pump Lead Cement	10/7/2019	12:26:22	COM4	11.56	6.00	265.00	1228 sacks Elasticem, 343.37 bbl., 13.2 ppg, 1.57 yield, 7.52 gal/sack
Event	12	Pump Tail Cement	Pump Tail Cement	10/7/2019	13:13:35	COM4	13.25	8.00	565.00	1151 sacks NeoCem, 418.91 bbl., 13.2 ppg, 2.04 yield, 9.79 gal/sack
Event	13	Shutdown	Shutdown	10/7/2019	14:12:06	COM4	0.76	0.00	-5.00	Shutdown to shut in well & wash pumps and lines
Event	14	Drop Top Plug	Drop Top Plug	10/7/2019	14:21:41	COM4	8.15	0.00	-44.00	Verified by Kaleb
Event	15	Pump Displacement	Pump Displacement	10/7/2019	14:22:12	COM4	8.16	0.00	-35.00	396.5 gal freshwater displacement. first 20 bbls added 5 gal micro matrix retarder. Last 70 bbls added 15 gal Micro Matrix retarder. Cla web and BE-3 Throughout displacement
Event	16	Bump Plug	Bump Plug	10/7/2019	15:14:33	COM4	8.28	3.00	2563.00	Final circ pressure 2600 psi @ 3 bpm, Bump pressure 3000 psi, Pressure up - Sleeve shifts 5500 psi, Pump 6 bbl wet shoe 4 bpm, Check Floats, Floats hold, 3 bbl back to pump truck. 80 bbls Spacer to surface, approx 20 bbl Cement to surface. Top Lead Cement = Surface. Estimated Top Tail Cement = 7608'
Event	17	End Job	End Job	10/7/2019	15:22:10	COM4	8.33	0.00	-41.00	Stop recording data
Event	18	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	10/7/2019	15:25:00	USER				JSA safe Rig-Down
Event	19	Rig-Down Equipment	Rig-Down Equipment	10/7/2019	15:30:00	USER				Rig down equipment

Event	20	Crew Leave Location	Crew Leave Location	10/7/2019	17:00:00	USER
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Thanks for choosing
Halliburton Energy Services!

3.0 Attachments

3.1 Bost Farm 13N-11B-L Production.png

