

HALLIBURTON

iCem[®] Service

SRC ENERGY INC-EBUS

Bost Farm 12N-11C-L Production

Sincerely,
Meghan Jacobs

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 12N-11C-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 10 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

The Road to Excellence Starts with Safety

Sold To #: 359915		Ship To #: 3982156		Quote #:		Sales Order #: 0905969222				
Customer: SRC ENERGY INC-EBUS				Customer Rep: Caleb Ford						
Well Name: BOST FARM			Well #: 12N-11C-L		API/UWI #: 05-123-50251-00					
Field: WATTENBERG		City (SAP): MILLIKEN		County/Parish: WELD		State: COLORADO				
Legal Description: NW SW-7-5N-66W-2666FSL-1094FWL										
Contractor: PRECISION DRLG				Rig/Platform Name/Num: PRECISION 462						
Job BOM: 7523 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HB41307				Srv Supervisor: Prince Perez						
Job										
Formation Depth (MD)		Top	0'	Bottom		17,665'				
Job depth MD		17,645'		Job Depth TVD		7,029'				
Water Depth				Wk Ht Above Floor		5'				
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	1825		1825
Casing		5.5	4.778	20	TXP-BTC	P110IC	0	17645		7029
Open Hole Section			8.5				1825	17665	1825	7029
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5	1		17645'		Top Plug	5.5	1		
Float Shoe	5.5					Bottom Plug	5.5	1		
Float Collar	5.5	1		17,538'		SSR plug set	5.5			
Insert Float	5.5					Plug Container	5.5	1	HES	
Stage Tool	5.5					Centralizers	5.5	250		
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	Spacer	TUNED PRIME CEMENT SPACER SYS		80	bbl	12.5	2.79	16.6	4	2,673

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	Lead	ELASTICEM (TM) SYSTEM	1,174	sack	13.2	1.57	7.52	8	8,829
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	Tail	NeoCem TM	1,150	sack	13.2	2.04	9.79	8	11,259
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	Displacement	MMCR Displacement	20	bbl	8.34			8	
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	Displacement	Water	299.3	bbl	8.33			8	
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	Displacement	MMCR Displacement	70	bbl	8.34			8	
Cement Left In Pipe		Amount	0 ft		Reason			Wet Shoe	
Mix Water:	pH 7	Mix Water Chloride:	<300 ppm			Mix Water Temperature:	68 °F		
Cement Temperature:	## °F	Plug Displaced by:	8.33 lb/gal			Disp. Temperature:	68 °F		
Plug Bumped?	Yes	Bump Pressure:	3,123 psi			Floats Held?	Yes		
Cement Returns:	10 bbl	Returns Density:	## lb/gal			Returns Temperature:	## °F		
Comment									
Pumped 80 bbls of Tuned Prime Spacer with 20 gallons of D-air, 40 gallons of Dual B, 40 gallons of Musol A.									
Pumped 328.3 bbls of Elasticem.									
Pumped 417.8 bbls of NeoCem.									
Pumped 389.3 bbls of fresh water displacement with 20 gallons of MMCR in the first 20 bbls and last 70 bbls, 20 gallons of ClayWeb, and 3 lbs of BE3 throughout.									
3.5 bbls back on the floats.									

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)	PS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	9/14/2019	15:30:00	USER				CREW CALLED OUT AT 15:30, REQUESTED ON LOCATION 22:00. CREW PICKED UP CEMENT, CHEMICALS, AND PLUG CONTAINER FROM FT. LUPTON, CO. BULK 660, 10025027, 11689672, AND PUMP 11189145.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/14/2019	18:50:00	USER				CREW DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Shop	Crew Leave Shop	9/14/2019	19:00:00	USER				STARTED JOURNEY MANAGEMENT.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	9/14/2019	20:00:00	USER				END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9/58" 36 LB/FT @ 1,825', 5.5" CASING: 20 LB/FT TOTAL 17,645', 8 1/2" HOLE, TD 17,665', 107' SHOE TRAC, TVD- 7,029'. PUMP FRESH WATER DISPLACEMENT. CASING LANDED @ 22:00 9/14/2019.
Event	5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	9/14/2019	20:10:00	USER				HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	9/14/2019	20:20:00	USER				RIG UP BULK AND MIXING EQUIPMENT.
Event	7	Rig-Up Completed	Rig-Up Completed	9/15/2019	00:00:00	USER	8.46	0.00	1.00	
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	9/15/2019	00:15:00	USER	8.45	0.00	3.00	MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	9	Start Job	Start Job	9/15/2019	00:45:58	COM4	8.53	0.00	2.00	BEGIN RECORDING JOB DATA.
Event	10	Test Lines	Test Lines	9/15/2019	00:52:10	COM4	8.67	0.00	6393.00	PRESSURE TESTED IRON TO 6,500 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 660 PSI, 5TH GEAR STALL OUT @ 1,850 PSI. 6,500 PRESSURE TEST KICKED OUT @ 6,380 PSI
Event	11	Pump Spacer 1	Pump Spacer 1	9/15/2019	00:55:01	COM4	8.47	0.00	20.00	PUMP 80 BBLS OF TUNED PRIME SPACER @ 12.5 LB/GAL, 2.79 CUFT/SK, 16.6 GALL/SK. 20 GALS D-AIR, 40 GALLONS

OF DUAL B, 40 GALLONS OF MUSOL A. 80 BBLs
CALCULATED TO RETURN TO SURFACE. DENSITY VERIFIED
BY PRESSURIZED MUD SCALES. PUMP RATE 5 BBLs/MIN
@ 270 PSI.

Event	12	Drop Bottom Plug	Drop Bottom Plug	9/15/2019	01:10:20	COM4	13.10	5.00	167.00	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	13	Pump Lead Cement	Pump Lead Cement	9/15/2019	01:13:13	COM4	13.78	5.00	155.00	PUMPED 1,174 SKS OF ELASTICEM @ 13.2 LB/GAL, 1.57 FT3/SK, 7.52 GAL/SK. 328.27 BBLs. HOL CALCULATED @ 7,404.3'. 13.24 BBLs CALCULATED TO RETURN TO SURFACE. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLs/MIN @ 450 PSI
Event	14	Check Weight	Check Weight	9/15/2019	01:14:16	COM4	13.33	5.00	187.00	
Event	15	Check Weight	Check Weight	9/15/2019	01:44:19	COM4	13.03	8.00	414.00	
Event	16	Check Weight	Check Weight	9/15/2019	01:54:21	COM4	13.44	8.00	573.00	
Event	17	Pump Tail Cement	Pump Tail Cement	9/15/2019	01:57:02	COM4	13.63	8.00	761.00	PUMP 1,150 SKS OF NEOCEM @ 13.2 LB/GAL, 2.04 FT3/SK, 9.79 GAL/SK, 417.82 BBLs. HOT CALCULATED @ 10,240.7', TOT CALCULATED @ 7,404.3'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLs/MIN @ 1,200 PSI.
Event	18	Check Weight	Check Weight	9/15/2019	02:03:59	COM4	13.45	8.00	652.00	
Event	19	Check Weight	Check Weight	9/15/2019	02:32:37	COM4	13.08	8.00	1632.00	
Event	20	Shutdown	Shutdown	9/15/2019	02:57:16	COM4	13.29	0.00	485.00	SHUTDOWN TO WASH LINES.
Event	21	Drop Top Plug	Drop Top Plug	9/15/2019	03:06:18	COM4	7.69	0.00	6.00	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	22	Pump Displacement	Pump Displacement	9/15/2019	03:06:21	COM4	7.69	0.00	6.00	BEGIN CALCULATED DISPLACEMENT OF 389.34 BBLs WITH FRESH WATER. 20 GALLONS OF MMCR IN THE FIRST 20 BBLs AND LAST 70 BBLs, 20 GALLONS OF CLAYWEB, AND 3 LBS OF BE3 THROUGHOUT. PUMP RATE 4.5 BPM @ 3,350 PSI. CAUGHT CEMENT @ 10 BBLs INTO DISPLACEMENT. SPACER TO SURFACE @ 300 BBLs INTO DISPLACEMENT. 80 BBLs OF SPACER TO SURFACE. SLOW RATE TO 3.3 BPM @ 350 BBLs INTO DISPLACEMENT.
Event	23	Bump Plug	Bump Plug	9/15/2019	04:38:05	COM4	8.43	0.00	3623.00	PLUG BUMPED AT CALCULATED DISPLACEMENT. 3,123 PSI PRESSURED 500 PSI OVER BUMP. SHUTDOWN FOR 5 MINUTES.

Event	24	Shift Tool - Lower	Shift Tool - Lower	9/15/2019	04:49:26	USER	8.50	2.00	5979.00	SHEARED @ 5,979 PSI FOLLOWED BY A 6 BBL WET SHOE.
Event	25	Check Floats	Check Floats	9/15/2019	04:52:44	USER	8.37	0.00	1215.00	RELEASED PRESSURE, FLOATS HELD, 3.5 BBLS BACK.
Event	26	End Job	End Job	9/15/2019	04:54:11	COM4	8.30	0.00	-1.00	STOP RECORDING JOB DATA.
Event	27	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	9/15/2019	04:55:00	USER	8.30	0.00	0.00	DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	28	Rig-Down Equipment	Rig-Down Equipment	9/15/2019	05:00:00	USER				RIG DOWN BULK AND MIXING EQUIPMENT.
Event	29	Rig-Down Completed	Rig-Down Completed	9/15/2019	06:00:00	USER				
Event	30	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/15/2019	06:10:00	USER				CREW DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	31	Crew Leave Location	Crew Leave Location	9/15/2019	06:20:00	USER				THANK YOU FOR USING HALLIBURTON – PRINCE PEREZ AND CREW.

3.0 Attachments

3.1 Bost Farm 12N-11C-L Production – Job Chart

