

HALLIBURTON

iCem[®] Service

SRC ENERGY INC-EBUS

Date: Tuesday, August 27, 2019

Bost Farm 31N-11C-L Production

Job Date: Sunday, July 28, 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 31N-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 7 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 #: 3901368		Quote #:		Sales Order #: 0905859532					
Customer: SRC ENERGY INC-EBUS						Customer Rep: Lovel					
Well Name: BOST FARM				Well #: 31N-11C-L		API/UWI #: 05-123-47666-00					
Field: WATTENBERG		City (SAP): WINDSOR		County/Parish: WELD		State: COLORADO					
Legal Description: SW NW-7-5N-66W-1395FNL-1120FWL											
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	17,180					
Job depth MD		17166ft		Job Depth TVD	1797						
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	1797	0	1797	
Casing		5.5	4.778	20	TXP-BTC	P110IC	0	17166	0	7016	
Open Hole Section			8.5				1797	17180	1797	7016	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5	1		17166		Top Plug	5.5	1			
Float Shoe	5.5					Bottom Plug	5.5	1			
Float Collar	5.5	1		17,060		SSR plug set	5.5				
Insert Float	5.5					Plug Container	5.5	1	HES		
Stage Tool	5.5					Centralizers	5.5		263		
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	SBM FDP-C1337-18 CEMENT SPACER SYS			80	bbl	11.5	3.84		4	23.9

Cement Left In Pipe	Amount	0 ft	Reason	Wet Shoe
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Mix Water:	pH 7	Mix Water Chloride:	<300 ppm	Mix Water Temperature:	65 °F
Cement Temperature:	## °F	Plug Displaced by:	8.33 lb/gal	Disp. Temperature:	65 °F
Plug Bumped?	Yes	Bump Pressure:	2924 psi	Floats Held?	Yes
Cement Returns:	7 bbl	Returns Density:	## lb/gal	Returns Temperature:	## °F
Comment <p>Pumped 80 bbls of Tuned Prime spacer with 40 gallons of Dual B, 40 gallons of Musol A.</p> <p>Pumped 332 bbls of Elasticem.</p> <p>Pumped 393 bbls of Neocem.</p> <p>Pumped 378 bbls of fresh water displacement with 10 gallons of MMCR in the first 20 bbls, 3 lbs of BE3, 20 gallons of Clay web, and 10 gallons of MMCR in the last 70 bbls of displacement.</p> <p>Pumped a 6 bbl wet shoe.</p> <p>3.5 bbls back on the floats.</p> <p>7 bbls of cement back to surface.</p>					

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	7/27/2019	09:00:00	USER				CREW CALLED OUT AT 9:00, REQUESTED ON LOCATION 15:00. CREW PICKED UP CEMENT, CHEMICALS, AND PLUG CONTAINER FROM FT. LUPTON, CO. BULK 660, 11633846, 10991603, AND PUMP 11189145.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	7/27/2019	12:50:00	USER				CREW DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Shop	Crew Leave Shop	7/27/2019	13:00:00	USER				STARTED JOURNEY MANAGEMENT.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	7/27/2019	14:00:00	USER				END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9/58" 36 LB/FT @ 1,797', 5.5" CASING: 20 LB/FT TOTAL 17,166', 8 1/2" HOLE, TD 17,180', 48' SHOE TRAC, TVD- 7,016'. PUMP FRESH WATER DISPLACEMENT. CASING LANDED @ 18:00 7/27/2019.
Event	5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	7/27/2019	14:10:00	USER				HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH

										LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	7/27/2019	14:20:00	USER				RIG UP BULK AND MIXING EQUIPMENT.
Event	7	Rig-Up Completed	Rig-Up Completed	7/27/2019	18:35:00	USER				
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	7/27/2019	18:45:00	USER				MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	9	Start Job	Start Job	7/27/2019	20:13:43	COM4	8.71	0.00	-3.00	BEGIN RECORDING JOB DATA.
Event	10	Test Lines	Test Lines	7/27/2019	20:19:08	COM4	8.42	0.00	6261.00	PRESSURE TESTED IRON TO 6,500 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 1,000 PSI, 5TH GEAR STALL OUT @ 2,100 PSI. 6,500 PRESSURE TEST KICKED OUT @ 6,200 PSI
Event	11	Pump Spacer 1	Pump Spacer 1	7/27/2019	20:23:27	COM4	8.25	0.00	-1.00	PUMP 80 BBLS OF TUNED PRIME @ 11.5 LB/GAL, 3.84 CUFT/SK, 23.9 GALL/SK. 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 4 BBLS/MIN @ 320 PSI.
Event	12	Pump Lead Cement	Pump Lead Cement	7/27/2019	20:44:27	COM4	13.13	4.10	380.00	PUMPED 1,165 SKS OF ELASTICEM @ 13.2 LB/GAL, 1.6 FT3/SK, 7.8 GAL/SK. 332 BBLS. HOL CALCULATED @ 7,608'.7 BBLS CALCULATED TO SURFACE. DENSITY

										VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLs/MIN @ 700 PSI
Event	13	Pump Tail Cement	Pump Tail Cement	7/27/2019	21:32:42	COM4	13.18	6.40	1127.00	PUMP 1,062 SKS OF NEOCEM @ 13.2 LB/GAL, 2.08 FT3/SK, 10.18 GAL/SK, 394 BBLs. HOT CALCULATED @ 9,558', TOT CALCULATED @ 7,608'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLs/MIN @ 1,490 PSI.
Event	14	Shutdown	Shutdown	7/27/2019	22:28:21	COM4	12.97	0.00	59.00	SHUTDOWN TO WASH LINES.
Event	15	Drop Top Plug	Drop Top Plug	7/27/2019	22:41:00	COM4	-0.19	0.00	10.00	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	16	Pump Displacement	Pump Displacement	7/27/2019	22:41:03	COM4	-0.19	0.00	10.00	BEGIN CALCULATED DISPLACEMENT OF 378 BBLs WITH FRESH WATER. 10 GALLONS OF MMCR IN THE FIRST 20 BBLs, 3 LBS OF BE3, 10 GALLONS OF MMCR IN THE LAST 70 BBLs, AND 20 GALLONS OF CLAYWEB THROUGHOUT. PUMP RATE 6 BPM @ 3,060 PSI. CAUGHT CEMENT @ 10 BBLs INTO DISPLACEMENT. SPACER TO SURFACE @ 298 BBLs INTO DISPLACEMENT. 80 BBLs OF TUNED SPACER TO SURFACE. 7 BBLs OF CEMENT TO SURFACE. SLOW RATE TO 4 BPM @ 360 BBLs INTO DISPLACEMENT.
Event	17	Bump Plug	Bump Plug	7/27/2019	23:42:32	COM4	8.18	3.80	2924.00	PLUG BUMPED AT CALCULATED DISPLACEMENT. 2,924 PSI

										PRESSURED 500 PSI OVER BUMP. SHUTDOWN FOR 1 MINUTE.
Event	18	Shift Tool - Lower	Shift Tool - Lower	7/27/2019	23:45:42	USER	8.18	1.90	2886.00	SHEARED @ 2,886 PSI FOLLOWED BY A 6 BBL WET SHOE.
Event	19	Check Floats	Check Floats	7/27/2019	23:48:44	USER	8.17	0.00	705.00	RELEASED PRESSURE, FLOATS HELD, 3.5 BBLs BACK.
Event	20	End Job	End Job	7/27/2019	23:49:50	COM4	8.11	0.00	-1.00	STOP RECORDING JOB DATA.
Event	21	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	7/28/2019	00:30:00	USER				DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	22	Rig-Down Equipment	Rig-Down Equipment	7/28/2019	00:40:00	USER				RIG DOWN BULK AND MIXING EQUIPMENT.
Event	23	Rig-Down Completed	Rig-Down Completed	7/28/2019	01:40:00	USER				
Event	24	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	7/28/2019	01:50:00	USER				DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	25	Crew Leave Location	Crew Leave Location	7/28/2019	02:00:00	USER				THANK YOU FOR USING HALLIBURTON – PRINCE PEREZ AND CREW.

3.0 Attachments

3.1 SRC Energy Bost Farm 31N-11C-L Production.png

