

HALLIBURTON

iCem[®] Service

SRC ENERGY INC-EBUS

Ft. Lupton District, COLORADO

For: SRC

Date: Wednesday, October 02, 2019

BOST FARM 33N-11C-L

WELD, BOST FARM 33N-11C-L

Case 1

Job Date: Wednesday, October 02, 2019

Sincerely,

KYLE BATH

Legal Notice

Disclaimer:

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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 33N-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 60 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 #: 3982119		Quote #:		Sales Order #: 0906007601	
Customer: SRC ENERGY INC-EBUS				Customer Rep: SRC REP			
Well Name: BOST FARM			Well #: 33N-11C-L			API/UWI #: 05-123-50252-00	
Field: WATTENBERG		City (SAP): MILLIKEN		County/Parish: WELD		State: COLORADO	
Legal Description: NW SW-7-5N-66W-2666FSL-1154FWL							
Contractor: PRECISION DRLG				Rig/Platform Name/Num: PRECISION 462			
Job BOM: 7523 7523							
Well Type: HORIZONTAL OIL							
Sales Person: HALAMERICA\HB41307				Srv Supervisor: Kyle Bath			

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	17879ft		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	1820
Casing		5.5	4.778	20	TXP-BTC	P110IC	0	17844	0	0
Open Hole Section			8.5				1820	17860	0	6977

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	5.5			17844	Top Plug	5.5		HES
Float Shoe	5.5				Bottom Plug	5.5		HES
Float Collar	5.5				SSR plug set	5.5		HES
Insert Float	5.5				Plug Container	5.5		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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Tuned Prime Cement Spacer Base - RKS/SE	TUNED PRIME CEMENT SPACER SYS	80	bbl	11.5	3.81			
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	1202	sack	13.2	1.57		8	7.52
0.15 %		FE-2, 2000 LB BAG - (1005549)							
0.12 %		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	1150	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			8	
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	302	bbl	8.33			8	
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			8	
0.2140 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
Cement Left In Pipe		Amount	0 ft		Reason			Wet Shoe	

Mix Water:	pH 7	Mix Water Chloride:	0 ppm	Mix Water Temperature:	59 °F
Cement Temperature:	## °F °C	Plug Displaced by:	8.4 lb/gal	Disp. Temperature:	59 °F
Plug Bumped?	Yes/No	Bump Pressure:	#### psi	Floats Held?	Yes/No
Cement Returns:	12 bbl	Returns Density:	## lb/gal	Returns Temperature:	## °F °C
Comment Received 60 BBLs Cement To Surface					

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	DH Density (ppg)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	10/1/2019	13:30:00					CREW CALLED OUT, REQUESTED ON LOCATION 21:00
Event	2	Depart Yard Safety Meeting	10/1/2019	16:45:00					DISCUSS ROUTE AND HAZARDS
Event	3	Crew Leave Yard	10/1/2019	17:00:00					CREW DEPART YARD
Event	4	Arrive at Location from Service Center	10/1/2019	17:45:00					ARRIVE ON LOCATION, RIG RUNNING CASING UPON HES ARRIVAL, RECIEVED NUMBERS FROM THE CO REP, TD 17860, TP 17844, FC 17795, WET SHOE SUB 17736, CSG 5.5" 20#, PREV CSG 9 5/8 36# @ 1820, MUD 10.3, HOLE 8 1/2, TVD 6977
Event	5	Assessment Of Location Safety Meeting	10/1/2019	18:00:00					DISCUSS LOCATION HAZARDS AND HOW TO MITIGATE THEM, WATER TEST, TEMP 59, CHLORIDES 0, PH 7
Event	6	Safety Meeting - Pre Rig-Up	10/1/2019	18:15:00					DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	7	Safety Meeting - Pre Job	10/1/2019	23:00:00					PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP, RIG CIRCULATE 10 BPM, 1100 PSI, 800 BBLS, PASON GAS AT 1099 AT

					START OF CIRCULATING 147 AT TURNOVER
Event	8	Start Job	10/2/2019	03:34:59	START RECORDING DATA
Event	9	Test Lines	10/2/2019	03:38:13	TEST LINES TO 6490 PSI
Event	10	Drop Bottom Plug	10/2/2019	03:51:58	LAUNCH BOTTOM PLUG
Event	11	Pump Spacer 1	10/2/2019	03:54:42	PUMP 80 BBLS TUNED PRIME SPACER 11.5 PPG 4 BPM 400 PSI, WITH MUSCOL A AND DUAL B
Event	12	Pump Lead Cement	10/2/2019	04:15:56	MIX AND PUMP 1202 SKS 336 BBLS LEAD CEMENT 13.2 PPG, 1.57 FT3/SK, 7.52 GAL/SK 8 BPM 830 PSI, CALCULATED TOLC SURFACE
Event	13	Check Weight	10/2/2019	04:17:19	VERIFY WEIGHT ON PRESSURIZED MUD SCALES
Event	14	Pump Tail Cement	10/2/2019	05:00:37	MIX AND PUMP 1150 SKS 417 BBLS TAIL CEMENT 13.2 PPG, 2.04 FT3/SK, 9.79 GAL/SK 8 BPM 1125 PSI, CALCULATED TOTC 7603
Event	15	Check Weight	10/2/2019	05:04:44	VERIFY WEIGHT ON PRESSURIZED MUD SCALES
Event	16	Shutdown	10/2/2019	05:56:02	SHUTDOWN
Event	17	Clean Lines	10/2/2019	06:01:19	WASH PUMPS AND LINES
Event	18	Drop Top Plug	10/2/2019	06:09:17	LAUNCH TOP PLUG
Event	19	Pump Displacement	10/2/2019	06:09:43	PUMP 393 BBLS FRESH WATER DISPLACEMENT WITH BE-3, MMCR, AND CLAYWEB 9 BPM 3150 PSI, RECIEVED 80 BBLS TUNED SPACER AND 60 BBLS CEMENT TO SURFACE

Event	20	Bump Plug	10/2/2019	07:17:20	BUMP PLUG AT 2600 PSI TOOK TO 2900 PSI
Event	21	Pressure Up	10/2/2019	07:20:23	PRESSURE UP TO RUPTURE WET SHOE SUB, RUPTURED AT 5420 PSI
Event	22	Check Floats	10/2/2019	07:25:58	FLOATS HELD TOOK 3 BBLS BACK
Event	23	End Job	10/2/2019	07:27:56	STOP RECORDING DATA
Event	24	Safety Meeting - Pre Rig-Down	10/2/2019	07:33:00	DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	25	Depart Location Safety Meeting	10/2/2019	09:00:00	DISCUSS HAZARDS AND ROUTE
Event	26	Crew Leave Location	10/2/2019	09:30:00	THANK YOU FOR USING HALLIBURTON, KYLE BATH AND CREW

3.0 Attachments

3.1 JOB CHART.png

