

# HALLIBURTON

iCem<sup>®</sup> Service

## **SRC OIL & GAS LP**

Date: Tuesday, August 27, 2019

## **BOST FARM 5N-11A-L Production**

Job Date: Monday, July 22, 2019

Sincerely,

**Tyler Hill**

## Legal Notice

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### Disclaimer:

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## Table of Contents

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1.0	Cementing Job Summary .....	4
1.1	Executive Summary .....	4
2.0	Real-Time Job Summary .....	8
2.1	Job Event Log .....	8
3.0	Attachments.....	11
3.1	Bost Farm 5N-11A-L Production.png .....	11

## 1.0 Cementing Job Summary

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### 1.1 Executive Summary

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Halliburton appreciates the opportunity to perform the cementing services on the **Bost Farm 5N-11A-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 Ft. Lupton**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 359915		<b>Ship To #:</b> 3901306		<b>Quote #:</b>		<b>Sales Order #:</b> 0905839887					
<b>Customer:</b> SRC ENERGY INC-EBUS				<b>Customer Rep:</b> KALIB FORD							
<b>Well Name:</b> BOST FARM			<b>Well #:</b> 5N-11A-L			<b>API/UWI #:</b> 05-123-47660-00					
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> WINDSOR		<b>County/Parish:</b> WELD			<b>State:</b> COLORADO				
<b>Legal Description:</b> SW NW-7-5N-66W-1455FNL-1120FWL											
<b>Contractor:</b> PRECISION DRLG				<b>Rig/Platform Name/Num:</b> PRECISION 462							
<b>Job BOM:</b> 7523 7523											
<b>Well Type:</b> HORIZONTAL OIL											
<b>Sales Person:</b> HALAMERICA/HB41307				<b>Srvc Supervisor:</b> Vitali Neverdasov							
<b>Job</b>											
<b>Formation Name</b>											
<b>Formation Depth (MD)</b>		<b>Top</b>			<b>Bottom</b>						
<b>Form Type</b>					<b>BHST</b>						
<b>Job depth MD</b>		16883ft			<b>Job Depth TVD</b>		6920				
<b>Water Depth</b>					<b>Wk Ht Above Floor</b>						
<b>Perforation Depth (MD)</b>		<b>From</b>			<b>To</b>						
<b>Well Data</b>											
<b>Description</b>	<b>New / Used</b>	<b>Size in</b>	<b>ID in</b>	<b>Weight lbm/ft</b>	<b>Thread</b>	<b>Grade</b>	<b>Top MD ft</b>	<b>Bottom MD ft</b>	<b>Top TVD ft</b>	<b>Bottom TVD ft</b>	
Casing		9.625	8.921	36	LTC	J-55	0	1830	0	1830	
Casing	0	5.5	4.778	20	TXP-BTC	P110IC	0	16883	0	6920	
Open Hole Section			8.5				1830	16889	1830	6920	
<b>Tools and Accessories</b>											
<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	<b>Depth ft</b>		<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>		
Guide Shoe	5.5					Top Plug	5.5	1	N/A		
Float Shoe	5.5	1	N/A	16883		Bottom Plug	5.5	1	N/A		
Float Collar	5.5	1	N/A	16834		SSR plug set	5.5				
Insert Float	5.5					Plug Container	5.5	1	HES		
Stage Tool	5.5					Centralizers	5.5				
<b>Fluid Data</b>											
<b>Stage/Plug #:</b> 1											
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>			<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>
1	Tuned Prime Cement Spacer	SBM FDP-C1337-18 CEMENT SPACER SYS			80	bbl	11.5	3.84		5	

146.19 lbm/bbl	<b>BARITE, BULK (100003681)</b>
0.50 gal/bbl	<b>DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)</b>
1 lbm/bbl	<b>FE-2 (100001615)</b>
0.50 gal/bbl	<b>MUSOL(R) A, 5 GAL PAIL (100064220)</b>

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	1170	sack	13.2	1.57		8	7.54
0.15 %		<b>FE-2 (100001615)</b>							
0.30 %		<b>SCR-100 (100003749)</b>							
7.54 Gal		<b>FRESH WATER</b>							

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	1058	sack	13.2	2.04		7.5	9.75
9.75 Gal		<b>FRESH WATER</b>							
0.08 %		<b>SCR-100 (100003749)</b>							

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		<b>MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)</b>							

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	282	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	MMCR Displacement	MMCR Displacement	70	bbl	8.34			8	
0.2140 gal/bbl		<b>MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)</b>							

<b>Cement Left In Pipe</b>	<b>Amount</b>	0 ft	<b>Reason</b>	<b>WET SHOE</b>
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**Comment :** 10 BBLS OF CEMENT BACK TO SURFACE. ESTIMATED TOP OF TAIL @ 7461'.

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate <i>(bbl/min)</i>	DH Density <i>(ppg)</i>	PS Pump Press <i>(psi)</i>	Comments
Event	1	Other	RIG UP	7/15/2019	09:35:00	USER				RIG UP ALL SURFACE LINES.
Event	2	Call Out	Call Out	7/22/2019	02:00:00	USER				ON LOCATION @ 10:00
Event	3	Depart Yard Safety Meeting	Depart Yard Safety Meeting	7/22/2019	08:00:00	USER				HELD JSA PRIOR LEAVING THE YARD
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	7/22/2019	09:15:00	USER				30 MILES. DISCUSS NUMBERS AND PROCEDURE WITH CUSTOMER. RIG IS RUNNING CASING.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	7/22/2019	09:25:00	USER				JSA PRIOR SPOTTING EQUIPMENT AND RIGGING UP
Event	6	Other	SPOT TRUCKS	7/22/2019	09:30:00	USER				SPOT TRUCKS
Event	7	Casing on Bottom	Casing on Bottom	7/22/2019	11:45:00	USER				CASING LANDED. RIG IS CIRCULATING THRU CRT
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	7/22/2019	13:30:00	USER				DISCUSS HAZARDS AND JOB PROCEDURE WITH ALL PERSONAL INVOLVED
Event	9	Start Job	Start Job	7/22/2019	14:15:00	USER				
Event	10	Pressure Test	Pressure Test	7/22/2019	14:24:00	USER	0.00	8.18	4815.00	LOAD LINE AND TEST TO 6497 PSI
Event	11	Drop Bottom Plug	Drop Bottom Plug	7/22/2019	14:32:00	USER	0.00	8.33	25.00	DROP BOTTOM PLUG VERIFYIED BY CUSTOMER
Event	12	Pump Spacer	Pump Spacer	7/22/2019	14:33:00	USER	0.00	8.35	27.00	BATCH/ WEIGHT/ PUMP 80 BBLs OF TUNED SPACER @

										11.5 PPG WITH SURFACTANS.
Event	13	Pump Lead Cement	Pump Lead Cement	7/22/2019	14:50:00	USER	5.40	11.52	242.00	WEIGHT/ PUMP 1170 SKS (327.2 BBLS) OF ELASTICEM @ 13.2 PPG.
Event	14	Pump Tail Cement	Pump Tail Cement	7/22/2019	15:38:00	USER	6.00	13.25	320.00	WEIGHT/ PUMP 1058 SKS (384.4 BBLS) OF NEOCEM @ 13.2 PPG.
Event	15	Shutdown	Shutdown	7/22/2019	16:36:00	USER	0.80	11.36	42.00	FINISHED PUMPING CEMENT
Event	16	Clean Lines	Clean Lines	7/22/2019	16:38:00	USER	0.00	13.11	26.00	WASH PUMPS AND LINES.
Event	17	Drop Top Plug	Drop Top Plug	7/22/2019	16:52:00	USER	0.00	8.06	18.00	DROP TOP PLUG VERYFYED BY CUSTOMER.
Event	18	Pump Displacement	Pump Displacement	7/22/2019	16:53:00	USER	0.00	8.07	11.00	372 BBLS OF FRESH WATER DISPLACEMENT. FIRST 20 BBLS WIRH MMCR, REMAINING WITH CLA-WEB AND BE3-S. LAST 70 BBLS WITH MMCR.
Event	19	Bump Plug	Bump Plug	7/22/2019	17:44:00	USER	0.00	8.35	2315.00	BUMP PLUG @ 2630 PSI ,500 OVER FINAL LIFT PRESSURE.
Event	20	Other	SHIFT WET SHOE SUB	7/22/2019	17:48:00	USER	1.60	8.47	4736.00	PRESSURE UP 4700 PSI TO SHIFT WET SHOE SUB AND PUMP 6 BBLS WET SHOE.
Event	21	Shutdown	Shutdown	7/22/2019	17:50:00	USER	2.70	8.33	2096.00	
Event	22	Check Floats	Check Floats	7/22/2019	17:52:00	USER	0.00	8.03	58.00	FLOATS HELD. 2.5 BBLS BACK.
Event	23	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	7/22/2019	18:00:00	USER	0.00	8.31	13.00	HELD JSA PRIOR TO RIG DOWN
Event	24	End Job	End Job	7/22/2019	18:02:59	COM4	0.00	8.30	13.00	
Event	25	Depart from Service Center or Other Site	Depart from Service Center or Other Site	7/29/2019	08:10:00	USER				



## 3.0 Attachments

### 3.1 Bost Farm 5N-11A-L Production.png

