

# HALLIBURTON

iCem<sup>®</sup> Service

**SYNERGY RESOURCES CORPORATION**  
**BOST FARM 30N-11B-L**

Sincerely,

**Alexandria Dionigi**

## Legal Notice

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### Disclaimer:

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## 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 30N-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 15 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*

<b>Sold To #:</b> 359915		<b>Ship To #:</b> 3901304		<b>Quote #:</b>		<b>Sales Order #:</b> 0905895577					
<b>Customer:</b> SRC ENERGY INC-EBUS				<b>Customer Rep:</b> KALIB FORD							
<b>Well Name:</b> BOST FARM			<b>Well #:</b> 30N-11B-L			<b>API/UWI #:</b> 05-123-47657-00					
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> WINDSOR		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO					
<b>Legal Description:</b> NW NW-7-5N-66W-1295FNL-1122FWL											
<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>Srv 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>		17088ft		<b>Job Depth TVD</b>		6500					
<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	1850	0	1850	
Casing	0	5.5	4.778	20	TXP-BTC	P110IC	0	17088	0	6500	
Open Hole Section			8.5				1850	17108	1850	6500	
<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	na		
Float Shoe	5.5	1	na	17088		Bottom Plug	5.5	1	na		
Float Collar	5.5	1	Na	16984		SSR plug set	5.5				
Insert Float	5.5					Plug Container	5.5	1	HES		
Stage Tool	5.5					Centralizers	5.5	248	HES		
<b>Fluid Data</b>											
<b>Stage/Plug #: 1</b>											
<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<sup>3</sup>/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		FE-2 (100001615)							
0.50 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	1166	sack	13.2	1.6		8	7.8
0.15 %		FE-2 (100001615)							
0.35 %		SCR-100 (100003749)							
7.80 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	1045	sack	13.2	2.08		8	10.18
10.18 Gal		FRESH WATER							
0.12 %		SCR-100 (100003749)							
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	285	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		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
Cement Left In Pipe		Amount	0 ft			Reason		Shoe Joint	
Comment : 15 bbls of cement back to surface. Estimated top of tail @ 7600'.									

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	Pump Stg Tot (bbl)	DS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	8/13/2019	01:00:00	USER					ON LOCATION @ 07:00
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	8/13/2019	06:00:00	USER					LEAVING THE YARD.
Event	3	Depart Yard Safety Meeting	Depart Yard Safety Meeting	8/13/2019	06:50:00	USER					HELD JSA PRIOR LEAVING THE YARD
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	8/13/2019	06:55:00	USER					32 MILES. RIG IS PICKING UP LANDING JOINT. DISCUSS NUMBERS AND JOB PROCEDURE WITH CUSTOMER.
Event	5	Casing on Bottom	Casing on Bottom	8/13/2019	07:00:00	USER					CASING LANDED. RIG IS CIRCULATING THRU CRT. VERIFIED RATE AND PRESSURE WITH DRILLER. 2050 PSI @ 10 BPM.
Event	6	Other	SPOT TRUCKS	8/13/2019	07:05:00	USER					SPOT TRUCKS
Event	7	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	8/13/2019	07:10:00	USER					JSA PRIOR SPOTTING EQUIPMENT AND RIGGING UP
Event	8	Other	RIG UP	8/13/2019	07:15:00	USER					RIG UP ALL SURFACE LINES. PRIME UP CEMENT PUMP TRUCK, AIR UP BULK EQUIPMENT AND PRE OPEN SURFACTANS.
Event	9	Other	Verified cement and water	8/13/2019	07:20:00	USER					VERYFIED CEMENT AND WATER VOLUMES ON LOCATION.

Event	10	Pre-Job Safety Meeting	Pre-Job Safety Meeting	8/13/2019	08:57:00	USER	0.00	9.23	22.10	1.00	DISCUSS HAZARDS, JOB PROCEDURE AND CONTINGENCY PLAN WITH ALL PERSONAL INVOLVED.
Event	11	Start Job	Start Job	8/13/2019	09:26:45	COM4	0.00	9.51	22.10	0.00	
Event	12	Pressure Test	Pressure Test	8/13/2019	09:31:00	USER	0.00	9.14	25.90	3726.00	LOAD LINE WITH 3 BBLS OF FRESH WATER AND TEST TO 6501 PSI.
Event	13	Drop Bottom Plug	Drop Bottom Plug	8/13/2019	09:33:00	USER	0.00	9.22	25.90	6475.00	DROP BOTTOM PLUG ON THE FLY, 70 BBLS IN TO SPACER, VERYFIYED BY CUSTOMER.
Event	14	Pump Spacer	Pump Spacer	8/13/2019	09:35:00	USER	2.90	10.96	26.80	216.00	BATCH/ WEIGHT/ PUMP 80 BBLS OF TUNED SPACER @ 11.5 PPG WITH SURFACTANS. 570 PSI @ 5.0 BPM.
Event	15	Pump Lead Cement	Pump Lead Cement	8/13/2019	09:49:00	USER	5.10	11.51	1.20	372.00	WEIGHT/ PUMP 1166 SKS (332.3 BBLS) OF ELASTICEM @ 13.2 PPG. 455 PSI @ 8.0 BPM. PROJECTED 15 BBLS OF LEAD BACK TO SURFACE.
Event	16	Check Weight	Check Weight	8/13/2019	09:52:16	COM4	5.10	13.09	17.80	454.00	
Event	17	Pump Tail Cement	Pump Tail Cement	8/13/2019	10:41:00	USER	4.40	12.96	3.50	228.00	WEIGHT/ PUMP 1045 SKS (387.1 BBLS) OF NEOCEM @ 13.2 PPG. 816 PSI @ 8.0 BPM. ESTIMATED TOP OF TAIL AT 7600'.
Event	18	Check Weight	Check Weight	8/13/2019	10:42:24	COM4	7.80	13.10	13.40	583.00	
Event	19	Shutdown	Shutdown	8/13/2019	11:34:00	USER	1.70	13.07	394.30	51.00	FINISHED PUMPING CEMENT.
Event	20	Clean Lines	Clean Lines	8/13/2019	11:36:00	USER	0.00	13.29	394.80	9.00	WASH PUMPS AND LINES PRIOR TO DISPLACEMENT.



Event	21	Drop Top Plug	Drop Top Plug	8/13/2019	11:46:00	USER	0.00	8.57	423.10	2.00	DROP TOP PLUG VERYFYED BY CUSTOMER.
Event	22	Pump Displacement	Pump Displacement	8/13/2019	11:48:00	USER	1.80	8.71	0.10	31.00	375.3 BBLS OF FRESH WATER DISPLACEMENT. FIRST 20 BBLS WIRH MMCR, REMAINING WITH CLA-WEB AND BE3-S. LAST 70 BBLS WITH MMCR.
Event	23	Bump Plug	Bump Plug	8/13/2019	12:33:00	USER	4.00	8.33	388.10	2456.00	BUMP PLUG @ 2925 PSI 500 OVER FINAL LIFT PRESSURE OF 2470 PSI.
Event	24	Other	SHIFT WET SHOE SUB	8/13/2019	12:39:00	USER	0.90	8.38	390.10	3060.00	PRESSURE UP 5025 PSI @ 1.5 BPM TO SHIFT WET SHOE SUB AND PUMP 6 BBLS WET SHOE @ 4.5 BPM 2350 PSI.
Event	25	Shutdown	Shutdown	8/13/2019	12:41:00	USER	4.00	8.35	393.40	2528.00	JOB IS COMPLETE.
Event	26	Check Floats	Check Floats	8/13/2019	12:43:00	USER	0.00	8.35	399.00	1797.00	FLOATS HELD. 2.5 BBLS BACK.
Event	27	End Job	End Job	8/13/2019	12:44:44	COM4	0.00	8.45	0.00	4.00	
Event	28	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	8/13/2019	12:47:00	USER					HELD JSA PRIOR TO RIG DOWN WITH CEMENT CREW.

## 3.0 Attachments

### 3.1 BOST FARM 30N-11B-L.png

