

# HALLIBURTON

iCem<sup>®</sup> Service

**SRC ENERGY CORPORATION**

**Boomerang 25N-3B-L Production**

Sincerely,  
**Meghan Jacobs**

## Legal Notice

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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 **Boomerang 25N-3B-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 15bbls of cement 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]**

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**Cementing Job Summary**

*The Road to Excellence Starts with Safety*

Sold To #: 359915	Ship To #: 3843095	Quote #:	Sales Order #: 0904737267
Customer: SRC ENERGY INC-EBUS		Customer Rep: Level Young	
Well Name: BOOMERANG	Well #: 25N-3B-L	API/UWI #: 05-123-45999-00	
Field: WATTENBERG	City (SAP): GREELEY	County/Parish: WELD	State: COLORADO
Legal Description: NE NW-5-5N-66W-1317FNL-2327FWL			
Contractor: Precision		Rig/Platform Name/Num: Precision 462	
Job BOM: 7523 7523			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB41307		Srcv Supervisor: Steven Markovich	
<b>Job</b>			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	17716ft		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	1821		0
Casing		5.5	4.778	20	BTC	P-110	0	17716	0	0
Open Hole Section			8.5				1821	17721	0	0

Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5			17716		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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Tuned Spacer III	Tuned Spacer III	40	bbl	11.5	3.8		6		
		0.50 gal/bbl MUSOL A, 330 GAL TOTE - (790828)								
		0.50 gal/bbl DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)								
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 LEAD	ELASTICEM (TM) SYSTEM	1004	sack	13.2	1.57		6	7.54	

last updated on 4/1/2018 1:04:53 PM

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*Cementing Job Summary*

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	NeoCem	NeoCem TM	1300	sack	13.2	2.04		4	9.77
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
4	MMCR Displacement	MMCR Displacement	90	bbl	8.34				
0.2850 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/mi n	Total Mix Fluid Gal
5	Water	Water	320	bbl	8.33				
0.0655 gal/bbl			CLA-WEB - BULK (101985043)						
Cement Left In Pipe		Amount	100 ft		Reason			Shoe Joint	
Mix Water:		pH ##	Mix Water Chloride:## ppm		Mix Water Temperature:## °F °C				
Cement Temperature:## °F °C		Plug Displaced by:## lb/gal kg/m3 XXXX		Disp. Temperature:## °F °C					
Plug Bumped? Yes/No		Bump Pressure:#### psi MPa		Floats Held? Yes/No					
Cement Returns:## bbl m3		Returns Density:## lb/gal kg/m3		Returns Temperature:## °F °C					
Comment									

## 2.0 Real-Time Job Summary

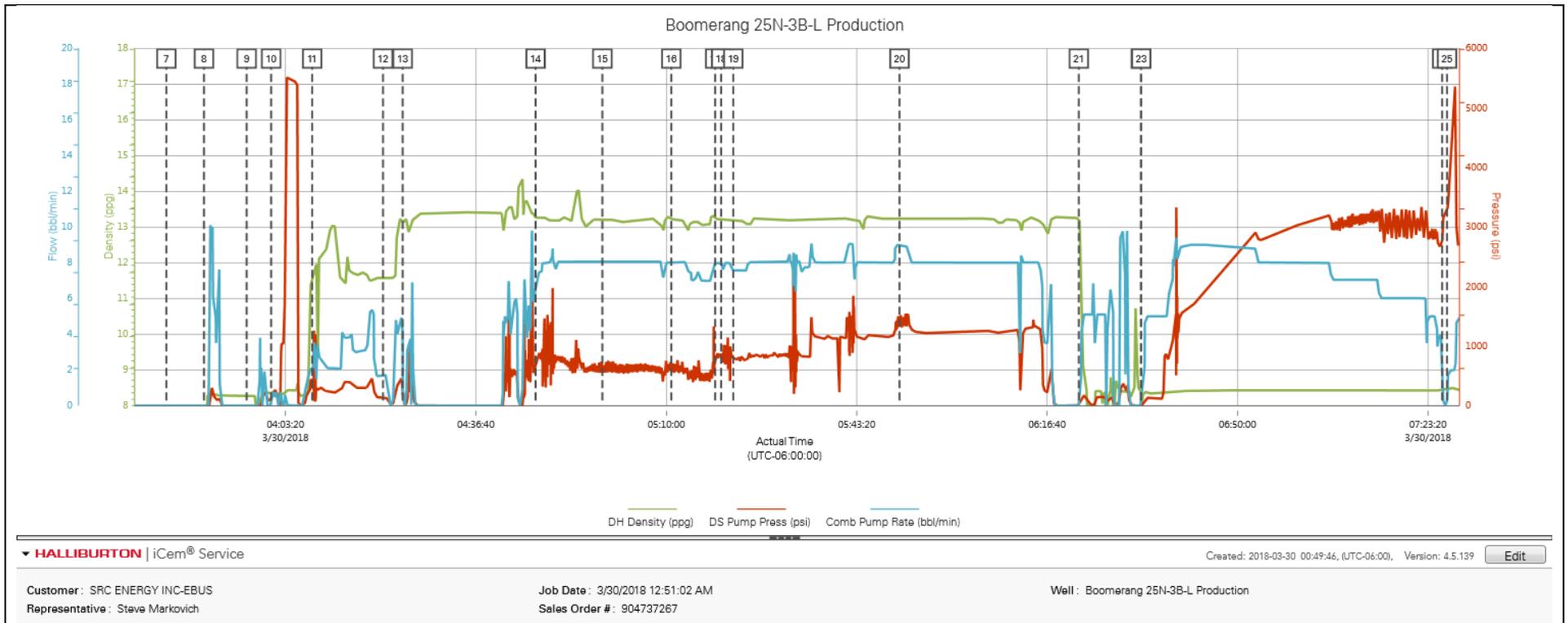
### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	DS Pump Press <i>(psi)</i>	Comb Pump Rate <i>(bbl/min)</i>	Comments
Event	1	Call Out	Call Out	3/29/2018	18:00:00	USER				Job called out with an on location time of 01:00
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/29/2018	22:00:00	USER				JSA with HES crew on driving safety and route to rig.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	3/29/2018	23:00:00	USER				Arrived on location, rig still running casing. 1200' left to run.
Event	4	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	3/29/2018	23:10:00	USER				JSA and Hazard hunt with HES crew.
Event	5	Rig-Up Equipment	Rig-Up Equipment	3/29/2018	23:20:00	USER				Rigged up HES lines and equipment.
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/30/2018	03:15:00	USER				JSA with HES and rig crew on job safety and procedure.
Event	7	Start Job	Start Job	3/30/2018	03:42:29	COM4	0.00	-30.00	0.00	TD 1772 TP17716' WSS 17603' 5 1/2" 20# Production casing, 8 1/2" Open hole, 9 5/8" 36# surface casing at 1821' TVD 7070"
Event	8	Prime Pumps	Prime Pumps	3/30/2018	03:49:04	COM4	0.56	-25.00	0.00	Prime up pump.
Event	9	Check Weight	Check weight	3/30/2018	03:56:32	COM4	8.27	-26.00	0.00	Weight verified by pressurized scales.
Event	10	Test Lines	Test Lines	3/30/2018	04:00:49	COM4	8.33	76.00	0.00	Set kick outs to 500psi and check kick outs, then bring pressure up to 550psi and hold.
Event	11	Pump Spacer 1	Pump Spacer 1	3/30/2018	04:08:00	COM4	11.47	419.00	2.10	Pump 40bbls of 11.5ppg 3.8yield Tuned Spacer. Added 20gallons of Dual Spacer B and Musol A on the fly. Pumped at 2.5bbl/min 220psi.
Event	12	Drop Bottom Plug	Drop Bottom Plug	3/30/2018	04:20:24	USER	11.57	149.00	1.70	Plug pre-loaded into HES head. Plug loaded and dropped in front of company rep.
Event	13	Pump Lead Cement	Pump Lead Cement	3/30/2018	04:23:51	COM4	13.09	402.00	4.10	Pump 280bbls (1004sks) of 13.2pg 1.57 yield Lead Cement. Pumped at 8bbl/min 621psi.
Event	14	Check Weight	Check weight	3/30/2018	04:47:07	COM4	13.26	668.00	6.50	Weight verified by pressurized scales.

Event	15	Check Weight	Check weight	3/30/2018	04:58:48	COM4	13.19	565.00	8.00	Weight verified by pressurized scales.
Event	16	Check Weight	Check weight	3/30/2018	05:10:53	COM4	13.20	588.00	8.10	Weight verified by pressurized scales.
Event	17	Pump Tail Cement	Pump Tail Cement	3/30/2018	05:18:33	COM4	13.19	799.00	7.90	Pump 472bbls (1300sks) of 13.2pg 2.04yield Tail Cement. Pumped at 8bbl/min 763psi.
Event	18	Check Weight	Check weight	3/30/2018	05:19:36	COM4	13.23	846.00	8.00	Weight verified by pressurized scales.
Event	19	Check Weight	Check weight	3/30/2018	05:21:44	COM4	13.20	816.00	7.60	Weight verified by pressurized scales.
Event	20	Check Weight	Check weight	3/30/2018	05:50:49	COM4	13.22	1286.00	9.00	Weight verified by pressurized scales.
Event	21	Clean Lines	Clean Lines	3/30/2018	06:22:13	COM4	13.23	13.00	0.00	Shutdown and clean pumps and lines.
Event	22	Drop Top Plug	Drop Top Plug	3/30/2018	06:33:05	COM4	8.40	-15.00	0.00	Plug pre-loaded into HES head. Plug loaded and dropped in front of company rep.
Event	23	Pump Displacement	Pump Displacement	3/30/2018	06:33:09	COM4	8.41	-16.00	0.00	Pump 389bbls of H2O first 70with MMCR then 319bbls with clayweb. Pumped at 9bbls/min and sowed rate with pressure increase. Spacer to surface at 334bbls away, cement to surface at 374bbls away bringing 15bbls of cement to surface.
Event	24	Bump Plug	Bump Plug	3/30/2018	07:25:49	COM4	8.43	2679.00	4.00	Bumped plug at 389bbls away, final lift pressure was 2679si. Brought pressure 500psi over and held.
Event	25	Other	Other	3/30/2018	07:26:40	USER	8.44	3273.00	0.00	Kicked in pumps at 2bbl/min to shear WSS. WSS sheered at 5359si. Picked rate up to 5bbl/min and pumped a 6bbl wet shoe.
Event	26	End Job	End Job	3/30/2018	07:30:40	COM4				Thank you Steve Markovich and crew.

3.0 Attachments

3.1 Boomerang 25N-3B-L Production – Job Chart with Events



### 3.2 Boomerang 25N-3B-L Production – Job Chart without Events

