

# HALLIBURTON

iCem<sup>®</sup> Service

**SYNERGY RESOURCES CORPORATION**

**Boomerang 32C-6-M 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 32C-6-M** 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 40bbls 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]**

## HALLIBURTON

## Cementing Job Summary

*The Road to Excellence Starts with Safety*

Sold To #: 359915		Ship To #: 3823601		Quote #:		Sales Order #: 0904717651					
Customer: SRC ENERGY INC-EBUS				Customer Rep: Buddy Davis							
Well Name: BOOMERANG		Well #: 32C-6-M		API/UWI #: 05-123-45395-00							
Field: WATTENBERG	City (SAP): GREELEY	County/Parish: WELD		State: COLORADO							
Legal Description: NE NW-5-5N-66W-1362FNL-2327FWL											
Contractor: Precision		Rig/Platform Name/Num: Precision 462									
Job BOM: 7523 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HB41307		Srv Supervisor: Luke Kosakewich									
<b>Job</b>											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		15902ft		Job Depth TVD		7056					
Water Depth				Wk Ht Above Floor							
Perforation Depth (MD)		From		To							
<b>Well Data</b>											
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	1826	0	1826	
Casing		5.5	4.778	20	BTC	P-110	0	15881	0	7056	
Open Hole Section			8.5				1826	15902	1826	7056	
<b>Tools and Accessories</b>											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe						Top Plug	5.5	1	Weatherford		
Float Shoe	5.5	1	Weatherford	15881		Bottom Plug	5.5	1	Weatherford		
Float Collar	5.5	1	Weatherford	15834		SSR plug set					
Wet Shoe Sub	5.5	1	weatherford	15773		Plug Container	5.5	1	HES		
Stage Tool	5.5					Centralizers	5.5	282			
<b>Fluid Data</b>											
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 W/ Surfactants			40	bbl	11.5	3.8		4	
<b>Fluid Data</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

last updated on 3/21/2018 1:26:27 PM

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(v. 4.5.139)

Created: Wednesday, March 21, 2018

## HALLIBURTON

## Cementing Job Summary

2	ElastiCem LEAD	ELASTICEM (TM) SYSTEM	1022	sack	13.2	1.57		6	7.54
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	1078	sack	13.2	2.04		8	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	20	bbl	8.34			10	
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 W/ BE3	330	bbl	8.33			8	
Cement Left In Pipe	Amount	0 ft		Reason				Wet Shoe	
Comment There were full returns throughout the job. Bumped the plug 500 psi. over 2,600 psi. at 3 bpm and held for a minutes. Final pressure was 3,200 psi. Got 40 bbls. of spacer and 40 bbls. of cement to surface. Pressured up to 5,380 psi. to shift the sleeve. Pumped a 6 bbl. wet shoe. Floats held. Got 2.5 bbls. of fluid back to the truck. Estimated TOT is 5,706'.									

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	DS Pump Press (psi)	Comb Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	3/20/2018	06:00:00	USER				Crew was called out at 06:00 for an on location time of 11:00.
Event	2	Depart Location Safety Meeting	Depart Location Safety Meeting	3/20/2018	10:35:00	USER				Crew held a pre journey safety meeting and JSA.
Event	3	Depart Shop for Location	Depart Shop for Location	3/20/2018	10:45:00	USER				Started journey management with dispatch and left location.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	3/20/2018	11:30:00	USER				Crew performed a site assessment and hazard hunt on location. Checked in with the customer and discussed the job procedures, rig up and well bore schematics to calculate the job. The rig was on bottom rigging down the casing crew.
Event	5	Other	Other	3/20/2018	12:00:00	USER				
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/20/2018	12:10:00	USER				The crew held a pre rig up safety meeting and JSA.
Event	7	Rig-Up Equipment	Rig-Up Equipment	3/20/2018	12:20:00	USER				The crew rigged up all lines, hoses and equipment for the job. The rig circulated through Halliburton's cement head and manifold.
Event	8	Safety Meeting	Safety Meeting	3/20/2018	14:00:00	USER	8.46	43.00	3.60	All personnel on location held a pre cement job safety meeting and JSA.
Event	9	Start Job	Start Job	3/20/2018	14:43:23	COM4	8.42	-3.00	0.00	Pumped 3 bbls. of fresh water at 3 bpm. to fill lines and establish circulation.
Event	10	Test Lines	Test Lines	3/20/2018	14:47:08	COM4	8.48	-3.00	0.00	Pressure tested lines to 6,400 psi. with a 500 psi. electronic kick out test.
Event	11	Pump Spacer 1	Pump Spacer 1	3/20/2018	14:54:46	COM4	11.59	48.00	2.70	Pumped 40 bbls. of Tuned Spacer III with surfactants mixed at 11.5 ppg., Yield: 3.8 ft3/sks, 23.8 gal/sks. Density was verified by pressurized scales.

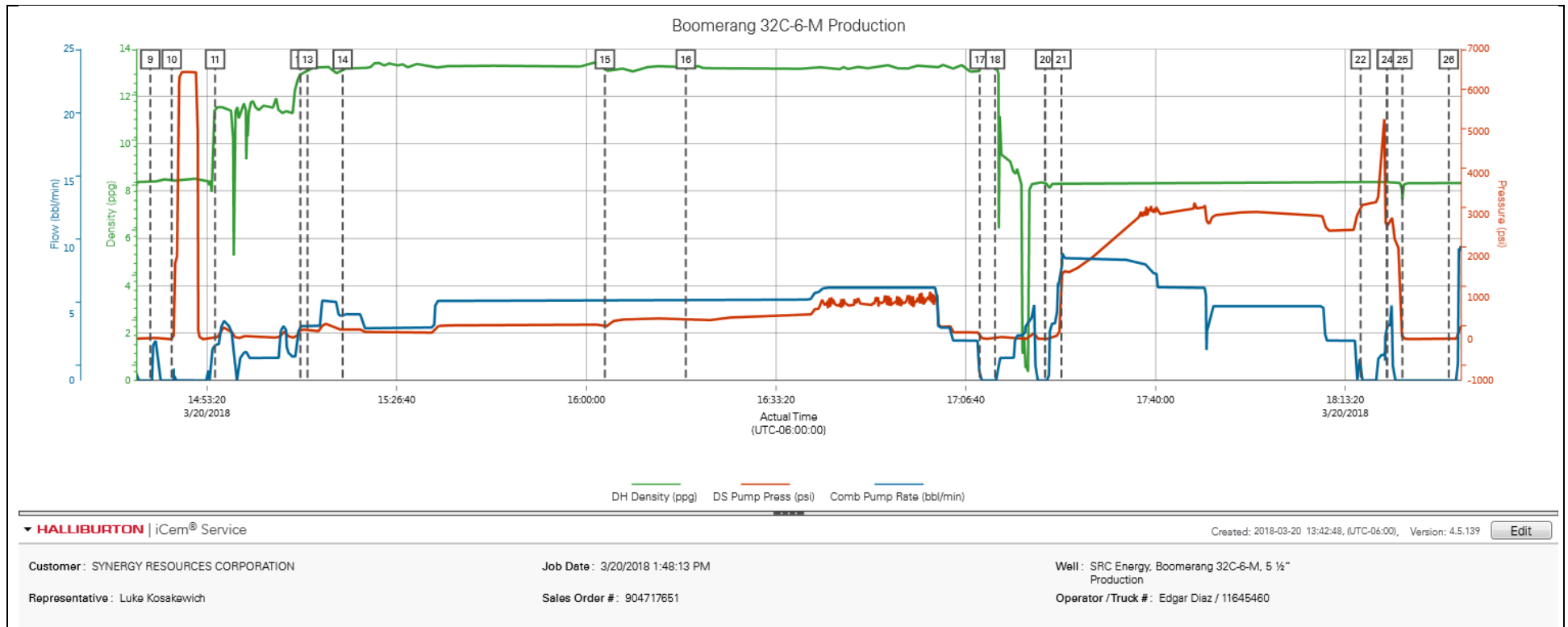
Event	12	Drop Bottom Plug	Drop Bottom Plug	3/20/2018	15:09:44	COM4	12.92	239.00	4.10	Dropped the bottom plug which, was witnessed by the customer.
Event	13	Pump Lead Cement	Pump Lead Cement	3/20/2018	15:11:00	COM4	13.09	215.00	4.10	Pumped 286 bbls. (1022 sks.) of Elasticem mixed at 13.2 ppg., Yield: 1.57 ft3/sks, 7.54 gal/sks. Density was verified by pressurized scales.
Event	14	Check Weight	Check Weight	3/20/2018	15:17:10	USER	13.15	218.00	5.00	
Event	15	Pump Tail Cement	Pump Tail Cement	3/20/2018	16:03:15	COM4	13.10	300.00	6.10	Pumped 392 bbls. (1078 sks.) of Neocem mixed at 13.2 ppg. Yield: 2.04 ft3/sks, 9.77 gal/sks. Density was verified by pressurized scales.
Event	16	Check Weight	Check weight	3/20/2018	16:17:28	COM4	13.23	491.00	6.10	Cement weighed up at 13.2 ppg. Density was verified by pressurized scales.
Event	17	Shutdown	Shutdown	3/20/2018	17:09:07	COM4	13.10	90.00	0.00	Shutdown to wash up and drop the top plug.
Event	18	Clean Lines	Clean Lines	3/20/2018	17:11:48	USER	13.36	8.00	0.00	Washed pumps and lines until clean.
Event	19	Drop Top Plug	Drop Top Plug	3/20/2018	17:20:34	COM4	8.31	-3.00	0.00	Dropped the top plug which was witnessed by the customer.
Event	20	Pump Displacement	Pump Displacement	3/20/2018	17:20:38	COM4	8.31	-3.00	0.00	Pumped 350 bbls. of fresh water with MMCR in the first 20 bbls. and Clayweb and BE3 throughout the rest of displacement.
Event	21	Displ Reached Cement	Displ Reached Cmmt	3/20/2018	17:23:27	COM4	8.31	1299.00	7.70	Pressured up and caught cement 16 bbls. into displacement.
Event	22	Bump Plug	Bump Plug	3/20/2018	18:16:01	COM4	8.36	3194.00	0.00	
Event	23	Pressure Up Well	Pressure Up Well	3/20/2018	18:20:37	USER	8.35	2731.00	4.20	Pressured up the well to 5,380 psi. to shift the sleeve.
Event	24	Pump Water	Pump Water	3/20/2018	18:20:42	USER	8.36	2736.00	4.20	Pumped 6 bbls. of fresh water for a wet shoe.
Event	25	Check Floats	Check Floats	3/20/2018	18:23:22	USER	7.71	43.00	0.00	Bled off pressure to check floats. Floats held. Got 2.5 bbls. of fluid back to the truck.
Event	26	End Job	End Job	3/20/2018	18:31:31	COM4				Washed and blew down all lines, pumps and hoses.
Event	27	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/20/2018	22:00:00	USER				Halliburton cement crew held a pre rig down safety meeting and JSA.
Event	28	Rig-Down Equipment	Rig-Down Equipment	3/20/2018	22:10:00	USER				Rigged down all lines, hoses and equipment.
Event	29	Depart Location Safety	Depart Location Safety	3/20/2018	22:20:00	USER				Held a pre journey safety meeting with the crew.



		Meeting	Meeting					
Event	30	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	3/20/2018	22:30:00	USER	Started journey management with dispatch and left location.	

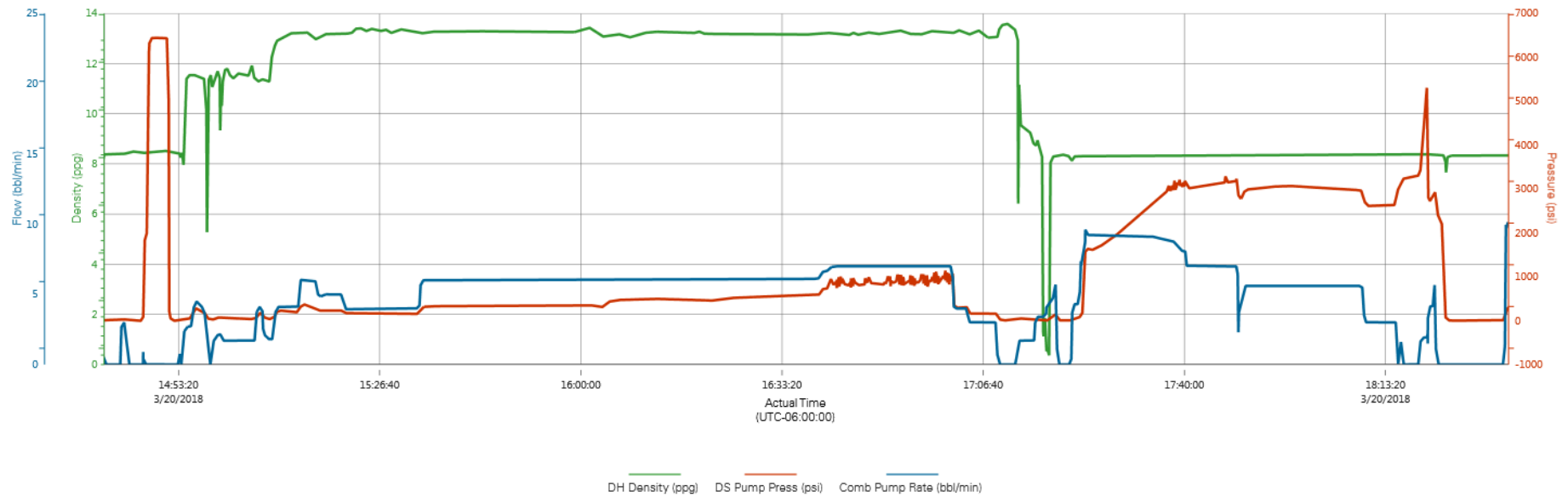
## 3.0 Attachments

### 3.1 Boomerang 32C-6-M Production – Job Chart with Events



## 3.2 Boomerang 32C-6-M Production – Job Chart without Events

Boomerang 32C-6-M Production



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Edit

Customer: SYNERGY RESOURCES CORPORATION

Job Date: 3/20/2018 1:48:13 PM

Well: SRC Energy, Boomerang 32C-6-M, 5 1/2" Production

Representative: Luke Kosakewich

Sales Order #: 904717651

Operator / Truck #: Edgar Diaz / 11645460