

HALLIBURTON

iCem[®] Service

SRC ENERGY INC-EBUS

Bost Farm 32C-11-L2 Production

Sincerely,
Meghan Jacobs

Legal Notice

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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 32C-11-L2 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 #: 3982012		Quote #:		Sales Order #: 0905961233					
Customer: SRC ENERGY INC-EBUS				Customer Rep: CALIB FORD							
Well Name: BOST FARM			Well #: 32C-11-L2			API/UWI #: 05-123-50256-00					
Field: WATTENBERG		City (SAP): MILLIKEN		County/Parish: WELD		State: COLORADO					
Legal Description: NW SW-7-5N-66W-2666FSL-1074FWL											
Contractor: PRECISION DRLG				Rig/Platform Name/Num: PRECISION 462							
Job BOM: 7523 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA/HB41307				Srv Supervisor: Vitali Neverdasov							
Job											
Formation Name											
Formation Depth (MD)		Top			Bottom						
Form Type					BHST						
Job depth MD		14381ft			Job Depth TVD		7128				
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	0	5.5	4.778	20	TXP-BTC	P110IC	0	14381	0	7128	
Open Hole Section			8.5				1824	14411	1820	7128	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5					Top Plug	5.5	1	NA		
Float Shoe	5.5	1	NA	14381		Bottom Plug	5.5	1	NA		
Float Collar	5.5	1	NA	14277		SSR plug set	5.5				
Insert Float	5.5					Plug Container	5.5	1	HES		
Stage Tool	5.5					Centralizers	5.5	214	HES		
Fluid Data											
Stage/Plug #: 1											
Fluid #	Stage Type	Fluid Name			Qty	Qty UoM	Mixing Density lbm/gal	Yield ft/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	bbbl	12.5	2.79	16.6	4.5		
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	1197	sack	13.2	1.57		8	7.52	
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	760	sack	13.2	2.04		8	9.79	
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	bbbl	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	225	bbbl	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	bbbl	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	
<p>Comment: 60 BBLS OF CEMENT BACK TO SURFACE. CALCULATED TOP OF TAIL @ 7635'.</p>										

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	Call Out	Call Out	9/9/2019	10:30:00	USER				ON LOCATION @ 16:30.
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	9/9/2019	14:45:00	USER				
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	9/9/2019	15:50:00	USER				29 MILES. RIG IS RUNNING CASING. DISCUSS NUMBERS AND JOB PROCEDURE WITH CUSTOMER. NUMBERS PROVIDED BY CUSTOMER: 8 1/2 " PRODUCTION HOLE @ 14411'. 5 1/2 CASING SET @ 14381'. 5 1/2" WET SHOE SUB @ 14277'. TVD 7059'. MUD 10.2. 9 5/8" 36# SURFACE CASING @ 1820'.
Event	4	Other	SPOT TRUCKS	9/9/2019	16:00:00	USER				SPOT TRUCKS
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	9/9/2019	16:05:00	USER				JSA PRIOR SPOTTING EQUIPMENT AND RIGGING UP
Event	6	Other	RIG UP	9/9/2019	16:10:00	USER				RIG UP ALL SURFACE LINES AND BULK . PRIME UP CEMENT PUMP TRUCK, AIR UP BULK EQUIPMENT AND PRE OPEN SURFACTANS.
Event	7	Other	Verified cement and water	9/9/2019	16:20:00	USER				VERYFIED CEMENT AND WATER VOLUMES ON LOCATION. TEST WATER.
Event	8	Casing on Bottom	Casing on Bottom	9/9/2019	16:30:00	USER				CASING LANDED. RIG IS CIRCULATING THRU CRT. VERYFIED CIRCULATING RATE AND PRESSURE WITH DRILLER. 1030 PSI @ 10 BPM.
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	9/9/2019	18:15:00	USER	0.00	8.28	21.00	DISCUSS HAZARDS, JOB PROCEDURE AND CONTINGENCY PLAN WITH ALL PERSONAL INVOLVED. DURING SAFETY MEETING CUSTOME NOTED REQUESTED VOLUME DID NOT MATCH DELIVERED VOLUMES. E-MAIL SHOWED CUSTOMER APPROVED VOLUME CHANGES BY ENGINEER. CUSTOMER REQUESTED WE REDUCE TAIL VOLUME TO REFLECT 7650' OF TAIL. CALCULATIONS WHERE PERFORMED RESULTING IN 760 SKS OF TAIL.

Event	10	Start Job	Start Job	9/9/2019	18:47:44	COM4	0.00	6.76	1.00	
Event	11	Other	Other	9/9/2019	19:00:00	USER	0.00	6.43	-3.00	LOAD BOTTOM AND TOP PLUG INTO PLUG CONTAINER VERIFIED BY CUSTOMER.
Event	12	Pressure Test	Pressure Test	9/9/2019	19:10:00	USER	0.00	8.59	6444.00	LOAD LINE WITH 3 BBLS OF FRESH WATER AND TEST TO 6480 PSI.
Event	13	Drop Bottom Plug	Drop Bottom Plug	9/9/2019	19:13:00	USER	0.00	8.42	-5.00	DROP BOTTOM PLUG BEFORE PUMPING SPACER.
Event	14	Pump Spacer	Pump Spacer	9/9/2019	19:14:00	USER	1.00	8.39	-3.00	BATCH/ WEIGHT/ PUMP 80 BBLS OF TUNED SPACER @ 12.5 PPG WITH 40 GAL OF MUSOL AND 40 GAL DUAL B. 147 PSI @ 4.5 BPM.
Event	15	Check Weight	Check Weight	9/9/2019	19:17:12	COM4	3.40	12.85	234.00	
Event	16	Pump Lead Cement	Pump Lead Cement	9/9/2019	19:34:00	USER	4.90	12.46	61.00	WEIGHT/ PUMP 1197 SKS (334.7 BBLS) OF ELASTICEM @ 13.2 PPG. 305 PSI @ 8.0 BPM. CALCULATED 9 BBLS BBLS OF LEAD BACK TO SURFACE.
Event	17	Check Weight	Check Weight	9/9/2019	19:36:53	COM4	5.00	13.43	126.00	
Event	18	Pump Tail Cement	Pump Tail Cement	9/9/2019	20:29:00	USER	6.00	13.27	167.00	WEIGHT/ PUMP NEW AND APPROVED VOLUME OF 760 SKS (276.1 BBLS) OF NEOCEM BY MEASURING MIX WATER (7440.4) @ 13.2 PPG. 615 PSI @ 8.0 BPM. CALCULATED TOP OF TAIL AT 7650'.
Event	19	Check Weight	Check Weight	9/9/2019	20:31:16	COM4	6.00	13.14	181.00	
Event	20	Shutdown	Shutdown	9/9/2019	21:16:00	USER	0.00	13.41	14.00	FINISHED PUMPING CEMENT.
Event	21	Clean Lines	Clean Lines	9/9/2019	21:20:00	USER	2.20	10.68	35.00	WASH PUMPS AND LINES PRIOR TO DISPLACEMENT.
Event	22	Drop Top Plug	Drop Top Plug	9/9/2019	21:27:00	USER	0.00	7.88	-5.00	DROP TOP PLUG VERIFIED BY CUSTOMER.
Event	23	Pump Displacement	Pump Displacement	9/9/2019	21:29:00	USER	0.00	7.86	-5.00	315.5 BBLS OF FRESH WATER DISPLACEMENT. FIRST 20 BBLS WIRH MMCR, REMAINING WITH CLA-WEB AND BE3-S. LAST 70 BBLS WITH MMCR.
Event	24	Bump Plug	Bump Plug	9/9/2019	22:18:00	USER	0.00	8.35	2876.00	BUMP PLUG @ 3050 PSI 500 OVER FINAL LIFT PRESSURE OF 2460 PSI.
Event	25	Other	SHIFT WET SHOE SUB	9/9/2019	22:20:00	USER	0.10	8.26	3080.00	PRESSURE UP 4900 PSI @ 1.5 BPM TO SHIFT WET SHOE SUB AND PUMP 6 BBLS WET SHOE @ 4.0 BPM 2450 PSI.
Event	26	Shutdown	Shutdown	9/9/2019	22:24:00	USER	0.00	8.20	2056.00	

Event	27	Check Floats	Check Floats	9/9/2019	22:26:00	USER	0.00	8.20	82.00	FLOATS HELD. 2.5 BBLS BACK.
Event	28	End Job	End Job	9/9/2019	22:26:48	COM4	0.00	8.19	-6.00	
Event	29	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	9/9/2019	22:33:00	USER	0.00	8.23	-7.00	HELD JSA PRIOR TO RIG DOWN WITH CEMENT CREW.

3.0 Attachments

3.1 BOST FARM 32C-11-L2 Production – Job Chart

