

HALLIBURTON

iCem[®] Service

SRC ENERGY

Falken 33N-9B-L Production

Job Date: Thursday, October 26, 2017

Sincerely,

Fort Lupton District Cement

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Falken 33N-9B-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.

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 #: 3815869		Quote #:		Sales Order #: 0904379756				
Customer: SRC ENERGY INC-EBUS				Customer Rep: TIM JONES						
Well Name: FALKEN			Well #: 33N-9B-L		API/UWI #: 05-123-45101-00					
Field: WATTENBERG		City (SAP): GREELEY		County/Parish: WELD		State: COLORADO				
Legal Description: NE SE-11-6N-66W-1844FSL-276FEL										
Contractor: PRECISION DRLG				Rig/Platform Name/Num: PRECISION 562						
Job BOM: 7523 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HB41307				Srv Supervisor: Jason Welton						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST		230 degF				
Job depth MD		18964ft		Job Depth TVD						
Water Depth				Wk Ht Above Floor		5				
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	1808	0	1808
Casing		5.5	4.778	20		P-110	0	19068	0	7269
Open Hole Section			8.5				1808	19068	0	7269
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5			18964		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		
147.42 lbm/bbl		BARITE, BULK (100003681)								
35.10 gal/bbl		FRESH WATER								
0.50 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)								

0.50 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)							
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	1003	sack	13.2	1.57		6	7.54
7.54 Gal		FRESH WATER							
0.30 %		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
3	NeoCem	NeoCem TM	1440	sack	13.2	2.043		4	9.77
9.77 Gal		FRESH WATER							
0.08 %		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	40	bbl	8.34				
0.50 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	Clay-Web Water	Clay-Web Water	379	bbl	8.33				
0.0493 gal/bbl		CLA-WEB - TOTE (101985045)							
Cement Left In Pipe	Amount	42 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 LANDED PLUG AT CALCULATED DISPLACEMENT. FOLLOWED WEATHERFORD WET SHOE PROCESS. FULL RETURNS THROUGHOUT.									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Comments
Event	1	Arrive At Loc	Arrive At Loc	10/25/2017	22:00:00	USER				CREW CALLED OUT AT 1830/REQUESTED ON LOCATION AT 0000/RIG RUNNING CASING 3500' OFF BOTTOM
Event	2	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	10/25/2017	22:10:00	USER				TEST WATER/SPOT IN HES EQUIPMENT
Event	3	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	10/25/2017	22:25:00	USER				TRIP HAZZARDS/SPILL PREVENTION
Event	4	Rig-Up Equipment	Rig-Up Equipment	10/25/2017	22:30:00	USER				
Event	5	Rig-Up Completed	Rig-Up Completed	10/25/2017	23:50:00	USER				HES READY
Event	6	Wait on Customer or Customer Sub-Contractor Equip - Start Time	Wait on Customer or Customer Sub-Contractor Equip - Start Time	10/26/2017	00:01:00	USER				RIG FINISH RUNNING CASING/RUPTURE CASING FLOATATION DISC/PERCULATE AIR/CONDITION WELL
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	10/26/2017	05:30:00	USER	-3.00	8.44	0.00	REVIEW JOB AND SAFETY PROCEDURES
Event	8	Start Job	Start Job	10/26/2017	06:50:28	COM4	-6.00	8.48	0.00	
Event	9	Test Lines	Test Lines	10/26/2017	06:57:12	COM4	-4.00	8.48	0.00	500PSI LOW/5000PSI HIGH/TESTS GOOD
Event	10	Pump Spacer 1	Pump Spacer 1	10/26/2017	06:57:17	COM4	-2.00	8.48	0.90	40BBLs TUNED SPACER III @ 11.5PPG/48BPM/361PSI
Event	11	Drop Bottom Plug	Drop Bottom Plug	10/26/2017	07:09:20	COM4	29.00	11.75	2.60	WEATHERFORD BOTTOM

7										PLUG
Event	12	Pump Lead Cement	Pump Lead Cement	10/26/2017	07:09:26	COM4	36.00	12.19	2.60	1003SKS @ 13.2PPG/8BPM/950PSI
Event	13	Check Weight	Check weight	10/26/2017	07:15:39	COM4	170.00	13.46	4.00	DENSITY VERIFIED
Event	14	Check Weight	Check weight	10/26/2017	07:25:49	COM4	612.00	13.48	8.00	DENSITY VERIFIED
Event	15	Pump Tail Cement	Pump Tail Cement	10/26/2017	07:50:09	COM4	142.00	13.24	4.60	1440SKS @ 13.2PPG/8BPM/462PSI
Event	16	Check Weight	Check weight	10/26/2017	08:04:10	COM4	736.00	13.53	8.00	DENSITY VERIFIED
Event	17	Shutdown	Shutdown	10/26/2017	08:58:45	COM4	87.00	10.66	0.00	
Event	18	Clean Lines	Clean Lines	10/26/2017	08:58:49	COM4	64.00	11.08	0.00	TO OPEN TOP PIT
Event	19	Drop Plug	Drop Plug	10/26/2017	09:07:56	COM4	-1.00	8.43	0.00	WEATHERFORD TOP PLUG
Event	20	Pump Displacement	Pump Displacement	10/26/2017	09:08:45	COM4	-3.00	8.46	0.00	418BBLS FRESHWATER/FIRST 40 TREATED WITH MMCR/REMAINDER TREATED WITH MYOCIDE AND CLA- WEB/9BPM/1700PSI
Event	21	Bump Plug	Bump Plug	10/26/2017	09:58:38	COM4	3065.00	8.27	0.00	PLUG LANDED AT 418BBLS DISPLACED/3600PSI/PRESS URE IMMEDIATELY FELL OFF INDICATING A PREMATURE WF PLUG RUPTURE
Event	22	Other	Other	10/26/2017	10:00:51	COM4	2219.00	8.25	0.00	CHECKED FLOATS/3BBLS BACK/HELD
Event	23	Pump Spacer 1	Pump Spacer 1	10/26/2017	10:16:05	COM4	2157.00	8.24	0.00	PUMPED 6BBLS FRESHWATER PER WET SHOE PROCESS

Event	24	Shutdown	Shutdown	10/26/2017	10:19:16	COM4	2478.00	8.28	0.00	
Event	25	Other	Other	10/26/2017	10:19:34	COM4	2226.00	8.28	0.00	CHECK FLOATS/3BBLs BACK/HELD
Event	26	End Job	End Job	10/26/2017	10:21:37	COM4				
Event	27	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	10/26/2017	10:30:00	USER	-10.00	8.22	0.00	
Event	28	Rig-Down Equipment	Rig-Down Equipment	10/26/2017	10:35:00	USER	-11.00	8.19	0.00	
Event	29	Rig-Down Completed	Rig-Down Completed	10/26/2017	11:35:00	USER				
Event	30	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	10/26/2017	11:50:00	USER				
Event	31	Depart Location	Depart Location	10/26/2017	12:00:00	USER				THANK YOU

3.0 Job Chart

3.1 Job Chart

