

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Wednesday, April 26, 2017

RBF 11 Surface

Job Date: Thursday, March 30, 2017

Sincerely,

Julia Nichols

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 **RBF 11** cement **Surface** 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 68 barrels 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 [Ft. Lupton]

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 369404	Ship To #: 3788376	Quote #:	Sales Order #: 0903942059
Customer: EXTRACTION OIL & GAS -		Customer Rep: Sean McIntyre	
Well Name: RBF	Well #: 11	API/UWI #: 05-123-44444-00	
Field: WATTENBERG	City (SAP): WINDSOR	County/Parish: WELD	State: COLORADO
Legal Description: SE NE-22-6N-67W-2090FNL-150FEL			
Contractor: UNKNOWN		Rig/Platform Name/Num: WORKOVER RIG	
Job BOM: 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX38199		Srvc Supervisor: Michael Loughran	
Job			
Formation Name			
Formation Depth (MD)	Top	0	Bottom 1578
Form Type	BHST		
Job depth MD	1600ft		
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 0 1578 0 1578
Open Hole Section			13.5 0 1579 0 1579
Tools and Accessories			
Type	Size in	Qty	Make Depth ft Type Size in Qty Make
Guide Shoe	9.625		157+ Top Plug 9.625 1 HES
Float Shoe	9.625		Bottom Plug 9.625
Float Collar	9.625		SSR plug set 9.625
Insert Float	9.625		Plug Container 9.625 1 HES
Stage Tool	9.625		Centralizers 9.625
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	Red Dye Spacer	Red Dye Spacer	10 bbl 8.33 2
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	SwiftCem	SWIFTCM (TM) SYSTEM	625 sack 13.5 1.74 6.5 9.2
9.20 Gal		FRESH WATER	

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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	Fresh Water	Fresh Water	118.81	bbl	8.33			6	
Cement Left In Pipe		Amount	42 ft		Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride: 0 ppm			Mix Water Temperature:		50°F °C	
Comment									

2.0 Real-Time Job Summary

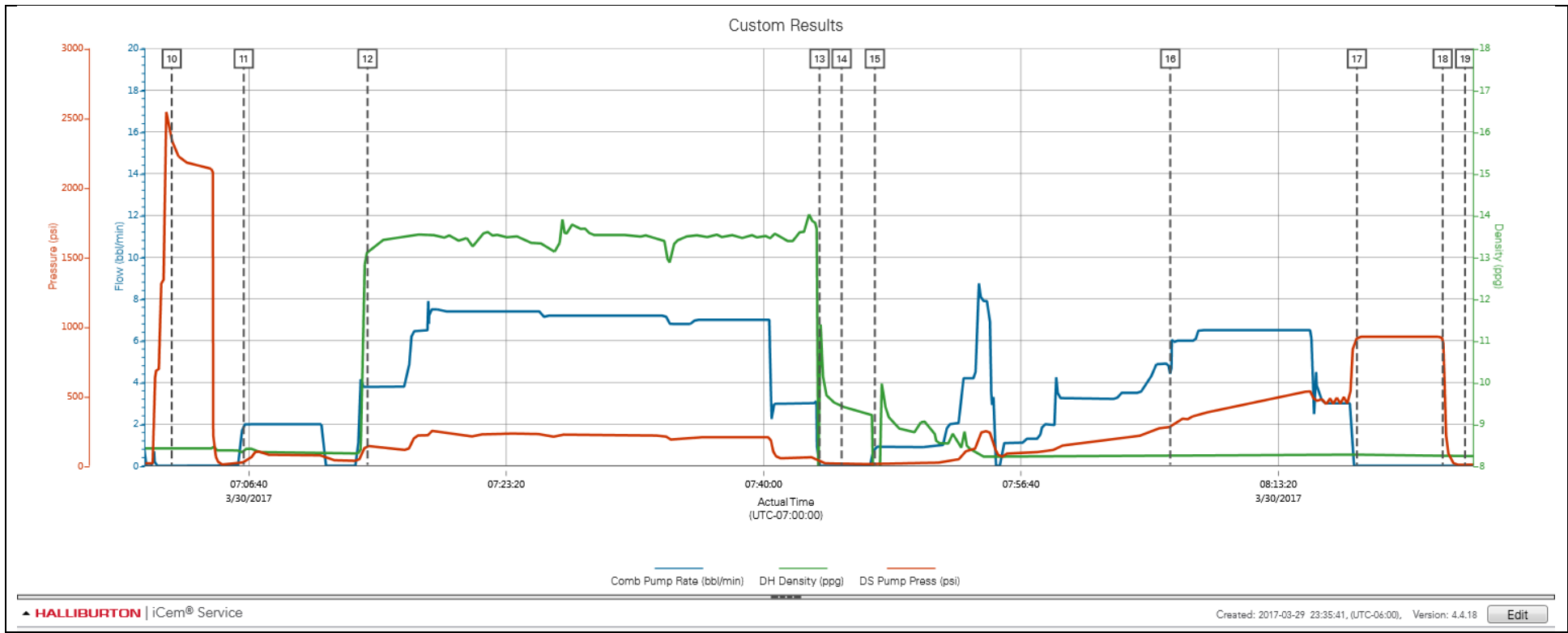
2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	DS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	3/29/2017	21:30:00	USER				Callout for on loc. time 0330
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/29/2017	23:30:00	USER				Discuss route, Safe driving, start JM
Event	3	Crew Leave Yard	Crew Leave Yard	3/29/2017	23:59:00	USER				
Event	4	Arrive At Loc	Arrive At Loc	3/30/2017	00:45:00	USER				Meet with customer to discuss job. Rig Tripping out Drill pipe
Event	5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	3/30/2017	01:00:00	USER				hazard hunt, discuss where to spot trucks
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/30/2017	04:30:00	USER				JSA safe rig up
Event	7	Rig-Up Equipment	Rig-Up Equipment	3/30/2017	04:35:00	USER				rig up all surface lines and iron to buffer zone
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/30/2017	06:45:00	USER	0.00	8.31	0.00	With all associated personnel. Discuss hazards of our equipment, iron, pressure
Event	9	Start Job	Start Job	3/30/2017	06:56:11	COM1				Begin recording data, 9.625" casing J-55 36# at 1579', 13.5" open hole to 1578'
Event	10	Test Lines	Test Lines	3/30/2017	07:01:40	COM1	0.00	8.44	2344.00	2000 psi
Event	11	Pump Spacer 1	Pump Spacer 1	3/30/2017	07:06:20	COM1	2.00	8.40	28.00	10 bbls Water with Red Dye
Event	12	Pump Cement	Pump Cement	3/30/2017	07:14:21	COM1	3.80	13.16	142.00	625 sacks SwiftCem, 193.68 bbls, 13.5 ppg, 1.74 yield, 9.2 gal/sack
Event	13	Shutdown	Shutdown	3/30/2017	07:43:37	COM1	0.00	10.23	30.00	
Event	14	Drop Top Plug	Drop Top Plug	3/30/2017	07:45:03	COM1	0.00	9.43	14.00	Verified by Customer
Event	15	Pump Displacement	Pump Displacement	3/30/2017	07:47:12	COM1	1.00	0.21	19.00	118.8 bbls fresh water displacement
Event	16	Cement Returns to	Cement returns to	3/30/2017	08:06:20	COM1	4.40	8.25	280.00	Cement returns to surface at 50 bbls into displacement. 68

		Surface	surface							bbbs cement to surface
Event	17	Bump Plug	Bump Plug	3/30/2017	08:18:25	COM1	0.00	8.27	920.00	500 psi over final circulating pressure of 500 psi, 5 min casing test
Event	18	Check Floats	Check Floats	3/30/2017	08:23:58	USER	0.00	8.26	910.00	Release pressure, check floats, floats hold, .06 bbbs back to pump truck
Event	19	End Job	End Job	3/30/2017	08:25:25	COM1				Stop recording data
Event	20	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	3/30/2017	08:30:00	USER				JSA safe rig down
Event	21	Rig Down Lines	Rig Down Lines	3/30/2017	08:45:00	USER				
Event	22	Crew Leave Location	Crew Leave Location	3/30/2017	10:00:00	USER				Start JM. Thanks for choosing Halliburton!

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

