

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Wednesday, April 26, 2017

RBF 11 Surface

Job Date: Thursday, March 30, 2017

Sincerely,

Julia Nichols

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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				Srcv Supervisor: Michael Loughran						
Job										
Formation Name										
Formation Depth (MD)		Top	0	Bottom		1578				
Form Type				BHST						
Job depth MD		1600ft		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			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			1536		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 ft ³ /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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	SwiftCem	SWIFTCEM (TM) SYSTEM		625	sack	13.5	1.74		6.5	9.2
9.20 Gal		FRESH WATER								

last updated on 5/3/2017 2:01:40 PM

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Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
3	Fresh Water	Fresh Water	118.81	bbl	8.33			8		
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

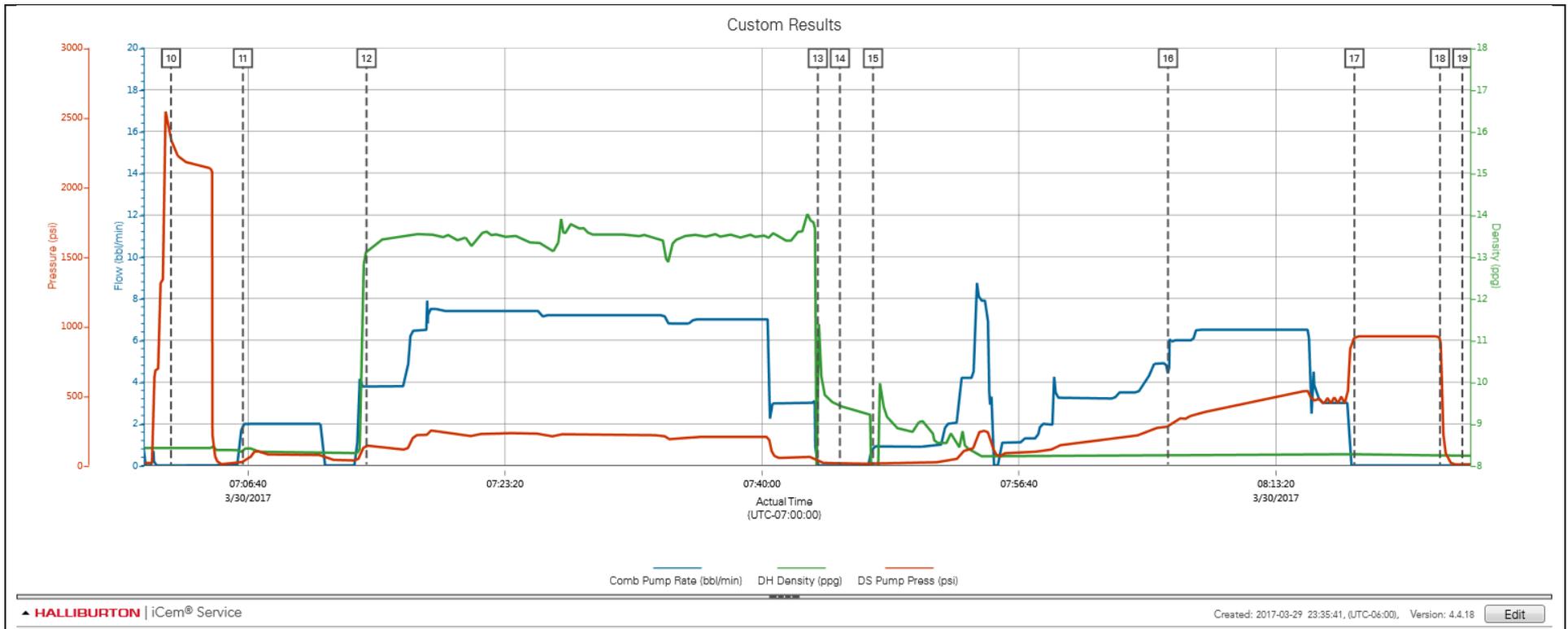
2.1 Job Event Log

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							bbls 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 bbls 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

