

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS-EBUS

Date: Wednesday, June 28, 2017

Longmeadow 1-1-13 Surface

Job Date: Saturday, June 17, 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 **Longmeadow 1-1-13** 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 30 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 #: 3706585	Quote #:	Sales Order #: 0904107610							
Customer: EXTRACTION OIL & GAS		Customer Rep:								
Well Name: CS-LONGMEADOW	Well #: 1-1-13	API/UWI #: 05-123-42476-00								
Field: WATTENBERG	City (SAP): GREELEY	County/Parish: WELD	State: COLORADO							
Legal Description: SW SE-36-6N-66W-338FSL-1840FEL										
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 341								
Job BOM: 7521 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199		Srvc Supervisor:								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST								
Job depth MD	1550ft	Job Depth TVD								
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
Open Hole Section			13.5				0	1550		0
Casing		9.625	8.921	36			0	1550		0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625					Top Plug	9.625	1	HES	
Float Shoe	9.625	1		1550		Bottom Plug	9.625		HES	
Float Collar	9.625	1		1530		SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625	1	HES	
Stage Tool	9.625					Centralizers	9.625		HES	
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	Spacer	Red Dye Water	10	bbl	8.34					
Fluid Data										
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	Primary Cement	SWIFCEM	550	sack	13.5	1.74		5	9.2	

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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/min	Total Mix Fluid Gal
3	Displacement	Displacement	119	bbl	8.34				
Cement Left In Pipe		Amount	45 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 30 bbls to surface									

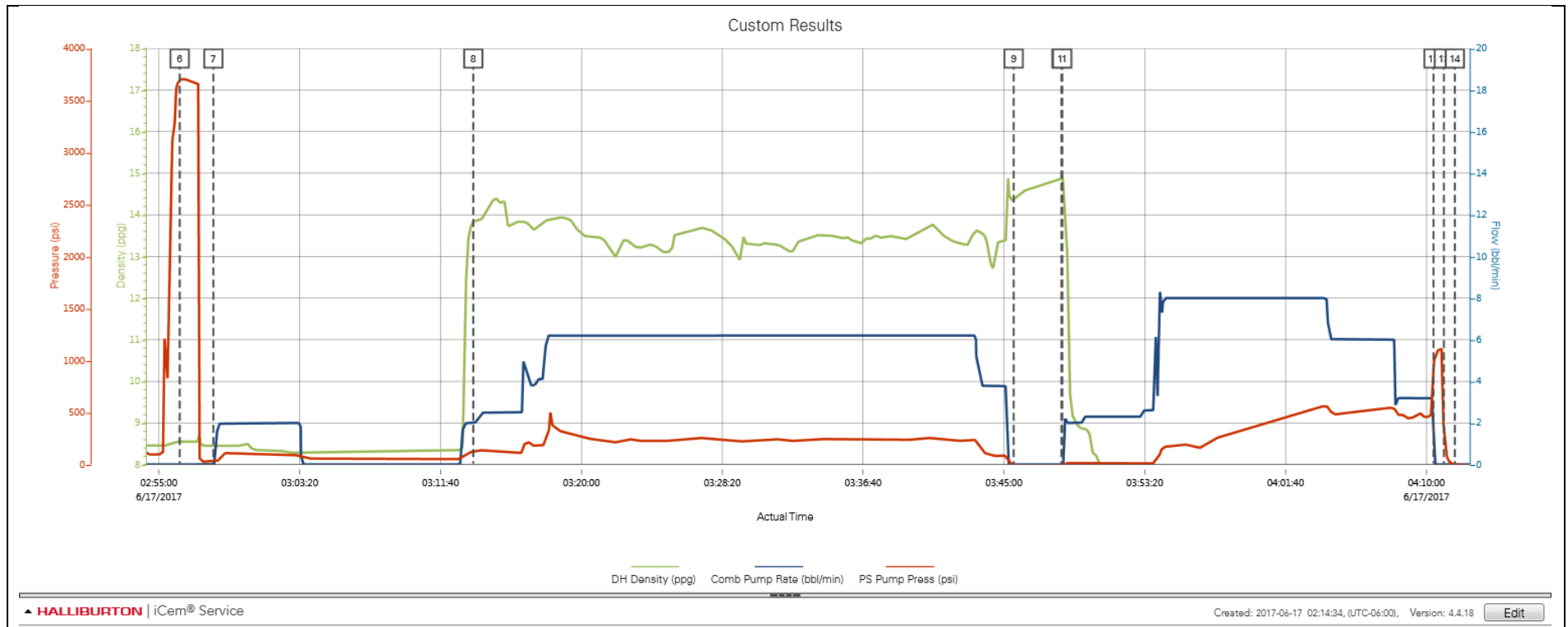
2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	6/16/2017	20:00:00	USER				Crew called for an on location of 0200 on 6/17/2017. Crew was Bradley Hinkle, Thomas Haas, Justin Toler and John Kendall.
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	6/17/2017	00:00:00	USER				Pre-journey safety meeting.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	6/17/2017	01:00:00	USER				Sign in, perform a site assessment and pre rig-up safety meeting.
Event	4	Safety Meeting - Pre Job	Safety Meeting - Pre Job	6/17/2017	02:30:00	USER	8.46	0.00	54.00	Pre-job safety meeting with all personnel on location.
Event	5	Start Job	Start Job	6/17/2017	02:52:19	COM4	8.45	0.00	0.00	
Event	6	Test Lines	Test Lines	6/17/2017	02:56:14	COM4	8.55	0.00	3702.00	Pressure test lines with a 500 PSI kick-out test.
Event	7	Pump Spacer 1	Pump Spacer 1	6/17/2017	02:58:13	COM4	8.45	0.00	26.00	Pump 10 bbls red dye water.
Event	8	Pump Cement	Pump Cement	6/17/2017	03:13:36	COM4	13.84	2.00	132.00	Pump 170 bbls (550 sacks) SwiftCem mixed at 13.5 ppg. Density verified by pressurized scales. Downhole density was inconsistent but scales were reading accurately throughout and mix water finished where it needed.
Event	9	Shutdown	Shutdown	6/17/2017	03:45:35	COM4	14.39	0.00	-5.00	
Event	10	Drop Top Plug	Drop Top Plug	6/17/2017	03:48:24	COM4	14.88	0.00	-11.00	Top plug preloaded and witnessed by customer.
Event	11	Pump Displacement	Pump Displacement	6/17/2017	03:48:27	COM4	14.88	0.00	-11.00	Pump 119 bbls fresh water. Good returns throughout. 30 bbls cement to surface.
Event	12	Bump Plug	Bump Plug	6/17/2017	04:10:25	COM4				Bump plug at 500 PSI and brought 500 PSI over.
Event	13	Release Casing Pressure	Release Casing Pressure	6/17/2017	04:11:02	USER	7.76	0.00	335.00	Floats held. Half bbl back.
Event	14	End Job	End Job	6/17/2017	04:11:41	COM4				
Event	15	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/17/2017	04:26:27	USER				Pre-rig down safety meeting.

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

