

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS-EBUS

Jesser 3E-10-11N Production

Job Date: Monday, December 25, 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 **Jesser 3E-10-11N** 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.

63 bbls of cement 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 #: 369404		Ship To #: 3830625		Quote #:		Sales Order #: 0904525994					
Customer: EXTRACTION OIL & GAS				Customer Rep: Kalyn Holgate							
Well Name: JESSER			Well #: 3E-10-11N		API/UWI #: 05-123-45664-00						
Field: WATTENBERG		City (SAP): BERTHOUD		County/Parish: WELD		State: COLORADO					
Legal Description: NW SW-3-4N-68W-2314FSL-556FWL											
Contractor:				Rig/Platform Name/Num: Patterson 901							
Job BOM: 7523 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HX38199				Srv Supervisor: Bradley Hinkle							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		11878ft		Job Depth TVD		6990ft					
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	0	9.625	8.921	36		J-55	0	1582	0	0	
Casing	0	5.5	4.778	20		P-110	0	11878	0	0	
Open Hole Section			8.5				1582	11885	0	0	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5					Top Plug	5.5	1	KLX		
Float Shoe	5.5	1	KLX	11878		Bottom Plug	5.5		HES		
Float Collar	5.5	2	KLX	11873		SSR plug set	5.5		HES		
Insert Float	5.5					Plug Container	5.5	1	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	Spacer	Tuned Spacer III			50	bbl	11.5	3.73		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	Primary Cement	ELASTICEM	2000	sack	13.2	1.57		7.5	7.53
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	Fresh Water	263	bbl	8.34			9	
Cement Left In Pipe		Amount	0 ft		Reason			Wet Shoe by Design	
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	Bump Pressure:2512 psi			Floats Held?			Yes	
Cement Returns:	63 bbl	Returns Density:## lb/gal kg/m3			Returns Temperature:## °F °C				
Comment 50 bbls Tuned Spacer and 63 bbls cement to surface. Pump 5 bbl wet shoe.									

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)	Driv-Side Pump Pressure (psi)	Comments
Event	1	Call Out	Call Out	12/24/2017	17:00:00	USER				Crew called for an on location of 2300. Crew was Bradley Hinkle, Kendall Brrom, Sarmad Aljabur, Rebecca Defer and Anthony Wells
Event	2	Arrive at Location from Service Center	Arrive at Location from Service Center	12/25/2017	01:21:09	USER	0.14	0.00	1.00	Perform a site assessment and pre-rig up safety meeting.
Event	3	Depart Shop for Location	Depart Shop for Location	12/25/2017	01:21:31	USER	0.14	0.00	1.00	Pre-journey safety meeting.
Event	4	Safety Meeting	Safety Meeting	12/25/2017	02:45:00	USER	0.05	0.00	1.00	Pre-job safety meeting with all personnel on location.
Event	5	Start Job	Start Job	12/25/2017	03:05:35	COM4	8.72	0.00	-1.00	
Event	6	Test Lines	Test Lines	12/25/2017	03:09:58	COM4	8.83	0.00	1588.00	Pressure test lines with a 500 PSI electronic kick-out test.
Event	7	Pump Spacer 1	Pump Spacer 1	12/25/2017	03:13:44	COM4	8.74	0.00	34.00	Pump 50 bbls Tuned Spacer mixed at 11.5 ppg with surfactants added throughout. Density verified by pressurized scales.
Event	8	Pump Cement	Pump Cement	12/25/2017	03:25:33	COM4	12.46	4.00	211.00	Pump 559 bbls (2000 sacks, 1.57 yield, 7.53 gal/sk) ElastiCem mixed at 13.2 ppg. Density verified by pressurized scales. Downhole was erratic, took

										multiple scales throughout and cement was within design.
Event	9	Check Weight	Check weight	12/25/2017	03:28:53	COM4	13.27	5.80	575.00	Cement weighed at 13.4 ppg.
Event	10	Check Weight	Check weight	12/25/2017	03:32:10	COM4	12.99	5.80	530.00	Cement weighed at 13.1 ppg.
Event	11	Check Weight	Check weight	12/25/2017	04:16:08	COM4	13.40	7.50	845.00	Cement weighed at 13.2 ppg.
Event	12	Shutdown	Shutdown	12/25/2017	04:50:18	COM4	12.93	0.40	141.00	
Event	13	Drop Top Plug	Drop Top Plug	12/25/2017	04:51:17	COM4	13.08	0.00	19.00	Top plug loaded. Witnessed by customer and KLX tool hand.
Event	14	Pump Displacement	Pump Displacement	12/25/2017	04:52:52	COM4	11.67	2.10	67.00	Pump 263 bbls fresh water. Good returns throughout 50 bbls Tuned Spacer and 63 bbls cement to surface.
Event	15	Bump Plug	Bump Plug	12/25/2017	05:24:17	COM4	8.29	0.00	2719.00	Bump plug at 2512 PSI and increase pressure 500 PSI over.
Event	16	Other	Other	12/25/2017	05:25:40	USER	8.31	2.10	3743.00	Burst plug at 3753 PSI. Pump 5 bbls fresh water for wet shoe at 5 bbls per minute.
Event	17	Check Floats	Check Floats	12/25/2017	05:27:33	USER	8.25	0.00	1409.00	Floats held. 2 bbls back.
Event	18	End Job	End Job	12/25/2017	05:28:11	COM4	8.20	0.00	31.00	
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/25/2017	05:30:00	USER	8.17	0.00	24.00	Pre-rig down safety meeting.
Event	20	Depart Location for Shop	Depart Location for Shop	12/25/2017	06:45:00	USER				Pre-journey safety meeting.

3.0 Job Chart

3.1 Job Chart

