

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS-EBUS

Date: Thursday, November 16, 2017

Jesser 3E-10-11N Surface

Job Date: Saturday, November 04, 2017

Sincerely,

Justin Lansdale

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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 **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.

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 #: 0904417424
Customer: EXTRACTION OIL & GAS -		Customer Rep: Larry Siegel	
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: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 341	
Job BOM: 7521 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX38199		Srvc Supervisor: Steven Markovich	

Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1584ft 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
Casing	0	9.625	8.921	36	8 RD	J-55	0	1584	0	0
Open Hole Section			13.5				0	1600	0	1600

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625			1584	Top Plug	9.625		HES
Float Shoe	9.625				Bottom Plug	9.625		HES
Float Collar	9.625				SSR plug set	9.625		HES
Insert Float	9.625				Plug Container	9.625		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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Red Dye Spacer	Red Dye Spacer	10	bbl	8.33					
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	SWIFTCEM (TM) SYSTEM	550	sack	13.5	1.74		5	9.2	
9.20 Gal		FRESH WATER								

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	
3	Fresh Water	Fresh Water	119	bbl	8.33					
Cement Left In Pipe		Amount	44 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/m ³ XXXX			Disp. Temperature:## °F °C			
Plug Bumped?		Yes/No	Bump Pressure: #### psi MPa			Floats Held? Yes/No				
Cement Returns:		## bbl m ³		Returns Density: ## lb/gal kg/m ³			Returns Temperature:## °F °C			
Comment Cement to surface at 90bbls away bringing 29bbls of cement to surface.										

2.0 Real-Time Job Summary

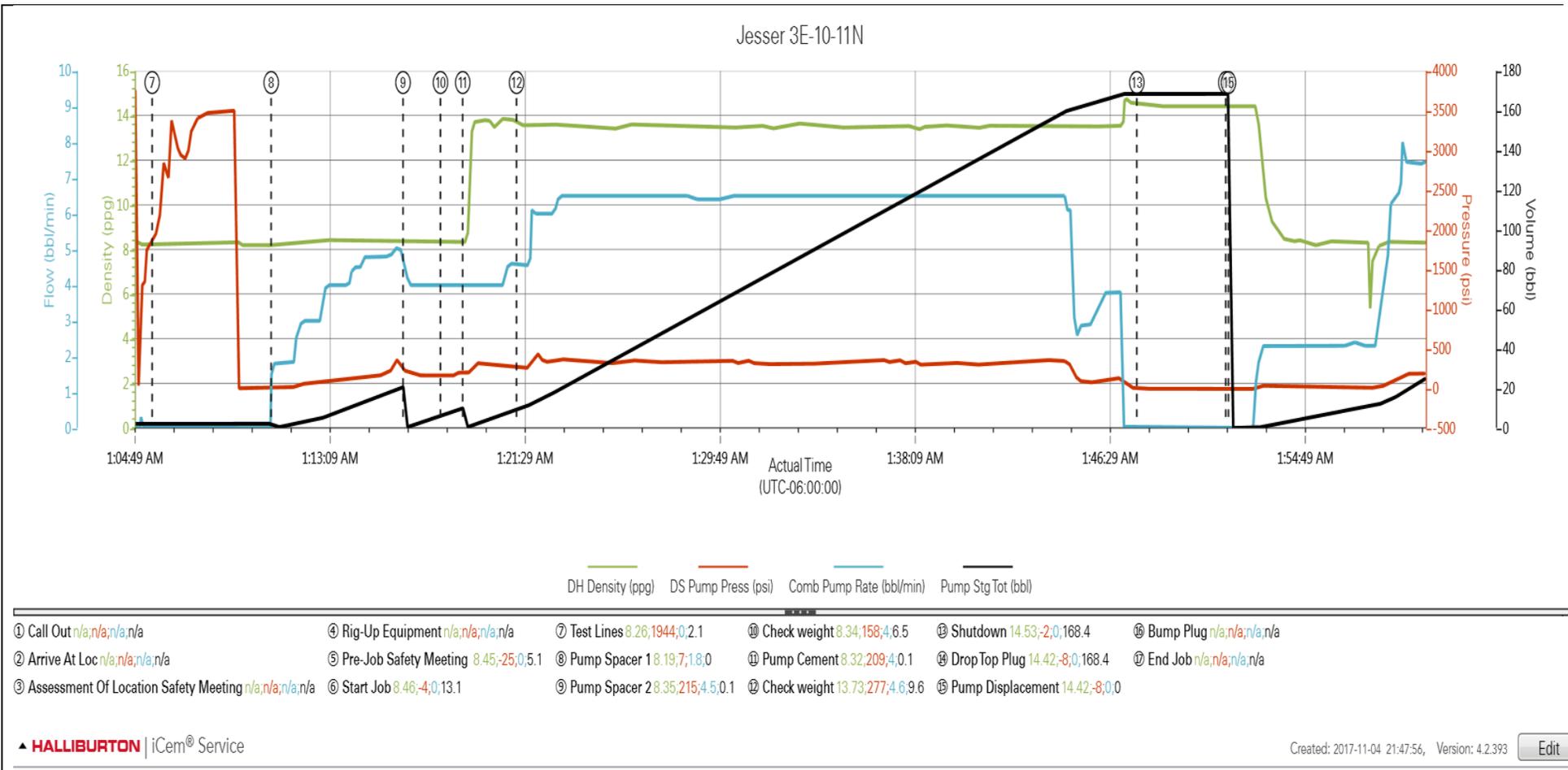
2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	11/4/2017	11:30:00	USER	Job called out with an on location time of 20:30
Event	2	Arrive At Loc	Arrive At Loc	11/4/2017	19:00:00	USER	Arrived on location rig was still drilling.
Event	3	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	11/4/2017	19:15:00	USER	JSA and hazard hunt with HES crew.
Event	4	Rig-Up Equipment	Rig-Up Equipment	11/4/2017	19:30:00	USER	Rigged up HES lines and equipment.
Event	5	Pre-Job Safety Meeting	Pre-Job Safety Meeting	11/5/2017	00:30:00	USER	JSA with HES and rig crew on job procedure.
Event	6	Start Job	Start Job	11/5/2017	00:56:08	COM4	TD 1600' TP 1584' FC 1542' 9 5/8" 36# surface casing, 13 1/2" openhole.
Event	7	Test Lines	Test Lines	11/5/2017	01:05:40	COM4	Set kick outs to 500psi for kick out test then bring pressure up to 3000psi and hold.
Event	8	Pump Spacer 1	Pump Spacer 1	11/5/2017	01:10:45	COM4	Break circulation. Circulation achieved at 20bbbls away.
Event	9	Pump Spacer 2	Pump Spacer 2	11/5/2017	01:16:23	COM4	Pump 10bbbls of Red Dye
Event	10	Check Weight	Check weight	11/5/2017	01:17:59	COM4	Weight verified by pressurized scales.
Event	11	Pump Cement	Pump Cement	11/5/2017	01:18:56	COM4	Pump 170bbbls (550sks) of 13.5ppg 1.74yield Cement. Pumped at 6.5bbl/min 373psi
Event	12	Check Weight	Check weight	11/5/2017	01:21:14	COM4	Weight verified by pressurized scales.
Event	13	Shutdown	Shutdown	11/5/2017	01:47:44	COM4	Shutdown
Event	14	Drop Top Plug	Drop Top Plug	11/5/2017	01:51:32	COM4	Plug pre loaded into HES head. Plug drop and loaded in front f company rep.

Event	15	Pump Displacement	Pump Displacement	11/5/2017	01:51:39	COM4	Pump 119bbbls of H2O. Pumped at 8bbl/min and slowed down with pressure increase. Red Dye to surface at 73bbbls away, cement to surface at 90bbbls away bringing 29bbbls of cement to surface.
Event	16	Bump Plug	Bump Plug	11/5/2017	02:15:00	COM4	Bumped plug at 119bbbls away, final lifting pressure was 475 brought pressure 500psi over and held it. Opened the release line to check floats, after 1 bbl back floats held.
Event	17	End Job	End Job	11/5/2017	02:16:12	COM4	Thank you Steve Markovich and crew.

3.0 Attachments

3.1 Job Chart



3.2 Jesser 3E-10-11N-Custom Results (1).png

