

# HALLIBURTON

iCem<sup>®</sup> Service

**EXTRACTION OIL & GAS**

**AD Fed J Evans 20W-25-5 Surface**

Sincerely,  
**Meghan Jacobs**

## Legal Notice

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### Disclaimer:

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## 1.0 Cementing Job Summary

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### 1.1 Executive Summary

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Halliburton appreciates the opportunity to perform the cementing services on the **AD Fed J Evans 20W-25-5** 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 8 bbls 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 Fort Lupton**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 369404		<b>Ship To #:</b> 3809273		<b>Quote #:</b>		<b>Sales Order #:</b> 0905619530					
<b>Customer:</b> EXTRACTION OIL & GAS -					<b>Customer Rep:</b> MIKE TORRES						
<b>Well Name:</b> AD FED J EVANS			<b>Well #:</b> 20W-25-5			<b>API/UWI #:</b> 05-123-45038-00					
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> GREELEY		<b>County/Parish:</b> WELD			<b>State:</b> COLORADO				
<b>Legal Description:</b> NW SW-21-5N-65W-2140FSL-370FWL											
<b>Contractor:</b>					<b>Rig/Platform Name/Num:</b> Cartel 15						
<b>Job BOM:</b> 7521 7521											
<b>Well Type:</b> HORIZONTAL OIL											
<b>Sales Person:</b> HALAMERICA\HX38199					<b>Srv Supervisor:</b> Jerald Watson						
<b>Job</b>											
<b>Formation Name</b>											
<b>Formation Depth (MD)</b>		<b>Top</b>			<b>Bottom</b>						
<b>Form Type</b>					<b>BHST</b>						
<b>Job depth MD</b>		1617ft			<b>Job Depth TVD</b>		1617				
<b>Water Depth</b>					<b>Wk Ht Above Floor</b>		0				
<b>Perforation Depth (MD)</b>		<b>From</b>			<b>To</b>						
<b>Well Data</b>											
<b>Description</b>	<b>New / Used</b>	<b>Size in</b>	<b>ID in</b>	<b>Weight lbm/ft</b>	<b>Thread</b>	<b>Grade</b>	<b>Top MD ft</b>	<b>Bottom MD ft</b>	<b>Top TVD ft</b>	<b>Bottom TVD ft</b>	
Open Hole Section			13.5					1617			
Casing		9.625	8.921	36				1617			
<b>Tools and Accessories</b>											
<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	<b>Depth ft</b>		<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>		
Guide Shoe	9.625					Top Plug	9.625	1	HES		
Float Shoe	9.625	1	HES	1617		Bottom Plug	9.625		HES		
Float Collar	9.625	1	HES	1573		SSR plug set	9.625		HES		
Insert Float	9.625					Plug Container	9.625	1	HES		
Stage Tool	9.625					Centralizers	9.625	4	HES		
<b>Fluid Data</b>											
<b>Stage/Plug #:</b> 1											
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>			<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>
1	Red Dye Spacer	Red Dye Spacer			10	bbl	8.33			4	

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	SwiftCem	SWIFTCEM (TM) SYSTEM	530	sack	13.5	1.74		8	9.2

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Fresh Water	Fresh Water	122	bbl	8.33			8	

Cement Left In Pipe		Amount	44 ft			Reason			Shoe Joint

## 2.0 Real-Time Job Summary

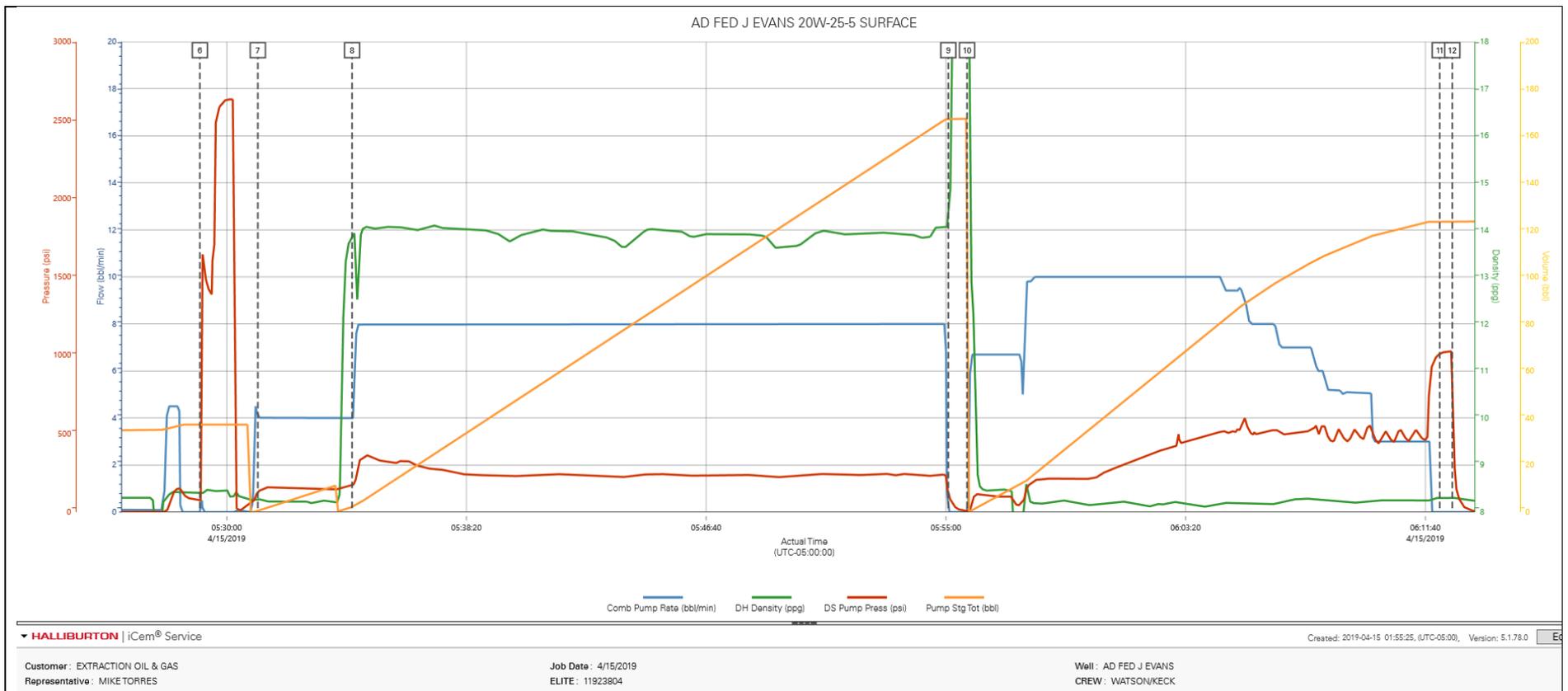
### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate <i>(bbl/min)</i>	DH Density <i>(ppg)</i>	DS Pump Press <i>(psi)</i>	Comments
Event	1	General Standby Start	General Standby Start	4/14/2019	09:00:00	USER				CREW STANDING BY FOR THE NEXT JOB, O/L TIME 0230 4-15
Event	2	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	4/15/2019	01:00:00	USER				TEST WATER, CHECK MATERIALS, GET NUMBERS FROM THE COMPANY MAN AND TALK ABOUT SPOTTING EQUIPMENT.
Event	3	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	4/15/2019	01:15:00	USER				DISCUSS HAZARDS ASSOCIATED WITH TASK
Event	4	Rig-Up Equipment	Rig-Up Equipment	4/15/2019	01:30:00	USER				RIG UP ALL EQUIPMENT
Event	5	Pre-Job Safety Meeting	Pre-Job Safety Meeting	4/15/2019	05:00:00	USER	10.00	7.94	423.00	DISCUSS HAZARDS ASSOCIATED WITH THE JOB WITH EVERYONE INVOLVED WITH THE JOB AS WELL AS WHAT NEEDS TO BE DONE IN CASE OF EMERGENCY OR IF WE NEED TO EVACUATE LOCATION.
Event	6	Test Lines	Test Lines	4/15/2019	05:29:04	COM4	0.00	8.42	76.00	TEST LINES TO 2000 PSI
Event	7	Pump Spacer 1	Pump Spacer 1	4/15/2019	05:31:05	COM4	4.10	8.27	127.00	10 DYED H2O, 4 BPM, 155 PSI, 8.33 PPG
Event	8	Pump Cement	Pump Cement	4/15/2019	05:34:22	COM4	4.00	13.89	171.00	164 CEMENT, 8 BPM, 236 PSI, 530 SKS, 13.5 PPG, 1.74 YIELD, 9.2 GAL/SK
Event	9	Drop Top Plug	Drop Top Plug	4/15/2019	05:55:05	COM4	0.00	14.42	115.00	HES PLUG
Event	10	Pump Displacement	Pump Displacement	4/15/2019	05:55:44	COM4	0.00	19.25	6.00	122 H2O, 10 BPM, 185 PSI, 8.33 PPG, 8 BBL CEMENT TO SURFACE
Event	11	Bump Plug	Bump Plug	4/15/2019	06:12:10	COM4	0.00	8.30	1011.00	BUMP AT 500 PSI, TOOK TO 1000 PSI
Event	12	Check Floats	Check Floats	4/15/2019	06:12:36	USER	0.00	8.30	1026.00	.75 BBL BACK
Event	13	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	4/15/2019	06:15:00	USER				DISCUSS HAZARDS INVOLVED AND IF ANYTHING IS STAYING ON LOCATION
Event	14	Rig-Down Equipment	Rig-Down Equipment	4/15/2019	06:30:00	USER				RIG DOWN ALL EQUIPMENT

Event	15	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	4/15/2019	07:15:00	USER	CHECK WITH EVERYONE TO SEE IF THEY ARE FIT TO DRIVE AND LEGAL TO DRIVE AND SEE WHAT THEIR PLANS ARE AS WELL AS DISCUSS ANY OTHER JOB THAT MAY NEED TO BE COVERED AFTER LEAVING LOCATION.
Event	16	Crew Leave Location	Crew Leave Location	4/15/2019	07:30:00	USER	EVERYONE LEAVES LOCATION

## 3.0 Attachments

### 3.1 AD Fed J Evans 20W-25-5 Surface – Job Chart with Events



### 3.2 AD Fed J Evans 20W-25-5 Surface – Job Chart without Events

