

# HALLIBURTON

iCem<sup>®</sup> Service

## **EXTRACTION OIL & GAS-EBUS**

Ft. Lupton District, CO

**Walt West 17W-20-03 Surface**

Job Date: Monday, December 20, 2021

Sincerely,

**Mike Loughran**

## 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 **Walt West 17W-20-03** 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 33 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**

<b>Sold To #:</b> 369404		<b>Ship To #:</b> 9049316		<b>Quote #:</b>		<b>Sales Order #:</b> 0907571545				
<b>Customer:</b> EXTRACTION OIL AND GAS-EBUS				<b>Customer Rep:</b> Manny Parras / Kenny Graham						
<b>Well Name:</b> WALT WEST			<b>Well #:</b> 17W-20-03			<b>API/UWI #:</b> 05-123-51090-00				
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> SEVERANCE		<b>County/Parish:</b> WELD			<b>State:</b> COLORADO			
<b>Legal Description:</b> SE NE-17-7N-67W-2101FNL-353FEL										
<b>Contractor:</b>				<b>Rig/Platform Name/Num:</b> Cartel 11						
<b>Job BOM:</b> 7521 7521										
<b>Well Type:</b> HORIZONTAL OIL										
<b>Sales Person:</b> HALAMERICA\HX41066				<b>Srv Supervisor:</b> Michael Loughran						
<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>		1600ft		<b>Job Depth TVD</b>						
<b>Water Depth</b>				<b>Wk Ht Above Floor</b>						
<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				0	1625		
Casing		9.625	8.835	40			0	1625		
<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			1625		Bottom Plug	9.625	1	HES	
Float Collar	9.625			1582		SSR plug set	9.625			
Insert Float	9.625					Plug Container	9.625	1	HES	
Stage Tool	9.625					Centralizers	9.625		HES	
<b>Fluid Data</b>										
<b>Stage/Plug #: 1</b>										
<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 ft<sup>3</sup>/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>
1	Water with dye	Water with dye		10	bbl	8.34			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	SBM SWIFTCEM CEMENT SYSTEM CEM	575	sack	13.5	1.75		8	9.23
9.23 Gal		<b>FRESH WATER</b>							
0.1250 lbm		<b>POLY-E-FLAKE (101216940)</b>							
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	Displacement	Displacement	120	bbl	8.34			8	
Cement Left In Pipe	Amount	43 ft			Reason			Shoe Joint	
Mix Water:	pH 6	Mix Water Chloride:	Less 200 ppm			Mix Water Temperature:			
Cement Temperature:		Plug Displaced by:	8.33 lb/gal			Disp. Temperature:		50 °F	
Plug Bumped?	Yes	Bump Pressure:	1000 psi			Floats Held?		Yes	
Cement Returns:		Returns Density:				Returns Temperature:			
<b>Comment</b> toc=0' 33 bbls cement to surface									

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Seq No.	Activity	Graph Label	Date	Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
1	Crew Leave Yard	Crew Leave Yard	12/19/2021	00:00:00					CREW ON LOCATION
2	Call Out	Call Out	12/19/2021	16:30:00					CREW CALLED OUT AT 1630 HRS. REQUESTED ON LOCATION 2230 HRS ON 12/19/2021
3	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/19/2021	21:00:00					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP, AND WEATHER.
4	Rig-Up Equipment	Rig-Up Equipment	12/19/2021	21:05:00					CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON AND WATER HOSES TO PERFORM JOB.
5	Arrive At Loc	Arrive At Loc	12/19/2021	22:20:00					Relieved Hinkle at 2220 hrs. CREW WAS ON LOCATION 40# 9-5/8" J-55 1625', TD 1625', F/C 1582', WF 8.4# 13.5" HOLE, WATER 50 DEGREES, PH 6, CHLORIDES LESS 200 PPM.
6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	12/19/2021	22:45:00	7.96	0.90	37.00	11.30	SAFETY MEETING WITH HALLIBURTON, AND RIG PERSONNEL. CREW COMMUNICATED POTENTIAL SAFETY HAZARDS, AND JOB DETAILS.
7	Start Job	Start Job	12/19/2021	22:52:11	7.96	0.00	6.00	6.70	
8	Start Job	Start Job	12/19/2021	23:07:15	0.18	0.00	-10.00	0.00	BEGIN RECORDING DATA
9	Drop Bottom Plug	Drop Bottom Plug	12/19/2021	23:07:33	0.00	0.00	-11.00	0.00	BOTTOM PLUG PROVIDED BY MANNY

10	Test Lines	Test Lines	12/19/2021	23:08:30	8.08	0.00	72.00	2.50	TEST LINES 2600 PSI
11	Pump Spacer 1	Pump Spacer 1	12/19/2021	23:12:29	8.04	0.00	-3.00	0.00	20 BBLS FRESH WATER
12	Pump Spacer 2	Pump Spacer 2	12/19/2021	23:16:38	8.03	5.50	234.00	0.00	10 BBLS FRESH WATER WITH 1/2 BOTTLE GREEN DYE
13	Pump Cement	Pump Cement	12/19/2021	23:23:22	8.31	0.00	35.00	0.00	575 SACKS SBM SWIFTCEM, 178.2 BBLS. 13.5 PPG, 1.75 YIELD, 9.23 GAL/SACK
14	Shutdown	Shutdown	12/19/2021	23:56:31	10.42	0.00	-11.00	201.20	SHUTDOWN
15	Drop Top Plug	Drop Top Plug	12/19/2021	23:57:29	21.98	0.00	-39.00	201.20	TOP PLUG VERIFIED BY MANNY
16	Pump Displacement	Pump Displacement	12/19/2021	23:58:27	16.67	0.00	-40.00	201.20	120 BBLS FRESH WATER DISPLACEMENT. 33 BBLS CEMENT TO SURFACE. TOC=0'
17	Bump Plug	Bump Plug	12/20/2021	00:21:56	8.25	0.00	1114.00	122.30	FCP 540 PSI/4BPM, BUMP 1000 PSI
18	Other	Other	12/20/2021	00:22:21	8.24	0.00	1068.00	122.30	CHECK FLOATS. FLOATS HOLD. .5 BBL BACK
19	End Job	End Job	12/20/2021	00:23:28	8.28	0.00	-30.00	122.30	STOP RECORDING DATA
20	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/20/2021	00:30:00					DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
21	Rig-Down Equipment	Rig-Down Equipment	12/20/2021	00:35:00					RIG DOWN BULK AND MIXING EQUIPMENT
22	Rig-Down Completed	Rig-Down Completed	12/20/2021	01:45:00					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN.
23	Crew Leave Location	Crew Leave Location	12/20/2021	02:00:00					THANK YOU FOR USING HALLIBURTON – MIKE LOUGHRAN AND CREW.



3.0 Attachments

3.1 Real Time iCem Job Chart

