

HALLIBURTON

iCem[®] 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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1.0 Cementing Job Summary

1.1 Executive Summary

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

Sold To #: 369404	Ship To #: 9049316	Quote #:	Sales Order #: 0907571545
Customer: EXTRACTION OIL AND GAS-EBUS		Customer Rep: Manny Parras / Kenny Graham	
Well Name: WALT WEST		Well #: 17W-20-03	API/UWI #: 05-123-51090-00
Field: WATTENBERG	City (SAP): SEVERANCE	County/Parish: WELD	State: COLORADO
Legal Description: SE NE-17-7N-67W-2101FNL-353FEL			
Contractor:		Rig/Platform Name/Num: Cartel 11	
Job BOM: 7521 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Michael Loughran	

Job

Formation Name	
Formation Depth (MD)	Top <input type="text"/> Bottom <input type="text"/>
Form Type	BHST
Job depth MD	1600ft Job Depth TVD <input type="text"/>
Water Depth	Wk Ht Above Floor <input type="text"/>
Perforation Depth (MD)	From <input type="text"/> To <input type="text"/>

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	1625		
Casing		9.625	8.835	40			0	1625		

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			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

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	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 ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
2	SwiftCem	SBM SWIFTCEM CEMENT SYSTEM CEM	575	sack	13.5	1.75		8	9.23
9.23 Gal		FRESH WATER							
0.1250 lbm		POLY-E-FLAKE (101216940)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	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:			
Comment 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

