

HALLIBURTON

iCem[®] Service

CONFLUENCE DJ LLC-EBUS

CANAL 22-1-3L

Surface Casing

Job Date: Tuesday, August 24, 2021

Sincerely,

Nick Roles and Crew

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 Canal 22-1-3L surface casing. 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 78 bbl. 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

Sold To #: 375989		Ship To #: 9082340		Quote #: 0022867383		Sales Order #: 0907342002				
Customer: CONFLUENCE DJ LLC-EBUS				Customer Rep: Josh Klesen						
Well Name: CANAL #22-1-3L,WELD			Well #: 9082340		API/UWI #:					
Field:		City (SAP): HUDSON		County/Parish: WELD		State: COLORADO				
Legal Description:										
Contractor: ENSIGN DRLG				Rig/Platform Name/Num: ENSIGN 161						
Job BOM: 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HB41307				Srvc Supervisor: Nicholas Roles						
Job										
Job depth MD		2700ft		Job Depth TVD						
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		9.625	8.921	36			0	2700	0	2700
Open Hole Section			13.5				0	2711		2711
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	9.625			2700		Top Plug	9.625	1	HES	
Float Collar	9.625			2654		Plug Container	9.625	1	HES	

Fluid Data									
Stage #: 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	Spacer	Mud Flush III	40	bbl	8.4			6	1680
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
2	Cement	SwiftCem™ Cement	650	sack	12.5	2.16	12.29	8	7989
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	Cement	SwiftCem™ Cement	215	sack	13.5	1.74	9.17	8	1972
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
4	Displacement	Fresh Water	205	bbl	8.3			8	8610
Cement Left In Pipe		Amount	46 ft		Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride:		0 ppm		Mix Water Temperature:		70 °F
Plug Bumped?		Yes	Plug Displaced by:		8.33 lb/gal		Disp. Temperature:		70 °F
Cement Returns:		78 bbl.	Bump Pressure:		1320 psi		Floats Held?		Yes
Comment: Got 78 bbl. cement to surface. Est TOT-1970'									

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq. No.	Activity	Date	Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
1	Call Out	8/24/2021	05:00:00					Called out by service coordinator for OL time of 1100, customer called and changed OL time to 1400.
2	Pre-Convoy Safety Meeting	8/24/2021	11:45:00					Discuss all hazards associated with journey, directions to destination, complete journey management if needed, and ensure all convoy is fit for duty.
3	Depart from Service Center or Other Site	8/24/2021	12:00:00					Depart from service center or other job site.
4	Arrive at Location from Service Center	8/24/2021	13:00:00					Upon arrival to location, signed in with onsite safety personnel. Met with company man and discussed job specific requirements and specifications.
5	Other	8/24/2021	15:00:00					Mix water test results- PH-7, Chlo-0, Temp-65F.
6	Pre-Rig Up Safety Meeting	8/24/2021	15:30:00					Held pre rig up JSA for hazards, hazard hunt with crew, and discussed plan for spotting equipment and rigging up lines for job. Discussed muster points and closest emergency location as well as coordinates.
7	Rig-Up Equipment	8/24/2021	15:45:00					Begin rig up with crew.
8	Rig-Up Completed	8/24/2021	16:30:00					Complete rig up for job to nearest point before red zone.
9	Safety Meeting - Pre Job	8/24/2021	18:00:00	7.97	0.00	44.00	18.10	Held job specific hazards as well as confirming job procedure with co man and rest of crew associated with job.

10	Start Job	8/24/2021	19:41:23	0.00	0.00	39.00	18.10	TD-2711' OH-13.5", TP-2699.67' 9.625" 36#, FC-2653.54', Mud-9.1#
11	Test Lines	8/24/2021	19:43:41	7.92	0.00	22.00	3.10	Pumped 3bbls to fill lines, established circulation, shutdown and closed manifold, performed 500psi k/o function test, continued with 5th gear stall at 1850psi proceeded to bring pressure to 3500psi. Pressure stabilized and held with no leaks.
12	Pump Spacer 1	8/24/2021	19:49:54	8.34	0.00	1.00	0.00	Pumped 40bbls water with 160lbs of Mud Flush III at 6.5bpm 150psi.
13	Pump Lead Cement	8/24/2021	19:58:48	8.30	0.00	7.00	40.60	Pumped 650sks or 250bbls 12.5# 2.16y 12.29g/s SwiftCem at 8bpm 310psi.
14	Check Weight	8/24/2021	20:06:33	12.41	5.20	162.00	12.80	Weight verified with pressurized mud scales.
15	Check Weight	8/24/2021	20:20:37	12.43	8.00	339.00	121.70	Weight verified with pressurized mud scales.
16	Pump Tail Cement	8/24/2021	20:38:08	12.43	7.90	318.00	258.60	Pumped 215sks or 67bbls of 13.5# 1.74y 9.17g/s SwiftCem at 8bpm 280psi
17	Check Weight	8/24/2021	20:40:09	13.41	7.90	363.00	15.80	Weight verified with pressurized mud scales.
18	Check Weight	8/24/2021	20:44:07	13.44	7.90	379.00	47.10	Weight verified with pressurized mud scales.
19	Shutdown	8/24/2021	20:49:08	14.91	0.00	21.00	76.60	
20	Drop Top Plug	8/24/2021	20:51:11	16.18	0.00	1.00	76.60	Dropped by HES supervisor, witnessed by company man.
21	Pump Displacement	8/24/2021	20:51:13	16.16	0.00	1.00	76.60	Pumped 205bbls of fresh water at 8bpm 550psi.
22	Bump Plug	8/24/2021	21:24:07	8.30	0.00	1282.00	209.00	Continued to 3bpm at 185bbls away, final circulating pressure - 840psi, Bumped at 1350psi.

23	Other	8/24/2021	21:27:46	8.32	0.00	1325.00	209.00	Released pressure to check floats, got 1bbls back. Floats held.
24	End Job	8/24/2021	21:28:32	8.31	0.00	8.00	0.00	Got 78bbls cement to surface. Est TOT-1970
25	Pre-Rig Down Safety Meeting	8/24/2021	21:45:00	8.36	0.00	2.00	12.60	Held safety meeting with crew prior to rig down, discussed possibility of trapped pressure, swing radius, slips trips and falls, pinch points and risks associated with rig down.
26	Rig Down Lines	8/24/2021	22:00:00					Begin rig down
27	Pre-Convoy Safety Meeting	8/24/2021	22:45:00					Held safety meeting with convoy, discussed trip hazards, directions and all crew fit for duty prior to departure.
28	Rig-Down Completed	8/24/2021	22:45:00					Rig down complete with no injuries, spills or damage to equipment.
29	Depart Location for Service Center or Other Site	8/24/2021	23:00:00					Depart location, if applicable journey will be submitted.

3.0 Attachments

3.1 Job Chart

