

HALLIBURTON

iCem[®] Service

CONFLUENCE DJ LLC-EBUS

Ft. Lupton District, COLORADO

SILVERTON 5-2-4L

Job Date: Tuesday, March 03, 2020

Sincerely,

Andrew McIntosh

Legal Notice

Disclaimer:

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **SILVERTON 5-2-4L** 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 30 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

Sold To #: 375989		Ship To #: 3917416		Quote #:		Sales Order #: 0906357232					
Customer: CONFLUENCE DJ LLC-EBUS				Customer Rep:							
Well Name: SILVERTON			Well #: 5-2-4L		API/UWI #: 05-123-48439-00						
Field: WATTENBERG		City (SAP): KERSEY		County/Parish: WELD		State: COLORADO					
Legal Description: SW NW-4-4N-63W-2684FNL-255FWL											
Contractor: ENSIGN DRLG				Rig/Platform Name/Num: ENSIGN 122							
Job BOM: 7521 7521											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA/H171328				Srv Supervisor:							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		1582ft		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		9.625	8.921	36			0	1582	0	0	
Open Hole Section			13.5				0	1592		0	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	9.625			1582		Top Plug	9.625		HES		
Float Shoe	9.625					Bottom Plug	9.625		HES		
Float Collar	9.625			1537		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	Mud Flush III (Powder)	Mud Flush III			40	bbl	8.4			8	
42 gal/bbl		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
2	12.5# SwiftCem	SWIFTCM (TM) SYSTEM	275	sack	12.5	2.16	12.28	8	3377
12.28 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	13.5# SwiftCem	SWIFTCM (TM) SYSTEM	195	sack	13.5	1.74	9.16	8	1786
9.16 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
4	Displacement fluid		118	bbl	8.3			8	
Cement Left In Pipe		Amount	45 ft	Reason				Shoe Joint	
Mix Water:			Mix Water Chloride:		Mix Water Temperature:				
Cement Temperature:			Plug Displaced by:		Disp. Temperature:				
Plug Bumped?		Yes	Bump Pressure:		Floats Held?		Yes		
Cement Returns:			Returns Density:		Returns Temperature:				
Comment									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	DH Density (ppg)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	3/2/2020	15:30:00	USER					CREW CALLED OUT 15:30.
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	3/2/2020	16:45:00	USER					DISCUSS ROUTE AND HAZARDS
Event	3	Crew Leave Yard	Crew Leave Yard	3/2/2020	17:00:00	USER					CREW DEPART YARD
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	3/2/2020	18:30:00	USER					ARRIVE ON LOCATION, RIG DRILLING UPON HES ARRIVAL, SPOKE WITH THE COMPANY MAN AND GOT NUMBERS. TD-1592 TP-1582 FC-1537 CSG-9 5/8 36# OPEN HOLE-13.5" PREV CSG- 16" 80' MUD WEIGHT- 8.4 #
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	3/2/2020	18:45:00	USER					DISCUSS LOCATION HAZARDS AND HOW TO MITIGATE THEM TESTED WATER PH-7 CHLORIDES- 0 TEMP-55 DEGREES
Event	6	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	3/3/2020	01:00:00	USER					DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	3/3/2020	02:00:00	USER					PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP
Event	8	Start Job	Start Job	3/3/2020	02:32:06	COM4	0.00	10.00	8.36	0.00	STARTED RECORDING DATA.

Event	9	Test Lines	Test Lines	3/3/2020	02:34:30	COM4	0.00	16.00	8.34	3.00	TESTED LINES TO 3000 PSI.
Event	10	Pump Spacer 1	Pump Spacer 1	3/3/2020	02:38:59	COM4	0.00	23.00	8.29	0.00	MIX AND PUMPED 160 #'S OF MUD FLUSH AND 1 BOTTLE OF RED DYE INTO 40 BBLS OF FRESH WATER . PUMPED AT 6 BPM AT 128 PSI.
Event	11	Pump Lead Cement	Pump Lead Cement	3/3/2020	02:47:20	COM4	6.00	192.00	8.35	0.10	MIXED AND PUMPED 275 SACK 105.79 BBLS OF LEAD CEMENT. 12.5 PPG, 2.16 YIELD, 12.28 GAL/SK, PUMPED AT 8 BPM 270 PSI.
Event	12	Check Weight	Check Weight	3/3/2020	02:51:17	COM4	8.20	276.00	12.60	31.20	CHECKED WEIGHT WIH PRESSURIZED SCALES.
Event	13	Pump Tail Cement	Pump Tail Cement	3/3/2020	03:00:34	COM4	8.20	273.00	12.58	0.10	MIXED AND PUMPED 195 SACKS 60.43 BBLS OF TAIL CEMENT. 13.5 PPG, 1.74 YIELD , 9.16 GAL/SK. PUMPED AT 8 BPM 350 PSI. TOTC 927.4'
Event	14	Check Weight	Check Weight	3/3/2020	03:01:30	COM4	8.20	277.00	13.45	7.70	CHECKED WEIGHT WIH PRESSURIZED SCALES.
Event	15	Drop Top Plug	Drop Top Plug	3/3/2020	03:11:08	COM4	0.00	21.00	-0.39	74.70	LAUNCHED TOP PLUG.

Event	16	Pump Displacement	Pump Displacement	3/3/2020	03:11:34	USER	0.00	20.00	-0.39	0.00	PUMPED 118 BBLS OF FRESH WATER DISPLACEMENT, GOT RED DYE SPACE BACK TO SURFACE AT 50 BBLS AWAY AND CEMENT TO SURFACE AT 88 BBLS AWAY.30 BBLS OF CEMENT TO SURFACE. PUMPED AT 9 BPM 535 PSI .
Event	17	Bump Plug	Bump Plug	3/3/2020	03:36:53	COM4	2.40	624.00	8.44	124.50	BUMPED PLUG AT CALCULATED DISPLACEMENT. LAST CIRCULATING PSI WAS 450, K/O AT 900, AND LEVELED OUT AT 1026 PSI
Event	18	Other	Other	3/3/2020	03:39:02	COM4	0.00	705.00	8.45	124.60	CHECKED FLOATS BACK TO THE PUMP. 1 BBLS RETURNED.
Event	19	End Job	End Job	3/3/2020	03:40:18	COM4	0.00	16.00	8.49	0.00	STOPPED RECORDING DATA.
Event	20	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	3/3/2020	03:45:00	USER					DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	21	Depart Location Safety Meeting	Depart Location Safety Meeting	3/3/2020	04:45:00	USER					DISCUSS HAZARDS AND ROUTE
Event	22	Crew Leave Location	Crew Leave Location	3/3/2020	05:00:00	USER					THANK YOU FOR USING HALLIBURTON, KYLE BATH AND CREW

3.0 Attachments

3.1 CONFLUENCE SILVERTON 5-2-4L-Custom Results.png

