

HALLIBURTON

iCem[®] Service

CONFLUENCE DJ LLC-EBUS

Ft. Lupton District, COLORADO

Date: Thursday, March 05, 2020

SILVERTON 5-8-2L Surface

Job Date: Thursday, March 05, 2020

Sincerely,

SAM CARPENTER

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 **Silverton 5-8-2L 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 20 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 #: 3917419		Quote #:		Sales Order #: 0906357235					
Customer: CONFLUENCE DJ LLC-EBUS				Customer Rep: JOSH							
Well Name: SILVERTON			Well #: 5-8-2L		API/UWI #: 05-123-48440-00						
Field: WATTENBERG		City (SAP): KERSEY		County/Parish: WELD		State: COLORADO					
Legal Description: NW SW-4-4N-63W-2673FSL-255FWL											
Contractor: ENSIGN DRLG				Rig/Platform Name/Num: ENSIGN 122							
Job BOM: 7521 7521											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA/H171328				Srvc Supervisor: Lance Carpenter							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		1580		Job Depth TVD		1580					
Water Depth				Wk Ht Above Floor		4					
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	1580	0		
Open Hole Section			13.5				0	1590			
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	9.625			1580		Top Plug	9.625	1	HES		
Float Shoe	9.625					Bottom Plug	9.625		HES		
Float Collar	9.625			1536		SSR plug set	9.625		HES		
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 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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	12.5# SwiftCem	SWIFTCM (TM) SYSTEM	275	sack	12.5	2.16		8	12.28	
12.28 Gal		FRESH WATER								
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	
3	13.5# SwiftCem	SWIFTCM (TM) SYSTEM	195	sack	13.5	1.74		8	9.16	
9.16 Gal		FRESH WATER								
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	
4	Displacement fluid		119	bbl	8.3			8		
Cement Left In Pipe		Amount	40 ft			Reason		Shoe Joint		
Mix Water:		pH 7	Mix Water Chloride:			750 ppm		Mix Water Temperature:		52 °F
Cement Temperature:		## °F °C	Plug Displaced by:			8.34 lb/gal Water		Disp. Temperature:		## °F °C
Plug Bumped?		Yes	Bump Pressure:			496 psi		Floats Held?		Yes
Cement Returns:		20 bbl	Returns Density:			## lb/gal kg/m3		Returns Temperature:		## °F °C
Comment JOB PERFORMED AS DESIGNED. NO ACCIDENT, INJURY OR SPILL. SLURRIES WEIGHT VERIFIED WITH PRESSURIZED MUD BALANCE AND VOLUME VERIFIED WITH MIX WATER GALLONS. PUMPED MUD FLUSH SPACER WITH RED DYE AND D-AIR. PUMPED LEAD AND TAIL SLURRY. DROPPED TOP PLUG. PUMPED WATER DISPLACEMENT WASHING UP ON TOP OF THE PLUG. BUMPED PLUG AT 3BPM WITH 496 PSI. TOOK TO 1160 PSI AND HELD FOR A FEW MINUTES. FLOATS HELD WITH 1 BBL BACK. 40 BBL SPACER TO SURFACE. 20 BBL CEMENT TO SURFACE. TOP OF TAIL – 925' TOP OF LEAD – SURFACE WITH 20 BBL BACK SPACER – ALL 40 BBL TO SURFACE										

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	3/4/2020	11:00:00	USER					CREW CALLED OUT. ON LOCATION TIME 1700
Event	2	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/4/2020	20:00:00	USER					CREW ASSESSES LOCATION FOR HAZARDS, DISCUSSING RIG OPERATIONS, EQUIPMENT LAYOUT, SLIPS TRIPS FALLS, COMMUNICATION, TEAM LIFTING, PINCH POINTS, HAND PLACEMENT AND BEGIN SPOTTING EQUIPMENT AND RIGGING UP LINES
Event	3	Casing on Bottom	Casing on Bottom	3/4/2020	21:45:00	USER	1.00	8.47	0.00	11.60	CASING ON BOTTOM. RIG BEGINS CIRCULATION
Event	4	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/4/2020	22:00:00	USER	-1.00	8.49	0.00	11.60	CREW, RIG CREW AND CUSTOMER REP HAVE PRE JOB SAFETY MEETING DISCUSSING RED ZONES, MUSTER AREAS, EMERGENCY PROCEEDURES, LINE OF FIRE, STOP WORK AUTHORITY, COMMUNICATION, TUGGER OPERATIONS, PINCH POINTS, ROLES AND THE JOB PROCEEDURE
Event	5	Start Job	Start Job	3/4/2020	22:18:28	COM4	0.00	8.50	0.00	11.60	START JOB

Event	6	Test Lines	Test Lines	3/4/2020	22:23:27	COM4	2209.00	8.48	0.00	2.70	FILL LINES WITH 3 BBL WATER. PRESSURE TEST HES LINES TO 2500 PSI. TEST GOOD
Event	7	Pump Spacer	Pump Spacer	3/4/2020	22:27:49	USER	-6.00	8.43	0.00	2.70	PUMP 40 BBL MUD FLUSH SPACER WITH RED DYE AND D-AIR
Event	8	Pump Lead Cement	Pump Lead Cement	3/4/2020	22:39:23	COM4	55.00	8.33	4.60	0.00	PUMP 106 BBL SWIFTCCEM LEAD 12.5# 2.16 YIELD 12.28 GAL 275 SACKS
Event	9	Pump Tail Cement	Pump Tail Cement	3/4/2020	22:55:30	COM4	165.00	12.41	6.90	103.80	PUMP 61 BBL SWIFTCCEM TAIL 13.5# 1.74 YIELD 9.16 GAL 195 SACKS
Event	10	Shutdown	Shutdown	3/4/2020	23:07:15	USER	80.00	13.22	3.80	71.90	SHUTDOWN
Event	11	Drop Top Plug	Drop Top Plug	3/4/2020	23:10:54	COM4	-8.00	0.22	0.00	72.20	DROP TOP PLUG
Event	12	Pump Displacement	Pump Displacement	3/4/2020	23:11:28	COM4	-7.00	0.24	0.70	72.20	PUMP 119 BBL WATER DISPLACEMENT WASHING UP ON TOP OF THE PLUG. 40 BBL SPACER TO SURFACE AND 20 BBL CEMENT TO SURFACE
Event	13	Bump Plug	Bump Plug	3/4/2020	23:30:54	COM4	1110.00	8.35	0.00	120.50	BUMP PLUG AT 3 BPM WITH 496 PSI. TOOK TO 1160 PSI AND HELD FOR A FEW MINUTES
Event	14	Check Floats	Check Floats	3/4/2020	23:33:27	USER	1166.00	8.34	0.00	120.50	FLOATS HELD WITH 1 BBL BACK
Event	15	End Job	End Job	3/4/2020	23:38:57	COM4	-5.00	8.31	0.00	120.50	END JOB
Event	16	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	3/4/2020	23:40:00	USER	-5.00	8.31	0.00	120.50	CREW HAS PRE RIG DOWN SAFETY MEETING DISCUSSING PROPER LIFTING, COMMUNICATION, LINE OF FIRE, PINCH POINTS, RIG OPERATIONS, RED ZONES AND BEGIN

RIGGING DOWN
EQUIPMENT AND LINES

Event	17	Depart Location	Depart Location	3/5/2020	01:30:00	USER	CREW IS READY TO DEPART
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3.0 Attachments

3.1 CONFLUENCE SILVERTON 5-8-2L SURFACE-Custom Results.png

