

# HALLIBURTON

iCem<sup>®</sup> Service

## **CONFLUENCE DJ LLC-EBUS**

Date: Thursday, December 19, 2019

## **WALLA 5-10-4L**

SURFACE

Job Date: Saturday, December 14, 2019

Sincerely,

**SAM CARPENTER**

## 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 **Walla 5-10-4L 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 41 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 #: 3851312		Quote #:		Sales Order #: 0906163047					
Customer: CONFLUENCE DJ LLC-EBUS				Customer Rep: BRYAN							
Well Name: WALLA			Well #: 5-10-4L			API/UWI #: 05-123-46223-00					
Field: WATTENBERG		City (SAP): HUDSON		County/Parish: WELD		State: COLORADO					
Legal Description: SE SE-31-1N-65W-861FSL-705FEL											
Contractor: ENSIGN DRLG				Rig/Platform Name/Num: ENSIGN 122							
Job BOM: 7521 7521											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA/H171328				Srv Supervisor: Lance Carpenter							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		1543ft		Job Depth TVD		1543					
Water Depth				Wk Ht Above Floor		3					
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	1543	0		
Open Hole Section			13.5				0	1570			
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	9.625			1543		Top Plug	9.625	1	HES		
Float Shoe	9.625					Bottom Plug	9.625		HES		
Float Collar	9.625			1498		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	13.5# SwiftCem	SWIFTCEM (TM) SYSTEM	650	sack	13.5	1.74		8	9.17
9.17 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	Displacement fluid		116	bbl	8.3			8	

Cement Left In Pipe	Amount	44 ft	Reason	Shoe Joint
Mix Water:	pH ##	Mix Water Chloride:## ppm	Mix Water Temperature:## °F °C	
Cement Temperature:## °F °C	Plug Displaced by:## lb/gal kg/m3 XXXX	Disp. Temperature:## °F °C		
Plug Bumped?Yes	Bump Pressure:530 psi	Floats Held?Yes		
Cement Returns:41 bbl	Returns Density:## lb/gal kg/m3	Returns Temperature:## °F °C		

## Comment

JOB WENT WELL. PERFORMED AS DESIGNED. SLURRY WAS WEIGHED BY PRESSURIZED MUD BALANCE AND VOLUME VERIFIED BY MIX FLUID. PUMPED MUD FLUSH SPACER WITH RED DYE IN FIRST 10 BBL. DROPPED TOP PLUG AFTER CEMENT. SPACER TO SURFACE AT 35 AWAY. CEMENT TO SURFACE AT 75 BBL AWAY. PLUG BUMPED WITH 530 PSI AT 3.5 BPM. FLOATS HELD WITH ½ BBL BACK.

40 BBL SPACER TO SURFACE

41 BBL CEMENT TO SURFACE

TOP OF CEMENT AT 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	12/13/2019	17:30:00	USER					CREW CALLED OUT. ON LOCATION 2330
Event	2	Depart Shop for Location	Depart Shop for Location	12/13/2019	21:00:00	USER					CREW HAS VERIFIED EQUIPMENT AND MATERIALS FOR THE JOB AND DEPARTS AFTER HAVING JOURNEY MANAGEMENT SAFETY MEETING DISCUSSING ROUTE, CONVOY ORDER, FOLLOWING DISTANCE, HAZARDS, CONSTRUCTION, DRIVING TO CONDITIONS AND COMMUNICATION
Event	3	Arrive At Loc	Arrive At Loc	12/13/2019	21:30:00	USER					CREW ARRIVES AT LOCATION. RIG JUST TD'ING THE WELL. MOVED CREW TO NEXT LOCATION OVER TO SAVE SPACE
Event	4	Casing on Bottom	Casing on Bottom	12/14/2019	03:15:00	USER					CASING ON BOTTOM. CREW CAN NOW SPOT IN EQUIPMENT AND BEGIN RIGGING UP LINES
Event	5	Safety Meeting	Safety Meeting	12/14/2019	03:45:00	USER	-1.00	2.42	0.00	1.30	CREW, RIG CREW AND CUSTOMER REP HAVE PRE JOB SAFETY MEETING DISCUSSING HAZARDS, MUSTER AREAS, LINE OF FIRE, PRESSURE HAZARDS, RED ZONES, PINCH POINTS, TUGGER OPERATIONS,

											CONTINGENCIES, COMMUNICATION AND STOP WORK AUTHORITY
Event	6	Check Floats	Start Job	12/14/2019	04:06:44	COM4	-1.00	2.42	0.00	1.30	START JOB
Event	7	Test Lines	Test Lines	12/14/2019	04:21:27	COM4	70.00	8.32	0.00	25.50	FILL LINES WITH 3 BBL WATER. PRESSURE TEST HES LINES TO 3000 PSI AND HELD FOR A FEW MINUTES. TEST GOOD
Event	8	Pump Spacer 1	Pump Spacer 1	12/14/2019	04:26:52	COM4	5.00	8.27	0.00	0.00	PUP 40 BBL MUD FLUSH SPACER WITH RED DYE IN FIRST 10 BBL
Event	9	Pump Lead Cement	Pump Lead Cement	12/14/2019	04:41:03	COM4	109.00	8.64	4.00	0.00	PUMP 201 BBL SWIFTCEM 13.5# 1.74 YIELD 9.17 GAL 650 SACKS
Event	10	Drop Top Plug	Drop Top Plug	12/14/2019	05:25:02	COM4	-25.00	12.92	0.00	230.60	DROP TOP PLUG
Event	11	Pump Displacement	Pump Displacement	12/14/2019	05:25:14	COM4	-25.00	12.92	0.00	230.60	PUMP 116 BBL WATER DISPLACEMENT WASHING UP ON TOP OF THE PLUG
Event	12	Bump Plug	Bump Plug	12/14/2019	05:53:20	COM4	749.00	8.28	0.00	123.80	BUMP PLUG AT 3.5 BPM AT 530 PSI FINAL CIRCULATING PRESSURE. TOOK TO 850 PSI
Event	13	Check Floats	Check Floats	12/14/2019	05:56:22	USER	793.00	8.27	0.00	123.80	CHECK FLOATS. FLOATS HELD WITH 0.5 BBL BACK
Event	14	End Job	End Job	12/14/2019	06:01:37	COM4	-23.00	8.26	0.00	128.50	END JOB
Event	15	Safety Meeting	Safety Meeting	12/14/2019	06:05:00	USER	-23.00	8.27	9.00	155.00	CREW HAS PRE RIG DOWN SAFETY MEETING DISCUSSING PINCH POINTS, SLIPS TRIPS FALLS, LINE OF FIRE, TUGGER OPERATIONS, RIG OPERATIONS, TEAM LIFTING, COMMUNICATION,



							HAND PLACEMENT AND BEGIN RIGGING DOWN EQUIPMENT AND LINES
Event	16	Depart Location	Depart Location	12/14/2019	08:00:00	USER	CREW IS RIGGED DOWN AND READY TO DEPART AFTER HAVING JOURNEY MANAGEMENT SAFETY MEETING DISCUSSING HOURS OF SERVICE, FIT FOR DUTY, DIRECTIONS, COMMUNICATION AND WALK AROUNDS

## 3.0 Attachments

### 3.1 CONFLUENCE WALLA 5-10-4L SURFACE-Custom Results.png



