

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS-EBUS

Date: Monday, February 19, 2018

Milkshake 31W-20-1N Surface

Job Date: Sunday, January 14, 2018

Sincerely,

Justin Lansdale

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Milkshake 31W-20-1N** 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.

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 #: 369404	Ship To #: 3847422	Quote #:	Sales Order #: 0904571914
Customer: EXTRACTION OIL & GAS -		Customer Rep: Shawn McIntyre	
Well Name: MILKSHAKE	Well #: 31W-20-1N	API/UWI #: 05-123-46054-00	
Field: WATTENBERG	City (SAP): WINDSOR	County/Parish: WELD	State: COLORADO
Legal Description: SW SW-32-6N-67W-1172FSL-300FWL			
Contractor: Cartell 41		Rig/Platform Name/Num: Cartel 41	
Job BOM: 7521 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX38199		Srvc Supervisor: Kendall Broom - H194727	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	1552ft		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	0	9.625	8.921	36	8 RD	J-55	0	1552	0	0
Open Hole Section			13.5				0	1552	0	0

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				Bottom Plug	9.625		HES
Float Collar	9.625			1511	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	Red Dye Spacer	Red Dye Spacer	10	bbl	8.33					

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	SwiftCem	SWIFTCEM (TM) SYSTEM	525	sack	13.5	1.74		5	9.2	
9.20 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	Fresh Water	Fresh Water	116	bbl	8.33					
Cement Left In Pipe		Amount	40.5 ft		Reason			Shoe Joint		

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	1/13/2018	16:00:00	USER	Called crew out to be on location at 2300
Event	2	Depart Shop for Location	Depart Shop for Location	1/13/2018	21:00:00	USER	Held a safety huddle before leaving for location
Event	3	Arrive At Loc	Arrive At Loc	1/13/2018	22:00:00	USER	Arrived on location and met with the company man. held a hazard hunt before spotting in the trucks
Event	4	Safety Meeting	Safety Meeting	1/14/2018	01:00:00	USER	Held a safety meeting with Haliburton crew. rig crew did not participate.
Event	5	Start Job	Start Job	1/14/2018	01:17:44	COM5	
Event	6	Test Lines	Test Lines	1/14/2018	01:18:49	COM5	Test lines to 3000 psi, we did the 500 psi KO and the 5th gear stall and then walked it up and held it for a couple minutes and released the pressure
Event	7	Pump Spacer 1	Pump Spacer 1	1/14/2018	01:24:25	COM5	Pumped 20 bbls water spacer
Event	8	Pump Spacer 2	Pump Spacer 2	1/14/2018	01:29:28	COM5	Pumped 10 bbls water spacer with red dye
Event	9	Pump Cement	Pump Cement	1/14/2018	01:32:56	COM5	Pumped 162 bbls Swiftcem. 525 sks, 13.5#, 1.74 yield, 9.2 gal/sks.
Event	10	Check Weight	Check weight	1/14/2018	01:33:14	COM5	Verified weight with pressurized scales
Event	11	Check Weight	Check weight	1/14/2018	01:36:30	COM5	Verified weight with presserized scales
Event	12	Check Weight	Check weight	1/14/2018	01:52:56	COM5	verified weight with presserized scales
Event	13	Drop Top Plug	Drop Top Plug	1/14/2018	02:04:04	COM5	Shut down and dropped the top plug. witnessed by the customer

Event	14	Pump Displacement	Pump Displacement	1/14/2018	02:04:06	COM5	Pumped 116 bbls water displacement.. Got all dye and 29 bbl cement back to surface.
Event	15	Bump Plug	Bump Plug	1/14/2018	02:22:56	COM5	Bumped plug at 400 psi KO at 850 psi. Held pressure and released to checked floats. floats held.
Event	16	End Job	End Job	1/14/2018	02:29:00	USER	
Event	17	Rig Down Lines	Rig Down Lines	1/14/2018	02:35:00	USER	Held a safety meeting before rigging down lines and moving trucks. Bulk trucks returned to yard to reload and return. We moved the pump truck for the rig move.

3.0 Attachments

3.1 Job Chart



