

# HALLIBURTON

iCem<sup>®</sup> Service

## **EXTRACTION OIL & GAS-EBUS**

Date: Wednesday, November 15, 2017

### **Launer #5 Surface**

Job Date: Monday, November 06, 2017

Sincerely,

**Justin Lansdale**

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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 **Launer #5** 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 #: 3818091		Quote #:		Sales Order #: 0904418282				
Customer: EXTRACTION OIL & GAS -				Customer Rep: SEAN MCINTIRE						
Well Name: LAUNER			Well #: 5		API/UWI #: 05-123-45172-00					
Field: WATTENBERG		City (SAP): WINDSOR		County/Parish: WELD		State: COLORADO				
Legal Description: SE SE-26-7N-67W-815FSL-333FEL										
Contractor:				Rig/Platform Name/Num: Cartel 41						
Job BOM: 7521 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199				Srv Supervisor: Vitali Neverdasov						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		1554ft		Job Depth TVD		1554'				
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	1554	0	0
Open Hole Section			13.5				0	1554	0	0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe						Top Plug	9.625	1	HES	
Float Shoe	9.625	1	NA	1554		Bottom Plug	9.625	0	HES	
Float Collar	9.625	1	NA	1514		SSR plug set	9.625	0	HES	
Insert Float	9.625					Plug Container	9.625	1	HES	
Stage Tool	9.625					Centralizers	9.625	0		
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	FRESH WATER	WATER	20	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	
	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
3	SwiftCem	SWIFTCEM (TM) SYSTEM	550	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
4	Fresh Water	Fresh Water	117	bbl	8.33				
Cement Left In Pipe		Amount	40 ft		Reason			Shoe Joint	
Comment : 27 BBLS OF CEMENT BACK TO SURFACE.									

## 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	11/5/2017	11:30:00	USER	ON LOCATION @ 18:00
Event	2	Other	Other	11/5/2017	11:40:00	USER	WAITED ON LOCATION FROM PREVIOUS JOB
Event	3	Other	Other	11/5/2017	12:30:00	USER	RIG BROKE DOWN.
Event	4	Other	Other	11/5/2017	15:50:00	USER	RELOADED BULK TRUCKS ARRIVED AT LOCATION
Event	5	Other	Other	11/5/2017	16:00:00	USER	SPOT BULK TRUCKS
Event	6	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	11/5/2017	16:10:00	USER	HELD PRE RIG UP JSA
Event	7	Rig-up Lines	Rig-up Lines	11/5/2017	16:20:00	USER	RIG UP ALL LINES TO THE BUFFER ZONE
Event	8	Other	Other	11/5/2017	18:50:00	USER	PER CUSTOMER TEST CASING @ 1500 PSI FOR 10 MIN.
Event	9	Check Floats	Check Floats	11/5/2017	19:00:00	USER	FLOATS HELD
Event	10	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	11/5/2017	19:05:00	USER	RIG DOWN SAFETY MEETING
Event	11	Other	Other	11/5/2017	19:15:00	USER	BULK TRUCKS LEAVING LOCATION BACK TO THE YARD TO GET RELOADED
Event	12	Other	Other	11/6/2017	08:30:00	USER	RIG START RUNNING CASING
Event	13	Casing on Bottom	Casing on Bottom	11/6/2017	10:19:00	USER	CASING ON BUTTOM
Event	14	Safety Meeting - Pre Job	Safety Meeting - Pre Job	11/6/2017	10:30:00	USER	PRE JOB SAFETY MEETING
Event	15	Start Job	Start Job	11/6/2017	10:36:16	COM4	
Event	16	Pressure Test	Pressure Test	11/6/2017	10:43:00	USER	LOAD LINE AND PRESSURE TEST TO 3000 PSI
Event	17	Pump Spacer 1	Pump Spacer 1	11/6/2017	10:47:43	COM4	PUMP 20 BBLS OF FRESH WATER

Event	18	Pump Spacer	Pump Spacer	11/6/2017	10:51:00	USER	PUMP 10 BBLS OF WATER + DYE
Event	19	Pump Cement	Pump Cement	11/6/2017	10:55:00	USER	BATCH/ WEIGH/ PUMP 550 SKS (170.5 BBLS) OF SWIFTCEN @ 13.5 PPG
Event	20	Shutdown	Shutdown	11/6/2017	11:26:00	USER	SHUTDOWN/ DROP TOP PLUG
Event	21	Pump Displacement	Pump Displacement	11/6/2017	11:29:00	USER	START DISPLACEMENT WITH WATER
Event	22	Other	Other	11/6/2017	11:51:00	USER	SLOW RATE
Event	23	Bump Plug	Bump Plug	11/6/2017	11:56:00	USER	PER CUSTOMER, BUMP PLUG @ 1500 PSI AND HOLD PRESSURE FOR 5 MIN FOR CASING TEST
Event	24	Check Floats	Check Floats	11/6/2017	12:01:00	USER	
Event	25	End Job	End Job	11/6/2017	12:01:50	COM4	
Event	26	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	11/6/2017	12:16:00	USER	HELD PRE RIG DOWN JSA
Event	27	Other	Other	11/6/2017	12:55:00	USER	BULK TRUCKS LEAVING LOCATION BACK TO THE YARD TO GET RELOADED



3.0 Attachments

3.1 Job Chart



