

# HALLIBURTON

iCem<sup>®</sup> Service

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

Date: Monday, December 18, 2017

### **Trott 8E-10-5N Surface**

Job Date: Friday, December 08, 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 **Trott 8E-10-5N** 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 #: 3833887		Quote #:		Sales Order #: 0904490594				
Customer: EXTRACTION OIL & GAS -				Customer Rep: Sean Macentire						
Well Name: TROTT			Well #: 8E-10-5N		API/UWI #: 05-123-45714-00					
Field: WATTENBERG		City (SAP): MEAD		County/Parish: WELD		State: COLORADO				
Legal Description: NE SE-7-4N-68W-1550FSL-1074FEL										
Contractor:				Rig/Platform Name/Num: Cartel 41						
Job BOM: 7521 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199				Srv Supervisor: Ryan Stevens						
Job										
Formation Name										
Formation Depth (MD)		Top	0	Bottom						
Form Type				BHST						
Job depth MD		1533ft		Job Depth TVD		1533				
Water Depth				Wk Ht Above Floor		5'				
Perforation Depth (MD)		From	0	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	New	9.625	8.921	36	8 RD	J-55	0	1533	0	1533
Open Hole Section			13.5				0	1550	0	1533
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625	1	HES	1533		Top Plug	9.625	1	HES	
Float Shoe	9.625					Bottom Plug	9.625			
Float Collar	9.625	1	HES			SSR plug set	9.625			
Insert Float	9.625					Plug Container	9.625	1	HES	
Stage Tool	9.625					Centralizers	9.625			
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		1.0	6	420	
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	SWIFTCM (TM) SYSTEM	525	sack	13.5	1.74	9.2	5	4,830	
9.20 Gal		FRESH WATER								

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Displacement	Fresh Water	115.25	bbl	8.33		42		4,840
Cement Left In Pipe		Amount	42 ft		Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride:		0 ppm		Mix Water Temperature:		65 °F
Cement Temperature:			Plug Displaced by:		8.34 LB/Gal		Disp. Temperature:		65 °F
Plug Bumped?		Yes	Bump Pressure:		1,000		Floats Held?		Yes
Cement Returns:		26 BBLS	Returns Density:		13.5 lb/gal		Returns Temperature:		°F
Comment									

## 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	12/8/2017	09:30:00	USER	CREW CALLED OUT TO JOB. PICKED UP PLUGS AND DYE FROM FORT LUPTON YARD. HPLUG CONTAINER AND BULK EQUIPMENT WAS ALREADY ON LOCATION.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	12/8/2017	13:17:26	USER	CREW DISCUSSED HAZARDS ALONG ROUTE.
Event	3	Crew Leave Yard	Crew Leave Yard	12/8/2017	13:30:06	USER	STARTED JOURNEY MANAGEMENT
Event	4	Arrive At Loc	Arrive At Loc	12/8/2017	14:31:01	USER	END JOURNEY MANAGEMENT
Event	5	Rig-Up Equipment	Rig-Up Equipment	12/8/2017	14:33:11	USER	CREW RIGGED UP PUMP, AND BULK EQUIPMENT TO PERFORM JOB.
Event	6	Rig-Up Completed	Rig-up Completed	12/8/2017	14:34:12	USER	EQUIPMENT WAS RIGGED UP AND READY TO PERFORM JOB.
Event	7	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/8/2017	14:35:48	USER	CREW DISCUSSED HAZARDS ASSOCIATED WITH RIG UP.
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	12/8/2017	20:20:00	USER	HAD SAFETY MEETING WITH RIG CREW. DISCUSSED JOB PROCEDURES AND JOB HAZARDS.
Event	9	Start Job	Start Job	12/8/2017	21:02:05	COM4	START RECORDING JOB DATA
Event	10	Test Lines	Test Lines	12/8/2017	21:04:34	COM4	PRESSURE TEST PUMPS AND LINES TO 2880, TEST EKO TO 500 PSI,
Event	11	Pump Spacer 1	Pump Spacer 1	12/8/2017	21:09:58	COM4	PUMP 10 BBLS OF FRESH WATER
Event	12	Pump Spacer 2	Pump Spacer 2	12/8/2017	21:14:13	COM4	PUMP 10 BBLS OF RED DYE
Event	13	Check Weight	Check weight	12/8/2017	21:17:05	COM4	CEMENT WEIGHED UP AT 13.5

Event	14	Pump Cement	Pump Cement	12/8/2017	21:19:32	COM4	PUMPED 162 BBLS OF 13.5#, 1.74 y, 9.2 wr CEMENT AT 6 BPM, 350 PSI.
Event	15	Shutdown	Shutdown	12/8/2017	22:02:02	COM4	SHUTDOWN TO DROP PLUG. WASHED UP ON HEAD.
Event	16	Drop Top Plug	Drop Top Plug	12/8/2017	22:03:39	COM4	DROPPED 9 5/8" HALLIBURTON TOP PLUG. CO. MAN WITNESSED.
Event	17	Pump Displacement	Pump Displacement	12/8/2017	22:04:32	COM4	PUMPED 115 BBLS OF FRESH WATER DISPLACEMENT AT 6 BPM.
Event	18	Bump Plug	Bump Plug	12/8/2017	22:26:46	COM4	BUMPED PLUG AT 2.5 BPM. FCP 550 PSI. BUMP PRESSURE WAS 980 PSI.
Event	19	Check Floats	Check Floats	12/8/2017	22:30:00	USER	CHECK FLOATS/ FLOATS HELD. GOT 1 BBL BACK TO THE TRUCK.
Event	20	End Job	End Job	12/8/2017	22:31:59	COM4	GOT 26 BBLS OF CEMENT BACK TO SURFACE.
Event	21	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/8/2017	22:35:00	USER	DISCUSSED HAZARDS ASSOIATED WITH RIG RIG DOWN
Event	22	Rig-Down Equipment	Rig-Down Equipment	12/8/2017	23:00:00	USER	BEGIN TO RIG DOWN AND BLOW DOWN IRON.
Event	23	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	12/8/2017	23:15:00	USER	CREW DISSCUSSED HAZARDS ALONG ROUTE BACK TO YARD.
Event	24	Crew Leave Location	Crew Leave Location	12/8/2017	23:25:38	USER	CREW LEFT LOCATION. THANKS RYAN , ADAM AND CREW.



## 3.0 Attachments

### 3.1 Job Chart



