

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS-EBUS

Date: Thursday, January 04, 2018

Trott 8E-10-3N Production

Job Date: Saturday, December 30, 2017

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 **Trott 8E-10-3N** cement **Production** 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 #: 3833831		Quote #:		Sales Order #: 0904529277				
Customer: EXTRACTION OIL & GAS				Customer Rep: Shayne Hackford						
Well Name: TROTT			Well #: 8E-10-3N		API/UWI #: 05-123-45709-00					
Field: WATTENBERG		City (SAP): MEAD		County/Parish: WELD		State: COLORADO				
Legal Description: NE SE-7-4N-68W-1550FSL-1110FEL										
Contractor: PATTERSON-UTI ENERGY				Rig/Platform Name/Num: PATTERSON 346						
Job BOM: 7523 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199				Srvc Supervisor: Luke Kosakewich						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		10560ft		Job Depth TVD		6220ft				
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		J-55	0	1550	0	1550
Casing	0	5.5	4.778	20		P-110	0	10547	0	6220
Open Hole Section			8.5				1565	10560	1550	6220
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe						Top Plug	5.5	1	Weatherford	
Float Shoe	5.5			10547		Bottom Plug				
Float Collar	5.5			10542		SSR plug set				
Insert Float						Plug Container	5.5	1	HES	
Stage Tool						Centralizers				
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	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	50	bbl	11.5	3.73		5		

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	Lead	ELASTICEM	1760	sack	13.2	1.57		8	7.53

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	Displacement	233.8	bbl	8.34			10	

Cement Left In Pipe	Amount	0 ft	Reason					Wet Shoe	

Comment There were full returns throughout the job. Burned the plug 500 psi. over 2,200 psi. at 5 bpm and held for a minutes. Finale pressure was 2,700 psi. Got 50 bbls. of spacer and 50 bbls. of cement to surface. Burst the plug at 3,660 psi. Pumped a 5 bbl. wet shoe. Floats held. Got 1.5 bbls. of fluid back to the truck.

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	12/29/2017	18:30:00	USER	Crew was called out at 18:30 for an on location time of 00:00.
Event	2	Depart Location Safety Meeting	Depart Location Safety Meeting	12/29/2017	22:20:00	USER	Crew held a pre journey safety meeting and JSA.
Event	3	Depart Shop for Location	Depart Shop for Location	12/29/2017	22:30:00	USER	Started journey management with dispatch and left location.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	12/29/2017	23:10:00	USER	Crew performed a site assessment and hazard hunt on location. Checked in with the customer and discussed the job procedures, rig up and well bore schematics to calculate the job. The rig was running casing.
Event	5	Other	Other	12/29/2017	23:15:00	USER	W
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/29/2017	23:20:00	USER	The crew held a pre rig up safety meeting and JSA.
Event	7	Rig-Up Equipment	Rig-Up Equipment	12/29/2017	23:25:00	USER	The crew rigged up all lines, hoses and equipment for the job.
Event	8	Safety Meeting	Safety Meeting	12/30/2017	02:30:00	USER	All personnel on location held a pre job safety meeting and JSA.
Event	9	Start Job	Start Job	12/30/2017	02:53:14	COM4	Pumped 3 bbls. of fresh water to fill line and establish circulation.
Event	10	Test Lines	Test Lines	12/30/2017	02:56:30	COM4	Pressure tested lines to 4,500 psi. with a 500 psi. electronic kick out test.

Event	11	Pump Spacer 1	Pump Spacer 1	12/30/2017	03:09:18	COM4	Pumped 50 bbls. of Tuned Spacer III with surfactants mixed at 11.5 ppg., Yield: 3.73 ft3/sks, 23.4 gal/sks. Density was verified by pressurized scales.
Event	12	Pump Cement	Pump Cement	12/30/2017	03:21:37	COM4	Pumped 492 bbls. (1760 sks.) of Elasticem mixed at 13.2 ppg., Yield: 1.57 ft3/sks, 7.53 gal/sks. Density was verified by pressurized scales.
Event	13	Check Weight	Check weight	12/30/2017	03:24:10	COM4	Cement weight up at 13.2 ppg.
Event	14	Shutdown	Shutdown	12/30/2017	04:48:38	COM4	Loaded to top plug.
Event	15	Clean Lines	Clean Lines	12/30/2017	04:50:15	USER	Washed pumps and lines until clean.
Event	16	Drop Top Plug	Drop Top Plug	12/30/2017	04:56:56	COM4	Dropped the top plug witnessed by the customer.
Event	17	Pump Displacement	Pump Displacement	12/30/2017	04:58:41	COM4	Pumped 233.8 bbls. of fresh water for displacement.
Event	18	Bump Plug	Bump Plug	12/30/2017	05:25:04	COM4	Bumped the plug 500 psi. over 2,200 psi. at 5 bpm. Finale pressure was 2,700 psi. Held pressure for a minute. Pressure held. Got 50 bbls. of spacer and 50 bbls. of cement to surface
Event	19	Pressure Up Well	Pressure Up Well	12/30/2017	05:26:43	USER	Pressured up the well to 3,660 psi. to burst the plug. Pumped 5 bbls. for a wet shoe.

Event	20	Check Floats	Check Floats	12/30/2017	05:29:14	USER	Bled off pressure to check floats. Floats held. Got 1.5 bbls. of fluid back to the truck.
Event	21	End Job	End Job	12/30/2017	05:40:43	COM4	Washed and blew down all lines until clean and dry.
Event	22	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/30/2017	05:45:00	USER	Halliburton cement crew held a pre rig down safety meeting and JSA.
Event	23	Rig-Down Equipment	Rig-Down Equipment	12/30/2017	05:55:00	USER	Rigged down all lines, hoses and equipment.
Event	24	Depart Location Safety Meeting	Depart Location Safety Meeting	12/30/2017	08:00:00	USER	Held a pre journey safety meeting with the crew.
Event	25	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	12/30/2017	08:15:00	USER	Started journey management with dispatch and left location.

3.0 Attachments

3.1 Job Chart

Custom Results



