

# HALLIBURTON

iCem<sup>®</sup> Service

## EXTRACTION OIL & GAS-EBUS

**FRYE GOTIS 32W-25-02**

Production Casing

Job Date: Sunday, May 02, 2021

Sincerely,

**Nick Roles and Crew**

## Legal Notice

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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 Frye Gotis 32W-25-02 production casing. 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 75 bbl. 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*

<b>Sold To #:</b> 369404		<b>Ship To #:</b> 3644979		<b>Quote #:</b>		<b>Sales Order #:</b> 0907120032				
<b>Customer:</b> EXTRACTION OIL & GAS-EBUS				<b>Customer Rep:</b> Danny Herrera and Larry Siegel						
<b>Well Name:</b> FRYE GOTIS			<b>Well #:</b> 32W-25-02			<b>API/UWI #:</b> 05-123-41073-00				
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> WINDSOR		<b>County/Parish:</b> WELD			<b>State:</b> COLORADO			
<b>Legal Description:</b> NE SW-29-7N-67W-1317FSL-2504FWL										
<b>Contractor:</b> PATTERSON-UTI ENERGY				<b>Rig/Platform Name/Num:</b> PATTERSON 901						
<b>Job BOM:</b> 7523										
<b>Well Type:</b> HORIZONTAL OIL										
<b>Sales Person:</b> HALAMERICA\HX41066				<b>Srvc Supervisor:</b> Nicholas Roles						
<b>Job</b>										
<b>Job depth MD</b>		20710 ft			<b>Job Depth TVD</b>					
<b>Well Data</b>										
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	1801	0	1801
Casing		5.5	4.892	17			0	20710	0	7235
Open Hole Section			8.5				1801	20720	1801	7235
<b>Tools and Accessories</b>										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	5.5			20710		Top Plug	5.5	1	DT	
Float Collar	5.5			20706		Bottom Plug	5.5	1	DT	
						Wiper Ball	5.5	2	DT	
						Plug Container	5.5	1	HES	

Fluid Data										
<b>Stage #: 1</b>										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
1	Spacer	Tuned Prime Spacer	50	bbl	12.5	2.74		6	1695	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
2	Cap Cement	ElastiCem Cement	640	sack	13	1.66	8.3	9	5312	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
3	Lead Cement	IsoBond Cement	820	sack	13	1.55	7.06	9	5789	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
4	Tail Cement	ElastiCem Cement	1826	sack	13.2	1.59	7.75	9	14152	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
5	Displacement	Fresh Water	480	bbl	8.33			10	20160	
<b>Cement Left In Pipe</b>										
<b>Amount</b>		4 ft			<b>Reason</b>			Shoe Joint		
<b>Mix Water:</b>		pH 7		<b>Mix Water Chloride:</b>		0 ppm		<b>Mix Water Temperature:</b>		60 °F
<b>Plug Bumped?</b>		Yes		<b>Plug Displaced by:</b>		8.33 lb/gal		<b>Disp. Temperature:</b>		60 °F
<b>Cement Returns:</b>		75 bbl.		<b>Bump Pressure:</b>		#### psi		<b>Floats Held?</b>		Yes
<b>Comment:</b> Est TOT-8038', TOL-2499' Got 75 bbl. cap cement to surface.										

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Seq. No.	Activity	Date	Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
1	Pre-Convoy Safety Meeting	5/1/2021	15:00:00					Discuss all hazards associated with journey, directions to destination, complete journey management if needed, and ensure all convoy is fit for duty.
2	Depart from Service Center or Other Site	5/1/2021	15:30:00					Depart from service center or other job site.
3	Arrive at Location from Service Center	5/1/2021	20:00:00					Upon arrival to location, signed in with onsite safety personnel. Met with company man and discussed job specific requirements and specifications.
4	Pre-Rig Up Safety Meeting	5/1/2021	20:15:00					Held pre rig up JSA for hazards, hazard hunt with crew, and discussed plan for spotting equipment and rigging up lines for job. Discussed muster points and closest emergency location as well as coordinates.
5	Rig-Up Equipment	5/1/2021	20:30:00					Begin rig up with crew.
6	Rig-Up Completed	5/1/2021	22:00:00					Complete rig up for job to nearest point before red zone.
7	Call Out	5/1/2021	23:00:00					Called out by service coordinator for OL time of 0900.
8	Other	5/2/2021	09:30:00	7.96	0.00	3.00	15.20	Mix water test results- PH-7, Chlo-0, Temp-65F.
9	Safety Meeting - Pre Job	5/2/2021	11:00:00	8.00	0.00	4.00	19.10	Held job specific hazards as well as confirming job procedure with co man and rest of crew associated with job.

10	Start Job	5/2/2021	11:30:38	8.03	0.00	-1.00	19.10	TD-20720' OH-8.5", TP-20710', FC-20706', 5.5" 17#, TVD-7235', SURF-1801' 9.625" 36#, MUD-9.5#
11	Drop Bottom Plug	5/2/2021	11:31:52	8.33	3.60	292.00	2.10	Dropped by Downhole tool hand, witnessed by company man.
12	Test Lines	5/2/2021	11:32:32	8.06	0.00	108.00	3.80	Pumped 3bbls fresh water to fill lines at 3bpm 280psi, shut manifold, and performed 500psi k/o function test, followed with 5th gear stall at 1820psi, proceeded to bring pressure to 4500psi, Pressure stabilized and held with no leaks.
13	Pump Spacer 1	5/2/2021	11:35:34	8.07	0.00	38.00	0.00	Pumped 50bbls of 12.5# 2.73y 16.55g/s Tuned Prime Spacer with 10g D-air at 6bpm 120psi.
14	Pump Lead Cement	5/2/2021	11:42:43	12.41	8.00	545.00	0.10	Pumped 640sk or 189bbls of 13# 1.66y 8.3g/s ElastiCem at 9bpm 350psi.
15	Check Weight	5/2/2021	11:44:22	12.87	8.10	759.00	13.40	Weight verified with pressurized mud scales.
16	Shutdown	5/2/2021	11:50:47	14.18	0.00	133.00	65.40	Double on the floor worked loose, shutdown to tighten.
17	Check Weight	5/2/2021	12:09:40	13.03	9.40	1457.00	195.40	Weight verified with pressurized mud scales.
18	Pump Lead Cement	5/2/2021	12:09:59	12.91	9.40	737.00	0.10	Pumped 820sk or 226bbls of 13# 1.55y 7.06g/s SBM CEM FDP with 20g of D-Air at 8.5bpm 1050psi.
19	Pump Tail Cement	5/2/2021	12:39:16	13.05	8.50	983.00	0.10	Pumped 1826sk or 517bbls of 13.2# 1.59y 7.75g/s ElastiCem at 9bpm 788psi.
20	Check Weight	5/2/2021	12:53:12	13.25	9.00	746.00	115.20	Weight verified with pressurized mud scales.
21	Shutdown	5/2/2021	13:42:45	13.60	0.00	141.00	551.20	Pumped 20bbls fresh water through pumps and lines to wash up pit.
22	Drop Top Plug	5/2/2021	13:44:11	13.75	0.00	15.00	551.20	Dropped by tool hand, witnessed by company man. Dropped 2 wiper balls behind plug.

Pumped 480bbls fresh water at 10bpm.

23	Pump Displacement	5/2/2021	13:50:25	8.47	0.00	15.00	563.00	
24	Bump Plug	5/2/2021	14:52:30					Slowed down at 450bbls away to 4bpm, final circulating pressure-2440psi. Bump pressure-2980psi.
25	Other	5/2/2021	14:52:37	8.30	0.00	2939.00	483.80	Released pressure and got 5bbls back. Floats held.
26	End Job	5/2/2021	14:55:16	8.28	0.00	5.00	0.00	Est TOT-8038', TOL-2499' Got 75bbls cap cement to surface.
27	Pre-Rig Down Safety Meeting	5/2/2021	15:00:00	8.29	0.00	5.00	0.00	Held safety meeting with crew prior to rig down, discussed possibility of trapped pressure, swing radius, slips trips and falls, pinch points and risks associated with rig down.
28	Rig Down Lines	5/2/2021	15:15:00					Begin rig down
29	Rig-Down Completed	5/2/2021	16:00:00					Rig down complete with no injuries, spills or damage to equipment.
30	Pre-Convoy Safety Meeting	5/2/2021	16:15:00					Held safety meeting with convoy, discussed trip hazards, directions and all crew fit for duty prior to departure.
31	Depart Location for Service Center or Other Site	5/2/2021	16:30:00					Depart location, if applicable journey will be submitted.

3.0 Attachments

3.1 Job Chart

