

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS-EBUS

Ft. Lupton District, COLORADO

State Pronghorn Fed 13-43-30HNB Production

Job Date: Saturday, December 04, 2021

Sincerely,

Meghan Van Zyl

Legal Notice

Disclaimer:

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **State Pronghorn Fed 13-43-30HNB** 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.

Approximately 52 bbls 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

Sold To #: 369404		Ship To #: 9059005		Quote #: 0022895709		Sales Order #: 0907539859					
Customer: EXTRACTION OIL & GAS-EBUS				Customer Rep: Todd Stephens							
Well Name: STATE PRONGHORN FEDERAL		Well #: 13-43-30HNB		API/UWI #: 05-123-51317-00							
Field: WATTENBERG		City (SAP): KERSEY		County/Parish: WELD		State: COLORADO					
Legal Description: 30-5N-61W-2240FSL-596FWL											
Contractor: PATTERSON-UTI ENERGY				Rig/Platform Name/Num: PATTERSON 345							
Job BOM: 7523 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HX41066				Srv Supervisor: Kyle Bath							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		11192ft		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		9.625	8.921	36			0	1600	0	1600	
Casing		5.5	4.892	17			0	11162	0	6013	
Open Hole Section			8.75				1600	11192	1600	6013	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5			11162		Top Plug	5.5		HES		
Float Shoe	5.5					Bottom Plug	5.5		HES		
Float Collar	5.5					SSR plug set	5.5		HES		
Insert Float	5.5					Plug Container	5.5		HES		
Stage Tool	5.5					Centralizers	5.5		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	Tuned Prime	TUNED PRIME CEMENT SPACER SYS			50	bbl	11.5	3.74			

iCem® Service
(v. 6.0.286.0)

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq No.	Activity	Graph Label	Date	Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
1	Call Out	Call Out	12/4/2021	08:00:00					CREW CALLED OUT, REQUESTED ON LOCATION 15:30
2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	12/4/2021	11:45:00					PRE CONVOY SAFETY MEETING WITH ALL HES EE
3	Crew Leave Yard	Crew Leave Yard	12/4/2021	12:00:00					CREW DEPART YARD FOR LOCATION
4	Arrive At Loc	Arrive At Loc	12/4/2021	13:40:00					ARRIVE ON LOCATION, RECIEVED NUMBERS FROM CO REP, TD 11192, TP 11162, SJ 5, CSG 5.5 20#, PREV CSG 9 5/8 36# @ 1615, HOLE 7 7/8, MUD 9.7, TVD 6025, 208 CENTALIZERS, WATER TEST, TEMP 50, CHLORIDES 0, PH 7
5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	12/4/2021	13:55:00					SAFETY MEETING WITH ALL HES EE TO ASSESS ALL HAZARDS
6	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	12/4/2021	14:10:00					PRE RIG UP SAFETY MEETING WITH ALL HES EE
7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	12/4/2021	19:30:00	0.00	0.00	7.00	0.00	PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP
8	Start Job	Start Job	12/4/2021	20:10:12	7.85	0.00	-2.00	0.00	START RECORDING DATA
9	Drop Bottom Plug	Drop Bottom Plug	12/4/2021	20:10:19	8.35	0.00	-2.00	0.00	LAUNCH BOTTOM PLUG
10	Test Lines	Test Lines	12/4/2021	20:12:32	8.36	0.00	167.00	3.50	TEST LINES TO 4450 PSI

11	Pump Spacer 1	Pump Spacer 1	12/4/2021	20:15:01	8.39	0.00	7.00	3.60	PUMP 50 BBLS TUNED PRIME SPACER 11.5 PPG, 6 BPM 580 PSI
12	Pump Cap Cement	Pump Cap Cement	12/4/2021	20:24:38	12.90	5.80	487.00	1.10	MIX AND PUMP 525 SKS 155 BBLS CAP CEMENT 13 PPG, 1.66 FT3/SK, 8.3 GAL/SK 9 BPM 1100 PSI, CALCULATED TOCC SURFACE
13	Pump Lead Cement	Pump Lead Cement	12/4/2021	20:44:45	12.95	8.90	730.00	0.10	MIX AND PUMP 415 SKS 115 BBLS LEAD CEMENT 13 PPG, 1.55 FT3/SK, 7.22 GAL/SK 9 BPM 900 PSI, CALCULATED TOLC 2440
14	Pump Tail Cement	Pump Tail Cement	12/4/2021	20:59:16	12.76	7.10	518.00	0.10	MIX AND PUMP 560 SKS 159 BBLS TAIL CEMENT 13.2 PPG, 1.59 FT3/SK, 7.76 GAL/SK 9 BPM 780 PSI, CALCULATED TOTC 6149
15	Shutdown	Shutdown	12/4/2021	21:22:31	13.62	0.00	41.00	173.40	SHUTDOWN, WASH PUMPS AND LINES TO TANK
16	Drop Top Plug	Drop Top Plug	12/4/2021	21:30:22	8.45	2.90	32.00	187.30	LAUNCH TOP PLUG
17	Pump Displacement	Pump Displacement	12/4/2021	21:32:30	8.33	0.00	-6.00	188.00	PUMP 248 BBLS FRESH WATER DISPLACEMENT, FIRST 20 W/MMCR, 10 BPM 2600 PSI, RECIEVED 50 BBLS TUNED PRIME SPACER AND 52 BBLS CEMENT TO SURFACE
18	Bump Plug	Bump Plug	12/4/2021	22:07:48	8.51	0.00	2450.00	253.90	BUMPED PLUG AT 2140 PSI TOOK TO 2540 PSI
19	Check Floats	Check Floats	12/4/2021	22:09:48	8.50	0.00	2537.00	253.90	FLOATS HELD TOOK 2 BBLS BACK
20	End Job	End Job	12/4/2021	22:11:06	8.47	0.00	0.00	0.00	
21	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	12/4/2021	22:15:00					PRE RIG DOWN SAFETY MEETING WITH ALL HES EE
22	Depart Location Safety Meeting	Depart Location Safety Meeting	12/4/2021	23:00:00					PRE DEPARTURE SAFETY MEETING WITH ALL HES EE

23	Crew Leave Location	Crew Leave Location	12/4/2021	23:30:00
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THANK YOU FOR USING HALLIBURTON, KYLE BATH AND
CREW

3.0 Attachments

3.1 Real Time iCem Job Chart

