

HALLIBURTON

iCem[®] Service

CRESTONE PEAK RESOURCES-EBUS

Ft. Lupton District, Colorado

Prosper Farms 4-65 11-12 4AH Production

Job Date: Friday, December 02, 2022

Sincerely,

Meghan Van Zyl

Legal Notice

Disclaimer:

All information in this report is provided subject to the terms and conditions which govern the services provided by Halliburton. Halliburton personnel use their best efforts in gathering information and their best judgment in interpreting it, but any interpretation, research, analysis or recommendation furnished by Halliburton are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and empirical relationships and assumptions are not infallible, and with respect to which professionals in the industry may differ. iCem 3D Displacement results are used to understand how fluids intermix during a cement job. Simulation and 3D displacement results are not intended as and should not be used as a replacement for bond logs in determining top of cement. Current 3D model calculations are known to model more volume than the input volume for standard cases due to known calculation improvements required. For rotational cases, the modeled volume will be impacted by the same calculations impacting the standard cases, as well as additional constraints imposed to make the calculation time required operationally feasible. Therefore, until further notice, 3D displacement results should not be used for replacement of a bond log, or used as an identifier of top of cement. HALLIBURTON IS UNABLE TO GUARANTEE THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, OR JOB RECOMMENDATION and any interpretation or recommendation is not for use of or reliance upon by any third party. The customer has full responsibility for any of its decisions which are based on the information provided in this report.

Table of Contents

Cementing Job Summary4
 Executive Summary..... 4
Real-Time Job Summary.....7
 Job Event Log 7
Attachments.....9
 Real Time iCem Job Chart..... 9

1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Prosper Farms 4-65 11-12 4AH** 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 #: 324725		Ship To #: 9146633		Quote #:		Sales Order #: 0908267569	
Customer: CRESTONE PEAK RESOURCES-EBUS				Customer Rep: Josh Kleisen			
Well Name: PROSPER FARMS 4-65 11-12			Well #: 4AH		API/UWI #: 05-005-07510		
Field:		City (SAP): WATKINS		County/Parish: ARAPAHOE		State: COLORADO	
Contractor: PATTERSON-UTI ENERGY				Rig/Platform Name/Num: PATTERSON 345			
Job BOM: 7523 7523							
Well Type: OIL							
Sales Person: HALAMERICA\HX41066				Srvc Supervisor: Cody Haley			
Job							

Formation Name							
Formation Depth (MD)		Top		Bottom			
Form Type		BHST					
Job depth MD		18170ft		Job Depth TVD		7760 ft	
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	3433	0	0
Casing	0	5.5	4.778	20			0	18156	0	7760
Open Hole Section			8.5				3433	18172	0	7760

Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5					Top Plug	5.5	1	CITIDEL	
Float Shoe	5.5			18156 ft		Bottom Plug	5.5	1	CITIDEL	
Float Collar	5.5			18151 ft		SSR plug set	5.5			
Insert Float	5.5					Plug Container	5.5	1	HES	
Stage Tool	5.5					Centralizers	5.5			

Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Tuned Prime Cement Spacer	TUNED PRIME CEMENT SPACER SYS	50	bbl	11.5	3.83	24.17	6	1771	

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
2	ElastiCem	SBM CEM ELASTICEM™ SYS	705	sack	13	1.66	8.3	8	5851
3	IsoBond(tm)	SBM CEM FDP-C1371 SYS	625	sack	13	1.55	7.14	8	4463
4	ElastiCem	SBM CEM ELASTICEM™ SYS	1545	sack	13.2	1.59	7.78	8	12020
5	MMCR Displacement	MMCR Displacement	20	bbl	8.33			10	840
6	Displacement Water	Displacement Water	389	bbl	8.34			10	16338
Comment 983bbbls mix water total used.									

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq No.	Activity	Date	Time	Dwnhole Density (ppg)	Cmb Pump Rate (bbl/min)	Pump B Pressure (psi)	Cmb Stg Total (bbl)	Comments
1	Call Out	12/1/2022	09:30:00					Crew called out at 09300 on 12/1/2022 for a requested on location time of 1630 on 12/1/2022
2	Safety Meeting	12/1/2022	13:15:00					Pre convoy safety meeting discussed route to location and hazards of driving.
3	Crew Leave Yard	12/1/2022	13:30:00					Crew Leaves yard in convoy at 1330 hrs
4	Arrive At Loc	12/1/2022	15:00:00					Crew arrived on location at 1500 hrs. Meet with costumer TD 18172', 8.5 OH, TP 18156, 5.5' 7637'17#, 10525' 20#, FC 18151', TVD 7760', P/C 3433' 9.625 36#, OBM WEIGHT 9.2 PPG.
5	Safety Meeting - Pre Rig-Up	12/1/2022	15:15:00					Discuss any hazards in rig up area and how were going to spot equipment.
6	Rig-Up Completed	12/1/2022	16:30:00					Rig up completed.
7	Safety Meeting - Pre Job	12/1/2022	22:00:00	8.25	0.00	-0.79	0.00	Pre job safety meeting discussed all hazards prior to job and reviewed job procedure.
8	Start Job	12/1/2022	22:09:43	8.31	0.00	-1.69	0.00	Start recording data.
9	Drop Bottom Plug	12/1/2022	22:10:00	7.99	3.09	17.14	0.45	Bottom plug verified by Josh Kleisen.
10	Test Lines	12/1/2022	22:11:18	8.30	0.00	263.66	3.07	Pressure tested HES lines to 4567 psi.
11	Pump Spacer 1	12/1/2022	22:18:18	8.21	0.00	26.46	0.00	Pumped 50 bbls of 11.5 ppg spacer/3.83 ft3/24.17 gal/sack.

12	Pump Cap Cement	12/1/2022	22:29:49	12.97	5.93	547.42	0.10	Pumped 208.4 bbls (705 sks) of 13 ppg cap/1.66 ft ³ /8.3 gal/sack. pre calculated TOCC = 0'
13	Pump Lead Cement	12/1/2022	22:55:36	12.87	8.93	604.68	0.15	Pumped 172.5 bbls (625 sks) of 13 ppg lead/1.55 ft ³ /7.14 gal/sack. Pre calculated TOLC = 3219.2'
14	Pump Tail Cement	12/1/2022	23:16:07	12.89	4.54	404.84	0.08	Pumped 437.5 bbls of 13.2 ppg tail/1.59 ft ³ /7.78 gal/sack. Pre calculated TOTC = 7446.96'
15	Shutdown	12/2/2022	00:06:58	14.01	0.00	220.92	451.57	Shutdown swap to wash up pit
16	Clean Lines	12/2/2022	00:10:57	14.53	0.00	-3.02	0.00	Washed pumps and lines with 14 bbls of water.
17	Drop Top Plug	12/2/2022	00:17:17	7.36	0.00	-3.14	14.02	Top plug verified by Josh Kleisen.
18	Pump Displacement	12/2/2022	00:17:20	7.36	0.00	-3.43	0.00	Pumped 409.4 bbls of fresh water displacement with 10 gallons of MICRO MATRIC RETARDER in first 20 bbls and 5 gallons of bellacide 300w threw out the rest of displacement. 52 bbls of cement to surface.
19	Bump Plug	12/2/2022	01:09:13	8.42	0.00	3339.29	403.69	FCP= 2700 AT 4 BPM. Bumped up to 3300 psi.
20	Check Floats	12/2/2022	01:11:00	8.40	0.00	3432.67	403.69	4.5 bbls back to pump truck floats holding.
21	End Job	12/2/2022	01:12:57	8.16	0.00	2.15	403.70	Stop recording data. Flushed rig stack with 20 bbls of fresh water and 100 lbs of sugar added.
22	Safety Meeting - Pre Rig-Down	12/2/2022	01:20:00					Discuss where we are going to tie in at to wash up rig stack. and final blow down process.
23	Rig-Down Completed	12/2/2022	02:20:00					Rig down completed.
24	Crew Leave Location	12/2/2022	02:30:00					Crew departs location in convoy. Thank you for choosing Halliburton.

3.0 Attachments

3.1 Real Time iCem Job Chart

