

HALLIBURTON

iCem[®] Service

CRESTONE PEAK RESOURCES-EBUS

Ft. Lupton District, COLORADO

Prosper Farms 4-65 11-12 2AH Production

Job Date: Sunday, December 11, 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..... 10
 Real Time iCem Job Chart..... 10

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 2AH** 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 21 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 #: 9147612	Quote #:	Sales Order #: 0908288663
Customer: CRESTONE PEAK RESOURCES-EBUS		Customer Rep: Josh Kliesen	
Well Name: PROSPER FARMS 4-65 11-12		Well #: 2AH	API/UWI #: 05-005-07509
Field:	City (SAP): AURORA	County/Parish: ARAPAHOE	State: COLORADO
Legal Description:			
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 345	
Job BOM: 7523 7523			
Well Type: OIL			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Kyle Bath	
Job			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	18163ft	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	3433	0	0
Casing	0	5.5	4.778	20			0	18160	0	7760
Open Hole Section			8.5				3408	18175	0	7760

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	5.5			18163		Top Plug	5.5	1	CITADEL
Float Shoe	5.5					Bottom Plug	5.5	1	CITADEL
Float Collar	5.5					SSR plug set	5.5		HES
Insert Float	5.5					Plug Container	5.5	1	HES
Stage Tool	5.5					Centralizers	5.5	310	

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	700	sack	13	1.67	8.38	8	5866
3	IsoBond(tm)	SBM CEM FDP-C1371 SYS	625	sack	13	1.56	7.2	8	4500
4	ElastiCem	SBM CEM ELASTICEM™ SYS	1535	sack	13.2	1.6	7.84	8	12034
5	MMCR Displacement	MMCR Displacement	407	bbl	8.33			9.31	17094
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 A Pressure (psi)	Cmb Stg Total (bbl)	Comments
1	Call Out	12/10/2022	16:30:00					CREW CALLED OUT, REQUESTED ON LOCATION @ 02:30
2	Depart Yard Safety Meeting	12/10/2022	21:45:00					PRE JOURNEY SAFETY MEETING WITH ALL HES PERSONNEL, DISCUSS ROUTE AND HAZARDS ASSOCIATED WITH THE JOURNEY
3	Crew Leave Yard	12/10/2022	22:00:00					ALL HES EMPLOYEES IN ROUTE TO LOCATION
4	Arrive at Location from Service Center	12/10/2022	23:30:00					CREW ON LOCATION, RECIEVED NUMBERS FROM CO REP, TD 18175, TP 18160, SJ 5, CSG 5.5 20# 14101, 5.5 17# 4062, PREV CSG 9 5/8 36# @ 3408, HOLE 8.5, MUD 9.2, TVD 7760, 310 CENTRALIZERS, WATER TEST, TEMP 70, PH 7, CHLORIDES 0
5	Assessment Of Location Safety Meeting	12/10/2022	23:45:00					ASSESSMENT OF LOCATION SAFETY MEETING WITH ALL HES EE'S TO DISCUSS SITE SPECIFIC HAZARDS
6	Safety Meeting - Pre Rig-Up	12/11/2022	00:00:00					PRE RIG UP SAFETY MEETING WITH ALL HES EE'S TO DISCUSS HAZARDS BEFORE RIGGING UP
7	Safety Meeting - Pre Job	12/11/2022	04:00:00	-0.05	0.00	-6.76	0.80	PRE JOB SAFETY MEETING WITH ALL HES EE'S, RIG HANDS AND CO REP TO DISCUSS HAZARDS DURING JOB
8	Start Job	12/11/2022	04:39:32	7.19	0.00	-2.91	0.00	START RECORDING DATA
9	Drop Bottom Plug	12/11/2022	04:39:48	8.61	0.00	-0.74	0.00	LAUNCH BOTTOM PLUG
10	Test Lines	12/11/2022	04:41:55	8.67	0.00	129.37	0.00	TEST LINES TO 6450 PSI

11	Pump Spacer 1	12/11/2022	04:48:31	7.71	0.00	32.38	0.00	PUMP 50 BBLS TUNED PRIME SPACER 11.5 PPG, 6 BPM 450 PSI
12	Pump Cap Cement	12/11/2022	04:57:42	11.57	5.95	174.94	0.10	MIX AND PUMP 700 SKS 208.2 BBLS CAP CEMENT 13 PPG, 1.67 FT3/SK, 8.38 GAL/SK, 9 BPM 500 PSI, CALCULATED TOCC SURFACE
13	Pump Lead Cement	12/11/2022	05:23:19	12.89	8.99	479.17	0.15	MIX AND PUMP 625 SKS 173.6 BBLS LEAD CEMENT 13 PPG, 1.56 FT3/SK, 7.2 GAL/SK, 9 BPM 600 PSI, CALCULATED TOLC 3221
14	Pump Tail Cement	12/11/2022	05:42:54	13.10	9.05	544.60	0.08	MIX AND PUMP 1535 SKS 437.4 BBLS TAIL CEMENT 13.2 PPG, 1.6 FT3/SK, 7.84 GAL/SK, 9 BPM 500 PSI, CALCULATED TOTC 7443
15	Shutdown	12/11/2022	06:33:37	-1.09	0.00	25.06	437.38	SHUTDOWN, WASH PUMPS AND LINES TO TANK
16	Drop Top Plug	12/11/2022	06:42:35	7.42	0.00	32.40	0.00	LAUNCH TOP PLUG
17	Pump Displacement	12/11/2022	06:43:05	7.41	0.00	28.65	0.00	PUMP 407 BBLS FRESH WATER DISPLACEMENT, FIRST 20 BBLS W/MMCR, 10 BPM 3300 PSI, RECEIVED 50 BBLS TUNED PRIME SPACER AND 21 BBLS CEMENT TO SURFACE
18	Bump Plug	12/11/2022	07:28:47	8.54	3.93	3254.46	401.92	BUMP PLUG AT 2800 PSI TOOK TO 3500 PSI
19	Check Floats	12/11/2022	07:30:33	8.53	0.00	3399.88	401.93	FLOATS HELD TOOK 5.5 BBLS BACK
20	End Job	12/11/2022	07:32:23	8.33	0.00	11.33	401.93	STOP RECORDING DATA, USED 981 BBLS FRESH WATER FOR JOB
21	Safety Meeting - Pre Rig-Down	12/11/2022	07:35:00					PRE RIG DOWN SAFETY MEETING WITH ALL HES EE'S TO DISCUSS HAZARDS ASSOCIATED WITH RIGGING DOWN
22	Depart Location Safety Meeting	12/11/2022	08:30:00					PRE DEPARTURE SAFETY MEETING WITH ALL HES EE'S TO DISCUSS ROUTES AND HAZARDS ASSOCIATED WITH THE JOURNEY

23 Crew Leave Location 12/11/2022 09:00:00

THANK YOU FOR USING HALLIBURTON, KYLE BATH AND
CREW.

3.0 Attachments

3.1 Real Time iCem Job Chart

