

# HALLIBURTON

iCem<sup>®</sup> 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

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### Disclaimer:

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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 **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**

<b>Sold To #:</b> 324725		<b>Ship To #:</b> 9146633		<b>Quote #:</b>		<b>Sales Order #:</b> 0908267569				
<b>Customer:</b> CRESTONE PEAK RESOURCES-EBUS					<b>Customer Rep:</b> Josh Kleisen					
<b>Well Name:</b> PROSPER FARMS 4-65 11-12			<b>Well #:</b> 4AH			<b>API/UWI #:</b> 05-005-07510				
<b>Field:</b>		<b>City (SAP):</b> WATKINS		<b>County/Parish:</b> ARAPAHOE			<b>State:</b> COLORADO			
<b>Contractor:</b> PATTERSON-UTI ENERGY					<b>Rig/Platform Name/Num:</b> PATTERSON 345					
<b>Job BOM:</b> 7523 7523										
<b>Well Type:</b> OIL										
<b>Sales Person:</b> HALAMERICA\HX41066					<b>Srv Supervisor:</b> Cody Haley					
<b>Job</b>										
<b>Formation Name</b>										
<b>Formation Depth (MD)</b>		<b>Top</b>				<b>Bottom</b>				
<b>Form Type</b>				<b>BHST</b>						
<b>Job depth MD</b>		18170ft		<b>Job Depth TVD</b>		7760 ft				
<b>Water Depth</b>				<b>Wk Ht Above Floor</b>						
<b>Perforation Depth (MD)</b>		<b>From</b>				<b>To</b>				
<b>Well Data</b>										
<b>Description</b>	<b>New / Used</b>	<b>Size in</b>	<b>ID in</b>	<b>Weight lbm/ft</b>	<b>Thread</b>	<b>Grade</b>	<b>Top MD ft</b>	<b>Bottom MD ft</b>	<b>Top TVD ft</b>	<b>Bottom TVD ft</b>
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
<b>Tools and Accessories</b>										
<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	<b>Depth ft</b>		<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	
<b>Guide Shoe</b>	5.5					<b>Top Plug</b>	5.5	1	CITIDEL	
<b>Float Shoe</b>	5.5			18156 ft		<b>Bottom Plug</b>	5.5	1	CITIDEL	
<b>Float Collar</b>	5.5			18151 ft		<b>SSR plug set</b>	5.5			
<b>Insert Float</b>	5.5					<b>Plug Container</b>	5.5	1	HES	
<b>Stage Tool</b>	5.5					<b>Centralizers</b>	5.5			
<b>Fluid Data</b>										
<b>Stage/Plug #: 1</b>										
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>		<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>
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 <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	ElastiCem	SBM CEM ELASTICEM™ SYS	705	sack	13	1.66	8.3	8	5851
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	IsoBond(tm)	SBM CEM FDP-C1371 SYS	625	sack	13	1.55	7.14	8	4463
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	ElastiCem	SBM CEM ELASTICEM™ SYS	1545	sack	13.2	1.59	7.78	8	12020
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
5	MMCR Displacement	MMCR Displacement	20	bbl	8.33			10	840
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
6	Displacement Water	Displacement Water	389	bbl	8.34			10	16338
<b>Comment</b> 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 ft3/8.3 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 ft3/7.14 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 ft3/7.78 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

