

# HALLIBURTON

iCem<sup>®</sup> Service

## **CRESTONE PEAK RESOURCES-EBUS**

**Prosper Farms 4-65 14-13 3AH Production**

Job Date: Friday, September 30, 2022

Sincerely,

**Meghan Van Zyl**

## 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 **Prosper Farms 4-65 14-13 3AH** 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 37 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> 324725		<b>Quote #:</b>		<b>Sales Order #:</b> 0908144981	
<b>Customer:</b> CRESTONE PEAK RESOURCES-EBUS				<b>Customer Rep:</b> Brent Moon			
<b>Well Name:</b> Prosper Farms 4-65			<b>Well #:</b> 14-13 3AH		<b>API/UWI #:</b> 05-005-07504		
<b>Field:</b>		<b>City (SAP):</b> Aurora		<b>County/Parish:</b> ARAPAHOE		<b>State:</b> COLORADO	
<b>Legal Description:</b>							
<b>Contractor:</b> PATTERSON-UTI ENERGY				<b>Rig/Platform Name/Num:</b> PATTERSON 572			
<b>Job BOM:</b> 7523 7523							
<b>Well Type:</b> OIL & GAS WELL							
<b>Sales Person:</b> HALAMERICA\HX41066				<b>Srvc Supervisor:</b> Bradley Hinkle			

Job			
<b>Formation Name</b>			
<b>Formation Depth (MD)</b>	<b>Top</b>	<b>Bottom</b>	
<b>Form Type</b>	BHST		
<b>Job depth MD</b>	18217ft	<b>Job Depth TVD</b>	7750ft
<b>Water Depth</b>		<b>Wk Ht Above Floor</b>	
<b>Perforation Depth (MD)</b>	<b>From</b>	<b>To</b>	

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	3386	0	3386
Casing	412	5.5	4.778	20			0	18217	0	7750
Open Hole Section			8.5				3386	18218	3386	7750

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe	5.5				Top Plug	5.5	1	Citadel	
Float Shoe	5.5	1	Citadel	18217	Bottom Plug	5.5	1	Citadel	
Float Collar	5.5	1	Citadel	18212	SSR plug set	5.5		HES	
Insert Float	5.5				Plug Container	5.5	1	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 ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Spacer	Tuned Prime Spacer	50	bbl	11.5	3.74	23.64	6	1775
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	Cap Cement	ElastiCem	575	sack	13	1.66	8.23	8.5	4732

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	815	sack	13	1.55	7.14	8.5	5819
4	Tail Cement	ElastiCem	1500	sack	13.2	1.59	7.78	8.5	11620
5	Displacement	MMCR Water	20	bbl	8.34	0	0	10	840
6	Displacement	Fresh Water	384	bbl	8.34	0	0	9	16128
<b>Comment</b> 974bbbls mix water total used.									

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Seq No.	Activity	Date	Time	Dwnhole Density (ppg)	Pump A Pressure (psi)	Cmb Pump Rate (bbl/min)	Cmb Stg Total (bbl)	Comments
1	Call Out	9/30/2022	04:00:00					Crew called for an on location of 1000. Crew was Bradley Hinkle, Cody Stalcar, Jason Hamilton and Joshua Phillips.
2	Safety Meeting - Pre Job	9/30/2022	07:22:04					Pre-job safety meeting with all personnel on location. Discuss safety protocols and job procedure.
3	Depart Shop for Location	9/30/2022	08:00:00					Pre-journey safety meeting.
4	Arrive at Location from Service Center	9/30/2022	09:00:00					Arrive on location, perform a site assessment and pre-rig up safety meeting.
5	Other	9/30/2022	09:15:00					TD: 18218 FS: 18217 - 5 feet of stick up makes total length of pipe at 18222. 5.5" 20# casing inside an 8.5" OH. TVD: 7750. 9.625" 36# casing set at 3386. Mud weight: 9.4 ppg.
6	Start Job	9/30/2022	13:41:19	8.20	-1.55	0.00	0.00	
7	Start Job	9/30/2022	13:47:29	8.19	6.83	0.00	0.00	
8	Drop Bottom Plug	9/30/2022	13:48:11	8.05	143.92	2.65	1.28	Drop bottom plug. Witnessed by customer.
9	Test Lines	9/30/2022	13:49:27	8.31	289.74	0.00	4.10	Pressure test lines to 5055 psi with a 500 psi electronic kick-out test.
10	Pump Spacer 1	9/30/2022	13:53:21	8.34	90.89	0.00	0.00	Pump 50 bbls Tuned Prime Spacer mixed at 11.5 ppg. Density verified by pressurized scales. Total mix water at 1775 gallons.
11	Check Weight	9/30/2022	14:03:22	11.66	525.31	5.96	34.47	Spacer weighed 11.6 ppg.

12	Pump Cap Cement	9/30/2022	14:04:52	11.89	483.53	5.94	0.05	Pump 170 bbls (575 sacks, 1.66 yield, 8.23 gal/sk) ElastiCem mixed at 13 ppg. Density verified by pressurized scales. Total mix water at 7432 gallons.
13	Check Weight	9/30/2022	14:06:54	13.45	637.52	5.96	12.08	Cement weighed at 13 ppg.
14	Check Weight	9/30/2022	14:16:03	13.01	459.31	5.96	71.90	Cement weighed at 12.95 ppg.
15	Pump Lead Cement	9/30/2022	14:27:40	12.77	43.39	1.30	0.01	Pump 225 bbls (815 sacks, 1.55 yield, 7.14 gal/sk) IsoBond mixed at 13 ppg. Density verified by pressurized scales. Total mix water at 5819 gallons.
16	Check Weight	9/30/2022	14:30:18	13.02	574.60	5.96	12.20	Cement weighed at 13 ppg.
17	Pump Tail Cement	9/30/2022	14:56:31	13.01	855.39	8.42	0.78	Pump 425 bbls (1500 sacks, 1.59 yield, 7.78 gal/sk) ElastiCem mixed at 13.2 ppg. Density verified by pressurized scales. Total mix water at 11620 gallons.
18	Check Weight	9/30/2022	15:15:44	13.24	688.82	8.53	163.76	Cement weighed at 13.2 ppg.
19	Check Weight	9/30/2022	15:39:12	13.53	775.25	8.49	362.83	Cement weighed at 13.15 ppg.
20	Shutdown	9/30/2022	15:48:25	14.89	165.59	0.00	434.49	Shutdown and line up for wash-up. Wash pumps and lines until clean.
21	Drop Top Plug	9/30/2022	15:57:39	7.44	-0.40	0.00	15.20	Drop top plug. Witnessed by customer.
22	Pump Displacement	9/30/2022	15:57:41	7.44	-0.66	0.00	0.00	Pump 404 bbls (first 20 with MMCR added) Fresh Water. Good returns throughout. 37 bbls cement to surface. Total water at 16968 gallons. Estimated top of lead cement at 2781 feet and top of tail cement estimated at 8193 feet.
23	Standby Other	9/30/2022	16:07:49	8.40	1816.27	10.17	101.56	Chixen on standpipe sprung a leak. Shutdown and release pressure. Chixen was broke off but was difficult to break free, and was swapped with a new chixen from pump truck.

24	Bump Plug	9/30/2022	16:50:53	8.40	3218.92	0.00	396.18	Final circulating pressure at 2670 psi with a bump plug at 3230 psi. Final pressure prior to release at 3282 psi.
25	Check Floats	9/30/2022	16:53:54	8.42	3281.55	0.00	396.18	Floats held; 4.5 bbls back.
26	End Job	9/30/2022	16:55:29	8.19	3.26	0.00	396.18	Pump 60 bbls sugar water through the stack to clean out stack and flow line.
27	Pre-Rig Down Safety Meeting	9/30/2022	17:35:00					Pre-rig down safety meeting.
28	Depart Location for Service Center or Other Site	9/30/2022	19:00:00					Pre-journey safety meeting.

3.0 Attachments

3.1 Real Time iCem Job Chart

