

# HALLIBURTON

iCem<sup>®</sup> Service

## **CIVITAS RESOURCES-EBUS**

Ft. Lupton District, COLORADO

**For: MANNY PARRAS**

Date: Wednesday, June 19, 2024

**Florida 3-65 27-26 1AH**

Post Job Report

Sincerely,

**JAVIER HERRERA**

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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 **Florida 3-65 27-26 1AH - Production**. 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.

- Quality of circulation – Prejob 100%, While pumping Cement 100%, While Pumping Displacement 100%
- Final Circulating Pressure and Pump Rate: 3,240 psi @ 4 bpm.
- Returns to Surface: 120 bbl of spacer and 41 bbl of cement.
- Any deviation from plan: N
- Abnormalities on job chart: N

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 Rockies Cement Team**

## 1.2 Job Overview

Job Details	
API #:	05-001-10558
City, County:	Aurora, Adams
SO#:	0909411341

Job Times		
	Date (mm/dd/yyyy)	Time (hh:mm)
Requested Time On Location:	06/18/2024	23:00
Called Out Time:	06/18/2024	17:00
Arrived On Location:	06/18/2024	22:30
Job Started:	06/19/2024	02:30
Job Completed:	06/19/2024	06:20
Departed Location:	06/19/2024	08:00

	Description	Units	Value
1	Surface temperature at the time of the job	degree F	60
2	Mud type (OBM, WBM, Synthetic, Water, Brine)	-	OBM
3	Mud density	ppg	9.3
4	Casing set depth (shoe)	ft	18,803
5	TVD	ft	7,810
6	Float collar depth	ft	18,798
7	Length of rate hole	ft	13
8	Previous casing shoe depth	ft	3,499
9	Pre-job mud circulation time	hh:mm	01:00
10	Pre-job mud circulation rate	bpm	11.8

11	Pre-job mud circulation volume	bbls	1,003
12	Mud circulation pressure at start of cement	psi	1,150
13	Annual flow before the start of job	Y/N	N
14	Pipe movement during cement job	Y/N	N
15	Calculated displacement	bbls	417.3
16	Job displaced by	Rig/HES	HES
17	Estimated returns % during job	%	100
18	Fluid returns to surface	Spacer/Cement, bbls	120 spacer / 41 cement
19	Final circulation pressure, rate prior to plug bump	psi @ bpm	3,240 @ 4
20	Number of Centralizers	-	
21	Number of bottom plugs	-	1
22	Number of trucks used preparing/during job	-	11
23	Add hours? If Yes, put #	Y/N and hours	N
24	NPT? If Yes, put #	Y/N and hours	N

1.3 Water Field Test

	Recorded Value	Unit	Acceptable Limit	Potential Problems if Values Exceed the Limit
<b>pH</b>	6		6.0 - 8.0	Chemicals in water can cause severe retardation
<b>Temperature</b>	62	F	60 - 80 F	Can pre-mature setting of cement
<b>Chlorides</b>	290	ppm	3000 ppm	Can shorten thickening time

1.4 Actual Pump Schedule

**Stage 1**

	Density (ppg)	Volume (bbls)	Yield (ft3/sk)	Water Requirement (gal/sk)	Bulk Sacks (sks)	Total Water (gals)
<b>Spacer Fluid</b>	11.5	120	2.57	16.2	262	4,244
<b>Cap Cement</b>	13	208.6	1.65	8.07	710	5,730
<b>Lead Cement</b>	13	175.9	1.58	7.42	625	4,638
<b>Tail Cement</b>	13.2	454.4	1.57	7.54	1,625	12,253
<b>Top Plug</b>	N/A	N/A	N/A	N/A	N/A	N/A
<b>Displacement Fluid</b>	8.4	417.3	N/A	N/A	N/A	17,514

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Seq. No.	Activity	Graph Label	Date	Time	Comments
1	Call Out	Call Out	6/18/2024	17:00:00	CIVITAS RESOURCES FLORIDA 3-65 27-26 1AH 5 1/2" PRODUCTION CASING JOB - On location 06/18/24 @ 23:00 PM
2	Safety Meeting - Service Center or other Site	Safety Meeting - Service Center or other Site	6/18/2024	18:45:00	Review Journey Management and Route with Crew Members
3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	6/18/2024	19:00:00	Depart From Yard
4	Arrive At Loc	Arrive At Loc	6/18/2024	22:30:00	Talk To Company Man, TD = 18,816', TP=18,803', ST = 5', OH = 8 1/2", CSG =5 1/2" 20#, Previous Casing 9 5/8" 36# Set @ 3,499', WF = OBM @ 9.3#, Test Water = pH – 6, Chlorides - < 290 ppm, 62 F
5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	6/18/2024	22:40:00	Spot Equipment
6	Safety Meeting - Pre-Rig-Up	Safety Meeting - Pre-Rig-Up	6/18/2024	22:50:00	Review JSA With Crew Members
7	Rig-Up Equipment	Rig-Up Equipment	6/18/2024	23:00:00	Rig Up Iron and Hoses Needed for Job
8	Rig-Up Completed	Rig-Up Completed	6/19/2024	00:00:00	Rigged Up All Iron and Hoses Needed for CMT Job With No Issues or Incidents.
9	Rig-Up Equipment	Rig-Up Plug Container	6/19/2024	00:50:00	Rigged Up Plug Container and Rig Floor to Circulate with Rig Pumps, Rig circulated from 01:00 To 02:25 At A Rate Of 11.8 BPM With 1,150 psi.

10	Safety Meeting - Pre Job	Safety Meeting - Pre Job	6/19/2024	02:15:00	Review Job Procedure and JSA With Rig Hands, Co. Man, And HES Members
11	Start Job	Start Job	6/19/2024	02:33:05	Start Job
12	Test Lines	Test Lines	6/19/2024	02:33:15	Performed A Pressure Kick Out Test To 500 psi On Both Pumps Then Tested Lines To 6,500 psi, Good Test
13	Drop Bottom Plug	Drop Bottom Plug	6/19/2024	02:39:51	Dropped Bottom Plug
14	Pump Spacer 1	Pump Spacer 1	6/19/2024	02:42:09	Pumped 120 bbl Of Tuned Prime Spacer @ 11.5 PPG @ 6 BPM With 255 psi, Good Returns.
15	Check Weight	Check Weight	6/19/2024	02:46:39	Performed A Weight Check with A Pressurized Mud Scale 11.5 ppg.
16	Pump Cap Cement	Pump Cap Cement	6/19/2024	03:12:00	Pumped 208.6 bbl Cap 710 Sacks @ 13 PPG Yield 1.65 And A Water Requirement Of 8.07 Gal/Sacks. 8 BPM With 506 psi, HEIGHT OF CAP CMT 4,353' TOP OF CAP CMT 0', Good Returns.
17	Check Weight	Check Weight	6/19/2024	03:20:20	Performed A Weight Check with A Pressurized Mud Scale 13 ppg.
18	Pump Lead Cement	Pump Lead Cement	6/19/2024	03:47:54	Pumped 175.9 bbl Lead 625 Sacks @ 13 PPG Yield 1.58 And A Water Requirement Of 7.42 Gal/Sack. 8 BPM With 650 psi, HOLC 4,292' TOLC 3,376', Good Returns.
19	Check Weight	Check Weight	6/19/2024	03:51:37	Performed A Weight Check with A Pressurized Mud Scale 13 ppg.
20	Pump Tail Cement	Pump Tail Cement	6/19/2024	04:11:44	Pumped 454.4 bbl Tail 1,625 Sacks @ 13.2 PPG Yield 1.57 And A Water Requirement Of 7.42 Gal/Sack. 8 BPM With 850 psi, HOTC 11,135' TOTC 7,668', Good Returns.
21	Check Weight	Check Weight	6/19/2024	04:16:28	Performed A Weight Check with A Pressurized Mud Scale 13.2 ppg.
22	Check Weight	Check Weight	6/19/2024	04:50:04	Performed A Weight Check with A Pressurized Mud Scale 13.2 ppg.
23	Shutdown	Shutdown	6/19/2024	05:18:00	Shutdown After Cement
24	Drop Top Plug	Drop Top Plug	6/19/2024	05:28:19	Dropped Top Plug
25	Pump Displacement	Pump Displacement	6/19/2024	05:28:48	Pump Displacement 417.3 Total bbls First 20 MMCR Followed By 397.3 bbl of Treated Biocide Water

26	Pump Displacement	100 bbls Pumped Into Displacement	6/19/2024	05:39:38	100 BBLs Pumped into Displacement,10 BPM With 2,250 psi, Good Returns
27	Pump Displacement	200 bbls Pumped Into Displacement	6/19/2024	05:50:44	200 BBLs Pumped into Displacement,8.5 BPM With 3,200 psi, Good Returns
28	Spacer Returns to Surface	Spacer Returns to Surface	6/19/2024	05:57:01	At 255 BBLs Into Displacement We Saw Spacer To Surface, We Got A Total Of 120 BBLs Of Spacer To Surface And 41 BBLs Of Cap Cement To Surface.
29	Pump Displacement	300 bbls Pumped Into Displacement	6/19/2024	06:04:23	300 BBLs Pumped into Displacement,8 BPM With 3,330 psi, Good Returns
30	Pump Displacement	400 bbls Pumped Into Displacement	6/19/2024	06:16:35	400 BBLs Pumped into Displacement,8 BPM With 3,240 psi, Good Returns
31	Bump Plug	Bump Plug	6/19/2024	06:18:08	Bumped Plug with Calculated Displacement and Went 600 psi Over final Circulating psi, Pressure Climbed From 3,280 to 3,900 psi.
32	Bleed Casing	Bleed Casing	6/19/2024	06:21:31	Bled Pressure Back to Zero and Got 4 bbl Back
33	Check Floats	Check Floats	6/19/2024	06:22:35	Floats Held Good.
34	End Job	End Job	6/19/2024	06:23:43	End Job
35	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	6/19/2024	06:30:00	Review JSA With HES Crew Members
36	Rig-Down Equipment	Rig-Down Equipment	6/19/2024	06:40:00	Rig Down Iron, Plug Container, And Hoses Used on Job
37	Rig-Down Completed	Rig-Down Complete	6/19/2024	07:40:00	All Equipment Rigged Down with No Issues Or Incidents
38	Safety Meeting - Departing Location	Safety Meeting - Departing Location	6/19/2024	07:50:00	Review Journey Management and Route With Crew Members
39	Depart Location	Depart Location	6/19/2024	08:00:00	Depart location

3.0 Attachments

3.1 Real time job chart

