

HALLIBURTON

iCem[®] Service

CIVITAS RESOURCES-EBUS

Ft. Lupton District, Colorado

For: Danny Herrera

Date: Friday, February 7, 2025

Civitas 5.5" Production Maverick2W-20-02

Weld, Severence

Sincerely,

Thomas Haas and Crew

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **CIVITAS 5.5" Maverick 2W-20-02**. 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 – 100% THROUGHOUT JOB**
- **Final Circulating Pressure and Pump Rate 2575 4bbl/min**
- **Returns to Surface 56 BBL OF CEMENT**
- **Any deviation from plan- PUMPED AS PLANNED**
- **Abnormalities on job chart- NONE**

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

1.1 Job Overview

API #:	05-123-52585
City, County:	Severance, Weld
SO#:	909864874

Job Times		
	Date (mm/dd/yyyy)	Time (hh:mm)
Requested Time On Location:	02/06/2025	22:00
Called Out Time:	02/06/2025	16:00
Arrived On Location:	02/06/2025	21:30
Job Started:	02/07/2025	02:06
Job Completed:	02/07/2025	05:30
Departed Location:	02/07/2025	07:00

	Description	Units	Value
1	Surface temperature at the time of the job	Degrees	29
2	Mud type (OBM, WBM, Synthetic, Water, Brine)	-	OBM
3	Mud density	ppg	9.4
4	Casing set depth (shoe)	ft	21157
5	TVD	ft	7058
6	Float collar depth	ft	21152
7	Length of rate hole	ft	10
8	Previous casing shoe depth	ft	1626
9	Pre-job mud circulation time	hh:mm	01:15
10	Pre-job mud circulation rate	bpm	12
11	Pre-job mud circulation volume	bbls	1050

12	Mud circulation pressure at start of cement	psi	1500
13	Annual flow before the start of job	Y/N	n
14	Pipe movement during cement job	Y/N	Y
15	Calculated displacement	bbls	469.2
16	Job displaced by	Rig/HES	HES
17	Estimated returns % during job	%	100
18	Fluid returns to surface	Spacer/Cement, bbls	56 BBL cement
19	Final circulation pressure, rate prior to plug bump	psi @ bpm	2575 4 BBL/MIN
20	Number of Centralizers	-	350
21	Number of bottom plugs	-	1
22	Number of trucks used preparing/during job	-	4
23	Add hours? If Yes, put #	Y/N and hours	n
24	NPT? If Yes, put #	Y/N and hours	n

	Recorded Value	Unit	Acceptable Limit	Potential Problems if Values Exceed the Limit
pH	7.0		6.0 - 8.0	Chemicals in water can cause severe retardation
Temperature	65	F	60 - 80 F	Can can pre-mature setting of cement
Chlorides	300	ppm	3000 ppm	Can shorten thickening time

Stage 1

	Density (ppg)	Volume (bbls)	Yield (ft3/sk)	Water Requirement (gal/sk)	Bulk Sacks (sks)	Total Water (gals)
Spacer Fluid	11.5	80	2.57	16.2	174	2831
Cap Cement	13	124.9	1.65	8.03	425	3414
Lead Cement	13	322.2	1.58	7.38	1145	8450
Tail Cement	13.2	483.4	1.56	7.51	1740	13067
Top Plug	1					
Displacement Fluid	H2O	469.2				19706.4

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq No.	Activity	Graph Label	Date	Time	Source	Dwnhole Density (ppg)	Cmb Pump Rate (bbl/mi n)	Pump A Pressure (psi)	Cmb Stg Total (bbl)	Comments
Event	1	Call Out	Call Out	2/6/2025	16:00:00	USER					CREW CALLED OUT FOR JOB.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	2/6/2025	19:15:00	USER					PRE-CONVOY SAFETY MEETING AT HES LOCATON TO DISCUSS ROUTE AND DRIVING HAZARDS.
Event	3	Crew Leave Yard	Crew Leave Yard	2/6/2025	19:30:00	USER					CREW DEPARTS HALLIBURTON FACILITIES FOR LOCATION.
Event	4	Arrive At Loc	Arrive At Loc	2/6/2025	20:30:00	USER					CREW ARRIVES ON LOCATION. MET WITH CO MAN TO DISCUSS JOB. TD-21167' 8.5" OH, TP-21157' 5.5" 20# P-110, FC-21152', PC-1626' 9/58 36# J55, TVD-7058', 9.4 PPG OBM. 1 BTM PLUGS 1 TOP. WATER

											65* 7.0 PH, 0 CHLORIDES.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	2/6/2025	21:00:00	USER					PRE-RIG UP SAFTEY MEETING WITH ALL HES EMPLOYEES TO DISCUSS HAZARDS OF LOCATION AND DISCUSS RIG UP SEQUENCE.
Event	6	Rig-up Lines	Rig-up Lines	2/6/2025	21:15:00	USER					RIG UP PUMPS AND LINES.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	2/7/2025	01:30:00	USER	0.02	0.00	-0.44	0.00	SAFTEY NMEETING WITH HES, COMPANY MAN, AND RIG HANDS.
Event	8	Start Job	Start Job	2/7/2025	02:07:32	NONE	8.53	0.00	1.04	0.00	START JOB DATA RECORDING.
Event	9	Other	Fill Lines	2/7/2025	02:07:40	USER	8.53	0.00	0.99	0.00	FILL LINES WITH 3 BBL OF FRESH WATER.
Event	10	Test Lines	Test Lines	2/7/2025	02:08:51	NONE	8.32	0.00	183.40	1.92	PRESSURE TESTED LINES TO 5900PSI, 500 EKO TEST AT 800PSI, 5TH GEAR STALL AT 2800PSI.

Event	11	Drop Bottom Plug	Drop Bottom Plug	2/7/2025	02:11:42	NONE	8.23	0.00	4.04	1.95	PLUG WAS LOADED DIRECTLY INTO CASING, VERIFIED BY COMPANY MAN.
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Event	12	Pump Spacer 1	Pump Spacer 1	2/7/2025	02:11:46	NONE	8.23	0.00	3.45	0.00	PUMPED 80 BBLS OF 11.5 PPG TUNED SPACER. 2.57 CUFT/SK AND 16.2GAL/SK VERIFIED WEIGHT WITH PRSSURIZED MUD SCALES.
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Event	13	Pump Cap Cement	Pump Cap Cement	2/7/2025	02:23:20	USER	11.54	8.15	261.83	1.02	PUMPED 124.9 BBLS OF 13 PPG ELASTI CEM 425 SKS 1.645CUFT/SK, 8.03 GAL/SK. VERIFIED BY PRESSURISED MUD SCALES. TOC ESTIMATED AT SURFACE.
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Event	14	Pump Lead Cement	Pump Lead Cement	2/7/2025	02:38:42	NONE	13.05	9.51	608.49	0.08	PUMPED 322.2 BBLS OF 13 PPG ISOBOND 1145 SKS 1.58 CUFT/SK, 7.38 GAL/SK. VERIFIED BY PRESSURISED MUD SCALES. TOC ESTIMATED AT 1444'.
Event	15	Pump Tail Cement	Pump Tail Cement	2/7/2025	03:17:11	NONE	13.03	9.51	822.65	0.08	PUMPED 483.4 BBLS OF 13.2 PPG ELASTICEM 1740 SKS 1.56 CUFT/SK, 7.51 GAL/SK. VERIFIED BY PRESSURISED MUD SCALES. TOC ESTIMATED AT 9309'.
Event	16	Shutdown	Shutdown	2/7/2025	04:17:41	NONE	13.60	0.00	256.56	560.52	SHUTDOWN TO CLEAN PUMPS AND LINES.
Event	17	Clean Lines	Clean Lines	2/7/2025	04:18:07	NONE	13.80	0.00	-1.54	0.00	CLEAN PUMPS AND LINES.
Event	18	Drop Top Plug	Drop Top Plug	2/7/2025	04:32:09	USER	10.36	0.00	-23.53	15.28	PLUG WAS LOADED DIRECTLY INTO PLUG CONTAINER, VERIFIED BY COMPANY MAN.

Event	19	Pump Displacement	Pump Displacement	2/7/2025	04:32:10	NONE	10.36	0.00	-23.49	0.00	BEGIN PUMPING DISCPLACEMENT, 464.2 BBLS FRESH WATER, FIRST 20 BBLS OF DISCPLACEMENT WITH 10-GAL MMCR, 10 GAL OF BIOCID E THROUGHOUT THE REST OF DISPLACEMENT.
Event	20	Bump Plug	Bump Plug	2/7/2025	05:28:21	NONE	8.31	0.00	3015.80	484.51	PLUG BUMPED AT CALCULATED DISPLACEMENT. FINAL CIRCULATING PRESSURE OF 2575 PSI AT 4BBL/MIN, HOLD PRESSURE AT 3075 PSI. 56 BBL OF CEMENT TO SURFACE.
Event	21	Check Floats	Check Floats	2/7/2025	05:30:21	USER	8.20	0.00	1455.63	484.51	CHECK FLOATS, REALEASED PRESSURE BACK TO TRUCK, 5 BBL BACK.
Event	22	End Job	End Job	2/7/2025	05:31:21	NONE	8.05	0.00	-2.07	484.51	END JOB DATA RECORDING.
Event	23	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	2/7/2025	05:35:00	USER	8.08	5.45	7.34	484.93	PRE-RIG DOWN SAFTEY MEETING TO

											DISCUSS HAZRDS OF LOCATION AND SEQUENCE OF RIG DOWN.
Event	24	Rig Down Lines	Rig Down Lines	2/7/2025	05:40:00	USER	8.09	0.00	-12.58	503.96	RIG DOWN PUMPS AND LINES.
Event	25	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	2/7/2025	06:45:00	USER					PRE-CONVOY SAFETY MEETING ON LOCATON TO DISCUSS ROUTE AND DRIVING HAZARDS.
Event	26	Crew Leave Location	Crew Leave Location	2/7/2025	07:00:00	USER					CREW DEPARTS LOCATION, THANK YOU FOR CHOOSING HES. THOMAS HAAS AND CREW.

3.0 Attachments

3.1 Job Chart.png

