HALLIBURTON

iCem® Service

CIVITAS RESOURCES-EBUS

Ft. Lupton District, Colorado

For: Frank Kinney

Date: Sunday, February 2, 2025

Civitas5.5" Production Maverick 2W-20-01

Weld,

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-20-01.** 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 2425 4bbl/min**
- **Returns to Surface 51 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 #:	05-123-52582
City, County:	Severance, Weld
SO#:	909843746

Job Times		
	Date (mm/dd/yyyy)	**Time (hh:mm)**
Requested Time On Location:	02/02/2025	9:30
Called Out Time:	02/02/2025	03:30
Arrived On Location:	02/02/2025	08:30
Job Started:	02/02/2025	13:13
Job Completed:	02/02/2025	16:30
Departed Location:	02/02/2025	17:30

	Description	**Units**	**Value**
1	Surface temperature at the time of the job	Degrees	45
2	Mud type (OBM, WBM, Synthetic, Water, Brine)	-	OBM
3	Mud density	ppg	9.4
4	Casing set depth (shoe)	ft	20934
5	TVD	ft	7231
6	Float collar depth	ft	20929
7	Length of rate hole	ft	10
8	Previous casing shoe depth	ft	1624
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	464.2
16	Job displaced by	Rig/HES	HES
17	Estimated returns % during job	%	100
18	Fluid returns to surface	Spacer/Cement, bbls	51 BBl cement
19	Final circulation pressure, rate prior to plug bump	psi @ bpm	2425 4 BBL/MIN
20	Number of Centralizers	-	360
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	180	2.57	16.2	174	2831
Cap Cement	13	163.6	1.64	8.03	560	4497
Lead Cement	13	285.2	1.57	7.39	1020	7538
Tail Cement	13.2	468.2	1.56	7.51	1685	12654
Top Plug	1					
Displacement Fluid	H2O	464.2				19496

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Pump A Pressure *(psi)*	Dwnhole Density *(ppg)*	Cmb Pump Rate *(bbl/min)*	Cmb Stg Total *(bbl)*	Comments
Event	1	Call Out	Call Out	2/2/2025	03:00:00	USER					CREW CALLED OUT FOR FOR JOB.
Event	2	Crew Leave Yard	Crew Leave Yard	2/2/2025	07:30:00	USER					CREW DEPARTS HALLIBURTON FACILITIES FOR LOCATION.
Event	3	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	2/2/2025	07:55:00	USER					PRE-CONVOY SAFETY MEETING AT HES LOCATON TO DISCUSS ROUTE AND DRIVING HAZARDS.
Event	4	Arrive At Loc	Arrive At Loc	2/2/2025	08:30:00	USER					CREW ARRIVES ON LOCATION. MET WITH CO MAN TO DISCUSS JOB. TD-20944' 8.5" OH, TP-20934' 5.5" 20# P-110, FC-20929', PC-1624' 9/58 36# J55, TVD-7231', 9.3 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	2/2/2025	09:10:00	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	2/2/2025	09:15:00	USER					RIG UP PUMPS AND LINES.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	2/2/2025	13:00:00	USER	-0.80	8.45	0.00	8.28	SAFTEY NMEETING WITH HES, COMPANY MAN, AND RIG HANDS.
Event	8	Start Job	Start Job	2/2/2025	13:13:22	NONE	-1.01	0.87	0.00	0.00	START JOB DATA RECORDING.
Event	9	Prime Pumps	Prime Pumps	2/2/2025	13:14:22	NONE	310.96	8.34	0.00	1.47	FILL LINES WITH 3 BBL OF FRESH WATER.
Event	10	Test Lines	Test Lines	2/2/2025	13:14:24	NONE	317.73	8.34	0.00	1.47	PRESSURE TESTED LINES TO 5700PSI, 500 EKO TEST AT 500PSI, 5TH GEAR STALL AT 2400PSI.

Event	11	Drop Bottom Plug	Drop Bottom Plug	2/2/2025	13:17:08	NONE	-2.62	8.29	0.00	1.49	PLUG LEFT PLUG CONTAINER, VERIFIED BY COMPANY MAN.
Event	12	Pump Spacer 1	Pump Spacer 1	2/2/2025	13:17:12	NONE	-2.23	8.32	0.00	0.00	PUMPED 120 BBLS OF 11.5 PPG TUNED SPACER. 2.57 CUFT/SK AND 16.2GAL/SK VERIFIED WEIGHT WITH PRSSURIZED MUD SCALES.
Event	13	Pump Cap Cement	Pump Cap Cement	2/2/2025	13:30:02	NONE	445.37	11.51	8.13	0.07	PUMPED 163.6 BBLS OF 13 PPG ELASTI CEM 560 SKS 1.64CUFT/SK, 8.03 GAL/SK. VERIFIED BY PRESSURISED MUD SCALES. TOC ESTIMATED AT SURFACE.

Event	14	Pump Lead Cement	Pump Lead Cement	2/2/2025	13:49:02	NONE	551.87	13.01	9.52	0.16	PUMPED 285.2 BBLS OF 13 PPG ISOBOND 1020 SKS 1.57 CUFT/SK, 7.39 GAL/SK. VERIFIED BY PRESSURISED MUD SCALES. TOC ESTIMATED AT 2468'.
Event	15	Pump Tail Cement	Pump Tail Cement	2/2/2025	14:23:18	NONE	645.55	13.03	9.51	0.08	PUMPED 464.2 BBLS 0F 13.2 PPG ELASTICEM 1685 SKS 1.56 CUFT/SK, 7.5 GAL/SK. VERIFIED BY PRESSURISED MUD SCALES. TOC ESTIMATED AT 9459'.
Event	16	Shutdown	Shutdown	2/2/2025	15:23:01	NONE	9.98	14.01	0.00	539.60	SHUTDOWN TO CLEAN PUMPS AND LINES.
Event	17	Clean Lines	Clean Lines	2/2/2025	15:23:13	NONE	15.82	13.98	0.00	539.60	CLEAN PUMPS AND LINES.

Event	18	Shutdown	Shutdown	2/2/2025	15:30:48	NONE	-6.23	8.46	0.00	552.90	SHUTDOWN TO DROP TOP PLUG.
Event	19	Drop Top Plug	Drop Top Plug	2/2/2025	15:30:53	NONE	-6.87	8.45	0.00	552.90	PLUG WAS LOADED DIRECTLY INTO PLUG CONTAINER, VERIFIED BY COMPANY MAN.
Event	20	Pump Displacement	Pump Displacement	2/2/2025	15:30:55	NONE	-7.06	8.45	0.00	0.00	BEGIN PUMPING DISCPLACEMENT, 464.2 BBLS FRESH WATER, FIRST 20 BBLS OF DISCPLACEMENT WITH 10-GAL MMCR, 10 GAL OF BIOCIDE THROUGHOUT THE REST OF DISPLACEMENT.
Event	21	Bump Plug	Bump Plug	2/2/2025	16:21:19	USER	2917.15	8.43	0.00	476.78	PLUG BUMPED AT CALCULATED DISPLACEMENT. FINAL CIRCULATING PRESSURE OF 2425 PSI AT 4BBL/MIN. 51 BBL OF CEMENT TO SURFACE.
Event	22	Other	Casing Test	2/2/2025	16:21:20	USER	2928.85	8.43	0.00	476.78	CASING TEST AT 2925 PSI.
Event	23	Check Floats	Check Floats	2/2/2025	16:22:00	USER	1905.72	8.35	0.00	476.78	CHECK FLOATS, REALEASED PRESSURE BACK TO TRUCK, 5 BBL BACK.

Event	24	End Job	End Job	2/2/2025	16:22:41	NONE	30.57	4.61	0.00	476.78	END JOB DATA RECORDING.
Event	25	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	2/2/2025	16:30:00	USER	-4.76	8.24	0.00	494.62	PRE-RIG DOWN SAFTEY MEETING TO DISCUSS HAZRDS OF LOCATION AND SEQUENCE OF RIG DOWN.
Event	26	Rig Down Lines	Rig Down Lines	2/2/2025	16:35:00	USER	-7.02	8.30	0.00	494.62	RIG DOWN PUMPS AND LINES.
Event	27	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	2/2/2025	17:15:00	USER					PRE-CONVOY SAFETY MEETING ON LOCATON TO DISCUSS ROUTE AND DRIVING HAZARDS.
Event	28	Crew Leave Location	Crew Leave Location	2/2/2025	17:30:00	USER					CREW DEPARTS LOCATION, THANK YOU FOR CHOOSING HES. THOMAS HAAS AND CREW.

3.0 Attachments

3.1 Job Chart.png