

HALLIBURTON

iCem[®] Service

CRESTONE PEAK RESOURCES

Cosslett East 1M-22H-H168

Job Date: Tuesday, May 30, 2023

Sincerely,

Rafael Giorgana

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Cosslett East 1M-22H-H168 - 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.

Approximately 53 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 Rockies Cement Team

1.2 Job Overview

Job Details	
API #:	05-123-51943
City, County:	Weld

Job Times		
	Date (mm/dd/yyyy)	Time (hh:mm)
Requested Time On Location:		
Called Out Time:	5/29/202	10:00
Arrived On Location:	5/29/2023	13:00:00
Job Started:	5/30/2023	00:43:28
Job Completed:	5/30/2023	04:41:04
Departed Location:	5/30/2023	07:00:00

	Description	Units	Value
1	Surface temperature at the time of the job	degree F	65
2	Mud type (OBM, WBM, Synthetic, Water, Brine)	-	OBM
3	Mud density	ppg	9
4	Casing set depth (shoe)	ft	19,939
5	TVD	ft	7,869
6	Float collar depth	ft	19,934
7	Length of rate hole	ft	5ft
8	Previous casing shoe depth	ft	2,780
9	Pre-job mud circulation time	hh:mm	01:30
10	Pre-job mud circulation rate	Bpm	6
11	Pre-job mud circulation volume	bbls	390

12	Mud circulation pressure at start of cement	psi	440
13	Annual flow before the start of job	Y/N	No
14	Pipe movement during cement job	Y/N	no
15	Calculated displacement	bbls	No info
16	Job displaced by	Rig/HES	HES
17	Estimated returns % during job	%	No info
18	Fluid returns to surface	Spacer/Cement, bbls	173
19	Final circulation pressure, rate prior to plug bump	psi @ bpm	No info
20	Number of Centralizers	-	No info
21	Number of bottom plugs	-	No info

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq No.	Activity	Graph Label	Date	Time	Source	Comments
1	Call Out	Call Out	5/29/2023	10:00:00	USER	CALLED OUT FOR THE CIVITAS RESOURCES-EBUS COSSLETT EAST FED #1M22H-H168 PRODUCTION CASING JOB (REQUESTED ON LOCATION @ 2030 PM PER COMPANY REP.)
2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	5/29/2023	13:00:00	USER	GOING OVER JOURNEY MANGEMENT WITH CREW
3	Arrive At Loc	Arrive At Loc	5/29/2023	14:30:00	USER	ON LOCATION FOR THE CIVITAS RESOURCES-EBUS COSSLETT EAST FED #1M22H-H168 PRODUCTION CASING JOB (REQUESTED ON LOCATION @ 2030 PM PER COMPANY REP.)
4	Other	Other	5/29/2023	14:45:00	USER	JOB DETAILS- TD-19949' SET @ 19939' TC-19939' SJ-5' 5 1/2" 20# P-110ICY PREV@ 2780' 9 5/8" 36# OH- 8 1/2" MUD- 9.2# OBM DISPLACE- 8.4 MMCR/TREATED 2 PLUG 1-BOTTOM 1-TOP (CUSTOMER SUPPLIED)
5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	5/29/2023	14:50:00	USER	GOING OVER JSA WITH CREW ON HAZZARDS
6	Rig-Up Completed	Rig-Up Completed	5/29/2023	16:30:00	USER	HES EQUIPMENT IS RIGGED UP AND JOB READY (NO INJURIES)
7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	5/30/2023	00:00:01	USER	GOING OVER JSA ON HAZZARDS OF CEMENT JOB AND JOB PROCEDURES WITH COMPANY REP. AND ALL PERSONAL ON LOCATION INVOLVED WITH RIG OR CEMENT JOB

8	Start Job	Start Job	5/30/20 23	00:43:2 8	NONE	START ON-LINE CEMENT JOB ON THE CIVITAS RESOURCES-EBUS COSSLETT EAST FED #1M22H-H168 PRODUCTION CASING
9	Break Formation	Break Formation	5/30/20 23	00:43:5 5	NONE	FILLED HES PUMPS AND LINES FOR PRESSURE TEST
10	Drop Bottom Plug	Drop Bottom Plug	5/30/20 23	00:44:2 2	NONE	DROP COMP. BOTTOM
11	Test Lines	Test Lines	5/30/20 23	00:45:4 7	NONE	TESTED HES PUMPS AND LINES TO 6000 PSI (GOOD TEST ON LINES AND EQUIPMENT)
12	Pump Spacer	Pump Spacer	5/30/20 23	00:52:3 3	USER	SPACER- 120 BBLs TOTAL OF TUNE PRIME SPACER MIXED @ 11.5# 40 BBLs GONE 5 BPM @ 200 PSI 80 BBLs GONE 5.5 BPM @ 180 PSI 120 BBLs GONE 5.5 BPM @ 130 PSI EST TOP OF SPACER @ 0' (SURFACE) EST HEIGHT OF SPACER-2506'
13	Check Weight	Check Weight	5/30/20 23	00:55:3 6	NONE	CHECK WEIGHT ON PUMP WITH SCALES (GOOD WEIGHT ON SPACER)
14	Pump Cement	Pump Cement	5/30/20 23	01:17:5 2	NONE	CAP CEMENT- 180 BBLs TOTAL OF CAP CEMENT MIXED @ 13# (615 SKS) 40 BBLs GONE 5.5 BPM @ 275 PSI 100 BBLs GONE 8.5 BPM @ 690 PSI 180 BBLs GONE 9.0 BPM @ 860 PSI EST TOP OF CAP CEMENT @ 0' (SURFACE) EST HEIGHT OF CAP CEMENT-3758'
15	Check Weight	Check Weight	5/30/20 23	01:20:2 2	NONE	CHECK WEIGHT ON PUMP WITH SCALES (GOOD WEIGHT ON CAP CEMENT)
16	Check Weight	Check Weight	5/30/20 23	01:28:1 2	NONE	CHECK WEIGHT ON PUMP WITH SCALES (GOOD WEIGHT ON CAP CEMENT)
17	Pump Lead Cement	Pump Lead Cement	5/30/20 23	01:46:2 4	NONE	LEAD CEMENT- 273 BBLs TOTAL OF LEAD CEMENT MIXED @ 13# (970 SKS)

40 BBLS GONE 9.0 BPM @ 780 PSI
 100 BBLS GONE 9 BPM @ 950 PSI
 273 BBLS GONE 9 BPM @ 1000 PSI
 EST TOP OF LEAD CEMENT @ 2677'
 EST HEIGHT OF LEAD CEMENT-6673'

18	Check Weight	Check Weight	5/30/20 23	01:48:5 6	NONE	CHECK WEIGHT ON PUMP WITH SCALES (GOOD WEIGHT ON LEAD CEMENT)
19	Pump Tail Cement	Pump Tail Cement	5/30/20 23	02:18:4 0	NONE	TAIL CEMENT- 432 BBLS TOTAL OF TAIL CEMENT MIXED @ 13.2# (1555 SKS) 40 BBLS GONE 9 BPM @ 740 PSI 200 BBLS GONE 8.5 BPM @ 745 PSI 432 BBLS GONE 5 BPM @ 290 PSI EST TOP OF TAIL CEMENT-9350' EST HEIGHT OF TAIL CEMENT- 10,588'
20	Check Weight	Check Weight	5/30/20 23	02:20:1 9	NONE	CHECK WEIGHT ON PUMP WITH SCALES (GOOD WEIGHT ON TAIL CEMENT)
21	Shutdown	Shutdown	5/30/20 23	02:53:0 2	NONE	1" VALVE ON CEMENT HEAD STARTED LEAKING
22	Resume	Resume	5/30/20 23	02:54:5 9	NONE	TIGHTEN UP VALVE GOOD TO GO BACK TO PUMPING
23	Shutdown	Shutdown	5/30/20 23	03:18:1 3	USER	SHUTDOWN TO CLEAN HES PUMPS AND LINES
24	Clean Lines	Clean Lines	5/30/20 23	03:19:1 7	NONE	CLEAN HES PUMPS AND LINES TO OPEN TOP TANK
25	Drop Top Plug	Drop Top Plug	5/30/20 23	03:22:2 8	NONE	DROP COMP. TOP PLUG
26	Pump Displacement	Pump Displacement	5/30/20 23	03:24:1 4	NONE	DISPLACEMENT- 443 BBLS TOTAL OF DISPLACEMENT CAL. TO BUMP PLUG (FIRST 20 BBLS MMCR/423 BBLS FW/ADDS)

27	Bump Plug	Bump Plug	5/30/20 23	04:36:1 7	NONE	BUMP PLUG @ 443 BBLS TOTAL OF DISPLACEMENT FROM 2570 PSI TO 3000 PSI
28	Other	Other	5/30/20 23	04:38:0 6	NONE	BLEED OFF PRESSURE TO CHECK FLOATS (FLOATS HELD GOOD BLEED BACK 4.5 BBLS)
29	End Job	End Job	5/30/20 23	04:41:0 4	NONE	ON-LINE CEMENT JOB COMPLETED ON THE CIVITAS RESOURCES-EBUS COSSLETT EAST FED #1M22H-H168 PRODUCTION CASING (120 BBLS SPACER & 53 BBLS CEMENT TO SURFACE)
30	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	5/30/20 23	04:45:0 0	USER	GOING OVER JSA WITH CREW ON HAZZARDS
31	Rig-Down Completed	Rig-Down Completed	5/30/20 23	06:00:0 0	USER	HES EQUIPMENT IS RIGGED DOWN AND READY FOR DEPARTING LOCATION (NO INJURIES)
32	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	5/30/20 23	06:30:0 0	USER	GOING OVER JOURNEY MANGEMENT WITH CREW
33	Depart Location	Depart Location	5/30/20 23	07:00:0 0	USER	CREW IS DEPARTING LOCATION FOR HES YARD

3.0 Attachments

3.1 Real Time Job Chart

