

HALLIBURTON

iCem[®] Service

CRESTONE PEAK RESOURCES

BLUE 3-65 33-32-31-36 3BH Surface

Job Date: Tuesday, August 29, 2023

Sincerely,

Rafael Giorgana

Legal Notice

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **BLUE 3-65 33-32-31-36 3BH – Surface65 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 10 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 #:	05-001-10554
City, County:	AURORA

Job Times		
	Date (mm/dd/yyyy)	Time (hh:mm)
Requested Time On Location:	08/29/2023	01:30
Called Out Time:	08/28/2023	20:30
Arrived On Location:	08/29/2023	01:30
Job Started:	08/29/2023	07:30
Job Completed:	08/29/2023	09:10
Departed Location:	08/29/2023	11:00

	Description	Units	Value
1	Surface temperature at the time of the job	degree F	66.0
2	Mud type (OBM, WBM, Synthetic, Water, Brine)	-	WBM
3	Mud density	ppg	8.9
4	Casing set depth (shoe)	ft	3236 FT
5	TVD	ft	3236 FT
6	Float collar depth	ft	3204 FT
7	Length of rate hole	ft	11 FT
8	Previous casing shoe depth	ft	0
9	Pre-job mud circulation time	hh:mm	00:45
10	Pre-job mud circulation rate	bpm	8
11	Pre-job mud circulation volume	bbls	1500 BBLS

12	Mud circulation pressure at start of cement	psi	300 PSI
13	Annual flow before the start of job	Y/N	N
14	Pipe movement during cement job	Y/N	0
15	Calculated displacement	bbls	248 BBL
16	Job displaced by	Rig/HES	HES
17	Estimated returns % during job	%	100
18	Fluid returns to surface	Spacer/Cement, bbls	CEMENT/10 BBLS
19	Final circulation pressure, rate prior to plug bump	psi @ bpm	1600 PSI
20	Number of Centralizers	-	UNKNOWN
21	Number of bottom plugs	-	0

1.3 Water Field Test

	Recorded Value	Unit	Acceptable Limit	Potential Problems if Values Exceed the Limit
pH	6.0		6.0 - 8.0	Chemicals in water can cause severe retardation
Temperature	66.0	F	60 - 80 F	Can can pre-mature setting of cement
Chlorides	300	ppm	3000 ppm	Can shorten thickening time

1.4 Actual Pump Schedule

	Density (ppg)	Volume (bbls)	Yield (ft3/sk)	Water Requirement (gal/sk)	Bulk Sacks (sks)	Total Water (gals)
Spacer Fluid	8.33	20				
Cap Cement						
Lead Cement						
Tail Cement	13.5	376.70	1.77	9.43	1195	
Top Plug						
Displacement Fluid	8.33	248				

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq No.	Activity	Date	Time	Comments
1	Call Out	8/28/2023	20:30:00	CREW CALLOUT CIVITAS ON LOCATION @ 01:30 (8/29)
2	Pre-Convoy Safety Meeting	8/28/2023	21:00:00	PRE-CONVOY SAFETY MEETING
3	Crew Leave Yard	8/28/2023	21:30:00	CREW LEAVE YARD FOR LOCATION
4	Arrive At Loc	8/29/2023	01:27:26	ARRIVE AT LOC (RIG RUNNING CASING),SIGNED IN AND SPOKE WITH THE COMPANY REP. ABOUT VOLUMES AND CALCULATIONS
5	Other	8/29/2023	01:30:00	WATER ANALYSIS: TEMPERATURE – 66.0 F CHLORIDES – 300 PPM PH – 6
6	Other	8/29/2023	01:31:00	TD-3247, TP- 3236 9 5/8 36#, ST-32.43, OH- 13 1/2, MW- 8.9 WBM #, PLUGS- TOP PLUG ONLY (CUSTOMER SUPPLIED), 500 PSI OVER, (8.33 PPG FRESH WATER DISPLACEMENT)
7	Pre-Rig Up Safety Meeting	8/29/2023	01:45:00	DISCUSSED JSA AND RIGGING UP PROCEDURES AND HAZARDS
8	Rig-Up Equipment	8/29/2023	01:50:00	MOBILIZE & RIG UP EQUIPMENT ON LOCATION

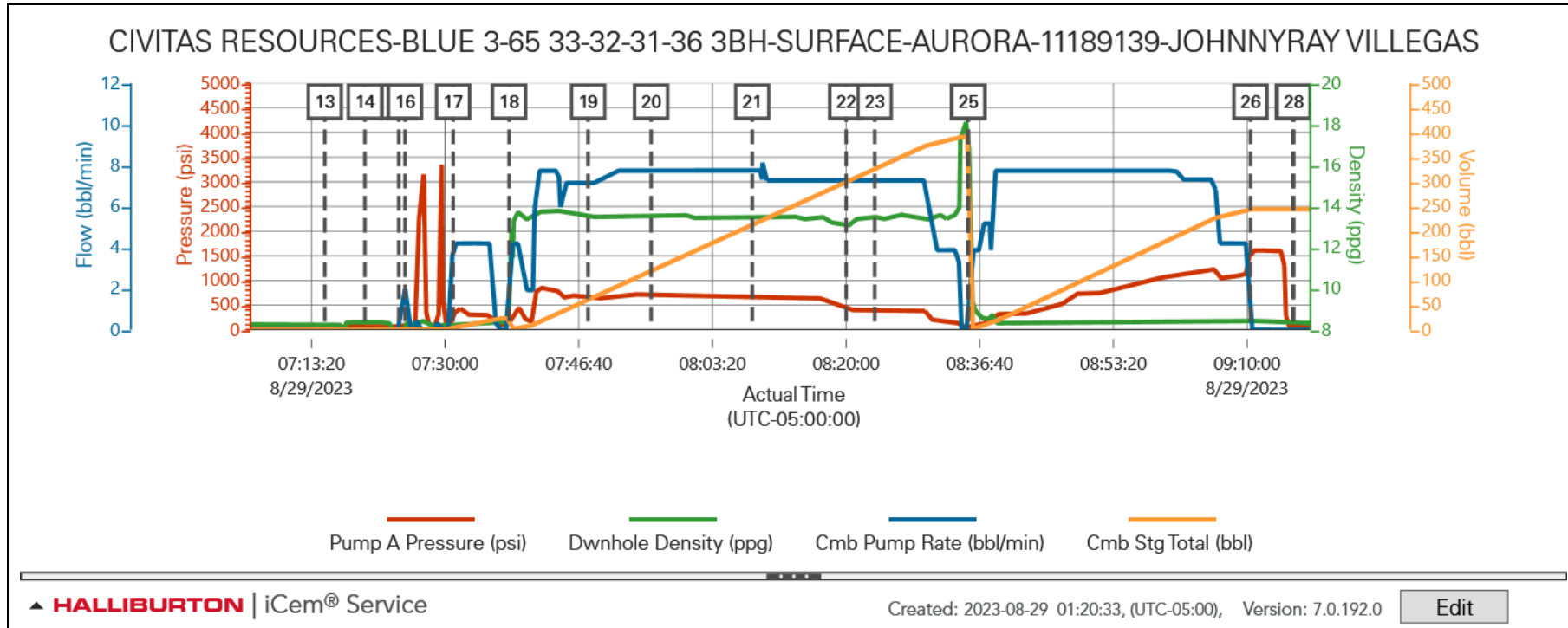
9	Rig-Up Completed	8/29/20 23	02:30:0 0	RIG-UP COMPLETED
10	Standby Rig	8/29/20 23	02:45:0 0	RIG-CONTINUE TO RUN CASING
11	Casing on Bottom	8/29/20 23	06:30:0 0	CASING ON BOTTOM/RIG CIRCULATE W/9 5/8 CEMENT HEAD
12	Start Job	8/29/20 23	06:51:0 8	START JOB
13	Safety Meeting	8/29/20 23	07:15:0 0	DISCUSSED JSA AND JOB PROCEDURES W/CO. REP & RIG CREW
14	Rig-Up Equipment	8/29/20 23	07:20:0 0	RIG UP CEMENT HEAD/STEEL LINES IN CELLAR (OFF-LINE CEMENT)
15	Other	8/29/20 23	07:24:1 3	BREAK CIRCULATION W/FRESH WATER
16	Test Lines	8/29/20 23	07:25:0 0	TEST LINES 500 PSI/3000 PSI
17	Pump Spacer	8/29/20 23	07:31:0 0	PUMP 20 BBLS FRESH WATER @ 8.33 PPG (4BPM/400PSI)
18	Pump Cement	8/29/20 23	07:37:5 9	PUMP PRIMARY CEMENT (376.70 BBLS @ 13.5 PPG)
19	Check Weight	8/29/20 23	07:47:5 0	PRESSURIZED SCALE WEIGHT @ 13.5 PPG
20	Check Weight	8/29/20 23	07:55:4 2	PRESSURIZED SCALE WEIGHT @ 13.5 PPG
21	Check Weight	8/29/20 23	08:08:1 8	PRESSURIZED SCALE WEIGHT @ 13.5 PPG

22	Check Weight	8/29/20 23	08:20:0 0	PRESSURIZED SCALE WEIGHT @ 13.5 PPG
23	Check Weight	8/29/20 23	08:23:3 4	PRESSURIZED SCALE WEIGHT @ 13.5 PPG
24	Drop Top Plug	8/29/20 23	08:35:1 2	DROP TOP PLUG (CUSTOMER SUPPLIED)
25	Pump Displacement	8/29/20 23	08:35:1 5	PUMP 248 BBLS FRESH WATER DISPLACEMENT @ 8.34 PPG
26	Cement Returns to Surface	8/29/20 23	09:00:0 0	CEMENT RETURNS TO SURFACE @ 238 BBLS GONE (10 BBLS CEMENT TO SURFACE)
27	Bump Plug	8/29/20 23	09:10:2 6	LAND PLUG 1100 PSI - 1600 PSI
28	Bleed Casing	8/29/20 23	09:14:0 0	BLEED CASING 1 1/2 BBLS BACK
29	End Job	8/29/20 23	09:15:4 3	END JOB
30	Pre-Rig Down Safety Meeting	8/29/20 23	09:20:0 0	PRE-RIG DOWN SAFETY MEETING
31	Rig-Down Equipment	8/29/20 23	09:30:0 0	RIG-DOWN EQUIPMENT
32	Rig-Down Completed	8/29/20 23	10:00:0 0	RIG-DOWN COMPLETED
33	Paper Work	8/29/20 23	10:30:0 0	PREPARE PAPERWORK FOR CUSTOMER
34	Pre-Convoy Safety Meeting	8/29/20 23	11:00:0 0	PRE-CONVOY SAFETY MEETING

35	Crew Leave Location	8/29/20 23	12:00:0 0	CREW LEAVE LOCATION
36	Other	8/29/20 23	13:00:0 0	THANKS HALLIBURTON

3.0 Attachments

3.1 Real Time Job Chart



3.2 Case 1-Custom Results (1).png

