

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: Terra

Date: Thursday, April 18, 2019

GM 413-14 Surface PJR

API# 05-045-24252-00

Sincerely,

Grand Junction Cement Engineering

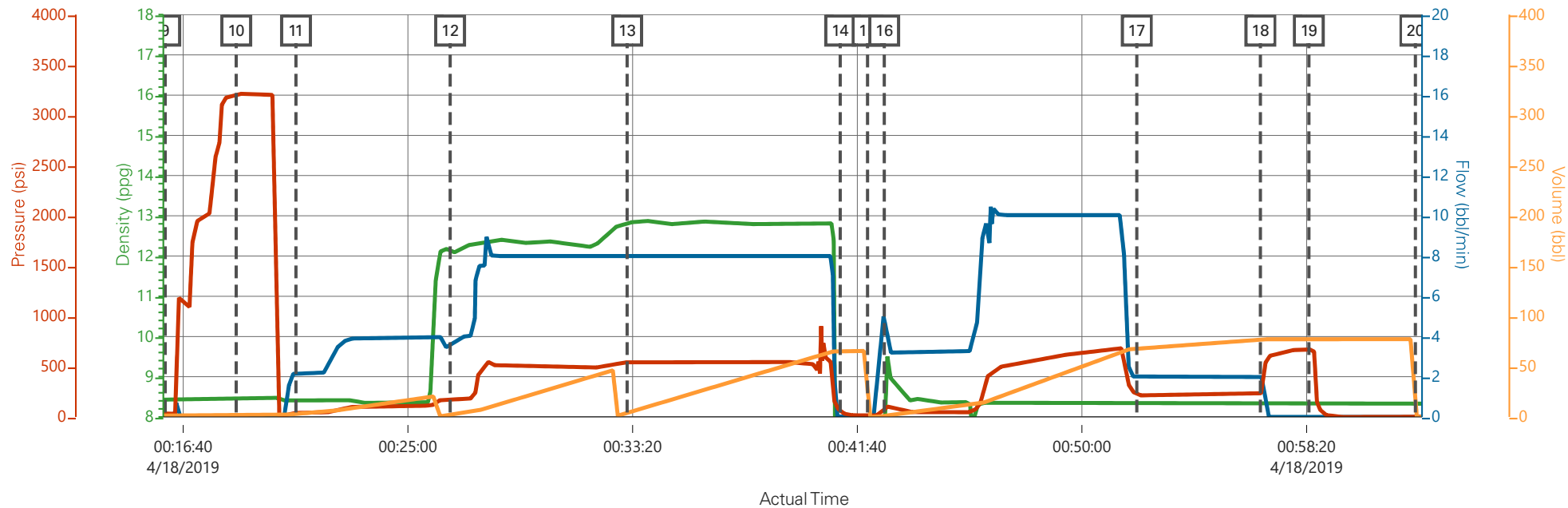
2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	4/17/2019	16:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	4/17/2019	18:30:00	USER					JOURNEY MANAGEMENT COMPLETE, AS WELL AS JSA
Event	3	Crew Leave Yard	4/17/2019	19:00:00	USER					
Event	4	Arrive At Loc	4/17/2019	20:30:00	USER					JOURNEY MANAGEMENT CLOSED OUT. RIG POOH W/ DP
Event	5	Assessment Of Location Safety Meeting	4/17/2019	21:22:41	USER					
Event	6	Other	4/17/2019	21:23:57	USER					WATER TEST: PH-7, CL-0, TEMP-63 WELL INFO: 9 5/8 36# CASING TOTAL 1029.42, TD-1036, S.J.-46.25, HOLE- 13.5". MUD#- 9.5
Event	7	Pre-Rig Up Safety Meeting	4/17/2019	21:30:00	USER					JSA COMPLETE
Event	8	Rig-Up Equipment	4/17/2019	22:00:00	USER					
Event	9	Other	4/17/2019	22:45:00	USER					MUD SCALES CHECKED WITH WATER PRIOR TO JOB.
Event	10	Pre-Job Safety Meeting	4/17/2019	23:00:00	USER					JSA COMPLETE
Event	11	Prime Pumps	4/17/2019	23:10:00	USER					FRESH WATER
Event	12	Start Job	4/18/2019	00:16:00	COM5					

Event	13	Test Lines	4/18/2019	00:18:38	USER			3212.00		3212 PSI
Event	14	Pump Spacer 1	4/18/2019	00:20:51	USER	8.33	4.00	104.00	20.00	FRESH WATER
Event	15	Pump Lead Cement	4/18/2019	00:26:34	USER	12.30	8.0	501	42.4	100 SKS VARICEM, 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Event	16	Pump Tail Cement	4/18/2019	00:33:08	USER	12.80	8.00	556.00	65.8	175 SKS VARICEM, 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	17	Shutdown	4/18/2019	00:41:02	USER					TO BUMP PLUG, AND WASH UP ON TOP OF PLUG
Event	18	Drop Top Plug	4/18/2019	00:42:03	USER					AWAY, USING POSITIVE DISPLACEMENT
Event	19	Pump Displacement	4/18/2019	00:42:40	USER	8.33	10.00	687.0	76.0	FRESH WATER
Event	20	Slow Rate	4/18/2019	00:52:02	USER	8.33	2.00	245.00	67.90	TO BUMP PLUG
Event	21	Bump Plug	4/18/2019	00:56:37	USER	8.33	2.00	225.00	76.00	PLUG BUMPED ON CALCULATED
Event	22	Check Floats	4/18/2019	00:58:25	USER			663.00		FLOATS HELD 0.5 BBLS BACK TO TRUCK
Event	23	End Job	4/18/2019	01:02:22	COM5					GOOD CIRCULATION THROUGHOUT JOB, 26 BBL OF CMT TO SURFACE, NO PIPE MOVEMENT
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	4/18/2019	01:05:46	USER					
Event	25	Crew Leave Location	4/18/2019	02:00:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, JAMES LEIST AND CREW

TERRA ENERGY - STRAIT BOTTOM RANCH GM 413-14 - 9 5/8" SURFACE CASING



— DH Density (ppg)
 — Comb Pump Rate (bbl/min)
 — PS Pump Press (psi)
 — Pump Stg Tot (bbl)

Description	Actual Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)
9 Start Job	00:16:00	8.42	0.00	25.00	2.20
10 Test Lines	00:18:38	8.47	0.00	3212.00	2.20
11 Pump Spacer 1	00:20:51	8.43	2.20	43.00	2.90
12 Pump Lead Cement	00:26:34	12.14	3.50	167.00	1.90
13 Pump Tail Cement	00:33:08	12.81	8.00	556.00	4.00
14 Shutdown	00:41:02	0.08	0.00	56.00	65.60
15 Drop Top Plug	00:42:03	0.02	0.00	13.00	0.00
16 Pump Displacement	00:42:40	6.73	5.00	94.00	1.10
17 Slow Rate	00:52:02	8.33	2.00	225.00	67.90
18 Bump Plug	00:56:37	8.33	2.00	230.00	76.90
19 Check Floats	00:58:25	8.34	0.00	671.00	77.30
20 End Job	01:02:22	8.33	0.00	-1.00	0.00

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