

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS-EBUS

For: Terra

Date: Monday, July 16, 2018

PA 421-26 Surface PJR

API# 05-045-23711

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

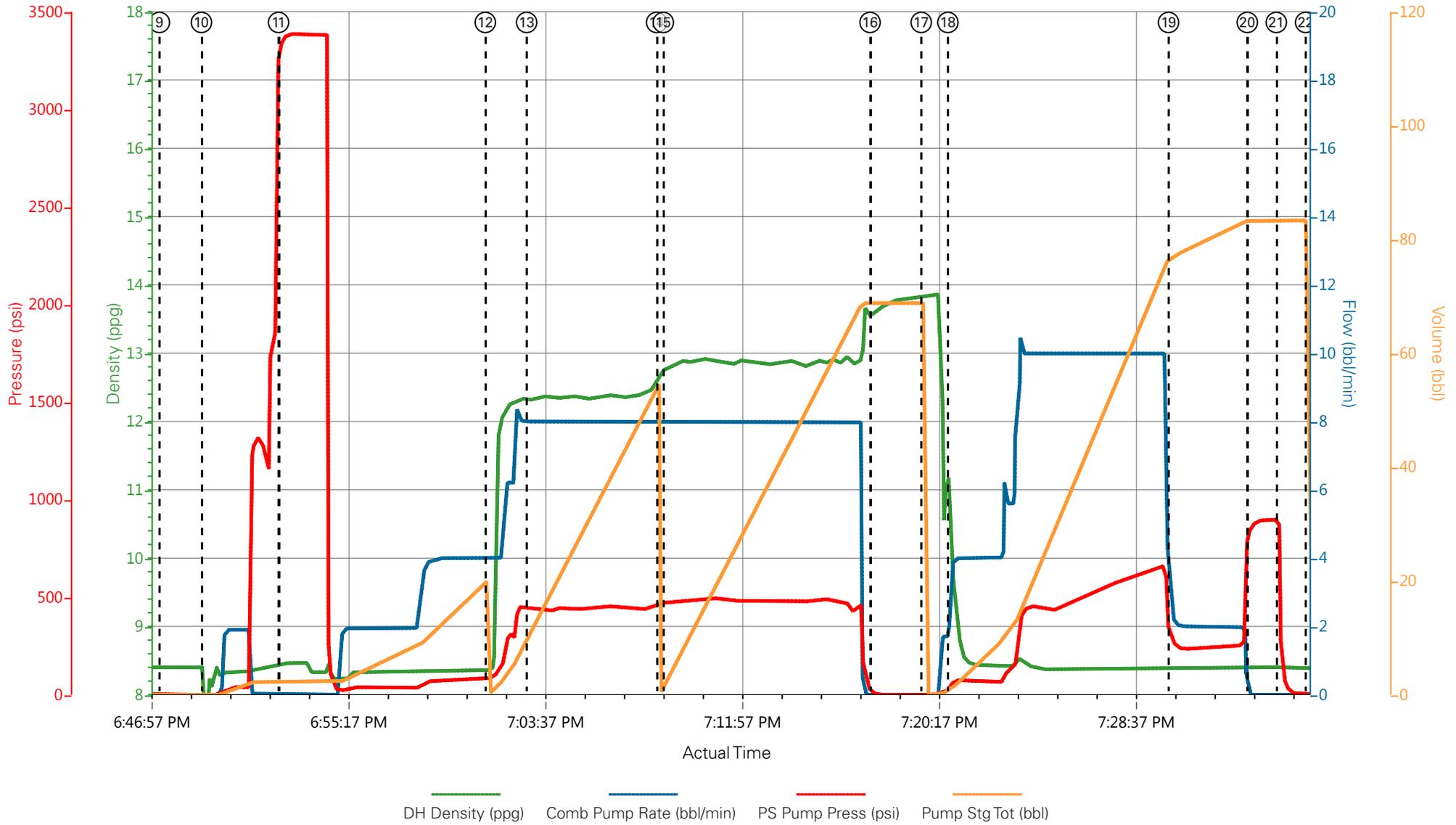
2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	PS Pump Press <i>(psi)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	7/16/2018	11:00:00	USER					REQUESTED ON LOCATION @ 16:00
Event	2	Pre-Convoy Safety Meeting	7/16/2018	13:00:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	7/16/2018	13:05:00	USER					1 HT 400 PUMP TRUCK E1, 1 660 BULK TRUCKS, 1 450 SERVICE PICKUP
Event	4	Arrive At Loc	7/16/2018	15:00:00	USER					ARRIVED 1 HOUR EARLY. RIG GETTING READY TO START RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	7/16/2018	15:10:00	USER					MET WITH COMP REP, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH- 7.0, CHLORIDES- 500, TEMP- 70F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	7/16/2018	15:15:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	7/16/2018	15:20:00	USER					HES RIGGED UP EQUIPMENT WITHOUT ENTERING RED ZONE.
Event	8	Pre-Job Safety Meeting	7/16/2018	18:30:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 15BPM PRIOR TO JOB, PRESSURE @171 PSI

Event	9	Start Job	7/16/2018	18:47:25	COM6					TD 1135', TP 1128.46' OF 9 5/8" 36# SURFACE CSG, FC @ 1088.4', OH 13.5", MUD 9.4 PPG
Event	10	Prime Lines	7/16/2018	18:49:11	USER	8.33	2	40	2	8.33 PPG FRESH WATER
Event	11	Test Lines	7/16/2018	18:52:27	COM6				3420	ALL LINES HELD PRESSURE AT 3420 PSI
Event	12	Pump Lead Cement	7/16/2018	19:01:12	COM6	12.3	8	450	53	125 SKS VARICEM CMT 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Event	13	Check weight	7/16/2018	19:02:57	COM6					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	14	Pump Tail Cement	7/16/2018	19:08:27	COM6	12.8	8	485	65.8	175 SKS VARICEM CMT 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	15	Check weight	7/16/2018	19:08:44	COM6					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	16	Shutdown	7/16/2018	19:17:30	USER					END OF CEMENT, WASH UP ON TOP OF PLUG
Event	17	Pump Displacement	7/16/2018	19:19:39	COM6	8.33	10	660	84.1	FRESH WATER
Event	18	Drop Top Plug	7/16/2018	19:20:47	USER					VERIFIED BY FLAG INDICATOR
Event	19	Slow Rate	7/16/2018	19:30:08	USER	8.33	2	250	74.1	SLOW RATE TO 2 BPM TO BUMP PLUG
Event	20	Bump Plug	7/16/2018	19:33:27	COM6	8.33	2	260	84.1	LAND PLUG AT 260 PSI, BROUGHT UP TO 895 PSI
Event	21	Check Floats	7/16/2018	19:34:41	USER					FLOATS HELD, .5 BBL BACK TO TRUCK
Event	22	End Job	7/16/2018	19:35:56	COM6					RETURNS THROUGHOUT JOB, 20 BBLs CMT TO SURFACE, 40# OF SUGAR USED.

Event	23	Post-Job Safety Meeting (Pre Rig-Down)	7/16/2018	19:37:00	USER	ALL HES PRESENT
Event	24	Rig-Down Equipment	7/16/2018	19:40:00	USER	ALL HES PRESENT
Event	25	Pre-Convoy Safety Meeting	7/16/2018	20:30:00	USER	ALL HES PRESENT
Event	26	Crew Leave Location	7/16/2018	21:00:00	USER	THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW

TERRA PA 421-26, 9 5/8" SURFACE



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|---|--------------------------|---------------------|---|------------------------------|
| ① Call Out | ⑦ Rig-Up Equipment | ⑬ Check weight | ⑰ Slow Rate | 25 Pre-Convoy Safety Meeting |
| ② Pre-Convoy Safety Meeting | ⑧ Pre-Job Safety Meeting | ⑭ Pump Tail Cement | 20 Bump Plug | 26 Crew Leave Location |
| ③ Crew Leave Yard | ⑨ Start Job | ⑮ Check weight | 21 Check Floats | |
| ④ Arrive At Loc | ⑩ Prime Lines | ⑯ Shutdown | 22 End Job | |
| ⑤ Assessment Of Location Safety Meeting | ⑪ Test Lines | ⑰ Pump Displacement | 23 Post-Job Safety Meeting (Pre Rig-Down) | |
| ⑥ Pre-Rig Up Safety Meeting | ⑫ Pump Lead Cement | ⑱ Drop Top Plug | 24 Rig-Down Equipment | |

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