

HALLIBURTON

iCem[®] Service

Terra Energy Partners

For: Terra

Date: Sunday, July 09, 2017

SR 441-12 Surface PJR

API# 05-045-23300-00

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

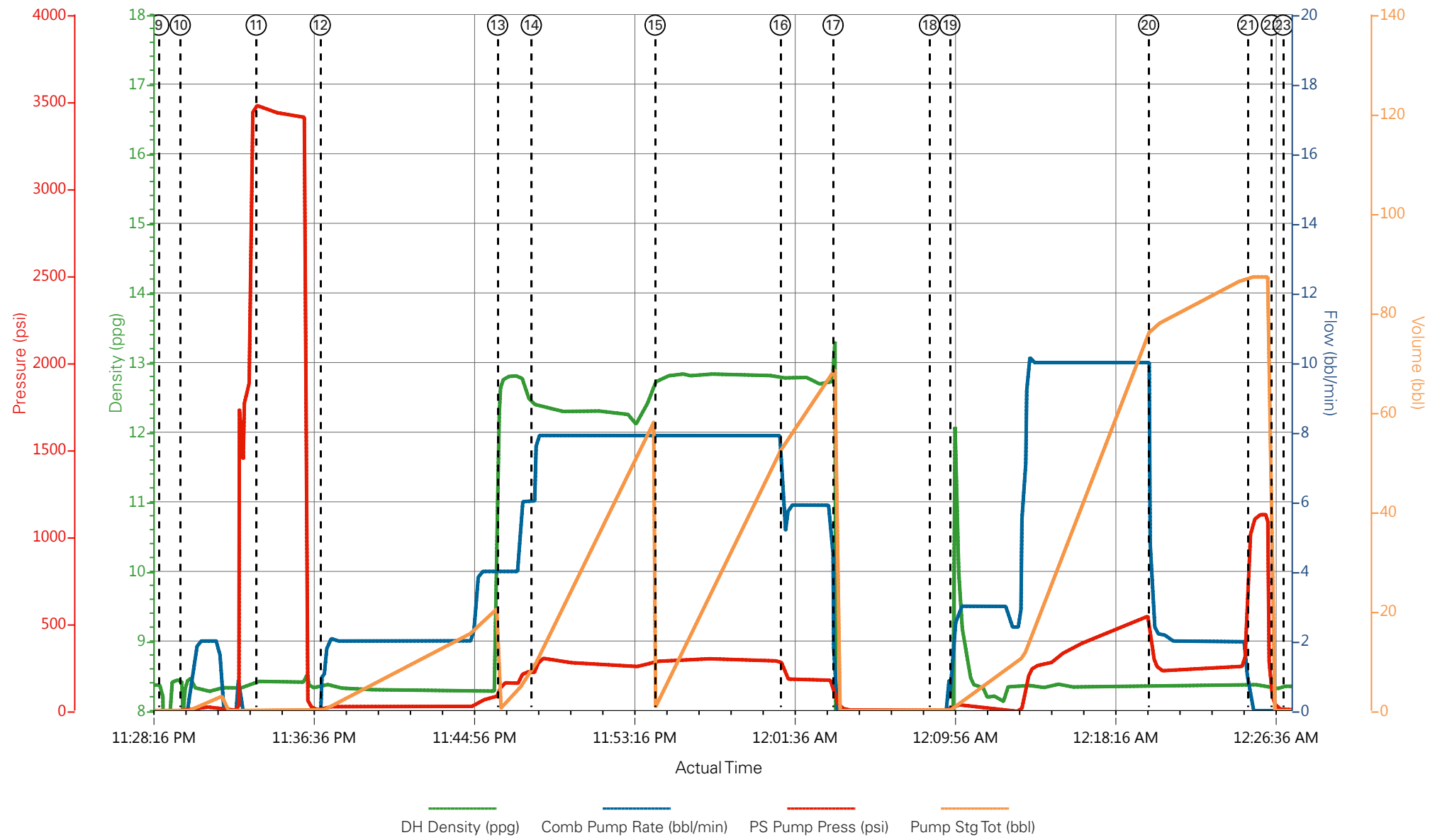
Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	7/8/2017	17:00:00	USER					REQUESTED ON LOCATION @ 20:00
Event	2	Pre-Convoy Safety Meeting	7/8/2017	17:05:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	7/8/2017	17:10:00	USER					1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCKS, 1 450 SERVICE PICKUP
Event	4	Arrive At Loc	7/8/2017	18:00:00	USER					ARRIVED 2 HOURS EARLY. RIG GETTING READY TO START RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	7/8/2017	18:10:00	USER					MET WITH COMP REP, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH- 7, CHLORIDES- 0, TEMP- 68F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	7/8/2017	18:30:00	USER					ALL HES PRESENT
										HES RIGGED UP EQUIPMENT WITHOUT ENTERING RED ZONE.
Event	7	Rig-up Lines	7/8/2017	18:45:00	USER					
Event	8	Pre-Job Safety Meeting	7/8/2017	22:45:21	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED FOR .5 HR @ 20 BPM PRIOR TO JOB, PRESSURE @390 PSI. PUMPING OFFLINE THROUGH

A SWEDGE.

Event	9	Start Job	7/8/2017	23:28:42	COM5					TD 1140', TP 1130.75, SJ 46.42', OH 13.5", 9 5/8" 32.3 # H-40, MUD 9#, VIS 30
Event	10	Prime Pumps	7/8/2017	23:29:49	COM5	8.33	2	20	2	8.33 PPG FRESH WATER
Event	11	Test Lines	7/8/2017	23:33:46	COM5	8.33	0.0	3480	0	ALL LINES HELD PRESSURE AT 3480 PSI
Event	12	Pump H2O Spacer	7/8/2017	23:37:06	COM5	8.33	4	80	20	FRESH WATER
Event	13	Pump Lead Cement	7/8/2017	23:46:19	COM5	12.3	8	300	52.98	125 SKS VARICEM CMT 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Event	14	Check weight	7/8/2017	23:48:04	COM5					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	15	Pump Tail Cement	7/8/2017	23:54:30	COM5	12.8	8.0	300	65.76	175 SKS VARICEM CMT 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	16	Slow Rate	7/9/2017	00:01:00	USER					SLOWED TO END CEMENT
Event	17	Shutdown	7/9/2017	00:03:45	COM5					END OF CEMENT
Event	18	Drop Top Plug	7/9/2017	00:08:46	COM5					REMOVED SWEDGE AND LAUNCHED PLUG VERIFIED BY CO REP
Event	19	Pump Displacement	7/9/2017	00:09:49	COM5	8.33	10	540	73.45	FRESH WATER
										SLOW RATE TO 2 BPM TO BUMP PLUG
Event	20	Slow Rate	7/9/2017	00:20:09	USER	8.33	2	240	10	
Event	21	Bump Plug	7/9/2017	00:25:18	USER	8.33	2	260	83.45	LAND PLUG AT 260 PSI, BROUGHT UP TO 1130 PSI
Event	22	Check Floats	7/9/2017	00:26:32	USER					FLOATS HELD, .5 BBL BACK TO TRUCK
Event	23	End Job	7/9/2017	00:27:08	USER					RETURNS THROUGHOUT JOB, 8.5 BBLS CMT TO SURFACE
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	7/9/2017	00:30:56	USER					ALL HES PRESENT

Event	25	Rig Down Lines	7/9/2017	00:40:12	USER	ALL HES PRESENT
Event	26	Pre-Convoy Safety Meeting	7/9/2017	02:00:00	USER	ALL HES PRESENT
Event	27	Crew Leave Location	7/9/2017	02:15:00	USER	THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW

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|-----------------------------|---|-------------------|--------------------|---------------------|---|----------|
| ① Call Out | ⑤ Assessment Of Location Safety Meeting | ⑨ Start Job | ⑬ Pump Lead Cement | ⑰ Shutdown | 21 Bump Plug | 25 Rig D |
| ② Pre-Convoy Safety Meeting | ⑥ Pre-Rig Up Safety Meeting | ⑩ Prime Pumps | ⑭ Check weight | ⑱ Drop Top Plug | 22 Check Floats | 26 Pre-C |
| ③ Crew Leave Yard | ⑦ Rig-up Lines | ⑪ Test Lines | ⑮ Pump Tail Cement | ⑲ Pump Displacement | 23 End Job | 27 Crew |
| ④ Arrive At Loc | ⑧ Pre-Job Safety Meeting | ⑫ Pump H2O Spacer | ⑯ Slow Rate | 20 Slow Rate | 24 Post-Job Safety Meeting (Pre Rig-Down) | |

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