

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Terra

Date: Tuesday, May 08, 2018

PA 321-26 Surface PJR

API #05-045-23708-00

Sincerely,

Grand Junction Cement Engineering

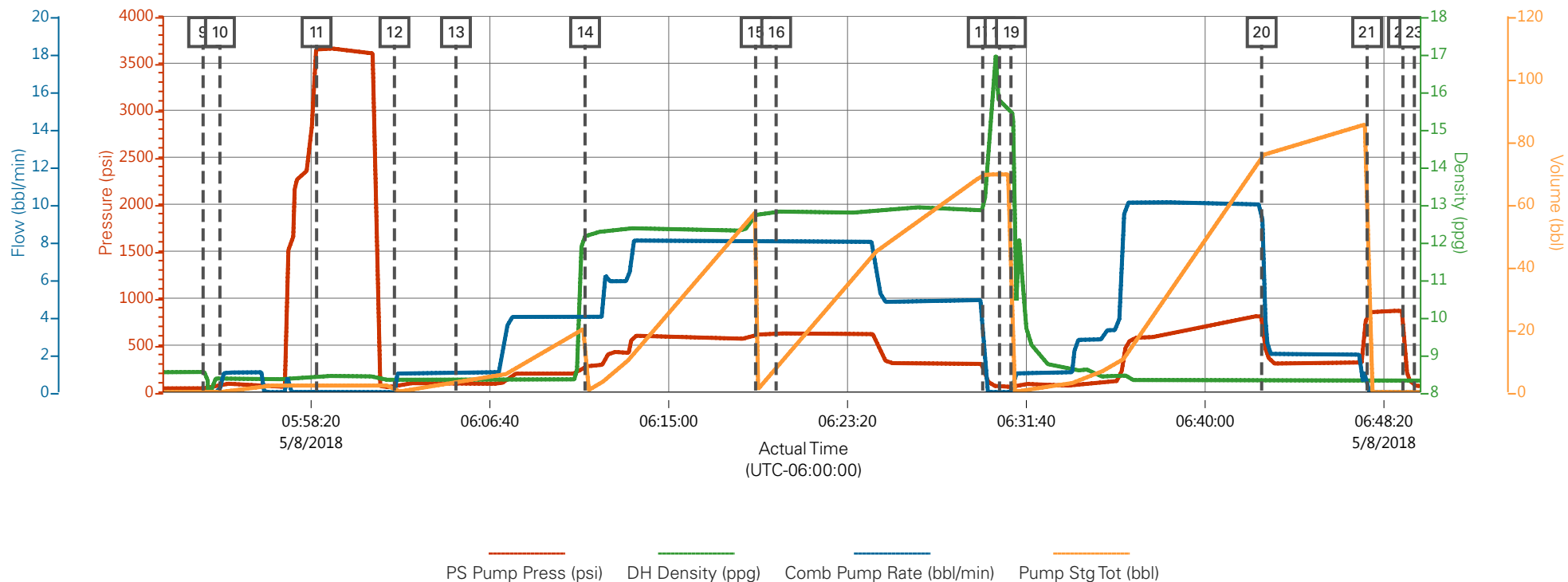
1.0 Real-Time Job Summary

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	5/7/2018	21:00:00	USER					REQUESTED ON LOCATION @ 03:30
Event	2	Depart Yard Safety Meeting	5/7/2018	23:15:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	5/7/2018	23:30:00	USER					1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	5/8/2018	01:00:00	USER					ARRIVE 2.5 HOURS EARLY TO LOCATION. RIG PULLING DRILL PIPE
Event	5	Assessment Of Location Safety Meeting	5/8/2018	01:15:00	USER					MET WITH COMP REP, WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE. COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Spot Equipment	5/8/2018	01:30:00	USER					1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	7	Pre-Rig Up Safety Meeting	5/8/2018	02:00:00	USER					ALL HES PRESENT
Event	8	Pre-Job Safety Meeting	5/8/2018	05:30:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 14 BPM WITH 250 PSI.
Event	9	Start Job	5/8/2018	05:53:18	USER					TP 1124.18', OH 13 ½", CSG 9 5/8" 36# J-55, FC @ 1083.17', MUD 9.3 PPG
Event	10	Prime Lines	5/8/2018	05:54:05	USER	8.33	1.0	90	3	FRESH WATER
Event	11	Test Lines	5/8/2018	05:58:35	COM5			3660		PRESSURE HELD
Event	12	Pump Spacer	5/8/2018	06:02:13	COM5	8.33	4.0	270	20	FRESH WATER

Event	13	Check Weight	5/8/2018	06:05:05	COM5					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	14	Pump Lead Cement	5/8/2018	06:11:06	COM5	12.3	8.0	600	53	125 SKS VARICEM CMT 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK.
Event	15	Pump Tail Cement	5/8/2018	06:19:03	COM5	12.8	8.0	630	65.8	175 SKS VARICEM CMT 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	16	Check Weight	5/8/2018	06:20:00	COM5					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	17	Shutdown	5/8/2018	06:29:38	USER					END OF CEMENT
Event	18	Drop Top Plug	5/8/2018	06:30:25	USER					VERIFIED BY FLAG INDICATOR AND CO REP
Event	19	Pump Displacement	5/8/2018	06:30:57	COM5	8.33	10.0	820	73.73	FRESH WATER
Event	20	Slow Rate	5/8/2018	06:42:38	USER	8.33	2.0	300	10	SLOW RATE
Event	21	Bump Plug	5/8/2018	06:47:33	COM5	8.33	2.0	300	83.73	PLUG BUMPED
Event	22	Check Floats	5/8/2018	06:49:13	USER			866		.5 BBL FLOW BACK TO TRUCK
Event	23	End Job	5/8/2018	06:49:45	COM5					RETURNS THROUGHOUT JOB. 23 BBL CEMENT TO SURFACE. 40 LBS SUGAR USED.
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	5/8/2018	06:55:00	USER					ALL HES PRESENT
Event	25	Pre-Convoy Safety Meeting	5/8/2018	07:45:00	USER					ALL HES PRESENT
Event	26	Depart Location	5/8/2018	08:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, DUSTIN HYDE AND CREW

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Description	Actual Time (UTC-06:00:00)	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)
9 Start Job	05:53:18	41.00	8.54	0.00	0.00
10 Prime Lines	05:54:05	70.00	8.37	0.20	0.00
11 Test Lines	05:58:35	3647.00	8.43	0.00	2.10
12 Pump Spacer	06:02:13	59.00	8.34	0.00	2.10
13 Check Weight	06:05:05	90.00	8.34	1.00	2.90
14 Pump Lead Cement	06:11:06	268.00	12.17	4.00	20.50
15 Pump Tail Cement	06:19:03	611.00	12.71	8.00	0.10
16 Check Weight	06:20:00	627.00	12.77	8.00	7.70
17 Shutdown	06:29:38	302.00	12.83	4.90	69.30
18 Drop Top Plug	06:30:25	58.00	15.66	0.00	69.50
19 Pump Displacement	06:30:57	54.00	15.46	0.00	0.00
20 Slow Rate	06:42:38	814.00	8.33	10.00	75.10
21 Bump Plug	06:47:33	844.00	8.34	0.00	85.50
22 Check Floats	06:49:13	866.00	8.33	0.00	0.00
23 End Job	06:49:45	71.00	8.31	0.00	0.00

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