

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: Terra

Date: Thursday, April 26, 2018

RU 14-17 Surface PJR

API #05-045-23741-00

Sincerely,

Grand Junction Cement Engineering

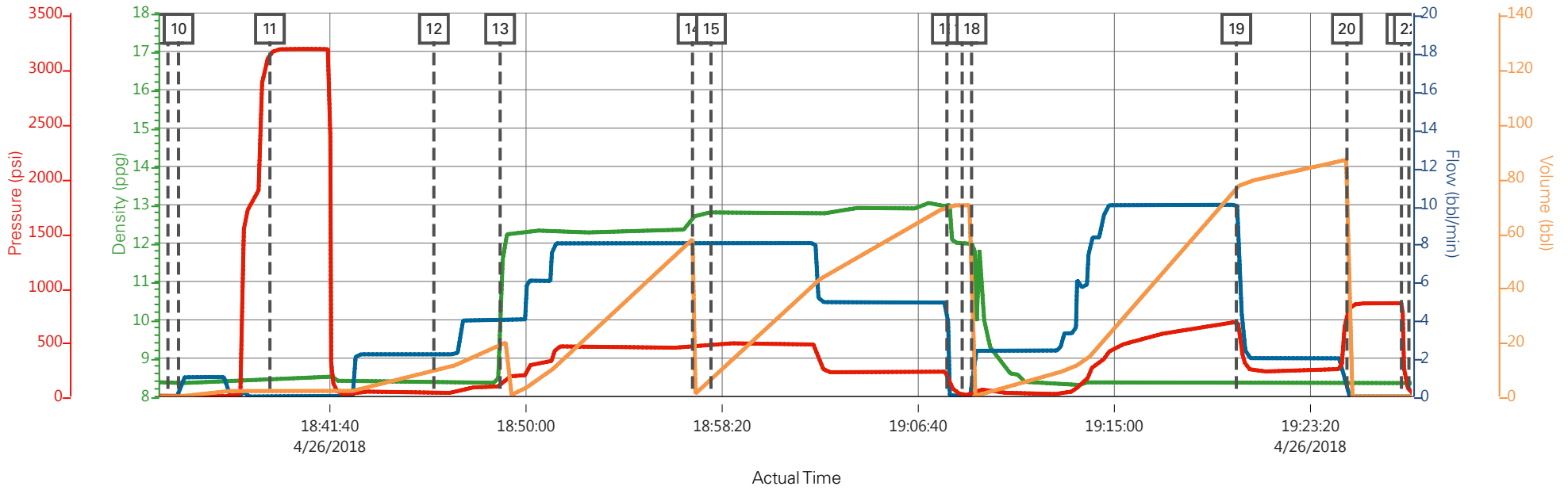
1.0 Real-Time Job Summary

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	4/26/2018	11:30:00	USER					REQUESTED ON LOCATION @ 18:00
Event	2	Depart Yard Safety Meeting	4/26/2018	11:45:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	4/26/2018	14:00:00	USER					1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	4/26/2018	16:30:00	USER					ARRIVED TO LOCATION 1.5 HOUR EARLY WITH ALL EQUIPMENT, RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	4/26/2018	16:35:00	USER					MET WITH COMP REP, AND TOOL HAND, 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	4/26/2018	16:50:00	USER					1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCK 1 550 SERVICE PICKUP
Event	7	Pre-Rig Up Safety Meeting	4/26/2018	17:00:00	USER					ALL HES PRESENT
Event	8	Pre-Job Safety Meeting	4/26/2018	18:30:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 6 BPM WITH 40 PSI.
Event	9	Start Job	4/26/2018	18:34:47	USER					TD 1111', TP 1100.80', OH 13 1/2", CSG 9 5/8" 32.3# H-40, FC @ 1057', MUD 9.1 PPG
Event	10	Prime Lines	4/26/2018	18:35:14	USER	8.33	1.6	20	3	FRESH WATER
Event	11	Test Lines	4/26/2018	18:39:07	COM5			3170		PRESSURE HELD
Event	12	Check Weight	4/26/2018	18:46:05	COM5					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES

Event	13	Pump Lead Cement	4/26/2018	18:48:54	COM5	12.3	8.0	450	53	125 SKS VARICEM CMT 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK.
Event	14	Pump Tail Cement	4/26/2018	18:57:04	COM5	12.8	8.0	480	65.8	175 SKS VARICEM CMT 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	15	Check Weight	4/26/2018	18:57:52	COM5					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	16	Shutdown	4/26/2018	19:07:53	USER					END OF CEMENT
Event	17	Drop Top Plug	4/26/2018	19:08:32	USER					VERIFIED BY FLAG INDICATOR
Event	18	Pump Displacement	4/26/2018	19:08:56	COM5	8.33	10.0	680	73.2	FRESH WATER
Event	19	Slow Rate	4/26/2018	19:20:11	USER	8.33	2.0	250	10	SLOWED TO BUMP PLUG
Event	20	Bump Plug	4/26/2018	19:24:53	COM5	8.33	2.0	250	83.2	BLUG BUMPED
Event	21	Check Floats	4/26/2018	19:27:12	USER			850		FLOATS HELD .5 BBL FLOW BACK TO TRUCK
Event	22	End Job	4/26/2018	19:27:31	USER					RETURNS THROUGHOUT JOB, 30 BBL CEMENT TO SURFACE. USED 40 LBS. SUGAR.
Event	23	Post-Job Safety Meeting (Pre-Rig Down)	4/26/2018	19:30:00	USER					ALL HES PRESENT
Event	24	Pre-Convoy Safety Meeting	4/26/2018	20:45:00	USER					ALL HES PRESENT
Event	25	Crew Leave Location	4/26/2018	21:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, DUSTIN HYDE AND CREW

TERRA - FED RU 14-17 - 9 5/8" SURFACE



— 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)
10 Prime Lines	18:35:14	8.34	0.00	19.00	0.00
11 Test Lines	18:39:07	8.49	0.00	3125.00	2.00
12 Check Weight	18:46:05	8.40	2.20	31.00	9.40
13 Pump Lead Cement	18:48:54	9.46	4.00	100.00	18.80
14 Pump Tail Cement	18:57:04	12.71	8.00	465.00	57.40
15 Check Weight	18:57:52	12.81	8.00	481.00	6.30
16 Shutdown	19:07:53	12.97	4.90	229.00	69.50
17 Drop Top Plug	19:08:32	11.99	0.00	19.00	69.80
18 Pump Displacement	19:08:56	12.00	0.00	12.00	0.00
19 Slow Rate	19:20:11	8.37	10.00	680.00	76.00
20 Bump Plug	19:24:53	8.38	0.00	773.00	86.40
21 Check Floats	19:27:12	8.38	0.00	852.00	0.00
22 End Job	19:27:31	8.35	0.00	57.00	0.00

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Created: 2018-04-26 17:19:08, (UTC-06:00), Version: 4.5.139

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Customer : TERRA ENERGY PARTNERS
 Representative : NATHAN BURR

Job Date : 4/26/2018
 Sales Order # : 904803945

Well : FEDERAL RU 14-17
 ELITE 4 : HYDE / ANGELO

TERRA - FED RU 14-17 - 9 5/8" SURFACE

