

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Terra

Date: Friday, September 21, 2018

PA 32-24 Surface PJR

API# 05-045-23786-00

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

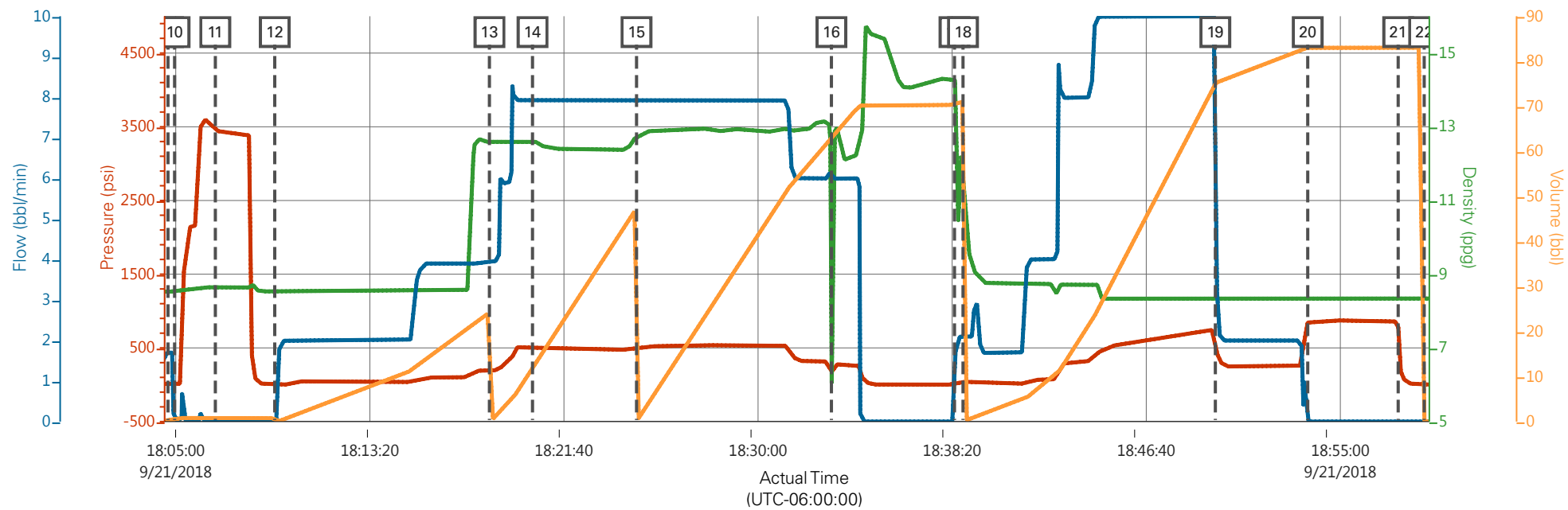
2.1 Job Event Log

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	9/21/2018	09:30:00	USER					REQUESTED ON LOCATION @ 15:00
Event	2	Pre-Convoy Safety Meeting	9/21/2018	11:45:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	9/21/2018	12:00:00	USER					1 HT 400 PUMP TRUCK E1, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	9/21/2018	13:30:00	USER					RIG RUNNING CASING WHEN HES ARRIVED AT LOCATION
Event	5	Assessment Of Location Safety Meeting	9/21/2018	13:40:00	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- 65F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	9/21/2018	13:45:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	9/21/2018	13:50:00	USER					HES RIGGED UP 1 HT400 PUMP TRUCK, 1 660 BULK TRUCK, 2" DISCHARGE IRON, AND 4" SUCTION HOSE WITHOUT ENTERING RED ZONE.
Event	8	Pre-Job Safety Meeting	9/21/2018	17:45:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 10 BPM PRIOR TO JOB PRESSURE @ 170 PSI. CALIBRATED MUD SCALES TO WATER.
Event	9	Start Job	9/21/2018	18:04:40	COM6					TD 1148', TP 1142' OF 9 5/8" 36# SURFACE CSG,

FC @ 1098.77', OH 13.5", MUD 9.3 PPG

Event	10	Prime Lines	9/21/2018	18:04:57	USER	8.33	2	47	2	FRESH WATER
Event	11	Test Lines	9/21/2018	18:06:42	USER			3260		ALL LINES HELD PRESSURE AT 3260 PSI
Event	12	Pump H2O Spacer	9/21/2018	18:09:15	COM6	8.33	4	135	20	20 BBLS FRESH WATER
Event	13	Pump Lead Cement	9/21/2018	18:18:28	COM6	12.3	8	520	53	125 SKS VARICEM CMT 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Event	14	Check Weight	9/21/2018	18:20:19	COM6					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	15	Pump Tail Cement	9/21/2018	18:24:47	COM6	12.8	8	540	65.8	175 SKS VARICEM CMT 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	16	Shutdown	9/21/2018	18:33:09	USER					END OF CEMENT, WASH UP ON TOP OF PLUG
Event	17	Drop Top Plug	9/21/2018	18:38:26	USER					VERIFIED BY FLAG INDICATOR
Event	18	Pump Displacement	9/21/2018	18:38:48	COM6	8.33	10	760	85	FRESH WATER
Event	19	Slow Rate	9/21/2018	18:49:38	USER	8.33	2	250	75	SLOW RATE TO 2 BPM TO BUMP PLUG
Event	20	Bump Plug	9/21/2018	18:53:36	COM6	8.33	2	265	85	LAND PLUG AT 265 PSI, BROUGHT UP TO 887 PSI
Event	21	Check Floats	9/21/2018	18:57:29	USER					FLOATS HELD, .5 BBL BACK TO TRUCK
Event	22	End Job	9/21/2018	18:58:36	COM6					RETURNS THROUGHOUT JOB, 24 BBLS CMT TO SURFACE, 40# OF SUGAR USED.
Event	23	Post-Job Safety Meeting (Pre Rig-Down)	9/21/2018	19:00:00	USER					ALL HES PRESENT
Event	24	Rig Down Lines	9/21/2018	19:05:00	USER					ALL HES PRESENT
Event	25	Pre-Convoy Safety Meeting	9/21/2018	19:45:00	USER					ALL HES PRESENT
Event	26	Crew Leave Location	9/21/2018	20:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW

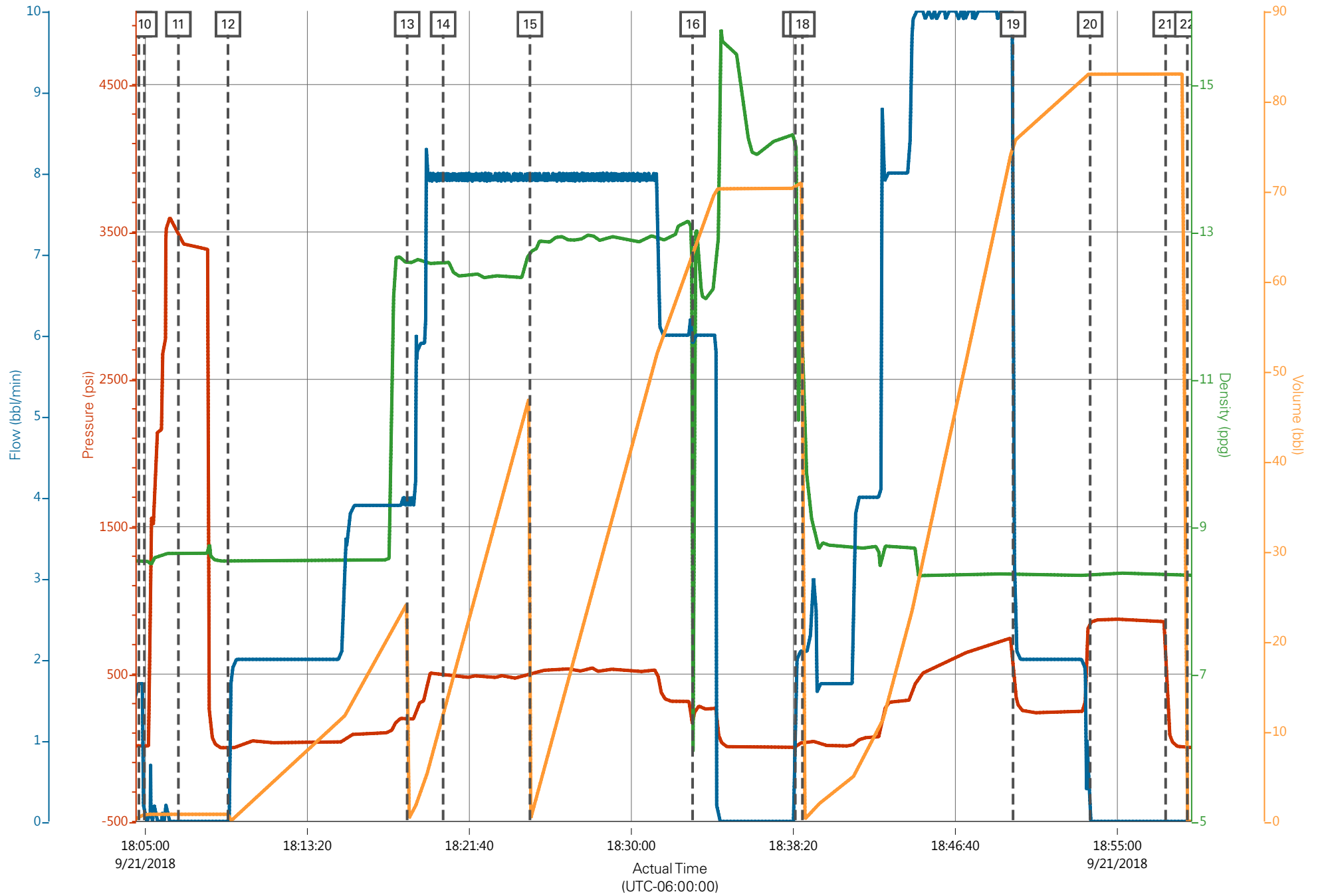
TEP PA 32-24 Surface



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

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	18:04:40	14.30	8.52	1.70	0.40
10	Prime Lines	18:04:57	16.30	8.53	0.00	0.80
11	Test Lines	18:06:42	3471.30	8.64	0.00	0.80
12	Pump H2O Spacer	18:09:15	-3.70	8.54	0.00	0.80
13	Pump Lead Cement	18:18:28	201.30	12.57	4.00	24.20
14	Check Weight	18:20:19	497.30	12.59	7.90	11.90
15	Pump Tail Cement	18:24:47	496.30	12.73	7.90	0.10
16	Shutdown	18:33:09	160.30	6.13	5.90	63.00
17	Drop Top Plug	18:38:26	1.30	14.33	0.80	70.30
18	Pump Displacement	18:38:48	39.30	11.36	2.10	0.00
19	Slow Rate	18:49:38	594.30	8.36	7.60	75.20
20	Bump Plug	18:53:36	852.30	8.36	0.00	83.00
21	Check Floats	18:57:29	778.30	8.37	0.00	83.00
22	End Job	18:58:36	0.30	8.34	0.00	0.00

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