

# HALLIBURTON

iCem<sup>®</sup> Service

## **TERRA ENERGY PARTNERS**

United States of America, COLORADO

### **For: Terra**

Date: Saturday, August 11, 2018

### **PA 534-26 Surface PJR**

API# 05-045-23714-00

Sincerely,

**Grand Junction Cement Engineering**

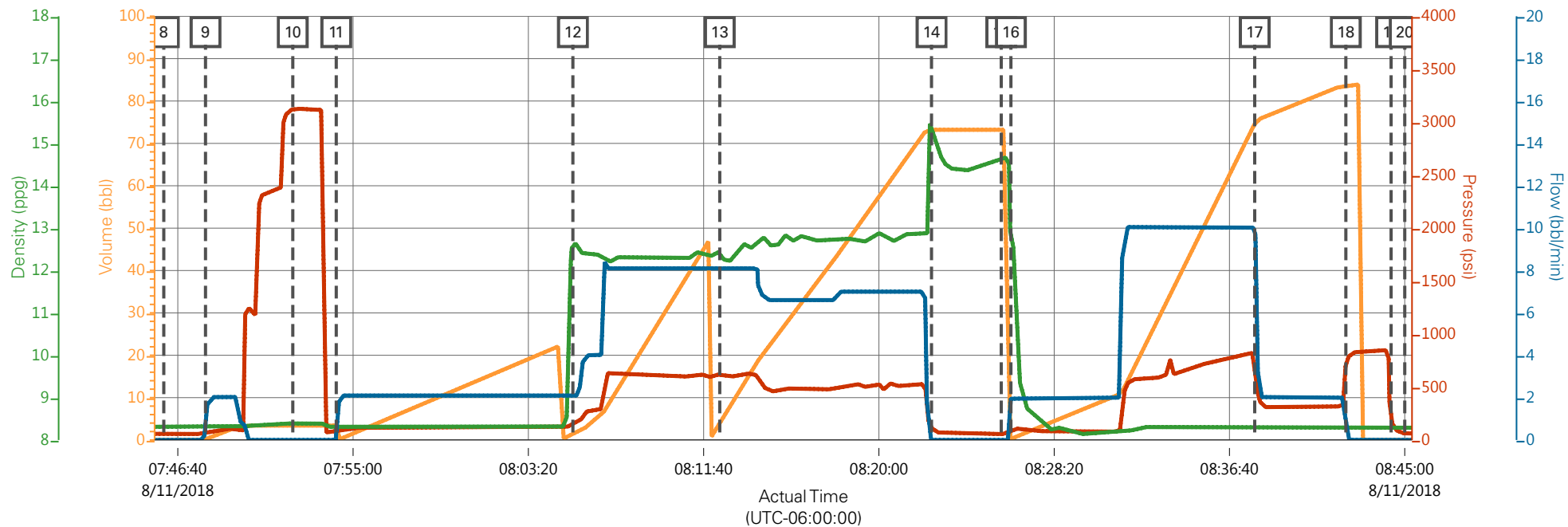
## 2.0 Real-Time Job Summary

## 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	8/11/2018	00:01:00	USER					
Event	2	Pre-Convoy Safety Meeting	8/11/2018	02:45:00	USER					JOURNEY MANAGEMENT COMPLETE, AS WELL AS JSA
Event	3	Crew Leave Yard	8/11/2018	03:00:00	USER					
Event	4	Arrive At Loc	8/11/2018	04:00:00	USER					JOURNEY MANAGEMENT CLOSED OUT, RIG PULLING DP.
Event	5	Other	8/11/2018	04:10:00	USER					WATER TEST: PH-7, TEMP- 68, CO-0 TP- 1133.23 9 5/8 36#, TD-1140, F.C- 1088.49, HOLE-13 1/2, MUD#-9.6
Event	6	Assessment Of Location Safety Meeting	8/11/2018	05:30:00	USER					
Event	7	Pre-Rig Up Safety Meeting	8/11/2018	05:45:00	USER					JSA COMPLETE,
Event	8	Rig-Up Equipment	8/11/2018	05:50:00	USER					1 ELITE, 1 660, 1 WATER HOSE RAN TO EQUALIZED UPRIGHT WATER TANKS.
Event	9	Comment	8/11/2018	06:00:00	USER					MUD SCALES CALIBRATED TO DRINKING WATER PRIOR TO JOB.
Event	10	Pre-Job Safety Meeting	8/11/2018	07:30:00	USER					JSA COMPLETE
Event	11	Start Job	8/11/2018	07:46:00	COM5					
Event	12	Prime Pumps	8/11/2018	07:47:59	COM5	8.33	1.70	62.00	3.10	FRESH WATER

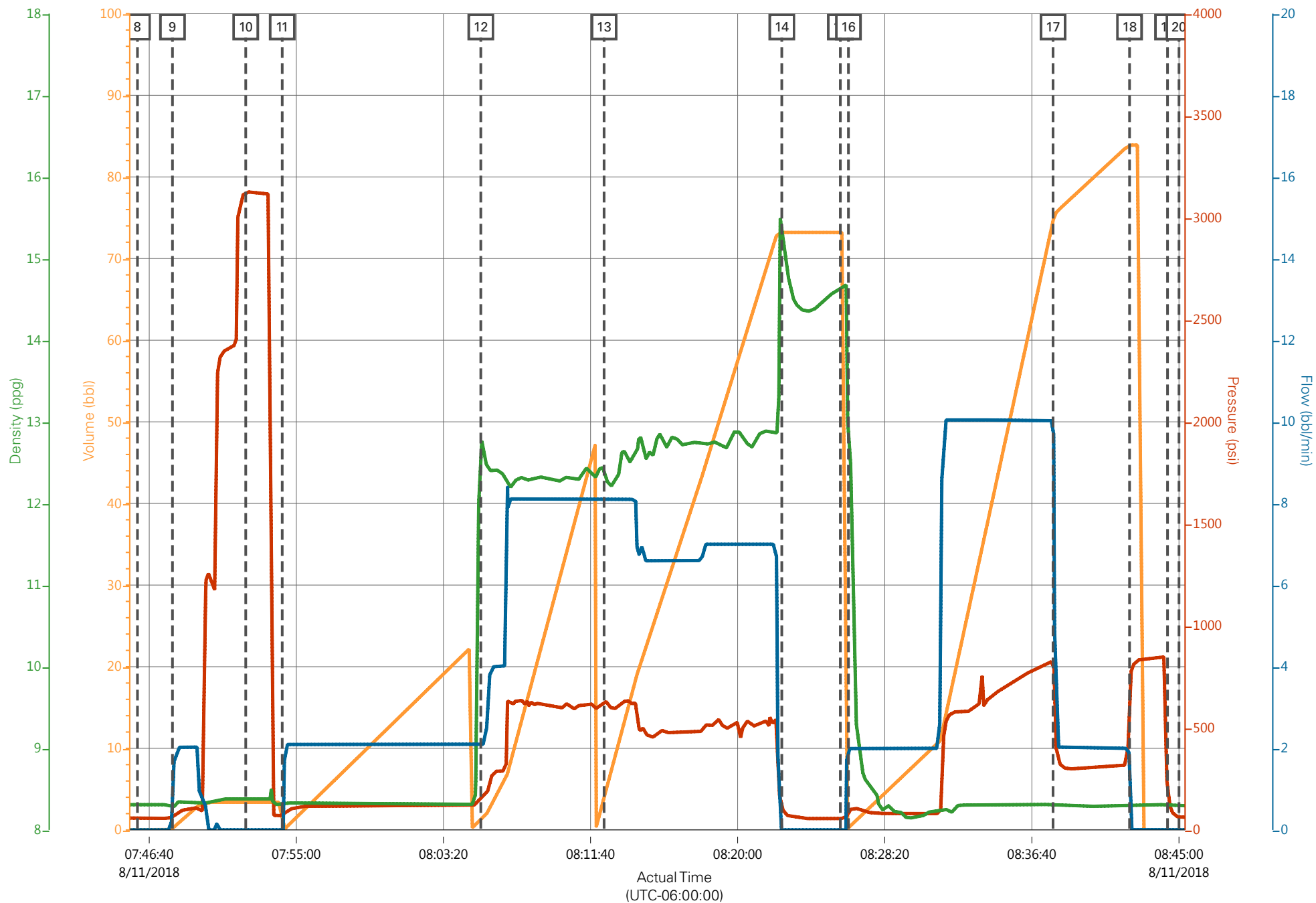
Event	13	Test Lines	8/11/2018	07:52:08	COM5			3128.00		3128 PSI
Event	14	Pump Spacer 1	8/11/2018	07:54:12	COM5	8.33	2.00	70.00	20.00	FRESH WATER
Event	15	Pump Lead Cement	8/11/2018	08:05:27	COM5	12.30	8.00	640.0	53.0	125 SKS VARICEM, 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Event	16	Pump Tail Cement	8/11/2018	08:12:26	COM5	12.80	8.00	520.0	65.8	175 SKS VARICEM, 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	17	Shutdown	8/11/2018	08:22:30	COM5					TO WASH UP TUB ON TOP OF PLUG.
Event	18	Drop Top Plug	8/11/2018	08:25:49	COM5					AWAY
Event	19	Pump Displacement	8/11/2018	08:26:17	COM5	8.33	10.00	850.0	84.1	FRESH WATER
Event	20	Slow Rate	8/11/2018	08:37:52	COM5	8.33	2.00	335.0	74.10	SLOW RATE TO BUMP PLUG
Event	21	Bump Plug	8/11/2018	08:42:12	COM5	8.33	2.00	340.0	84.1	PLUG BUMPED ON CALULATED
Event	22	Check Floats	8/11/2018	08:44:21	USER			884.0		FLOATS HELD, 0.5 BBLS BACK TO TRUCK
Event	23	End Job	8/11/2018	08:45:00	COM5					GOOD CIRCULATION THROUGHOUT JOB, NO PIPE MOVEMENT, 18 BBLS GOOD CMT TO SURFACE
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	8/11/2018	08:55:00	USER					
Event	25	Assessment Of Location Safety Meeting	8/11/2018	09:45:00	USER					
Event	26	Crew Leave Location	8/11/2018	10:00:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, JAMES LEIST AND CREW

## TEP PA 534-26 Surface



Description	Actual Time (UTC-06:00:00)	Pump Stg Tot (bbl)	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)
8 Start Job	07:46:00	0.00	58.00	8.31	0.00
9 Prime Pumps	07:47:59	0.10	62.00	8.31	1.70
10 Test Lines	07:52:08	3.40	3124.00	8.39	0.00
11 Pump Spacer 1	07:54:12	0.00	70.00	8.32	0.00
12 Pump Lead Cement	08:05:27	1.30	147.00	12.69	2.10
13 Pump Tail Cement	08:12:26	4.00	608.00	12.42	8.10
14 Shutdown	08:22:30	73.20	113.00	15.25	0.00
15 Drop Top Plug	08:25:49	73.20	56.00	14.64	0.00
16 Pump Displacement	08:26:17	0.30	90.00	12.81	2.00
17 Slow Rate	08:37:52	74.70	833.00	8.31	10.00
18 Bump Plug	08:42:12	83.90	728.00	8.31	0.00
19 Check Floats	08:44:21	0.00	191.00	8.30	0.00
20 End Job	08:45:00	0.00	62.00	8.29	0.00

# TEP PA 534-26 Surface



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