

# HALLIBURTON

iCem<sup>®</sup> Service

## **TERRA ENERGY PARTNERS**

United States of America, COLORADO

**For: Darrell Leatherman**

Date: Saturday, August 25, 2018

**PA 311-26 Surface PJR**

API# 05-045-23719-00

Sincerely,

**Grand Junction Cement Engineering**

## 1.0 Real-Time Job Summary

## 1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	DH Density (ppg)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	8/25/2018	10:30:00	USER					REQUESTED ON LOCATION TIME 13:00, CREW NOTIFIED WHILE ON ANOTHER CEMENT JOB
Event	2	Depart Yard Safety Meeting	8/25/2018	10:40:00	USER					WITH HES, 1 F-550, 1 ELITE CEMENTING UNIT, 1 660 BULK TRUCK, JSA COMPLETED
Event	3	Arrive At Loc	8/25/2018	12:40:00	USER					RIG RUNNING CASING UPON HES, ARRIVAL
Event	4	Assessment Of Location Safety Meeting	8/25/2018	13:00:00	USER					WITH HES, JSA COMPLETED, SDS OFFERED FOR ALL HES MATERIALS
Event	5	Pre-Rig Up Safety Meeting	8/25/2018	14:00:00	USER					WITH HES, JSA COMPLETED
Event	6	Rig-Up Equipment	8/25/2018	14:10:00	USER					1 LINE RAN TO THE FLOOR, 1 9.625 IN QUICK-LATCH PLUG CONTAINER
Event	7	Other	8/25/2018	16:15:00	USER	2.00	0.00	8.37	0.00	TD 1145 FT, CSG 1139.5 FT 9.625 IN 36 LB/FT J-55, HOLE 13.5 IN, SHOE 43.5 FT
Event	8	Other	8/25/2018	16:19:00	USER	2.00	0.00	8.37	0.00	RIG CIRCULATION, 300 BBL, 10 BBL/MIN, 158 PSI, RAT HOLE LENGTH 5.5 FT, PIPE WAS STATIC, MW 9.4 LB/GAL WBM
Event	9	Other	8/25/2018	16:20:00	USER	2.00	0.00	8.37	0.00	WATER TEST PH 8.1, CHLOR 0, TEMP 64 DEG F
Event	10	Pre-Job Safety Meeting	8/25/2018	16:30:00	USER	2.00	0.00	8.36	0.00	WITH HES, TEP, AND H&P 318
Event	11	Start Job	8/25/2018	16:50:00	USER	6.00	0.00	8.43	4.60	
Event	12	Fill Lines	8/25/2018	16:53:55	USER	51.00	1.90	8.42	5.40	5 BBL FRESH WATER, RETURNS AT 2 BBL AWAY

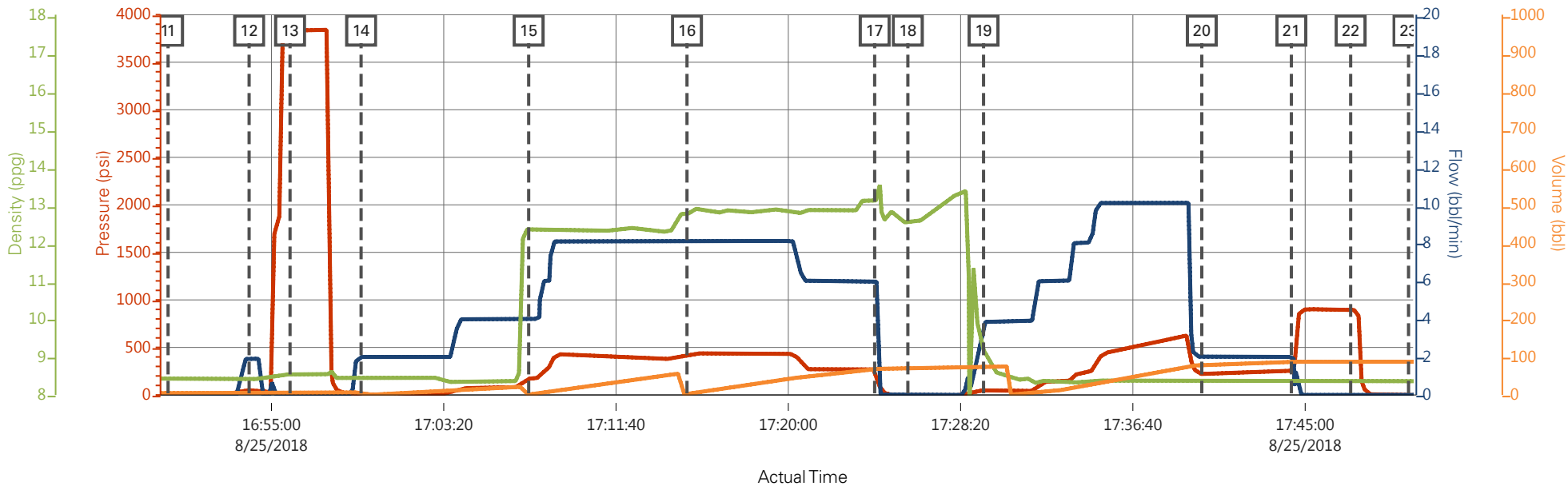
Event	13	Test Lines	8/25/2018	16:55:54	USER	3831.00	0.00	8.54	6.30	LOW TEST AT 1900 PSI, HIGH TEST AT 3831 PSI, PRESSURE HOLDING
Event	14	Pump Fresh Water Spacer	8/25/2018	16:59:20	USER	23.00	2.00	8.43	7.00	20 BBL FRESH WATER
Event	15	Pump Lead Cement	8/25/2018	17:07:27	USER	173.00	4.00	12.36	0.90	MIXED AT 12.3 LB/GAL, 125 SKS, 2.38 FT3/SK, 13.77 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES
Event	16	Pump Tail Cement	8/25/2018	17:15:06	USER	422.00	8.10	12.75	2.60	MIXED AT 12.8 LB/GAL, 175 SKS, 2.11 FT3/SK, 11.78 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES
Event	17	Shutdown	8/25/2018	17:24:11	USER	268.00	6.00	13.12	68.10	
Event	18	Drop Top Plug	8/25/2018	17:25:47	USER	-2.00	0.00	12.53	68.90	PLUG LAUNCHED, CUSTOMER WITNESSED
Event	19	Pump Displacement	8/25/2018	17:29:27	USER	53.00	3.80	9.17	70.50	FRESH WATER
Event	20	Slow Rate	8/25/2018	17:40:00	USER	218.00	2.00	8.37	78.20	SLOWED AT 74 BBL AWAY TO 2 BBL/MIN
Event	21	Bump Plug	8/25/2018	17:44:20	USER	252.00	2.00	8.37	87.00	PLUG BUMPED AT CALCULATED DISPLACEMENT, 255 PSI
Event	22	Check Floats	8/25/2018	17:47:12	USER	895.00	0.00	8.39	87.40	FLOATS HOLDING, .5 BBL RETURNED TO THE TRUCK
Event	23	End Job	8/25/2018	17:50:00	USER	-4.00	0.00	8.37	87.40	GOOD CIRCULATION, RIG USED HES TOP PLUG, RIG USED 40 LBS SUGAR, NO ADD HOURS
Event	24	Pre-Rig Down Safety Meeting	8/25/2018	17:55:00	USER	-4.00	0.00	8.35	87.40	WITH HES, JSA COMPLETD
Event	25	Rig Down Lines	8/25/2018	18:00:00	USER	-6.00	0.00	8.35	98.80	
Event	26	Pre-Convoy Safety Meeting	8/25/2018	18:15:00	USER					WITH HES, JSA COMPLETED
Event	27	Other	8/25/2018	18:20:00	USER					SPACER 20 BBL FRESH WATER, LEAD CEMENT 52.9 BBL, TAIL CEMENT 65.7 BBL, FINAL DISPLACEMENT 84.7 BBL, 24 BBL CEMENT

CIRCULATED TO SURFACE, TOP OF TAIL CEMENT  
332 FT

THANKS FOR USING HALLIBURTON, JOHN  
KEANE AND CREW

Event    28    Crew Leave Location    8/25/2018    18:30:00    USER

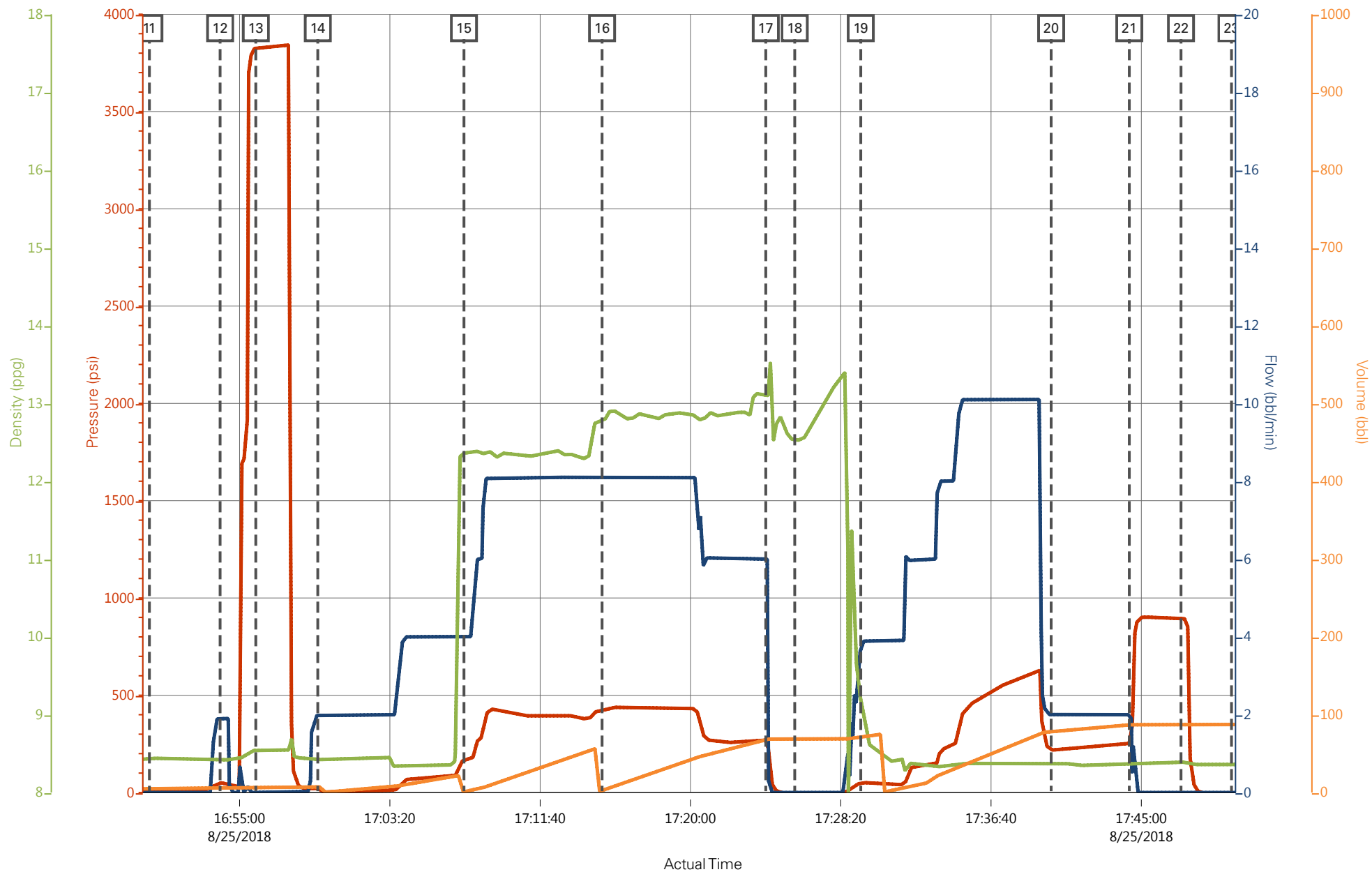
# TEP - FEDERAL PA 311-26 - SURFACE



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

Description	Actual Time	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	DH Density (ppg)	Pump Stg Tot (bbl)	
11 Start Job	16:50:00	6.00	0.00	8.43	4.60	
12 Fill Lines	16:53:55	51.00	1.90	8.42	5.40	
13 Test Lines	16:55:54	3831.00	0.00	8.54	6.30	
14 Pump Fresh Water Spacer	16:59:20	23.00	2.00	8.43	7.00	
15 Pump Lead Cement	17:07:27	173.00	4.00	12.36	0.90	
16 Pump Tail Cement	17:15:06	422.00	8.10	12.75	2.60	
17 Shutdown	17:24:11	268.00	6.00	13.12	68.10	
18 Drop Top Plug	17:25:47	-2.00	0.00	12.53	68.90	
19 Pump Displacement	17:29:27	53.00	3.80	9.17	70.50	
20 Slow Rate	17:40:00	218.00	2.00	8.37	78.20	
21 Bump Plug	17:44:20	252.00	2.00	8.37	87.00	
22 Check Floats	17:47:12	895.00	0.00	8.39	87.40	
23 End Job	17:50:00	-4.00	0.00	8.37	87.40	

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