

# HALLIBURTON

iCem<sup>®</sup> Service

## **TERRA ENERGY PARTNERS**

**For: Terra**

Date: Saturday, October 13, 2018

**PA 432-24 Surface PJR**

**API #: 05-045-23774**

Sincerely,

**Grand Junction Cement Engineering**

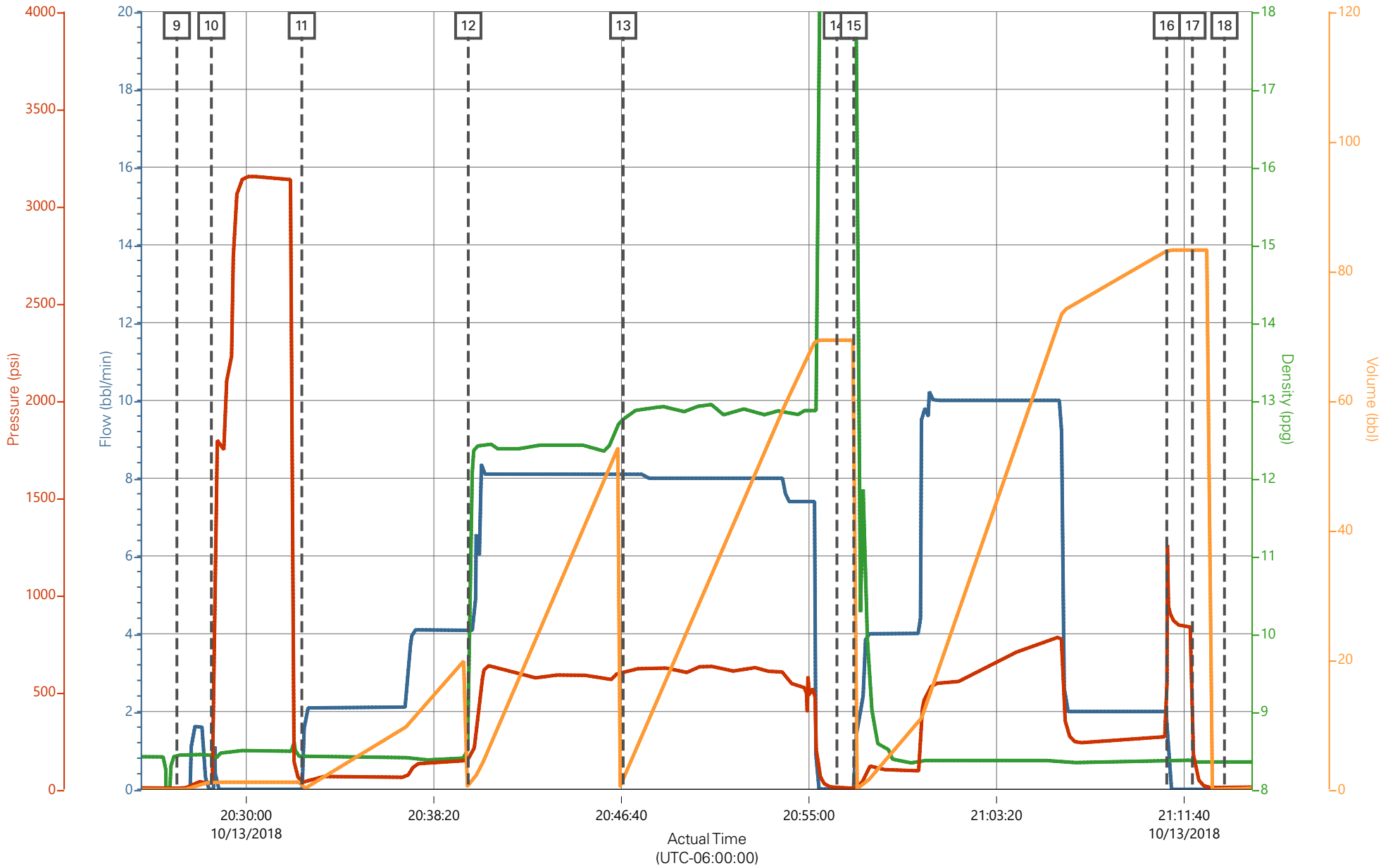
## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	11Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	10/13/2018	10:00:00	USER					REQUESTED ON LOCATION 10/13/18 @ 16:00
Event	2	Depart Yard Safety Meeting	10/13/2018	11:55:00	USER					JSA COMPLETED
Event	3	Crew Leave Shop	10/13/2018	12:00:00	USER					
Event	4	Arrive At Loc	10/13/2018	14:00:00	USER					RIG PULLING DRILL PIPE
Event	5	Assessment Of Location Safety Meeting	10/13/2018	14:05:00	USER					JSA COMPLETED
Event	6	Pre-Rig Up Safety Meeting	10/13/2018	14:15:00	USER					JSA COMPLETED
Event	7	Rig-Up Equipment	10/13/2018	14:20:00	USER					
Event	8	Pre-Job Safety Meeting	10/13/2018	20:00:00	USER					JSA COMPLETED, PRESSURIZED MUD SCALES CALIBRATED TO FRESH WATER
Event	9	Start Job	10/13/2018	20:26:55	COM4					9 5/8"-36# CASING IN 13 1/2" OH, TD 1138', TP 1128', ST 42.2', MUD 9.4 PPG, WATER TEMP 60, PH 7, CHLORIDES 0
Event	10	Test Lines	10/13/2018	20:28:27	COM4			3000.00		TEST LINES TO 3000 PSI
Event	11	Pump Spacer 1	10/13/2018	20:32:28	COM4	4.00	8.33	135.00	20.00	20 BBLS FRESH WATER SPACER
Event	12	Pump Lead Cement	10/13/2018	20:39:52	COM4	8.00	12.30	600.00	53.00	53 BBLS LEAD CEMENT, 125 SKS @ 12.5 PPG / 2.38 YLD / 13.77 GAL/SK
Event	13	Pump Tail Cement	10/13/2018	20:46:45	COM4	8.00	12.80	610.00	65.80	65.8 BBLS TAIL CEMENT, 175 SKS @ 12.8 PPG / 2.11 YLD / 11.78 GAL/SK
Event	14	Drop Top Plug	10/13/2018	20:56:14	COM4					PLUG AWAY

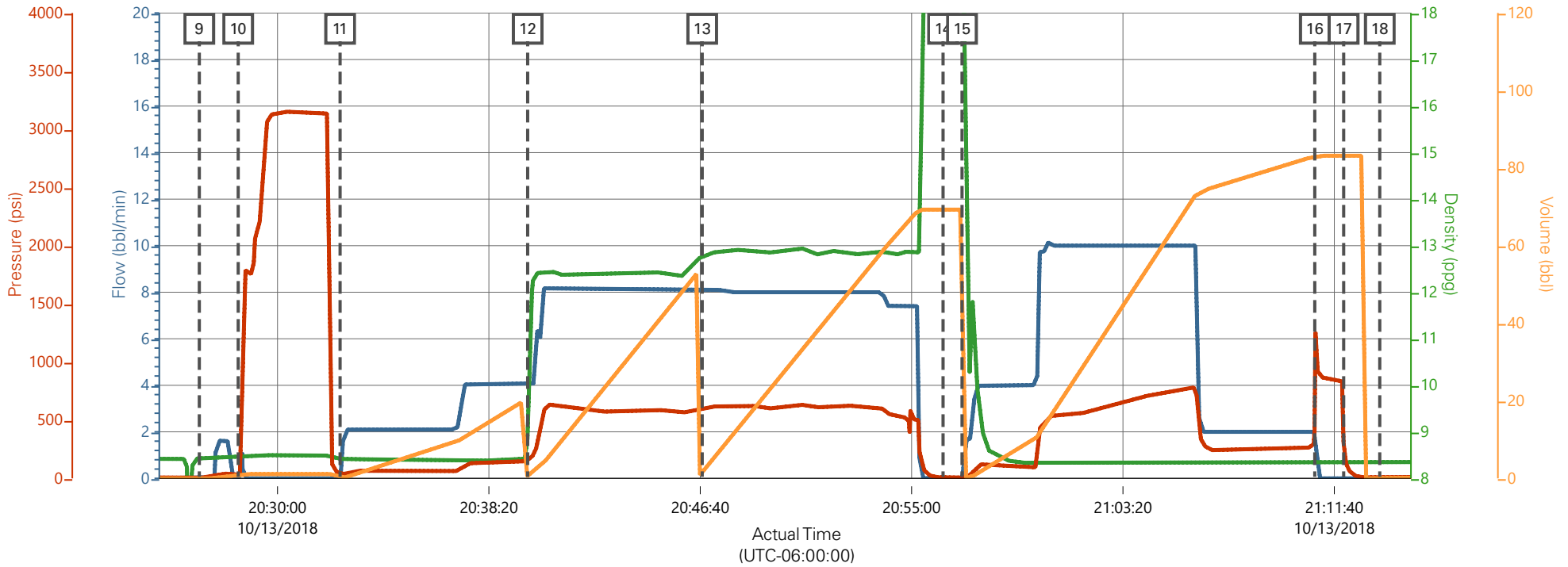
Event	15	Pump Displacement	10/13/2018	20:56:59	COM4	10.00	8.33	785.00	84.20	84.2 BBLs FRESH WATER DISPLACEMENT
Event	16	Bump Plug	10/13/2018	21:10:54	COM4	2.00	8.33	265.00	84.20	PLUG BUMPED AT CALCULATED, FINAL CIRCULATING PRESSURE 265 PSI @ 2 BBL/MIN BROUGHT TO 900 PSI
Event	17	CHECK FLOATS	10/13/2018	21:12:02	COM4					FLOATS HELD, 1 BBL BACK TO PUMP
Event	18	End Job	10/13/2018	21:13:27	COM4					PIPE LEFT STATIC, GOOD RETURNS THROUGHOUT, 15 BBLs CEMENT TO SURFACE, 40# SUGAR AND TOP PLUG USED, NO ADD HOURS CHARGED
Event	19	Pre-Rig Down Safety Meeting	10/13/2018	21:30:00	USER					JSA COMPLETED
Event	20	Rig-Down Equipment	10/13/2018	21:35:00	USER					
Event	21	Pre-Convoy Safety Meeting	10/13/2018	21:55:00	USER					JSA COMPLETED
Event	22	Crew Leave Location	10/13/2018	22:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING OF GRAND JUNCTION, CO - RYAN MARTIN AND CREW

# TERRA - FEDERAL PA 432-24 - 9 5/8" SURFACE CASING



— Comb Pump Rate (bbl/min) 0    
 — DH Density (ppg) -0.05    
 — PS Pump Press (psi) 7    
 — Pump Stg Tot (bbl) 25.9

# TERRA - FEDERAL PA 432-24 - 9 5/8" SURFACE CASING



Comb Pump Rate (bbl/min) 0    DH Density (ppg) -0.05    PS Pump Press (psi) 7    Pump Stg Tot (bbl) 25.9

Description	Actual Time (UTC-06:00:00)	Comb Pump Rate (bbl/min)	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)
9 Start Job	20:26:55	0.00	8.44	6.00	0.00
10 Test Lines	20:28:27	0.00	8.44	32.00	1.00
11 Pump Spacer 1	20:32:28	0.00	8.43	36.00	1.10
12 Pump Lead Cement	20:39:52	4.10	8.85	148.00	0.60
13 Pump Tail Cement	20:46:45	8.10	12.76	601.00	1.50
14 Drop Top Plug	20:56:14	0.00	19.42	7.00	69.30
15 Pump Displacement	20:56:59	0.00	18.48	6.00	0.00
16 Bump Plug	21:10:54	2.00	8.36	406.00	83.10
17 Other	21:12:02	0.00	8.38	282.00	83.20
18 End Job	21:13:27	0.00	8.35	8.00	0.00

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Created: 2018-10-13 14:57:17, (UTC-06:00), Version: 4.5.139

Edit

Customer : TERRA ENERGY PARTNERS  
 Representative : ROBERT BROWN

Job Date : 10/13/2018  
 Sales Order # : 905204782

Well : FEDERAL PA 432-24  
 ELITE #8 : TRAVIS BROWN / RYAN MARTIN