

# HALLIBURTON

iCem<sup>®</sup> Service

## **TERRA ENERGY PARTNERS**

**For: Terra**

Date: Tuesday, December 12, 2017

**PA 441-26 Surface PJR**

API# 05-045-23649-00

Sincerely,

**Grand Junction Cement Engineering**

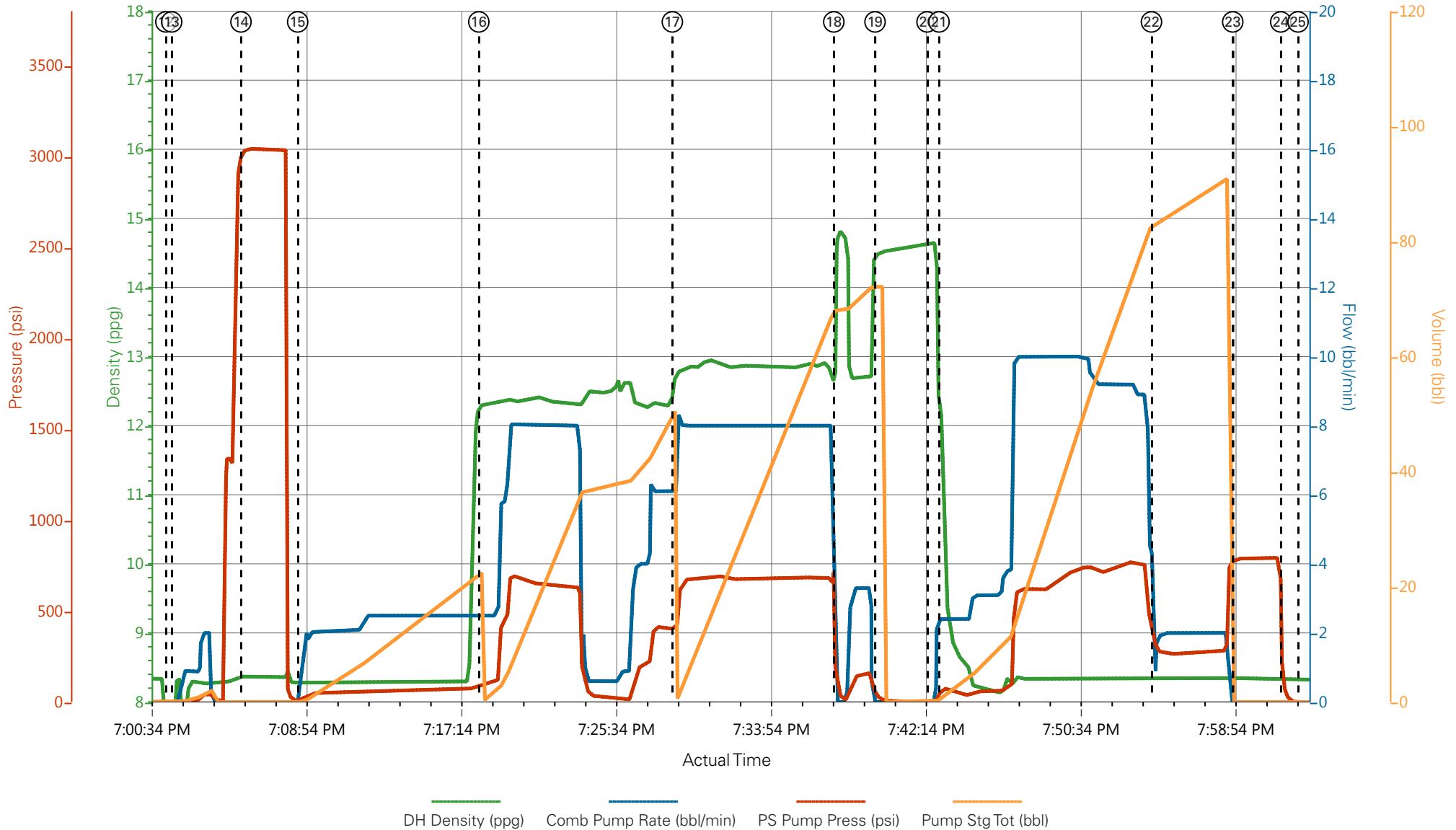
## 2.0 Real-Time Job Summary

### 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	12/12/2017	09:30:00	USER					
Event	2	Post-Job Safety Meeting (Pre Rig-Down)	12/12/2017	10:15:00	USER					JSA COMPLETE
Event	3	Pre-Convoy Safety Meeting	12/12/2017	12:00:00	USER					
Event	4	Crew Leave Yard	12/12/2017	12:10:00	USER					
Event	5	Arrive At Loc	12/12/2017	13:00:00	USER					RIG POOH WITH DP
Event	6	Assessment Of Location Safety Meeting	12/12/2017	16:00:00	USER					JSA COMPLETED
Event	7	Other	12/12/2017	16:00:10	USER					WATER TEST PH-7, CH-0, TEMP- 62
Event	8	Pre-Rig Up Safety Meeting	12/12/2017	16:20:00	USER					JSA COMPLETED
Event	9	Rig-Up Equipment	12/12/2017	16:35:00	USER					1 ELITE, 1 660. IRON ALREADY RAN TO RIGS STAND PIPE
Event	10	Other	12/12/2017	16:40:00	USER					RIG CIRCULATED FOR 35 MINS PRIOR TO JOB AT 600 GPM, WITH 137 PSI.
Event	11	Pre-Job Safety Meeting	12/12/2017	18:45:00	USER					JSA COMPLETED
Event	12	Start Job	12/12/2017	19:01:29	COM5					9 5/8 32.3# TP- 1155, TD-1160, S.J.-44.32, HOLE- 13 1/2, MUD# 9.4

Event	13	Prime Pumps	12/12/2017	19:01:48	COM5						
Event	14	Test Lines	12/12/2017	19:05:32	COM5			3043.00			3043 PSI TEST GOOD
Event	15	Pump Spacer 1	12/12/2017	19:08:35	COM5	8.33	2.50	70	20		FRESH WATER
Event	16	Pump Cement	12/12/2017	19:18:20	COM5	12.30	8.0	650	52.9		125 SKS, 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Event	17	Pump Tail Cement	12/12/2017	19:28:45	COM5	12.80	8.0	685	65.7		175 SKS, 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	18	Other	12/12/2017	19:37:26	USER						HIT KICKOUTS ON PUMP
Event	19	Shutdown	12/12/2017	19:39:40	COM5						TO DROP TOP PLUG
Event	20	Drop Top Plug	12/12/2017	19:42:28	COM5						AWAY
Event	21	Pump Displacement	12/12/2017	19:43:06	COM5	8.33	9.5	740	87.5		FRESH WATER
Event	22	Slow Rate	12/12/2017	19:54:32	USER	8.33	2.0	265	77		TO BUMP PLUG
Event	23	Bump Plug	12/12/2017	19:58:55	COM5			305	87.5		PLUG BUMPED
Event	24	Check Floats	12/12/2017	20:01:30	USER	8.32	0.00	790	0.0		FLOATS HELD, 0.5 BBLs BACK TO TRUCK
Event	25	End Job	12/12/2017	20:02:26	COM5						
Event	26	Other	12/12/2017	20:10:00	USER						HIT KICK OUTS AT END OF TAIL CEMENT, CHECKED NO VALVES SHUT THEN PROCEEDED TO FINSH UP TAIL CMT. 27 BBLs CMT TO SURFACE NO PIPE MOVEMENT
Event	27	Rig Down Lines	12/12/2017	20:45:00	USER						
Event	28	Pre-Convoy Safety Meeting	12/12/2017	22:00:00	USER						
Event	29	Crew Leave Location	12/12/2017	22:10:00	USER						THANKYOU FOR USING HALLIBURTON CEMENT, JAMES LEIST AND CREW

# TEP - PA 441-26 - 9 5/8 SURFACE CASING



- |  |                             |                    |                      |                              |
|--|-----------------------------|--------------------|----------------------|------------------------------|
| ① Call Out                               | ⑦ Other                     | ⑬ Prime Pumps      | ⑲ Shutdown           | 25 End Job                   |
| ② Post-Job Safety Meeting (Pre Rig-Down) | ⑧ Pre-Rig Up Safety Meeting | ⑭ Test Lines       | 20 Drop Top Plug     | 26 Other                     |
| ③ Pre-Convoy Safety Meeting              | ⑨ Rig-Up Equipment          | ⑮ Pump Spacer 1    | 21 Pump Displacement | 27 Rig Down Lines            |
| ④ Crew Leave Yard                        | ⑩ Other                     | ⑯ Pump Cement      | 22 Slow Rate         | 28 Pre-Convoy Safety Meeting |
| ⑤ Arrive At Loc                          | ⑪ Pre-Job Safety Meeting    | ⑰ Pump Tail Cement | 23 Bump Plug         | 29 Crew Leave Location       |
| ⑥ Assessment Of Location Safety Meeting  | ⑫ Start Job                 | ⑱ Other            | 24 Check Floats      |                              |

▼ **HALLIBURTON** | iCem® Service

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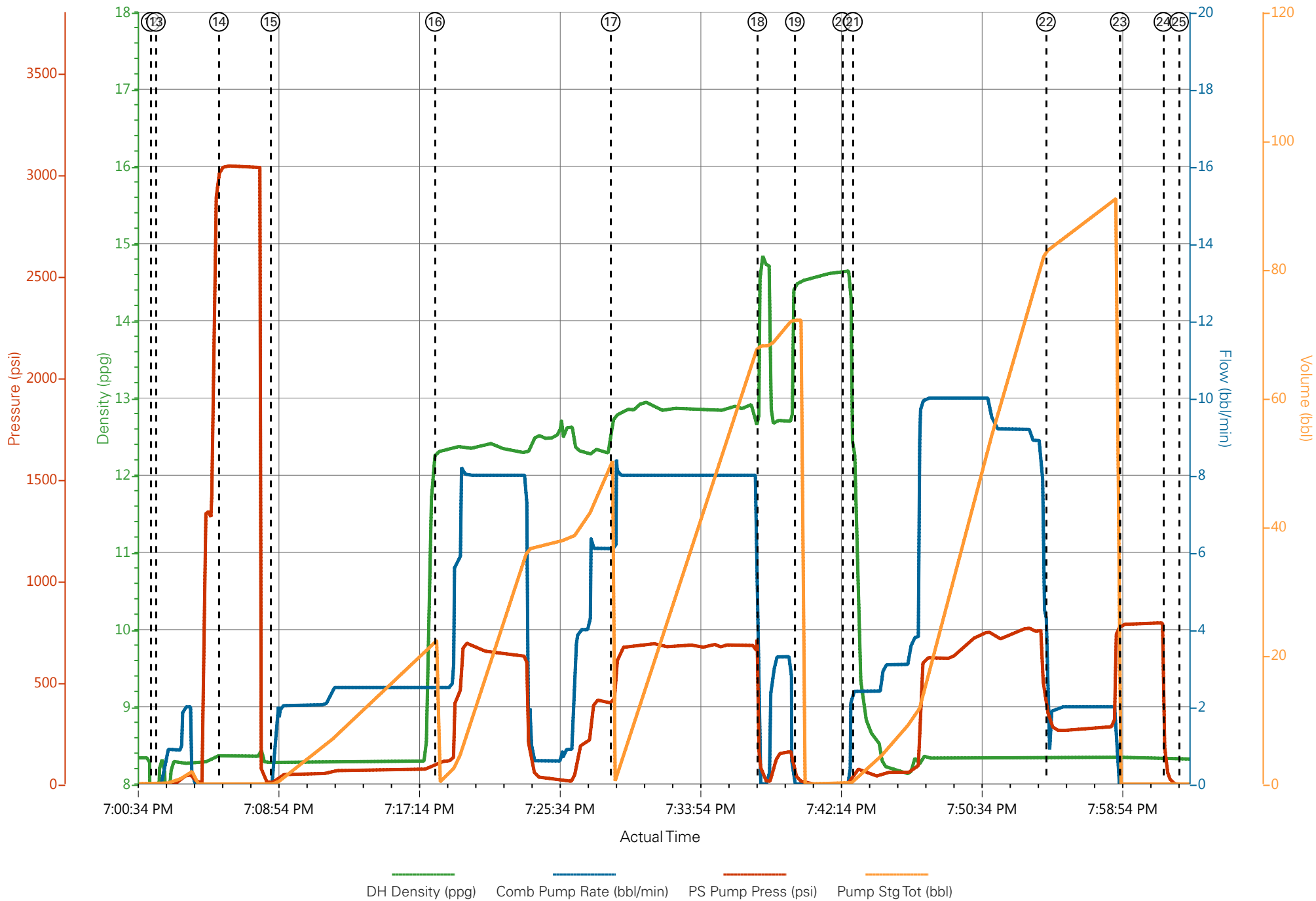
Edit

Customer : TERRA ENERGY PARTNERS-EBUS  
 Representative : MATT HUTSON

Job Date : 12/12/2017 5:15:48 PM  
 Sales Order # : 904497321

Well : PA 441-26  
 ELITE 4 : WES GOWEN

# TEP - PA 441-26 - 9 5/8 SURFACE CASING



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