

# HALLIBURTON

iCem<sup>®</sup> Service

## **TERRA ENERGY PARTNERS-EBUS**

**For: Terra**

Date: Saturday, May 26, 2018

**PA 11-26 Surface PJR**

API# 05-045-23704

Sincerely,

**Grand Junction Cement Engineering**

## 2.0 Real-Time Job Summary

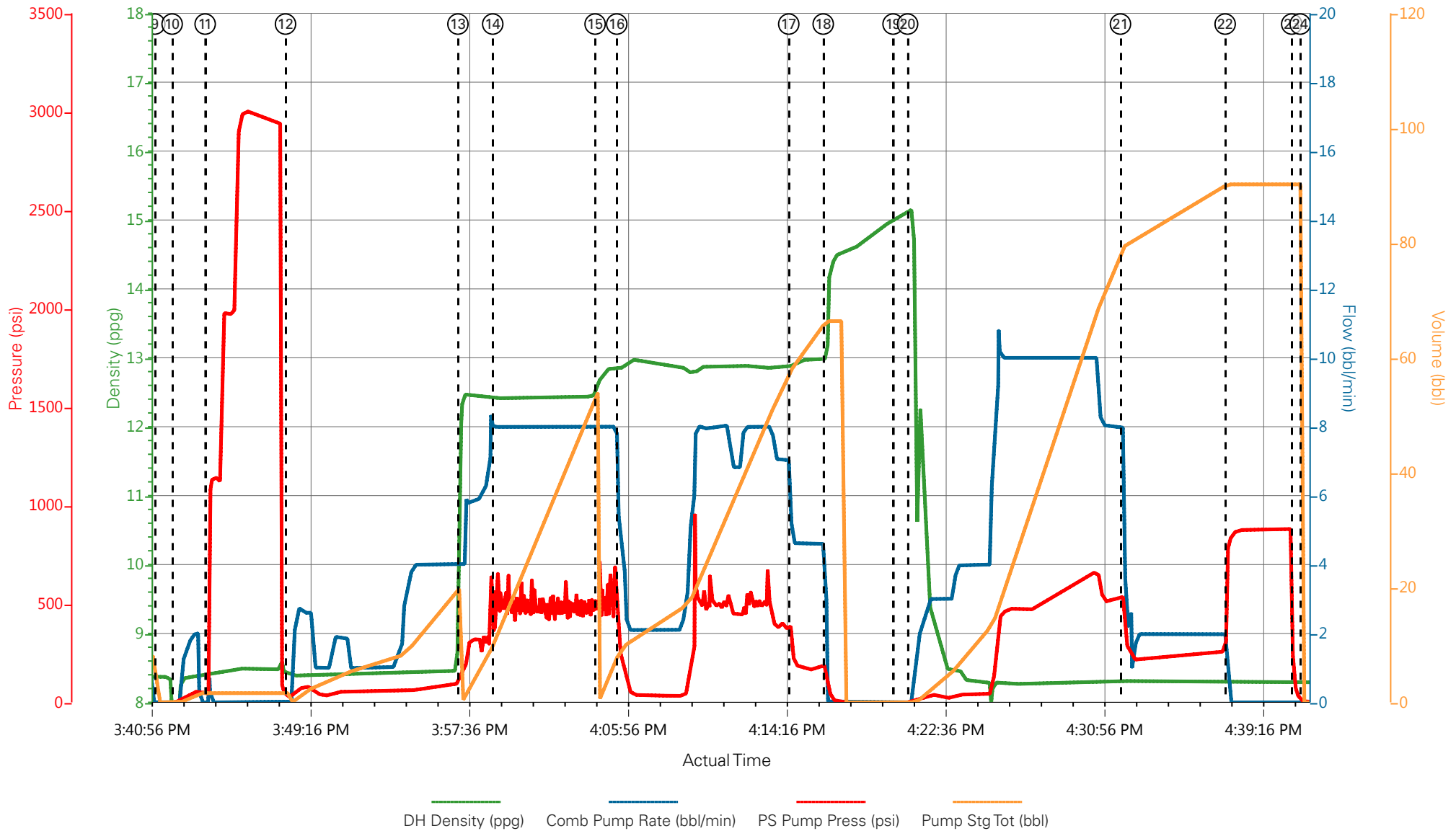
### 2.1 Job Event Log

| Type  | Seq. No. | Graph Label                           | Date      | Time     | Source | DH Density<br><i>(ppg)</i> | Comb Pump Rate<br><i>(bbl/min)</i> | PS Pump Press<br><i>(psi)</i> | Pump Stg Tot<br><i>(bbl)</i> | Comments  |
|-------|----------|---------------------------------------|-----------|----------|--------|----------------------------|------------------------------------|-------------------------------|------------------------------|---|
| Event | 1        | Call Out                              | 5/26/2018 | 08:30:00 | USER   |                            |                                    |                               |                              | REQUESTED ON LOCATION @ 14:30   |
| Event | 2        | Pre-Convoy Safety Meeting             | 5/26/2018 | 11:30:00 | USER   |                            |                                    |                               |                              | ALL HES PRESENT   |
| Event | 3        | Crew Leave Yard                       | 5/26/2018 | 11:40:00 | USER   |                            |                                    |                               |                              | 1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCKS, 1 450 SERVICE PICKUP   |
| Event | 4        | Arrive At Loc                         | 5/26/2018 | 13:00:00 | USER   |                            |                                    |                               |                              | ARRIVED 1 HOUR EARLY. RIG GETTING READY TO START RUNNING CASING   |
| Event | 5        | Assessment Of Location Safety Meeting | 5/26/2018 | 13:10:00 | 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             | 5/26/2018 | 13:15:00 | USER   |                            |                                    |                               |                              | ALL HES PRESENT   |
| Event | 7        | Rig-Up Equipment                      | 5/26/2018 | 13:20:00 | USER   |                            |                                    |                               |                              | HES RIGGED UP EQUIPMENT WITHOUT ENTERING RED ZONE.  |
| Event | 8        | Pre-Job Safety Meeting                | 5/26/2018 | 15:30:00 | USER   |                            |                                    |                               |                              | ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 12 BPM PRIOR TO JOB, PRESSURE @1200 PSI  |

|       |    |                   |           |          |      |      |    |     |      |  |   |
|-------|----|-------------------|-----------|----------|------|------|----|-----|------|--|---|
| Event | 9  | Start Job         | 5/26/2018 | 15:41:15 | COM6 |      |    |     |      |  | TD 1135', TP 1128.3' OF 9<br>5/8" 36# SURFACE CSG, FC<br>@ 1085.05', OH 13.5", MUD<br>9.3 PPG |
| Event | 10 | Fill Lines        | 5/26/2018 | 15:42:10 | COM6 | 8.33 | 2  | 56  | 2    |  | 8.33 PPG FRESH WATER  |
| Event | 11 | Test Lines        | 5/26/2018 | 15:43:54 | COM6 | 8.33 |    |     | 3002 |  | ALL LINES HELD PRESSURE<br>AT 3002 PSI  |
| Event | 12 | Pump H2O Spacer   | 5/26/2018 | 15:48:07 | COM6 | 8.33 | 4  | 90  | 20   |  | FRESH WATER   |
| Event | 13 | Pump Lead Cement  | 5/26/2018 | 15:57:10 | COM6 | 12.3 | 8  | 540 | 53   |  | 125 SKS VARICEM CMT 12.3<br>PPG, 2.38 FT3/SK, 13.77<br>GAL/SK                                 |
| Event | 14 | Check weight      | 5/26/2018 | 15:59:00 | COM6 |      |    |     |      |  | WEIGHT VERIFIED VIA<br>PRESSUREIZED MUD SCALES  |
| Event | 15 | Pump Tail Cement  | 5/26/2018 | 16:04:22 | COM6 | 12.8 | 8  | 530 | 65.8 |  | 175 SKS VARICEM CMT 12.8<br>PPG, 2.11 FT3/SK, 11.78<br>GAL/SK                                 |
| Event | 16 | Slow Rate         | 5/26/2018 | 16:05:30 | USER |      |    |     |      |  | SLOWED RATE BECAUSE<br>CELLAR PUMP COULD NOT<br>KEEP UP                                       |
| Event | 17 | Slow Rate         | 5/26/2018 | 16:14:32 | USER |      |    |     |      |  | SLOWED TO END CEMENT  |
| Event | 18 | Shutdown          | 5/26/2018 | 16:16:20 | USER |      |    |     |      |  | END OF CEMENT, WASH UP<br>ON TOP OF PLUG  |
| Event | 19 | Drop Top Plug     | 5/26/2018 | 16:20:00 | USER |      |    |     |      |  | VERIFIED BY FLAG<br>INDICATOR   |
| Event | 20 | Pump Displacement | 5/26/2018 | 16:20:46 | COM6 | 8.33 | 10 | 632 | 83.9 |  | FRESH WATER   |
| Event | 21 | Slow Rate         | 5/26/2018 | 16:31:56 | USER | 8.33 | 2  | 225 | 73.9 |  | SLOW RATE TO 2 BPM TO<br>BUMP PLUG  |
| Event | 22 | Bump Plug         | 5/26/2018 | 16:37:26 | COM6 | 8.33 | 2  | 280 | 83.9 |  | LAND PLUG AT 280 PSI,<br>BROUGHT UP TO 880 PSI  |
| Event | 23 | Check Floats      | 5/26/2018 | 16:40:56 | USER |      |    |     |      |  | FLOATS HELD, .5 BBL BACK<br>TO TRUCK  |

|       |    |  |           |          |      |   |
|-------|----|--|-----------|----------|------|---|
| Event | 24 | End Job                                | 5/26/2018 | 16:41:22 | USER | RETURNS THROUGHOUT JOB, 17 BBLS CMT TO SURFACE, 100# OF SUGAR USED. |
| Event | 25 | Post-Job Safety Meeting (Pre Rig-Down) | 5/26/2018 | 16:45:00 | USER | ALL HES PRESENT   |
| Event | 26 | Rig-Down Equipment                     | 5/26/2018 | 16:50:00 | USER | ALL HES PRESENT   |
| Event | 27 | Pre-Convoy Safety Meeting              | 5/26/2018 | 17:30:00 | USER | ALL HES PRESENT   |
| Event | 28 | Crew Leave Location                    | 5/26/2018 | 17:45:00 | USER | THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW   |

# TERRA PA 11-26, 9 5/8" SURFACE



- |   |                          |                    |                      |   |
|---|--------------------------|--------------------|----------------------|---|
| ① Call Out                              | ⑦ Rig-Up Equipment       | ⑬ Pump Lead Cement | ⑰ Drop Top Plug      | 25 Post-Job Safety Meeting (Pre Rig-Down) |
| ② Pre-Convoy Safety Meeting             | ⑧ Pre-Job Safety Meeting | ⑭ Check weight     | 20 Pump Displacement | 26 Rig-Down Equipment                     |
| ③ Crew Leave Yard                       | ⑨ Start Job              | ⑮ Pump Tail Cement | 21 Slow Rate         | 27 Pre-Convoy Safety Meeting              |
| ④ Arrive At Loc                         | ⑩ Fill Lines             | ⑯ Slow Rate        | 22 Bump Plug         | 28 Crew Leave Location                    |
| ⑤ Assessment Of Location Safety Meeting | ⑪ Test Lines             | ⑰ Slow Rate        | 23 Check Floats      |   |
| ⑥ Pre-Rig Up Safety Meeting             | ⑫ Pump H2O Spacer        | ⑱ Shutdown         | 24 End Job           |   |

▼ HALLIBURTON | iCem® Service

Created: 2018-05-26 11:20:18, Version: 4.2.393

Edit

Customer : TERRA ENERGY PARTNERS-EBUS  
 Representative : GARRET WADE

Job Date : 5/26/2018  
 Sales Order # : 904871965

Well : PA 11-26  
 ELITE 4 : D.BRENNECKE/ S.BLOSSOM

# TERRA PA 11-26, 9 5/8" SURFACE

