

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Terra

Date: Tuesday, February 27, 2018

PA 21-25 Surface PJR

API #05-045-23655-00

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

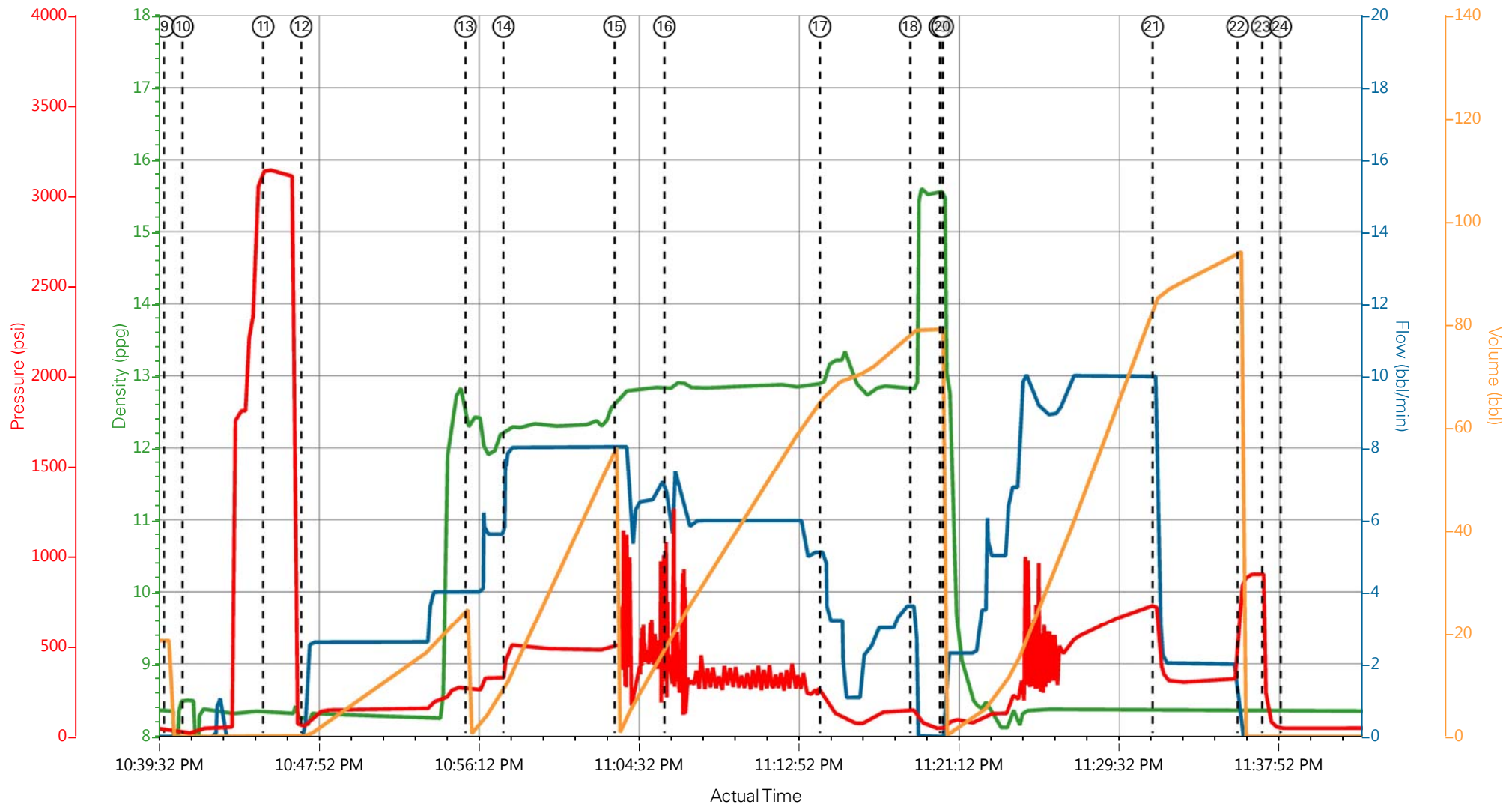
2.1 Job Event Log

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	2/26/2018	14:30:00	USER					REQUESTED ON LOCATION @ 18:30
Event	2	Pre-Convoy Safety Meeting	2/26/2018	16:00:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	2/26/2018	16:15:00	USER					1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCKS, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	2/26/2018	17:30:00	USER					ARRIVED 1 HOUR EARLY. RIG GETTING READY TO START RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	2/26/2018	17:40:00	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- 48F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	2/26/2018	17:50:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	2/26/2018	17:55:00	USER					HES RIGGED UP EQUIPMENT WITHOUT ENTERING RED ZONE.
Event	8	Pre-Job Safety Meeting	2/26/2018	22:30:54	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 12 BPM PRIOR TO JOB, PRESSURE @265 PSI

Event	9	Start Job	2/26/2018	22:40:00	COM6					TD 1137', TP 1130.91' OF 9 5/8" 36# SURFACE CSG, FC @ 1087.56', OH 13.5", MUD 9.3 PPG
Event	10	Prime Lines	2/26/2018	22:40:58	USER	8.33	2	110	2	8.33 PPG FRESH WATER
Event	11	Test Lines	2/26/2018	22:45:09	COM6	8.33	0	3140	0	ALL LINES HELD PRESSURE AT 3140 PSI
Event	12	Pump H2O Spacer	2/26/2018	22:47:08	COM6	8.33	4	150	20	8.33 PPG FRESH WATER
Event	13	Pump Lead Cement	2/26/2018	22:55:41	COM6	12.3	8	510	53	125 SKS VARICEM CMT 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Event	14	Check weight	2/26/2018	22:57:40	COM6					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	15	Pump Tail Cement	2/26/2018	23:03:27	COM6	12.8	6	260	65.8	175 SKS VARICEM CMT 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	16	Check weight	2/26/2018	23:06:03	COM6					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	17	Slow Rate	2/26/2018	23:14:09	USER					SLOWED RATE TO FIX DENSITY
Event	18	Shutdown	2/26/2018	23:18:51	USER					END OF CEMENT, WASH UP ON TOP OF PLUG
Event	19	Pump Displacement	2/26/2018	23:20:23	COM6	8.33	10	740	84	FRESH WATER
Event	20	Drop Top Plug	2/26/2018	23:20:32	USER					VERIFIED BY FLAG INDICATOR
Event	21	Slow Rate	2/26/2018	23:31:28	USER	8.33	2	310	74	SLOW RATE TO 2 BPM TO BUMP PLUG
Event	22	Bump Plug	2/26/2018	23:35:53	COM6	8.33	2	330	84	LAND PLUG AT 330 PSI, BROUGHT UP TO 900 PSI
Event	23	Check Floats	2/26/2018	23:37:10	USER					FLOATS HELD, .5 BBL BACK TO TRUCK

Event	24	End Job	2/26/2018	23:38:08	USER	RETURNS THROUGHOUT JOB, 8 BBLS CMT TO SURFACE
Event	25	Post-Job Safety Meeting (Pre Rig-Down)	2/26/2018	23:45:00	USER	ALL HES PRESENT
Event	26	Rig-Down Equipment	2/26/2018	23:55:00	USER	ALL HES PRESENT
Event	27	Pre-Convoy Safety Meeting	2/27/2018	01:00:00	USER	ALL HES PRESENT
Event	28	Crew Leave Location	2/27/2018	01:15:00	USER	THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW

TERRA TRI STATE PA 21-25, 9 5/8" SURFACE



DH Density (ppg) 0.16 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 30 Pump Stg Tot (bbl) 14.1

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|---|--------------------------|--------------------|---------------------|---|
| ① Call Out | ⑦ Rig-Up Equipment | ⑬ Pump Lead Cement | ⑰ Pump Displacement | 25 Post-Job Safety Meeting (Pre Rig-Down) |
| ② Pre-Convoy Safety Meeting | ⑧ Pre-Job Safety Meeting | ⑭ Check weight | 20 Drop Top Plug | 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 Prime Lines | ⑯ Check weight | 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

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Edit

Customer: TERRA ENERGY PARTNERS-EBUS
Representative: D. BURR

Job Date: 2/26/2018
Sales Order #: 904668019

Well: PA 21-25.
ELITE 4: ADAM ANGELO

TERRA TRI STATE PA 21-25, 9 5/8" SURFACE

