

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: Terra

Date: Thursday, August 16, 2018

PA 334-26 Surface PJR

API# 05-045-23705-00

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	PS Pump Press <i>(psi)</i>	DH Density <i>(ppg)</i>	Pump Stg Tot <i>(bbl)</i>	Comb Pump Rate <i>(bbl/min)</i>	Comments
Event	1	Call Out	8/16/2018	00:00:00	USER					REQUESTED ON LOCATION TIME 06:00
Event	2	Depart Yard Safety Meeting	8/16/2018	02:00:00	USER					WITH HES, 1 F-450, 1 ELITE CEMENTING UNIT, 1 660 BULK TRUCK, JSA COMPLETED
Event	3	Arrive At Loc	8/16/2018	03:40:00	USER					RIG PULLING DRILL PIPE UPON HES, ARRIVAL
Event	4	Assessment Of Location Safety Meeting	8/16/2018	03:50:00	USER					WITH HES, JSA COMPLETED, SDS OFFERED FOR ALL HES MATERIALS
Event	5	Pre-Rig Up Safety Meeting	8/16/2018	06:00:00	USER					WITH HES, JSA COMPLETED
Event	6	Rig-Up Equipment	8/16/2018	06:10:00	USER					1 LINE RAN TO THE FLOOR, 1 9.625 IN QUICK-LATCH PLUG CONTAINER
Event	7	Other	8/16/2018	06:20:00	USER					TD 1138 FT, CSG 1131.45 FT 9.625 IN 36 LB/FT J-55, HOLE 13.5 IN, SHOE 44.74FT
Event	8	Other	8/16/2018	06:30:06	USER					RIG CIRCULATION, 300 BBL, 10 BBL/MIN, 188 PSI, RAT HOLE LENGTH 7 FT, PIPE WAS STATIC, MW 9.6 LB/GAL WBM
Event	9	Other	8/16/2018	07:12:31	USER	-2.00	8.37	0.00	0.00	WATER TEST PH 8.0, CHLOR 0, TEMP 64 DEG F
Event	10	Check Weight	8/16/2018	07:13:03	USER	-2.00	8.38	0.00	0.00	
Event	11	Pre-Job Safety Meeting	8/16/2018	08:09:53	USER	0.00	8.38	0.00	0.00	WITH HES, TEP, AND H&P 271
Event	12	Start Job	8/16/2018	08:15:00	USER	0.00	8.38	0.00	0.00	
Event	13	Fill Lines	8/16/2018	08:21:47	USER	33.00	8.40	0.70	2.00	5 BBL FRESH WATER, RETURNS AT 2 BBL AWAY

Event	14	Test Lines	8/16/2018	08:24:39	USER	2498.00	8.42	2.50	0.00	LOW TEST AT 880 PSI, HIGH TEST AT 2499 PSI, PRESSURE HOLDING
Event	15	Pump Fresh Water Spacer	8/16/2018	08:27:43	USER	37.00	8.37	0.40	2.00	20 BBL FRESH WATER
Event	16	Check Weight	8/16/2018	08:30:55	COM4	45.00	8.37	6.20	1.80	
Event	17	Pump Lead Cement	8/16/2018	08:35:58	USER	177.00	12.38	0.50	3.90	MIXED AT 12.3 LB/GAL, 125 SKS, 2.38 FT3/SK, 13.77 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES
Event	18	Pump Tail Cement	8/16/2018	08:43:03	USER	480.00	12.66	0.70	8.00	MIXED AT 12.8 LB/GAL, 175 SKS, 2.11 FT3/SK, 11.78 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES
Event	19	Check Weight	8/16/2018	08:43:54	COM4	504.00	12.90	7.50	8.00	
Event	20	Shutdown	8/16/2018	08:51:50	USER	309.00	12.94	66.50	6.00	
Event	21	Drop Top Plug	8/16/2018	08:54:17	USER	3.00	17.76	66.70	0.00	PLUG LAUNCHED, CUSTOMER WITNESSED
Event	22	Pump Displacement	8/16/2018	08:55:17	USER	59.00	11.82	0.60	3.00	FRESH WATER
Event	23	Slow Rate	8/16/2018	09:04:53	USER	506.00	8.31	74.10	6.50	SLOWED AT 70 BBL AWAY TO 2 BBL/MIN
Event	24	Bump Plug	8/16/2018	09:10:41	USER	285.00	8.32	86.90	2.60	PLUG BUMPED AT CALCULATED DISPLACEMENT, 300 PSI
Event	25	Check Floats	8/16/2018	09:13:21	USER	999.00	8.33	87.40	0.00	FLOATS HOLDING, .5 BBL RETURNED TO THE TRUCK
Event	26	End Job	8/16/2018	09:16:00	USER	4.00	8.31	0.00	0.00	GOOD CIRCULATION, RIG USED HES TOP PLUG, RIG USED 40 LBS SUGAR, NO ADD HOURS
Event	27	Pre-Rig Down Safety Meeting	8/16/2018	09:20:00	USER	3.00	8.31	0.00	0.00	WITH HES, JSA COMPLETD
Event	28	Rig Down Lines	8/16/2018	09:25:00	USER					
Event	29	Pre-Convoy Safety Meeting	8/16/2018	09:35:00	USER					WITH HES, JSA COMPLETED

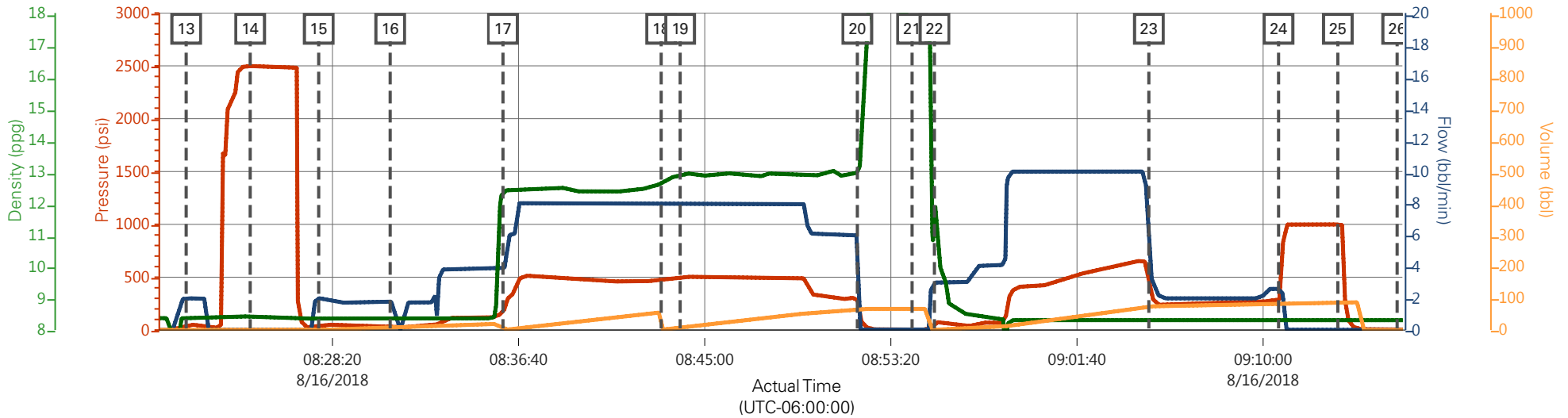
Event 30 Other 8/16/2018 09:40:00 USER

SPACER 20 BBL FRESH WATER, LEAD CEMENT
52.9 BBL, TAIL CEMENT 65.7 BBL, FINAL
DISPLACEMENT 84 BBL, 20 BBL CEMENT
CIRCULATED TO SURFACE, TOP OF TAIL CEMENT
414 FT

Event 31 Crew Leave Location 8/16/2018 09:55:00 USER

THANKS FOR USING HALLIBURTON, JOHN
KEANE AND CREW

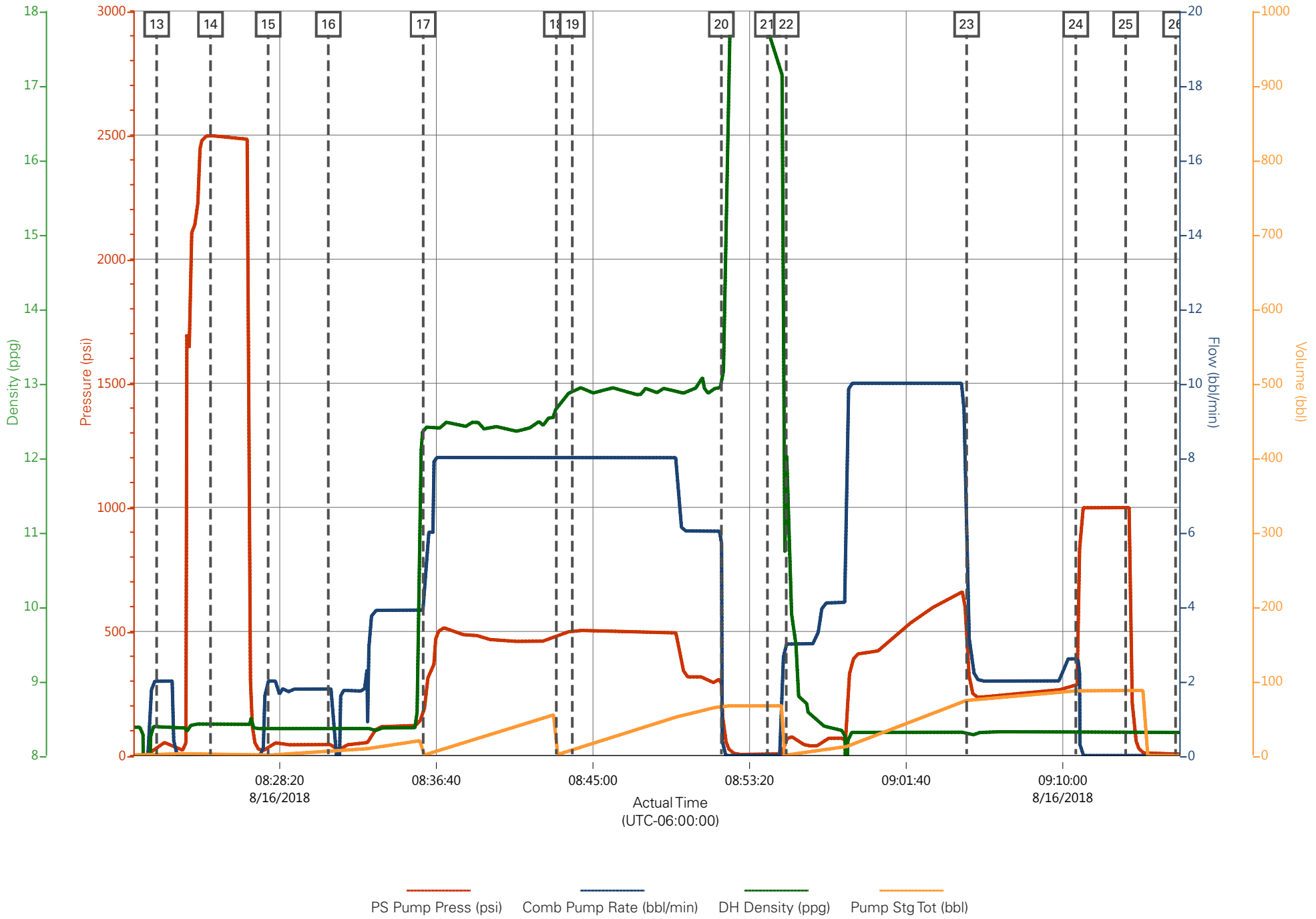
TEP - FEDERAL PA-334-26 - SURFACE



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

Description	Actual Time (UTC-06:00:00)	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	DH Density (ppg)	Pump Stg Tot (bbl)
13 Fill Lines	08:21:47	33.00	2.00	8.40	0.70
14 Test Lines	08:24:39	2498.00	0.00	8.42	2.50
15 Pump Fresh Water Spacer	08:27:43	37.00	2.00	8.37	0.40
16 Check Weight	08:30:55	45.00	1.80	8.37	6.20
17 Pump Lead Cement	08:35:58	177.00	3.90	12.38	0.50
18 Pump Tail Cement	08:43:03	480.00	8.00	12.66	0.70
19 Check Weight	08:43:54	504.00	8.00	12.90	7.50
20 Shutdown	08:51:50	309.00	6.00	12.94	66.50
21 Drop Top Plug	08:54:17	3.00	0.00	17.76	66.70
22 Pump Displacement	08:55:17	59.00	3.00	11.82	0.60
23 Slow Rate	09:04:53	506.00	6.50	8.31	74.10
24 Bump Plug	09:10:41	284.00	2.60	8.32	86.90
25 Check Floats	09:13:21	999.00	0.00	8.33	87.40
26 End Job	09:16:00	4.00	0.00	8.31	0.00

TEP - FEDERAL PA-334-26 - SURFACE



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