

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

Date: Wednesday, June 06, 2018

Federal PA 521-26

Laramie Federal PA 521-26 Surface

API # 05-045023715-00

Job Date: Friday, June 01, 2018

Sincerely,

Grand Junction Cement Engineering

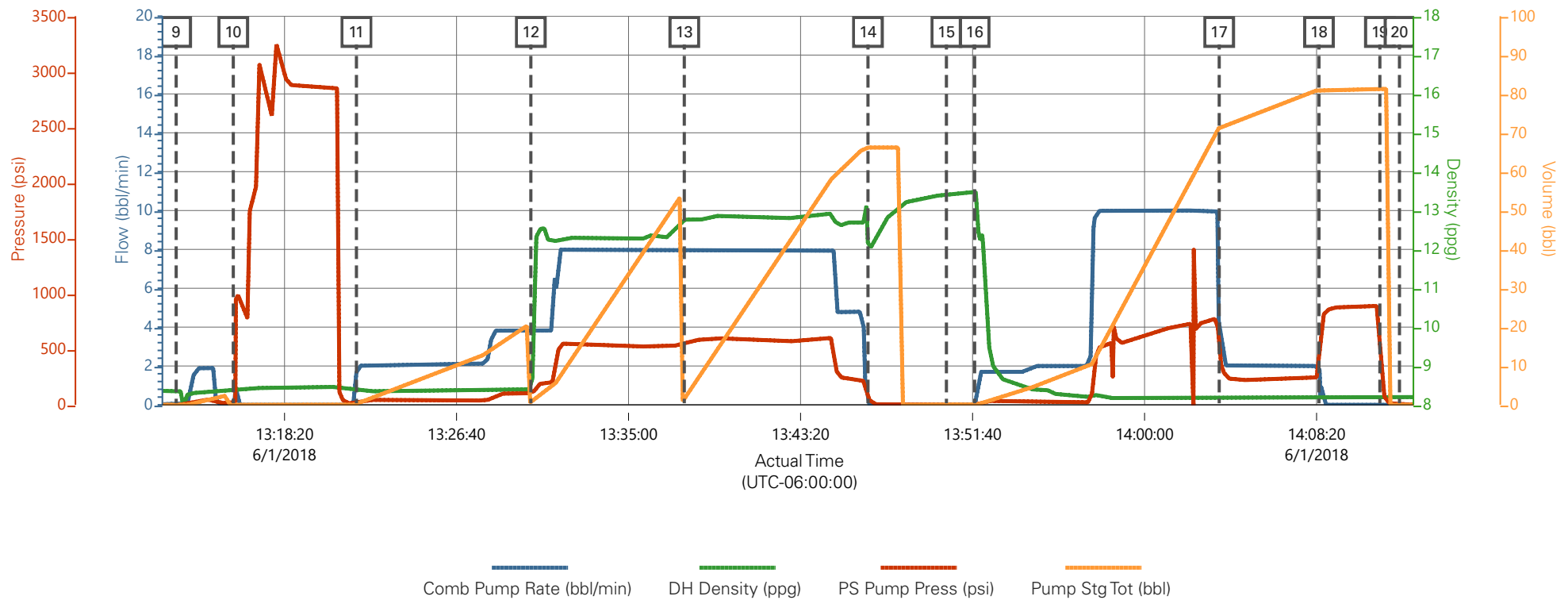
1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Graph 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	6/1/2018	05:00:00	USER					REQUESTED ON LOCATION 6/1/18 @ 11:00
Event	2	Depart Yard Safety Meeting	6/1/2018	07:55:00	USER					JSA COMPLETED
Event	3	Crew Leave Shop	6/1/2018	08:00:00	USER					
Event	4	Arrive At Loc	6/1/2018	09:00:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	6/1/2018	09:05:00	USER					JSA COMPLETED
Event	6	Pre-Rig Up Safety Meeting	6/1/2018	09:25:00	USER					JSA COMPLETED
Event	7	Rig-Up Equipment	6/1/2018	09:30:00	USER					
Event	8	Pre-Job Safety Meeting	6/1/2018	12:30:00	USER					JSA COMPLETED
Event	9	Start Job	6/1/2018	13:13:05	COM4					9 5/8" - 36# CASING IN 13 1/2" OH, TD 1115', TP , 1108.2', ST 44.1', MUD 9.6 PPG, WATER TEMP 60, PH 7, CHLORIDES 0
Event	10	Test Lines	6/1/2018	13:15:51	COM4			3000.00		TEST LINES TO 3000 PSI
Event	11	Pump Spacer 1	6/1/2018	13:21:49	COM4	4.00	8.33	100.00	20.00	20 BBL FRESH WATER
Event	12	Pump Lead Cement	6/1/2018	13:30:16	COM4	8.00	12.30	550.00	53.00	53 BBLS LEAD, 125 SKS @ 12.3 PPG / 2.38 YLD / 13.77 GAL/SK
Event	13	Pump Tail Cement	6/1/2018	13:37:42	COM4	8.00	12.80	580.00	65.80	65.8 BBLS TAIL, 175 SKS @ 12.8 PPG / 2.11 YLD / 11.78 GAL/SK

Event	14	Shutdown	6/1/2018	13:46:36	COM4					
Event	15	Drop Top Plug	6/1/2018	13:50:24	COM4					PLUG AWAY
Event	16	Pump Displacement	6/1/2018	13:51:46	COM4	10.00	8.33	790.00	82.30	82.3 BBLS FRESH WATER DISPLACEMENT
Event	17	Slow Rate	6/1/2018	14:03:37	USER	2.00	8.33	240.00	72.00	SLOW RATE AT 72 BBLS AWAY TO 2 BBL/MIN, 790 PSI TO 240 PSI
Event	18	Bump Plug	6/1/2018	14:08:27	COM4	2.00	8.33	250.00	82.30	PLUG BUMPED AT CALCULATED, FINAL CIRCULATING PRESSURE 250 PSI BROUGHT TO 850 PSI
Event	19	CHECK FLOATS	6/1/2018	14:11:24	COM4					FLOATS HELD, 1/4 BBL BACK TO PUMP
Event	20	End Job	6/1/2018	14:12:21	COM4					GOOD CIRCULATION THOROUGHOUT, PIPE LEFT STATIC, 18 BBLS CEMENT TO SURFACE, 40# SUGAR USED, NO ADD HOURS CHARGED
Event	21	Pre-Rig Down Safety Meeting	6/1/2018	14:15:00	USER					JSA COMPLETED
Event	22	Rig-Down Equipment	6/1/2018	14:20:00	USER					
Event	23	Pre-Convoy Safety Meeting	6/1/2018	14:55:00	USER					JSA COMPLETED
Event	24	Crew Leave Location	6/1/2018	15:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING OF GRAND JUNCTION, CO - RYAN MARTIN AND CREW

TEP - FEDERAL PA 521-26 - 9 5/8" SURFACE CASING



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	13:13:05	0.00	8.37	-5.00	0.00	
10 Test Lines	13:15:51	0.00	8.36	13.00	0.00	
11 Pump Spacer 1	13:21:49	1.70	8.38	19.00	0.00	
12 Pump Lead Cement	13:30:16	3.80	8.39	100.00	0.70	
13 Pump Tail Cement	13:37:42	7.90	12.77	564.00	1.50	
14 Shutdown	13:46:36	0.00	12.10	60.00	66.20	
15 Drop Top Plug	13:50:24	0.00	13.41	-2.00	0.00	
16 Pump Displacement	13:51:46	0.00	13.49	-2.00	0.00	
17 Slow Rate	14:03:37	3.80	8.20	438.00	71.40	
18 Bump Plug	14:08:27	1.90	8.19	316.00	81.10	
19 CHECK FLOATS	14:11:24	0.00	8.22	876.00	81.30	
20 End Job	14:12:21	0.00	8.20	-2.00	0.00	

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