

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Terra

Date: Thursday, January 04, 2018

PA 341-26 Surface PJR

API# 05-045-23650-00

Sincerely,

Grand Junction Cement Engineering

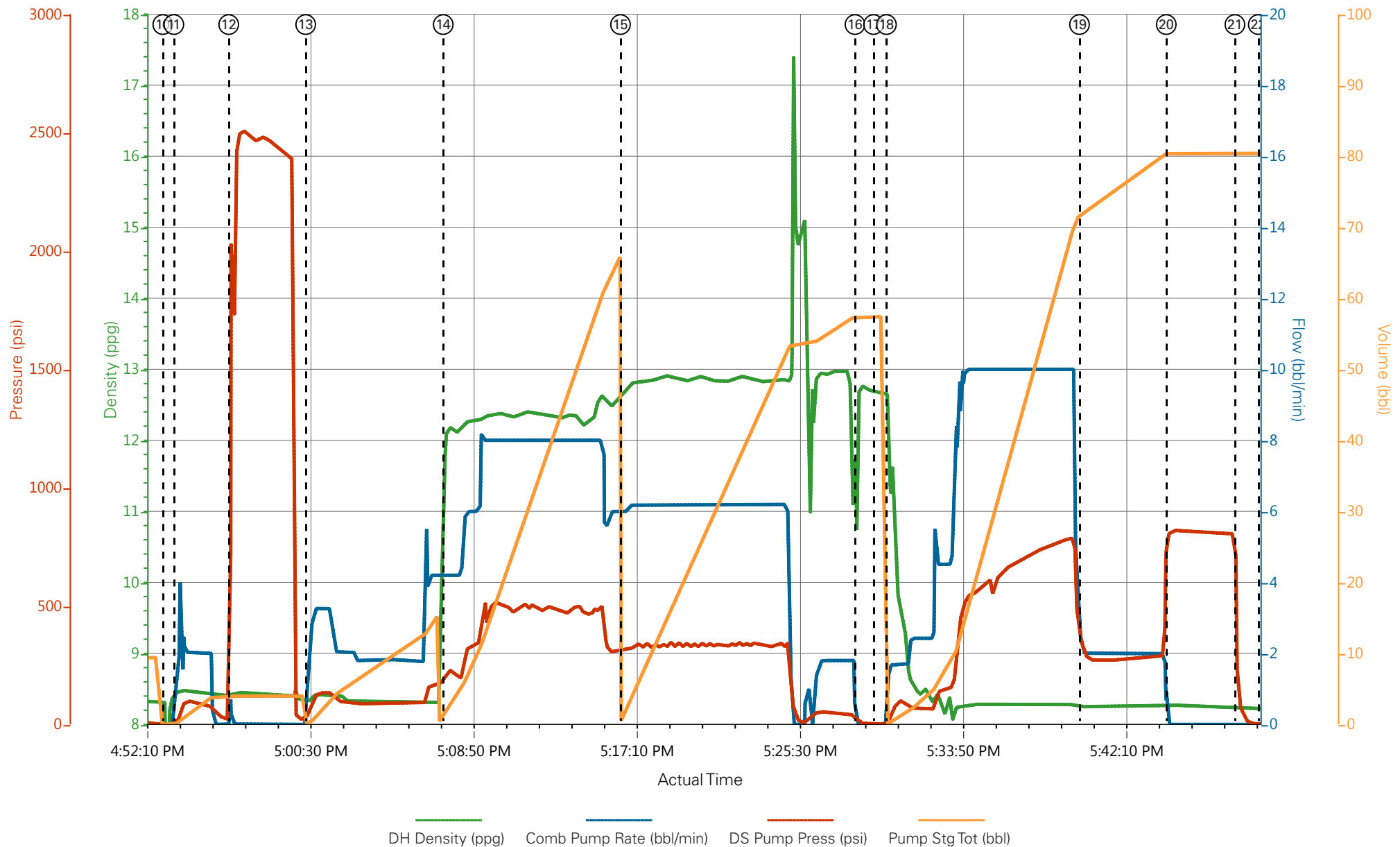
2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Driv-Side Pump Pressure (psi)	Pump Stage Total (bbl)	Comments
Event	1	Call Out	1/4/2018	06:00:00						Requested on Location @ 12:00
Event	2	Pre-Convoy Safety Meeting	1/4/2018	08:00:00						
Event	3	Crew Leave Yard	1/4/2018	08:20:00						1 Elite, 1 660, 1 pickup
Event	4	Arrive At Loc	1/4/2018	12:00:00						Rig pulling drill pipe
Event	5	Assessment Of Location Safety Meeting	1/4/2018	12:10:00						JSA completed - Customer offered/received SDS - water test pH 7.0, Cl <200, temp 74 degrees
Event	6	Pre-Rig Up Safety Meeting	1/4/2018	12:20:00						
Event	7	Rig-Up Equipment	1/4/2018	12:45:00						1 hardline to standpipe, water hoses to upright, bulk hoses to 660.
Event	8	Other	1/4/2018	14:06:51						Rig Circulated 30 mins prior to cement job at 450 gpm 300 psi
Event	9	Pre-Job Safety Meeting	1/4/2018	15:40:00						All HES personnel, rig crew, and company rep
Event	10	Start Job	1/4/2018	16:53:07						TP 1103.15, SJ 39.73, MUD# 9.6, OH 13 1/2", CSG 9 5/8"
Event	11	Fill Lines	1/4/2018	16:53:41		8.33	2	90	5	Fresh Water
Event	12	Test Lines	1/4/2018	16:56:29				2560		Held pressure 2 minutes no leaks
Event	13	Pump Spacer	1/4/2018	17:00:25		8.33	4	180	15	Fresh Water
Event	14	Pump Lead Cement	1/4/2018	17:07:26		12.3	8	530	53	125 sks, 12.3 ppg, 2.38 yield, 13.77 gal-sk

Event	15	Pump Tail Cement	1/4/2018	17:16:29	12.8	6	360	65.8	175 sks, 12.8, 2.11 yield, 11.78 gal-sk
Event	16	Shutdown	1/4/2018	17:28:28					Wash up on top of plug
Event	17	Drop Top Plug	1/4/2018	17:29:25					Customer verified plug launch
Event	18	Pump Displacement	1/4/2018	17:30:04	8.33	10	790		Fresh Water
Event	19	Slow Rate	1/4/2018	17:39:56	8.33	2	270	73	Slow Rate 10 bbls to calculated displacement
Event	20	Bump Plug	1/4/2018	17:44:22	8.33		815	83.7	Plug Bumped at psi 270, Brought up to psi 815
Event	21	Check Floats	1/4/2018	17:47:52					Floats Held 1/2 bbl Back to Truck
Event	22	End Job	1/4/2018	17:49:04					Good Returns Throughout Job, 26 bbl Of Cement To Surface
Event	23	Pre-Rig Down Safety Meeting	1/4/2018	18:18:37					40 # of Sugar, No Add Hours
Event	24	Rig-Down Equipment	1/4/2018	18:24:23					
Event	25	Pre-Convoy Safety Meeting	1/4/2018	18:36:40					
Event	26	Crew Leave Location	1/4/2018	18:39:48					Thanks For Using Halliburton Cement. Chris Martinez And Crew

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① Call Out n/a;n/a;n/a;n/a	⑧ Other n/a;n/a;n/a;n/a	⑮ Pump Tail Cement 12.65;6;321;1.4	22 End Job 8.22;0;1;80.4
② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a	⑨ Pre-Job Safety Meeting 0;0;-2;0.1	⑯ Shutdown 12.53;0;11;57.4	23 Pre-Rig Down Safety Meeting n/a;n/a;n/a;n/a
③ Crew Leave Yard n/a;n/a;n/a;n/a	⑩ Start Job 6.92;0;-2;0	⑰ Drop Top Plug 12.68;0;1;57.4	24 Rig-Down Equipment n/a;n/a;n/a;n/a
④ Arrive At Loc n/a;n/a;n/a;n/a	⑪ Fill Lines 8.45;1.8;13;0.2	⑱ Pump Displacement 11.48;1.7;27;0.2	25 Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a
⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a	⑫ Test Lines 8.37;0;1846;4	⑲ Slow Rate 8.25;2;322;72.1	26 Crew Leave Location n/a;n/a;n/a;n/a
⑥ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a	⑬ Pump Spacer 8.33;1.4;52;0.1	20 Bump Plug 8.27;0;809;80.4	
⑦ Rig-Up Equipment n/a;n/a;n/a;n/a	⑭ Pump Lead Cement 12.13;4.2;219;2	21 Check Floats 8.22;0;131;80.4	

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