

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Terra Energy

PA 643-26

API# 05-045-23846-00

PA 643-26 Surface

Job Date: Friday, February 02, 2018

Sincerely,

Grand Junction Cement Engineering

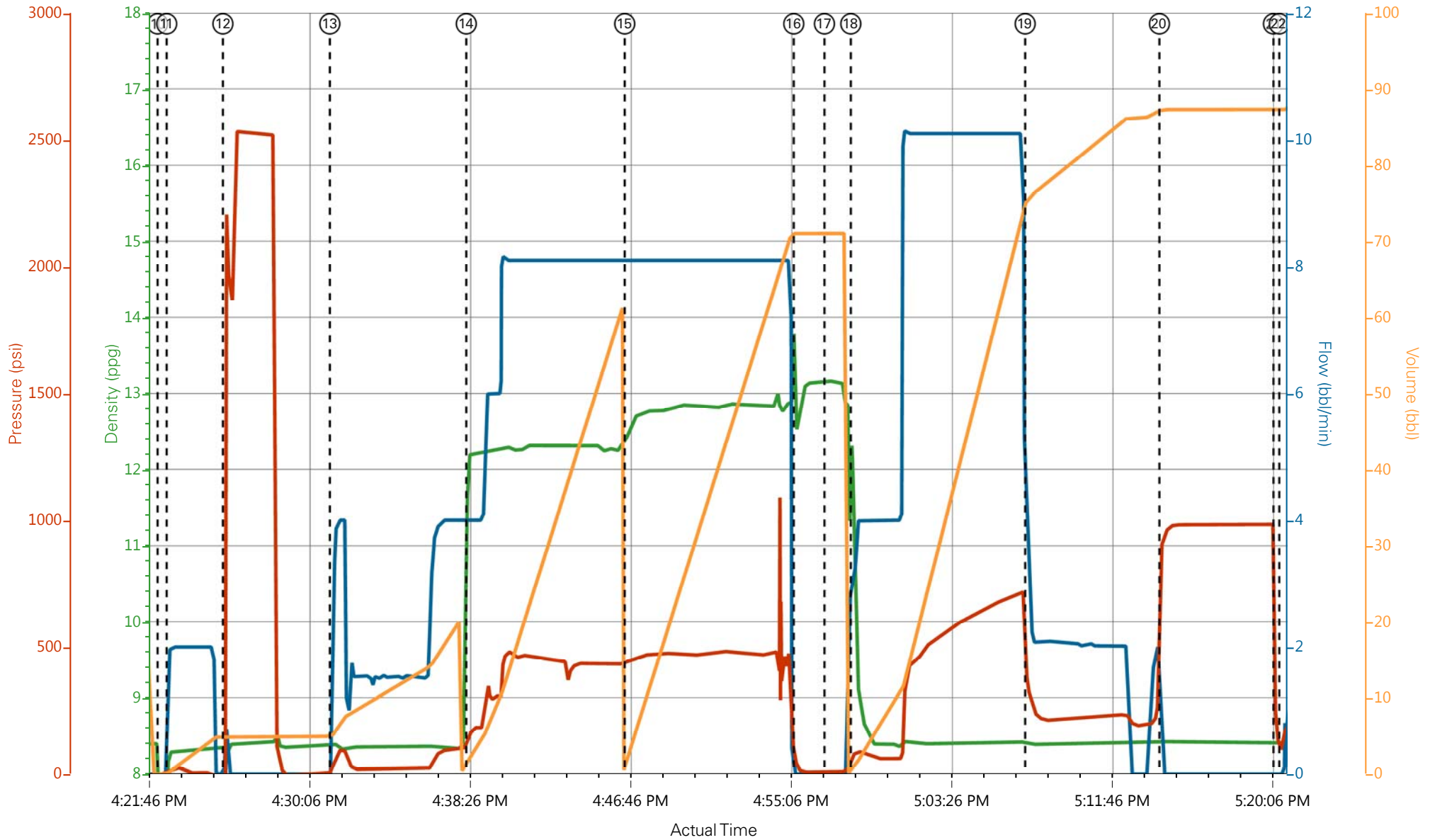
1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Downhole Density <i>(ppg)</i>	Combined Pump Rate <i>(bbl/min)</i>	Driv-Side Pump Pressure <i>(psi)</i>	Pump Stage Total <i>(bbl)</i>	Comments
Event	1	Call Out	2/2/2018	04:30:00						Requested on Location @ 11:00
Event	2	Pre-Convoy Safety Meeting	2/2/2018	06:00:00						
Event	3	Crew Leave Yard	2/2/2018	06:30:00						1 Elite, 1 660, 1 pickup
Event	4	Arrive At Loc	2/2/2018	11:00:00						Rig running casing
Event	5	Assessment Of Location Safety Meeting	2/2/2018	11:05:00						JSA completed - Customer offered/received SDS - water test pH 7.0, CI <200, temp 50 degrees
Event	6	Pre-Rig Up Safety Meeting	2/2/2018	11:08:00						
Event	7	Rig-Up Equipment	2/2/2018	11:10:00						1 hardline to standpipe, water hoses to upright, bulk hoses to 660.
Event	8	Other	2/2/2018	11:56:27						Rig Circulated 30 mins prior to cement job at 450 gpm 300 psi
Event	9	Pre-Job Safety Meeting	2/2/2018	15:20:00						All HES personnel, rig crew, and company rep
Event	10	Start Job	2/2/2018	16:22:23						TD 1110, TP 1083.8, SJ 44.2, CSG 9 5/8" 32.3# H-40, OH 13 1/2", MUD 9.3 #
Event	11	Fill Lines	2/2/2018	16:22:51		8.33	2	55	5	Fresh Water
Event	12	Test Lines	2/2/2018	16:25:46				2535		Held pressure 2 minutes no leaks
Event	13	Pump Spacer	2/2/2018	16:31:19		8.33	4	85	15	Fresh Water
Event	14	Pump Lead Cement	2/2/2018	16:38:24		12.3	8	495	52.9	125 sks, 12.3 ppg, 2.38 yield, 13.77 gal/sk

Event	15	Pump Tail Cement	2/2/2018	16:46:37	12.8	8	510	65.8	175 sks, 12.8 ppg, 2.11 yield, 11.78 gal/sk
Event	16	Shutdown	2/2/2018	16:55:24					
Event	17	Drop Top Plug	2/2/2018	16:56:59					Wash up on top of plug
Event	18	Pump Displacement	2/2/2018	16:58:21	8.33	10	750	81.8	Fresh Water
Event	19	Slow Rate	2/2/2018	17:07:24	8.33	2	225	71	Slow Rate 10 bbls to calculated displacement
Event	20	Bump Plug	2/2/2018	17:14:22	8.33		930		Plug Bumped at 225 psi, Brought up to 930 psi
Event	21	Check Floats	2/2/2018	17:20:17					Floats not holding, Shut in Well
Event	22	End Job	2/2/2018	17:20:35					good returns throughout job, 23 bbls of cement to surface.
Event	23	Pre-Rig Down Safety Meeting	2/2/2018	17:55:32					40 lbs sugar, No add hours
Event	24	Rig-Down Equipment	2/2/2018	18:24:45					
Event	25	Pre-Convoy Safety Meeting	2/2/2018	18:54:37					
Event	26	Crew Leave Location	2/2/2018	19:01:26					Thanks For Using Halliburton Cement. Chris Martinez And Crew

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

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|---|---|--|--------------------------------------|---------------------|
| ① Call Out n/a;n/a;n/a;n/a | ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑨ Pre-Job Safety Meeting 8.4;0;-4;16.3 | ⑬ Pump Spacer 8.39;2.6;23;5.2 | ⑰ Drop Top Plug 13 |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑥ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a | ⑩ Start Job 0.63;0;-3;0 | ⑭ Pump Lead Cement 12.19;4;152;2 | ⑱ Pump Displacem |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a | ⑦ Rig-Up Equipment n/a;n/a;n/a;n/a | ⑪ Fill Lines 8.28;2;3;0.3 | ⑮ Pump Tail Cement 12.47;8.1;423;2.4 | ⑲ Slow Rate 8.4;3.2 |
| ④ Arrive At Loc n/a;n/a;n/a;n/a | ⑧ Other 0.04;0;8;0.1 | ⑫ Test Lines 8.34;0.4;-1;4.8 | ⑯ Shutdown 12.54;0;30;71 | ⑳ Bump Plug 8.42 |

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