

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: Terra

Date: Monday, July 24, 2017

Federal GM 11-10 Surface

API# 05-045-22694

Sincerely,

Grand Junction Cement Engineering

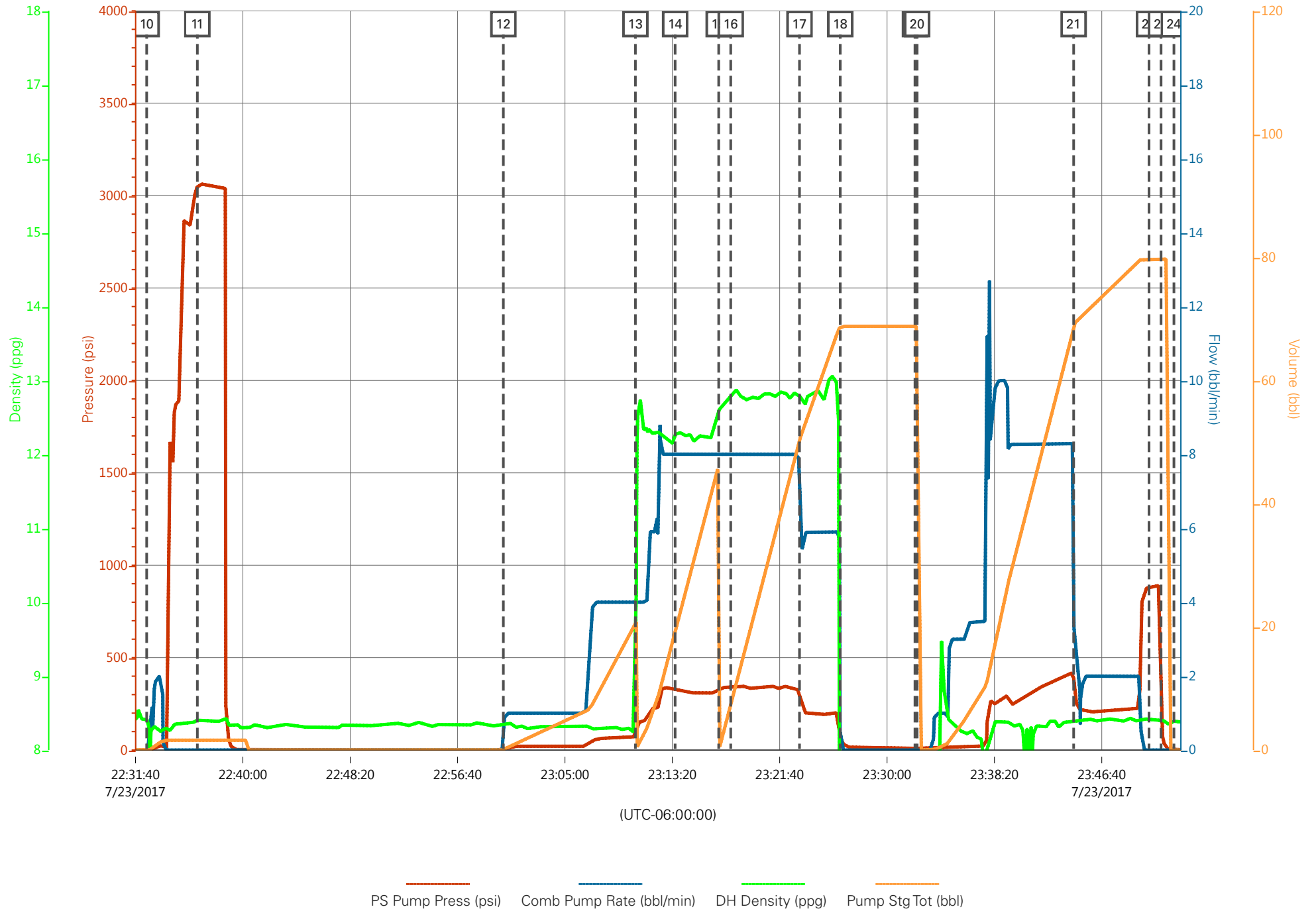
1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	DH Density (ppg)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	7/23/2017	14:30:00	USER					Requested on Location @ 2200
Event	2	Pre-convoy Safety Meeting	7/23/2017	17:45:00	USER					
Event	3	Crew Leave Yard	7/23/2017	18:00:00	USER					1 Elite, 1 660, 1 pickup
Event	4	Arrive at Location	7/23/2017	20:30:00	USER					Rig running casing
Event	5	Assessment of Location	7/23/2017	20:40:00	USER					JSA completed - Customer offered/received SDS - Water test pH 7.0, CI 200, temp 65 degrees
Event	6	Pre-Rig Up Safety Meeting	7/23/2017	20:50:00	USER					
Event	7	Rig-Up Equipment	7/23/2017	21:00:00	USER					DME iron to standpipe. Water hoses to upright and bulk hoses to 660.
Event	8	Start Job	7/23/2017	21:47:28	COM5					TD 1026', TP 1016', SJ 39', CSG 9 5/8" 32.3 LB/FT, OH 13 1/2", MUD 9.1 PPG, Rig circulated bottoms up at 10 bpm 220 psi no gas.
Event	9	Pre-Job Safety Meeting	7/23/2017	22:15:00	USER					All HES personnel, rig crew, and company rep
Event	10	Prime Lines	7/23/2017	22:32:32	COM5	25.0	2.0	8.4	2.0	Fresh Water
Event	11	Test Lines	7/23/2017	22:36:28	COM5	3064.0				Tested lines to 3064, pressure holding
Event	12	Pump Water Spacer	7/23/2017	23:00:13	COM5	60.0	4.0	8.4	20.0	Fresh Water
Event	13	Pump Lead Cement	7/23/2017	23:10:28	COM5	315.0	8.0	12.3	42.4	100 Sks 12.3 ppg 2.38 yield 13.77 gal/sk
Event	14	Check Weight	7/23/2017	23:13:33	COM5					Density Verified via Mud Scales
Event	15	Pump Tail Cement	7/23/2017	23:16:56	COM5	320.0	8.0	12.8	65.8	175 Sks 12.8 ppg 2.11 yield 11.78 gal/sk
Event	16	Check Weight	7/23/2017	23:17:52	COM5					Density Verified via Mud Scales

Event	17	Slow Rate	7/23/2017	23:23:12	USER	210.0	6.0	12.8	55.0	Slowed rate to finish cement
Event	18	Shutdown	7/23/2017	23:26:22	USER					Wash up on plug
Event	19	Drop Top Plug	7/23/2017	23:32:10	COM5					Verified plug launch
Event	20	Pump Displacement	7/23/2017	23:32:20	COM5	420.0	8.0	8.4	76.9	Fresh Water, 20 bbls lead to surface
Event	21	Slow Rate	7/23/2017	23:44:29	COM5	200.0	2.0	8.4	66.9	Slow Rate 10 bbls to calculated displacement
Event	22	Bump Plug	7/23/2017	23:50:20	COM5	230.0				Plug Bumped at 230 psi, Brought up to 890 psi
Event	23	Check Floats	7/23/2017	23:51:16	USER	890.0				Floats holding, 1/2 bbl back to pump
Event	24	End Job	7/23/2017	23:52:16	COM5					Good Circulation throughout job, pipe was static during job. Used 20 lbs sugar, no add hours.
Event	25	Pre-Rig Down Safety Meeting	7/24/2017	00:15:00	USER					20 lbs sugar, No add hours
Event	26	Rig-Down Equipment	7/24/2017	00:30:00	USER					
Event	27	Pre-Convoy Safety Meeting	7/24/2017	01:00:00	USER					
Event	28	Crew Leave Location	7/24/2017	01:15:00	USER					
Event	29	Comment	7/24/2017	01:30:00	USER					Thank you for using Halliburton Cement, Steven Wardell and Crew.

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