

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

Date: Saturday, March 9, 2019

Trail Ridge 44-22-597 Surface

Terra Trail Ridge 44-22-597 Surface

API# 05-045-23690-00

Job Date : February 14, 2019

Sincerely,

Grand Junction Cement Engineering

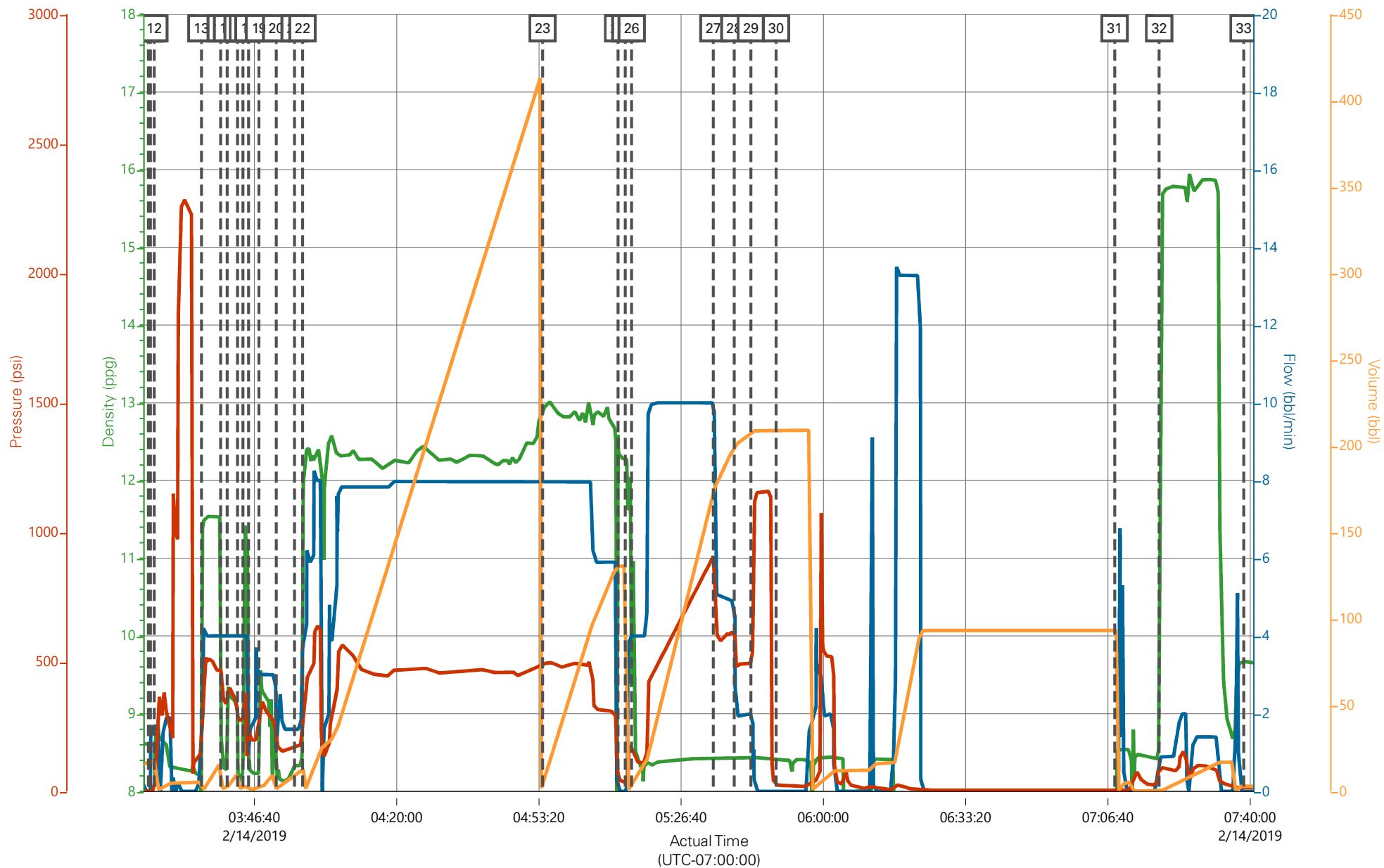
1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	2/13/2019	16:00:00						Requested on Location @ 22:00
Event	2	Pre-Convoy Safety Meeting	2/13/2019	17:50:00						
Event	3	Crew Leave Yard	2/13/2019	18:00:00						1 Elite, 1 Transport, 2 pickups, 1 Compressor Trailer
Event	4	Arrive At Loc	2/13/2019	22:00:00						Rig running casing
Event	5	Assessment Of Location Safety Meeting	2/13/2019	22:05:00						JSA completed - Customer offered/received SDS - water test pH 7.0, CI <200, temp 72 degrees
Event	6	Pre-Rig Up Safety Meeting	2/13/2019	22:10:00						
Event	7	Rig-Up Equipment	2/13/2019	22:20:00						DME iron to standpipe, hardline to rig cellar. Water hoses all three uprights, bulk hoses to Silo's.
Event	8	Other	2/13/2019	23:00:00						Mud scales calibrated to drinking water prior to job.
Event	9	Pre-Job Safety Meeting	2/14/2019	02:40:00						All HES personnel, rig crew, and company rep.
Event	10	Start Job	2/14/2019	03:21:50						TD 2773', TP 2779.61', SJ 31.8', OH 14 3/4", Csg 9 5/8" 36 lb/ft J-55, Mud 9.2 ppg.
Event	11	Fill Lines	2/14/2019	03:22:19		8.33	2	400	5	Fresh Water
Event	12	Test Lines	2/14/2019	03:23:13				2300		Held pressure 2 minutes
Event	13	Pump Spacer	2/14/2019	03:34:15		11.7	4	500	10	10 bbl, Super Flush 100
Event	14	Pump Spacer 1	2/14/2019	03:38:45		8.33	4	420	5	5 bbl, Fresh Water
Event	15	Pump Spacer	2/14/2019	03:40:16		8.4	4	380	10	10 bbl, Calcium Chloride Water.
Event	16	Pump Spacer	2/14/2019	03:42:42		8.33	4	360	5	5 bbl of Fresh Water
Event	17	Pump Spacer	2/14/2019	03:44:00		11.7	4	350	10	10 bbl of Super Flush 100

Event	18	Pump Spacer	2/14/2019	03:45:17	8.33	3	200	5	5 bbl of Fresh Water
Event	19	Pump Spacer	2/14/2019	03:47:45	8.4	3	340	10	10 bbl of Calcium Chloride Water
Event	20	Pump Spacer	2/14/2019	03:51:46	8.33	3	280	10	10 bbl of Fresh Water
Event	21	Check Weight	2/14/2019	03:56:04					Density verified via mud cup
Event	22	Pump Lead Cement	2/14/2019	03:57:56	12.3	8	850	390.4	925 sks, 12.3 ppg, 2.37 yield, 13.74 gal/sk
Event	23	Pump Tail Cement	2/14/2019	04:54:12	12.8	8	540	129.7	345 sks, 12.8 ppg, 2.11 Yield, 11.75 gal/sk
Event	24	Shutdown	2/14/2019	05:11:52					Wash up on top of plug
Event	25	Drop Top Plug	2/14/2019	05:13:35					Co-Rep Verify Plug Launched.
Event	26	Pump Displacement	2/14/2019	05:15:03	8.33	10	960	212.4	Fresh Water
Event	27	Slow Rate	2/14/2019	05:34:12	8.33	5	600	180	Slow rate @ 180 bbl of displacement away, returns slowed
Event	28	Slow Rate	2/14/2019	05:39:06	8.33	2	490	192	Slow Rate 20 bbls to Calculated Displacement
Event	29	Bump Plug	2/14/2019	05:43:00			1154		Plug Bumped at 490 psi, Brought up to 1154 psi
Event	30	Check Floats	2/14/2019	05:48:53					Floats held – .5 bbl back to the truck
Event	31	Pump Spacer 2	2/14/2019	07:08:14	8.33	2	80	3	3 bbl of Fresh Water
Event	32	Pump Cap Cement	2/14/2019	07:18:40	15.6	2	110	27.5	Top Out Cement, 130 sks, 15.6 ppg, 1.19 Yield, 5.24 gal/sk
Event	33	End Job	2/14/2019	07:38:28					returns Slowed @ 80 bbl of displacement away. Pipe was not reciprocated during job. no spacer or cement to surface on primary job
Event	34	Pre-Rig Down Safety Meeting	2/14/2019	08:24:00					10 lbs sugar, No HES Plugs used, 2 add hours, 10 Transport hours. used 23 bbl of Super Flush, 22 sks Of Calcium Chloride.
Event	35	Rig-Down Equipment	2/14/2019	08:36:00					
Event	36	Pre-Convoy Safety Meeting	2/14/2019	09:50:00					
Event	37	Crew Leave Location	2/14/2019	10:00:00					Thanks for using Halliburton Cement, Chris Martinez and crew.

Terra, TR 44-22-597, 4 1/2" Production



DH Density (ppg) -0.1 Comb Pump Rate (bbl/min) 0 DS Pump Press (psi) 17 Pump Stg Tot (bbl) 0