

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Terra

Date: Sunday, May 07, 2017

TR 423-23-597 Surface PJR

API# 05-045-23462-00

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

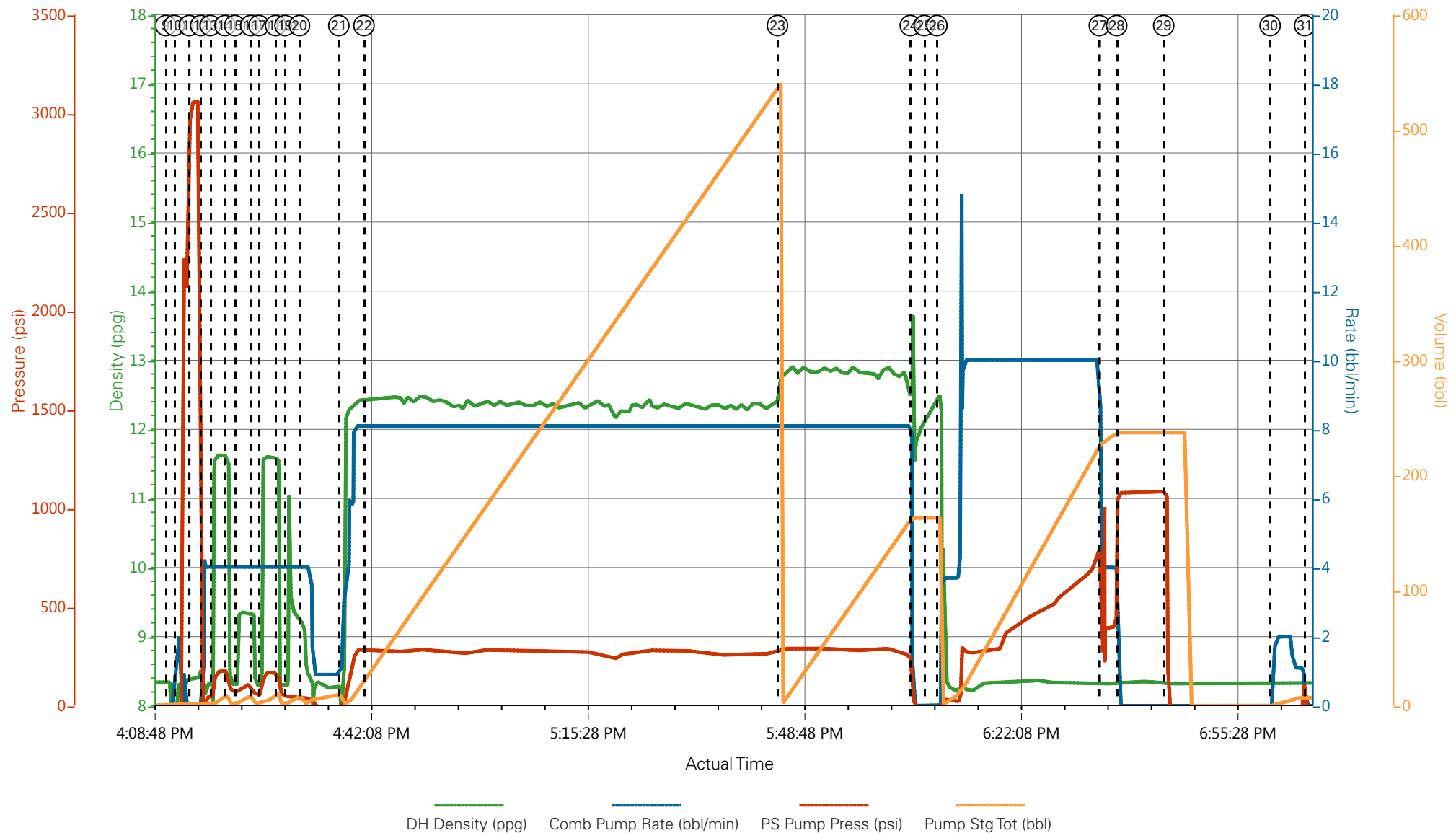
1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	5/7/2017	06:00:00	USER					O/L time 1200 - Pickup and pump already in field
Event	2	Pre-Convoy Safety Meeting	5/7/2017	08:45:00	USER					
Event	3	Crew Leave Yard	5/7/2017	09:00:00	USER					1 660, 1 transport
Event	4	Arrive At Location	5/7/2017	11:30:00	USER					Cementer arrived
Event	5	Assessment Of Location Safety Meeting	5/7/2017	11:45:00	USER					JSA completed - customer offered/received SDS - water test pH 7.5, Cl 0, temp 48 degrees
Event	6	Pre-Rig Up Safety Meeting	5/7/2017	14:00:00	USER					All cement vehicles and personnel on site - start O/L time
Event	7	Rig-Up Equipment	5/7/2017	14:30:00	USER					Hard line to standpipe, water hoses to uprights, bulk hoses to silos and 660, bullet hose to transport
Event	8	Pre-Job Safety Meeting	5/7/2017	15:45:00	USER					All HES personnel, rig crew, and company rep - rig circulating @ 8.5 bpm w/ 260 psi for 1 hour
Event	9	Start Job	5/7/2017	16:11:00	USER					TD 2978', TP 2978', SJ 25.45', Mud 8.6 ppg, 14 3/4" OH, 9 5/8" 36# J55 casing
Event	10	Prime Lines	5/7/2017	16:12:18	USER	8.33	2.0	40	2.0	Fresh water
Event	11	Test Lines	5/7/2017	16:14:36	COM5			3077		Pressure held well
Event	12	Pump H2O Spacer	5/7/2017	16:16:22	COM5	8.33	4.0	62	5.0	Start Spacer train - Water ahead
Event	13	Pump SuperFlush	5/7/2017	16:17:50	COM5	11.5	4.0	178	10.0	10 bbl SuperFlush 100
Event	14	Pump H2O Spacer	5/7/2017	16:20:06	COM5	8.33	4.0	70	5.0	

Event	15	Pump CaCl water	5/7/2017	16:21:36	COM5	9.0	4.0	120	10.0	500 lbs CaCl
Event	16	Pump H2O Spacer	5/7/2017	16:24:04	COM5	8.33	4.0	70	5.0	
Event	17	Pump SuperFlush	5/7/2017	16:25:20	COM5	11.5	4.0	160	10.0	10 bbl SuperFlush 100
Event	18	Pump H2O Spacer	5/7/2017	16:27:54	COM5	8.33	4.0	115	5.0	
Event	19	Pump CaCl water	5/7/2017	16:29:21	COM5	9.0	4.0	110	10.0	500 lbs CaCl
Event	20	Pump H2O Spacer	5/7/2017	16:31:34	COM5	8.33	4.0	80	10.0	Water behind - End Spacer train
Event	21	Pump Lead Cement	5/7/2017	16:37:37	COM5	12.3	8.0	305	498.1	1175 sks, 12.3 ppg, 2.38 yield, 13.76 gal/sk - Tuf Fiber added on fly throughout - returns about 350 bbls into Lead - inconsistent returns from that point on
Event	22	Check weight	5/7/2017	16:41:29	COM5	12.3				Recirc matched mud scales
Event	23	Pump Tail Cement	5/7/2017	17:45:08	COM5	12.8	8.0	320	129.6	345 sks, 12.8 ppg, 2.11 yield, 11.78 gal/sk - no returns throughout Tail
Event	24	Shutdown	5/7/2017	18:05:34	USER					Wash up on top of plug
Event	25	Drop Top Plug	5/7/2017	18:07:43	COM5					Plug launched - verified by company rep
Event	26	Pump Displacement	5/7/2017	18:09:40	COM5	8.4	10.0	820	228.2	Fresh water
Event	27	Slow Rate	5/7/2017	18:34:40	USER	8.4	4.0	395	@ 215	No returns during displacement
Event	28	Bump Plug	5/7/2017	18:37:20	COM5			420		
Event	29	Check Floats	5/7/2017	18:44:34	COM5			1075		Floats held - 1 bbl flowback
Event	30	Pump Water	5/7/2017	19:00:57	USER					Pump Sugar water to clear parasite line
Event	31	Shutdown	5/7/2017	19:06:17	USER					Cleared- Standby for Topout
Event	32	Pump SuperFlush	5/7/2017	20:58:15	COM5	11.5	2.5	30	10.0	Pump SuperFlush ahead
Event	33	Pump Cement	5/7/2017	21:03:32	COM5	15.6	2.5	38	47.1	228 sks Topout, 15.6 ppg, 1.19 yield, 5.24 gal/sk
Event	34	End Job	5/7/2017	21:31:48	COM5					No add hours
Event	35	Pre-Rig Down Safety	5/7/2017	21:45:00	USER					

Meeting					
Event	36	Rig-Down Equipment	5/7/2017	22:00:00	USER
Event	37	Pre-Convoy Safety Meeting	5/7/2017	22:45:00	USER
Event	38	Crew Leave Location	5/7/2017	23:00:00	USER
Thank you for using Halliburton - Ed Deussen and crew					

TERRA ENERGY - TR 423-23-597 - 9 5/8" Surface



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|---|--------------------------|-------------------|---------------------|----------------------|--------------------------------|
| ① Call Out | ⑦ Rig-Up Equipment | ⑬ Pump SuperFlush | ⑰ Pump CaCl water | 25 Drop Top Plug | 31 Shutdown |
| ② Pre-Convoy Safety Meeting | ⑧ Pre-Job Safety Meeting | ⑭ Pump H2O Spacer | 20 Pump H2O Spacer | 26 Pump Displacement | 32 Pre-Rig Down Safety Meeting |
| ③ Crew Leave Yard | ⑨ Start Job | ⑮ Pump CaCl water | 21 Pump Lead Cement | 27 Slow Rate | 33 Rig-Down Equipment |
| ④ Arrive At Location | ⑩ Prime Lines | ⑯ Pump H2O Spacer | 22 Check weight | 28 Bump Plug | 34 Pre-Convoy Safety Meeting |
| ⑤ Assessment Of Location Safety Meeting | ⑪ Test Lines | ⑰ Pump SuperFlush | 23 Pump Tail Cement | 29 Check Floats | 35 Crew Leave Location |
| ⑥ Pre-Rig Up Safety Meeting | ⑫ Pump H2O Spacer | ⑱ Pump H2O Spacer | 24 Shutdown | 30 Pump Water | |

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Customer : TERRA ENERGY PARTNERS

Job Date : 5/7/2017 3:26:53 PM

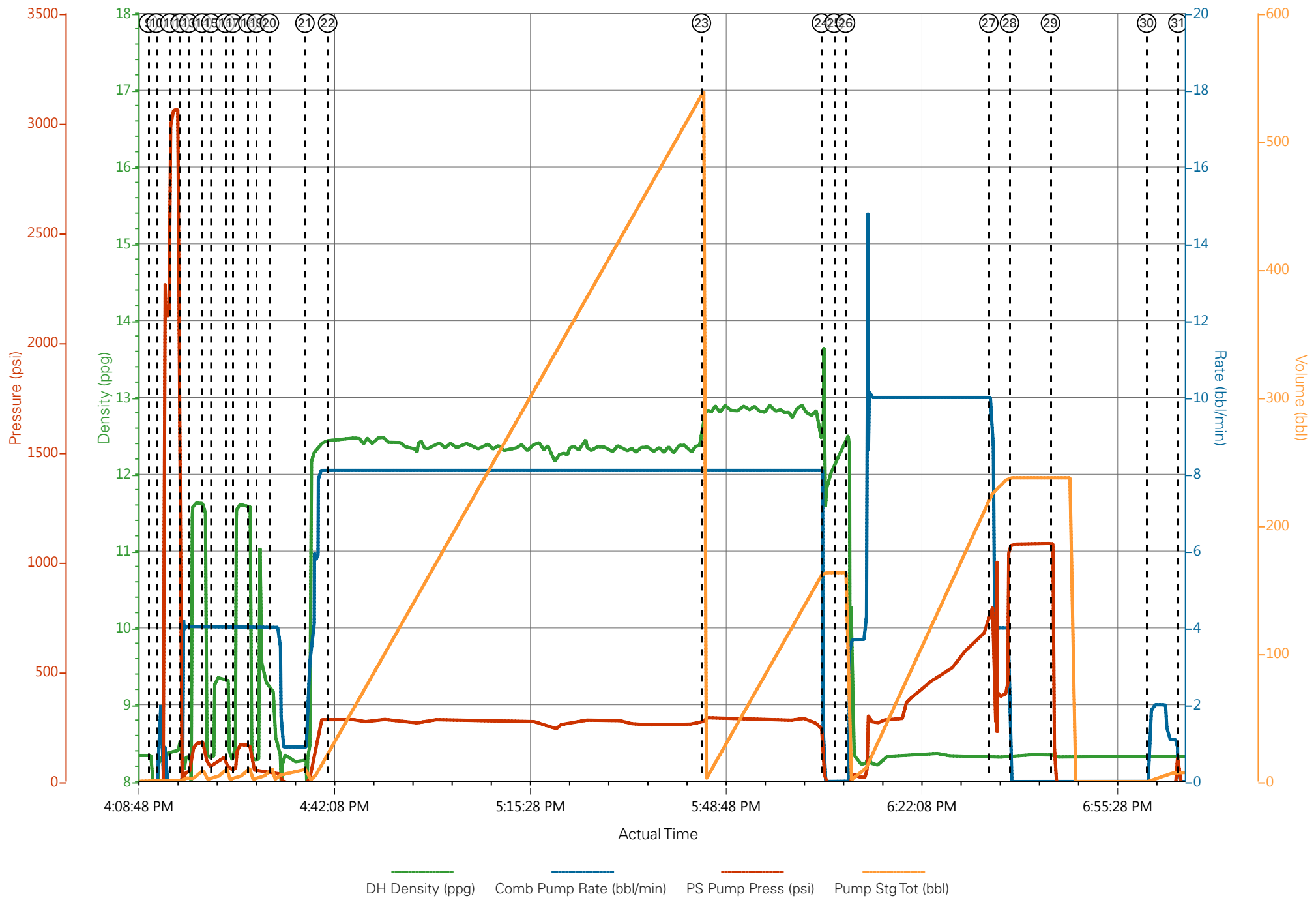
Well : TR 423-23-597

Representative : Dalen Burr

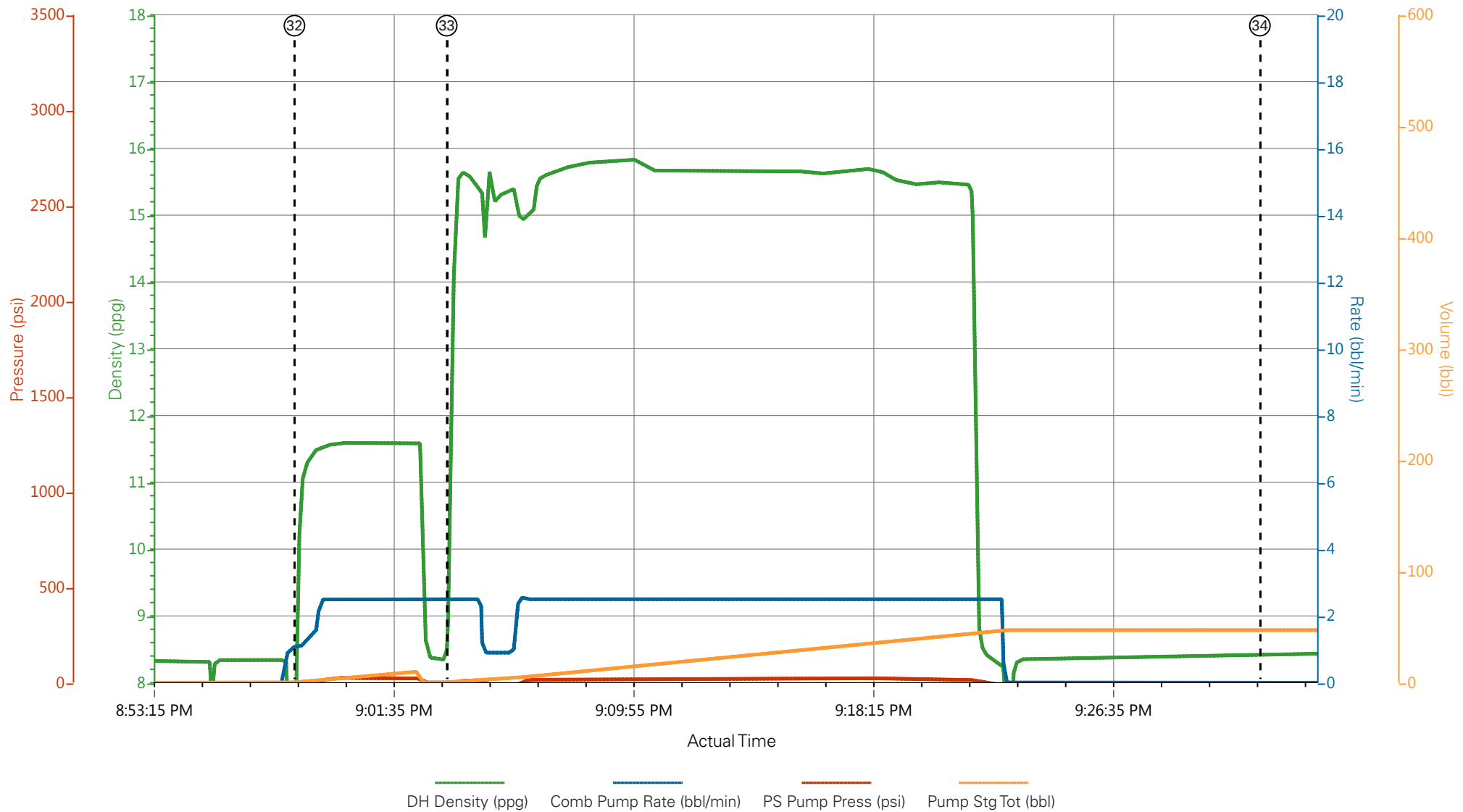
Sales Order # : 904020910

Elite #4 : Ed Deussen / Dillon Martin

TERRA ENERGY - TR 423-23-597 - 9 5/8" Surface



TERRA ENERGY - TR423-23-597 - Topout



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|---|--------------------------|---------------------|----------------------|--------------------------------|------------------------------|
| ① Call Out | ⑧ Pre-Job Safety Meeting | ⑮ Pump CaCl water | 22 Check weight | 29 Check Floats | 36 Rig-Down Equipment |
| ② Pre-Convoy Safety Meeting | ⑨ Start Job | ⑯ Pump H2O Spacer | 23 Pump Tail Cement | 30 Pump Water | 37 Pre-Convoy Safety Meeting |
| ③ Crew Leave Yard | ⑩ Prime Lines | ⑰ Pump SuperFlush | 24 Shutdown | 31 Shutdown | 38 Crew Leave Location |
| ④ Arrive At Location | ⑪ Test Lines | ⑱ Pump H2O Spacer | 25 Drop Top Plug | 32 Pump Spacer 2 | |
| ⑤ Assessment Of Location Safety Meeting | ⑫ Pump H2O Spacer | ⑲ Pump CaCl water | 26 Pump Displacement | 33 Pump Cement | |
| ⑥ Pre-Rig Up Safety Meeting | ⑬ Pump SuperFlush | 20 Pump H2O Spacer | 27 Slow Rate | 34 End Job | |
| ⑦ Rig-Up Equipment | ⑭ Pump H2O Spacer | 21 Pump Lead Cement | 28 Bump Plug | 35 Pre-Rig Down Safety Meeting | |

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