

HALLIBURTON

iCem[®] Service

TERRA ENERGY LTD.

Date: Saturday, April 07, 2018

RU 423-17

API # 05-045-23745-00
Terra Energy RU 423-17 Surface
Job Date: Saturday, April 07, 2018

Sincerely,

Grand Junction Cement Engineering

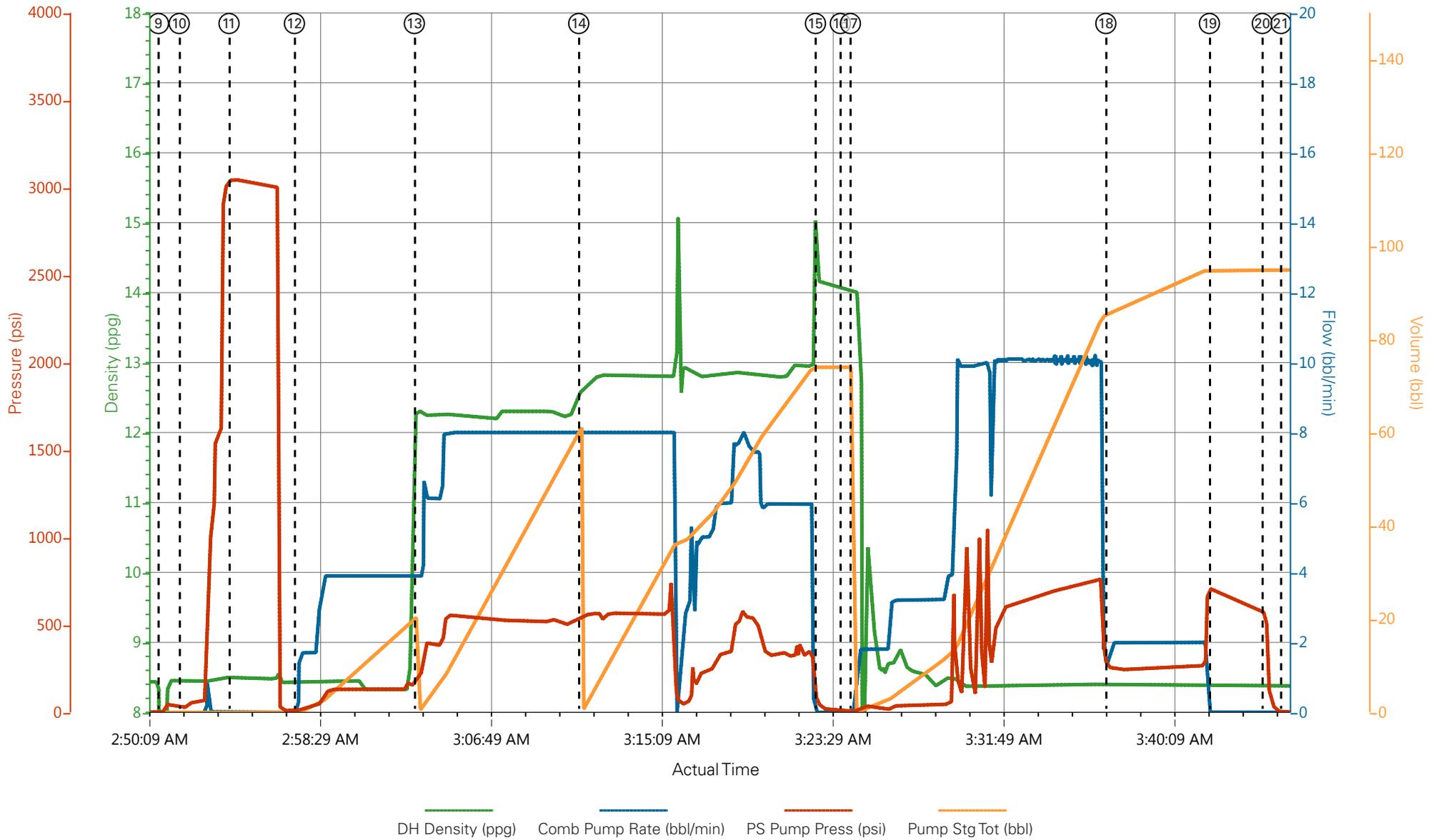
1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pump Stage Total (bbl)	Comments
Event	1	Call Out	4/6/2018	20:00:00	USER					REQUESTED ON LOCATION @ 0100
Event	2	Pre-Convoy Safety Meeting	4/6/2018	21:30:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	4/6/2018	21:50:00	USER					1 F550, 1 PUMP TRUCK & 1 660 BULK TURCK
Event	4	Arrive At Loc	4/7/2018	01:00:00	USER					RIG CIRCULATING ON BOTTOM
Event	5	Assessment Of Location Safety Meeting	4/7/2018	01:35:00	USER					MET WITH COMP REP AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH- 7, CHLORIDES- 100, TEMP- 61F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Pre-Rig Up Safety Meeting	4/7/2018	01:45:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	4/7/2018	02:00:00	USER					HES RIGGED UP EQUIPMENT WITHOUT ENTERING RED ZONE.
Event	8	Pre-Job Safety Meeting	4/7/2018	02:30:00	USER					ALL HES AND RIG CREW PRESENT
Event	9	Start Job	4/7/2018	02:50:45	COM3					TD 1116', TP 1106', SJ 29.15', OH 13.5'', CSG 9.625'' 32.3#, MUD 9.1 PPG. RIG CIRCULATED WELL AT 400 GPM, 250 PSI.
Event	10	Prime Pumps	4/7/2018	02:51:45	COM3	122.00	8.33	2.00	1.0	8.33 PPG FRESH WATER
Event	11	Test Lines	4/7/2018	02:54:11	COM3	3047.00	8.33	0.50	0.5	ALL LINES HELD PRESSURE AT 3047 PSI
Event	12	Pump Spacer 1	4/7/2018	02:57:22	COM3	130.00	8.33	4.00	20.0	8.33 PPG FRESH WATER (20 BBL)

Event	13	Pump Lead Cement	4/7/2018	03:03:13	COM3	541.00	12.30	3.90	53.0	VARICEM CEMENT 125 SKS (53 BBLS), 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK
Event	14	Pump Tail Cement	4/7/2018	03:11:14	COM3	539.00	12.80	8.00	66.0	VARICEM CEMENT 175 SKS (66 BBLS), 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK.
Event	15	Shutdown	4/7/2018	03:22:47	USER					END OF CEMENT
Event	16	Drop Plug	4/7/2018	03:24:00	USER					WASH UP PUMPS AND LINES ON TOP OF PLUG
Event	17	Pump Displacement	4/7/2018	03:24:29	COM3	746.00	8.33	10.00	74.7	8.34 PPG FRESH WATER (84.7 BBLS)
Event	18	Slow Rate	4/7/2018	03:36:57	USER	270.00	8.33	2.00	10.0	SLOW RATE TO 2 BPM PER CO REP TO LAND PLUG
Event	19	Bump Plug	4/7/2018	03:42:00	USER	701.00	8.33	2.00	84.7	LAND PLUG AT 270 PSI, BROUGHT UP TO 710 PSI
Event	20	Check Floats	4/7/2018	03:44:35	USER	568.00	8.33	0.00	84.7	WELL HEAD/ LANDING JOINT LEAKING WATER AFTER LANDING. FLOATS HELD, 1 BBL BACK TO TRUCK
Event	21	End Job	4/7/2018	03:45:30	COM3					RETURNS THROUGHOUT JOB, 33 BBL OF CEMENT BACK TO SURFACE
Event	22	Post-Job Safety Meeting (Pre Rig-Down)	4/7/2018	03:47:16	USER					ALL HES PRESENT
Event	23	Rig-Down Equipment	4/7/2018	03:53:00	USER					ALL HES PRESENT
Event	24	Pre-Convoy Safety Meeting	4/7/2018	04:30:00	USER					ALL HES PRESENT
Event	25	Crew Leave Location	4/7/2018	04:35:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, CHRIS SMITH AND CREW

TERRA - RU423-17 - 9.625" SURFACE



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|---|-----------------------------|--------------------|---------------------|---|
| ① Call Out | ⑥ Pre-Rig Up Safety Meeting | ⑪ Test Lines | ⑯ Drop Plug | 21 End Job |
| ② Pre-Convoy Safety Meeting | ⑦ Rig-Up Equipment | ⑫ Pump Spacer 1 | ⑰ Pump Displacement | 22 Post-Job Safety Meeting (Pre Rig-Down) |
| ③ Crew Leave Yard | ⑧ Pre-Job Safety Meeting | ⑬ Pump Lead Cement | ⑱ Slow Rate | 23 Rig-Down Equipment |
| ④ Arrive At Loc | ⑨ Start Job | ⑭ Pump Tail Cement | ⑲ Bump Plug | 24 Pre-Convoy Safety Meeting |
| ⑤ Assessment Of Location Safety Meeting | ⑩ Prime Pumps | ⑮ Shutdown | 20 Check Floats | 25 Crew Leave Location |

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