

# HALLIBURTON

iCem<sup>®</sup> Service

## **TEP ROCKY MOUNTAIN LLC**

**For: Terra**

Date: Monday, October 09, 2017

## **GM 334-5 Surface**

API#05-045-22661

Sincerely,  
Grand Junction Cement Engineering

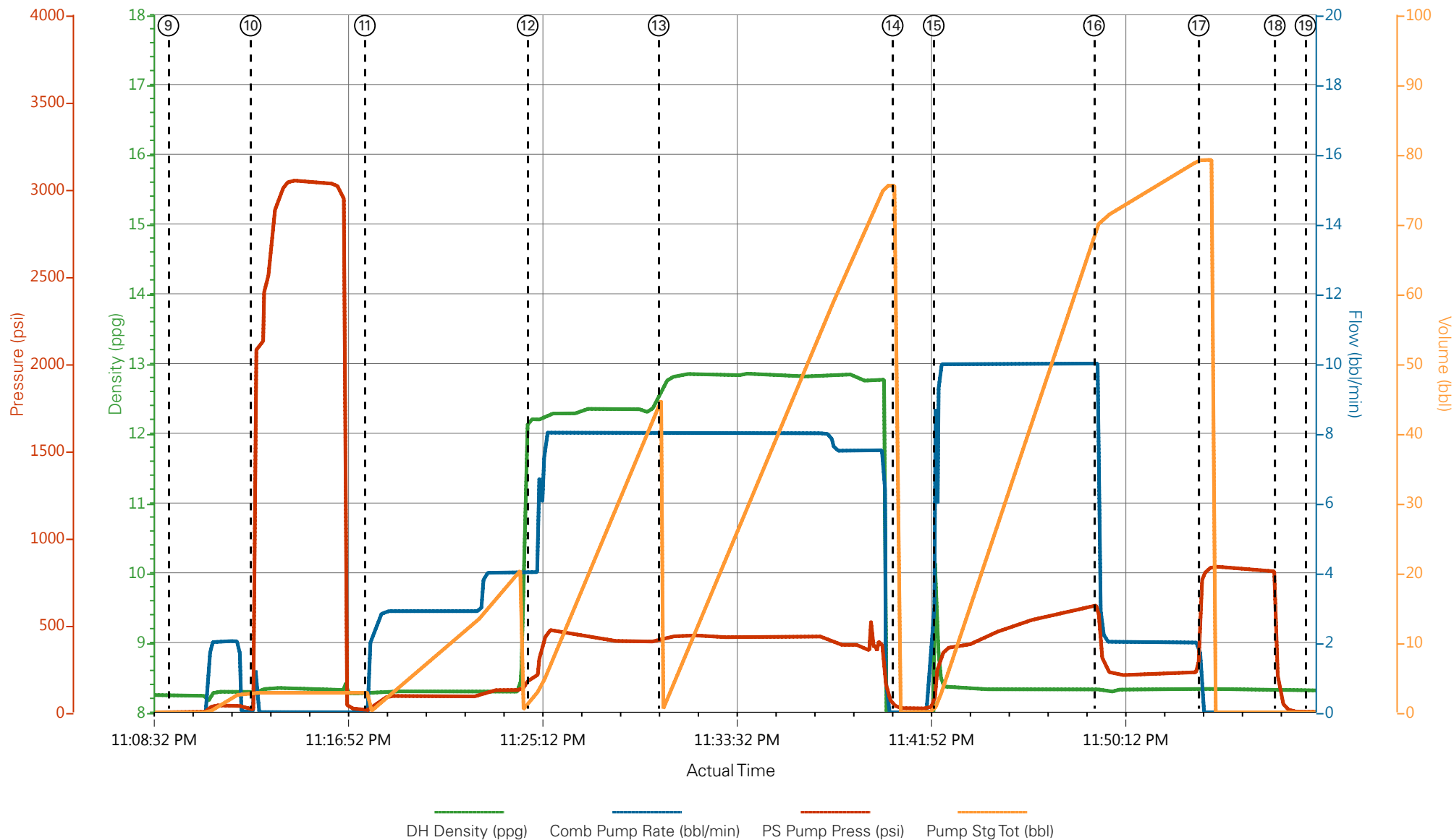
## 2.0 Real-Time Job Summary

## 2.1 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	10/8/2017	15:00:00	USER					ELITE 8, REQUESTED ON LOCATION 2000.
Event	2	Pre-Convoy Safety Meeting	10/8/2017	17:30:00	USER					ALL HES CREW
Event	3	Arrive At Loc	10/8/2017	19:00:00	USER					ARRIVED ON LOCATION 1 HOUR EARLY, RIG PULLING DRILL PIPE
Event	4	Meet With Company Rep	10/8/2017	19:05:00	USER					COMPANY REP OFFERED SDS. WATER TEST: TEMP: 51 PH: 7 CHLORIDES: 0
Event	5	Assessment Of Location Safety Meeting	10/8/2017	19:45:00	USER					ALL HES CREW
Event	6	Pre-Rig Up Safety Meeting	10/8/2017	19:50:00	USER					ALL HES CREW
Event	7	Rig-Up Equipment	10/8/2017	20:00:00	USER					1 HT400 PUMP TRUCK , 1 660 BULK TRUCK, 1 F550 PICKUP.
Event	8	Pre-Job Safety Meeting	10/8/2017	21:30:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRCULATED 3 BOTTOMS UP @ 551 GPM @110 PSI
Event	9	Start Job	10/8/2017	23:09:18	COM5					TD 1015', TP 1009.25', SJ 39.45', OH 13.5", MUD 9 PPG, CASING 9 5/8 32.3# H40.
Event	10	Test Lines	10/8/2017	23:12:49	COM5	8.33	0.00	3049	3	PRESSURE HELD, TOP WAS 3049.
Event	11	Pump Fresh Water Spacer	10/8/2017	23:17:43	COM5	8.33	4	125	20	20 BBLs FRESH WATER
Event	12	Pump Lead Cement	10/8/2017	23:24:42	COM5	12.3	8	430	42.3	100 SACKS OF LEAD. MIXED AT 12.3 PPG, 2.38 YIELD, 13.77 WATER REQUIREMENT, WEIGHT CONFIRMED VIA PRESSURIZED MUD SCALES.
Event	13	Pump Tail Cement	10/8/2017	23:30:19	COM5	12.8	8.00	440	65.7	175 SACKS OF TAIL. MIXED AT 12.8 PPG, 2.11 YIELD, 11.78 WATER REQUIREMENT, WEIGHT CONFIRMED VIA PRESSURIZED MUD SCALES.

Event	14	Drop Top Plug	10/8/2017	23:40:22	COM5					PLUG AWAY NO PROBLEMS. USED POSITIVE DISPLACEMENT.
Event	15	Pump Displacement	10/8/2017	23:42:07	COM5	8.33	10	620	76.3	FRESH WATER DISPLACEMENT
Event	16	Slow Rate	10/8/2017	23:49:00	USER	8.33	2	229	66	SLOW RATE TO BUMP PLUG
Event	17	Bump Plug	10/8/2017	23:53:29	COM5	8.33	2	835	76.3	PSI BEFORE BUMPING PLUG @ 229, BUMPED PLUG UP TO 835
Event	18	Check Floats	10/8/2017	23:56:45	USER					FLOATS HELD, 1/2 BBL BACK TO DISPLACEMENT TANKS.
Event	19	End Job	10/8/2017	23:58:04	COM5					GOOD RETURNS THROUGHOUT JOB, 26 BBLS CEMENT TO SURFACE
Event	20	Pre-Rig Down Safety Meeting	10/9/2017	00:00:00	USER					ALL HES CREW
Event	21	Rig-Down Equipment	10/9/2017	00:10:00	USER					
Event	22	Pre-Convoy Safety Meeting	10/9/2017	00:55:00	USER					ALL HES CREW
Event	23	Crew Leave Location	10/9/2017	01:00:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, DUSTIN SMITH AND CREW.

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|---|-----------------------------|---------------------------|--------------------------------|------------------------------|
| ① Call Out                              | ⑥ Pre-Rig Up Safety Meeting | ⑪ Pump Fresh Water Spacer | ⑯ Slow Rate                    | 21 Rig-Down Equipment        |
| ② Pre-Convoy Safety Meeting             | ⑦ Rig-Up Equipment          | ⑫ Pump Lead Cement        | ⑰ Bump Plug                    | 22 Pre-Convoy Safety Meeting |
| ③ Arrive At Loc                         | ⑧ Pre-Job Safety Meeting    | ⑬ Pump Tail Cement        | ⑱ Check Floats                 | 23 Crew Leave Location       |
| ④ Meet With Company Rep                 | ⑨ Start Job                 | ⑭ Drop Top Plug           | ⑲ End Job                      |                              |
| ⑤ Assessment Of Location Safety Meeting | ⑩ Test Lines                | ⑮ Pump Displacement       | 20 Pre-Rig Down Safety Meeting |                              |

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