

# HALLIBURTON

iCem<sup>®</sup> Service

## **TEP ROCKY MOUNTAIN LLC**

**For: Lynn Cass and Mark Mewshaw**

Date: Tuesday, October 11, 2016

**RU 311-7 Surface**

**API #: 05-045-23235-00**

Sincerely,

**Grand Junction Cement Engineering**

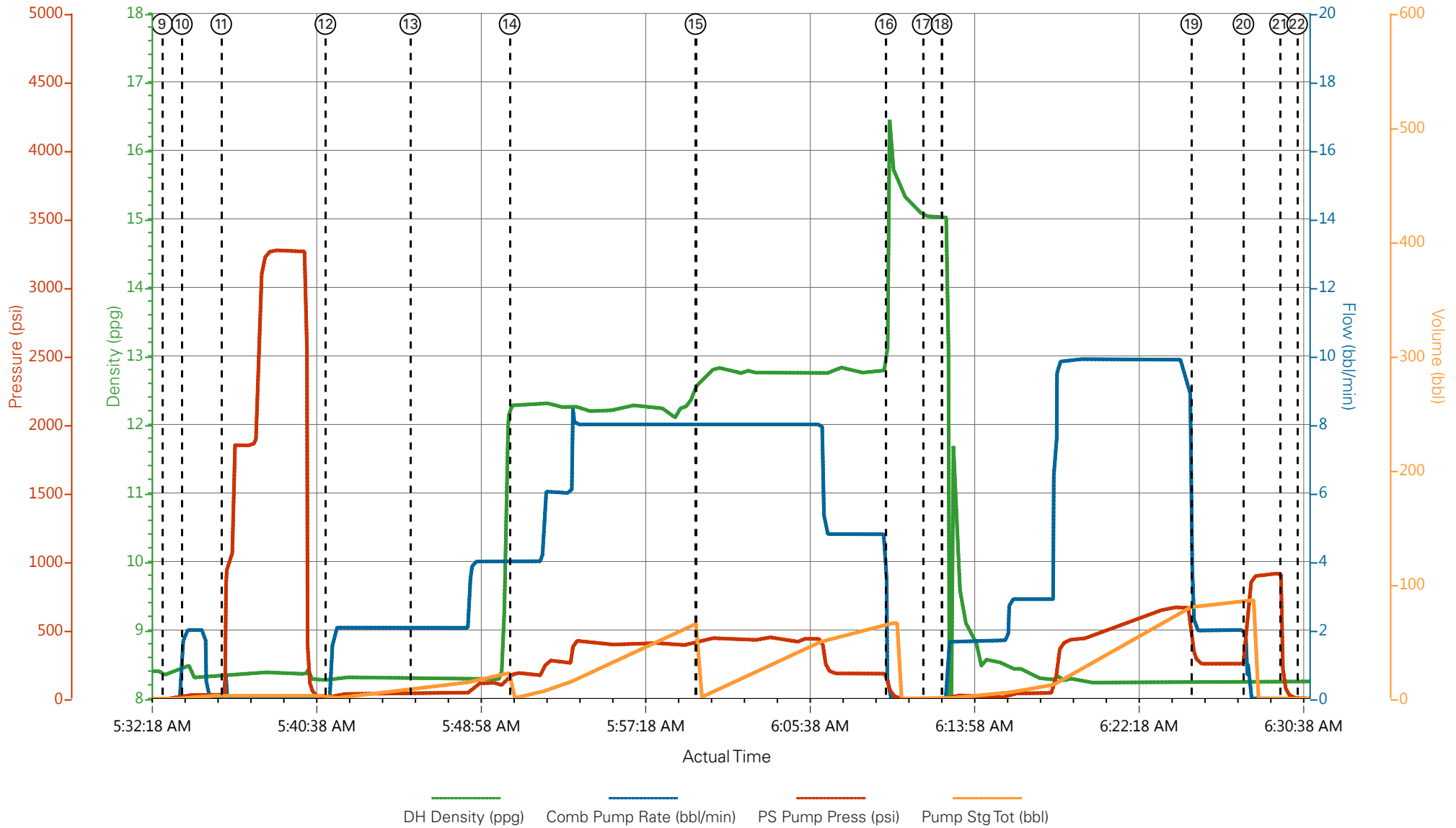
## 1.0 Real-Time Job Summary

### 1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	PS Pump Press <i>(psi)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	10/10/2016	21:00:00	USER					Requested on Location @ 3:00
Event	2	Pre-Convoy Safety Meeting	10/10/2016	23:30:00	USER					
Event	3	Crew Leave Location	10/10/2016	23:45:00	USER					1 Elite, 1 660, 1 pickup
Event	4	Arrive at Location	10/11/2016	01:00:00	USER					Rig running casing
Event	5	Assessment Of Location Safety Meeting	10/11/2016	01:30:00	USER					JSA completed - Customer offered/received SDS - water test pH 7.0, CI <200, temp 40 degrees
Event	6	Pre-Rig Up Safety Meeting	10/11/2016	01:45:00	USER					
Event	7	Rig-Up Equipment	10/11/2016	02:00:00	USER					1 hardline to standpipe, water hoses to upright and day tank, bulk hoses to silo and 660.
Event	8	Pre-Job Safety Meeting	10/11/2016	05:00:00	USER					All HES personnel, rig crew, and company rep
Event	9	Start Job	10/11/2016	05:33:00	USER					TD 1154', TP 1143, SJ 43.2', FC 1099.8 OH 13.5'', Csg 9.625'' 32.3 lb/ft H-40, Mud 9.4 ppg.
Event	10	Fill lines	10/11/2016	05:34:00	USER	8.4	2	30	2	Fresh water
Event	11	Test Lines	10/11/2016	05:35:59	COM6	8.4	.5	3270	.5	Held pressure 2 minutes no leaks
Event	12	Pump Spacer 1	10/11/2016	05:41:16	COM6	8.4	3	100	20	Fresh water
Event	13	Check weight	10/11/2016	05:45:34	COM6					Density Verified via Mud Scales
Event	14	Pump Lead Cement	10/11/2016	05:50:36	COM6	12.3	8	420	57.2	135 Sks VariCem 12.3 ppg 2.38 yield 13.77 gal/sk
Event	15	Pump Tail Cement	10/11/2016	06:00:01	COM6	12.8	8	448	65.8	175 Sks VariCem 12.8 ppg 2.11 yield 11.78 gal/sk
Event	16	Shutdown	10/11/2016	06:09:39	USER					Wash up on top of plug

Event	17	Drop Top Plug	10/11/2016	06:11:31	USER					Verify Plug Launched
Event	18	Pump Displacement	10/11/2016	06:12:28	COM6	8.4	10	680	86.6	Fresh water
Event	19	Slow Rate	10/11/2016	06:25:07	USER	8.4	2	250	77	Slow Rate 10 bbls to Calculated Displacement
Event	20	Bump Plug	10/11/2016	06:27:46	COM6	84	2	810	86.6	Plug Bumped at 290 psi, Brought up to 810 psi
Event	21	Check Floats	10/11/2016	06:29:37	USER					Floats held – ½ bbl back to the truck
Event	22	End Job	10/11/2016	06:30:30	USER					Good Returns Throughout job, Pipe was not reciprocated during cement, 17 bbls of Cement to surface
Event	23	Other	10/11/2016	06:39:01	USER					Rig Circulated 30 mins prior to cement job at 16 bpm 80 psi.
Event	24	Pre-Rig Down Safety Meeting	10/11/2016	06:45:00	USER					40 lbs sugar, No add hours
Event	26	Rig-Down Equipment	10/11/2016	06:50:00	USER					
Event	27	Pre-Convoy Safety Meeting	10/11/2016	07:15:00	USER					
	28	Crew Leave Location	10/11/2016	07:30:00	USER					Thank you for using Halliburton – Ryan Muhlestein and crew.

# TEP ROCKY MOUNTAIN LLC - RU 311-7 - Surface Casing



- |   |                          |                     |                                |                              |
|---|--------------------------|---------------------|--------------------------------|------------------------------|
| ① Call Out                              | ⑦ Rig-Up Equipment       | ⑬ Check weight      | ⑲ Slow Rate                    | 25 Start Job                 |
| ② Pre-Convoy Safety Meeting             | ⑧ Pre-Job Safety Meeting | ⑭ Pump Lead Cement  | 20 Bump Plug                   | 26 Rig-Down Equipment        |
| ③ Crew Leave Location                   | ⑨ Start Job              | ⑮ Pump Tail Cement  | 21 Check Floats                | 27 Pre-Convoy Safety Meeting |
| ④ Arrive at Location                    | ⑩ Fill lines             | ⑯ Shutdown          | 22 End Job                     | 28 Crew Leave Location       |
| ⑤ Assessment Of Location Safety Meeting | ⑪ Test Lines             | ⑰ Drop Top Plug     | 23 Other                       |                              |
| ⑥ Pre-Rig Up Safety Meeting             | ⑫ Pump Spacer 1          | ⑱ Pump Displacement | 24 Pre-Rig Down Safety Meeting |                              |

▼ **HALLIBURTON** | iCem<sup>®</sup> Service

Created: 2016-10-11 04:06:49, Version: 4.2.393

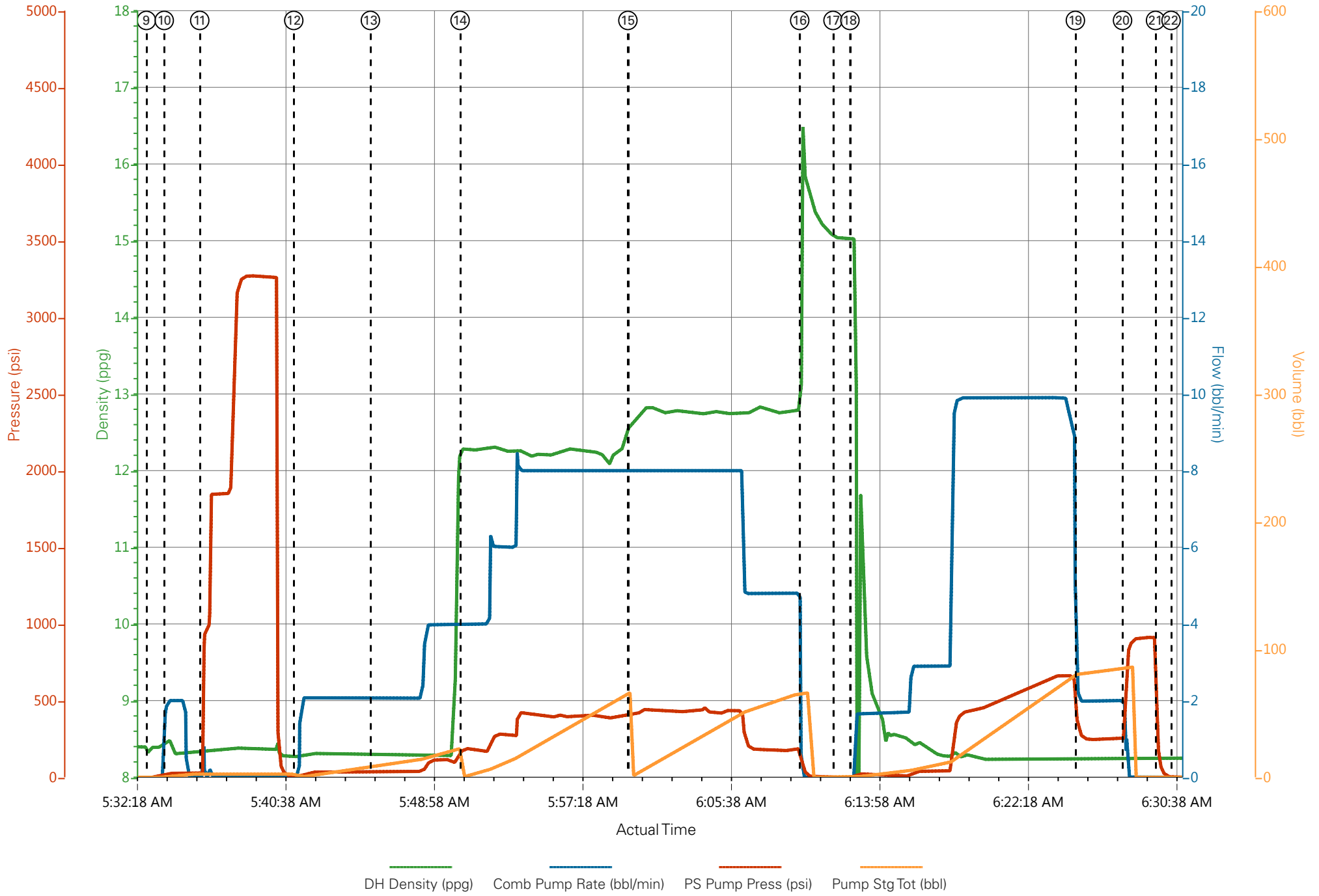
Edit

Customer : TEP ROCKY MOUNTAIN LLC  
 Representative : Bobby Brown

Job Date : 10/11/2016 4:09:12 AM  
 Sales Order # : 903594681

Well : RU 311-7  
 Elite 6 : Muhlestein/Angelo

# TEP ROCKY MOUNTAIN LLC - RU 311-7 - Surface Casing



— DH Density (ppg)    
 — Comb Pump Rate (bbl/min)    
 — PS Pump Press (psi)    
 — Pump Stg Tot (bbl)