

HALLIBURTON

iCem[®] Service

LARAMIE ENERGY II LLC

For: Laramie

Date: Saturday, March 31, 2018

GUNDERSON 994-13-12E Surface PJR

API #: 05-077-10535

Sincerely,

Grand Junction Cement Engineering

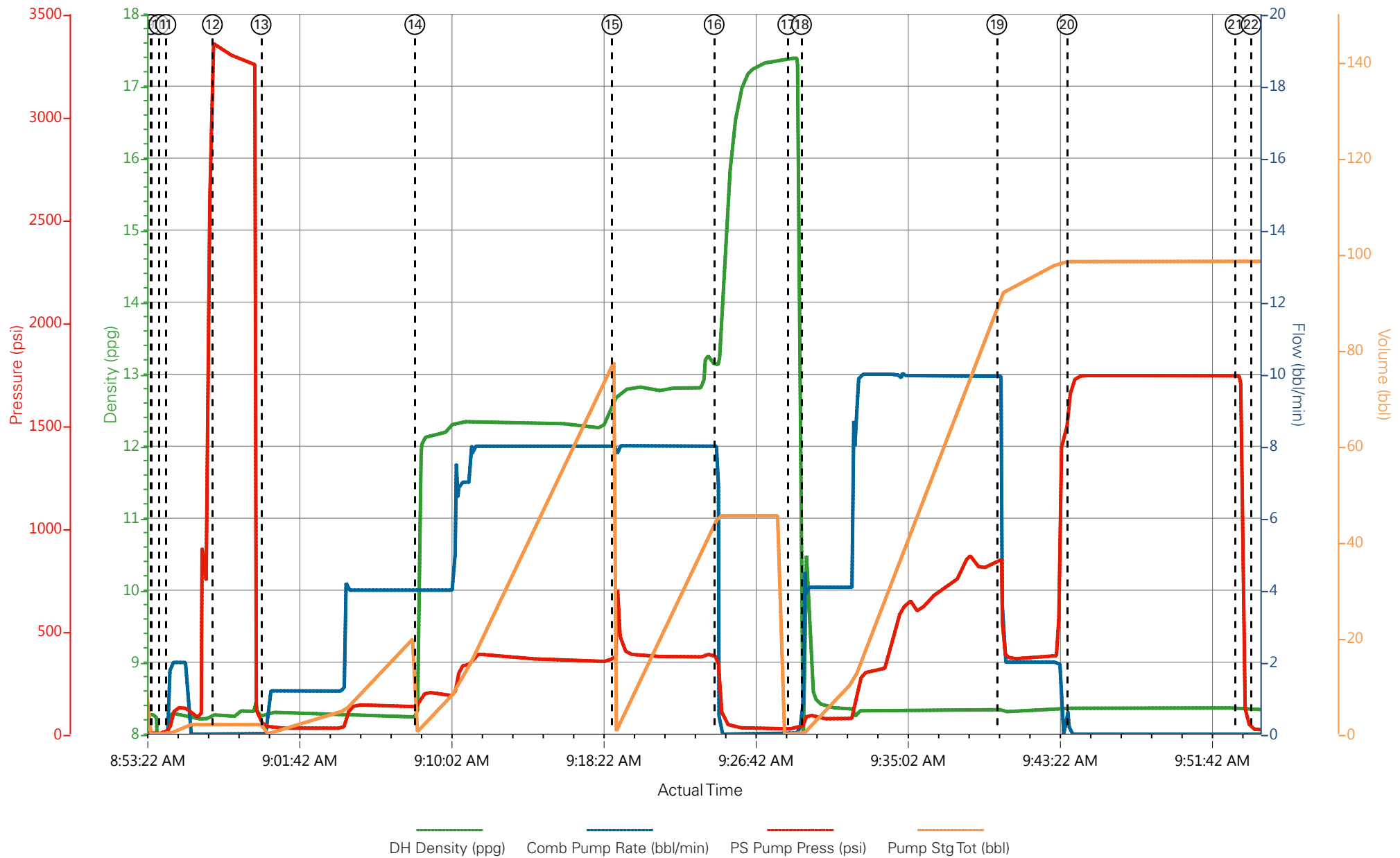
2.0 Real-Time Job Summary

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 | 3/31/2018 | 03:00:00 | USER | | | | | REQUESTED ON LOCATION @ 07:00 |
| Event | 2 | Pre-Convoy Safety Meeting | 3/31/2018 | 04:50:00 | USER | | | | | ALL HES PRESENT |
| Event | 3 | Crew Leave Yard | 3/31/2018 | 05:00:00 | USER | | | | | 1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCK, 1 450 SERVICE PICKUP |
| Event | 4 | Arrive At Loc | 3/31/2018 | 06:30:00 | USER | | | | | RIG RUNNING CASING |
| Event | 5 | Assessment Of Location Safety Meeting | 3/31/2018 | 06:45:00 | USER | | | | | MET WITH COMP REP, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE. COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES. |
| Event | 6 | Spot Equipment | 3/31/2018 | 07:00:00 | USER | | | | | 1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCKS, 1 450 SERVICE PICKUP |
| Event | 7 | Pre-Rig Up Safety Meeting | 3/31/2018 | 07:15:00 | USER | | | | | ALL HES PRESENT |
| Event | 8 | Pre-Job Safety Meeting | 3/31/2018 | 08:00:00 | USER | | | | | ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 10 BPM PRIOR TO JOB, PRESSURE 210 PSI |
| Event | 9 | Start Job | 3/31/2018 | 08:53:43 | COM5 | | | | | TD-1574', TP-1564', SJ-47', CSG-8.625" 24# J55, OH-11", MUD-9.1PPG |

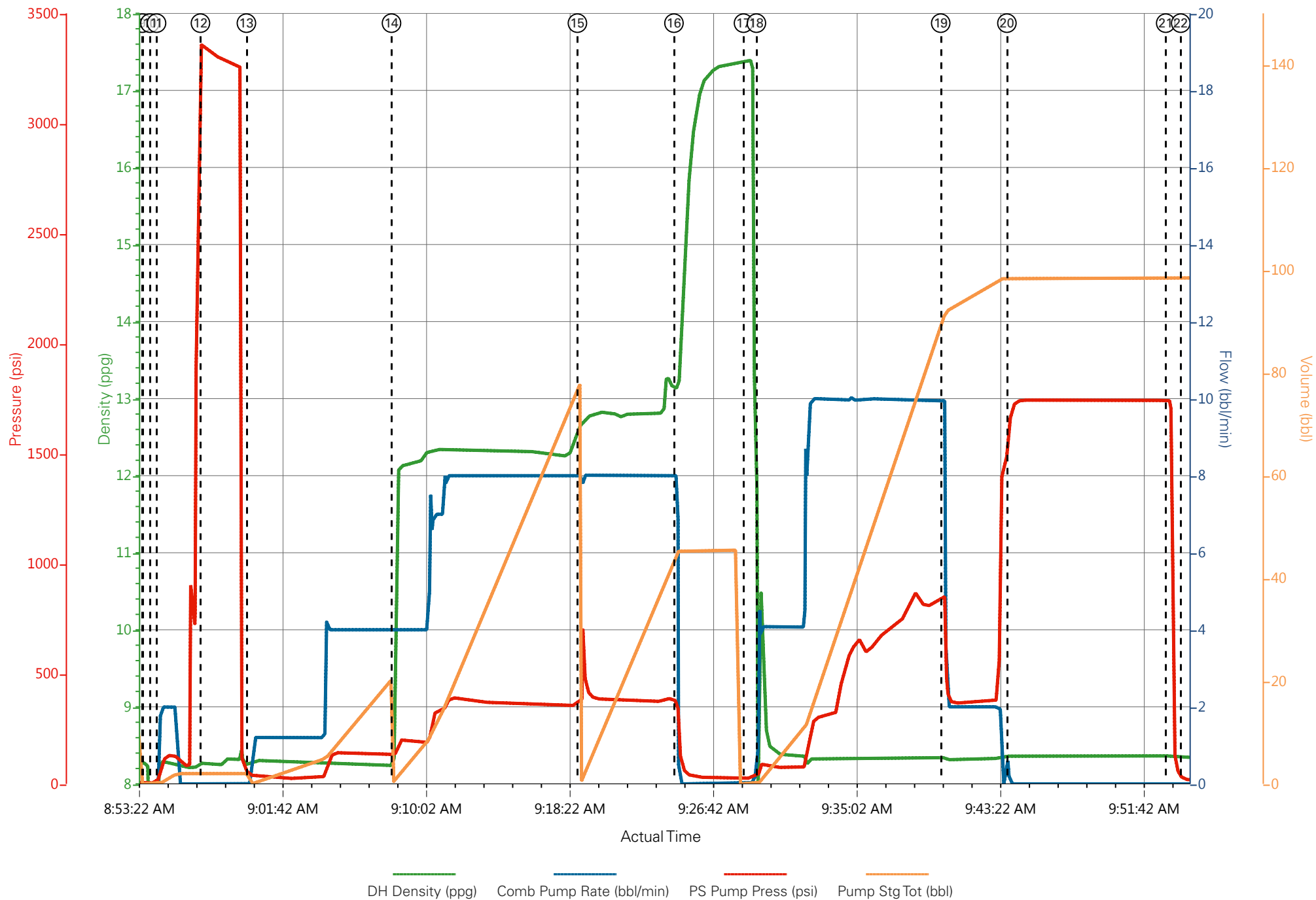
| | | | | | | | | | | |
|-------|----|---|-----------|----------|------|------|------|------|------|---|
| Event | 10 | Drop Bottom Plug | 3/31/2018 | 08:54:10 | USER | | | | | VERIFIED BY FLAG INDICATOR |
| Event | 11 | Prime Lines | 3/31/2018 | 08:54:33 | USER | 8.33 | 2.0 | 130 | 2 | FRESH WATER |
| Event | 12 | Test Lines | 3/31/2018 | 08:57:06 | COM5 | | | 3300 | | PRESSURE HELD |
| Event | 13 | Pump Spacer | 3/31/2018 | 08:59:46 | COM5 | 8.33 | 4.0 | 140 | 20 | FRESH WATER |
| Event | 14 | Pump Lead Cement | 3/31/2018 | 09:08:11 | COM5 | 12.3 | 8.0 | 380 | 73.2 | 167 SKS VARICEM GJ5 CMT 12.3 PPG, 2.46 FT3/SK, 14.17 GAL/SK |
| Event | 15 | Pump Tail Cement | 3/31/2018 | 09:18:59 | COM5 | 12.8 | 8.0 | 375 | 42.3 | 109 SKS VARICEM GJ5 CMT 12.8 PPG, 2.18 FT3/SK, 12.11 GAL/SK |
| Event | 16 | Shutdown | 3/31/2018 | 09:24:35 | USER | | | | | END OF CEMENT |
| Event | 17 | Drop Top Plug | 3/31/2018 | 09:28:37 | COM5 | | | | | VERIFIED BY FLAG INDICATOR |
| Event | 18 | Pump Displacement | 3/31/2018 | 09:29:22 | COM5 | 8.33 | 10.0 | 860 | 86 | FRESH WATER |
| Event | 19 | Slow Rate | 3/31/2018 | 09:40:04 | USER | 8.33 | 2.0 | 380 | 10 | SLOWED TO BUMP PLUG |
| Event | 20 | Bump Plug | 3/31/2018 | 09:43:55 | COM5 | 8.33 | 2.0 | 380 | 96 | PLUG BUMPED. BROUGHT PRESSURE UP TO 1600 PSI FOR A 10 MIN CASING TEST |
| Event | 21 | Check Floats | 3/31/2018 | 09:53:08 | USER | | | 1742 | | FLOATS HELD 1 BBL FLOW BACK TO TRUCK |
| Event | 22 | End Job | 3/31/2018 | 09:54:00 | COM5 | | | | | 25BBL CEMENT TO SURFACE 10 LB SUGAR USED |
| Event | 23 | Post-Job Safety Meeting (Pre Rig-Down) | 3/31/2018 | 10:00:00 | USER | | | | | ALL HES PRESENT |
| Event | 24 | Pre-Convoy Safety Meeting | 3/31/2018 | 11:45:00 | USER | | | | | ALL HES PRESENT |
| Event | 25 | Crew Leave Location | 3/31/2018 | 12:00:00 | USER | | | | | THANK YOU FOR CHOOSING HALLIBURTON CEMENT, DUSTIN HYDE AND CREW |

LARAMIE - GUNDERSON 994-13-12E - 8 5/8" SURFACE



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|-----------------------------|-------------------|---|-----------------------------|--------------------|---------------|--------------------|---------|
| ① Call Out | ③ Crew Leave Yard | ⑤ Assessment Of Location Safety Meeting | ⑦ Pre-Rig Up Safety Meeting | ⑨ Start Job | ⑪ Prime Lines | ⑬ Pump Spacer | ⑮ Pump |
| ② Pre-Convoy Safety Meeting | ④ Arrive At Loc | ⑥ Spot Equipment | ⑧ Pre-Job Safety Meeting | ⑩ Drop Bottom Plug | ⑫ Test Lines | ⑭ Pump Lead Cement | ⑯ Shutd |

LARAMIE - GUNDERSON 994-13-12E - 8 5/8" SURFACE



HALLIBURTON

iCem[®] Service

LARAMIE ENERGY II LLC

United States of America, COLORADO

For: Laramie

Date: Tuesday, April 03, 2018

Gunderson 994-13-12E Production

API#05-077-10535

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 | Start Job | 4/2/2018 | 00:15:00 | | | | | | TD 8384', TP 8379', FC 8292.82' SJ 86.18', OH 7.875', Csg 4.5" 11.6 lb/ft P-110, Prev. Csg. 8.625" 24# @ 1530', Mud 9.9 ppg. |
| Event | 2 | Call Out | 4/2/2018 | 16:00:00 | | | | | | Requested on Location @ 016:00 |
| Event | 3 | Pre-Convoy Safety Meeting | 4/2/2018 | 19:00:00 | | | | | | |
| Event | 4 | Crew Leave Yard | 4/2/2018 | 19:20:00 | | | | | | 1 Elite, 1 660, 1 pickup |
| Event | 5 | Arrive At Loc | 4/2/2018 | 22:00:00 | | | | | | Rig running casing |
| Event | 6 | Assessment Of Location Safety Meeting | 4/2/2018 | 22:05:00 | | | | | | JSA completed - Customer offered/received SDS - Water test pH 7.0, Cl <200, temp 53 degrees |
| Event | 7 | Pre-Rig Up Safety Meeting | 4/2/2018 | 22:10:00 | | | | | | |
| Event | 8 | Rig-Up Equipment | 4/2/2018 | 22:20:00 | | | | | | Iron to ground manifold, standpipe, wash up to cellar. Water hoses to upright and day tank, bulk hoses to silos and 660. |
| Event | 9 | Pre-Job Safety Meeting | 4/3/2018 | 00:15:34 | | | | | | All HES personnel, rig crew, and Company Rep |
| Event | 10 | Fill Lines | 4/3/2018 | 00:17:11 | | 8.33 | 2 | 280 | 5 | Fresh Water |
| Event | 11 | Test Lines | 4/3/2018 | 00:18:46 | | | | 5230 | | Held pressure 2 minutes |
| Event | 12 | Pump Tuned Spacer | 4/3/2018 | 00:26:22 | | 11.0 | 4 | 350 | 40 | Tuned Spacer III @ 11 ppg, drop bottom plug ahead of spacer |
| Event | 13 | Pump Lead Cement | 4/3/2018 | 00:35:35 | | 12.5 | 8 | 620 | 303.4 | 878 sks 12.5 ppg 1.94 yield 9.6 gal/sk |
| Event | 14 | Pump Tail Cement | 4/3/2018 | 01:17:37 | | 13.3 | 7.5 | 520 | 121.7 | 395 Sks 13.3 ppg 1.73 yield 7.81 gal/sk |
| Event | 15 | Shutdown | 4/3/2018 | 01:36:50 | | | | | | Wash lines to cellar |

| | | | | | | | | | |
|-------|----|-----------------------------|----------|----------|------|---|------|-------|--|
| Event | 16 | Drop Top Plug | 4/3/2018 | 01:44:50 | | | | | Verify Plug Launched |
| Event | 17 | Pump Displacement | 4/3/2018 | 01:46:02 | 8.33 | 8 | 1900 | 128.5 | 1 gal MMCR, 5 gals Clay-Web II |
| Event | 18 | Slow Rate | 4/3/2018 | 02:06:52 | 8.33 | 4 | 1800 | 118 | Slow Rate 10 bbls prior to Calculated Displacement |
| Event | 19 | Bump Plug | 4/3/2018 | 02:09:52 | | | 2500 | | Plug Bumped at 1900 psi, Brought up to 2500 psi |
| Event | 20 | Pressure Up Casing | 4/3/2018 | 02:11:16 | | | 3240 | | Held For 10 Min. |
| Event | 21 | Check Floats | 4/3/2018 | 02:20:28 | | | | | Floats held – 1.5 bbl back to the truck |
| Event | 22 | End Job | 4/3/2018 | 02:21:45 | | | | | Good Returns Throughout job. 40 bbls Tuned Spacer to surface |
| Event | 23 | Pre-Rig Down Safety Meeting | 4/3/2018 | 02:35:57 | | | | | 40 sugar, No add hours |
| Event | 24 | Rig-Down Equipment | 4/3/2018 | 02:40:28 | | | | | |
| Event | 25 | Pre-Convoy Safety Meeting | 4/3/2018 | 02:42:50 | | | | | |
| Event | 26 | Crew Leave Location | 4/3/2018 | 02:45:38 | | | | | Thanks For Using Halliburton Cement. Chris Martinez And Crew |

2.0 Attachments

2.1 Gunderson 994-13-12E-Custom Results.png

