

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Terra

Date: Saturday, April 29, 2017

TR 634-27-597 Surface PJR

API# 05-045-23502-00

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

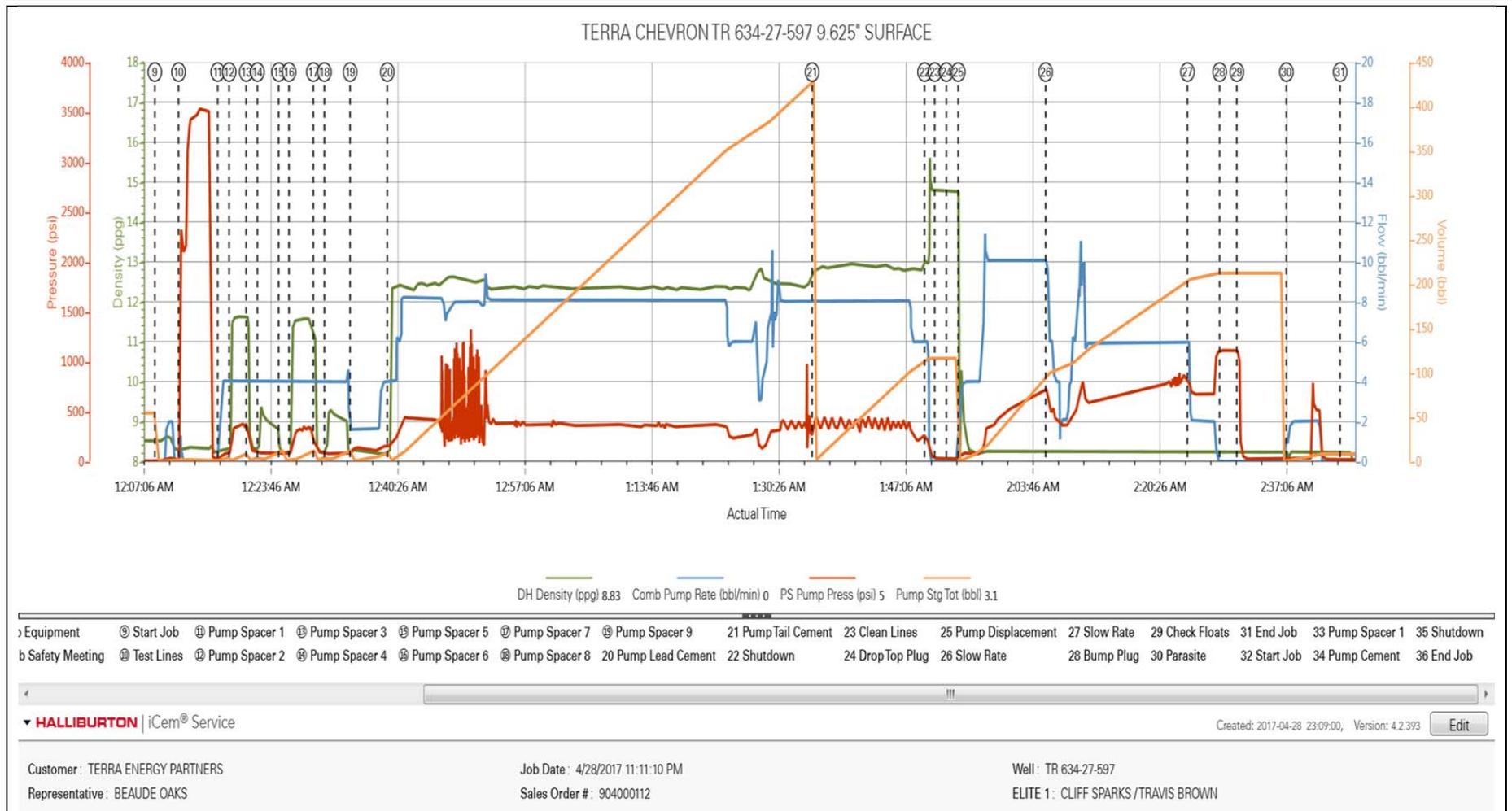
1.1 Job Event Log

| 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 | 4/28/2017 | 11:30:00 | USER | | | | | REQUESTED ON LOCATION AT 19:00 4/28/17 |
| Event | 2 | Pre-Convoy Safety Meeting | 4/28/2017 | 13:45:00 | USER | | | | | ALL HES PRESENT |
| Event | 3 | Crew Leave Yard | 4/28/2017 | 14:00:00 | USER | | | | | 1 ELITE PUMP, 1 660 BULK TRUCK, 1 550 PU. SUPER FLUSH TRUCK LEFT NEAR LOCATION |
| Event | 4 | Arrive At Loc | 4/28/2017 | 18:00:00 | USER | | | | | ARRIVED AN HOUR EARLY |
| Event | 5 | Assessment Of Location Safety Meeting | 4/28/2017 | 18:05:00 | USER | | | | | MET WITH CO REP TO GO OVER NUMBERS AND JOB PROCEDURE. CUSTOMER OFFERED SDS. DID A WALK AROUND OF LOCATION AND COLLECTED WATER SAMPLE. PH 7, CHL 0, TEMP 65F |
| Event | 6 | Pre-Rig Up Safety Meeting | 4/28/2017 | 18:15:00 | USER | | | | | FILLED OUT JSA AND SPOTTED TRUCKS ON TO LOCATION. |
| Event | 7 | Rig-Up Equipment | 4/28/2017 | 18:30:00 | USER | | | | | LINED OUT CREW FOR RIG UP AND HEADED OUT TO GET SUPER FLUSH TRUCK. ARRIVING BACK ON LOCATION AND RIG CREW WAS JUST LANDING CASING AND RIGGING CASING CREW DOWN |
| Event | 8 | Pre-Job Safety Meeting | 4/28/2017 | 23:30:00 | USER | | | | | MET WITH RIG CREW TO GO OVER JOB. ALL HES PRESENT |
| Event | 9 | Start Job | 4/29/2017 | 00:08:49 | COM5 | | | | | TD 2839', TP 2837' FC 2798', 864' 40# J-55 9.625" AND 1934' OF 36# J-55 9.625" SC. OH 14.75" MW 9.2 PPG. RIG CIRCULATED AT 12 BPM 35PSI AND NO RETURNS. |
| Event | 10 | Test Lines | 4/29/2017 | 00:11:55 | COM5 | | | | | TESTED TO 3535 PSI. KO'S FUNCTIONING. TESTED WELL |

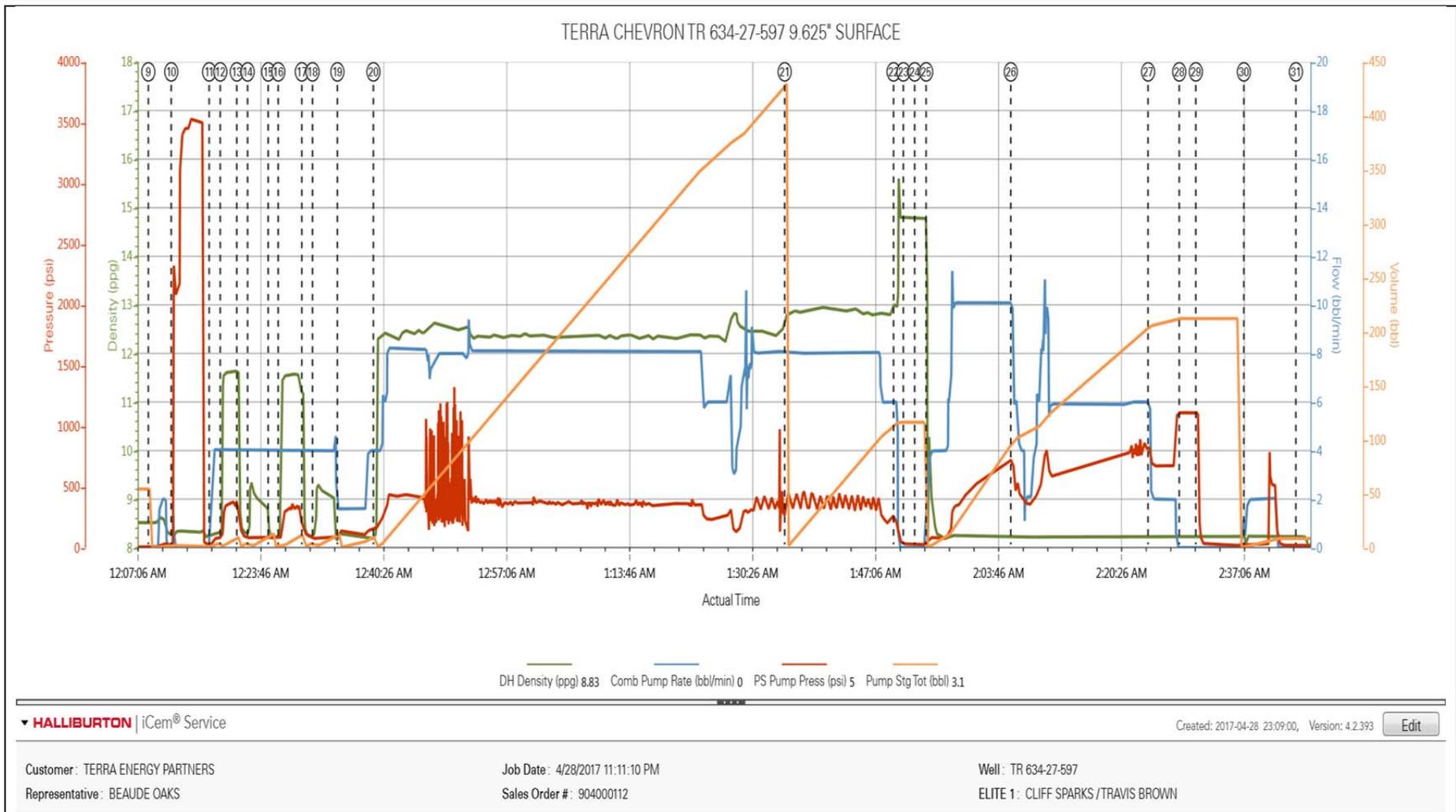
| | | | | | | | | | | |
|-------|----|-------------------|-----------|----------|------|------|----|------|-----|--|
| Event | 11 | Pump Spacer 1 | 4/29/2017 | 00:17:03 | COM5 | 8.33 | 4 | 35 | 5 | 5 BBLs FRESH WATER |
| Event | 12 | Pump Spacer 2 | 4/29/2017 | 00:18:34 | COM5 | 11.4 | 4 | 320 | 10 | 10 BLS SUPER FLUSH |
| Event | 13 | Pump Spacer 3 | 4/29/2017 | 00:20:48 | COM5 | 8.33 | 4 | 35 | 5 | 5 BBLs FRESH WATER |
| Event | 14 | Pump Spacer 4 | 4/29/2017 | 00:22:16 | COM5 | 9.1 | 4 | 35 | 10 | 10 BBLs CALCIUM CHLORIDE |
| Event | 15 | Pump Spacer 5 | 4/29/2017 | 00:25:04 | COM5 | 8.33 | 4 | 35 | 5 | 5 BBLs FRESH WATER |
| Event | 16 | Pump Spacer 6 | 4/29/2017 | 00:26:25 | COM5 | 11.4 | 4 | 350 | 10 | 10 BBLs SUPER FLUSH |
| Event | 17 | Pump Spacer 7 | 4/29/2017 | 00:29:37 | COM5 | 8.33 | 4 | 35 | 5 | 5 BBLs FRESH WATER |
| Event | 18 | Pump Spacer 8 | 4/29/2017 | 00:31:04 | COM5 | 9.1 | 4 | 35 | 10 | 10 BBLs CALCIUM CHLORIDE |
| Event | 19 | Pump Spacer 9 | 4/29/2017 | 00:34:26 | COM5 | 8.33 | 4 | 35 | 10 | 10 BBLs FRESH WATER |
| Event | 20 | Pump Lead Cement | 4/29/2017 | 00:39:19 | COM5 | 12.3 | 8 | 420 | 400 | 945 SKS (400 BBLs) 12.3 PPG, 2.38 FT3/SK, 13.76 GAL/SK WITH 90# TUFF FIBER |
| Event | 21 | Pump Tail Cement | 4/29/2017 | 01:35:04 | COM5 | 12.8 | 8 | 430 | 130 | 345 SKS (130 BBLs) 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK |
| Event | 22 | Shutdown | 4/29/2017 | 01:49:50 | USER | | | | | END OF CEMENT |
| Event | 23 | Clean Lines | 4/29/2017 | 01:51:10 | USER | | | | | 10 BBLs WASHED ON TOP |
| Event | 24 | Drop Top Plug | 4/29/2017 | 01:52:42 | USER | | | | | PLUG WENT. WITNESSED BY CO REP |
| Event | 25 | Pump Displacement | 4/29/2017 | 01:54:15 | COM5 | 8.33 | 10 | 720 | 215 | 215 BBLs FRESH WATER. GOT GOOD CEMENT RETURNS AT 127 BBLs AWAY TOTAL CEMENT 88 BBLs. |
| Event | 26 | Slow Rate | 4/29/2017 | 02:05:44 | USER | 8.33 | 6 | 870 | 100 | HAD TO ADJUST RATES DUE TO THE CELLAR PUMP NOT KEEPING UP |
| Event | 27 | Slow Rate | 4/29/2017 | 02:24:20 | USER | 8.33 | 2 | 680 | 205 | SLOWED TO 2 BBLs/MIN TO LAND THE PLUG |
| Event | 28 | Bump Plug | 4/29/2017 | 02:28:34 | COM5 | | | 675 | 215 | PLUG BUMPED AT 675 PSI AND WENT TO 1100 PSI |
| Event | 29 | Check Floats | 4/29/2017 | 02:30:49 | USER | | | 1100 | | FLOATS HELD. 1 BBLs BACK |
| Event | 30 | Parasite | 4/29/2017 | 02:37:19 | COM5 | 8.34 | 2 | 790 | 10 | PUMPED 10 BBLs SUGAR WATER THROUGH |

| PARASITE. PRESSURED UP TO 790 AT 7 BBLs GONE | | | | | | | | | | | |
|--|----|---------------|-----------|----------|------|------|---|----|-----|--|---|
| Event | 31 | End Job | 4/29/2017 | 02:44:23 | USER | | | | | | GOOD RETURNS DURING TAIL AND DISPLACEMENT. 88 BBLs OF GOOD CEMENT TO SURFACE |
| Event | 32 | Start Job | 4/29/2017 | 08:07:00 | COM5 | | | | | | START TOP-OUT. CEMENT 70' DOWN. |
| Event | 33 | Pump Spacer 1 | 4/29/2017 | 08:08:24 | USER | 8.33 | 2 | 10 | 1 | | 1 BBL FRESH WATER TO ESTABLISH FLOW |
| Event | 34 | Pump Cement | 4/29/2017 | 08:10:02 | COM5 | 15.6 | 2 | 50 | 8.4 | | 40 SKS (8.4 BBLs) 15.6 PPG, 1.19 FT ³ /SK, 5.24 GAL/SK 1% CALCIUM CHLORIDE |
| Event | 35 | Shutdown | 4/29/2017 | 08:16:39 | USER | | | | | | CEMENT TO SURFACE |
| Event | 36 | End Job | 4/29/2017 | 08:19:19 | COM5 | | | | | | THANK YOU FOR USING HALLIBURTON CEMENT. CLIFF SPARKS AND CREW |

2.2 CHART WITH EVENTS.png



2.3 CHART WITHOUT EVENTS.png



2.0 Attachments

2.1 TOP OUT CHART.png

