

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America

For: Lynn Cass and Abe Alexander

Date: Sunday, January 01, 2017

TR 23-21-597 Surface

API# 05-045-23346-00

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

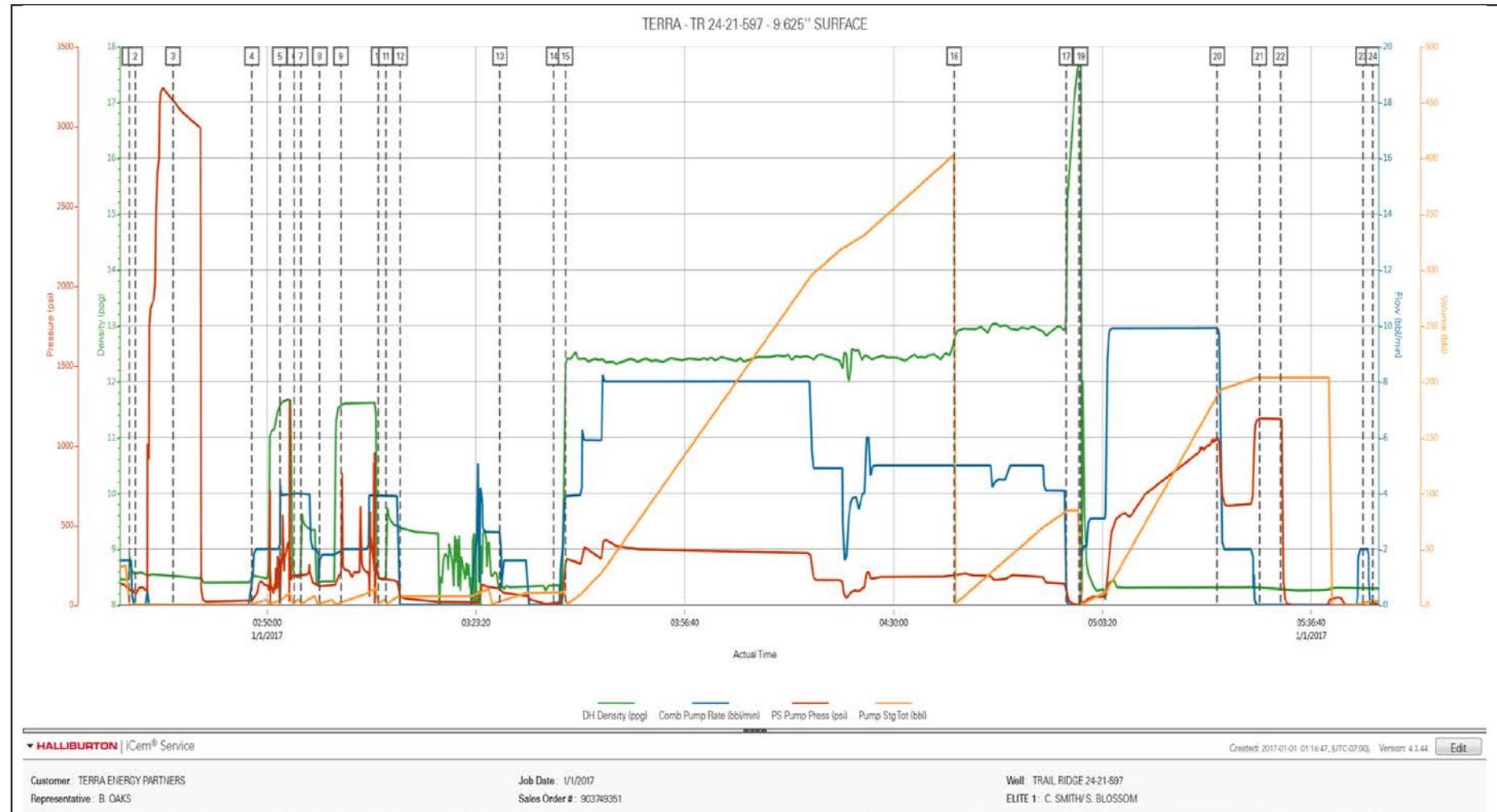
| Type | Seq. No. | Graph Label | Date | Time | Source | DH Density <i>(ppg)</i> | Comb Pump Rate <i>(bbl/min)</i> | PS Pump Press <i>(psi)</i> | Pump Stg Tot <i>(bbl)</i> | Comments |
|-------|----------|---------------------------|------------|----------|--------|----------------------------|------------------------------------|-------------------------------|------------------------------|---|
| Event | 1 | Call Out | 12/31/2016 | 23:30:00 | USER | | | | | REQUESTED ON LOCATION @ 0900 |
| Event | 2 | Pre Convoy Safety Meeting | 12/31/2016 | 02:30:00 | USER | | | | | ALL HES PRESENT |
| Event | 3 | Crew Leave Yard | 12/31/2016 | 03:00:00 | USER | | | | | 1 F550, 1 PUMP TRUCK, & 1 660 BULK TRUCK. |
| Event | 4 | Arrive At Location | 12/31/2016 | 07:30:00 | USER | | | | | RIG PULLING DRILL PIPE |
| Event | 5 | Assessment Of Location | 12/31/2016 | 08:30:00 | USER | | | | | RIG PULLING DRILL PIPE |
| Event | 6 | Pre Rig Up Safety Meeting | 1/1/2017 | 23:30:00 | USER | | | | | ALL HES PRESENT |
| Event | 7 | Rig Up Equipment | 1/1/2017 | 01:00:00 | USER | | | | | HES RIGGED UP EQUIPMENT WITHOUT ENTERING RED ZONE. |
| Event | 8 | Pre Job Safety Meeting | 1/1/2017 | 02:00:00 | USER | | | | | ALL HES PRESENT AND RIG CREW |
| Event | 9 | Start Job | 1/1/2017 | 02:28:00 | USER | | | | | TD 2692', TP 2695', SJ 44.9', OH 14.75", CSG 9.625" 36#, MUD 9.3 PPG. RIG CLEARED CASING CAPACITY (215 BBL) AND TURNED OVER TO HES. |
| Event | 10 | Prime Pumps | 1/1/2017 | 02:28:58 | COM6 | 8.54 | 0.00 | 62.00 | 0.00 | 8.33 PPG FRESH WATER |
| Event | 11 | Test Lines | 1/1/2017 | 02:34:59 | COM6 | 8.50 | 0.00 | 3157.00 | 0.00 | ALL LINES HELD PRESSURE AT 3157 PSI |
| Event | 12 | Pump Spacer 1 | 1/1/2017 | 02:47:33 | COM6 | 8.55 | 0.80 | 27.00 | 0.20 | 8.33 PPG FRESH WATER (5BBL) |
| Event | 13 | Pump Spacer 2 | 1/1/2017 | 02:52:02 | COM6 | 11.56 | 2.20 | 82.00 | 4.10 | 11 PPG SUPER FLUSH 100 (10BBL) |
| Event | 14 | Pump Spacer 1 | 1/1/2017 | 02:54:19 | COM6 | 8.53 | 4.00 | 184.00 | 2.00 | 8.33 PPG FRESH WATER (5BBL) |
| Event | 15 | Pump Spacer 3 | 1/1/2017 | 02:55:23 | COM6 | 8.96 | 4.00 | 192.00 | 0.90 | 9 PPG CALCIUM CHLORIDE WATER (10BBL) |

| | | | | | | | | | | |
|-------|----|-----------------------------|----------|----------|------|-------|------|---------|--------|---|
| Event | 16 | Pump Spacer 1 | 1/1/2017 | 02:58:24 | COM6 | 8.43 | 1.60 | 109.00 | 1.20 | 8.33 PPG FRESH WATER (5BBL) |
| Event | 17 | Pump Spacer 2 | 1/1/2017 | 03:01:47 | COM6 | 11.57 | 1.90 | 194.00 | 2.20 | 11 PPG SUPER FLUSH 100 (10BBL) |
| Event | 18 | Pump Spacer 1 | 1/1/2017 | 03:07:47 | COM6 | 8.49 | 3.90 | 170.00 | 1.30 | 8.33 PPG FRESH WATER (5BBL) |
| Event | 19 | Pump Spacer 3 | 1/1/2017 | 03:08:57 | COM6 | 8.87 | 3.90 | 156.00 | 0.40 | 9 PPG CALCIUM CHLORIDE WATER (10BBL) |
| Event | 20 | Shutdown | 1/1/2017 | 03:11:14 | USER | 9.35 | 0.00 | 56.00 | 7.80 | ESTABLISHED FULL RETURNS AND RIG WAS NOT SET UP TO TRANSFER. |
| Event | 21 | Pump Spacer 1 | 1/1/2017 | 03:27:09 | COM6 | 8.30 | 2.60 | 104.00 | 4.00 | 8.33 PPG FRESH WATER (10 BBL) |
| Event | 22 | Check Weight | 1/1/2017 | 03:35:44 | COM6 | | | | | WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES |
| Event | 23 | Pump Lead Cement | 1/1/2017 | 03:37:38 | COM6 | 12.32 | 3.90 | 261.00 | 13.20 | VARICEM CEMENT 900 SKS (381 BBLs), 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK |
| Event | 24 | Pump Tail Cement | 1/1/2017 | 04:39:40 | COM6 | 12.81 | 4.10 | 191.00 | 2.15 | VARICEM CEMENT 305 SKS (114 BBLs), 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK. |
| Event | 25 | Shutdown | 1/1/2017 | 04:57:34 | USER | | | | | END OF CEMENT |
| Event | 26 | Drop Top Plug | 1/1/2017 | 04:59:37 | COM6 | | | | | PLUG WENT, VERIFIED BY CO REP. |
| Event | 27 | Pump Displacement | 1/1/2017 | 04:59:53 | COM6 | 17.80 | 1.70 | 0.00 | 0.00 | 8.34 PPG FRESH WATER (204.8 BBLs) |
| Event | 28 | Slow Rate | 1/1/2017 | 05:21:40 | USER | 8.32 | 9.90 | 1049.00 | 187.20 | SLOW RATE TO 2 BPM PER CO REP TO LAND PLUG |
| Event | 29 | Bump Plug | 1/1/2017 | 05:28:25 | COM6 | 8.31 | 0.00 | 1169.00 | 203.40 | LAND PLUG AT 662 PSI, BROUGHT UP TO 1160 PSI |
| Event | 30 | Check Floats | 1/1/2017 | 05:31:47 | USER | 8.30 | 0.00 | 1168.00 | 203.40 | FLOATS HELD, 1 BBL BACK TO TRUCK |
| Event | 31 | Pumping On Tubing Or Casing | 1/1/2017 | 05:44:56 | USER | 8.29 | 2.00 | 6.00 | 1.60 | 8.33 PPG SUGAR WATER (6 BBL) CIRCULATE PARACITE STRING THROUGH CASING |
| Event | 32 | End Job | 1/1/2017 | 05:46:30 | USER | 8.29 | 0.00 | 13.00 | 3.40 | RETURNS THROUGHOUT JOB, GAINED RETURNS AT 55 BBLs AWAY ON SPACER TRAIN, LOST RETURNS AT 50 BBLs OF TAIL CEMENT AWAY, GAINED RETURNS AT 30 BBLs AWAY ON DISPLACEMENT. PIPE NOT WAS RECIPROCATED DURING THE JOB AND 114 BBLs OF CEMENT TO SURFACE. CEMENT FELL BACK APROX 50' |
| Event | 33 | Start Top Out | 1/1/2017 | 09:20:01 | COM6 | | | | | |
| Event | 34 | Prime Pumps | 1/1/2017 | 09:32:19 | COM6 | 8.69 | 0.00 | -5.00 | 0.00 | 8.33 PPG FRESH WATER |

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|-------|----|---------------------------|----------|----------|------|-------|------|-------|-------|--|
| Event | 35 | Pump Cement | 1/1/2017 | 09:40:51 | USER | 15.71 | 1.50 | 12.00 | 0.80 | TOP OUT CEMENT 50 SKS (11 BBLS), 15.6 PPG, 1.19 FT3/SK, 5.24 GAL/SK |
| Event | 36 | Clean Lines | 1/1/2017 | 09:49:54 | USER | 11.67 | 0.80 | 21.00 | 11.50 | 8.33 PPG FRESH WATER |
| Event | 37 | End Top Out | 1/1/2017 | 09:52:00 | COM6 | | | | | CEMENT FELL BACK APROX 50', 6 BBLS OF CMENT TO FILL ANNULUS. 50 SKS USED FOR TOP OUT |
| Event | 38 | Post Job Safety Meeting | 1/1/2017 | 10:00:00 | USER | | | | | ALL HES PRESENT |
| Event | 39 | Rig Down Equipment | 1/1/2017 | 10:20:00 | USER | | | | | ALL HES PRESENT |
| Event | 40 | Crew Leave Location | 1/1/2017 | 11:15:00 | USER | | | | | THANK YOU FOR CHOOSING HALLIBURTON CEMENT, CHRIS SMITH AND CREW |
| Event | 41 | Pre Convoy Safety Meeting | 1/1/2017 | 11:30:00 | USER | | | | | ALL HES PRESENT |

2.0 Attachments

2.1 PRIMARY JOB.png



2.2 TOP OUT.png

