

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: Terra

Date: Saturday, April 21, 2018

FED PA 33-26 Surface PJR

API # 05-045-23720

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) | PS Pump Press (psi) | Pump Stg Tot (bbl) | Comments |
|-------|----------|---------------------------------------|-----------|----------|--------|---------------------|-----------------------------|------------------------|-----------------------|--|
| Event | 1 | Call Out | 4/21/2018 | 08:30:00 | USER | | | | | REQUESTED ON LOCATION @ 14:30 |
| Event | 2 | Pre-Convoy Safety Meeting | 4/21/2018 | 11:45:00 | USER | | | | | ALL HES PRESENT |
| Event | 3 | Crew Leave Yard | 4/21/2018 | 12:00:00 | USER | | | | | 1 HT 400 PUMP TRUCK E1, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP |
| Event | 4 | Arrive At Loc | 4/21/2018 | 13:00:00 | USER | | | | | HES ARRIVED TO LOCATION 1.5 HOURS EARLY. RIG GETTING READY TO START RUNNING CASING |
| Event | 5 | Assessment Of Location Safety Meeting | 4/21/2018 | 13:15:00 | USER | | | | | MET WITH COMP REP, 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 | 4/21/2018 | 13:30:00 | USER | | | | | 1 HT 400 PUMP TRUCK E1, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP |
| Event | 7 | Pre-Rig Up Safety Meeting | 4/21/2018 | 14:00:00 | USER | | | | | ALL HES PRESENT |
| Event | 8 | Pre-Job Safety Meeting | 4/21/2018 | 16:00:00 | USER | | | | | ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 10.7 BPM WITH 270 PSI |
| Event | 9 | Start Job | 4/21/2018 | 16:31:41 | USER | | | | | TD 1135', TP 1128.29', OH 13 1/2", CSG 9 5/8" 36# J-55, SJ 43.23', MUD 9.7 PPG |
| Event | 10 | Prime Lines | 4/21/2018 | 16:32:15 | USER | 8.33 | 1.6 | 70 | 3 | FRESH WATER |
| Event | 11 | Test Lines | 4/21/2018 | 16:36:58 | COM5 | | | 3122 | | PRESSURE HELD |

| | | | | | | | | | | |
|-------|----|--|-----------|----------|------|------|------|-----|------|---|
| Event | 12 | Pump Spacer | 4/21/2018 | 16:40:39 | COM5 | 8.33 | 4.0 | 140 | 20 | FRESH WATER |
| Event | 13 | Check Weight | 4/21/2018 | 16:45:21 | COM5 | | | | | WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES |
| Event | 14 | Pump Lead Cement | 4/21/2018 | 16:48:58 | COM5 | 12.3 | 8.0 | 650 | 53 | 125 SKS VARICEM CMT 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK. |
| Event | 15 | Pump Tail Cement | 4/21/2018 | 16:56:18 | COM5 | 12.8 | 8.0 | 690 | 65.8 | 175 SKS VARICEM CMT 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK |
| Event | 16 | Check Weight | 4/21/2018 | 16:56:52 | COM5 | | | | | WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES |
| Event | 17 | Shutdown | 4/21/2018 | 17:05:47 | USER | | | | | END OF CEMENT |
| Event | 18 | Drop Top Plug | 4/21/2018 | 17:06:59 | USER | | | | | VERIFIED BY FLAG INDICATOR |
| Event | 19 | Pump Displacement | 4/21/2018 | 17:07:30 | COM5 | 8.33 | 10.0 | 900 | 73.6 | FRESH WATER |
| Event | 20 | Slow Rate | 4/21/2018 | 17:19:08 | USER | 8.33 | 2.0 | 300 | 10 | SLOWED RATE TO BUMP PLUG |
| Event | 21 | Bump Plug | 4/21/2018 | 17:23:26 | COM5 | 8.33 | 2.0 | 280 | 83.6 | PLUG BUMPED |
| Event | 22 | Check Floats | 4/21/2018 | 17:26:22 | USER | | | 800 | | FLOATS HELD .5 BBL FLOW BACK |
| Event | 23 | End Job | 4/21/2018 | 17:27:00 | COM5 | | | | | 24 BBL OF CEMENT TO SURFACE. USED 40 LBS SUGAR |
| Event | 24 | Post-Job Safety Meeting (Pre Rig-Down) | 4/21/2018 | 17:30:00 | USER | | | | | ALL HES PRESENT |
| Event | 25 | Pre-Convoy Safety Meeting | 4/21/2018 | 18:45:00 | USER | | | | | ALL HES PRESENT |
| Event | 26 | Crew Leave Location | 4/21/2018 | 19:00:00 | USER | | | | | THANK YOU FOR CHOOSING HALLIBURTON CEMENT, DUSTIN HYDE AND CREW |

TERRA - FED PA 33-26 - 9 5/8" SURFACE

