

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

Date: Friday, October 19, 2018

PA 533-24 Surface

Terra PA 533-24 Surface

Job Date: Thursday, September 27, 2018

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

| Type | Seq. No. | Activity | Date | Time | Source | PS Pump Press (psi) | Comb Pump Rate (bbl/min) | DH Density (ppg) | Pump Stg Tot (bbl) | Comments |
|-------|----------|---------------------------------------|-----------|----------|--------|------------------------|-----------------------------|---------------------|-----------------------|---|
| Event | 1 | Call Out | 9/26/2018 | 19:00:00 | USER | | | | | REQUESTED ON LOCATION TIME 01:00 |
| Event | 2 | Depart Yard Safety Meeting | 9/26/2018 | 21:30:00 | USER | | | | | WITH HES, 1 F-550, 1 ELITE CEMENTING UNIT, 1 660 BULK TRUCK, JSA COMPLETED |
| Event | 3 | Arrive At Loc | 9/26/2018 | 23:15:00 | USER | | | | | RIG RUNNING CASING UPON HES, ARRIVAL |
| Event | 4 | Assessment Of Location Safety Meeting | 9/27/2018 | 00:01:00 | USER | | | | | WITH HES, JSA COMPLETED, SDS OFFERED FOR ALL HES MATERIALS |
| Event | 5 | Pre-Rig Up Safety Meeting | 9/27/2018 | 00:09:51 | USER | | | | | WITH HES, JSA COMPLETED |
| Event | 6 | Rig-Up Equipment | 9/27/2018 | 00:14:14 | USER | | | | | 1 LINE RAN TO THE FLOOR, 1 9.625 IN QUICK-LATCH PLUG CONTAINER |
| Event | 7 | Other | 9/27/2018 | 00:14:15 | USER | | | | | TD 1134 FT, CSG 1128.3 FT 9.625 IN 36 LB/FT J-55, HOLE 13.5 IN, SHOE 44.36FT |
| Event | 8 | Other | 9/27/2018 | 00:14:17 | USER | | | | | RIG CIRCULATION, 300 BBL, 10 BBL/MIN, 188 PSI, RAT HOLE LENGTH 5 FT, PIPE WAS STATIC, MW 9.2 LB/GAL WBM |
| Event | 9 | Other | 9/27/2018 | 00:14:19 | USER | | | | | WATER TEST PH 7.1, CHLOR 0, TEMP 63 DEG F |
| Event | 10 | Pre-Job Safety Meeting | 9/27/2018 | 03:30:00 | USER | 6.00 | 0.00 | 8.54 | 0.00 | WITH HES, TEP, AND HP 271 |
| Event | 11 | Start Job | 9/27/2018 | 03:40:55 | COM4 | 7.00 | 0.00 | 8.54 | 0.00 | |
| Event | 12 | Prime Pumps | 9/27/2018 | 03:42:32 | USER | 50.00 | 2.00 | 8.57 | 0.90 | 4 BBL FRESH WATER, RETURNS AT 2 BBL AWAY |

| | | | | | | | | | | |
|-------|----|-----------------------------|-----------|----------|------|---------|-------|-------|-------|--|
| Event | 13 | Test Lines | 9/27/2018 | 03:46:28 | USER | 3056.00 | 0.00 | 8.61 | 4.10 | LOW TEST AT 1980 PSI, HIGH TEST AT 3056 PSI, PRESSURE HOLDING |
| Event | 14 | Pump Spacer 1 | 9/27/2018 | 03:49:33 | USER | 44.00 | 1.90 | 8.55 | 0.60 | 20 BBL FRESH WATER |
| Event | 15 | Pump Lead Cement | 9/27/2018 | 03:58:19 | USER | 200.00 | 4.00 | 12.31 | 0.10 | MIXED AT 12.3 LB/GAL, 125 SKS, 2.38 FT3/SK, 13.77 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES |
| Event | 16 | Pump Tail Cement | 9/27/2018 | 04:05:59 | USER | 216.00 | 4.70 | 12.78 | 0.60 | MIXED AT 12.8 LB/GAL, 175 SKS, 2.11 FT3/SK, 11.78 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES |
| Event | 17 | Shutdown | 9/27/2018 | 04:14:50 | USER | 147.00 | 0.00 | 12.57 | 67.00 | |
| Event | 18 | Drop Top Plug | 9/27/2018 | 04:17:21 | USER | 4.00 | 0.00 | 14.90 | 67.00 | PLUG LAUNCHED, CUSTOMER WITNESSED |
| Event | 19 | Pump Displacement | 9/27/2018 | 04:19:53 | USER | 118.00 | 2.90 | 12.12 | 1.60 | FRESH WATER |
| Event | 20 | Slow Rate | 9/27/2018 | 04:31:06 | USER | 266.00 | 2.00 | 8.34 | 78.50 | SLOWED AT 74 BBL AWAY TO 2 BBL/MIN |
| Event | 21 | Bump Plug | 9/27/2018 | 04:33:11 | USER | 246.00 | 2.00 | 8.35 | 82.60 | PLUG BUMPED AT CALCULATED DISPLACEMENT, 246 PSI |
| Event | 22 | Check Floats | 9/27/2018 | 04:36:31 | USER | 912.00 | 0.00 | 8.36 | 83.00 | FLOATS HOLDING, .5 BBL RETURNED TO THE TRUCK |
| Event | 23 | End Job | 9/27/2018 | 04:38:00 | USER | 6.00 | 0.00 | 8.34 | 83.00 | GOOD CIRCULATION, RIG USED HES TOP PLUG, RIG DID NOT USE SUGAR, NO ADD HOURS |
| Event | 24 | Pre-Rig Down Safety Meeting | 9/27/2018 | 04:50:00 | USER | 15.00 | 18.60 | 8.35 | 44.50 | WITH HES, JSA COMPLETD |
| Event | 25 | Rig Down Lines | 9/27/2018 | 05:00:00 | USER | | | | | |
| Event | 26 | Other | 9/27/2018 | 05:13:00 | USER | | | | | SPACER 20 BBL FRESH WATER, LEAD CEMENT 52.9 BBL, TAIL CEMENT 65.7 BBL, FINAL DISPLACEMENT 83.8 BBL, 25 BBL CEMENT CIRCULATED TO SURFACE, TOP OF TAIL CEMENT 411 FT |
| Event | 27 | Pre-Convoy Safety Meeting | 9/27/2018 | 05:20:00 | USER | | | | | WITH HES, JSA COMPLETED |
| Event | 28 | Crew Leave Location | 9/27/2018 | 05:30:00 | USER | | | | | THANKS FOR USING HALLIBURTON, JOHN KEANE AND CREW |

2.0 Attachments

2.1 TEP-PA-533-24-SURFACE.png

