

The Road to Excellence Starts with Safety

| | | | | | | | | | | |
|--|------------|--------------------|------------------|-----------------------------------|----------------------------|-----------------------------|---------------|--------------|---------------------|---------------|
| Sold To #: 375989 | | Ship To #: 3869143 | | Quote #: | | Sales Order #: 0905874396 | | | | |
| Customer: CONFLUENCE DJ LLC-EBUS | | | | Customer Rep: CONFLUENCE REP | | | | | | |
| Well Name: 70 RANCH | | | Well #: 10-18-3L | | API/UWI #: 05-123-46612-00 | | | | | |
| Field: WATTENBERG | | City (SAP): KERSEY | | County/Parish: WELD | | State: COLORADO | | | | |
| Legal Description: SW SW-3-4N-63W-260FSL-1137FWL | | | | | | | | | | |
| Contractor: ENSIGN DRLG | | | | Rig/Platform Name/Num: ENSIGN 140 | | | | | | |
| Job BOM: 7523 7523 | | | | | | | | | | |
| Well Type: HORIZONTAL OIL | | | | | | | | | | |
| Sales Person: HALAMERICA\HX38199 | | | | Srv Supervisor: Kyle Bath | | | | | | |
| Job | | | | | | | | | | |
| Formation Name | | | | | | | | | | |
| Formation Depth (MD) | | Top | | Bottom | | | | | | |
| Form Type | | | | BHST | | | | | | |
| Job depth MD | | 16512ft | | Job Depth TVD | | | | | | |
| Water Depth | | | | Wk Ht Above Floor | | | | | | |
| Perforation Depth (MD) | | From | | To | | | | | | |
| Well Data | | | | | | | | | | |
| Description | New / Used | Size in | ID in | Weight lbm/ft | Thread | Grade | Top MD ft | Bottom MD ft | Top TVD ft | Bottom TVD ft |
| Casing | 0 | 9.625 | 8.921 | 36 | | | 0 | 1555 | 0 | 0 |
| Casing | 0 | 5.5 | 4.778 | 20 | | | 0 | 16513 | 0 | 0 |
| Open Hole Section | | | 8.5 | | | | 1565 | 16525 | 0 | 0 |
| Tools and Accessories | | | | | | | | | | |
| Type | Size in | Qty | Make | Depth ft | | Type | Size in | Qty | Make | |
| Guide Shoe | 5.5 | | | 16513 | | Top Plug | 5.5 | | HES | |
| Float Shoe | 5.5 | | | | | Bottom Plug | 5.5 | | HES | |
| Float Collar | 5.5 | | | | | SSR plug set | 5.5 | | HES | |
| Insert Float | 5.5 | | | | | Plug Container | 5.5 | | HES | |
| Stage Tool | 5.5 | | | | | Centralizers | 5.5 | | HES | |
| Fluid Data | | | | | | | | | | |
| Stage/Plug #: 1 | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft ³ /sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 1 | DIESEL | DIESEL | 60 | bbl | 8.3 | | | | | |

| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
|---|-----------------------|---|---------------------|---------|---------------------------|----------------------|------------------|------------------------|------------------------|----------|
| 2 | Tuned Prime Spacer | SBM FDP-C1337-18 CEMENT SPACER SYS | 100 | bbl | 12 | 3.22 | | | | |
| 0.10 gal/bbl | | D-AIR 3000L, 5 GAL PAIL (101007444) | | | | | | | | |
| 1 lbm/bbl | | FE-2 (100001615) | | | | | | | | |
| 6 lbm/bbl | | SEM-93P, 35 LB SACK - (1023977) | | | | | | | | |
| 174.60 lbm/bbl | | BARITE, BULK (100003681) | | | | | | | | |
| 6 lbm/bbl | | SEM-94P, 35 LB SACK - (1023987) | | | | | | | | |
| | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 3 | ElastiCem | ELASTICEM (TM) SYSTEM | 1950 | sack | 14.4 | 1.72 | | 8 | 7.42 | |
| 7.42 Gal | | FRESH WATER | | | | | | | | |
| 0.45 % | | HR-5, 50 LB SK (100005050) | | | | | | | | |
| | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 4 | MMCR Displacement | MMCR Displacement | 30 | bbl | 8.34 | | | | | |
| 0.50 gal/bbl | | MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781) | | | | | | | | |
| | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 5 | Displacement | Displacement | 335 | bbl | 8.34 | | | | | |
| 0.0302 gal/bbl | | CLA-WEB - TOTE (101985045) | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Cement Left In Pipe | | Amount | 48 ft | | | Reason | | Shoe Joint | | |
| Mix Water: | | pH 5.5 | Mix Water Chloride: | | | 0 ppm | | Mix Water Temperature: | | 80 °F |
| Cement Temperature: | | ## °F °C | Plug Displaced by: | | | ## lb/gal kg/m3 XXXX | | Disp. Temperature: | | 80 °F |
| Plug Bumped? | | Yes/No | Bump Pressure: | | | #### psi MPa | | Floats Held? | | Yes/No |
| Cement Returns: | | 0 bbl | Returns Density: | | | ## lb/gal kg/m3 | | Returns Temperature: | | ## °F °C |
| Comment 60 BBLs DIESEL AND 12 BBLs TUNED SPACER TO SURFACE | | | | | | | | | | |

2.0 Real-Time Job Summary

2.1 Job Event Log

| Type | Seq. No. | Activity | Date | Time | Comb Pump Rate (bbl/min) | DS Pump Press (psi) | DH Density (ppg) | Pump Stg Tot (bbl) | Comments |
|-------|----------|--|----------|----------|-----------------------------|------------------------|---------------------|-----------------------|---|
| Event | 1 | Check Floats | 8/4/2019 | 20:00:00 | | | | | CREW CALLED OUT, CMT HEAD REQUESTED ON LOCATION AT MIDNIGHT, CREW 4:00, PUMP 6999 660 10866497, BACKUP AIR 10246780 |
| Event | 2 | Depart Yard Safety Meeting | 8/4/2019 | 23:30:00 | | | | | DISCUSS ROUTE AND HAZARDS |
| Event | 3 | Crew Leave Yard | 8/4/2019 | 23:45:00 | | | | | CREW DEPART YARD |
| Event | 4 | Other | 8/5/2019 | 01:47:00 | | | | | RUPTURE BACE TOOL AND BEGIN CIRCULATING, RUPTURED AT 3339 PSI |
| Event | 5 | Arrive at Location from Service Center | 8/5/2019 | 02:00:00 | | | | | ARRIVE ON LOCATION, RIG CIRCULATING UPON HES CREW ARRIVAL |
| Event | 6 | Assessment Of Location Safety Meeting | 8/5/2019 | 02:15:00 | | | | | DISCUSS LOCATION HAZARDS AND HOW TO MITIGATE THEM, WATER TEST, CHLORIDES 0, PH 5.5, TEMP 80 |
| Event | 7 | Safety Meeting - Pre Rig-Up | 8/5/2019 | 02:25:00 | | | | | DISCUSS HAZARDS AND WAYS TO MITIGATE THEM |
| Event | 8 | Safety Meeting - Pre Job | 8/5/2019 | 07:30:00 | | | | | PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP, RIG CIRCULATE 30000 STROKES 10 BPM 1300 PSI, UPON LANDING BOTTOM PLUG PRESSURE ROSE TO |

| | | | | | | | | | |
|-------|----|-------------------|----------|----------|---|------|------|-----|---|
| | | | | | | | | | 3700 PSI AND SLOWLY FELL OFF, CIRCULATED ANOTHER 1.5 HRS UNTIL PRESSURE STABILIZED BEFORE BEGINNING CEMENT JOB |
| Event | 9 | Start Job | 8/5/2019 | 07:43:20 | | | | | TD16525, TP 16512.53, SJ 47.1, CSG 5.5" 20#, PREV CSG 9 5/8 36# @ 1555, HOLE 8.5, MUD 9.8, TVD 6450, RSI 16419.56, BACE 6877.44 |
| Event | 10 | Test Lines | 8/5/2019 | 07:47:21 | | | | | TEST LINES TO 5700 PSI |
| Event | 11 | Pump Spacer 1 | 8/5/2019 | 08:08:02 | 6 | 800 | 12 | 100 | PUMP 100 BBL TUNED SPACER 12 PPG 6 BPM 800 PSI |
| Event | 12 | Pump Lead Cement | 8/5/2019 | 08:27:29 | 8 | 600 | 14.4 | 579 | MIX AND PUMP 1950 SKS 579.3 BBLS CEMENT 14.4 PPG, 1.72 FT3/SK, 7.42 GAL/SK 8 BPM 600 PSI, CALCULATED TOC 1872 |
| Event | 13 | Check Weight | 8/5/2019 | 08:45:37 | | | | | VERIFY WEIGHT ON PRESSURIZED MUD SCALES |
| Event | 14 | Check Weight | 8/5/2019 | 09:19:31 | | | | | |
| Event | 15 | Shutdown | 8/5/2019 | 09:53:57 | | | | | FINISHED PUMPING CEMENT SHUTDOWN |
| Event | 16 | Clean Lines | 8/5/2019 | 09:57:25 | | | | | WASH PUMPS AND LINES TO 3 SIDE TANK, PUMP MMCR WATER THROUGH LINES BEFORE SWAPPING TO PUMP DISPLACEMENT |
| Event | 17 | Drop Top Plug | 8/5/2019 | 10:04:33 | | | | | LAUNCH TOP PLUG |
| Event | 18 | Pump Displacement | 8/5/2019 | 10:04:37 | 7 | 2800 | 8.4 | 365 | PUMP 365 BBLS FRESH WATER DISPLACEMENT, MMCR FIRST 30 BBLS, CLAYWEB UNTIL 200 AWAY |

BE-3 40, 100, 200 AWAY, 7
 BPM 2800 PSI, RECIEVED 60
 BBLS DIESEL AND 5 BBLS
 TUNED SPACER TO SURFACE

| | | | | | |
|-------|----|-----------------------------------|----------|----------|--|
| Event | 19 | Other | 8/5/2019 | 10:37:23 | PUMP ISSUES, SHUTDOWN FIX AND RESUME PUMPING |
| Event | 20 | Check Floats | 8/5/2019 | 11:23:51 | FLOATS HELD TOOK 2.5 BBLS BACK |
| Event | 21 | Bump Plug | 8/5/2019 | 11:27:28 | BUMPED AT 2400 PSI, PRESSURE ROSE TO 2800 AND STABALIZED WHILE PUMPING 4 BPM, PUMPED CALCULATED PER CO REP AND SHUTDOWN |
| Event | 22 | End Job | 8/5/2019 | 11:27:34 | |
| Event | 23 | Safety Meeting - Pre Rig-Down | 8/5/2019 | 11:31:00 | DISCUSS HAZARDS AND WAYS TO MITIGATE THEM |
| Event | 24 | Depart Location Safety Meeting | 8/5/2019 | 13:30:00 | DISCUSS HAZARDS AND ROUTE |
| Event | 25 | Crew Leave Location | 8/5/2019 | 14:00:00 | THANK YOU FOR USING HALLIBURTON, KYLE BATH AND CREW |

3.0 Attachments

3.1 JOB CHART

