

Rocky Mtn Fuel Co F 3 Remedial Cement.docx

- 1 NOTE: NO GYRO RAN AS OF 2/4/14.
- 2 Level location for base beam rig.
- 3 Call Foreman or Field Coordinator before rig up to catch plunger, isolate production equipment, and ask if replacement parts/equipment are requested.
- 4 Check and report surface casing pressure. If surface casing is not accessible at ground level, re-plumb so valve is at ground level.
- 5 Spot a minimum of 5 jts 2-3/8", 4.7#, J-55 EUE TBG for replacement and 33 jts of 1-1/4", 2.3#, J-55 10rd IJ tubing for annular job.
- 6 MIRU slickline. Fish production equipment as necessary and tag fill. Note tagged depth in OpenWells. RDMO Slickline.
- 7 MIRU WO rig, flat tanks and rig pumps. Kill well, as necessary, with biocide treated fresh water. ND WH. NU BOP.
- 8 Unseat landing joint and lay down.
- 9 MIRU EMI services. TOO H with 2-3/8" TBG. EMI on TOO H. LD joints with wall loss or penetrations > 35%. Replace joints as necessary. **Keep yellow & blue band tubing. Note joint number and depth of tubing leak(s) on PRODUCTION EQUIPMENT FAILURE REPORT IN OPEN WELLS.
- 10 PU and TIH with RBP for 4-1/2", 10.5/11.6# casing on tubing and set RBP at +/- 4400'. Pressure test RBP to 500 psi for 15 mins. If pressure test passes, proceed. Dump 2 sx sand on RBP.
- 11 MIRU WL. PU and RIH with CCL/CBL/GR. Correlate to depth to Schlumberger CBL dated 1/23/95. Run CBL from just above RBP to surface. Deliver logs to Evans for review. Once cleared by Engineering, proceed with next step.
- 12 ND BOP. ND WH. Unland 4-1/2" casing. NU double entry flange.
- 13 PU 1-1/4", 2.3#/ft J-55 10rd IJ tubing and TIH outside 4-1/2" casing and open hole to 1000'. Circulate with biocide treated fresh water on TIH.
- 14 MIRU cementer. Prepare & pump Freshwater spacer, 20 bbls Sodium Metasilicate, 325 sks Type III cement + 1/4 #/sk cello flake, mixed at 14.0 ppg and 1.53 cu ft/sk. The cement is to be retarded for 125 degF for a six hour pump time. Design is for coverage from 1000 to 250 in 11" hole, including 20% excess.
- 15 PUH to trip out of the hole with 1-1/4" tubing and shut in well.
- 16 Rig down cementing services.
- 17 Reland 4-1/2" CSG. ND double entry flange. NU WH. SDFN to WOC.
- 18 MIRU wireline services.
- 19 PU and RIH with CCL-GR-CBL-VDL. Run from 1100' to surface. RDMO wireline. Clear with Evans engineering before proceeding.
- 20 NU BOPs. PU and TIH with 2-3/8" TBG & retrieving head. Circulate sand off of RBP. Release RBP and POOH while standing back TBG.
- 21 Clean out to PBDT if necessary depending on tagged depth.
- 22 MIRU hydrotester.
- 23 PU & RIH with 2-3/8" NC, 2-3/8" XN profile nipple, 23 joint 2-3/8" TBG, Arrowset AS-1X packer (10k psi rated), and 2-3/8" TBG. Hydrotest tubing to 6000 psi while RIH. Set packer at 6936'.
- 24 Load backside with biocide treated water and pressure test packer to 500 psi for 15 min.
- 25 ND BOP. NU WH. Ensure all valves on TBG head are rated to 5000 psi and ensure TBG head has a new R-46 ring gasket installed.
- 26 Hydrotest TBG head and master valve to 5000 psi. If pressure test fails, call Evans office for alternate procedures.
- 27 RDMO hydrotester. RDMO WO rig.
- 28 Return well to production team.

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- 29 END OF SAFETY PREP STEPS. BELOW ARE STEPS FOR UN-PREPPING THE WELL.
- 30 When notification is sent to un-prep well, MIRU WO rig.
- 31 Control well with biocide treated water.
- 32 ND WH. NU BOP.
- 33 Release Arrowset AS-1X packer and POOH with 2-3/8" TBG, Arrowset packer, XN profile nipple, and NC while standing back TBG and laying down packer.
- 34 Return packer to shop were purchased and have redressed.
- 35 PU & RIH with 2-3/8" NC, 2-3/8" XN profile nipple (ensure nipple is input into OpenWells), and 2-3/8" TBG.
- 36 Clean out to at least 8211' using biocide treated water. Use a bailer if necessary.
- 37 PUH and land TBG at 8096', which is approximately 1 joint above the top JS perf.
- 38 RU rig lubricator. Broach TBG to SN. RD rig lubricator.
- 39 ND BOP, NU WH.
- 40 Hydrotest TBG head and master valve to 5000 psi. If pressure test fails, call Evans office for alternate procedures. RDMO hydrotesters.
- 41 RDMO WO rig. Swab well back if needed. Return well to production team.