

Miller Elton GU B 2 – P&A

- 1 Gyro run 11/20/2011.
- 2 Provide 48 hr notice to COGCC prior to rig up per request on approved Form 6. Submit Form 42 and call Automation Removal Group at least 24 hr prior to rig move. If not already completed, request that they catch and remove plunger, isolate production equipment and remove any automation equipment prior to the rig showing up. Install perimeter fence as needed.
- 3 If unable to catch plunger, MIRU SL. Fish plunger and tag PBMD (should be 7932'). Otherwise, use rig to tag fill with tbg. Enter tag depth in OpenWells.
- 4 Prepare location for base beam rig.
- 5 Check and record Bradenhead pressure. If Bradenhead valve is not accessible, re-plumb so that valve is above GL. Contact engineer if Bradenhead pressure is greater than 0 psi.
- 6 Spot 25 jts of 2-3/8" 4.7# J-55 8RD EUE tbg.
- 7 MIRU WO rig. Kill well with fresh water and biocide. ND WH, NU BOP.
- 8 PU tbg to break any possible sand bridges. Do not exceed 80% of tubing tensile strength, or 57,360 lb. LD landing jt. TOO H with 2-3/8" tbg.
- 9 Notify cementers of the needed volumes: 115 sx of 50/50 Poz "G" w/ 20% silica flour, 3% gel, 0.4% FL-52, and 0.1% sodium metasilicate mixed at 13.5 ppg and 1.71 cf/sk (Niobrara suicide squeeze); 55 sx Class G w/ 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cf/sk (Sussex balanced plug); 440 sx Type III cement with ¼ pps cello flake and CaCl₂ mixed at 14.8 ppg and 1.33 cf/sk (FHM stub plug).
- 10 MIRU WL. RIH gauge ring for 4-1/2" 10.5# csg to 7750'.
- 11 RIH with 4-1/2" CIBP (4-1/2" 10.5#). Set CIBP at +/- 7710' (avoid collars with CCL) and dump 2 sx of cement on CIBP.
- 12 RIH with 4-1/2" CIBP (4-1/2" 10.5#). Set CIBP at +/- 7200' (Collars at 7180' and 7220') and dump 2 sx of cement on CIBP. RDMO WL.
- 13 Current CBL is inconclusive. RIH with 2-3/8" tbg to 7100' while hydrotesting to 3000 psi. Circulate fresh water with biocide to remove gas from hole, POOH. Stand back 6700'.
- 14 MIRU WL, RIH with CCL-CBL and log from 7140' to surface. Send logs to engineer to discuss further steps.
- 15 PU and RIH with two perf guns and CCL inside 4-1/2" csg (3-1/8", 3 spf, "Big Hole" 0.6" EHD, 7" penetration, 120 deg phasing, 2' net, 6 total holes). Shoot bottom squeeze holes at 7080'. PUH and shoot top squeeze holes at 6680'. POOH, RDMO WL.
- 16 RIH with 4-1/2" CICR (4-1/2" 10.5#) on 2-3/8" tbg and set at +/- 6710'.
- 17 MIRU cement company. Establish circulation with fresh water and biocide. Pump 115 sx of 50/50 Poz "G" w/ 20% silica flour, 3% gel, 0.4% FL-52, and 0.1% sodium metasilicate mixed at 13.5 ppg and 1.71 cf/sk into squeeze holes (cement from 7080' to 6680' in 4-1/2" csg, 8.75" avg hole from caliper, adding 20% excess). Under displace by 3 bbls, sting out of CICR and dump remaining cement on CICR.
- 18 PUH to 6400'. Circulate fresh water with biocide to clear tbg.
- 19 PUH to 4810', LD remainder.
- 20 Pump 55 sx Class G w/ 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cf/sk (balanced plug from 4810' to 4120' over SX squeeze perfs inside 4-1/2" csg).
- 21 PUH to 3800' and circulate fresh water with biocide to clear tbg.
- 22 TOO H. Stand back 1270' of 2-3/8" tbg and LD remainder.
- 23 MIRU WL. PU jet cutter and RIH to 1170', cut 4-1/2" csg. Reverse circulate to remove any gas from wellbore. RDMO WL.
- 24 ND BOP, ND tbg head. NU BOP on surface csg with 4-1/2" pipe rams. Install 3000 psi ball valves on csg head outlets. Install choke or choke manifold on one outlet.
- 25 TOO H with 4-1/2" csg and LD.

- 26 Uninstall 4-1/2" pipe rams on BOP and install 2-3/8" pipe rams.
- 27 TIH with 2-3/8" tbg to +/- 1270', 100' inside 4-1/2" csg stub.
- 28 MIRU cement company. Pump 10 bbls SAPP, 20 bbls fresh water and biocide followed with 440 sx of Type III cement with ¼ pps cello flake and CaCl₂ mixed at 14.8 ppg and 1.33 cf/sk (cement from 1270' to 370' over Fox Hills, assuming 10.5" avg hole from nearest SX caliper, adding 40% excess).
- 29 TOOH with 2-3/8" tbg to 200' and circulate hole clean.
- 30 WOC 4 hrs, tag plug. Tag needs to be 470' or higher. TOOH.
- 31 MIRU WL. RIH with 8-5/8" CIBP and set at 80'. Pressure test to 1000 psi for 15 min. If pressure holds, RDMO WL and RDMO WO rig.
- 32 Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries and invoices to rscDJVendors@anadarko.com within 24 hrs of the completion of the job.
- 33 Supervisor submit paper copies of all invoices, logs, and reports to Joleen Kramer.
- 34 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
- 35 Excavate hole around surface casing enough to allow welder to cut 8-5/8" casing minimum 5' below ground level.
- 36 Welder cut 8-5/8" casing minimum 5' below ground level.
- 37 MIRU Redi Cement mixer. Use 4500 psi compressive strength cement, (NO gravel) to fill stubout.
- 38 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
- 39 Properly abandon flowlines per Rule 1103.
- 40 Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.
- 41 Back fill hole with fill. Clean location, level.
- 42 Submit Form 6 to COGCC ensuring to provide 'As performed' WBD identifying operations completed.

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