

## Cannon Land 7-33: Annular Fill

- 1 Well needs single stage annular fill from 1360' to 515' due to Bradenhead pressure and fluid flow.
- 2 Well has gyro 12/30/14
- 3 Call Automation Removal Group 24 hours before rig up to isolate any production equipment (remove plunger, wellhead automation, etc.). Prepare to move base beam rig onto location. Install fence if needed.
- 4 Check and report surface casing pressure. If valve is not accessible at ground level, re-plumb so valve is at ground level.
- 5 MIRU slickline. RIH to retrieve production equipment and tag for fill. Note tagged depth in OpenWells. RDMO slickline.
- 6 MIRU WO rig. Spot 1500' of 1.66" 2.33 J-55 10RD IJ tbg. Kill well as necessary with water and biocide. Attach a hardline from the bradenhead/surface casing valve to a flowback tank and blow down any Bradenhead pressure. (Form 17 was performed 09/25/2012. Bradenhead instantaneous pressure was 110 psi and surfacing casing produced 50 gallons of water during test. Pressure built back up to 61 psi in 15 min). If pressure does not blow down within 1 hour contact engineer, otherwise proceed.
- 7 ND wellhead. NU BOP.
- 8 PU 8-10' pup joint with TIW valve on top and screw into the tbg hanger. Back out the lock down pins and pull up on the tubing string to break any possible sand bridges. (Do not exceed 80% of tubing tensile strength, or 57,384 lbs.) Unseat and LD the landing joint.
- 9 MIRU EMI services. EMI 2-3/8" tbg (232 joints landed at 7174') while TOO H and tally while standing back. Lay down joints that have greater than 35% penetration or wall loss. Replace all joints that fail EMI testing. Document joint numbers and depth of bad tubing and create a Production Equipment Failure report in OpenWells. RDMO EMI services.
- 10 PU 10,000 psi rated from above and below RBP (4.5", 11.6#), retrieving head, and 2-3/8" tubing. Set RBP at +/- 6800' (collars located at 6776' and 6819').
- 11 Release tbg from RBP and circulate all gas out of the hole. Pumping water with biocide, pressure test RBP and production casing to 1000 psi for 15 minutes. If pressure test passes, proceed; otherwise contact engineering.
- 12 Circulate 2 sx of sand on top of RBP and TOO H with 2-3/8" tubing.
- 13 ND BOP. ND wellhead. Screw 4-1/2" pup joint into production casing and un-land 4-1/2" production casing. NU double entry flange and BOP. Install 1.66" pipe rams.
- 14 PU 1560' of 1.66" 2.33# J-55 10RD IJ tubing and TIH between the 4-1/2" production casing and 8-5/8" surface casing/open hole to +/- 1560'. Circulate with the rig pump while TIH to clean up the annulus. Use two sweeps of Alcomer 74L while TIH and a final sweep at 1560', and circulate until well is dead. Make sure no pressure is present on bradenhead. If gas is detected contact engineering.
- 15 Contact Ed Asuchak at 970-515-1170 for mud (min of 24hrs in advance). Pump 20 bbl of 10.0 ppg mud at 1560'. Leave 1.66" tbg full of mud to avoid wet trip and PUH to 1360' to place cement in annulus and LD extra tbg.
- 16 MIRU cementing services. Establish circulation and pump 30 bbl (5 bbls of water, 20 bbls of sodium metasilicate, and 5 bbls water) spacer, **400 sx Type III cement with 0.3% CFL-3 + 0.3% CFR-2 + 0.25 lb/sk Polyflake (NO CaCl2) mixed at 14.6ppg 1.12 cuft/sx yield with 3 hour pump time.** (based on 9.5" hole size + 20% excess from 1360'-717' and 202' between 8-5/8" 24# surface casing and 4-1/2" 11.6# production casing). Attempt to cement from 1360' to 515'.
- 17 TOO H with 1.66" 2.3# J-55 10RD IJ tubing until EOT is at 315' and LD extra tbg. Circulate with freshwater 1.5 times the hole volume or until returns are clean. RDMO cementing services.

Well needs annular fill due to Bradenhead pressure in preparation for Milky Way fracs

Offset HZ PADS CREAM 27-28HZ

TOC: 3590'; NB Top 6980'

Earliest Primary Constraint Date: 5/28/15

No known wellbore integrity issues

Full Circle

Not Noble trade well

Has Gyro 12/30/14

STIPS: PASTURE

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- 18 TOO H and LD all 1.66" 2.3# J-55 10RD IJ tubing. ND BOP and double entry flange. Use 4-1/2" pup joint to re-land 4-1/2" casing. NU BOP. Install 2-3/8" pipe rams. Shut well in and WOC.
- 19 MIRU wireline and run **CCL-GR-CBL-VDL from +/- 3600' to surface**. If the cement is not at or above 515' contact engineer. RDMO wireline services. In addition to normal handling, of logs/job summaries, email copies of all cement job logs/job summaries and invoices to [rscDJVendors@anadarko.com](mailto:rscDJVendors@anadarko.com) within 24 hrs of the completion of the job.
- 20 PU and TIH with retrieving head and 2-3/8" tubing. Circulate sand off of RBP. Latch onto and release RBP at +/- 6800'. TOO H standing back all 2-3/8" tubing and LD RBP.
- 21 PU 2-3/8" NC, 2-3/8" XN nipple (be sure nipple is correctly input into OpenWells), and 2-3/8" 4.7# J-55 tbg to surface. Circulate out fill if necessary and land EOT at +/- 7,174' (1 joint above top JSand perfs).
- 22 RU rig lubricator. Broach tubing to XN seating nipple. RD rig lubricator. ND BOP.
- 23 Install 7-1/16" flanged 5000 psi tubing head adaptor with 2-1/16" studded top, 2-1/16" flanged 5000 psi master valve, flanged 5000 psi 2-3/8" plunger lubricator (side outlets threaded). Make sure all wellhead valves are rated to 5,000 psi and all nipples are XXH. Document wellhead components in an OpenWells wellhead report.
- 24 Install 2-3/8" pup joint above the master valve. Pressure test the tubing head from below the tubing head through the master valve to 5,000 psi using hydrotester. If wellhead does not pressure test, replace wellhead/ wellhead valves as necessary with 5,000 psi rated equipment.
- 25 NU WH. RDMO WO rig. Return well to production team.

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