

San Juan 28-6 Unit #51
Blanco Mesaverde
Unit K, Sec. 29, T-28-N, R-6-W
Latitude / Longitude: 36° 37.78656' / 107° 29.5752'
Recommended Tubing Repair Procedure 3/18/99

Project Justification: The San Juan 28-6 Unit #51 has not been pulled since its completion in 1957. The lease operator reports that the casing pressure must drop 60-70 psig in order for the well to unload. Some simple Nodal analysis using a current producing rate and current pressures revealed that the well is producing with a restriction equivalent to 1.073" ID tubing (the existing string is 2-3/8"). It is proposed to pull the tubing, replace any bad joints, treat the well with acid if necessary, and cleanout to PBTD.

NOTE: ALL DEPTHS ARE MEASURED FROM KB. KB to GL was 10'.

1. Comply with all NMOCD, BLM and Burlington safety and environmental regulations. Prior to moving in rig, make one-call and then verify rig anchors and dig pit.
2. MIRU workover rig. NU relief line and blow well down (kill with 2% KCL water only if necessary). ND WH and NU BOP. Test and record operation of BOP rams. Replace any WH valves that do not operate properly. Test secondary seal and install or replace if necessary.
3. Mesaverde, 2-3/8", 4.7#, J-55 tubing set at **5544'** (176 jts; 2' perfed sub on btm). Broach tubing and set tubing plug in tubing at **5520'**. **NOTE: There is no record of a seating nipple in the wellfile.** Release donut, pick up additional joints of tubing and tag bottom, recording the depth. PBTD should be at +/- **5629'**. TOOH, stand back 2-3/8" tubing, and LD perfed joint. Visually inspect tubing for corrosion, and replace any bad joints. Check tubing for scale and notify Operations Engineer and Drilling Superintendent if it is present.
4. TIH with 4-3/4" bit, bit sub, and watermelon mill on 2-3/8" tubing and round trip to PBTD, cleaning out with air/mist. **NOTE: When using air/mist, mist rate must not be less than 12 bph.** Speak with Operations Engineer and Drilling Superintendent, and if necessary, determine the best way to remove scale from the casing and perforations.
5. TIH with one 4' pup joint of 2-3/8" tubing with expendable check, F-nipple (above 4' pup joint), then 1/2 of the 2-3/8" production tubing. Run a broach on sandline to insure that the tubing is clear. TIH with remaining 2-3/8" tubing. Replace any bad joints. CO to PBTD with air/mist.
6. PU above the top Mesaverde perforation at **4906'** and flow the well naturally, making short trips for clean-up when necessary.
7. Land tubing at **5520'**. Obtain pitot gauge from casing and report this gauge. Broach the upper 1/2 of the production tubing. ND BOP and NU WH. Pump off expendable check. Connect to casing and circulate air to assure that expendable check has pumped off. If well will not flow on its own, make swab run to SN. RD and MOL. Return well to production.

Recommended: *Tom Loveland*
Operations Engineer

Approved: *Bruce W. Bay* 3-18-99
Drilling Superintendent

Operations Engineer: L. Tom Loveland

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