

Empire South Deep Unit Well #15
Unit E, 1980' FNL & 660' FWL, Section 8, T-18-S, R-29-E
Eddy County, New Mexico
Strawn Formation
Proposed Recompletion Procedure

March 5, 1997

1. Hold a pre-job safety meeting with all personnel on lease. Ensure that all personnel on lease are aware of job procedures and egress routes.
2. Note and record tubing and casing pressures.
3. MIRU Service Rig.
4. Ensure well is dead, kill well with clean filtered 2 % KCL water.
5. Unset packer then POOH with tubing and packer.
6. RIH and set a CIBP at 10195'. Dump 35' of cement on top of CIBP.
7. RIH w/ tubing on/off tool and packer, set packer at 10035' (with 1 joint of tubing and a profile nipple below the packer).
8. Swab the fluid level down to 5000' from surface.
9. Rig up perforators and perf the Strawn zone through tubing at 4 JSPF, 180 degree phasing. Interval to be perforated is 10120' to 10128'. If the zone kicks and flows, RIH with guns and sit below the zone while flowing the well back for 1 hour. Shut well in, POOH with wireline.
10. If necessary swab well to evaluate and then if well is flowing proceed to step 12 otherwise go to step 11.
11. Acidize Strawn down tubing with 1000 gallons of 7 1/2 % HCL acid as per Dowell Procedure. Swab well to evaluate.
12. Rig out/move off, TOTP.