

COMPLETION PROCEDURE

1. MIRUPU. Load tbg w/brine wtr. Install BOP. Pull on stuck pkr.
2. Pull pkr loose. POH w/tbg. Set cmt retainer @ 10,600'. Ran tbg to 10,295'.
3. GIH w/bit, DC & tbg. Set tbg in retainer. Pmp 90 sxs C1 "H" cmt into perfs 10,674-10,684'. No press. Well on vacuum. Wait 5 hrs. Sqz perfs w/100 sxs C1 "H" cmt, 3# salt/sx to 4700#. Reverse out 12 sxs, 5 sxs in csg & 83 sxs in perfs. POH w/tbg.
4. GIH w/bit, DC & tbg. Drl ret & cmt to 10,632'. Cmt not hard.
5. POH w/tbg. Drl cmt from 10,632-11,027'. Test cst to 1500# for 25 min. Ran bit to 11,260'. Displ hole w/brine wtr.
6. RU to perf. POH w/tbg. Ran GR-Collar Correlation log from 12,000-10,000'.
7. Perf 1 JS @ 11,162-11,233'. GIH w/tbg. Spot 200 gals 15% NE acid from 11,236-030'. Pull pkr to 11,111'. Reverse acid out of csg. Set pkr. Pmp into perfs @ 3800#.
8. RU to swb. Had 25# TP. Fluid @ 10,700'. Swb ½ BO & 2 BW. Fluid @ 11,000' RU & acidz perfs 11,162-11,233' (Wolfcamp) w/4000 gals NE acid & 43 BS. Max press 6670#, Min 5300#. Avg 6100# @ 4 BPM. Flw & swb 70 BLW. Fluid @ 10,500'. Good shw oil & gas. Swb stopped @ 10,500'. Well started making mud or thick emulsion. Last run w/swb stopped @ 8000'.
9. POH w/tbg. Swbd 4 BO & 2 BW in 4 hrs. Rlsd pkr. Pull tbg to 7400'. GIH w/tbg & pkr. Pin on btm of pkr was damaged. GIH w/4" perforating gun. Stopped @ 11,094'. Was hard to pull loose. Set dwn again at same place. POH. Ran 4 5/8" tapered tap to 10,500'. SI.
10. Worked tapered tap thru tight place @ 11,085'. Was never able to free up tight place. Was hard to work tap thru & hard to pull back thru.
11. GIH w/4 5/8" string mill. Milling w/string reamer @ 11,097'. Ran reamer to 11,094'. Worked thru tight place. Ran reamer to 11,250'. Pull back to 11,100'. Had trouble getting reamer thru tight place. Ream up tight place from 11,094' to 11,097'.
12. GIH w/tbg. Milled from 11,097-11,101'. Fell free. Work mill thru tight place several times. POH. Mill was 4½" OD. GIH w/4 5/8" mill to 3620'. Mill tight place in csg from 11,094-11,101'. Work mill thru tight place until free. Pull mill to 9800'.
13. GIH to perf. POH w/tbg. RU & ran gauge ring to 11,150'. Set CIBP @ 11,139'. Perf 1 JSPF @ 11,046-11,104'. Was unable to get 4" gun thru tight place @ 11,110'. POH.
14. Ran 3 2/3" perf gun. Perf 1 JSPF 11,108-118'. Ran pkr & tbg to 11,120'. Spot 150 gals 15% NE acid from 11,120-10,960'. Pull pkr to 10,860'. Set pkr into perfs at 3250#. Pmp 4 Bbls @ 2900#, ½ BPM. No shw oil or gas.
15. RU to swb. FL 6000'. Swbd 4 BLW, 1 BO & 1 BFW w/small amt gas in 4 hrs. RU & acidz perfs 11,046-118' w/5000 gals 15% NE acid & 60 BS. Flw & swb 40 BLW. Fluid 8000'. No oil or gas.
16. Swbg. Making small amt gas. Swbd 1 BO & 3 BLW in 5 hrs. Rlsd pkr. POH w/tbg. Ran 4 5/8" bit, DC & tbg. Collar hung up in tight place @ 11,000'. Pull loose. Pull bit to 9350'. SI.