

Marathon Oil Company  
Lou Worthan Well No. 20  
C-103 Intent Attachment  
October 8, 1996

PURPOSE: Add Abo Perforations and Stimulate

1. MIRU pulling unit.
2. Pull rods and pump. ND wellhead. NU BOPE. POOH w/2 3/8" tbg.
3. RIH w/ 5 1/2" RBP, set at 100', test BOPE. POOH w/RBP.
4. PU 2 3/8" workstring. RIH w/ 5 1/2" RBP with ball catcher and set at 7055'. Pickle tbg and POOH. RIH w/ 5 1/2" RBP and ball catcher, set at 7045. POOH w/tbg.
5. RU wireline company. RIH and selectively perforate Abo formation with 4" guns, 2 JSPF and 120° phasing at 6730-34', see AFE Procedure.
6. RIH w/ RBP overshot and 5 1/2" RTTS pkr to 6920'. RU acid company and acidize Abo perfs from 6944-7031' with 5000 gallons of 15% acid and 100 ball sealers. Flush with 2% KCL.
7. Release pkr and knock balls off perfs. RIH and retrieve RBP at 7045'. Reset RBP at 6920'. Reset pkr at 6700'. Acidize Abo perfs from 6730-6830' with 9500 gals 15% acid and 200 ball sealers. Flush w/2% KCL and RD acid company.
8. Release pkr and retrieve RBP at 6920'. POOH. RIH w/RBP and ball catcher and RTTS pkr. Set RBP at 7045' and pkr at 6700'. Swab back acid load. RD swab. Release pkr, retrieve RBP and PUH to 6720'. Set RBP at 6720'. POOH w/pkr and tbg.
9. RU wireline company. Test lubricator and RIH w/4" guns and selectively perforate Abo formation w/2 JSPF, 120° phasing at 6537'-44'. See procedure (116 holes). RD wireline company.
10. RIH w/RBP overshot and 5 1/2" RTTS pkr. Set pkr at 6500'. RU acid company and acidize Abo perfs from 6537-6705' with 8700 gals 15% acid and 150 ball sealers. Flush with 2% KCL and RD acid company.
11. RU swab. Swab acid load. Rel RTTS pkr, RIH and retrieve RBP at 6720'. POOH with RBP. RIH w/overshot and retrieve RBP at 7055'. POOH.
12. RIH w/production tbg. ND BOPE, NU wellhead. RIH with pump and rods. Hang well on and put back on production.