

Engineering
Drilling F
Dist Prod *DR*

UNION OIL COMPANY OF CALIFORNIA
SOUTHWEST REGION
CONDITION OF HOLE & PROCEDURE

DATE: 5-23-91

FIELD: North Anderson Ranch **AREA:** Andrews

LSE/UNIT: North Anderson Ranch Unit **WELL NO.** 1-33

REASON FOR WORK: To add additional Wolfcamp pay.

CONDITION OF HOLE:

TOTAL DEPTH: 13,502' **ETD or PBTB:** 10,227' **KB** **Drillers' DATUM IS** 15' **ABOVE:** G.L.

CASING RECORD: 13-3/8", 48#, H-40, csg @ 601' - cmt circ
9-5/8", 36#, J-55, csg @ 4176' - 700 sks w/4% gel -
TOC @ 1427.5 by Volumetrics
5-1/2", 15.5#, & 17#, J-55 & N-80, csg @ 10,277' -
200 sks 4% gel, 100 sks reg, 90 gel Latex

PERFORATIONS: Wolfcamp - 9951-9979'

TUBING DETAIL: 90 jts (2783.9') of 2-7/8" 8rd tbg and
238 jts (7341.3') of 2-3/8" 8rd tbg set @ 10,134'
w/TAC @ 9810.2' and 2" SN @ 10,128.3'

ROD & PUMP DETAIL: Trico 2' x 1-1/4" x 30' pump on:
144 - 1" FG, 88 - 7/8", 97 - 3/4" steel rods

REGULATORY AGENCY REQUIREMENTS: Contact ~~BLM~~ UCD

PROCEDURE:

1. MIRU DDP. NU BOP. POOH w/pump & rods. POOH w/production tbg.
2. RIH w/4-3/4" bit & tag ETD. POOH w/tbg & bit.
3. Run GR correlation log referencing Schlumberger Sonic-GR log dated 5-19-60. Perforate Wolfcamp zone w/4" DP csg gun @ 2 JSPF from 9920-9950' (total 30'/61 holes).
4. RIH w/straddle assembly & set RBP @ 10,000'. PU and set pkr @ 8890' & pressure test annulus to 500 psi.
5. Break down & acidize Wolfcamp perfs 9920-79' w/4000 gal of 15% HCL w/NE, FE, & LST in 3 stages (1000 gal, 2000 gal, and 1000 gal) dropping 500# of GRS in 10 ppg gelled brine between stages @ 3-5 BPM & 3000 psi max pressure. Overflush w/10 BFW.
6. Flow/swab load back.
7. Release pkr & retrieve BP @ 10,000'. PU to 9890' and set BP. PU to 9856' and set pkr. Pressure test BP to 1500 psi. Unset pkr & spot 300 gal of 15% HCL w/NE, FE, & LST double inhibited f/9856-9548'. POOH w/tbg & pkr.
8. Perforate Wolfcamp zone w/4" DP csg gun @ 2 JSPF:
9838-40, 9842-50, 9854-56' (total 12'/27 holes).
9. RIH w/pkr & tbg to 9725' and rev. acid into tbg. Set pkr and pressure test annulus to 500 psi. Break down Wolfcamp perfs 9838-56' w/spot acid and acidize same w/1200 gal 15% HCL w/NE, FE, & LST using 32 0.9 SG BS to evenly divert @ 3-5 BPM & 3000 psi max pressure.
10. Flow/swab load back.
11. Release pkr & retrieve BP @ 9890'. POOH w/5-1/2" straddle assembly.
12. Run in production equipment. Place on production.

Rec of PMC Res. 1/7
214-696-4006