| Sub-site 1 Opering | | State of Ne | w Mexico | | | $C \langle ; \rangle$ | |
|---|--|---|---|--|---|-----------------------|--|
| Submit 3 Copies to Appre riate District ()ffice | E | State of New Mexico Energy, Minerals and Natural Resources Departme | | Form C-103 Revised 1-1-89 | | | |
| DISTRIC <u>F</u> I P.O. Box 1980, Hobbs NN | 1 8824 0 | P.O. I | TION DIVISION Box 2088 | WELL API NO. 30-015-01218 | | | |
| DISTRIC I II P.O. Dra ver DD, Artesia, NM 88210 | | Santa Fe, New Mexico 87504-2088 | | 5. Indicate Type of Lease STATE X FEE | | | |
| <u>DISTRIC I III</u> 1000 Rio Brazos Rd., Azte | x, NM 87410 | | | 6. State Oil & G | | | |
| SUNDRY NOTICES AND REPORTS | | | | B-752 | | | |
| DIFF | O N OT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEP DIFFERENT RESERVOIR. USE "APPLICATION FOR (FORM C-101) FOR SUCH PROPOSALS.) | | | | 7. Lease Name or Unit Agreement Name EMPIRE ABO UNIT "H" | | |
| I. Type of Well: OIL WEL - 🗶 | GAS WELL | OTHER | | 7 | | | |
| 2. Name of Operator ARCO 'ermian | | | | 8. Well No. 18 | | | |
| 3. Addre is of Operator P.O.B X 1610, M | IIDLAND, TX | (79702 | ····· | 9. Pool name or EMPIRE | | | |
| 4. Well] ocation Jnit Letter N | : 330 | Feet From The SOUTH | Line and 2310 | Feet Fro | om The WEST | Line | |
| ection 36 | | Township 17S | Range 27E | NMPM | EDC | Y County | |
| //////.//////////////////////////////// | | | whether DF, RKB, RT, GR, | tc.) | | | |
| | | | | · • · | Other Data T REPORT OI | =: | |
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| NOTIO | | ropriate Box to Ind ENTION TO: PLUG AND ABANDON CHANGE PLANS ABO | REMEDIAL WORK | | T REPORT OI ALTERING CASING PLUG AND ABANDO | (| |
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WORKOVER PROCEDURE

DATE: December 13, 1995

| WELL & JOB: Empire Abo Unit H | DRILLED: | DRILLED: 1960 | | | | | | | |
|---|-------------------------------------|-------------------------------|-----------------------------|--|--|--|--|--|--|
| LAST WORKOVER: 9/90 Elimina | chind Prod Casing FIELD: Abo | COU | COUNTY: Eddy, NM | | | | | | |
| BY: W. C. Heard | TD: 5925' | PBD: 813' | DAT | U M: 12' KB | | | | | |
| CASING: SIZE SURFACE: 8-5/8" PROD: 5-1/2" | <u>WEIGHT</u> 24# 15.5# | <u>GRADE</u> 970' 5925' | <u>SX CMT</u> 500 250 | TOC surf-circ surf-circ last WO | | | | | |
| PERFORATIONS: Abo 5725-5750' open | | | | | | | | | |
| TUBING: NA SIZE: W MISC: | EIGHT: GRAI | DE: THREAD: | JOINTS: | BTM'D @ | | | | | |

HISTORY AND BACKGROUND: This well was drilled and completed in 1960 as an Abo producer. In 1976, the well was shut in due to high GOR. In May, 1990, it was temporarily abandoned - when CA pulled, packer mandrel parted leaving packer in hole. Packer tagged at 5843' with bit and scraper. Set CIBP at ? - would not test. Set second CIBP at 5701'. Tested casing 5701' to surface to 500 psi. According to records first CIBP set in "top perfs" but no exact depth given. In September, 1990, a CBL was run and indicated TOC behind the 5-1/2" production casing at 4430' with a possible bridge at 3600'. The 5-1/2" was perforated at 3540' and cemented with 850 sacks using a CR at 3433'. Circulation was lost during displacement bringing TOC to 982'. The 5-1/2" was perforated at 900' and cemented with 206 sacks using a CR at 813'. Cement circulated. Well left in TA status.

SCOPE OF WORK: Re-enter weil, deepen to 6800', log and test Lower Abo.

PROCEDURE

- 1. MIRU PU. Install wellhead and BOP.
- 2. TIH with bit and WS. RU reverse unit. DO/CO CR and cement from 813-900'. Test 5-1/2" casing to 800 psi.
- 3. TIH with bit. DO/CO CR and cement from 3433-3540'. Test 5-1/2" casing to 800 psi. POH.
- 4. TIH with shoe and 1 joint wash pipe. MO CIBP's at 5701' and 5730' (approximate). FIH and tag packer at 5843'. MO packer. POH.
- 5. Fish packer as necessary.
- 6. TIH with service packer and set at 5500'. Establish IR and pressure into Abo perfs 5725-5750'. Cemen same as indicated by injection. Release packer and POH.
- 7. TIH with bit and DC's. DO cement. Test squeeze to 800 psi. DO shoe and new formation to 7000'. Circulate hole clean. POH.
- 8. RU WL. Run OH logs as per Engineering and Geology. RD WL.

9. Run 3-1/2" liner as follows (bottom to top):

3-1/2" set shoe

1 joint 3-1/2" 9.3# J-55

3-1/2" float collar

1040' + 3-1/2" 9.3# J-55

running/setting tool

- 10. Cement liner with 100 sacks Class H. Release from liner and POH.
- 11. TIH with bit. CO to TOL and test liner lap to 800 psi. POH.
- 12. TIH with 2-3/4" blade bit. CO liner and test to 800 psi. POH.
- 13. RU WL. Run GR-CCL from PBD-TOL. Perf Abo as per Engineering. RD WL.
- 14. TIH with packer. Acidize Abo as per Engineering. Test. Release packer and POH.
- 15. Run CA as per Production Department recommendation.

W. C. Heard

J. E. Shields

EMPIRE ABO UNIT H-18 PRESENT STATUS



8-5/8" 24# casing at 970' with 500 sacks. TOC at surface - circulated

Perf'd 5-1/2" casing at 900' and cemented with 206 sx & CR @ 813'. TOC at surface - circulated.

Perf'd 5-1/2" casing at 3540' and cemented with 850 sx & CR @ 3433'. TOC at 982' - TS.

-430'

CIBP's @ 5701' & ? (approx 5730'). Retrievable production packer @ 5843' - tagged w/bit - w/mandrel parted.

Abo perfs 5725-5750'

5-1/2" 15.5# casing at 5925' with 250 sacks. TOC at 4430' - CBL.

TD 5925', PBD 813'

EMPIRE ABO UNIT H-18 PROPOSED COMPLETION



TD 7000'