WORKOVER_PROCEDURE

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DATE___10/8/87____37

WELL NO. & TYPE OF JOB: Empire Abo Unit #C-43 ARCO WI 34.1406% JOB TITLE: Drill Out, Test and Plug Back to Upper Interval DRILLED & COMPLETED: 8/60 LAST WO: TA 9/77 FIELD: <u>Empire Abo</u> COUNTY: <u>Eddy County</u>, <u>NM</u> PREPARED BY: <u>M.B. Smith</u> TD: 6380' PBD: 6092' DATUM: RKB DIST RKB TO GL: 13' TUBINGHEAD: MAKE NA SIZE 7-1/16 PRESSURE RATING 3000 psi CASING INFORMATION: SIZE WEIGHT GRADE SET @ SX CMT TOC <u>8-5/8"</u> <u>28</u> <u>NA</u> <u>742'</u> <u>375</u> <u>Surface</u> <u>170</u> Units HYS 400 & SURFACE: <u>5-1/2" 15.5 J-55 6380' 150 sx Surface</u> PRODUCTION: PRESENT PERFORATIONS 6262 - 6272 (1 JSPF) TA'd w/CIBP at 6092' TUBING SIZE: None WT: GRD: THD: NO JTS: PACKER & MISC.: Original perforations 6286-6302 squeezed with 20 sx thru CICR_set_at_6280'. Well_TA'd_9/8/77 with CIBP_set_at_6092'. Left_one joint of 2-3/8" tubing in wellhead. Hole is loaded with treated water. _____

PROCEDURE

- Test anchors. MIRU PU. Check well for pressure and bleed off. ND wellhead and NU BOP. Pressure test the BOP and 5-1/2" casing to 500 psi.
- 2. TIH w/4-3/4" bit and 4, 3-1/2" DC's on 2-3/8" tubing and drill out the CIBP at 6092'. Clean out to the top of the CICR at 6280' and POH.
- 3. TIH with a treating packer and std SN on 2-3/8" tubing to $\pm 6170'$ and swab test the perforations from 6262' to 6272'. Report results of swab test to Midland.

If results of swab test are favorable pressure the annulus to 500 psi and acidize the Abo perforations from 6262' to 6272' with 1000 gals of 60/40 15% NEFE HCL and xylene at 1-2 BPM with a maximum wellhead treating pressure of 1000 psi. Flush to the bottom perforation with produced water. SI for 30 minutes and swab test. If production from these perfs is adequate, continue with step 9.

If results of swab test are not favorable either before or after the acid treatment continue with step 4.

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- 4. WL set a CIBP at 6257' and perforate the Empire Abo w/2 JSPF from 6240' to 6246'. Correlate to Schlumberger LL/GR/N log dated 9/5/60. Note fluctuation in fluid level after perforating. If well goes on a vacuum proceed with swab testing prior to performing the acid job.
- 5. TIH with treating packer and 2-3/8" SN on 2-3/8" tubing to 6246'. Spot 100 gal acid across perforations and pull packer up hole to $\pm 6250'$. Reverse 5 bbls water up tubing and set packer.
- Pressure annulus to 500 psi and acidize the Empire Abo perforations with 750 gal 15% NEFE HCL acid at 1-2 BPM. Flush to the bottom perforation with produced water. Maximum wellhead treating pressure 1000 psi.
- 7. SWI for 30 minutes and swab test.

If the well is productive continue with step 9.

If the well is not productive continue with step 8.

- 8. WL set a CIBP at 6235' and perforate the Empire Abo from 6222 6228 w/2 JSPF. Spot acid and acidize as necessary with 750 gal of 15% NEFE HCL acid at 1-2 BPM with a 1000 psi maximum wellhead treating pressure. SI for 30 minutes and swab test.
- 9. POH with tubing and packer. TIH with completion assembly as per production department specifications. TOTPS.
 - NOTE: a. There should be enough surplus 2-3/8" tubing at the Empire Abo Unit yard to equip this well.
 - b. Be sure to notify the State when rigging up and prior to performing any plug back operations.

MBS ICDIC

