

WORKOVER PROCEDURE

DATE 12/17/87

WELL NO. & TYPE OF JOB: Empire Abo Unit #F-364 ARCO WI: 34.1406x

JOB TITLE: Plug Back to Upper ABO Interval

DRILLED & COMPLETED: 6/79 LAST WO: 12/84

FIELD: Empire Abo COUNTY: Eddy County, NM PREPARED BY: M.B. Smith

TD: 6350' PBD: 6282' DATUM: RKB DIST RKB TO GL: 11'

TUBINGHEAD: MAKE NA SIZE 7-1/16 PRESSURE RATING 3000 psi

| CASING INFORMATION: | SIZE | WEIGHT | GRADE | SET @ | SX CMT | TOC |
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| SURFACE: | <u>8-5/8"</u> | <u>24</u> | <u>K-55</u> | <u>744'</u> | <u>450</u> | <u>Surface</u> |
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| PRODUCTION: | <u>5-1/2"</u> | <u>15.5</u> | <u>K-55</u> | <u>6350'</u> | <u>480</u> | <u>Surface</u> |
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PRESENT PERFORATIONS 6224 - 6234 (2 JSPF)

TUBING SIZE: 2-3/8" WT: 4.7# GRD: J-55 THD: RUE 8R NO JTS: 196 @ 6136'

PACKER & MISC.: Has a Lok-set packer set at 6136' with a fluid pak cavity on top. Last production test produced 1 BO, 479 BW and 17 MCFG 5/29/87 Well shut in 6/27/87 pending evaluation.

PROCEDURE

1. Test anchors. MIRU PU. Check well for pressure and bleed off. Kill well as necessary with produced water. ND wellhead and NU BOP.
2. Release the packer and lower it to +6220'. POH with tubing and packer. Visually inspect tubing and hydrotest as necessary on next trip in hole.
3. RU WL unit and WL set a 5-1/2" CIBP at 6200'. Load the hole with produced water and pressure test the CIBP, 5-1/2" casing and BOP to 500 psi.
4. Perforate the Empire Abo with 2 JSPF from 6140' - 6146'. Correlate to Schlumberger Density/Neutron log dated 6/20/79. 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 6146'. Spot 100 gal acid across perforations and pull packer up hole to +6050'. Reverse 5 bbls water up tubing and set packer.