

JUN 18 1981

was 3800 psi, minimum pressure 2600 psi, average treating pressure was 3200 psi, ISIP was 1600 psi. Well went on vacuum in 16 hrs. Average injection rate 26.8 bbls. per minute. Released work rig @ 3:00 p.m., 9/26/67. Well kicked off and flowed at a rate of approximately seven barrels oil per day through 4½" OD casing.

3. Moved in and rigged up workover rig 3/12/68. Ran 102 joints (3107' LTM) 2 3/8" OD tubing with Baker AD-1 Tension Packer, set @ 3153' with 10,000#. Well converted to water injection status and rig was released 3/12/68. (Note: No tubing was in this well prior to completing it to an injection well.)

Workover to repair casing failure:

4. 5/22/74: Prior to W.O. well was injecting 500 bbls. of fresh water @ 1750# pressure daily. Moved in and rigged up DA&S @ 5:00 p.m. 5/23/74: Unset packer and pulled 102 joints of 2 3/8" OD tubing (3137') = 1 - 2 x 4½ Baker AD-1 packer. Found a hole in the 2 3/8" tubing 89 joints down @ 2726'. Ran 101 joint of 2 3/8" OD tubing with 1 - 2 x 4½ Johnson Retrievable Bridge Plug, Set @ 3107'. Located a hole in the 4½" casing @ 65'. Tested casing above and below hole with packer @ 2000 psi, with no loss. P.O.O.H. with tubing and packer. Ran volume check with 15 bbls of water down 4½" casing @ 3 BPM and 500#. It took 25 ft.<sup>3</sup> to circulate to surface. SDON. 5/24/74: B.J. cemented hole @ 65' with 30 sacks of Class "H" cement containing 2% CaCl<sub>2</sub>, down 4½" casing. Circulated cement to surface @ 0# pressure, failed to squeeze. Shut down 1 hr. then B.J. again squeezed (65') with 30 sacks of Class "H" cement containing 2% CaCl<sub>2</sub> down 4½" casing. Cement circulated to surface. Pump plug was @ 50'. W.O.C. 21 hrs. 5/25/74: Ran 1 - 3 7/8" OD bit with 1-3 1/8" D.C. Drilled cement 53' - 67'. Ran bit to 180'. Pressure tested 4½" casing from surface to 3107'. Pumped in @ 2 BPM @ 650 psi but did not circulate to surface. P.O.O.H. with bit. Ran 1 - 2 x 4½ packer. Located hole in 4½" casing @ 65'. P.O.O.H. with tubing and packer. SDON. 5/26/74: After being shut in overnight well had a small amount of backflow. Ran 2" tubing and packer and set packer @ 3077'. Checked B.P. @ 3107', had leak in B.P. Reset B.P. @ 3077'. B.P. failed to hold. P.O.O.H. with tubing and B.P. Ran 1 - 2 x 4½ Johnson Retrievable B.P. and set @ 2489'. B.P. failed to hold. P.O.O.H. with tubing and B.P. Ran 1 - 2 x 4½ Halliburton retrievable bridge plug on 81 joints of 2" tubing with a 2 x 4½ packer. Set B.P. @ 2483' and tested it to 2300 psi with no loss or backflow. P.O.O.H. with tubing and packer. B.J. cemented the hole @ 65' with 200 sacks Class "H" cement containing 2% CaCl<sub>2</sub> down the 4½" casing. Pumped the plug to 40' @ 6:00 p.m., 5/25/74. Final pressure was 100 psi. 5/27/74: Ran 1 - 3 7/8" bit on 3 1/8" DC and drilled out cement from 40' to 68'. Pressure tested 4½" casing from surface to 2483' with 400# for 15 minutes with no loss. P.O.O.H. with bit. Ran 81 joints of 2" tubing and retrieved the B.P. @ 2483'. P.O.O.H. with tubing and B.P. Ran 123 joints of 2" tubing with 1 - 3 1/8" DC and 1 - 3 7/8" bit. Cleaned out from 3752-3582'. Recovered frac sand. Circulated hole clean. P.O.O.H. with tubing and bit. SDON. 5/28/74: Ran 101 joints of 2 3/8" OD, 4.7#, 8rd, EUE, J-55, tubing (3105'). Set tubing O.E. @ 3109' with 1 - 2" x 4½ Baker model AD-1 packer @ 3106'. Displaced 50 bbls. of treated water down the 4½" casing. Set packer with 11,000# tension. Nippled up well head and returned to injection @ 12:00 noon, 5/28/74. Released DA&S @ 1:00 p.m. Injected 19 hrs. for 420 bbls of water @ 1100 psi.