

ABSTRACT

AN EVALUATION OF LINER FAILURES IN OPEN HOLE GRAVEL PACK
WELLS IN THE CENTRAL LOS BAJOS THERMAL SCHEME

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Liner failure is an extreme problem in the Central Los Bajos Thermal Scheme. During the period January 1974 to December 1978, sixty (60) wells were drilled, and completed by the open hole gravel pack technique, using slotted liners. Forty (40) of these wells were studied, thirty five (35) of which failed within the study period.

This thesis seeks to evaluate forty (40) of these wells, with the aim of presenting a feasible cause and where necessary make suitable recommendations that may help limit the severity of the problem of liner failures.

The evaluation indicates that the erosion of the liner slots by particle impingement, abrasion and wear were the main causes for liner failure. Also, the use of sand load-production flux might be useful in indicating liner failure due to sand erosion.

As a result of these findings, it is believed that 30-50 U.S. Mesh gravel and liners with slots of width .010 inches may be used to limit the problem of liner erosion. Also, the use of resin coated sand slurries for the repair of damaged liners should be investigated.