REVIEW OF FRACTURE STIMULATION

TREATMENTS IN THE DENISON TROUGH

R.J. Theriault
Senior Petroleum Engineer
AAR Limited
(CSR Oil & Gas Division)

Well stimulation procedures are designed to reduce the restrictions to flow from the reservoir into the wellbore. Successful well stimulation permits more rapid and hence more profitable exploitation of a reservoir and often, though not always, results in greater ultimate recovery.

Hydraulic fracturing is one of the most important stimulation methods and has been employed in a number of wells in the Denison Trough. Fracturing has been used to overcome wellbore damage and create deep penetrating, highly conductive reservoir fractures to improve the productivity of medium to low permeability reservoirs. In some cases sub-commercial wells have been established as economic producers, and production increases of up to 25 fold have been realized.

The general considerations of treatment design, fracturing results, and problems encountered with the fracturing programs will be discussed.

Fracture types: CO₂ / Water

N₂ / Foam

20,000 lbs of sand - rectify damage around wellbore

60,000 lbs - low perm. in Jun.