



CASE HISTORY

Reservoir Optimization

Casing Annulus Packer

INTELLIGENT WELL

Intelligent Well Completion Requires Open Hole Zone Isolation

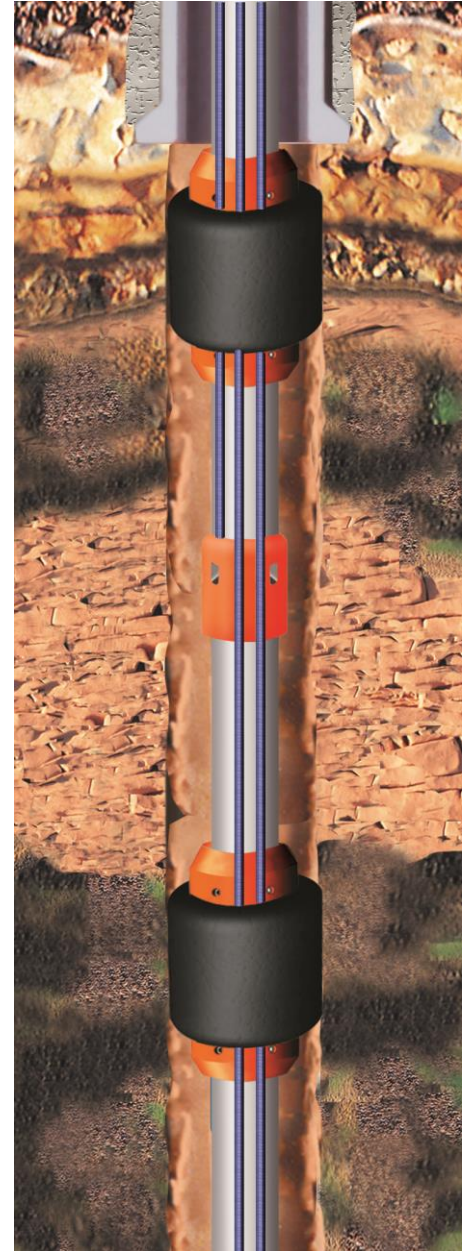
Location: Japan



CHALLENGES: Three wells, offshore Japan, were drilled and completed to monitor pressure, fluid, temperature and stress changes in each interval of the tectonic plate movement study. Wells were to be monitored and sampled over a 10-year program.

SOLUTION: A 17-1/2" hole was drilled thru the plate overlap region in 13,000' water depth. Three 13-3/8" x 10-3/4" dual mandrel CAP were run with a total of 12 control and conductor lines feeding thru the packers for pressure measurement and fluid sampling. Packers were positioned at depths required to monitor the top plate, plate overlap section and the lower plate. Pressure, stress, seismic activity, temperature and sampling were achieved with an ROV used to download data and samples biannually from the wellhead electronics module.

RESULTS AND BENEFIT: These three wells offshore Japan and two wells offshore Costa Rica have been in service for over 5 years and the CAP continue to provide zonal isolation in all intervals.



CAP
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