

SOME REMARKS ON THE COMPLETION TECHNOLOGY APPLIED TO GAS CAVERNS IN WEST GERMANY

by

Jörg Blecker

Hans-Werner Grote

KAVERNEN BAU- UND BETRIEBS-GMBH

Summary

The completion of gas caverns with a production casing suspended in the cavern head, landed and fixed in the last cemented casing with a permanent packer has proven successful and can be regarded as the standard completion design in Germany.

This design is relatively complex in comparison with completion concepts prevalent abroad. This is due in particular to the installation of subsurface safety valves, prescribed by the mining inspectorate. Initial operating experience with different types of safety valves is now available.

In the case of special storage concepts, the completion design is adapted to the specific conditions. One of many possible completion options is the installation of an additional last cemented casing for production. In exceptional cases, completion design foresees the last cemented casing and production through a tubing. A future variant foresees completion without a travel joint.