

Experience with Thermophysical Modelling of Gas Cavern Operations in Etzel

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ABSTRACT

Etzel Gas-Lager in northern Germany has been in operation since early 1993. It is designed to deliver conditioned gas at a rate of 32 MSm³/d for 14 days. During the recent year gas has at several occasions been withdrawn at high flowrates from partly filled caverns. Analyses of recorded wellhead data by use of the cavern simulator called VECTORS (VERTical Cavern Thermophysical OpeRations Simulator) have given valuable information of the inherent thermophysical properties of the caverns and the wellhead characteristics. In this paper it is shown that simulation of withdrawal characteristics closely agree with the corresponding measured wellhead data.

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