

Parameter Determination for Planning and Constructing of Gas Cavern Storage

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0 Preface

For planning and constructing of gas cavern storage in saltrock deposits a lot of parameters regarding the local geological facts are necessary. Besides petrophysical properties of the rock the initial rock stress conditions are very important.

For leaching operation and proposed modelling, respectively, knowledges about the kinetic dissolution behaviour are necessary.

For planning and designing of gas cavern storage Stassfurt, Germany, an extensive **Salt Exploration Programme** has been carried out and will be shown as an example.

The Salt Exploration Programme can be divided in following parts:

1. *Rockmechanical investigations*
2. *Investigations to saltrock tightness*
3. *Kinetic dissolution investigations*
4. *Investigations to initial rock stress condition*

Based on the collected results from the Salt Exploration Programme salt caverns for gas storing can be dimensioned by geomechanical and leaching model calculations.