

Thermodynamic simulator of gas storage in salt caverns

Context

A thermodynamic simulator of gas storage in salt caverns has been developed to replace the old SCTS software. This new tool is called GUSTS V2.

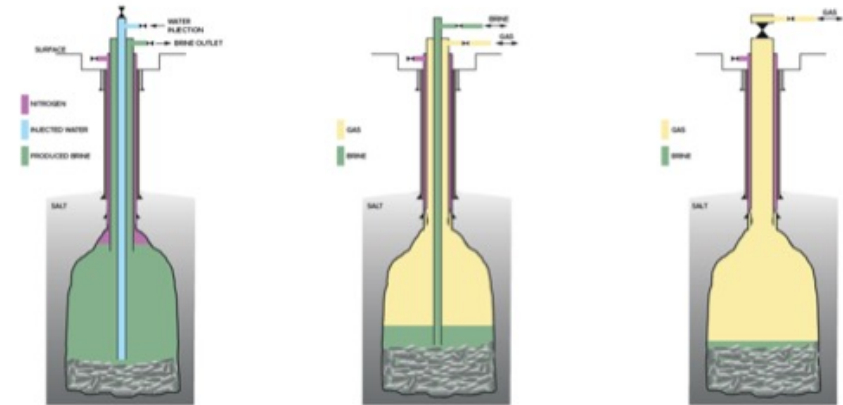
Approach

- Modelling of PVT thermodynamic state of gas in the cavern and the wellbore as well as the heat transfer with the surrounding rock
- Developed by specialized company (SCALIAN ALYOTECH)
- Validation tests and comparison with SCTS

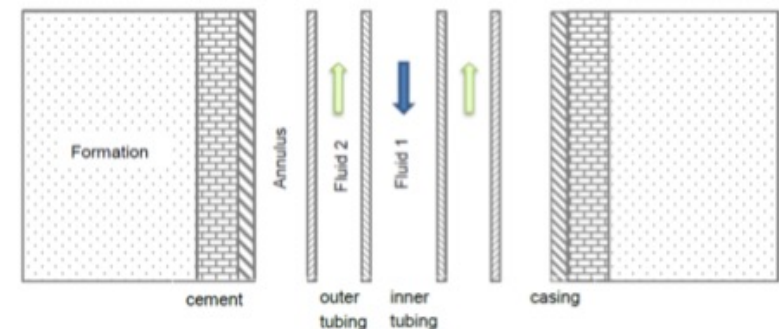
Advantage

Technological showcase regarding Geostock clients
Geostock autonomy to develop a software complying the need for the modelling of new gas storage concepts such as hydrogen and compressed air energy storage (CAES).

Contact : Mehdi Karimi-Jafari, mehdi.karimijafari@geostock.fr



Different steps of storage development (leaching, debrining and gas operation) taken into account in GUSTS V2



Well configuration for the heat transfer modeling