

Presentation of Les Pinasses Underground Gas Storage Project to be Developed in Salt Leached Caverns in Northeast Spain.

Samuel Ramos, Geostock Iberia, Madrid, Spain
Angel Merino, Petroleum Oil and Gas España, Madrid, Spain

Abstract

The underground gas storage (hereafter, UGS) Project in salt caverns Les Pinasses is a pioneer project in Spain. The project is located in the northeast of Spain around 60 km northwest from Barcelona in the potash area of Cardona. The owner of the Project is Petroleum Oil and Gas España—a fully owned subsidiary of GAS NATURAL FENOSA—. The project counts with a European funding within TEN 2011 and 2013 programs. Although at present Spain has several UGS — 4 depleted reservoirs, 1 aquifer— none of them are in salt caverns. The objective of this paper is presenting the main technical features of this Project.

The project to be built consists of 8 caverns to be solution mined at depths of approximately 720-920 m with geometrical volumes of around 500 000 m³ each and a total working gas volume greater than 0.3 bnm³. The project starts from scratch, access road and platforms will be built, wells from which the caverns will be leached shall be drilled and the following main elements are to be constructed: a leaching plant, a gas plant, roads/gravel paths within the storage area, a power line and a devoted gas pipe connected to the national grid at 46 km distance. Currently the project permitting process is underway.

Keywords: salt caverns, underground gas storage, Front End Engineering Design, Spain