

FINITE ELEMENT MODELS OF CAVERNS IN SALT

by

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ABSTRACT

The increased use of caverns in rock salt for underground storage has brought about an increased interest in our ability to analyze, design, construct, and monitor the performance of such conventional- and solution-mined caverns. This paper addresses some of the considerations and aspects of numerical, finite element method, analysis of the structural response of caverns in salt. The objective of this paper is to put the role of state-of-the-art numerical modeling of the structural response (i.e., cavern stability) of solution-mined caverns into proper perspective relative to the realities of working in the earth.

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