

CAVERN DESIGN TECHNOLOGY IN THE 1990s AND BEYOND

Prepared for:

Solution Mining Research Institute  
Spring Meeting  
Austin, Texas  
22-25 April 1990

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ABSTRACT

The excavation of caverns by solution or dry mining of salt formations has relied heavily on experience and judgment. Given the increasing requirement for suitable storage space for energy-related materials as well as wastes, underground salt structures have come to be recognized as a natural resource of great value. As a result of recent studies involving computer modeling and validation by field measurements, solution cavern fields can be designed on a quantitative basis. Utilization of salt deposits is known to be well below its potential. Critical issues concerning development of this resource are evaluated and measures suggested for improving the utilization of domal and bedded salt formations.

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