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PAPER



AN AXISYMMETRIC METHOD FOR ANALYZING CAVITY ARRAYS

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# AN AXISYMMETRIC METHOD FOR ANALYZING CAVITY ARRAYS

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## ABSTRACT

Single, isolated cavities or small clusters of cavities far removed from the periphery of their host salt dome can usually be satisfactorily analyzed with two-dimensional methods. In some instances, three-dimensional effects of a cavity array and, perhaps, the sedimentary layers surrounding the host salt dome are important. In an attempt to capture essential three-dimensional effects within the constraints of a two-dimensional analysis capability, the concept of "axisymmetric rings" is introduced. This paper discusses the approach of axisymmetric rings and presents an example of its application, i.e., the analysis of the LOOP storage facility in the Clovelly salt dome.