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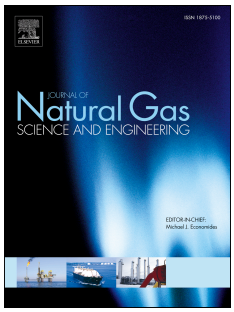

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Feasibility analysis of using horizontal caverns for underground gas storage: a case study of Yunying salt district

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Abstract: Rock salt of Yunying salt district, Hubei province, China, has a typical bedded structure, composed of many thin interlayers and thin salt layers. When the conventional single-well leaching method is used for the construction of caverns, the construction efficiency is low and the usable volume of the caverns is small. However, horizontal caverns (HCs) can be built in the formation with a high salt content, which can eliminate the shortcomings caused by the conventional single-well leaching method. Tests have been carried out on samples prepared from the cores obtained from the target formation to determine their mechanical properties. A 3D

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