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RIG-LESS SOLUTION MINING AND STORAGE BY OILFIELD INNOVATIONS LIMITED

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Abstract

The increased importance of hydrocarbon gas to the world economic system will drive the need for technological development of more cost effective and efficient underground salt cavern gas storage facilities in both onshore and offshore environments for both peak leveling and seasonal consumer demand. Innovations explained herein represent one possible proposition for enhancing the economics of salt cavern storage by removing the conventional need for drilling rig intervention and installation of completion strings during solution mining, dewatering and storage operations, whereby rig-less wireline conveyed tools are usable within a permanently installed flow diverting string to accomplish the same tasks in a safer and more cost effective manner. The visual simplicity of the required tooling and methods suggests that their development is both viable and economic, given the significant costs and risks associated with using drilling and snubbing rigs to intervene in salt caverns.

Key words: Well Design, Drilling and Completion, Solution Mining and Salt, Caverns for Gas Storage, Caverns for Liquid Storage

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