

INTERPRETATION OF CAVERN SHAPES MEASURED BY CHEMKOP ECHOSONDA APPLICATION

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Abstract

From more than 30 years Chemkop is using sonar device “Echosonda” of its own design and construction for measuring shapes and volumes of cavities created in salt deposits. At the beginning the image of the cavity was created on electro-sensitive recording paper. That was an analog recording. There were software tools designed to help interpretation this kind of recording. Since 1998 Chemkop has introduced digital recording of results. This allowed to create applications for automation of the interpretation process. During measurement images of cavities energetic field are obtained. Measurements are performed using aligned converter (energy is emitted horizontally) or tilted under desired angle. In each case converter makes full circle rotation (360°). Received image of ultrasound field is filtered and shape of cavity is proposed. If automated algorithm fails shape can be changed by software user.

This article covers process of filtration and interpretation of echograms created using aligned/bended converter and process of creation final data file containing image of cavity.