

Solution Mining Research Institute, Spring 2003 Technical Meeting

Houston, Texas, USA, 27-30 April 2003

MAPPING OF A REAL CAVERN FIELD USING THE CAVMAP SOFTWARE

Andre Stille

SOCON Sonar Control Kavernenvermessung GmbH, Giesen, Germany

Abstract

The *CavMap* software is a tool to store data about an entire cavern field as well as visualizing it. All necessary views of the cavern field are available. Data of a real cavern field will be used to demonstrate the usefulness of the various display and analysis options to support the cavern operator.

Horizontal slices show the distance between the cavities for a specific depth. Calculation of a real 3D distance between selected cavities is also possible. Different graphic layers, objects as well as subsidence and bore hole deviation can be shown. It is possible to create predefined as well as freehand vertical slices.

Vertical slices which do not need to include wellhead or reference point of the bore holes will show the distance between the cavities for a specific direction. Graphical layers, objects and geology can be included in the vertical and 3D view. Distances between cavities can be calculated and shown in a new view.

Pillar views will show the undisturbed distance between two cavities as well as the horizontal distance for every depth.

Regardless of the current view there is always access to the properties of the cavities like coordinates, geology, subsidence information, pipe configuration, datasheets, movies and other documents. Additionally programs for viewing linked documents and logs as well as the other parts of the *CavInfo* suite can be launched.