

A MODEL FOR THE SOLUTION MINING OF MULTI-COMPONENT ORES: THE INFLUENCE OF SULPHATES.

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Summary

At the Kon./Shell Laboratories in Amsterdam a model for the simulation of the solution mining of multi-component ores has been developed. The program relates to the mining activities of the NOZO (a company of Billiton International Metals) in the northern part of The Netherlands.

This paper will specifically address the influence of kieserite ( $\text{MgSO}_4 \cdot \text{H}_2\text{O}$ ) on the dissolution of other Mg containing ores. An important part of the program, describing the phase equilibria of the solid and liquid phases, will also be discussed. Finally, a comparison will be made between the results of the calculations and those of an actual field trial. It will be seen that the program predicts the cavern development correctly.

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