

A Re-Evaluation of the Muschelkalk Salt at Heilbronn

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ABSTRACT

Within the Unteres Salz at Heilbronn, a number of small, isolated, horizontally banded masses of primary-structured salt have been revealed. The horizontal banding and the relationship between these masses and the Unteres Salz suggest their position as original. Bromine content in the Unteres Salz and the enclosed horizontally banded salt is the same, indicating that the destruction of the original structure (horizontal) and its replacement by Unteres Salz structure (vertical) was accomplished by syndimentary solutions.

The transition from Unteres Salz to overlying Baendersalz is normally abrupt and across a relatively flat, uniform surface. Structural and textural contrasts and bromine content suggest an abrupt change in depositional environment. Locally, narrow zones in which the Unteres Salz structure is superimposed on the Baendersalz structure also indicate the near contemporaneity of deposition and recrystallization in the Unteres Salz. Tectonic forces were responsible for the development of the Napf structures, an event which occurred after lithification of the Baendersalz as well as after the development of the Unteres Salz structure.