

finally finished by eolian sedimentation. The lacustrine phases represent intensive spring activity generating relatively high water levels during the formation of the 3rd and 4th unit, while the fluvial to eolian phases are related to reduced spring activity with water level drops. Based on the different age determination methods and former studies the age of Tata travertine is approximately 100ky. According to the XRD analyses the Tata travertine are composed of pure, magnesium-free calcite.

On the basis of the field observations and thin section examinations numerous carbonate vents and cascades can be distinguished in the quarry, which were formed because of the former intensive spring activity. The vents are connected to each other, to the cascades and to the tetaratas. The different facies (vent, cascade, pond) migrated during the evolution of the travertine complex due to changes in morphology and flow direction.

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