Thermomineral salt water of Tetima (Tuzla Municipality)

Rock salt deposit Tetima is located about 10 km northeast from salt deposit Tuzla. This deposit was found in 1973 by drilling the well DS-3 in the village Tetima (Municipality of Tuzla), what was followed by detailed research and exploitation continues up today.

Springs and wells of salt waters occur in the area of spatial distribution of the salt body. Their mineralization and temperatures vary depending on the position of the aquifer relative to the salt body; waters accumulated in the roof and laterally around the margin of the salt body has lower mineralization, while the mineralization of water accumulated below salt layer goes up to 320 g/l. The water temperature is different and ranges from 13 to 24 °C.

The waters in the roof of the salt body and laterally on the periphery of the body are modern or with a significant share of young waters, while the those in the underlying layers are old that had no connection with the atmosphere after atomic experiment in 1950s. So that, the water of well TD-22 which is accumulated below the salt body (deeper than 658 m) according to the ^{14}C method is very old (32000 ± 2300 year); ^{3}H content is below the detection limit (Obelić, 1984).

See also

Geomanifestations on the territory of Tuzla, photo of brine well in Tetima (Tuzla Municipality) and GeoConnect^{3}d blog post

Generalities

Two salt deposits are known in the Tuzla Basin: Tuzla and Tetima. The salt formation in Tuzla Basin was formed during the Lower Badenian which was determined from side of Vrabac and Ćorić (2008) by micropaleontological research of the core of the well Ravna Trešnja - 1 (RT-1).

Tetima is the only deposit in Bosnia and Herzegovina where salt is exploited. After the finishing of the salt extraction at deposit Tuzla, greater exploitation of the Tetima salt deposit, which is located in sparsely populated area, was activated. The exploitation at deposit Tetima is performed by artificial leaching of salt bodies in deep wells, so the devastation of the area of Tetima is not expected as was the case at the Tuzla salt deposit.

Anomalies

High groundwater mineralization (up to 320 g/l).

Data

Source of data: Đurić (1988); Miošić et al. (2010).

FZZG_ factsheetTetima	Well depth (m)	Temperature of water (°C)	Q (l/s)	Total mineralisation (g/l)	Type of water	Aquifer
TD-21	970			295	Na-Cl	Sediments of salt formation
TD-22	790	22	3,3*	319	Na-Cl	Sediments of salt formation

*natural outflow on wellhead

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This file is part of the GeoConnect^{3}d project that has received funding by the European Union's Horizon 2020 research and innovation programme under grant agreement n.731166.

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Cite this source

Samardžić, N., 2021. Thermomineral salt water of Tetima (Tuzla Municipality) [Fact sheet]. Geological Survey of Federation of Bosnia and Herzegovina-Sarajevo (FZZG).

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Date: 04/07/2021

This file is part of the GeoConnect³d project that has received funding by the European Union's Horizon 2020 research and innovation programme under grant agreement n.731166.