

HYDROGEOLOGICAL STUDY OF BULAMAÇLI THERMAL WATER SOURCE,  
IN KIRŞEHİR, ÇİÇEKDAĞI

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ABSTRACT. — This study includes the origin, feeding and physical-chemical qualities of Bulamaçlı thermal water spring, and, also the type of drilling suggested to increase its discharge. In the studied area it is found that Paleocene age granites are overlaid by Lower Eocene rhyolites, then by Middle Eocene age sandstones extending unconformably. Then comes limestones and marls at top. Thermal waters extract through a faulting along E-W. Temperature of water is 44.5° C and discharge is 1.45 lt/sec. Another thermal water drunk with an aim of curing in thermal-baths has a temperature of 29.5° C and a discharge of 3.36 m<sup>3</sup> a day.

Both waters have heated by geothermal gradient, and have properties partly resulted from some internal ions. Classification in chemical composition is equated and it is a thermal water with «sodium, chlor, carbonate, radioactive and carbondioxide». Chemical analyses in various times showed the solved material about 4107-5413 mg/lt. 3 protecting areas surrounding each other have been suggested to eliminate the external effects on thermal water springs.

Discharge of thermal water should be increased for the establishment of a modern thermal center in Bulamaçlı. A drillhole 500 m deep will help this increase which should be opened without delay if thermal tourism of the area is wanted develop.