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## Medical Capabilities of Qualitative Characteristics of Water Springs of Mineral-Afra Tafilah governorate / Jordan

### Omar Farhan Al- Sagarat Mohammad Jamil Al- Qaralleh

#### **Abstract**

This study aimed to analyze the qualitative characteristics of water springs of Afra' to determine the potential that water in these springs has for medical treatment of certain diseases. Fifteen hot Springs flew in the lower reaches of Wadi Alparis, with water temperature ranging between (41.5-47°c) and quantities of water drained on average of 500 L/sec. The amount of radiation and the air confined in spring reserved for use by men (sauna) were measured, by the device (Digilert-50) for measuring Gamma, Beta and Alpha rays. The results obtained through this measurement revealed a direct dose of rays in the water reaching (0.103) milliroentgn per hour, and another dose in the air confined in the sauna reaching (0.022) milliroentgen per hour.

As the results of laboratory analysis of some physical and chemical properties of representative samples of six hot water springs that hot water springs of Afra` has physical and chemical elements such as hydrogen sulphide and radon which distinguish them from the other rest of the springs in Jordan in the healing of some chronic diseases such as rheumatic diseases, rheumatism, gout, muscle stiffness. The majority of quantities and proportions of physical and chemical elements of the spring waters are within international standards. In order to exploit this advantage and promote tourism, we must organize and develop its infrastructure, and facilities that meet these possibilities.

**Keywords**: mineral springs, quality characteristics, physical and chemical properties, medical tourism, Medical Capabilities.

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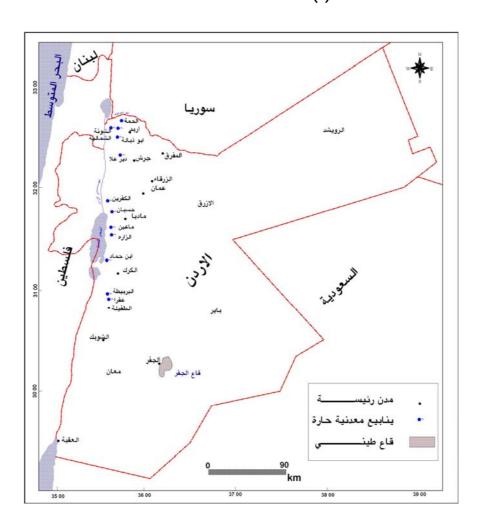
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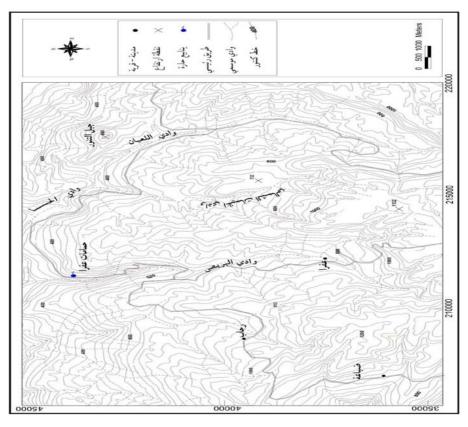
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source: Royal Jordanian Geographical Center,1986, National Atlas of Jordan, Part 2,Hydrology and Agro hydrology , -

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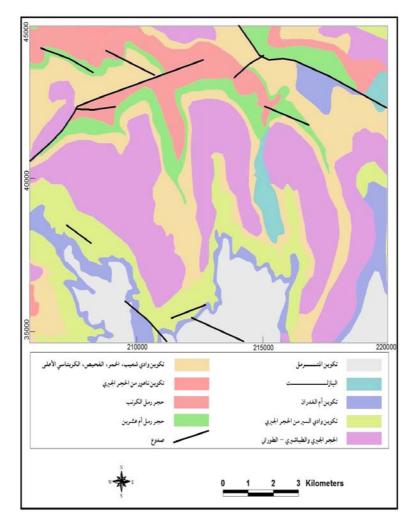
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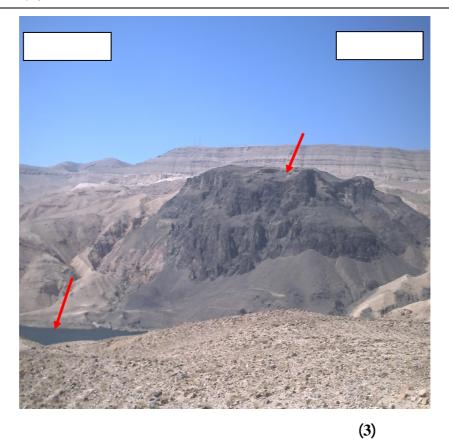
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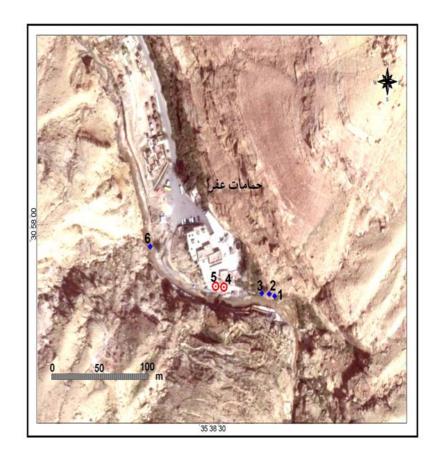
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