

COMPARATIVE HYDROCHEMICAL CHARACTERISTICS OF WATER BODIES OF KARST ORIGIN IN THE KABARDINO-BALKARIAN REPUBLIC

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On the territory of the KBR the chemical composition of the springs of cold hydrogen sulfide waters and karst lakes, the famous Blue lake (Cherik-Kel) and the drainless lake Bolshoy Shadhurei were studied. A comparison of them with each other and with the surface waters of the mid-mountain zone showed that waters of all springs as well as the lake Cheric-kel have deep karst origin (excepting the lake B. Shadhurei), but are affected to varying degrees by non-deep-lying groundwater. These water species are characterized by high mineralization, absolute predominance of sulfate ions in their composition, high content of toxic strontium, as well as magnesium, fluorine and molybdenum. Features of the trace element composition in each of the sources are related to the composition of sedimentary rocks in the corresponding river basin.

Key words: subsurface water, chemical composition, karst lakes, springs of hydrogen sulfide water, surface water of land, mid-mountain zone.

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