

ЯДЕРНО-ГЕОФИЗИЧЕСКИЕ ИССЛЕДОВАНИЯ
NUCLEAR-GEOPHYSICAL INVESTIGATION IN
NALYCHEVO NATURE PARK, KAMCHATKA

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Over the period 2009-2010 the authors conducted a nuclear-geophysical investigation in Nalychevo Nature Park. Local anomalies with γ -radiation ($I \geq 20-30 \mu\text{R/h}$) were detected within Kotel thermal area. The anomalies were caused by high radium concentration which deposited in travertine field of thermal spring's sources. The authors also detected high levels of volumetric activity of radon in soil air caused, on one hand, by emanating collectors with high radium content in travertine within the zones of old sources of thermal springs and, on the other hand, by zones of fracture observed as negative landforms. Formation of travertine field at the non-natural thermal field «Grifon Ivanova» is accompanied by deposition of radium-bearing minerals within a few hundreds of meters away from the source with $I \geq 20-30 \mu\text{R/h}$ along the drain.

Keywords: Nuclear-Geophysical, γ -survey, radon, thermal area, travertine, Nalychevo.