

## **ACTIVATION OF MUD VOLCANISM IN THE APSHERON IN 2001 AFTER THE CASPIAN EARTHQUAKE (25.11.00)**

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In 2001 activity of mud volcanism dramatically increased in Apsheron and in Gobustan. Eruption of March 21, 2001 took place in the Buzovna volcano; 30.05.01 – in Chegil-daniz; 26.06.01 – in Keireki volcano (Binagadi regions, Baku) and 25.10.01 – in Volcano in Lockbatan village. Moreover, in the first half of 2001 as a result of the study there were fixed new eruptions of volcanoes located in the central and in the south Gobustan. Detailed analysis of seismicity in the territory of Azerbaijan of 2000-2001 according to data of RCSS of the Azerbaijan National Academy of sciences (Republican Centre of Seismic Survey) demonstrated that in 2001 active sources of strong earthquakes in radius  $\Delta$  100 km from the observed volcanoes were not recorded, i.e. activity of these mud volcanoes took place on the background of a relative seismic calm. One may think that during volcanic activity seismicity is not matter in this case. However, it is known that on November 25, 2000 there occurred a strong Caspian earthquake (K=14; M=6.3). The hypocenter was removed from the volcanoes in Apsheron and Gobustan at a distance  $\Delta=70\div 120$  km. Constant aftershocks (K $\leq$ 11) of the source went on till April 2001.

We think that the source of the Caspian earthquake initiated activity of mud volcanism in Apsheron and Gobustan. Process of preparation of mud volcanoes eruption was reflected in anomalies of hydrogeochemical fields (ions: Eh, CO<sub>3</sub>, SO<sub>4</sub>,  $\Sigma$ (Cl, Br, I), Mg,  $\Sigma$ (Na, K)) of the ground waters in the objects of seismogeochemical monitoring which was conducted by RCSS of ANAS to solve some problems of seismic prognosis.