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**CONCENTRATIONS OF MAJOR AND TRACE ELEMENTS IN SEDIMENT AND
WATER OF VAN LAKE (TURKEY) BY ICP-OES AND EDXRF**

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Seas, lakes and rivers are polluted as a result of human activities (such as industrial waste) and are threatening the lives of living organisms. To determine trace elements which is one of the factors causing environmental pollution, water and sediment samples are selected as possible from characteristic regions. For this purpose, a total of 54 samples (20 sediment cores, 19 surface water and 15 deep water) collected from various depths of Lake Van (Turkey), is the larger soda lake and one of the world's largest endorheic lakes were analyzed for their elemental content using Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES) and Energy Dispersive X-Ray Fluorescence (EDXRF). The concentrations of B, Na, Mg, Al, P, K, Ca, Cr, Mn, Fe, Cu, Zn, Cd and Pb in sediments, surface water and deep water were determined by ICP-OES. According to the results measured by ICP-OES, element B (boron) was found mostly in all samples. Another measurement for concentrations in sediments were performed by EDXRF. In result of analysis K, Ca, Fe, Mn, Co, Rb, Sr, Y, Zr, U, Ni, Mo, In, Sn, I, Cs, Ba, La, Ce ve Nd elements were determined in sediments. Concentrations of elements were calculated and usually Sr element at maximum concentration and U element at minimum concentration were observed in sediment samples. Method used to interpret the elemental concentrations data is SPSS 20 package program.