

Hydrochemical characteristics of the groundWaters of Ain Defla

H.Haddad¹, F. Benrejdal¹, H. Goualem¹

Laboratory of Electrochemistry-Corrosion, Metallurgy and Inorganic Chemistry. Faculty of
Chemistry. USTHB. Algiers. Algeria.

haboul6@hotmail.com; fazial@live.fr; hghoualem@usthb.dz

Abstract. As part of our work, special attention is given to water and especially to its quality. The present work proposes to contribute to the estimation of the physicochemical quality of the sources of the region of Ain Defla. The physicochemical parameters taken into account during the characterization of its waters are: Conductivity, temperature, pH, Ca^{2+} , Mg^{2+} , Na^+ , K^+ cations, and NO_3^- , NO_2^- , Cl^- , HCO_3^- anions, SO_4^{2-} , PO_4^{3-} . The use of the Piper and Stabler and Schöeller-Berkaloff diagrams made it possible to make a hydrochemical study of these spring waters and thus to know their chemical facies, their quality and their potability. The use of these diagrams has been facilitated by its automation thanks to the software (Rolond SIMILER Laboratory of Hydrogeology of Avignon) that we have developed on PC.

Keywords: Groundwater, Physicochemical Parameters, Hydrochemistry.