Geochemical characterization of various types of dolomite in Mila Formation (Late Camberian) North of Urmia (NW IRAN)

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In studied area Carbonate-Clastic deposition of Mila Formation have been formed of 330 meters,very fine-grained sandstone, siltstone and dolomitic lime with more than 20 layers. According geochemical (such as oxygen and carbon isotope analysis and elemental Mg, Na, Sr, Fe, Mn, and Ca) four different types formation dolomite in Mila Formation has been detected. Because of the diversity of early and late diagenetic dolomite Mila formation is due to the impact that changes in the composition of the Dolomite mechanism has been changed as a result. Based on geochemical studies, it seems that dolomite is mainly "in reducing conditions and under the influence of burial diagenesis (shallow, medium and deep) consist. Mg required for the formation of dolomite type 1 as dolomite primary or Syndepositional considered It is, of sea water supply, while Mg to the other (dolomite diagenetic) the density of shales and brines basin resulted. Due to the abundance of clay Montmorillonite and chlorite clays in shales and by reducing the amount of MgO in the 40 and 87 percent, respectively (XRD and XRF studies shales), we can say that for the Mg dolomitic shales of likely congestion (Shale pressing) has been concluded The primary dolomite formation temperature of Mila Formation respectively according to the equation Land (1985) between 40 and 52 degrees Celsius has been calculated.