

PERMO-TRIASSIC DEPOSITES IN CHIAN AREA

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The Chian area, which is considered to be geologically a part of the Zagros orogenic belt (Sanandaj-Sirjan zone), lies immediately northeast of the Zagros simply folded belt. The Chian area is located between longitude 53.30E and 54.00E and latitude 30.30N and 31.00N. The oldest exposed rocks in the region are Permian age. More than 1000m of marine carbonate rocks (mainly limestone) of early Permian to late Permian are exposed in the region. The Permian sequence can be divided into 8 different units. The Permian begins with deposits of coarse to massive to well-bedded and thin-bedded fossiliferous limestone with cherty nodules and veins, dolomite and shale. The upper part of this unit is overlain by lower Triassic deposits. The Triassic sequence in this region can be divided into 3 units. Lower Triassic consists of marl, oolitic limestone and vermicular limestone. It has a transitional contact with the underlying upper Permian rocks. Middle Triassic rock unit has a transitional contact with the underlying lower Triassic rock unit. The middle Triassic group consists of white and gray well-bedded dolomite. The upper Triassic deposits are in tectonic contact with the middle Triassic rocks. Upper Triassic rocks consist of reefal limestone, sandy limestone, shale and sandstone. Volcanic rocks in this area, the exception of some tuff and andesite, rhyolitic and basaltic rocks in the lower part of the upper Triassic sequence. At last, according to the previous studies it could be said that the Permian and Triassic (early-middle) deposits have been formed in Gondwanian continental shelf and the late Triassic deposits belong to Neo-Tethyan opening facies.