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Mineralogical and Geochemical Characteristics of Tafresh(Central Iran)

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The area under the study that located in central and 221 kilometers of SW of Tehran is a part of Qom quadrangle. From the litho logical point of view, the most rock is volcanic and plutonic rocks. Volcanic rocks are andesibasalt, andesite, dacite and rhyolite that is emplaced during Eocene. Plutonic rocks are included of diorite, tonalite and granodiorite that is emplaced during Oligo _ Miocene. Magma tic rocks has plagioclase, alcalifeldespar m quartz, clinopyroxne and biotite. The amphibole crystals has rim burnt. The most texture is porphyry, microlite for volcanic rocks and granular, pertite for plutonic rocks. From the geochemical and petrological point of view , variation of major elements , index differentiation and trace element show crystallization on the basis of petrological diagrams magmatic rocks of area under study are calc - alkalin and tollitic and they are belong to subduction (CAG) . Similarity between volcanic and plutonic rocks and belonging them to the same place and the same time show that volcanic and plutonic rocks maybe have the same origin. Key words: volcanic, plutonic, andesite, continental margin, calc alkalin