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Petrogensis of rhyolitic domes of Dastjerd (SE Qom)

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The study area is located in South Eastern Qom; this area is marginal part of SW Central Iran, located in Urumieh- Dokhtar magmatic belt. Rhyolitic domes (Post Eocene) as endogenous (crypto dome) are along Meyem slip-fault, that this fault probably is effective in emplacement and magma ascent. The ryholitic rocks contain some phenocrysts of garnets, plagioclases and biotits. The groundmasses are consisting of plagioclase, K-feldspar and quartz. Rhyolitic rocks have calc alkaline trends and base on chemical composition of rhyolite rocks and mica bearing. The source of magma is S-type and per aluminums which belongs to collision environment. It is suggested the role of continental crust in generation rhyolitic rocks. Because of the garnet area is an early crystallizing phase and is only confined to rhyolite, it is inferred that the garnet did not crystallize in more basic magmas and that the rhyolite could not have been derived from a basic magma by crystal fractionation. Keywords: Rhyolitic, slip-fault, collision, S-type, endogenous