

PETROGRAPHY, IDENTIFICATION OF METASOMATIC TEXTURES AND ISOCHEMICAL REACTIONS FROM DARBA SUITE, SW JORDAN

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ABSTRACT

Hydrothermal fluids penetrated Darba rocks through their weak points in the solid state during the latest stage of their crystallization. Such fluid movement was facilitated by tectonic deformation. The Ediacaran rocks of Darba suite show metasomatic features and textures that were petrographically identified to be related to magmatism during the late stage of crystallization by isochemical hydrothermal fluids. The isochemical reactions are mostly grain boundary controlled changes ("metasomatic active fronts" or "reaction interfaces") represented by plagioclase crystals merging into one porphyroblast (megacryst), K-feld spathization equalizing albitization, sericitization, limited growth of apatite from plagioclase and the alteration of biotite and hornblende to chlorite.

KEYWORDS: Shield, Jordan, Metasomatism, Petrography, Tectonics

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