Andradite	$(Ca_3Fe_2^3+Si_3O_{12})$	: 98–71%
Pyrope	$(Mg_3Al_2Si_3O_{12})$	: 0–1%
Spessartine	$(Mn_3Al_2Si_3O_{12})$	: 0.2–1.5%
Grossulare	$(Ca_3Al_2Si_3O_{12})$	: 0.2–28%
Almandine	$(Fe_3^2+Al_2Si_3O_{12})$	: –

Optical properties, density and lattice constants were determined and are in good agreement to each other.

In order to determine the application potential of the garnetite of Serifos a sample wes tested as industrial mineral by the Battel method.

The possibility to use the garnetite as industrial mineral is discussed.

SUBMARINE HYDROTHERMAL ALTERATION OF BASALTS AND DOLERITES (ZEOLITIC FACIES) IN THE INTERMEDIATE UNIT OF NORTHERN ARGOLIS (PELOPONNESUS, GREECE)

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In nothern Argolis (N. of Epidaurus) in the inner part of Hellenides, the ophiolitic complex is composed of three superposed tectonic units: a) The Lower which is a sedimentary ophiolitic «mélange»; b) An Intermediate volcanic unit and c) An Upper ophiolitic tectonic «mélange».

The intermediate volcanic unit is composed of a lower massive dolerite and an upper basaltic pillow-lava, both of MORB tholeiitic affinity.

In this study the examination of secondary mineralogical assemblages shows a probable hydrothermal origin. This metamorphism is characterized by the remplacement of the original minerals by secondary minerals such as: smectites, celadonites, albites, chlorites, sphene, (Na, Ca) zeolites, ferriferous pumpellyites, which also appear in fractures, or as fillings of voids.

These mineralogical assemblages are the result of a submarine hydrothermal alteration with temperatures between 190 to 200°C and low pressures ($P \leq 1$ Kb).

These thermodynamic conditions are characterized by the association of laumontite-ferriferous pumpellyite in the dolerite, also the presence of smectites-celadonites associated with various (Na, Ca) zeolites in the basaltic pillow-lavas, suggest temperatures less than those in dolerites.