This age implies that the exposure of the gabbros representing the lower crust occurred at/or close to the Ridge-Transform Intersection.

Furthermore, deep levels of the oceanic crust and the upper mantle rocks are also rather commonly exposed on the Atlantic Ocean seafloor away from the transform fault scarps, suggesting that their emplacement may be a characteristic feature of slow-spreading oceans (Juteau et al., 1990).

Understanding the processes leading to exposure of the deepest crustal levels and the serpentinitized mantle peridotites, that act in present-day slow-spreading ridges, gives rise to two different hypotheses which are quite comparable to those stated in the case of the Western Mediterranean Sea. The mechanisms involved in the first hypothesis emphasize large variations in magma supply and dominantly tectonic phases of spreading accommodated by the stretching of the crust along low angle normal and listric faulting (Karson et al., 1987). The second possibility implies a vertical rise of a metamorphic front which provokes physicochemical processes resulting in the outcropping of the deep levels of the crust and the upper mantle.

**PRELIMINARY STUDY OF ALTERED VOLCANICS OF SAPPE - SYKORRACI AREA, W. THRACE, FOR INDUSTRIAL MINERALS**

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The Sappes area is located at the border of Essimi - Kirki and Sappes - Komotini Tertiary basins. The studied area is covered by volcanic rocks (tufts and lavas) of intermediate composition. Subvolcanic intrusive rocks (andesites) and plutonic rocks (quartz-Monzodioritite) are also occur in the area. The above formations are strongly altered as a result of tectonic - hydrothermal activity. On the basis of mineral assemblages the following alteration zones were identified: 1) Siliceous zones (quartz ± Fe - Mn - oxides, alunite, Au), 2) Alunite zone (alunite + quartz ± opal C-T ± Fe-Mn oxides ± FeS2), 3) Sericite/argillitic zone (sericite + kaolinite + quartz + FeS2 ± I-S mixed layer, diasporite, rutile, smectite, albite, jarosite), 4) Keolinite zone (kaolinite + quartz ± opal C-T ± alunite, FeS2. On the basis of mineralogical and chemical data, a first approach of these zones from the point of view of Industrial minerals is attempted.