This age implies that the exposure of the gabbros representing the lower crust occured 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 e charecteristic feeture of slow-spreading oceans (Juteau et al., 1990).

Understanding the processes leading to exposure of the deepest crustal levels and the serpentinized mantle peridotites, that act in present-day slow-spreading ridges, gives rise to two different hypotheses which are quite compareble to those stated in the case of the Western Mediterennean Sea. The mechanisms involved in the first hypothesis emphasize large variations in magma supply and dominatly tectonic phases of spreading accommodated by the streching 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 SAPPES - SYKORRACHI 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 (tuffs and lavas) of indermidiate composition. Subvolcanic intrusive rocks (andesites) and plutonic rocks (quartz-Monzodiorite) 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 ±/or opal C-T ± Fe-Mn oxides ± FeS_2), 3) Sericite/argillic zone (sericite + kaolinite + quartz + FeS_2 ± I-S mixed layer, diaspore, rutile, smectite, albite, jarosite), 4) Keolinite zone (kaolinite + quartz ±/or opal C-T ± alunite, FeS_2. On the basis of mineralogical and chemical data, a first approach of these zones from the point of view of Industrial minerals is attemted.