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THE GEOTECTONIC SETTING OF LATE CRETACEOUS-
TERTIARY VOLCANISM ALONG THE EASTERN PONTIDES

YILMAZ,A.,MTA General Directorate, 06520, Ankara,
Turkey and TERZIOĞLU,M.N, TPAO,Exploration Group,
Ankara, Turkey.

The Study area is located in the vicinity of Ünye,
Ordu, Koyulhisar and Reşadiye, to the west part of the
Eastern Pontides. This investigation aims to evaluate the
geodynamic evolution of the region in the light of regional
geology and characteristics of the volcanism.

In the study area, a Cenomanian-Campanian ensialic
type-arc occurred on the Jurassic-Early Cretaceous platform
type- carbonates representing the edge of the passive
continent. On the basis of deformation intensity and facial
distribution of the volcanism, consisting of andesitic or
basaltic lavas and volcano-sedimentary rocks,it can be said
that the arc has a trend towards the north. Andesitic
volcanism occurred when the arc had a neutral character
and the basaltic volcanism occurred when the arc had a
tensional character.

The Maastrichtian-Paleocene facies changing from
shallow marine to continental deposits overlie the arc-
relating units unconformably. There is not any volcanic
activity in the Maastrichtian-Paleocene time. The Eocene
clastics and neritic carbonates overlie the older units
unconformably in a regional scale and are gradually
followed by the Late Eocene hybridic-type volcanics and the
continental flood basalts. In addition, Upper Miocene-
Pliocene alkaline-type volcanics and Quaternary shoshonitic
type volcanics represent the different stages of within-
plate volcanism in the region developed after the collision
between the Pontian arc and Anatolid-Taurid platform.