CHAPTER I
INTRODUCTION

The Egyptian basement complex represents the North Western part of the Arabian-Nubian Shield which is composed of sheared metasedimentary, metavolcanic and ophiolitic rock assemblages. These rocks were evolved in island arc, back-arc and oceanic settings and were episodically deformed, intruded and metamorphosd together during the Late Proterozoic Pan-African orogeny (Greenwood et al., 1976; Gass, 1977; Stoeser and Camp, 1985 and Kroner et al., 1987).

Many authors have concluded that Cenozoic-type plate tectonic processes were responsible for the development of the Pan-African mobile belt of the Arabian-Nubian Shield (Garson and Shalaby, 1976; Bakor et al., 1976; Nasseef and Gass, 1977; Gass, 1981; Shackleton, 1977 and Shackleton et al., 1980).

Ries et al. (1983) recorded the presence of large nappes of ophiolitic mélange along the Qena-Quseir asphaltic road (north of the study area).

Kroner et al. (1987) defined the Pan-African structural domain with its ophiolitic mélange and low angle thrusts and postulated that it extends almost as far West as the River Nile.