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**CLAY MINERAL DISTRIBUTION IN SELECTED LOCATIONS  
ALONG THE TIGRIS AND SHATT AL-ARAB RIVERS,  
SOUTH IRAQ**

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**ABSTRACT**

Four sites were sampled during Nov. 1984, in order to measure the clay mineral assemblages. These sites, All Al-Sharki, AlMajer, Al-Mes'heb and Shaft Al-Arab, are distributed along the Tigris river and around Qarmat All, south of Iraq. The clay mineral assemblages are; chlorite, illite, kaolinite with traces of illite-chlorite mixed layer and a notable quantity of amorphous silica. Chlorite is high in Al-Sharki and Al-Mas'heb sites. There is a tendency of increasing in percentage of illite toward the Shaft Al-Arab river. The kaolinite percentage is relatively stable in the studied sites. The Tigris and Shaft Al-Arab rivers are lack of smectite. The amorphous silica is abundant in Al-Mas'heb site. The clay mineral assemblages prove the origin of the recent sediments which, originated from the formations, that outcropped in catchment area of Tigris and Euphrates rivers.