

# DEVELOPMENT AND HEAVY MINERAL ANALYSIS OF THE TIGRIS RIVER TERRACES, NORTHERN IRAQ

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Fluvial terraces of the Tigris River , Northern Iraq are studied in a 12 Km as maximum width by 200 Km length from Dao-Al-Qamar village , north-west of Mosul city to Sharqat , south of Mosul around the river channel . Attention has been focused on the development and field recognition of terraces , petrographic description of their lithologic components with a detailed study of the distribution of heavy minerals leading to estimation of their provenance . The Tigris River terraces are divided into five stages (including the present stage ) ranging in age from Pleistocene to Recent. The first stage represents the farthest , highest and the oldest one of the terraces. Petrographic investigation of conglomerate indicates variation in rock type , size , sorting and cementing materials . Variation occurs within the different stages of each terrace as well as different areas along the river. Different assemblages of heavy minerals were recognized . The distribution and provenance of heavy minerals are used to suggest an idea about the river history .