Depositional facies and environments in the Umm Ishrin Sandstone Formation, Dead Sea area, Jordan

I. M. Makhlouf and A. M. Abed

a Natural Resources Authority, P.O. Box 7, Amman, Jordan
b Department of Geology, University of Jordan, Amman, Jordan

Received 15 June 1989; accepted 6 February 1991; Available online 4 April 2003.

Abstract

The Umm Ishrin Sandstone Formation between Wadi Manshala and Wadi Abu Khusheiba, along the northeastern margin of the Dead Sea, consists of a quartz arenite facies and a subordinate heterolithic facies of siltstone and mudstone with sandy lenses. The former are trough cross-bedded with unidirectional northwesterly mode. The Umm Ishrin sediments were deposited on a braidplain and tidal flat in response to periodic shifting of the active part of the braidplain system. Reworking of the abandoned parts of the braidplain by tidal currents and subsidence led to marine incursions and the development of tidal flats.