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**Lithofacies of Recent Sediments of Khor Abdallah And The
Shatt Al-Arab Delta, NW Arabian Gulf**

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Abstract

Eleven core samples of recent sediments, up to 60cm in depth, from Khor Abdallah and Shatt Al-Arab delta in the northwest Arabian Gulf, were collected from Sept. 1991 to Nov. 1992. On the bases of texture, lithology and sedimentary structures, four lithofacies were distinguished. The first lithofacies is stiff compact dark grey clay. Overlain by a light grey sandy layer with shell fragments. It covers the vicinity of Shatt Al-Arab delta, especially the distributary channels. This lithofacies may have formed by graded suspension transport followed by a deposition in a quiet environment. A surface of erosion exist between the basal muddy layer and the overlying sandy layer. The second lithofacies is homogeneous, sticky and beige to light grey clay. It covers the vicinity of Shatt Al-Arab and the entrance of Khor Abdallah. This also may be a product of graded suspension. The source of these lithofacies may be to the Shatt Al-Arab River. The third lithofacies is clayey sandy silt to clayey silt, with sand pockets. Generally it covers the Khor Abdallah area. The last lithofacies is clay with fine sand and silt, fining-upward and alternating light to dark gray. This is present in the vicinity of Atlassi shoal in Khor Abdallah. These last two lithofacies related to the ebb-tide currents of high velocity in the Khor Abdallah.