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Geochemical Studies of Salman, Resalat and Sirri Oil Fields in the Eastern Part of Persian Gulf Area

The Persian Gulf is one of the most proliferous areas. Mesozoic and Tertiary source rocks and crude oils from the Iranian sector of Persian Gulf have been characterized by means of a variety of organic geochemical techniques. Oil fields investigated include the Resalat, Salman, Sirii and Nousrat in the eastern part of Persian Gulf. The Biomarker characteristics (molecular fossils) were combined with other geochemical data to interpret the sources, depositional environments, diagenesis and catagenesis processes, migration and alteration. According to the biomarker and other geochemical study, oils in the eastern part of Persain Gulf can be classified in two groups. Groups 1 include the Sirri and Nousrat oil fields. According to the C28/C29 Steran and Dia/reg ST this group sourced from the Jourassic and Lower part of the Cretasseous shaley rocks. Groupe2 (Resalat and Salman oil fields) sourced from the upper Paleozoic Carbonate rocks