

## **Study of extraction and pyrolysis of Jordan tar sand**

### **Abstract**

The extraction and pyrolysis of tar sand from Wadi Isal, Jordan have been investigated. Solvent type, mixing time, temperature, particle size and alkali concentration have been identified as important parameters for bitumen recovery. The results show that hot water extraction is ineffective since a small amount of bitumen has been obtained even at 80°C. Kerosene extraction shows a maximum bitumen recovery of about 43% at 80°C and 180–250 µm particle size. The kinetic parameters of pyrolysis have been determined based on first-order rate expression and their values were in agreement with other published data in the literature.

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