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STUDY ON SHALE OIL DIESEL REFINING

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A new method of non-hydrofining is proposed to improve the stability of diesel fraction of Fushun shale oil. The experimental results show that solvent extraction is efficiently selective to remove nitrogen-, oxygen-, and sulfur-containing compounds. At the temperature of 10–30 °C, diesel fraction is continuously extracted by using the 7–10% additive-containing solvent three times at the ratio of solvent to oil of 0.2. Thereafter, the oil layer is washed by aqueous alkali and water. The recovery of refined oil is more than 75%, and the gum content is less than 70 mg/100 mL. All other parameters meet the requirements of quality specification of diesel product.

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