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Largest West Siberia Oil and Gas Bearing Basin: Giant and Unique Petroleum Systems

The West Siberian Province is the largest oil- and gas-bearing province recognized on Russian territory. West Siberian Province is subdivided into 10 oil and gas regions. Each region contains several oil- and gas-bearing areas. Four areas in the northern part of the province (Nadym -- Pur, Pur -- Taz, Yamal and Gydan) are predominantly gas bearing. Other, such as Pre- Ural and Frolov in the west of the province, Sredny Priob and Kamys in the central part, and Vasyugan and Paidugin in the east, are oil-and gas-bearing and contain the bulk of oil reserves. One characteristic feature of the West Siberian is a large number of giant fields. Giant oil field as Samotlor, Mamontovo, Fedorovo, Priob, Krasnoleninsk, Talin. Giant gas field as Urengoy, Yamburg, Medvezhie, Bovanenkovo, Kharasavey, Yubileynoe, Zapoliarnoe, which contain the main oil and gas reserves of West Siberia. The confinement of the gas accumulations to coal bearing sediments, the compositional features of the natural gases, which are virtually devoid of heavy hydrocarbons, the similar absolute values of the carbon-isotope composition of the methane in the gas deposits and marsh gases, the scale generation, and the nature of their distribution, have led to the conclusion that the principal source of the gas in the cenomanian sediments was organic matter of humic type, the carbonized remains of which saturate the entire rock sequence of the pokur supergroup. Lower cretaceous and upper jurassic are source rock for oil systems of the central and southern provinces.