Development of the Oil-Gas Industry in Central Asia

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Central Asia is one of the oldest oil producing regions of the country. Discharges of oil in the Fergana depression have been known since ancient times. At Cheleken, according to accounts of travelers, oil was produced from wells back in the 18th Century.

The first drilling at Cheleken was in 1876. The wells had a depth of 60-100 m and yielded 200-500 buckets per day, and after 1908 when a powerful gusher was brought in, production increased to where it was 210,000 tons in 1911. However, the oil sectors were later flooded and by 1917 the total yield of the 37 operating wells was 110.5 tons. The average depth of the Cheleken wells was 200 m, and 600 of them had been drilled by 1917.

In the Fergana depression drilling for oil was begun in 1880. The first two wells were drilled manually in the Shorsu region; one of them yielded a flow of oil at 10 buckets a day, and the other gave yet less. Drilling was begun somewhat later in the Chimion and Mayli-Say areas. At Chimion in 1900 was organized the “Chimion” company, and in 1904 an oil operation was opened on a basis of exploitation of pools in Paleogene sediments.

In the following years exploration was largely along the margins of the Fergana depression and in Cheleken near known fields. Production was by numerous firms, predaciously exploiting the pools with no regard for the elementary rules of conservation. At the time of nationalization of the oil industry, the known oil horizons had been flooded and the oil industry of Central Asia was in complete disarray.

Work was begun after nationalization on the Sorsuy IV anticline where a new field was discovered; production here reached 50,000 tons per year. Exploration drilling was subsequently extended to new areas: Khanabad, Tekebel, Changyrtaish II, Cahur, and others.

Geological and geophysical work in the Thirties disclosed numerous folds, in the cores of which at the surface are Neogene or early Quaternary sediments. A flow of oil was obtained in 1935 on the Andizhan fold.

During World War II the following oil fields were discovered in the Fergana depression and placed in production: Palvantash (1942) and Yuzhno-Alamashin (1943), - and later - Sharikhan (1946), Mayli-Su IV (1948), Izbaskent (1950), and others.

In the post-war years in Fergana gas pools were discovered in addition to those of the Paleogene also in Mesozoic sediments. The first commercial gas of the Cretaceous sediments in the Fergana depression was found in 1946 in the Palvantash area.

In southwest Turkmenia after restoration of the Cheleken industry in 1924-25 oil production was 6,000 tons, and in 1926-27 it was 11,000 tons. In 1927 exploration drilling was organized at Nebit-Dag, where the first commercial flows were obtained in 1931-33 from the upper part of the redbed unit. One of the wells gushed with a flow of 15,000 tons per day. In 1934 the yearly production was 16,000 tons.

Oil production subsequently increased due to production from new pools in the redbed unit at Nebit-Dag and in 1948 reached 1.3 million tons. After discovery of the Kum-Dag field, oil production increased significantly in 1955. During the period 1949-63 the following fields were discovered: Aliqad, Dagadzhik, and Zapadnyy Cheleken on the Cheleken Peninsula; Okarem, Kamysldzha, Barsa-Kel’mes, and Kotur-Tepe, the largest field in Central Asia. Owing to these discoveries oil production in the Turkmen SSR in 1963 was 7.8 million tons.

In the southern regions of the Uzbek SSR exploration drilling was begun in 1933 in the Khaudar area (Surkhandar Region), and in 1934 the first oil flow was obtained from carbonate sediments of the Bukhara beds. In subsequent years the Uch-Kizyl, Kokayty, and Lyal’-Mikar fields were discovered in the Surkhandar synclinal zone. During this period in the Tadzhik SSR the following fields were discovered: Kyzyl-Tumshuk, Kichik-Bel, Andygyn, Komsomol, Shaambary (Vakh synclinal zone and Gissar downwarp). Up until recently the main oil and gas pools were in Paleogene sediments, and only recently have oil and gas been found in the Mesozoic (Andygyn, Komsmol).

The youngest gas-oil area of Central Asia is the Bukhara-Khiva in West Uzbekistan. The first oil showings in the Lower Cretaceous were found in 1935 in the Karaiz area. This fact and also the presence of structures comprised at the surface of Upper Cretaceous and Paleogene sediments, as well as the favorable geographic conditions, were the basis for beginning exploration in