



Oil for the lamps of Japan

**Growing industrial
demand spurs the search
for a scarce resource**

by Stuart Griffin

Japan consumes more petroleum annually than any other country except the United States and the Soviet Union. Yet its domestic output totals less than one percent of the nation's over-all petroleum requirements. In 1968 Japan spent some \$2.1 billion buying oil from abroad, from the United States, Indonesia and the Soviet Union as well as the Middle East. In 1969 the figure climbed \$2.45 billion.

Japan needs even more oil to feed its expanding industry. Its overseas petroleum exploitation effort dates back to 1959, with the test drillings in Saudi Arabia and Kuwait conducted by Japan's first postwar overseas development firm, Arabian Oil. Full-scale production came two years later. But for Japan to meet its rising requirements it must find new overseas development areas.

This explains why there is now in progress in Japan a virtual black gold rush. Enterprises are stepping up their efforts to develop overseas petroleum resources, and the Tokyo Government is also investing funds through the Petroleum Development Corp. The rush is stimulated by the belief that oil will be Japan's chief source of energy for many more years.

Already 13 domestic firms have been founded to press development abroad, with two more soon to be inaugurated—the North Slope Petroleum Co. and the Egyptian Oil Development Co. Except for four concerns, including North Slope Petroleum and the Alaska Oil Development Co., all are exploring or soon will explore Middle East, Near East and Indonesian resources. All firms will be actively in operation by the end of this year.

Kiyoshi Takahashi of the Mining and Coal Bureau of the Ministry of International Trade and Industry, however, sounds a note of caution. He points out that only 3 of 10 companies now at work have scored success: the Arabian Oil Co., North Sumatra Oil Development Cooperation Co. and the Abu Dhabi Oil Co.

"Arabian and North Sumatra," he says, "are already producing oil at an annual rate of about 18 million and 2 million kiloliters, respectively, while Abu Dhabi has succeeded in exploratory boring of its No. 2 well.

"For the rest of the enterprises, though, the prospect is totally uncertain, and nobody can say whether they will succeed or fail."

Great expectations are being placed on North Slope Petroleum, which is actively exploring on Alaska's Arctic

coast. This area has taken the spotlight since 1968, when the Atlantic Richfield Oil Co. of the United States, after ten years of drilling, discovered oil there and announced that the estimated reserves would make the oilfield the world's second largest, following only the Middle East. Gulf Oil, Royal Dutch Shell, Humble and British Petroleum quickly made advances there. In September Alaska sold oil leases to 179 parcels of land for \$900 million, and a major development operation is now under way (SN: 5/16, p. 486).

The bidding for concessions in the Alaska oil strike was particularly fierce, and several of the companies that obtained positions on the North Slope at great cost will have to drill with luck if they are to make back their investments. Japan did not get in on the first bidding for oil sites, but both Government officials and industry expect the country to get in at least on the fringes.

"We would be stupid to sit idle before Golconda," says Soichi Matsune, board chairman of the Alaska Oil Development Co., which has been instrumental in founding North Slope Petroleum. "We will bid for concessions this autumn and if successful will secure for Japan an important new source of petroleum energy supply."

Some 25 iron-steel, electric power and petroleum-refining companies are investing in North Slope Petroleum. The reason, says Keisuke Idemitsu, president of the Idemitsu Kosan Co., is "a true dispersion of risk."

Analysts view the risk as great indeed and cite this example: Kyushu Oil Development Co., founded to develop Indonesian oil, has been prospecting at eight locations for several years and has invested more than \$11 million, 80 percent of its paid-in capital. So far it has not struck oil.

The Ministry of International Trade and Industry is fully backing local oil undertakings in these overseas development efforts, since it wants to meet 30 percent of its Japanese crude oil demand in 1985—estimated at 500 kiloliters annually—with crude developed by Japanese companies. This would be a marked rise from the 14 percent figure of today.

The Japanese also fear, says Petroleum Bureau Sub-Chief Takenobu Toyama, that oil imports from the Middle East may stop at any time because of that area's political instability. "Oil imports from the Middle East," he says, "account for 90 percent of all Japan's oil consumption."