

TABLE 2.—U.S. DISCOVERY EFFORTS DROP DESPITE RISING CRUDE OIL PRODUCTION

	Number of wells drilled annually		Wells drilled per million barrels of crude oil produced		Barrels of crude oil discovered per well drilled	
	All wells	Exploratory	All wells	Exploratory	All wells	Exploratory
1948.....	39,477	8,013	18.5	3.9	96,137	473,631
1949.....	38,682	9,058	20.5	4.9	82,412	351,936
1950.....	43,307	10,306	21.4	5.2	59,175	248,660
1951.....	45,996	11,756	19.8	5.2	95,964	375,464
1952.....	46,509	12,425	19.8	5.4	59,113	221,271
1953.....	49,480	13,313	20.5	5.7	68,325	247,587
1954.....	52,179	13,100	22.2	5.7	55,875	219,316
1955.....	55,879	14,942	22.5	6.0	51,999	192,124
1956.....	58,418	16,207	22.3	6.2	51,827	183,522
1957.....	53,783	14,714	20.6	5.6	46,283	164,795
1958.....	49,101	13,199	19.9	5.3	53,120	197,609
1959.....	50,179	13,191	19.2	5.1	73,073	277,973
1960.....	46,831	11,704	18.2	4.5	50,508	202,096
1961.....	45,644	10,992	17.4	4.2	58,224	241,761
1962.....	45,997	10,785	17.2	4.0	47,414	202,216
1963.....	43,126	10,664	15.7	3.9	50,413	203,874
1964.....	44,149	10,747	15.8	3.8	60,358	247,954
1965.....	40,374	9,466	14.2	3.3	75,496	322,003
1966.....	36,883	10,313	12.1	3.4	80,362	287,402
1967.....	32,473	8,878	10.1	2.9	91,218	333,647
5-year summaries:						
1948-52.....	213,971	51,558	20.9	5.0	78,090	324,081
1953-57.....	269,739	72,276	21.8	6.0	53,530	199,776
1958-62.....	237,752	59,871	19.2	4.8	56,692	180,870
1963-67.....	197,005	50,068	13.5	3.5	70,115	275,886
10-year summaries:						
1948-57.....	483,710	123,834	21.7	5.5	64,394	251,530
1958-67.....	434,757	109,939	16.6	4.2	62,775	248,245

Source: All wells drilled from "World Oil" annual review-forecast issues. Exploratory tests drilled from American Association of Petroleum Geologists annual drilling reports.

Another statistical measurement of discovery efficiency is the amount of oil found in relationship to the number of exploratory wells drilled. Exploratory wells are those tests drilled outside of known producing limits of a field for the purpose of finding new producing fields or of extending the producing area of previously found fields. Here again, there exists a remarkable similarity between the last two decades. The volume of new reserves found between 1948-1957 was equivalent to 251,530 barrels for each of the 123,834 exploratory wells drilled, while discoveries in the 1958-1967 period amounted to 248,245 barrels for each exploratory well drilled.

This comparison of discovery volumes and discovery efforts shows a 12 percent reduction in number of exploratory tests drilled resulting in the discovery of 12 percent less oil in the last 10-year period. Therefore, we can conclude that lower oil discovery rates in the U.S. are the result of a drastic reduction in drilling activity. To increase the volume of oil discovered, we must increase the amount of drilling in the U.S. Drilling is the only way oil can be found and can be made recoverable from the earth.

DRASTIC DROP IN DRILLING

Contrary to the need to increase drilling, there has been a drastic reduction in U.S. drilling activity during the past decade. In the years between 1948 and 1956, the volume of total wells drilled annually advanced sharply, rising from 39,477 wells in 1948 to an all-time peak of 58,418 wells in 1956. During these years drilling activity grew at a somewhat greater rate than crude production, the number of wells drilled per million barrels of production advancing from 18.5 in 1948 to better than 22 wells per million barrels of crude oil production during the years 1954, 1955, and 1956. With drilling at high levels, new oil found exceeded production by comfortable margins.

This upward trend came to a sudden end in 1957, when drilling activity turned sharply downward. By 1961 U.S. drilling rates had dropped to 45,000 wells annually. Drilling continued to undergo steady substantial reduction, failing to just 36,883 wells in 1966, then to only 32,473 wells in 1967. Only 10.1 wells were drilled per million barrels of crude oil production in 1967, contrasted with the drilling of 20 to 22 wells for each million barrels of production during the years 1953 through 1957.