

TABLE 1.—U.S. OIL DISCOVERY RATES FAIL TO KEEP ABREAST OF RISING CRUDE OIL PRODUCTION

[Figures in thousands of barrels annually]

| End of year        | New supply discovered | Annual production | Discovered versus production | Proved unproduced reserves | Ratio of reserves to production |
|--------------------|-----------------------|-------------------|------------------------------|----------------------------|---------------------------------|
| 1948               | 3,795,207             | 2,002,448         | +1,792,759                   | 23,280,444                 | 11.6                            |
| 1949               | 3,187,845             | 1,818,800         | +1,369,045                   | 24,649,489                 | 13.6                            |
| 1950               | 2,562,685             | 1,943,776         | +618,909                     | 25,268,398                 | 13.0                            |
| 1951               | 4,413,954             | 2,214,321         | +2,199,633                   | 27,468,031                 | 12.4                            |
| 1952               | 2,749,288             | 2,256,765         | +492,523                     | 27,960,554                 | 12.4                            |
| 1953               | 3,296,130             | 2,311,856         | +984,274                     | 28,944,828                 | 12.5                            |
| 1954               | 2,873,037             | 2,257,119         | +615,918                     | 29,560,746                 | 13.1                            |
| 1955               | 2,870,724             | 2,419,300         | +451,424                     | 30,012,170                 | 12.4                            |
| 1956               | 2,974,336             | 2,551,857         | +422,479                     | 30,434,649                 | 11.9                            |
| 1957               | 2,424,800             | 2,559,044         | -134,244                     | 30,300,405                 | 11.8                            |
| 1958               | 2,608,242             | 2,372,730         | +235,512                     | 30,535,917                 | 12.9                            |
| 1959               | 3,666,745             | 2,483,315         | +1,183,430                   | 31,719,347                 | 12.8                            |
| 1960               | 2,365,328             | 2,471,464         | -106,136                     | 31,613,211                 | 12.8                            |
| 1961               | 2,657,567             | 2,512,273         | +145,294                     | 31,758,505                 | 12.6                            |
| 1962               | 2,180,896             | 2,550,178         | -369,282                     | 31,389,223                 | 12.3                            |
| 1963               | 2,174,110             | 2,593,343         | -419,233                     | 30,969,990                 | 11.9                            |
| 1964               | 2,664,767             | 2,644,247         | +20,520                      | 30,990,510                 | 11.7                            |
| 1965               | 3,048,079             | 2,686,198         | +361,881                     | 31,352,291                 | 11.7                            |
| 1966               | 2,963,978             | 2,864,242         | +99,736                      | 31,452,127                 | 11.1                            |
| 1967               | 2,962,122             | 3,037,579         | -75,457                      | 31,376,670                 | 10.3                            |
| 5-year summaries:  |                       |                   |                              |                            |                                 |
| 1948-52            | 16,708,979            | 10,236,110        | +6,472,869                   |                            |                                 |
| 1953-57            | 14,439,027            | 12,099,176        | +2,339,851                   |                            |                                 |
| 1958-62            | 13,478,778            | 12,389,960        | +1,088,818                   |                            |                                 |
| 1963-67            | 13,813,056            | 13,825,609        | -12,553                      |                            |                                 |
| 10-year summaries: |                       |                   |                              |                            |                                 |
| 1948-57            | 31,148,006            | 22,335,286        | +8,812,720                   |                            |                                 |
| 1958-67            | 27,291,834            | 26,215,569        | +1,076,265                   |                            |                                 |
| Difference         | -3,856,172            | 3,880,283         | -7,736,455                   |                            |                                 |

Source: American Petroleum Institute annual reports.

Note: Ratio of reserves to production calculated by dividing proved unproduced reserves end of each year by annual production during that year.

## SHORTAGE WOULD ENDANGER SECURITY

Obviously the U.S. is in very serious trouble if crude oil discovery rates continue to decline at a time when consumption is going to rise so rapidly. Unless future discovery rates are vastly larger than in recent years, this country is headed toward a shortage in domestic oil supplies.

The stakes are high. National security is involved. Without oil: planes cannot fly, ships cannot sail, armored vehicles become immobile, and guns cannot fire. The nation's economic health also is involved. Oil fuels and lubricates our plants. Oil powers our planes, automobiles, trucks and tractors. Oil is one of the prime sources of heat for our homes, schools, plants and offices. Together with gas, oil is a primary source of the petrochemicals which play so important a role in today's modern world. The remarkable dependence of the U.S. on an adequate supply of petroleum has been recounted too many times to need repeating here.

The sudden and drastic changes taking place in this nation's outlook for an abundance of future crude oil focuses attention on the question of why less oil is being found than in the past. It is commonplace to hear someone express the thought that it has become too difficult to find oil in the U.S. However, an analysis shows this is a false premise not supported by fact.

## LESS DRILLING CAUSES DISCOVERY DECLINE

The truth is that the relationship between the amount of oil discovered in the U.S. and the amount of effort expended to discover new oil supplies has remained remarkably consistent over the years (Table 2, Page 6). In the 1948-1957 decade, the finding of 31.1 billion barrels of new crude oil reserves was equivalent to 64,394 barrels for each of the 483,710 wells drilled in those years. In the decade between 1958 and 1967 discovery of 27.3 billion barrels of new crude supplies represented 62,775 barrels for each of the 434,757 wells drilled.