Any rights, therefore, to oil or mineral deposits located within property owned or controlled by the federal government may be acquired only pursuant to legislation enacted by Congress.

1872. The Mining Act of 1872 36 codified pre-existing local mining customs and allowed an outright federal grant of title to mineral-bearing lands by fee simple

1897. In 1897 "an Act to authorize the entry and patenting of lands containing petroleum and other mineral oils under the placer mining laws of the United States" 37 made it clear that petroleum was a locatable mineral, and until 1910 thousands of acres in California, Wyoming and other western states were patented as a result of petroleum discoveries. However, the general mining laws were ill suited to the proper development of the oil industry and contributed to its instability in the early stages. Under these laws the common law rule of capture, coupled with the legislative demand for discovery, acted as a stimulant to excessive and wasteful production of petroleum.

1910. Conservation sentiment was on the upsurge during President Taft's administration, and in 1909 most of the remaining public domain was withdrawn by Executive Order from petroleum entries under the mining laws. These with-

drawal orders were confirmed by the Pickett Act of 1910.3

1920. During the decade that followed President Taft's withdrawal orders conservationists struggled with those representing the "free-miner" tradition in an effort to develop a federal petroleum land policy. The result was the Mineral Leasing Act of 1920 30 which represented compromises from both sides. The 1920 Act represented a radical policy shift from the outright granting of title to federal lands and minerals by fee simple patent to a policy which allowed the development of federal lands under a lessor-lessee relationship. Nevertheless, in retrospect the Mineral Leasing Act does show a legislative intent to allow for the development of petroleum by private industry. The Act likens the federal government to any other private owners of minerals who grants an oil and gas lease on his lands, and it contemplates that leasing and development will be by private, rather than public, hands.

A paradox exists, however, for despite the large acreage of the public domain available for leasing under the Mineral Leasing Act, petroleum production from these lands has rarely exceeded 5 per cent of the total production of the United States. Federal land and mining law has never, therefore, been a critical factor in the major problems of conservation and marketing, discussed earlier, con-

fronting the petroleum industry in the past.

Northcutt Ely comments:

"Most of the important discoveries of hard minerals have been made on land belonging to the Federal Government . . . not so as to oil and gas. By a queer combination of historical and geographical accidents, the major discoveries of petroleum and natural gas have been on lands that were never federally owned [in Texas] or on lands that had passed from federal to private ownership, without a reservation of minerals, prior to discovery".40

But the paradox has come full circle, for while lands covered by the Mineral Leasing Act produce only a minimal amount of petroleum today, the oil shale deposits of the Green River Formation in Colorado, Wyoming and Utah, lie almost wholly 41 under federal lands and are explicitly subject to Section 21 of the original Mineral Leasing Act. 42 Thus the federal government in its ca-

pacity as "landowner" will determine the future fate of oil shale.

1930-1966. On April 15, 1930, President Hoover issued Executive Order 5327, which withdrew designated lands containing deposits of oil shale from further leasing under the Mineral Leasing Act and "temporarily" reserved these lands for the purpose of "investigation, examination, and classification." 48 Whatever purpose President Hoover may have had in mind when issuing the order in 1930 is not now clear. But the fact remains that this "temporary" withdrawal order remains still in effect today, having prohibited for over 35 years the leasing of federal lands containing over 80 per cent of the known oil shale reserves in this country.

³⁶ REV. STAT. § 2319 (1875), 30 U.S.C. § 21 (1964).
37 29 Stat. 526 (1897), 30 U.S.C. § 101 (1964).
38 36 Stat. 847, (1910), 43 U.S.C. § 141 (1964).
39 41 Stat. 437 (1920), 30 U.S.C. § 181 (1964).
40 ELY, MINEBAL TITLES AND TENURE, ECONOMICS OF THE MINERAL INDUSTRIES 108 (1959).
41 See note 3 supra.
42 41 Stat. 445 (1920), 30 U.S.C. § 241 (1964).
43 43 C.F.R. 405 (1930).