

Figure 1.—Status of surface- and mineral-rights ownership, as of 1980.

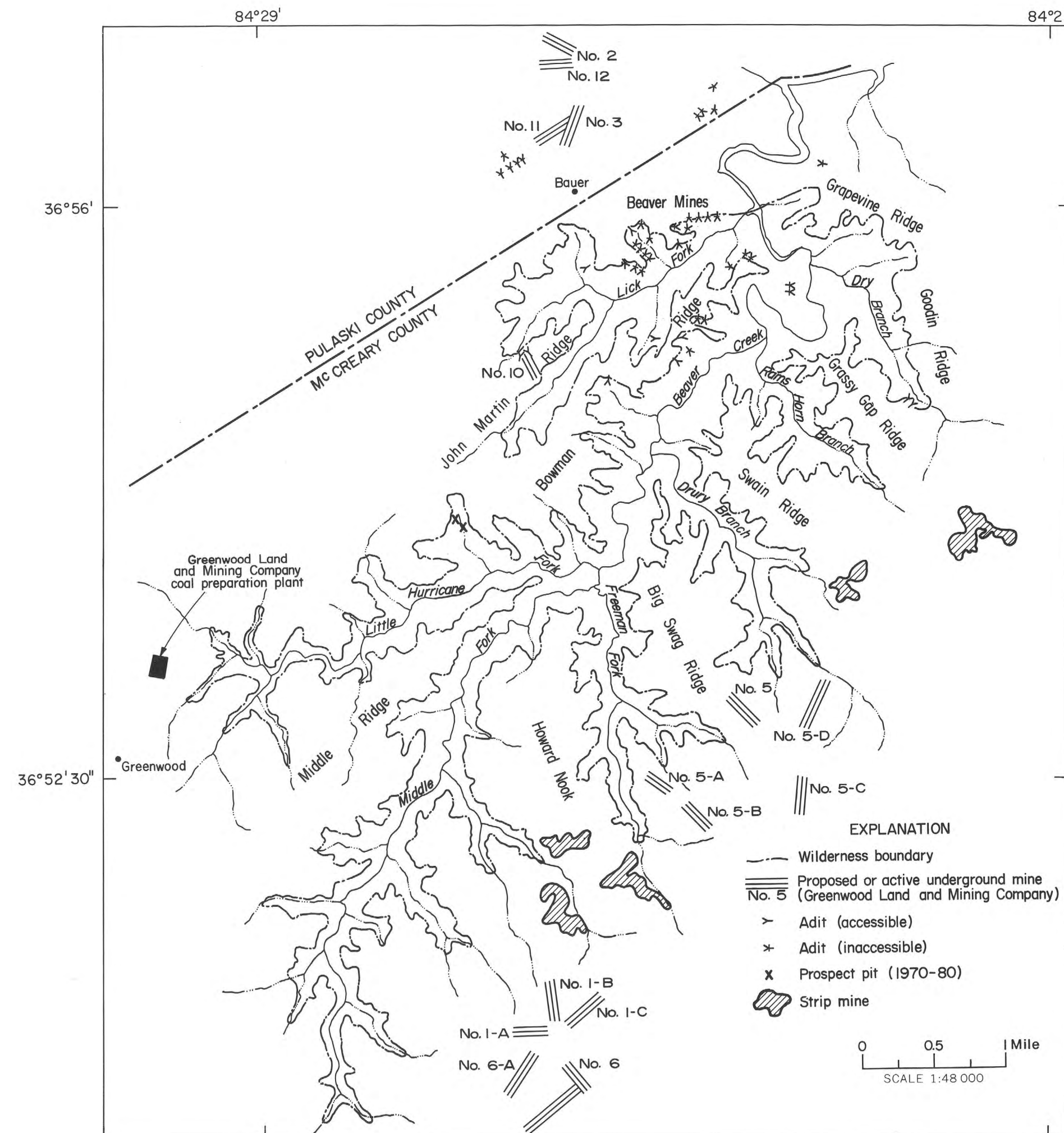


Figure 2.—Locations of proposed, active, and abandoned coal mines (as of 1982).

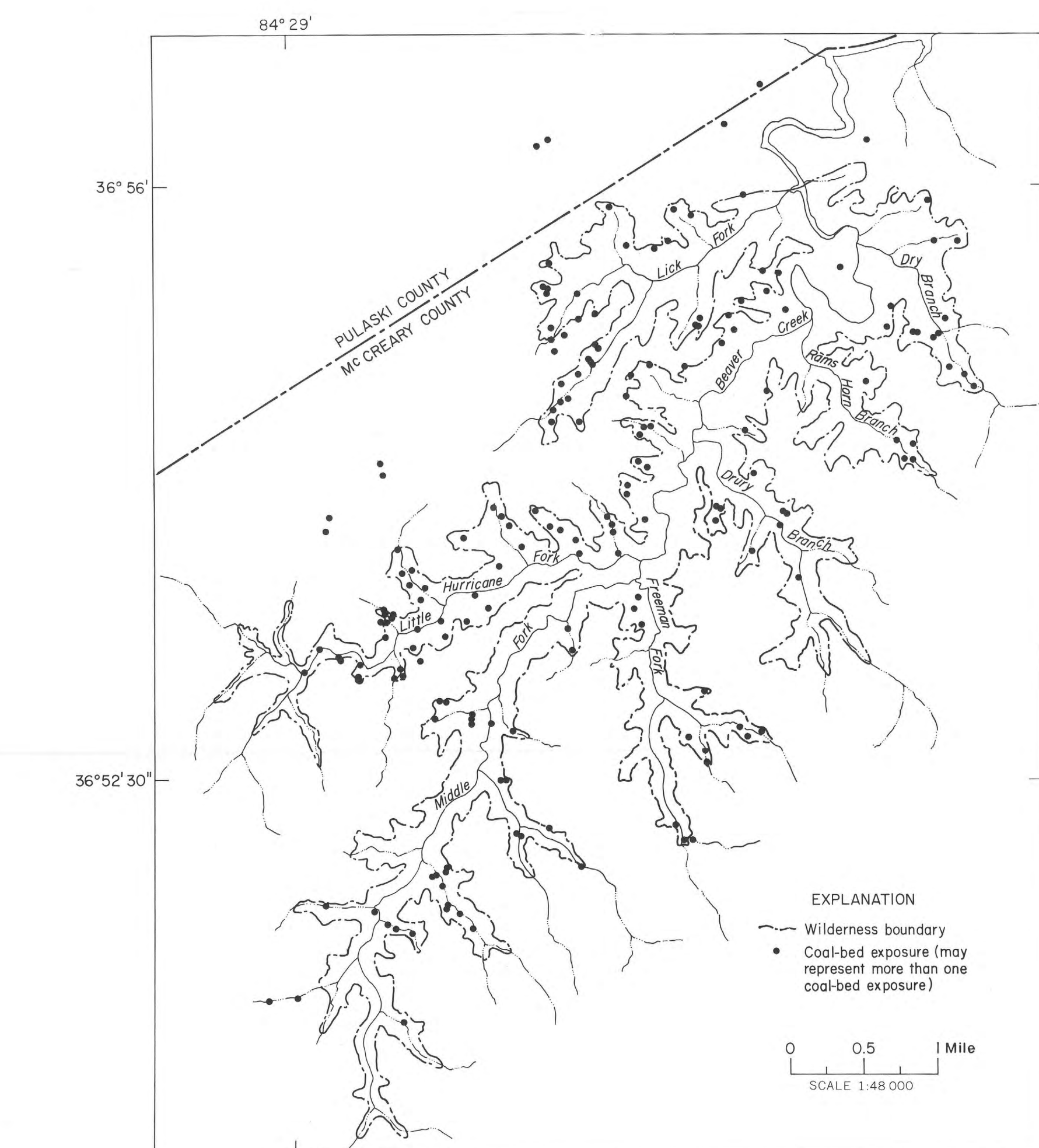


Figure 3.—Locations of described coal-bed exposures.

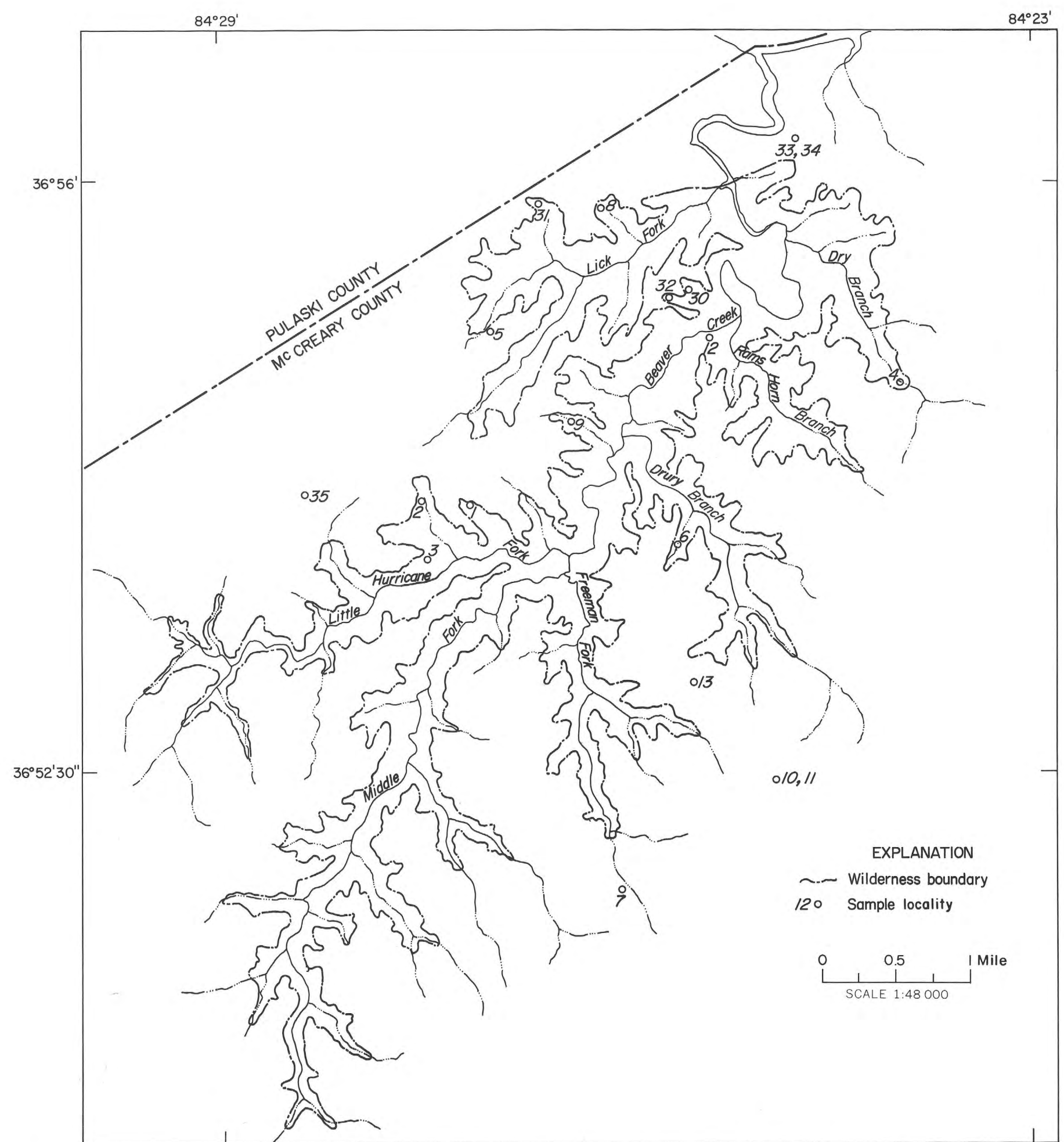
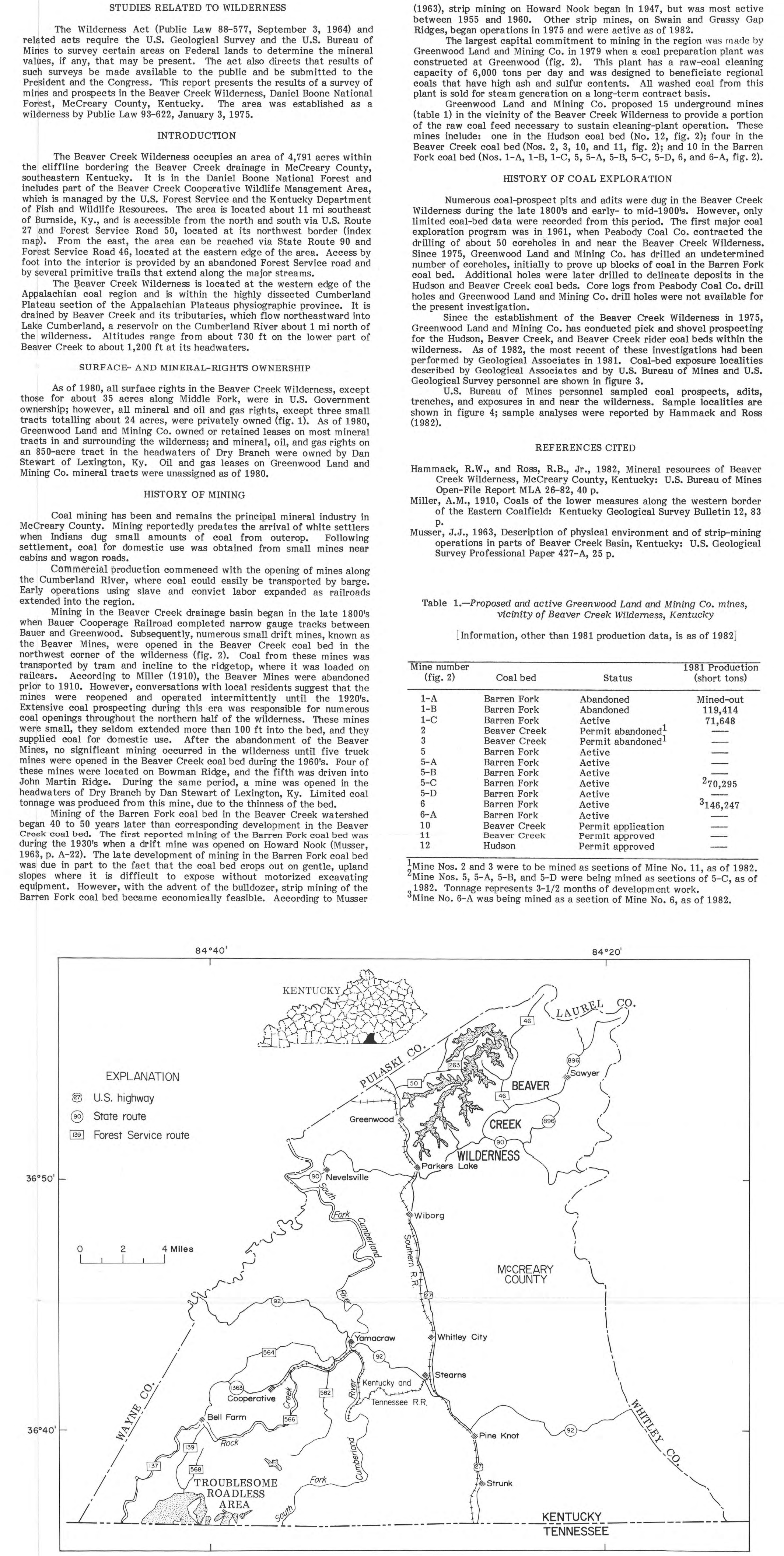


Figure 4.—Coal sample localities.



INDEX MAP

STUDIES RELATED TO WILDERNESS

The Wilderness Act (Public Law 88-577, September 3, 1964) and related acts require the U.S. Geological Survey and the U.S. Bureau of Mines to survey certain areas on Federal lands to determine the mineral values, if any, that may be present. The act also directs that results of such surveys be made available to the public and be submitted to the President and the Congress. This report presents the results of a survey of mines and prospects in the Beaver Creek Wilderness, Daniel Boone National Forest, McCreary County, Kentucky. The area was established as a wilderness by Public Law 93-622, January 3, 1975.

INTRODUCTION

The Beaver Creek Wilderness occupies an area of 4,791 acres within the cliffline bordering the Beaver Creek drainage in McCreary County, southeastern Kentucky. It is in the Daniel Boone National Forest and includes part of the Beaver Creek Cooperative Wildlife Management Area, which is managed by the U.S. Forest Service and the Kentucky Department of Fish and Wildlife Resources. The area is located about 11 mi southeast of Burnside, Ky., and is accessible from the north and south via U.S. Route 27 and Forest Service Road 50, located at its northwest border (index map). From the east, the area can be reached via State Route 90 and Forest Service Road 46, located at the eastern edge of the area. Access by foot into the interior is provided by an abandoned Forest Service road and by several primitive trails that extend along the major streams.

SURFACE- AND MINERAL-RIGHTS OWNERSHIP

As of 1980, all surface rights in the Beaver Creek Wilderness, except those for about 35 acres along Middle Fork, were in U.S. Government ownership; however, all mineral and oil and gas rights, except three small tracts totalling about 24 acres, were privately owned (fig. 1). As of 1980, Greenwood Land and Mining Co. owned or retained leases on most mineral tracts in and surrounding the wilderness and mineral, oil, and gas rights on an 850-acre tract in the headwaters of Dry Branch were owned by Dan Stewart of Lexington, Ky. Oil and gas leases on Greenwood Land and Mining Co. mineral tracts were unassigned as of 1980.

HISTORY OF MINING

Coal mining has been and remains the principal mineral industry in McCreary County. Mining reportedly predates the arrival of white settlers when Indians dug small amounts of coal from outcrop. Following settlement, coal for domestic use was obtained from small mines near cabins and wagon roads. Commercial production commenced with the opening of mines along the Cumberland River, where coal could easily be transported by barge. Early operations using slave and convict labor expanded as railroads extended into the region.

Mining in the Beaver Creek drainage basin began in the late 1800's when Bauer Cooperage Railroad completed narrow gauge tracks between Bauer and Greenwood. Subsequently, numerous small drift mines, known as the Beaver Mines, were opened in the Beaver Creek coal bed in the northwest corner of the wilderness (fig. 2). Coal from these mines was transported by tram and incline to the ridgetop, where it was loaded on railcars. According to Miller (1910), the Beaver Mines were abandoned prior to 1910. However, conversations with local residents suggest that the mines were reopened and operated intermittently until the 1920's. Extensive coal prospecting during this era was responsible for numerous coal openings throughout the northern half of the wilderness. These mines were small, they seldom extended more than 100 ft into the bed, and they supplied coal for domestic use. After the abandonment of the Beaver Mines, no significant mining occurred in the wilderness until five truck mines were opened in the Beaver Creek coal bed during the 1980's. Four of these mines were located on Bowman Ridge, and the fifth was driven into John Martin Ridge. During the same period, a mine was opened in the headwaters of Dry Branch by Dan Stewart of Lexington, Ky. Limited coal tonnage was produced from this mine, due to the thinness of the bed.

Mining of the Barren Fork coal bed in the Beaver Creek watershed began 40 to 50 years later than corresponding development in the Beaver Creek coal bed. The first reported mining of the Barren Fork coal bed was during the 1930's when a drift mine was opened on Howard Nook (Musser, 1963, p. A-22). The late development of mining in the Barren Fork coal bed was due in part to the fact that the coal bed crops out on gentle, upland slopes where it is difficult to expose without motorized excavating equipment. However, with the advent of the bulldozer, strip mining of the Barren Fork coal bed became economically feasible. According to Musser

(1963), strip mining on Howard Nook began in 1947, but was most active between 1955 and 1960. Other strip mines, on Swain and Grassy Gap Ridges, began operations in 1975 and were active as of 1982.

The largest capital commitment to mining in the region was made by Greenwood Land and Mining Co. in 1979 when a coal preparation plant was constructed at Greenwood (fig. 2). This plant has a raw-coal cleaning capacity of 6,000 tons per day and was designed to beneficiate regional coals that have high ash and sulfur contents. All washed coal from this plant is sold for steam generation on a long-term contract basis.

Greenwood Land and Mining Co. proposed 15 underground mines (table 1) in the vicinity of the Beaver Creek Wilderness to provide a portion of the raw coal feed necessary to sustain cleaning-plant operation. These mines include one in the Hudson coal bed (No. 12, fig. 2); four in the Beaver Creek coal bed (Nos. 2, 3, 10, and 11, fig. 2); and 10 in the Barren Fork coal bed (Nos. 1-A, 1-B, 1-C, 5, 5-A, 5-B, 5-C, 5-D, 6, and 6-A, fig. 2).

HISTORY OF COAL EXPLORATION

Numerous coal-prospect pits and adits were dug in the Beaver Creek Wilderness during the late 1800's and early- to mid-1900's. However, only limited coal-bed data were recorded from this period. The first major coal exploration program was in 1961, when Peabody Coal Co. contracted the drilling of about 50 coreholes in and near the Beaver Creek Wilderness. Since 1975, Greenwood Land and Mining Co. has drilled an undetermined number of coreholes, initially to prove up blocks of coal in the Barren Fork coal bed. Additional holes were later drilled to delineate deposits in the Hudson and Beaver Creek coal beds. Core logs from Peabody Coal Co. drill holes and Greenwood Land and Mining Co. drill holes were not available for the present investigation.

Since the establishment of the Beaver Creek Wilderness in 1975, Greenwood Land and Mining Co. has conducted pick and shovel prospecting for the Hudson, Beaver Creek, and Beaver Creek rider coal beds within the wilderness. As of 1982, the most recent of these investigations had been performed by Geological Associates in 1981. Coal-bed exposure localities described by Geological Associates and by U.S. Bureau of Mines and U.S. Geological Survey personnel are shown in figure 3.

U.S. Bureau of Mines personnel sampled coal prospects, adits, trenches, and exposures in and near the wilderness. Sample localities are shown in figure 4; sample analyses were reported by Hammack and Ross (1982).

REFERENCES CITED

Hammack, R.W., and Ross, R.B., Jr., 1982, Mineral resources of Beaver Creek Wilderness, McCreary County, Kentucky. U.S. Bureau of Mines Open-File Report MLA 26-82, 40 p.
Miller, A.M., 1910, Coals of the lower measures along the western border of the Eastern Coalfield. Kentucky Geological Survey Bulletin 12, 83 p.
Musser, J.J., 1963, Description of physical environment and of strip-mining operations in parts of Beaver Creek Basin, Kentucky. U.S. Geological Survey Professional Paper 427-A, 25 p.

Table 1.—Proposed and active Greenwood Land and Mining Co. mines, vicinity of Beaver Creek Wilderness, Kentucky

[Information, other than 1981 production data, is as of 1982]

Mine number (fig. 2)	Coal bed	Status	1981 Production (short tons)
1-A	Barren Fork	Abandoned	Mined-out
1-B	Barren Fork	Abandoned	119,414
1-C	Barren Fork	Active	71,648
2	Beaver Creek	Permit abandoned ¹	—
3	Beaver Creek	Permit abandoned ¹	—
5	Barren Fork	Active	—
5-A	Barren Fork	Active	—
5-B	Barren Fork	Active	—
5-C	Barren Fork	Active	270,295
5-D	Barren Fork	Active	—
6	Barren Fork	Active	3,146,247
6-A	Barren Fork	Active	—
10	Beaver Creek	Permit application	—
11	Beaver Creek	Permit approved	—
12	Hudson	Permit approved	—

¹Mine Nos. 2 and 3 were to be mined as sections of Mine No. 11, as of 1982.
²Mine Nos. 5, 5-A, 5-B, and 5-D were being mined as sections of 5-C, as of 1982. Tonnage represents 3-1/2 months of development work.
³Mine No. 6-A was being mined as a section of Mine No. 6, as of 1982.

MAPS SHOWING MINES, PROSPECTS, AND EXPOSURES IN THE BEAVER CREEK WILDERNESS,
MCCREARY COUNTY, KENTUCKY

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