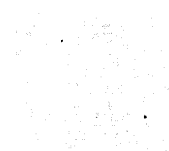

APPENDIX
Methodology



Methodology

This study of the ownership of existing Federal coal leases was conducted between November 1979 and October 1980. Most of the data collection and analysis was completed by May 1, 1980. A draft report was prepared in May 1980. Revisions and corrections were made between May and October in response to comments by reviewers and after the receipt of additional information gathered during telephone interviews and at OTA Task Force meetings on the development prospects of Federal coal leases in Santa Fe, N. Mex., Denver, Colo., and Cheyenne, Wyo.

Data Collection

The core of this project was the collection of the ownership histories of each of the 538 outstanding Federal coal leases in 13 States. This study analyzes the ownership histories of the currently valid coal leases contained on a master list developed by OTA from the Automated Coal Lease Data System maintained by the Department of Interior. A few leases subsequently have been issued which are not included in this study. Also, this study does not examine coal leases which have been relinquished and thus are no longer in existence. Every owner of record at any time in the history of each presently valid lease was identified.

The State Bureau of Land Management (BLM) offices are the primary repositories of lease ownership information. Summaries of ownership data appear in serial books maintained in BLM public records room. More complete information is contained in voluminous case files which house correspondence, memoranda, and legal papers pertaining to each lease.

In October and November 1979, three trial data collection trips were made: one to Denver and two to Salt Lake City. The purpose of these trips was to gain a familiarity with the public records, to identify and resolve potential data collection problems, to organize data worksheets, and to collect a portion of ownership information from the States with the largest number of outstanding leases. Proposed worksheets were reviewed and modified.

The actual lease histories for 523 of the 538 leases were obtained during a 5-week field trip from mid-November through late December 1979. Serial pages for each of the leases were examined. A serial page records the date of lease assignments. The research team discovered that when more than one owner has held title to a lease at different times (true for 78 per-

cent of the leases) or when more than one acreage modification has taken place (true for about 30 percent of the leases), the accurate sequence of title transfers and acreage changes often could not be ascertained from the serial pages alone. Accurate information for these leases was obtained from a review of the case files themselves. •

In addition to the case files and serial books, the research team examined the corporate qualifications statements for as many of the present and past lessees as the BLM maintains records. These statements are contained in files generally housed in the offices of the land law examiners at each State BLM office.

The field trip covered leases in the States of California, New Mexico, Oklahoma, Colorado, Utah, Wyoming, Montana, and North Dakota. Lease ownership data for 15 leases in other States were obtained by mail or phone interviews with BLM staff in Fairbanks and Anchorage, Alaska, Portland, Oreg., and Alexandria, Va.

Lease ownership information was recorded on worksheets, one for each lease.

Data Organization

In order to study the changes and trends in lease ownership, seven key dates were selected for intensive study: January 2 of the years 1950, 1955, 1960, 1965, 1970, 1975, and 1980. Using the worksheets as data sources, the leases existing at each of these key dates were listed in ledger books. The ownership of each lease at each of the key dates was recorded as was the acreage of the lease at that time.

Analysis of this information enabled the research team to determine the total number of leases in effect at each of the seven dates, the total acreage under lease, and a complete list of lessees. As mentioned above, the total does not include all outstanding leases at each key date; rather it includes only those leases which are in existence now. Other *leases in effect* at one or more of the analysis dates, but subsequently relinquished, were not included in this study.

Lessee Analysis

The largest part of the analytical work in the study consisted of placing each present and past lessee into a category defined by its principal business activity and organization at the time it held the **lease**. This task was complicated because many leases have changed hands a number of times over the past 30

years and because there have been many changes in organization and business activity among the lessees themselves. Each change was identified and dated, and information about now defunct lessees was unearthed.

Even without these changes, designations of the principal business activities for many companies are often difficult to make. Increasingly, lessees include diversified companies involved in several businesses with no clearly dominant activity. Also, divisions between some categories—such as coal or oil versus resource development—are somewhat arbitrary. Furthermore, recognizing the difference between a small coal or metals company which has not mined for several years because of soft markets and a landholding company which does not plan to mine is often a complicated task. To the extent possible, the percent of total sales contributed by different business activities was used as the determinant of principal lines of business for lessees examined in this survey. For private companies which do not publish financial reports or small companies with little or no current income, the research team attempted to assess their business capabilities or intentions from interviews and published materials of a nonfinancial nature.

The major source of information for this phase of the study included the corporate qualification statements at the BLM; company annual reports; standard industry reference texts such as Moody's *Public Utilities, Over the Counter*, and *Industrial Guides*; interviews with State government, BLM, and U.S. Geological Survey officials, land law examiners, and coal specialists; interviews with members of the coal mining industry; and newspapers and periodicals such as the *Wall Street Journal*, *Coal Age*, and *Coal Outlook*.

The corporate data collected in this section of the study enabled the categorization of 99 percent of all present and past coal lessees and their controlling interests.

Any business category whose members controlled 5 percent of the land under lease at any of the seven analysis dates (either through lease ownership by an independent corporation or through parent company ownership of a lease) was identified for separate further analysis. Any lessee not falling clearly into an identifiable business category, but which on its own controlled 5 percent of leased land at any analysis date, was also separated for individual attention. All other lessees were combined into the other category. The business activity categories and individual lessees meeting the above criteria are:

- Utilities;
- Energy companies;
- Steel companies;

- Peabody Holding Co.;
- Independent coal company;
- Minor oil and gas companies;
- Unincorporated individuals;
- Natural gas pipeline companies;
- Nonresource-related diversified companies;
- Kemmerer Coal Co.;
- Metals and mining companies;
- Landholding companies; and
- Other.

The criteria for categorization are explained in the respective business activity subchapters.

Next, each coal lessee was categorized according to its business organization, as follows:

- Unincorporated individuals;
- Independent corporations;
- Subsidiary corporations; and
- Multicorporate entities.

Lessees falling into the subsidiary or multicorporate business organization were further divided into the following categories:

- Subsidiary coal mining companies;
- Subsidiary resource development companies;
- Subsidiary landholding companies; and
- Passive subsidiaries (i.e., no active employees).

Final Data Analysis

With the lease history and corporate information in hand, it was possible to analyze lease ownership patterns at each of the seven key analysis dates. Lists of companies or individuals in each of the business categories at each of the dates were made. The same process was performed for business organizations. The total number of leases and acreage falling into each category was then tabulated. From this information, it was possible to analyze quantitatively changes in lease ownership by business activity and organization in relative and absolute terms over time.

Returning again to the worksheets, it was then possible to investigate the acquisition routes for leases eventually obtained by each business category.

The histories of coal leases include all transfers of title and acreage modifications from the date of lease issuance for competitive leases or the date of issuance of prospecting permits from which preference-right leases were derived until approximately the end of 1979. Several leases have been assigned since the lease assignment histories were collected for this project. No lease assignments approved in 1980 were included in this report. However, changes in lessee ownership through mergers and acquisitions which have been widely publicized have been included as comprehensively as possible in the lessee analysis portion of the report.