
COAL REPORT CR 98-1

WYOMING COAL MINES AND MARKETS

By Robert M. Lyman and Laura L. Hallberg



WYOMING STATE GEOLOGICAL SURVEY

*Laramie, Wyoming
September, 1998*

This report has not been reviewed for conformity with the editorial standards of the Wyoming State Geological Survey.

CR 98-1, Coal Report – Wyoming Coal Mines and Markets:

R.M. Lyman, and L.L. Hallberg

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Introduction

Purpose and Scope

The purpose of this report on the coal mines of the state of Wyoming and the markets served by those mines, is to give the reader a snapshot overview of the Wyoming coal industry as of the middle of 1998 with a review of the State's 1997

coal industry statistics. Some historic data is included to give the reader a basis for comparison to the current statistics presented herein.

This in-house report of the Wyoming State Geological Survey's Coal Section has been undertaken with the

belief that the information presented herein is accurate within the scope of the report.

Finally, it should be noted, this report has not been reviewed for conformity with the editorial and technical standards of the Wyoming State Geological Survey.

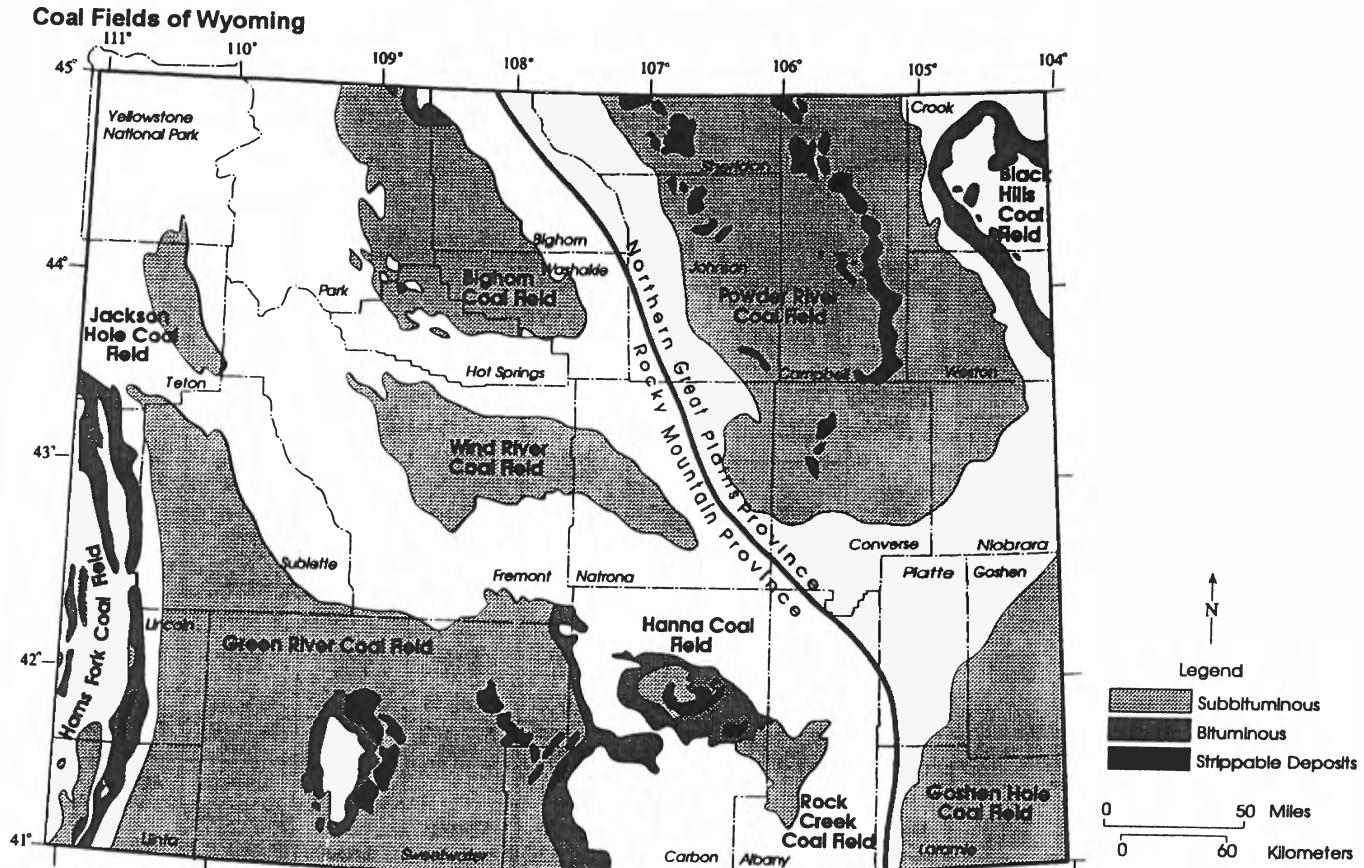


Figure 1. Coal Fields of Wyoming

Wyoming State Geological Survey 1998

Ten coal fields are identified within the state of Wyoming (figure 1). These fields occur in two coal bearing provinces: the Rocky Mountain Province, and the Northern Great Plains Province.

Currently, coal is produced from only four of the ten coal fields. In the Rocky Mountain Province portion of the state, coal is currently produced from mines in the Green River Coal Field, the

Hams Fork Coal Field, and the Hanna Coal Field. In the Northern Great Plains Province portion of Wyoming, coal is currently produced in the Powder River Coal Field.

| Jackson Hole Coal Field | Hams Fork Coal Field | Green River Coal Field | Hanna Coal Field | Rock Creek Coal Field | Wind River Coal Field | Bighorn Coal Field | Powder River Coal Field | Black Hills Coal Field | Goshen Hole Coal Field |
|-------------------------|----------------------|------------------------|------------------|-----------------------|-----------------------|--------------------|-------------------------|------------------------|------------------------|
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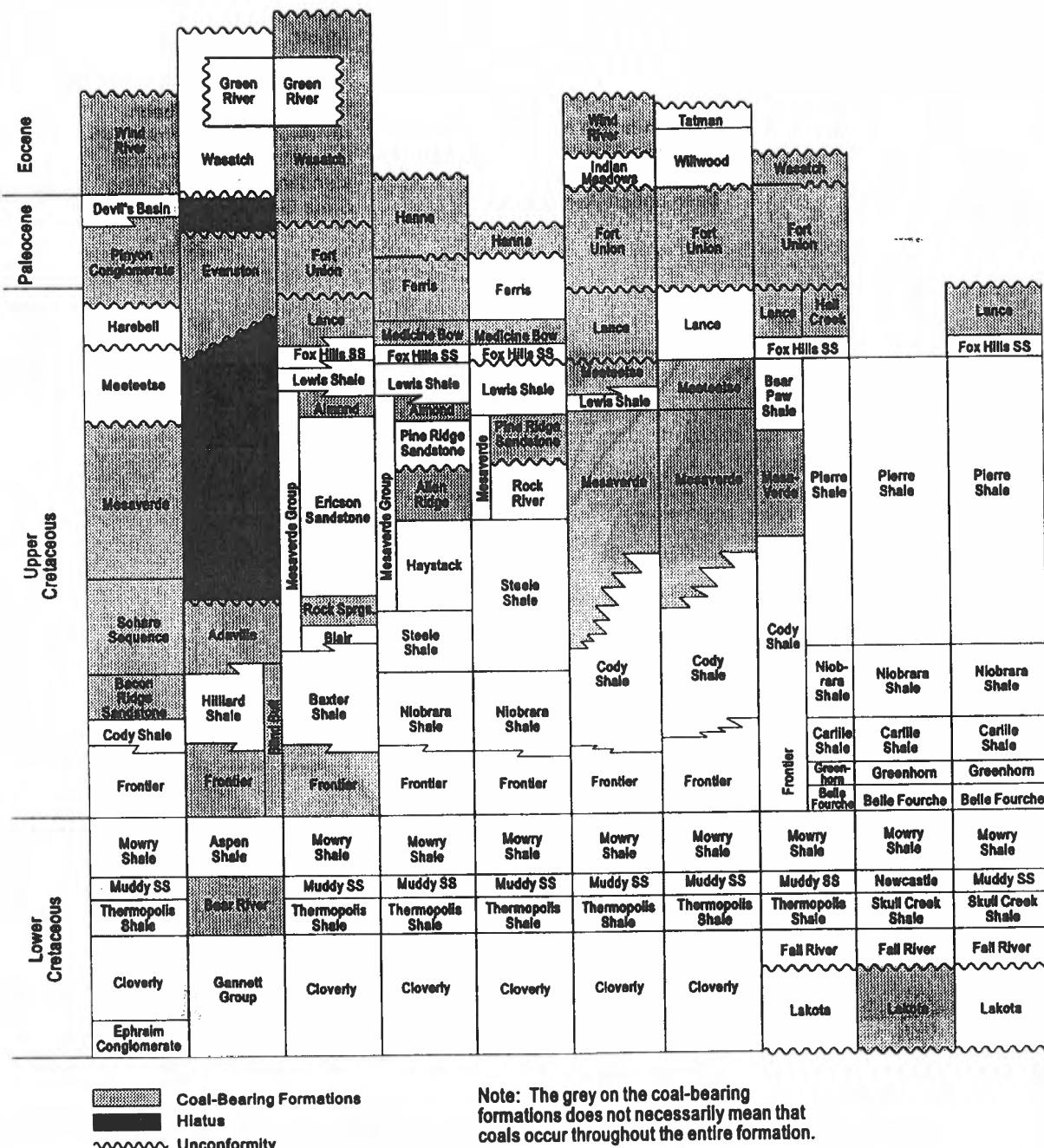
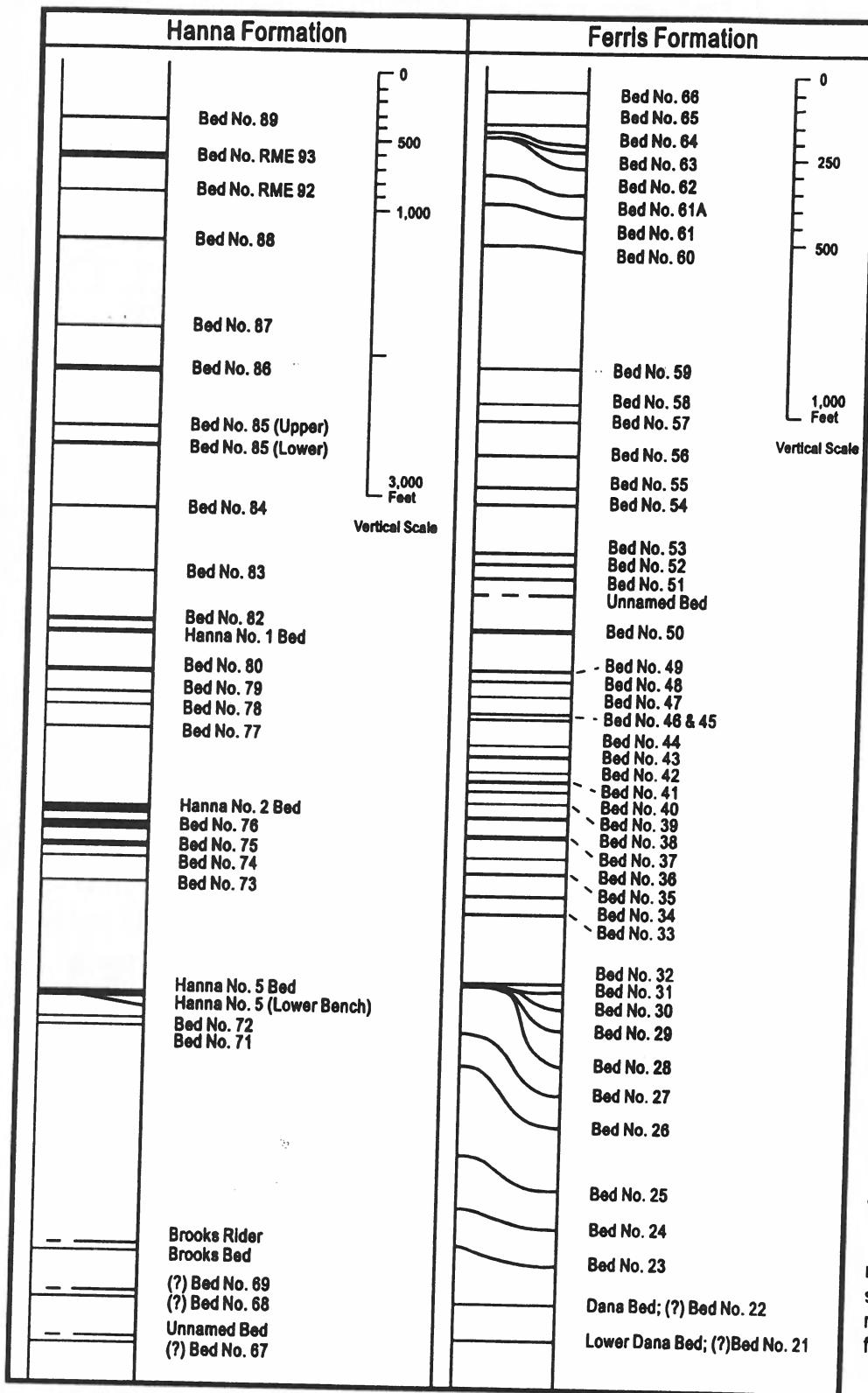


Figure 2. Principle coal bearing formations in the state by coal field.
Adopted and modified from Love, Christiansen, and Ver Ploeg (1987), and Glass (1989).

The Green River Coal Field's more important coals crop out along the flanks of the Rock Springs

uplift in the central part of the Green River Basin, on the eastern margin of the field, and in the Red Desert

Basin in the northeastern corner of the field.



These coals are Upper Cretaceous to Eocene in age, belonging to the Frontier Formation, the Rock Springs and Almond Formations of the Mesaverde Group, the Lance Formation, Fort Union Formation, and Wasatch Formation.

The apparent rank of the outcropping coals is sub-bituminous B to high-volatile C bituminous (Glass, 1998).

Currently, mining in the Green River Coal Field is restricted to coals of the Almond Formation of the Mesaverde Group (Black Butte and Leucite Hills mines), the Lance and Fort Union coals (Black Butte mine), and the Deadman coals of the Fort Union Formation (Jim Bridger mine)

The Hanna Coal Field occupies a structural low that is divided into two separate basins by a northeast-southwest trending anticline. The Hanna Basin lies to the northwest, while the area to the southeast is known as the Carbon Basin.

Surrounded on the north, east, and south by mountain ranges, this coal field's

Figure 3. Nomenclature of the Hanna and Ferris formations (Glass, 1998).

reserves are often faulted or structurally disturbed.

Figure 3 shows the coal nomenclature for the Hanna and Ferris formations.

The Hanna # 80 coal bed is the only seam currently deep mined in Wyoming (Shoshone No. 1 mine). The Hanna No. 5, No. 2 and No. 78 coal beds are surfaced mined in the coal field (Seminoe II mine), as are the Ferris beds Nos. 62, 63, 64, and 65 (Medicine Bow mine).

The Ferris coals are Paleocene in age, and are mostly high-volatile C bituminous in apparent rank. The exception to this is the No. 65 bed, which appears to range in apparent rank from subbituminous A to high-volatile C bituminous (Glass and Roberts, 1979, 1980a, 1980b, & 1984).

The Hanna No. 80 bed is also Paleocene in age, and has an apparent rank of high-volatile C Bituminous. The 78 bed and No.2 bed of the Hanna Formation also have an apparent rank of high-volatile C bituminous, while the Hanna No. 5 seam's apparent rank ranges from subbituminous A to high-volatile C bituminous (Glass and Roberts, 1979, 1980a, 1980b, & 1984).

The Hams Fork Coal Field is the state's westernmost coal field. It is defined as that portion of the Over-thrust Belt underlain with the coal-bearing units of the Bear River, Frontier, Adaville, Blind Bull, and Evanston formations.

The Hams Fork Coal Field is structurally complex. Surface minable coals occur in thin bands of north-south

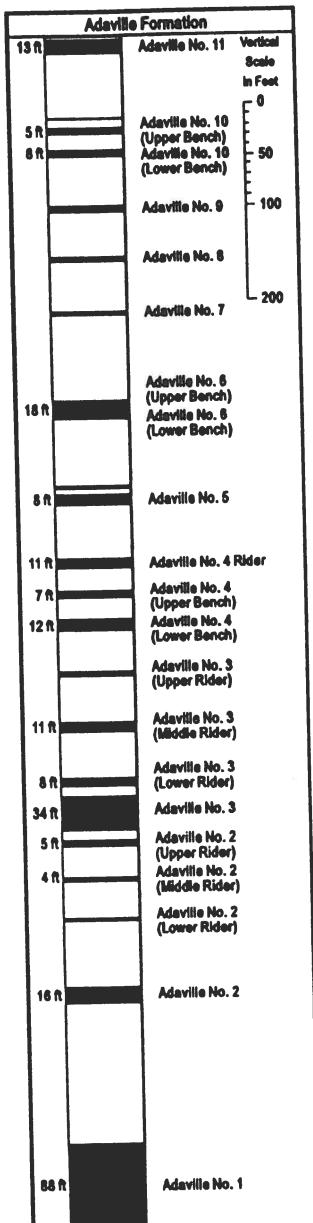


Figure 4. Nomenclature of the Adaville Formation

trending beds that dip 10 to 80 degrees. Currently only the Adaville coals are mined in the coal field (Kemmerer and Skull Point Mines).

Labeled stratigraphically, from lowest to highest, the Adaville No. 1 through No.11, the basal Adaville No.1 coal has an apparent rank of subbituminous A,

while the overlying Adaville coals' apparent rank ranges from subbituminous B to C (Glass, 1977). **Figure 4** shows the coal bed nomenclature for the Adaville Formation.

The Powder River Coal Field of Wyoming coincides with the structural Powder River Basin. As such, the coal field is a broad asymmetrical syncline bounded by the Bighorn Mountains to the west, Black Hills to the east, and the Casper Arch, Laramie Mountains, and Hartville uplift to the south. The northern edge of the basin continues into southern Montana where the coal field is separated from the Williston Basin by the Cedar Ridge anticline.

All the currently active mines in the Powder River Coal Field are surface operations mining coals from the (Paleocene) Tongue River Member of the Fort Union Formation, or coals from the (Eocene) Wasatch Formation (Glass and Lyman, 1998).

Figure 5 shows the correlation of named beds in the Powder River Coal Field of Wyoming.

All the currently active mines in the Powder River Coal Field, with one exception, are mining a portion of the Wyodak coal zone. That exception, the Dave Johnston mine, near Glenrock, Wyoming, is mining the School and Badger seams, which are in the lower portion of the Wasatch Formation. In the Powder River Coal Field, coal occurs in rock sequences of Upper Cretaceous to Tertiary age.

The Late Cretaceous Epoch (66.4–81 million years ago) coal deposits are described, in terms of their environments of deposition, as deltaic, coastal plain, or other near shore facies related a Cretaceous epeiric seaway. In contrast, the Tertiary Period (36.6–66.4 million years ago) coals are derived from fresh-water

swamps associated with fluvial and fluvio-lacustrine depositional systems (Glass, 1977; Moore and Shearer, 1993).

Due to these differences in environments of deposition, the older Cretaceous coals of the Powder River Coal Field, are as a rule more laterally

extensive. For the most part, Cretaceous coals are thinner and contain sulfur levels above current steam coal compliance levels (Glass and Lyman, 1998).

The most important beds of the coal field are those related to the splits and benches of the Paleocene Wyodak seam.

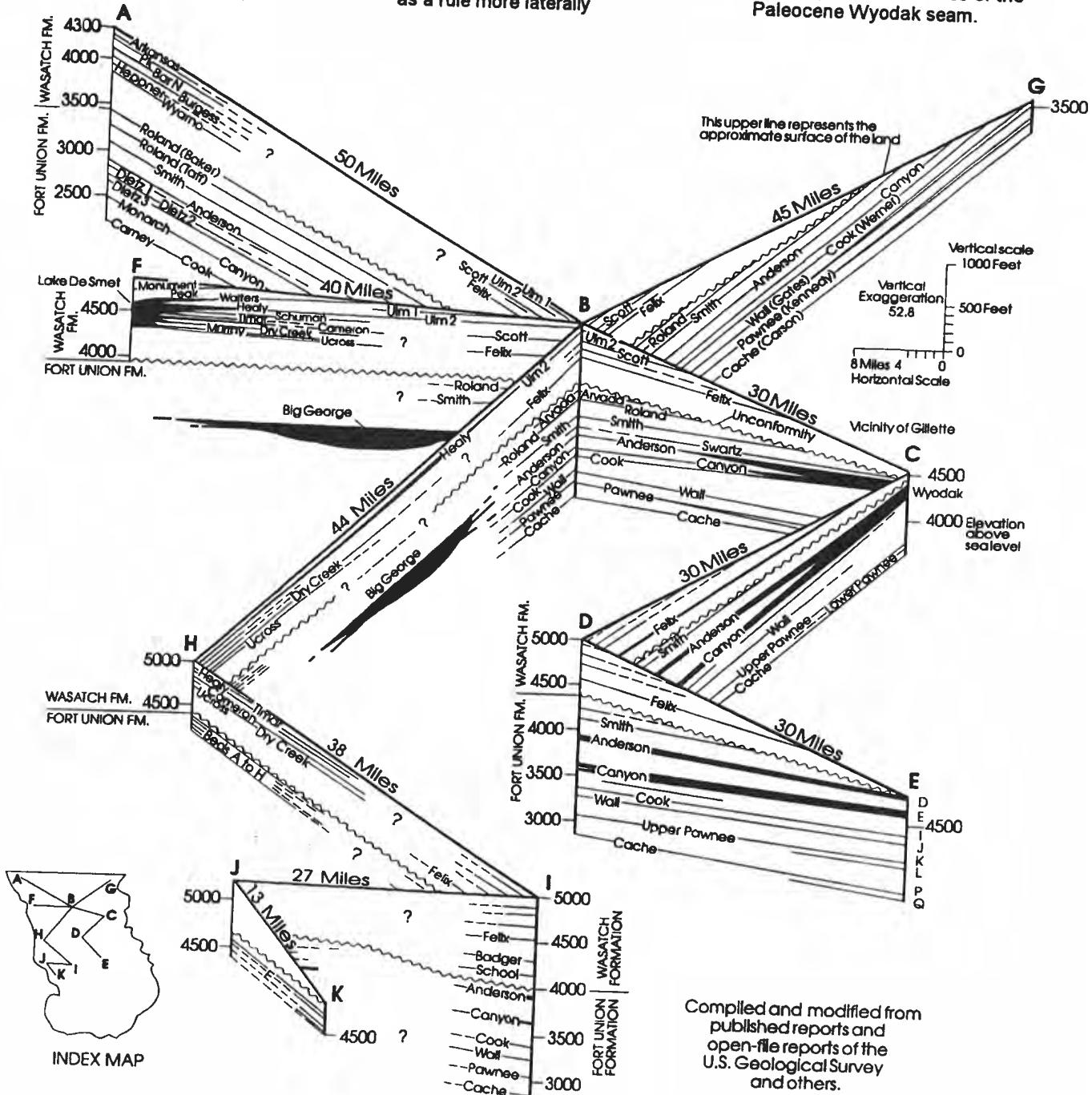


Figure 5. Correlation of Named Coal Beds in the Powder River Coal Field of Wyoming.

Utilization and Market Distribution of Wyoming Coal (1997)

Wyoming's coal industry, in 1997, set a new state annual production record of 281,481,566 short tons (tons). Wyoming remained number one in the nation in coal-production, supplying the country with approximately 26% of the United States' steam coal needs.

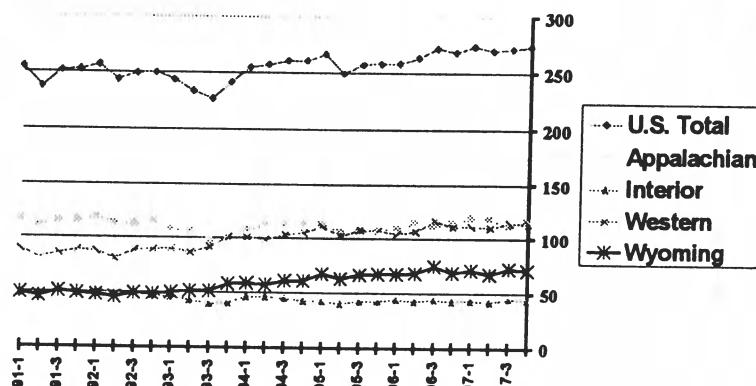
The State's 1997 coal production increased by 1.1 percent, but was far less than the 10.15 percent annual growth experience in the previous four years.

This slow down in growth was due in part to transportation and logistic problems experienced by

the Union Pacific/Southern Pacific Railroad Company, contracted to carry Powder River Basin coal to markets in Texas and the Midwest (Hong, 1998)

Figure 6 shows Wyoming coal's role in the United States quarterly production for the period from 1991 through 1997.

Figure 6. Wyoming Coal Production's Role in U.S. Quarterly Coal Production, 1991-1997 (millions of short tons)



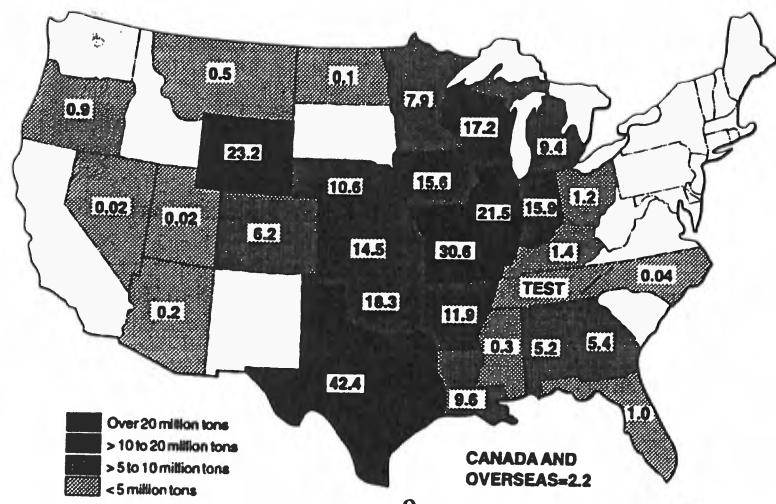
Data from EIA, FERC, Office of State Mine Inspector et. al.

U.S. coal consumption by all users in 1997 totaled 1,027.8 million tons, a 2.2 percent increase over 1996 figures. As coal consumption in the non-electricity sector fell by 2.6 percent, electric utilities burned

898.5 million tons and independent power producers 23.5 million tons for a total of 922.0 million tons of coal for electricity generation (Hong, 1998).

Statistics published by the Energy Information Administration (EIA), show that utilities in 29 states, as well as Canada and Spain, consumed Wyoming coal in 1997 (EIA, 1998) (Figure 7).

Figure 7. Wyoming coal deliveries to electric generating plants in 1997.



Ninety-seven percent of the coal produced in Wyoming during 1997 was used to generate electricity (Figure 8). When combined with coal exports, utility companies used 273.1 million tons.

In addition to the Wyoming coal consumed for electricity,

industrial customers, such as cement and fertilizer plants used 3.9 million tons.

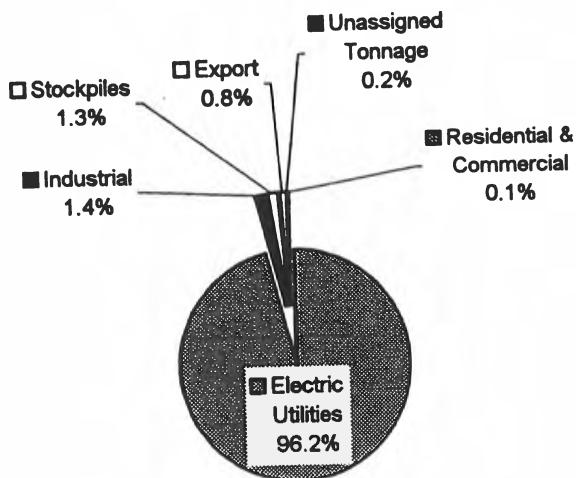
Residential and commercial markets consumed just under 400 thousand tons of Wyoming coal.

Coal stockpiles, at mines across the state (at year-end),

were reported to contain 3.6 million tons of coal (EIA, 1998).

These figures capture all but approximately 0.2 percent of the 281.5 million tons mined in Wyoming in 1997.

Figure 8. Utilization of Wyoming coal in 1997.



Wyoming State Geological Survey July, 1998

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Abbreviations, Definitions, and Explanations

Air Quality Capacity Limit – The maximum annual production capacity of a mine allowed under their current Air Quality permit.

Btu – British Thermal Unit per pound of coal

CT – Contract Type

C – contract

S – spot

¢/mmBtu – delivered price in cents per million Btu

\$/ton – delivered price in dollars per ton

LBA – Lease By Application Federal coal lease tract.

ton – short tons, where 1 short ton is 2,000 pounds

Quantity – amount delivered in short tons

Estimated remaining life of mine – Estimated years remaining in mine operations with considerations of current mine production, markets, and company announced plans.

Remaining life of mine at current permit capacity – Remaining recoverable reserves divided by current Air Quality Permit capacity.

Recoverable Coal Reserves – Coal tonnage estimated to be economically recoverable under current market conditions, using currently available equipment and technology.

1998 Directory of Coal Mines in Wyoming

Green River Coal Field

| <u>MINE</u> | <u>Page</u> |
|-------------------------------|-------------|
| Black Butte and Leucite Hills | GR-2 |
| Jim Bridger | GR-5 |

For abbreviations, definitions and explanations see page 12.

Black Butte and Leucite Hills

Operating Company: Black Butte Coal Company

Owned By: Peter Kiewit and Sons

Mailing Address:

Black Butte Coal Company

P.O. Box 98

Point of Rocks, WY 82942

Telephone: (307) 382-6200

Fax: (307) 352-6205

URL: <http://www.kiewit.com/mining.htm>

Number of Employees in 1997: 109

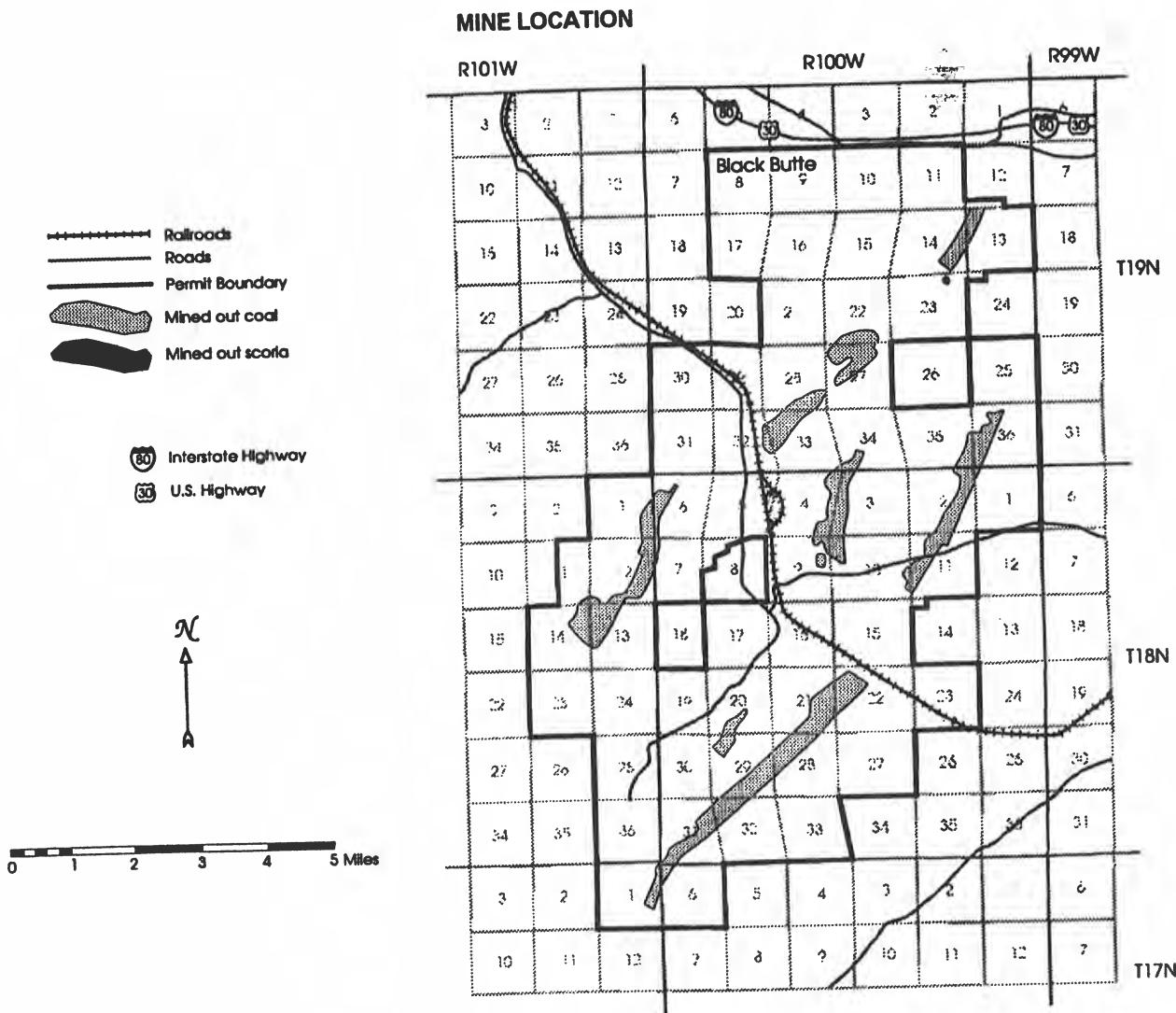
Mine Type: Surface

Acres permitted: 44,341

1997 Coal Production: 1,900,000 short tons

1998 Air Quality Capacity Limit: 7.0 million short tons (Black Butte)

2.5 million short tons (Leucite Hills)



Coal Field: Green River

County: Sweetwater

Rail Service: Unit train loadout served by Union Pacific/Southern Pacific Railroad.

Mining Method at Black Butte mine:

Overburden Removal: dragline, truck-shovel.

Coal Removal: truck-shovel.

1998 Directory of Coal Mines in Wyoming

Black Butte and Leucite Hills cont.)

Geologic Information at Black Butte mine:

Overburden thickness: 20 to 250 feet (average thickness: 165 feet).
 Seams Mined: C1 (average thickness: 9 feet).

0-50 feet interburden
 C (average thickness: 15 feet).
 10 feet interburden
 B (average thickness: 2 feet).

Formation: Fort Union.

Age: Tertiary/Paleocene.

Overburden thickness: 20 to 250 feet (average thickness: 120 feet).
 Seams Mined: F (average thickness: 5 feet).

DE (average thickness: 7 feet).
 C1 (average thickness: 5 feet).
 C (average thickness: 4 feet).
 AB (average thickness: 6 feet).

Formation: Lance.

Age: Late Cretaceous.

Overburden thickness: 20 to 250 feet (average thickness: 120 feet).
 Seams Mined: D (average thickness: 3 feet).

C (average thickness: 2 feet).
 B (average thickness: 2 feet).
 A1 (average thickness: 6 feet).
 A (average thickness: 5 feet).

Formation: Almond

Group: Mesaverde.

Age: Late Cretaceous.

Production History: (Start up year 1979 through end of 1997 in short tons for the Black Butte and Leucite Hills mines)

| | | | |
|------|-----------|------|-----------|
| 1997 | 1,900,000 | 1987 | 5,205,435 |
| 1996 | 1,857,145 | 1986 | 6,458,726 |
| 1995 | 2,155,632 | 1985 | 5,925,503 |
| 1994 | 4,029,069 | 1984 | 4,539,612 |
| 1993 | 2,569,713 | 1983 | 5,153,536 |
| 1992 | 5,889,973 | 1982 | 4,995,803 |
| 1991 | 5,290,400 | 1981 | 4,390,072 |
| 1990 | 5,797,238 | 1980 | 3,719,106 |
| 1989 | 5,885,947 | 1979 | 1,316,078 |
| 1988 | 5,706,660 | | |

Total production through 1997: 82,785,648.

Recoverable Coal Reserves (million short tons) for the Black Butte and Leucite Hills mines

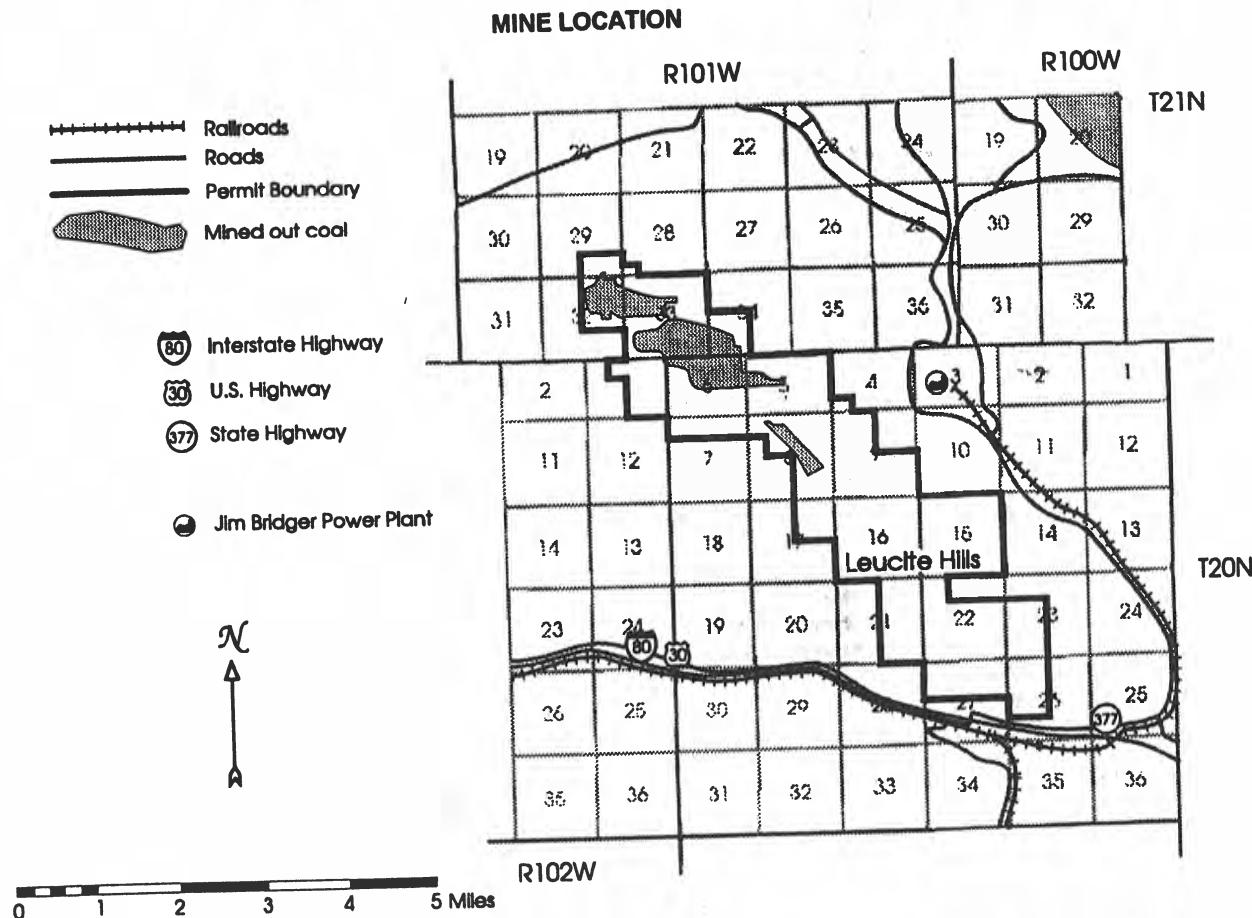
| | |
|---------------------|-------------|
| Original Lease: | 154.7 |
| Mined tonnage: | <u>82.8</u> |
| Remaining Reserves: | 71.9 |

Estimated remaining life of mine: 23 years.

Remaining life of mine at current permit capacity: 8 years.

1997 Black Butte Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|----------------------|-------------|-------|-----------|-------|----------|-------|----------|--------|
| C | | PacifiCorp | Jim Bridger | WY | 819,000 | 9,515 | 0.48 | 8.25 | 92.62 | 17.63 |
| S | | PacifiCorp | Jim Bridger | WY | 306,000 | 9,623 | 0.52 | 8.34 | 65.37 | 12.57 |
| S | | Sierra Pacific Power | North Valmy | NV | 17,000 | 9,858 | 0.47 | 7.51 | 95.30 | 18.79 |
| | | | | | 1,142,000 | 9,549 | 0.49 | 8.26 | 85.36 | 16.29 |

Black Butte and Leucite Hills (cont.)

Coal Field: Green River

County: Sweetwater

Rail Service: None (Coal trucked to Jim Bridger Power Plant).

Geologic Information for Leucite Hills mine:

Overburden thickness: 0 to 150 feet (average thickness: 60 feet).

Seams Mined: A5 (average thickness: 1.4 feet).

A4 (average thickness: 4 feet).

A3 (average thickness: 3.7 feet).

A2 (average thickness: 6.5 feet).

Formation: Almond.

Group: Mesaverde.

Age: Late Cretaceous.

Mining Method for Leucite Hills mine:

Overburden Removal: truck-shovel.

Coal Removal: truck-shovel.

1997 Leucite Hills Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|--------------|-------------|-------|----------|-------|----------|-------|----------|--------|
| C | | PacifiCorp | Jim Bridger | WY | 91,000 | 9,707 | 0.56 | 9.01 | 118.80 | 23.06 |
| S | | PacifiCorp | Jim Bridger | WY | 491,000 | 9,744 | 0.51 | 8.82 | 76.87 | 14.99 |
| | | | | | 582,000 | 9,738 | 0.52 | 8.85 | 83.43 | 16.25 |

FERC captured 90.7% of 1997 total production for Black Butte and Leucite Hills mines.

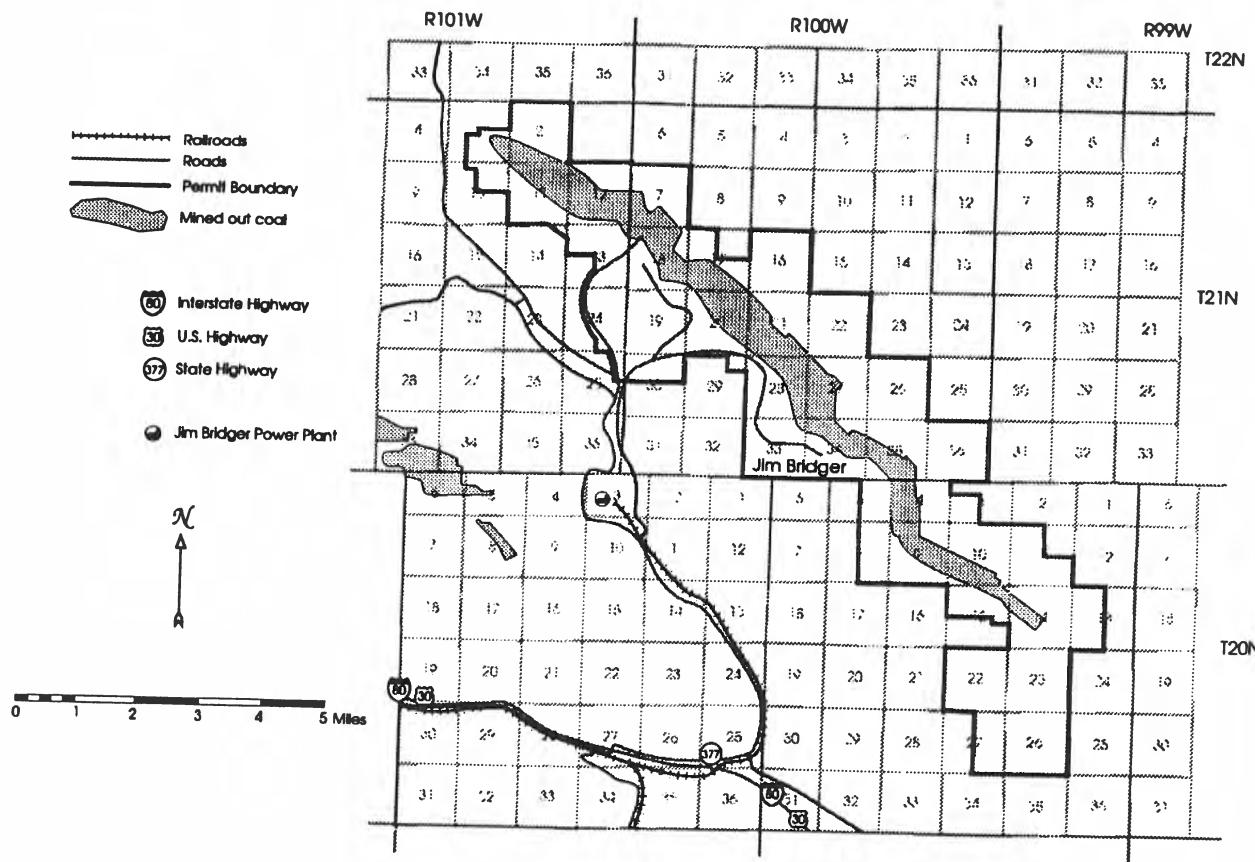
Jim Bridger

Operating Company: Bridger Coal Company
 Owned By: PacifiCorp/Idaho Power
 Mailing Address:

Bridger Coal Company
 P.O. Box 2068
 Rock Springs, WY 82902-2068
 Telephone: (307) 382-9741
 Fax: (307) 362-5330
 URL: <http://www.pacificorp.com/about/gen/mining.html>

Number of Employees in 1997: 404
 Mine Type: Surface
 Acres permitted: 20,470
 1997 Coal Production: 5,920,376 short tons
 1998 Air Quality Capacity Limit: 7.9 million short tons

MINE LOCATION



Coal Field: Green River
 County: Sweetwater
 Rail Service: None (Overland conveyor to power plant).

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Jim Bridger (cont.)

Geologic Information:

Overburden thickness: 80 to 220 feet (average thickness: 140 feet).

Seams Mined: No. 6 (average thickness: 2.4 feet).

No. 5-4 (average thickness: 15.4 feet).

No. 5-1 (average thickness: 27.8 feet).

No. 5 (average thickness: 6.2 feet).

No. 4-1 (average thickness: 13.6 feet).

No. 4 (average thickness: 8.5 feet).

No. 3-1 (average thickness: 11.8 feet).

No. 3 (average thickness: 4.6 feet).

No. 2-1 (average thickness: 7.0 feet).

Coal Zone: Deadman.

Formation: Fort Union.

Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: dragline, truck-shovel.

Coal Removal: truck, shovel and overland conveyor.

Production History: (Start up year 1971 through end of 1997 in short tons)

| | | | |
|------|-----------|------|-----------|
| 1997 | 5,920,376 | 1983 | 4,317,880 |
| 1996 | 6,293,172 | 1982 | 6,025,129 |
| 1995 | 6,967,096 | 1981 | 6,832,648 |
| 1994 | 7,036,084 | 1980 | 6,453,302 |
| 1993 | 6,417,662 | 1979 | 5,690,411 |
| 1992 | 6,073,832 | 1978 | 5,048,913 |
| 1991 | 5,746,925 | 1977 | 5,448,953 |
| 1990 | 5,842,017 | 1976 | 3,567,058 |
| 1989 | 6,023,607 | 1975 | 1,862,125 |
| 1988 | 6,412,384 | 1974 | 735,349 |
| 1987 | 6,600,573 | 1973 | 0 |
| 1986 | 6,480,450 | 1972 | 0 |
| 1985 | 7,224,977 | 1971 | 28,736 |
| 1984 | 4,338,421 | | |

Total production through 1997: 133,388,080.

Recoverable Coal Reserves (million short tons)

Original Lease: 233.2

Mined tonnage: 133.4

Remaining Reserves: 99.8

Estimated remaining life of mine: 17 years.

Remaining life of mine at current permit capacity: 13 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Blu | % Sulfur | % Ash | \$/mmBlu | \$/ton |
|----|------------|--------------|-------------|-------|-----------|-------|----------|-------|----------|--------|
| C | | PacifiCorp | Jim Bridger | WY | 5,967,000 | 9,475 | 0.61 | 10.50 | 110.72 | 20.98 |

FERC captured 100% of 1997 total production.

Hams Fork Coal Field

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| Kemmerer and Skull Point | HF-2 |

For abbreviations, definitions and explanations see page 12.

1998 Directory of Coal Mines in Wyoming

Kemmerer and Skull Point

Operating Company: Pittsburg & Midway Coal Company

Owned By: Chevron Corporation*

Mailing Address:

Pittsburg & Midway Coal Company

P.O. Box 950

Kemmerer, WY 83101

Telephone: (307) 828-2200

Fax: (307) 877-9089

URL: <http://www.kemmerer.org/pm.html>

Number of Employees in 1997: 300 (Kemmerer)

65 (Skull Point)

Mine Type: Surface

Acres permitted: 13,426

1997 Coal Production: 4,401,644 short tons (Kemmerer)

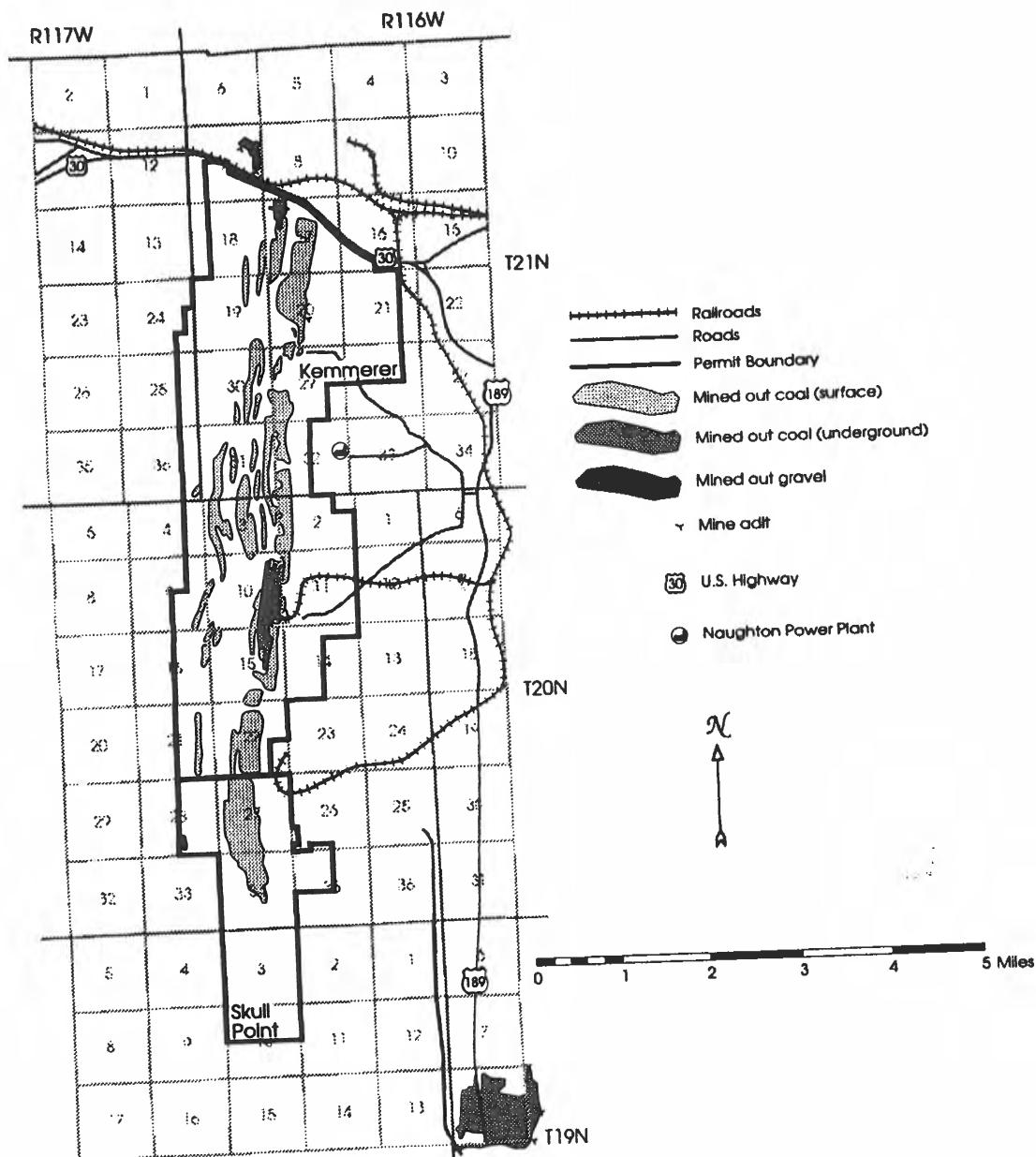
205,890 short tons (Skull Point)

1998 Air Quality Capacity Limit: 4.2 million short tons (Kemmerer)

1.5 million short tons (Skull Point)

Note: Pittsburg & Midway bought the Skull Point mine
from FMC Wyoming Corp. on 3/20/97.

*On August 18, 1998, Chevron announced plans to sell their coal holdings.
MINE LOCATION



Coal Field: Hams Fork

County: Lincoln

Rail Service: Unit train loadout served by Union Pacific/Southern Pacific Railroad.

1998 Directory of Coal Mines in Wyoming

Kemmerer and Skull Point (cont.)

Geologic Information:

Overburden thickness: 0 to 1,500 feet (average thickness: varies from pit to pit).
Seams Mined: No. 11 (average thickness: 13 feet).

- No. 10 (average thickness: 13 feet).
- No. 9 (average thickness: 4 feet).
- No. 8 (average thickness: 4 feet).
- No. 7 (average thickness: 4 feet).
- No. 6 (average thickness: 17 feet).
- No. 5 (average thickness: 10 feet).
- No. 4 (average thickness: 14 feet).
- No. 3 (average thickness: 46 feet).
- No. 2 (average thickness: 21 feet).
- No. 1 (average thickness: 88 feet).

Coal Zone: Adaville.

Formation: Adaville.

Age: Upper Cretaceous.

Mining Method:

Overburden Removal: truck-shovel.

Coal Removal: truck, front-end loader, and backhoe.

Production History: (Start up year 1909 through end of 1997 in short tons for the Kemmerer mine)

| | | | | | |
|------|-----------|------|---------|------|---------|
| 1997 | 4,401,644 | 1967 | 756,980 | 1937 | 46,294 |
| 1996 | 3,650,865 | 1966 | 726,138 | 1936 | 43,731 |
| 1995 | 3,624,328 | 1965 | 626,706 | 1935 | 40,899 |
| 1994 | 3,619,259 | 1964 | 605,086 | 1934 | 30,455 |
| 1993 | 3,261,818 | 1963 | 573,849 | 1933 | 50,159 |
| 1992 | 3,784,041 | 1962 | 271,236 | 1932 | 54,169 |
| 1991 | 3,552,190 | 1961 | 224,073 | 1931 | 73,838 |
| 1990 | 3,785,548 | 1960 | 195,868 | 1930 | 67,373 |
| 1989 | 3,880,294 | 1959 | 265,044 | 1929 | 69,505 |
| 1988 | 3,957,731 | 1958 | 393,659 | 1928 | 62,736 |
| 1987 | 3,000,000 | 1957 | 577,140 | 1927 | 68,320 |
| 1986 | 3,127,668 | 1956 | 579,314 | 1926 | 67,313 |
| 1985 | 3,418,392 | 1955 | 529,424 | 1925 | 72,757 |
| 1984 | 3,127,228 | 1954 | 450,997 | 1924 | 78,189 |
| 1983 | 3,083,067 | 1953 | 508,494 | 1923 | 67,172 |
| 1982 | 3,300,743 | 1952 | 706,660 | 1922 | 57,965 |
| 1981 | 4,037,963 | 1951 | 549,558 | 1921 | 81,772 |
| 1980 | 4,082,578 | 1950 | 318,104 | 1920 | 121,952 |
| 1979 | 4,281,123 | 1949 | 150,732 | 1919 | 108,026 |
| 1978 | 4,064,332 | 1948 | 220,214 | 1918 | 188,494 |
| 1977 | 4,385,147 | 1947 | 166,849 | 1917 | 198,045 |
| 1976 | 4,122,457 | 1946 | 106,256 | 1916 | 83,667 |
| 1975 | 2,733,091 | 1945 | 119,999 | 1915 | 20,478 |
| 1974 | 3,353,157 | 1944 | 153,816 | 1914 | 29,405 |
| 1973 | 2,946,676 | 1943 | 193,971 | 1913 | 70,000 |
| 1972 | 2,102,919 | 1942 | 73,493 | 1912 | 60,974 |
| 1971 | 1,503,545 | 1941 | 30,224 | 1911 | 59,000 |
| 1970 | 1,583,429 | 1940 | 29,375 | 1910 | 35,000 |
| 1969 | 1,459,471 | 1939 | 34,564 | 1909 | 120,000 |
| 1968 | 952,224 | 1938 | 35,387 | | |

Total production through 1997: 110,483,825. Note: 1909-1950 production from Elkol deep mine. 1951-

1962 production is from the Elkol surface mine, 1963-1980 production is from the Elkol and Sorenson surface mines. The Elkol and Sorenson mines were combined in 1981 to form the Kemmerer mine.

1998 Directory of Coal Mines in Wyoming

Kemmerer and Skull Point (cont.)

Production History: (Start up year 1976 through end of 1997 in short tons for the Skull Point mine)

| | | | | | |
|------|---------|------|-----------|------|---------|
| 1997 | 205,890 | 1989 | 896,000 | 1981 | 960,750 |
| 1996 | 768,580 | 1988 | 937,999 | 1980 | 908,580 |
| 1995 | 820,000 | 1987 | 802,930 | 1979 | 813,346 |
| 1994 | 670,934 | 1986 | 905,893 | 1978 | 896,036 |
| 1993 | 803,449 | 1985 | 911,196 | 1977 | 718,789 |
| 1992 | 810,020 | 1984 | 942,843 | 1976 | 84,524 |
| 1991 | 839,454 | 1983 | 957,397 | | |
| 1990 | 950,000 | 1982 | 1,014,874 | | |

Total production through 1997: 17,619,484.

Recoverable Coal Reserves (million short tons)

Kemmerer Original Lease: 214.7

Mined tonnage: 110.5

Remaining Reserves: 104.2

Skull Point Original Lease: 24.3

Mined tonnage: 17.6

Remaining Reserves: 6.7

Total Reserves: 110.9

Estimated remaining life of mine: 22 years.

Remaining life of mine at current permit capacity: 14 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|--------------|------------|-------|-----------|-------|----------|-------|----------|--------|
| C | | PacifiCorp | Naughton | WY | 2,632,000 | 9,855 | 0.76 | 5.08 | 113.14 | 22.31 |

FERC captured 57.1% of 1997 total production.

Hanna Coal Field

| <u>MINE</u> | <u>Page</u> |
|----------------|-------------|
| Medicine Bow | HN-2 |
| Seminoe II | HN-4 |
| Shoshone No. 1 | HN-6 |

For abbreviations, definitions and explanations see page 12

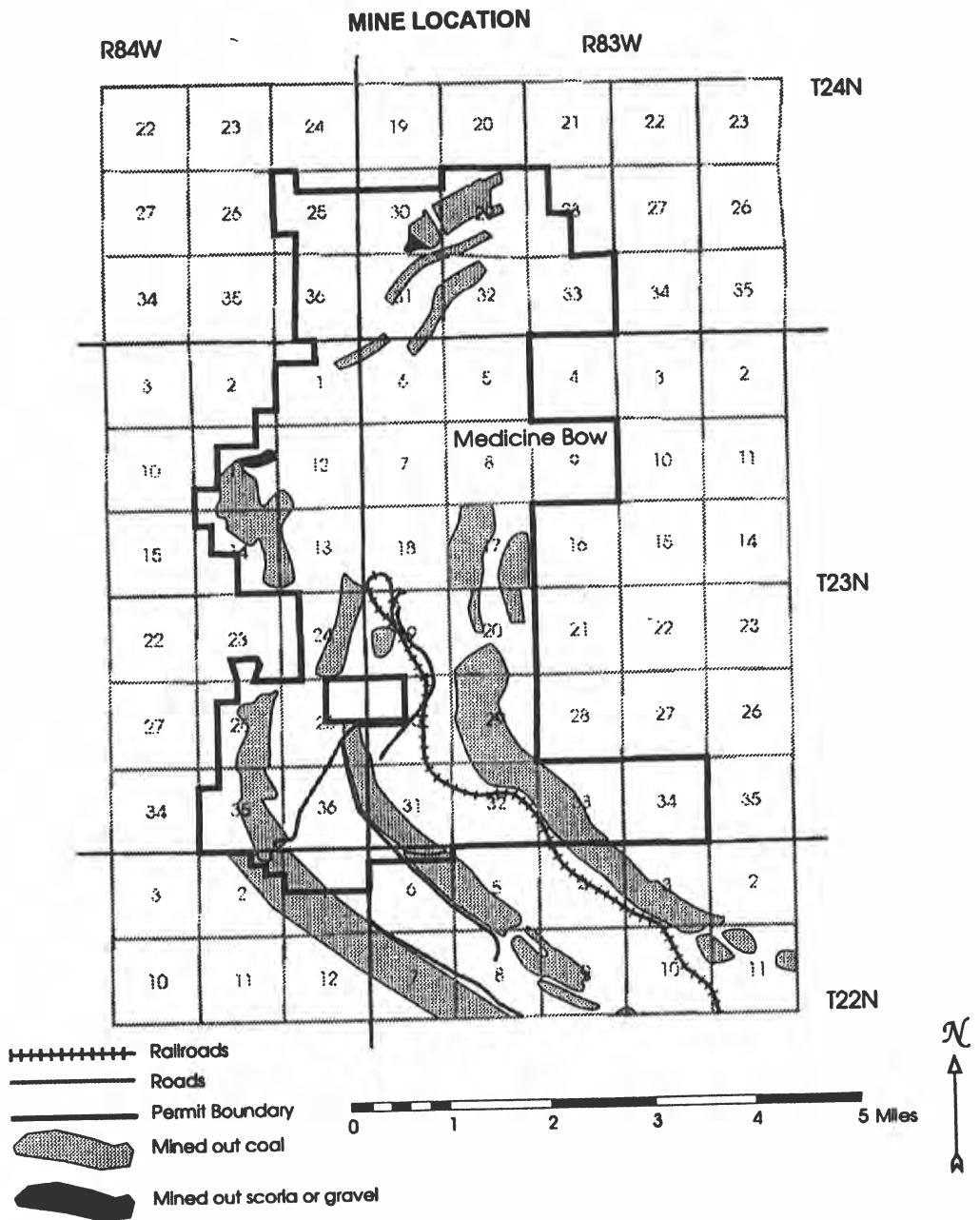
1998 Directory of Coal Mines in Wyoming

Medicine Bow

Operating Company: Arch of Wyoming, Inc.
 Subsidiary of: Arch Western Resources, LLC.
 Owned By: Arch Coal, Inc.
 Mailing Address:

Arch of Wyoming, Inc.
 P.O. Box 460
 Hanna, WY 82327
 Telephone: (307) 325-6581
 Fax: (307) 325-9250
 URL: <http://www.archcoal.com>

Number of Employees in 1997: 65
 Mine Type: Surface
 Acres permitted: 20,352
 1997 Coal Production: 1,534,904 short tons
 1998 Air Quality Capacity Limit: 4.0 million short tons



Coal Field: Hanna

County: Carbon

Rail Service: Unit train loadout served by Union Pacific/Southern Pacific Railroad.

1998 Directory of Coal Mines in Wyoming

Medicine Bow (cont.)

Geologic Information:

Overburden thickness: 0 to 150 feet (average thickness: 130 feet).
 Seams Mined: No. 65 (average thickness: 9 feet).
 No. 64 (average thickness: 6 feet).
 No. 63 (average thickness: 5 feet).
 No. 62 (average thickness: 9 feet).

Formation: Ferris.

Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: dragline.
 Coal Removal: Arch-veyor®, dragline, truck-shovel.

Production History: (Start up year 1975 through end of 1997 in short tons)

| | | | | | |
|------|-----------|------|-----------|------|-----------|
| 1997 | 1,534,904 | 1989 | 2,305,147 | 1981 | 2,025,455 |
| 1996 | 1,791,046 | 1988 | 441,222 | 1980 | 1,955,435 |
| 1995 | 1,699,106 | 1987 | 19,625 | 1979 | 2,345,917 |
| 1994 | 1,838,300 | 1986 | 3,274 | 1978 | 3,129,651 |
| 1993 | 2,614,424 | 1985 | 288,425 | 1977 | 2,809,312 |
| 1992 | 2,402,009 | 1984 | 540,844 | 1976 | 2,773,856 |
| 1991 | 2,418,573 | 1983 | 569,786 | 1975 | 2,506,379 |
| 1990 | 2,813,212 | 1982 | 609,597 | | |

Total production through 1997: 39,435,499.

Recoverable Coal Reserves (million short tons)

| | |
|---------------------|-------------|
| Original Lease: | 65.4 |
| Mined tonnage: | <u>39.4</u> |
| Remaining Reserves: | 26.0 |

Estimated remaining life of mine: 2 years.

Remaining life of mine at current permit capacity: 7 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|---------------------------------|------------|-------|-----------|--------|----------|-------|----------|--------|
| S | | Commonwealth Edison | Kincaid | IL | 244,000 | 10,484 | 0.59 | 6.87 | 162.50 | 34.07 |
| C | | Illinois Power | Havana | IL | 69,332 | 10,499 | 0.49 | 6.56 | 134.80 | 28.30 |
| C | 01-Dec-31 | Kansas City Bd Public Utilities | Kaw | KS | 58,500 | 10,512 | 0.46 | 6.62 | 128.86 | 27.09 |
| C | 31-Dec-97 | Kansas City Bd Public Utilities | Quindaro | KS | 283,700 | 10,561 | 0.47 | 6.54 | 128.25 | 27.09 |
| C | 01-Mar-00 | Missouri Public Service | Sibley | MO | 795,301 | 10,462 | 0.57 | 7.18 | 107.05 | 22.40 |
| | | | | | 1,450,833 | 10,489 | 0.54 | 6.95 | 122.73 | 25.75 |

FERC captured 94.5% of 1997 total production.

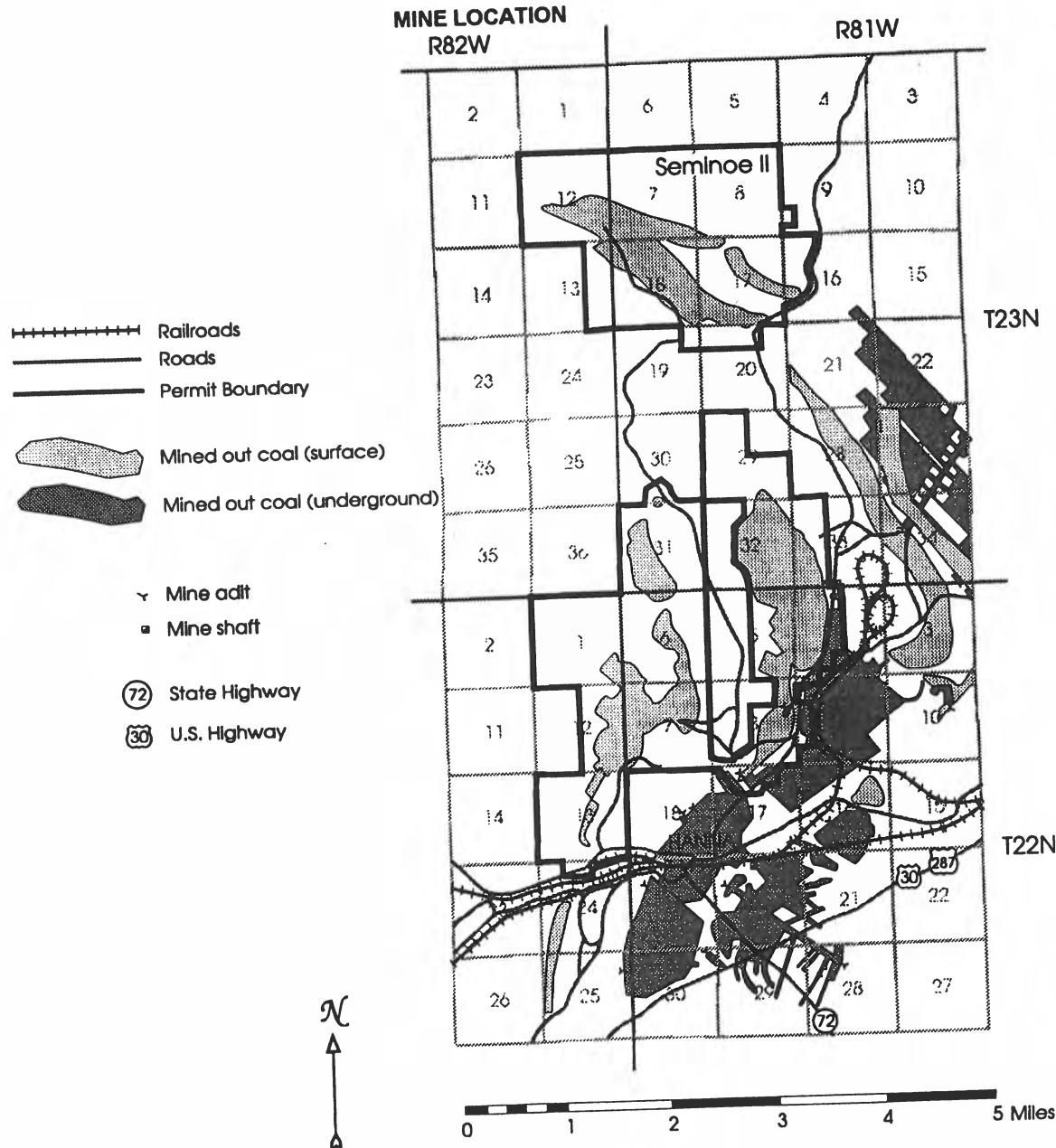
1998 Directory of Coal Mines in Wyoming

Seminoe II

Operating Company: Arch of Wyoming, Inc.
 Subsidiary of: Arch Western Resources, LLC.
 Owned By: Arch Coal, Inc.

Mailing Address:
 Arch of Wyoming, Inc.
 P.O. Box 460
 Hanna, WY 82327
 Telephone: (307) 325-6581
 Fax: (307) 325-9250
 URL: <http://www.archcoal.com>

Number of Employees in 1997: 27
 Mine Type: Surface
 Acres permitted: 9,596
 1997 Coal Production: 601,359 short tons
 1998 Air Quality Capacity Limit: 2.1 million short tons



Coal Field: Hanna
 County: Carbon
 Rail Service: Unit train loadout served by Union Pacific/Southern Pacific Railroad.

1998 Directory of Coal Mines in Wyoming

Seminole II (cont.)

Geologic Information:

Overburden thickness: 150 to 225 feet (average thickness: 200 feet).

Seams Mined: Bed No. 78 (average thickness: 18 feet).

Hanna No. 2 (average thickness: 30 feet).

Hanna No. 5 (average thickness: 14 feet).

Formation: Hanna.

Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: dragline, truck-shovel.

Coal Removal: truck-shovel.

Production History: (Start up year 1985 through end of 1997 in short tons)

| | | | | | |
|------|---------|------|-----------|------|-----------|
| 1997 | 601,359 | 1988 | 1,660,914 | 1979 | 2,719,790 |
| 1996 | 224,368 | 1987 | 1,342,900 | 1978 | 2,831,817 |
| 1995 | 113,991 | 1986 | 639,433 | 1977 | 2,776,204 |
| 1994 | 0 | 1985 | 1,294,307 | 1976 | 2,660,931 |
| 1993 | 0 | 1984 | 2,124,803 | 1975 | 2,941,432 |
| 1992 | 0 | 1983 | 1,456,678 | 1974 | 2,589,752 |
| 1991 | 0 | 1982 | 1,719,248 | 1973 | 1,497,675 |
| 1990 | 0 | 1981 | 2,800,402 | 1972 | 120,249 |
| 1989 | 344,942 | 1980 | 1,828,852 | | |

Total production through 1997: 34,290,047.

Recoverable Coal Reserves (million short tons)

Original Lease: 36.4

Mined tonnage: 34.3

Remaining Reserves: 2.1

Estimated remaining life of mine: 2 years.

Remaining life of mine at current permit capacity: 1 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | #/mmBtu | \$/ton |
|----|------------|----------------------------|--------------|-------|----------|--------|----------|-------|---------|--------|
| C | | Tennessee Valley Authority | BRT Terminal | KY | 10,640 | 11,021 | 0.65 | 8.00 | 125.46 | 27.65 |
| C | | Tennessee Valley Authority | Shawnee | KY | 238,110 | 11,041 | 0.65 | 8.00 | 122.47 | 27.04 |
| C | 01-Mar-00 | Missouri Public Service | Sibley | MO | 87,413 | 11,029 | 0.78 | 9.06 | 106.74 | 23.55 |
| S | | Commonwealth Edison | Kincald | IL | 13,000 | 10,558 | 0.70 | 10.40 | 130.60 | 27.58 |
| S | | Tennessee Valley Authority | Shawnee | KY | 10,280 | 10,843 | 0.60 | 9.49 | 124.97 | 27.10 |
| S | | Northern States Power | Bayfront | WI | 42,300 | 11,613 | 0.63 | 5.56 | 155.10 | 36.00 |
| | | | | | 401,743 | 11,077 | 0.68 | 8.09 | 122.89 | 27.26 |

FERC captured 66.8% of 1997 total production.

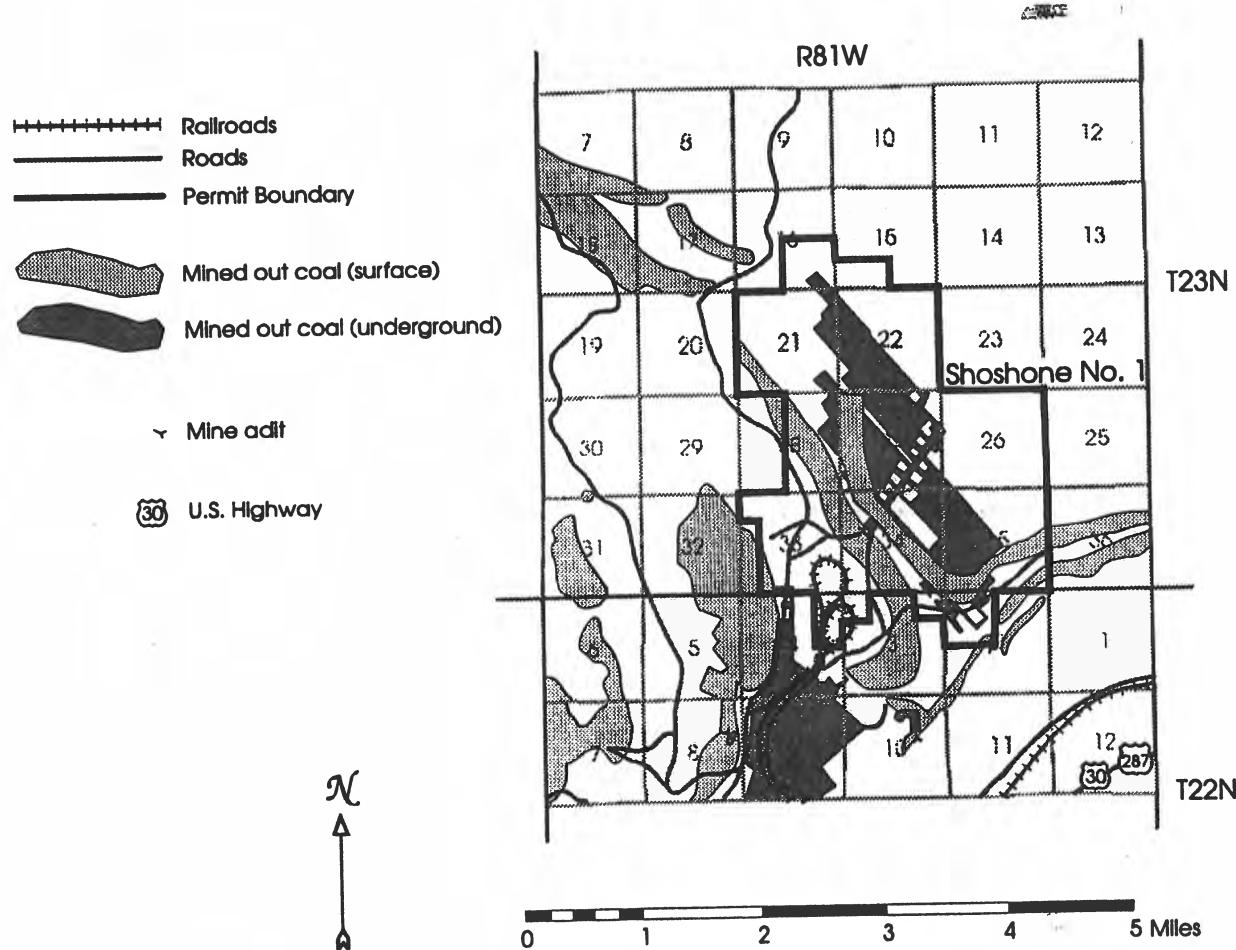
Shoshone No. 1

Operating Company: Cyprus Shoshone Coal Company
 Owned By: Cyprus-AMAX Corporation
 Mailing Address:

Cyprus Shoshone Coal Company
 P.O. Box 830
 Hanna, WY 82327
 Telephone: (307) 325-9471
 Fax: (307) 325-9247
 URL: <http://www.cyprusamax.com>

Number of Employees in 1997: 140
 Mine Type: Deep (Longwall)
 Acres permitted: 5,235
 1997 Coal Production: 2,854,936 short tons
 1998 Air Quality Capacity Limit: 3.5 million short tons

MINE LOCATION



Coal Field: Hanna

County: Carbon

Rail Service: Unit train loadout served by Union Pacific/Southern Pacific Railroad.

1998 Directory of Coal Mines in Wyoming

Shoshone No.1 (cont.)

Geologic Information:

Cover thickness: 200 to 1100 feet (average thickness 900 feet).
 Seams Mined: Hanna No. 80 (thickness 12-14 feet).
 Formation: Hanna.
 Age: Tertiary/Paleocene.

Mining Method:

Coal Removal: longwall, with continuous miner on development.
 Panel width: 740 feet.
 Panel length: 7,700 feet.
 Gate entries: 2.
 Depth of cut: 32 inches.
 Cutting height: 12 feet.

Production History: (Start up year 1985 through end of 1997 in short tons)

| | | | |
|------|-----------|------|-----------|
| 1997 | 2,854,936 | 1987 | 105,300 |
| 1996 | 2,640,912 | 1986 | 163,700 |
| 1995 | 1,990,114 | 1985 | 1,060,367 |
| 1994 | 2,543,441 | 1984 | 1,343,955 |
| 1993 | 1,590,696 | 1983 | 1,282,700 |
| 1992 | 1,651,966 | 1982 | 1,108,795 |
| 1991 | 2,026,065 | 1981 | 1,013,000 |
| 1990 | 1,420,980 | 1980 | 527,273 |
| 1989 | 1,544,661 | 1979 | 96,269 |
| 1988 | 1,067,305 | | |

Total production through 1997: 26,032,435. Note: before 1986 this was the Carbon No. 1 mine.

Recoverable Coal Reserves (million short tons)

| | |
|---------------------|------|
| Original Lease: | 35.3 |
| Mined tonnage: | 26.0 |
| Remaining Reserves: | 9.3 |

Estimated remaining life of mine: 2 years. (Restricted by geologic faulting.)
 Remaining life of mine at current permit capacity: 3 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|-----------------------------------|-----------------|-------|-----------|--------|----------|-------|----------|--------|
| C | 01-Dec-97 | MidAmerican Energy | George Neal 1-4 | IA | 400,000 | 10,798 | 0.63 | 5.98 | 105.17 | 22.71 |
| C | | Northern Indiana Public Service | Bailey | IN | 116,500 | 10,814 | 0.62 | 5.92 | 181.50 | 39.25 |
| C | | Northern Indiana Public Service | Michigan City | IN | 328,400 | 10,814 | 0.63 | 6.02 | 178.32 | 38.57 |
| C | | Northern Indiana Public Service | Mitchell | IN | 98,100 | 10,832 | 0.62 | 5.87 | 190.79 | 41.33 |
| C | | Northern Indiana Public Service | Rollin Schahfer | IN | 615,600 | 10,818 | 0.62 | 5.92 | 181.12 | 39.19 |
| S | | Commonwealth Edison | Kincaid | IL | 106,000 | 10,794 | 0.63 | 6.20 | 168.08 | 36.29 |
| S | | Central Illinois Public Service | Newton | IL | 378,500 | 10,816 | 0.62 | 5.89 | 132.11 | 28.58 |
| S | | Nebraska Public Power System | Sheldon | NE | 33,865 | 10,866 | 0.63 | 5.98 | 109.84 | 23.87 |
| S | | Fremont Dept. of Public Utilities | Wright | NE | 11,000 | 10,800 | 0.59 | 6.32 | 134.92 | 29.14 |
| S | | Wisconsin Power and Light | Edgewater | WI | 114,961 | 10,808 | 0.63 | 6.04 | 147.80 | 31.95 |
| | | | | | 2,202,926 | 10,813 | 0.62 | 5.96 | 155.25 | 33.58 |

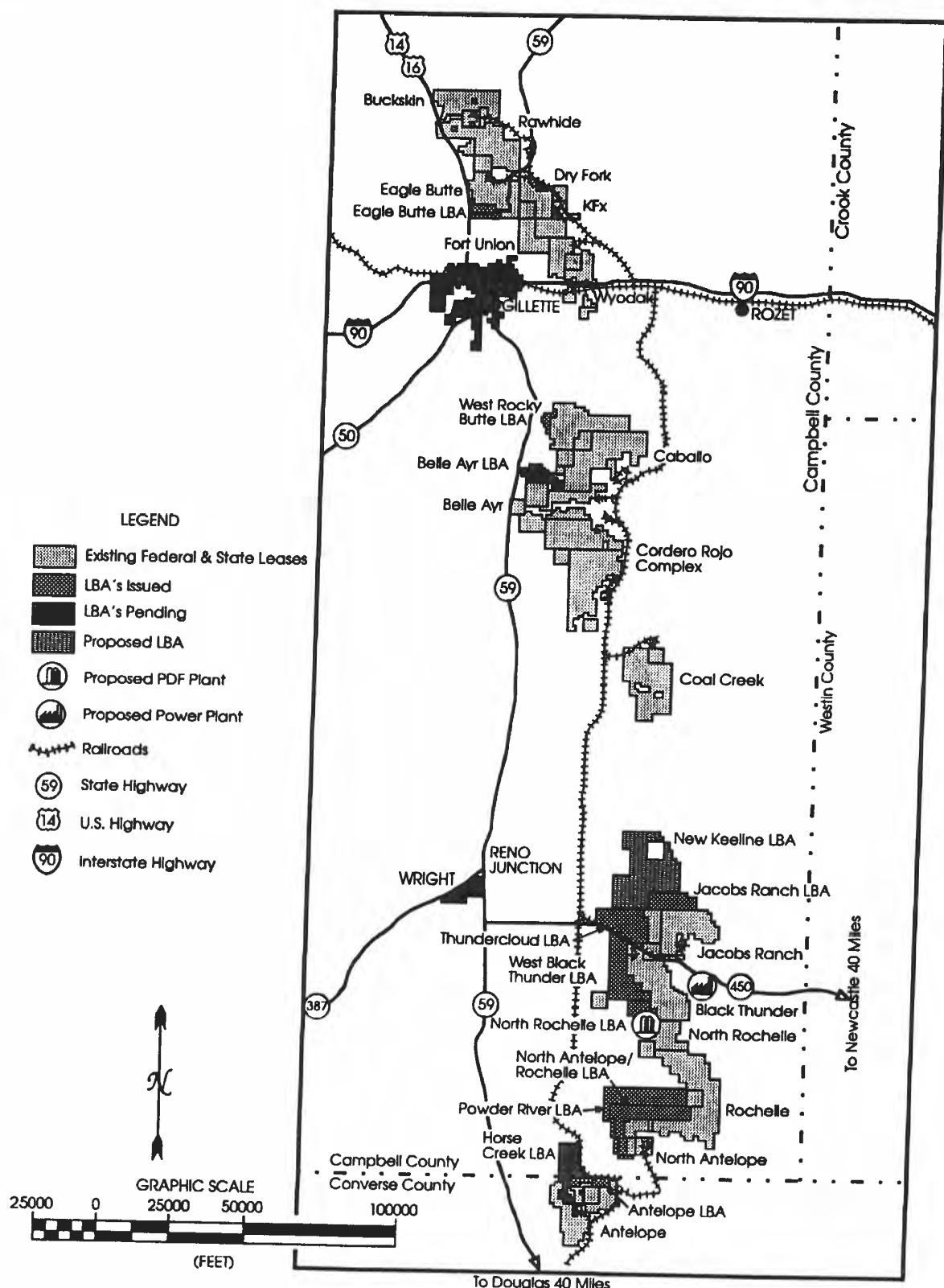
FERC captured 77.2% of 1997 total production.

Powder River Coal Field

| MINE | Page |
|-------------------------------|-------|
| Coal Mines of the Eastern PRB | PR-2 |
| Antelope | PR-3 |
| Belle Ayr | PR-6 |
| Big Horn | PR-8 |
| Black Thunder | PR-10 |
| Buckskin | PR-13 |
| Caballo | PR-15 |
| Coal Creek | PR-17 |
| Cordero Rojo Complex | PR-19 |
| Dave Johnston | PR-22 |
| Dry Fork | PR-24 |
| Eagle Butte | PR-26 |
| Fort Union | PR-28 |
| KFx | PR-30 |
| Jacobs Ranch | PR-32 |
| North Antelope | PR-35 |
| North Rochelle | PR-38 |
| Rawhide | PR-40 |
| Rochelle | PR-42 |
| Wyodak | PR-45 |

For abbreviations, definitions and explanations see page 12.

Coal Mines of the Eastern Powder River Basin



Antelope

Operating Company: Antelope Coal Company
 Subsidiary of: Kennecott Energy Company
 Owned By: Rio Tinto, PLC.

Mailing Address:

Antelope Coal Company
 Caller Box 3008
 Gillette, WY 82717-3008
 Telephone: (307) 464-1133
 Fax: (307) 464-2588
 URL: <http://www.kenergy.com/antelope/antelope.html>

Number of Employees in 1997: 168

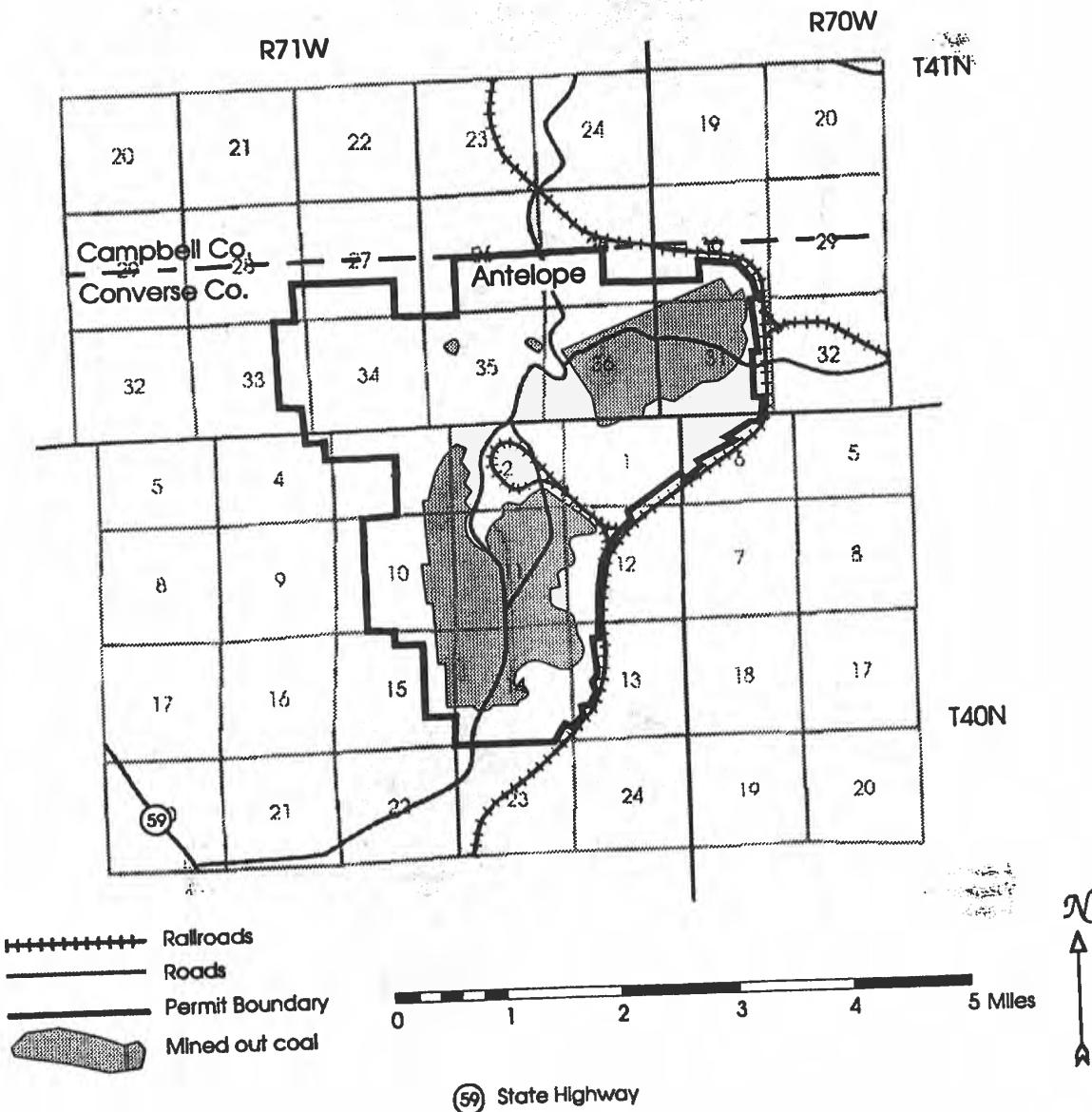
Mine Type: Surface

Acres permitted: 7,535

1997 Coal Production: 13,564,831 short tons

1998 Air Quality Capacity Limit: 30.0 million short tons

MINE LOCATION



Coal Field: Powder River

County: Converse

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.

Antelope (cont.)

1998 Directory of Coal Mines in Wyoming

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | ¢/mmBtu | \$/ton |
|----|------------|-----------------------------------|--------------------|-------|------------|-------|----------|-------|---------|--------|
| S | | Arizona Public Service | Cholla | AZ | 57,000 | 8,757 | 0.29 | 6.09 | 112.51 | 19.70 |
| S | 01-Dec-97 | Colorado Springs Utilities | R. D. Nixon | CO | 66,600 | 8,819 | 0.24 | 5.14 | 75.10 | 13.25 |
| S | | Georgia Power (Southern Co.) | Scherer | GA | 877,100 | 8,815 | 0.23 | 5.11 | 148.46 | 26.17 |
| S | | Tennessee Valley Authority | Cora Terminal | IL | 263,320 | 8,715 | 0.47 | 5.39 | 81.41 | 14.19 |
| S | | Indiana-Kentucky Electric Corp. | Clifty Creek | IN | 28,000 | 8,815 | 0.16 | 4.60 | 92.70 | 16.34 |
| S | | Tennessee Valley Authority | BRT Terminal | KY | 57,270 | 8,735 | 0.27 | 6.22 | 95.44 | 16.67 |
| S | | Detroit Edison Co. | Belle River | MI | 3,000 | 8,780 | 0.24 | 5.10 | 95.10 | 16.70 |
| S | | Lansing Board of Water and Light | Claude R. Erickson | MI | 3,300 | 8,940 | 0.33 | 6.02 | 144.16 | 25.77 |
| S | | Detroit Edison Co. | Monroe | MI | 151,000 | 8,788 | 0.24 | 5.30 | 99.18 | 17.43 |
| S | | Lansing Board of Water and Light | Otto E. Eckert | MI | 107,800 | 8,805 | 0.26 | 5.48 | 146.37 | 25.77 |
| S | 31-Dec-97 | Detroit Edison Co. | River Rouge | MI | 25,000 | 8,804 | 0.23 | 4.99 | 100.21 | 17.85 |
| S | | Detroit Edison Co. | St. Clair | MI | 3,000 | 8,780 | 0.24 | 5.10 | 95.10 | 16.70 |
| S | | Detroit Edison Co. | Trenton Channel | MI | 98,000 | 8,789 | 0.25 | 5.38 | 99.46 | 17.48 |
| S | | Detroit Edison Co. | Labadie | MO | 481,000 | 8,800 | 0.22 | 5.30 | 88.27 | 15.18 |
| S | | Union Electric | Lake Road | MO | 21,900 | 8,850 | 0.25 | 5.70 | 80.30 | 14.21 |
| S | | St. Joseph Light and Power | Avon Lake | OH | 25,000 | 8,824 | 0.18 | 4.60 | 127.90 | 22.57 |
| S | | Cleveland Electric Illum. Co. | Bay Shore | OH | 680,000 | 8,741 | 0.22 | 4.93 | 122.06 | 21.34 |
| S | | Toledo Edison Co. | Lake Shore | OH | 42,000 | 9,049 | 0.28 | 4.63 | 149.35 | 27.03 |
| S | | Cleveland Electric Illum. Co. | Boardman | OR | 63,000 | 8,870 | 0.25 | 5.08 | 110.91 | 19.67 |
| S | | Portland General Electric | Gibbons Creek | TX | 262,745 | 8,771 | 0.24 | 5.15 | 122.82 | 21.55 |
| S | | Texas Municipal Power Agency | Intermountain | UT | 22,000 | 8,837 | 0.24 | 4.90 | 128.30 | 22.68 |
| S | 01-Mar-97 | Los Angeles Dept of Wtr. and Pwr. | Oak Creek | WI | 672,600 | 8,766 | 0.21 | 5.18 | 95.08 | 16.67 |
| S | | Wisconsin Electric Power | Pleasant Prairie | WI | 12,800 | 8,664 | 0.23 | 5.80 | 78.10 | 13.53 |
| | | | | | 12,002,916 | 8,759 | 0.27 | 5.30 | 160.09 | 28.02 |

FERC captured 88.5% of 1997 total production.

Belle Ayr

Operating Company: Amax Coal West, Inc..
Owned By: Cyprus-Amex Coal Company
Mailing Address:

Amex Coal West, Inc.

P.O. Box 3039

Gillette, WY 82717-3039

Telephone: (307) 687-3400

Fax: (307) 687-3470

URL: <http://www.cyprusamax.com>

Number of Employees in 1997: 280

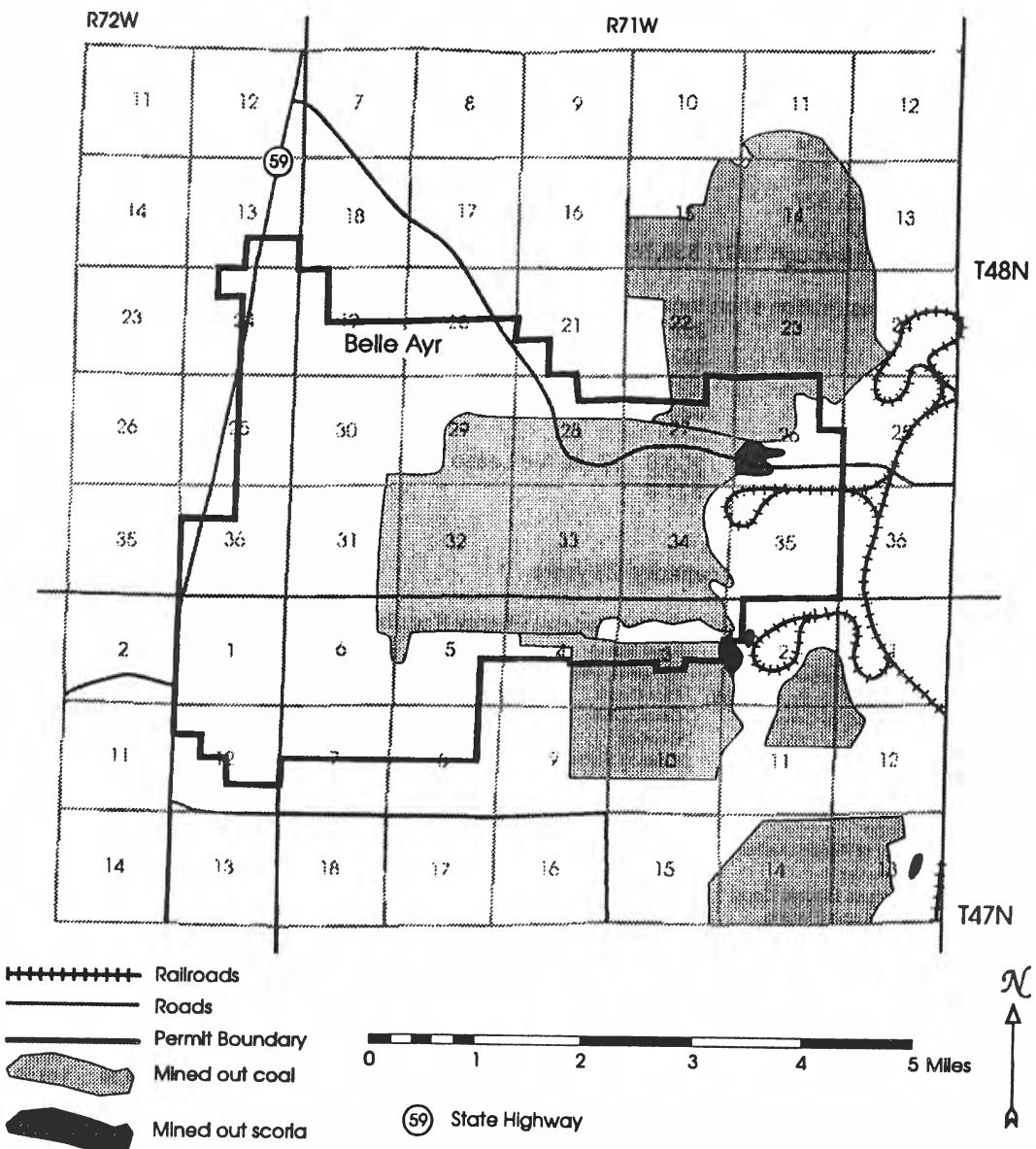
Mine Type: Surface

Acres permitted: 11,872

1997 Coal Production: 22,800,736 short tons

1998 Air Quality Capacity Limit: 25.0 million short tons

MINE LOCATION



Coal Field: Powder River

County: Campbell

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.

Belle Ayr (cont.)

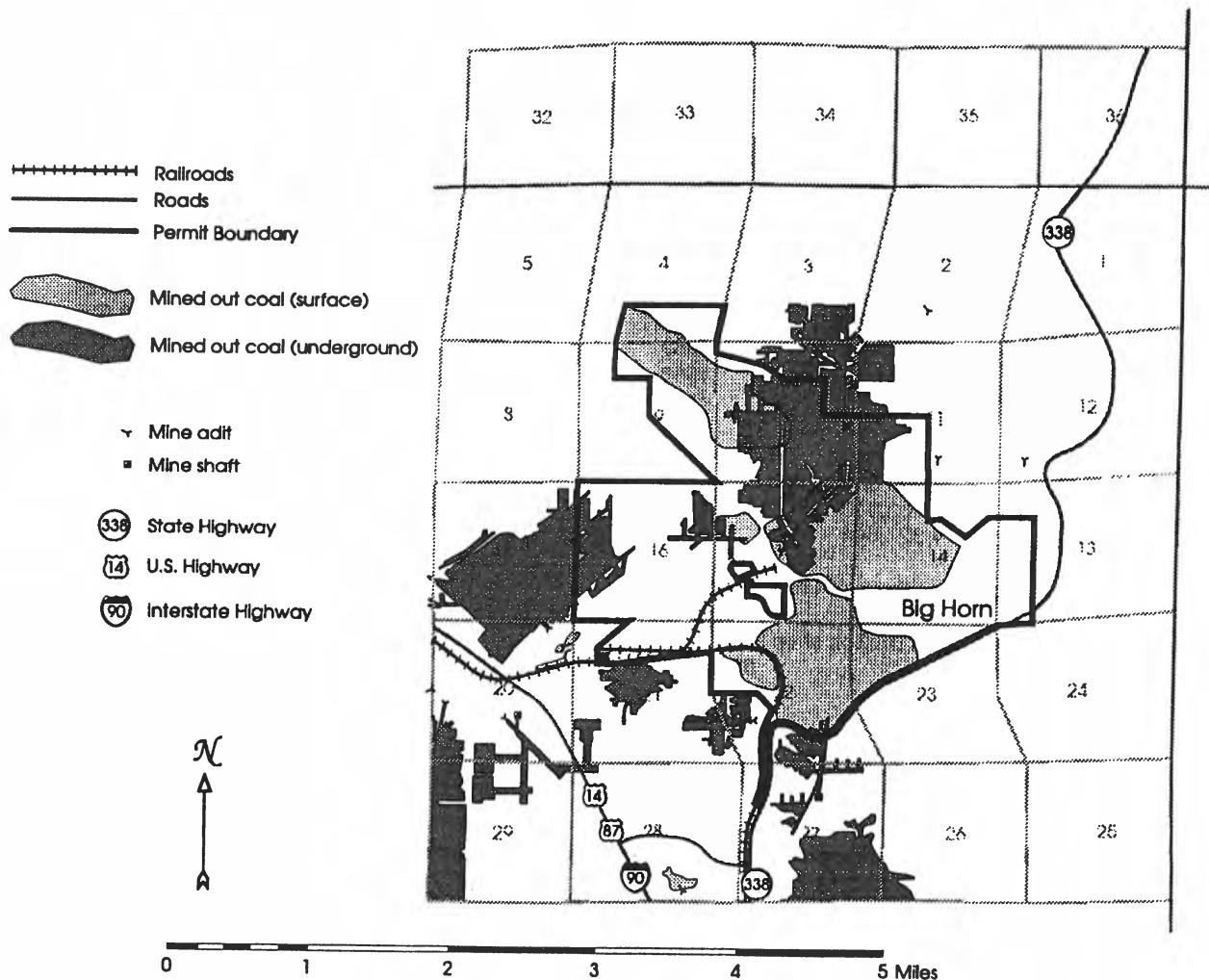
Big Horn

Operating Company: Big Horn Coal Company
 Owned By: Peter Kiewit and Sons
 Mailing Address:

Big Horn Coal Company
 P.O. Box 724
 Sheridan, WY 82801
 Telephone: (307) 674-6415
 Fax: (307) 674-8035
 URL: <http://www.kiewit.com/mining.htm>

Number of Employees in 1997: 14
 Mine Type: Surface (in reclamation)
 Acres permitted: 3,671
 1997 Coal Production: 44,202 short tons
 1998 Air Quality Capacity Limit: 4.6 million short tons

MINE LOCATION



Coal Field: Powder River
 County: Sheridan
 Rail Service: Unit train loadout served by Burlington Northern/Santa Fe.

1998 Directory of Coal Mines in Wyoming

Big Horn (cont.)

Geologic Information:

Overburden thickness: 60 to 275 feet (average thickness 130 feet).
 Seams Mined: Dietz #1 (average thickness 11 feet).
 Dietz #2 (average thickness 5 feet).
 Dietz #3 (average thickness 25 feet).
 Monarch (average thickness 26 feet).

Member: Tongue River.

Formation: Fort Union.

Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: truck-shovel.
 Coal Removal: truck-shovel.

Production History: (Start up year 1944 through end of 1997 in short tons)

| | | | | | |
|------|-----------|------|-----------|------|---------|
| 1997 | 44,202 | 1979 | 3,536,608 | 1961 | 334,218 |
| 1996 | 15,129 | 1978 | 2,844,958 | 1960 | 368,057 |
| 1995 | 37,472 | 1977 | 2,394,532 | 1959 | 370,063 |
| 1994 | 100,733 | 1976 | 739,385 | 1958 | 344,999 |
| 1993 | 120,000 | 1975 | 787,123 | 1957 | 378,140 |
| 1992 | 105,391 | 1974 | 997,274 | 1956 | 380,270 |
| 1991 | 158,055 | 1973 | 444,545 | 1955 | 398,010 |
| 1990 | 134,104 | 1972 | 953,611 | 1954 | 402,223 |
| 1989 | 106,147 | 1971 | 1,755,104 | 1953 | 435,024 |
| 1988 | 945,116 | 1970 | 1,442,565 | 1952 | 308,625 |
| 1987 | 1,201,093 | 1969 | 323,375 | 1951 | 323,012 |
| 1986 | 1,360,805 | 1968 | 194,750 | 1950 | 350,841 |
| 1985 | 2,400,000 | 1967 | 325,248 | 1949 | 425,663 |
| 1984 | 2,530,755 | 1966 | 306,507 | 1948 | 464,331 |
| 1983 | 2,946,680 | 1965 | 329,883 | 1947 | 551,429 |
| 1982 | 2,990,564 | 1964 | 412,761 | 1946 | 483,576 |
| 1981 | 2,753,913 | 1963 | 361,223 | 1945 | 264,723 |
| 1980 | 4,327,594 | 1962 | 341,196 | 1944 | 107,201 |

Total production through 1997: 47,458,806.

Recoverable Coal Reserves (million short tons)

| | |
|---------------------|------|
| Original Lease: | 58.3 |
| Mined tonnage: | 47.5 |
| Remaining Reserves: | 10.8 |

Estimated remaining life of mine: 0 years. (in reclamation)

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

none

FERC captured 0.0% of 1997 total production.

Black Thunder

Operating Company: Thunder Basin Coal Company
 Subsidiary of: Arch Western Resources, LLC.
 Owned By: Arch Coal, Inc..

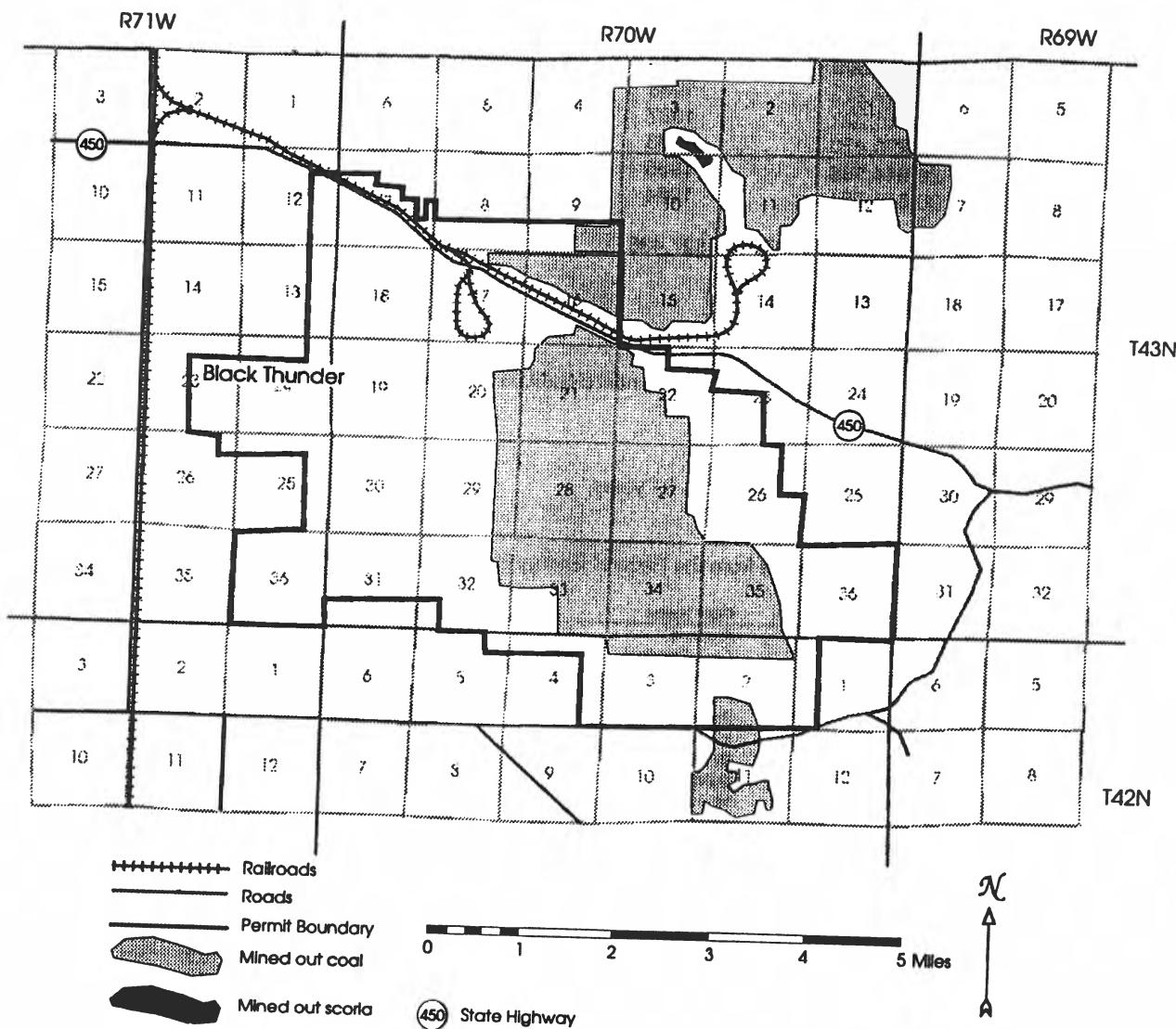
Mailing Address:

Thunder Basin Coal Company
 P.O. Box 406
 Wright, WY 82732
 Telephone: (307) 939-1300
 Fax: (307) 464-2313
 URL: <http://www.archcoal.com>

Number of Employees in 1997: 456
 Mine Type: Surface
 Acres permitted: 15,943
 1997 Coal Production: 37,669,516 short tons
 1998 Air Quality Capacity Limit: 55.0 million short tons

Note: Mine acquired June, 1998 by Arch Coal, Inc.,
 from ARCO Coal Company.

MINE LOCATION



Coal Field: Powder River

County: Campbell

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.

1998 Directory of Coal Mines in Wyoming

Buckskin

Operating Company: Triton Coal Company
Owned By: Zeigler Coal Company*

Mailing Address:

Buckskin Mine
P.O. Box 3027
Gillette, WY 82717-3027
Telephone: (307) 682-9144
Fax: (307) 686-5445

URL: http://www.zeigler-coal.com/prod_buckskin.htm

* Note: AEI Resources, Inc., on 8/3/98 signed a definitive merger agreement with Zeigler Coal Holding Company.

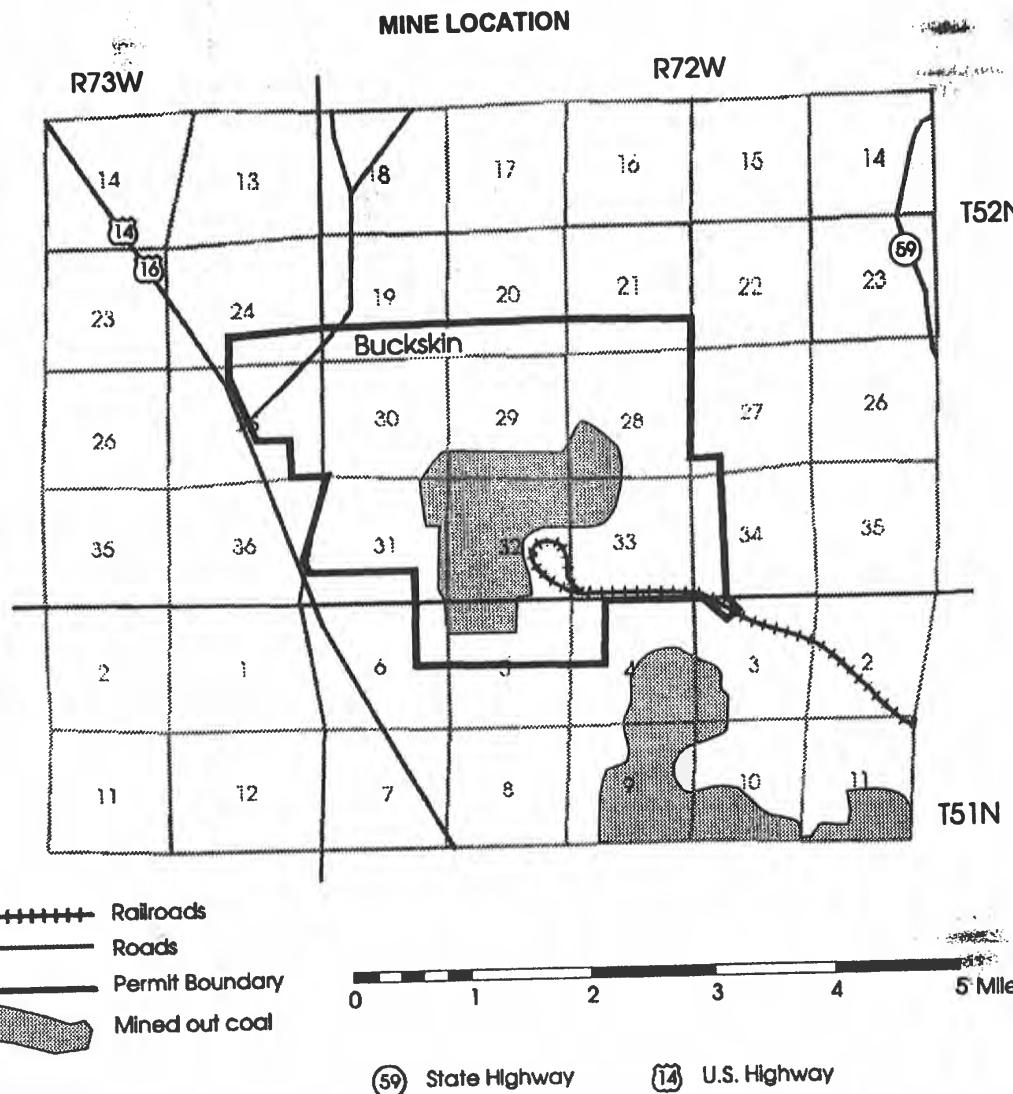
Number of Employees in 1997: 153

Mine Type: Surface

Acres permitted: 5,446

1997 Coal Production: 14,443,165 short tons

1998 Air Quality Capacity Limit: 24.0 million short tons



Coal Field: Powder River
County: Campbell
Rail Service: Unit train loadout served by Burlington Northern/Santa Fe.

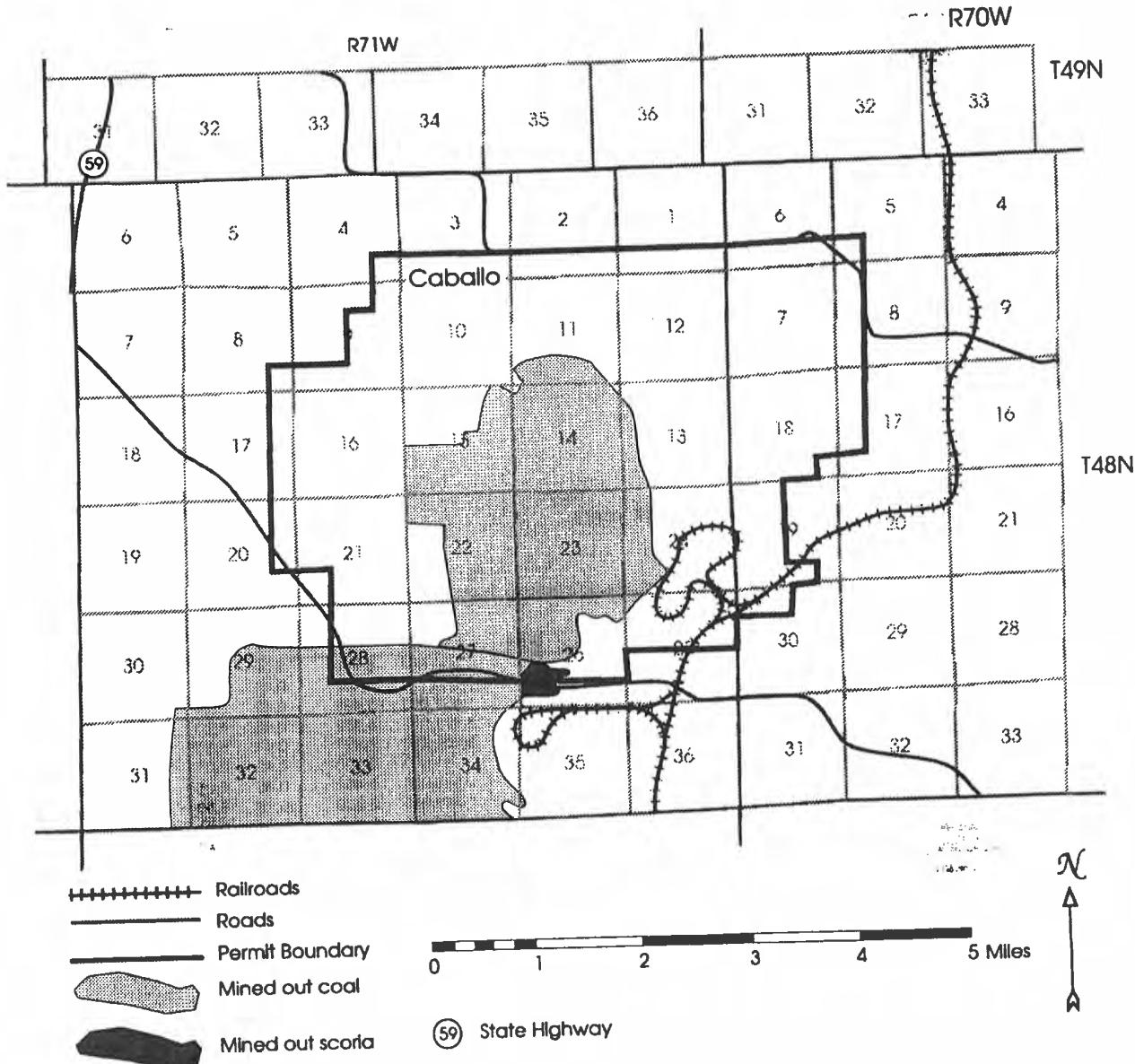
Caballo

Operating Company: Powder River Coal Company
 Subsidiary of: Peabody Coal Company
 Owned By: Lehman Brothers Merchant Banking Group
 Mailing Address:
 Caballo Coal Company
 Caller Box 3041
 Gillette, WY 82717-3041
 Telephone: (307) 686-1991
 Fax: (307) 682-2218
 URL: <http://www.peabodygroup.com/menupage.html> or <http://www.peabodygroup.com/PRCC/Default.htm>

Number of Employees in 1997: 238
 Mine Type: Surface
 Acres permitted: 12,093
 1997 Coal Production: 19,946,861 short tons
 1998 Air Quality Capacity Limit: 51.0 million short tons

Note: Mine acquired by Lehman Brothers in May, 1998
 from The Energy Group via Texas Utilities.

MINE LOCATION



Coal Field: Powder River

County: Campbell

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.

Coal Creek

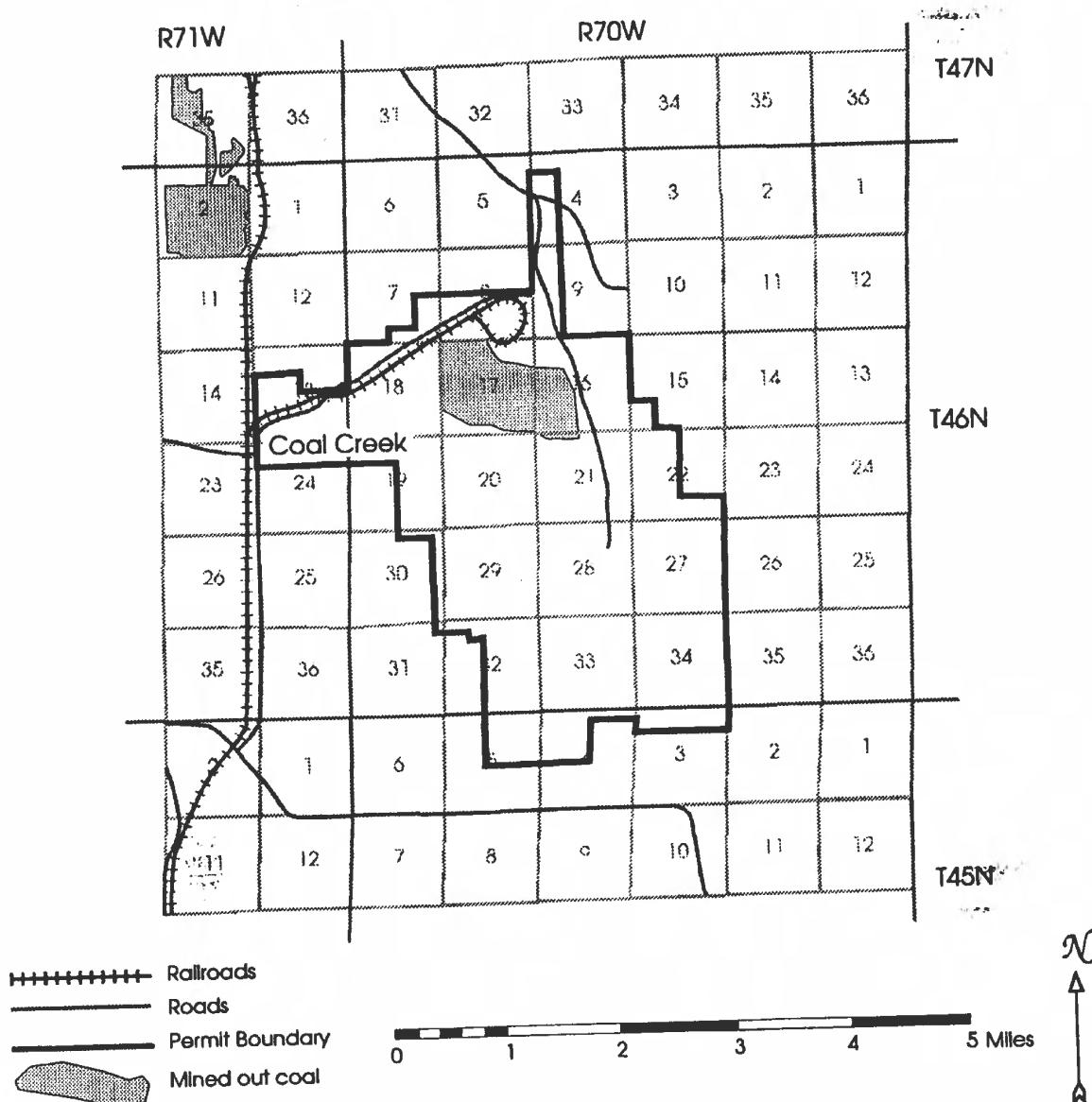
Operating Company: Fuller Construction Company
 Contractor Miner for: Arch Western Resources, LLC.
 Owned By: Arch Coal, Inc..

Mailing Address:
 Thunder Basin Coal Company
 P.O. Box 406
 Wright, WY 82732
 Telephone: (307) 939-1300
 Fax: (307) 464-2450
 URL: <http://www.archcoal.com>

Number of Employees in 1997: 57
 (53-Fuller Construction, 4-Thunder Basin Coal)
 Mine Type: Surface
 Acres permitted: 9,560
 1997 Coal Production: 2,921,242 short tons
 1998 Air Quality Capacity Limit: 18.0 million short tons

Note: Mine acquired June, 1998, by Arch Coal, Inc..
 from ARCO Coal Company.

MINE LOCATION



Coal Field: Powder River

County: Campbell

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.

Coal Creek (cont.)

1998 Directory of Coal Mines in Wyoming

Geologic Information:

Overburden thickness: 10 to 175 feet (average thickness 75 feet).
Seams Mined: Roland #1 (average thickness 23 feet).
 Roland #2 (average thickness 10 feet).
 Roland #3 (average thickness 10 feet).
 Roland #5 (average thickness 10 feet).
 Fort Union #1 (average thickness 10 feet).
 Anderson (average thickness 10 feet).

Coal Zone: Wyodak.

Member: Tongue River.

Formation: Fort Union.

Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: dozer and scraper (contractor).
Coal Removal: truck-shovel.

Production History: (Start up year 1982 through end of 1997 in short tons)

| | | | |
|------|-----------|------|-----------|
| 1997 | 2,921,242 | 1989 | 139,116 |
| 1996 | 5,804,419 | 1988 | 684,322 |
| 1995 | 4,199,587 | 1987 | 2,362,059 |
| 1994 | 2,532,859 | 1986 | 1,111,305 |
| 1993 | 110,488 | 1985 | 2,608,592 |
| 1992 | 152,760 | 1984 | 1,800,000 |
| 1991 | 151,165 | 1983 | 1,877,056 |
| 1990 | 140,250 | 1982 | 1,106,812 |

Total production through 1997: 27,702,032.

Recoverable Coal Reserves (million short tons)

| | |
|---------------------|-------|
| Original Lease: | 301.9 |
| Mined tonnage: | 27.7 |
| Remaining Reserves: | 274.2 |

Estimated remaining life of mine: 28 years.

Remaining life of mine at current permit capacity: 15 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | ¢/mmBtu | \$/ton |
|----|------------|-----------------------------|------------------|-------|-----------|-------|----------|-------|---------|--------|
| C | 01-Mar-98 | Kansas City Power and Light | La Cygne | KS | 566,000 | 8,354 | 0.34 | 5.40 | 69.92 | 11.68 |
| C | | Wisconsin Power and Light | Edgewater | WI | 987,295 | 8,358 | 0.34 | 5.56 | 128.23 | 21.43 |
| C | | Wisconsin Electric Power | Pleasant Prairie | WI | 972,200 | 8,363 | 0.35 | 5.68 | 81.44 | 13.62 |
| S | | Union Electric | Rush Island | MO | 409,000 | 8,820 | 0.33 | 5.00 | 89.92 | 15.86 |
| S | | Union Electric | Sioux | MO | 174,000 | 8,820 | 0.33 | 5.00 | 90.24 | 15.92 |
| S | | Omaha Public Power District | North Omaha | NE | 38,800 | 8,420 | 0.35 | 5.30 | 67.10 | 11.30 |
| | | | | | 3,147,295 | 8,445 | 0.34 | 5.46 | 95.46 | 16.11 |

FERC captured 107.7% of 1997 total production.

Cordero Rojo Complex

Operating Company: Cordero Mining Company

Subsidiary of: Kennecott Energy Company

Owned By: Rio Tinto, PLC.

Mailing Address:

Cordero Mining Company

P.O. Box 1449

Gillette, WY 82717-1449

Telephone: (307) 682-8005

Fax: (307) 686-5555

URL: <http://www.kenergy.com/cordero/cordero.html>

Number of Employees in 1997: 303

Mine Type: Surface

Acres permitted: 15,823

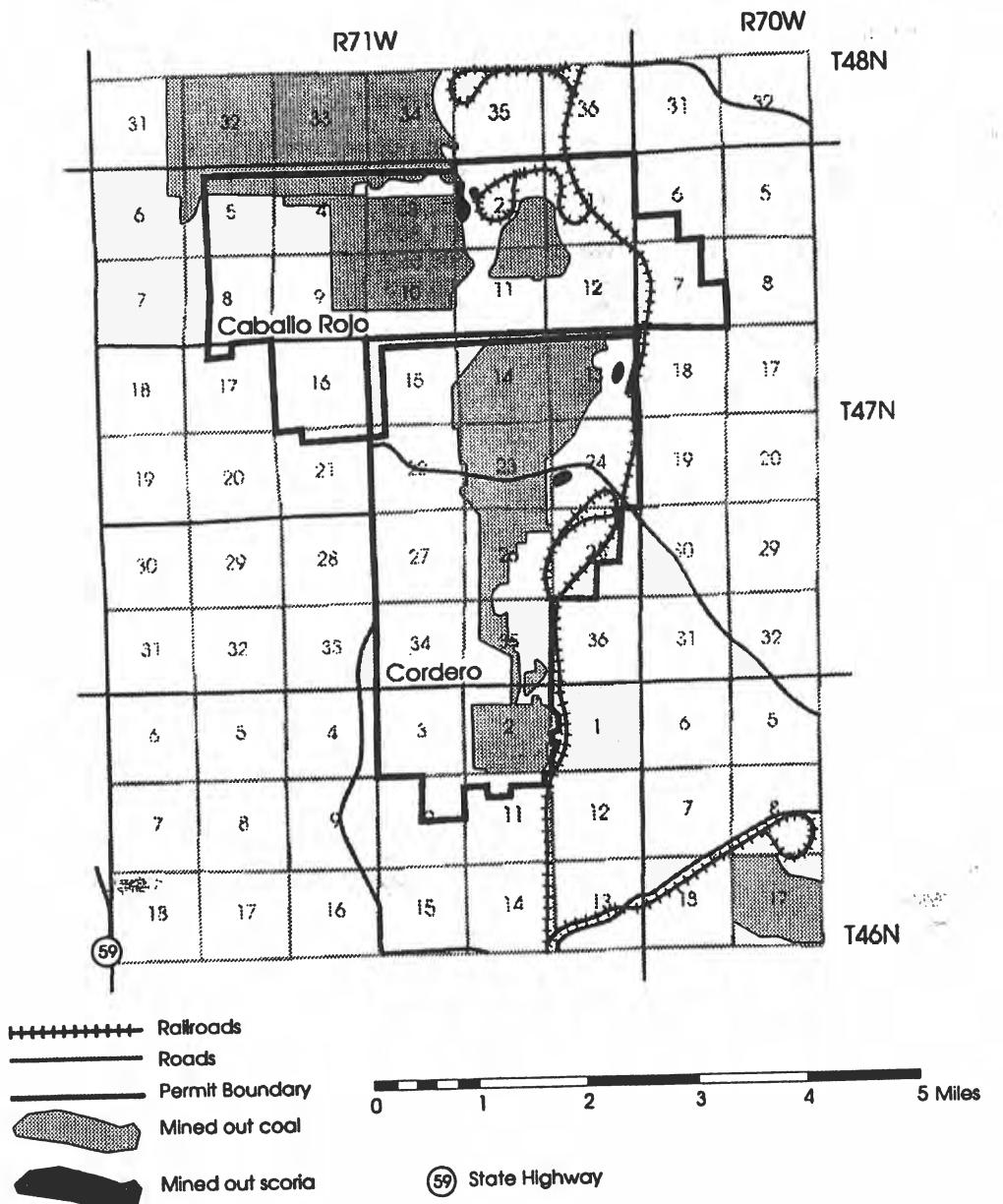
(Caballo Rojo: 7,524)

(Cordero: 8,299)

1997 Coal Production: 28,062,574 short tons

1998 Air Quality Capacity Limit: 60.0 million short tons

MINE LOCATION



Coal Field: Powder River

County: Campbell

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.

Cordero Rojo Complex (cont.)

1998 Directory of Coal Mines in Wyoming

Geologic Information:

Overburden thickness: 15 to 310 feet (average thickness 84 feet).

Seams Mined: Roland (average thickness 32 feet).

Anderson (average thickness 65 feet).

Coal Zone: Wyodak.

Member: Tongue River.

Formation: Fort Union.

Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: dragline and truck-shovel.

Coal Removal: truck-shovel.

Production History: (Start of combined reporting year 1997 in short tons for Cordero Rojo)

| | |
|------|------------|
| 1997 | 28,062,574 |
|------|------------|

Total production through 1997 for Cordero Rojo: 28,062,574.

Production History: (Start up year 1982 through end of 1996 in short tons for Caballo Rojo)

| | | | |
|------|------------|------|-----------|
| 1996 | 15,082,891 | 1988 | 7,126,693 |
| 1995 | 16,809,540 | 1987 | 6,489,799 |
| 1994 | 16,611,485 | 1986 | 3,989,622 |
| 1993 | 8,023,000 | 1985 | 4,221,574 |
| 1992 | 7,598,978 | 1984 | 3,446,221 |
| 1991 | 9,383,108 | 1983 | 1,440,000 |
| 1990 | 8,566,831 | 1982 | 47,063 |
| 1989 | 8,368,787 | | |

Total production through 1996 for Caballo Rojo: 117,205,592.

Production History: (Start up year 1976 through end of 1996 in short tons for Cordero)

| | | | | | |
|------|------------|------|------------|------|-----------|
| 1996 | 13,071,242 | 1989 | 12,602,336 | 1982 | 7,719,367 |
| 1995 | 14,607,000 | 1988 | 13,541,225 | 1981 | 8,312,578 |
| 1994 | 16,413,646 | 1987 | 11,943,375 | 1980 | 6,562,802 |
| 1993 | 12,988,628 | 1986 | 11,314,275 | 1979 | 3,832,800 |
| 1992 | 13,308,010 | 1985 | 10,085,299 | 1978 | 2,886,593 |
| 1991 | 13,703,094 | 1984 | 10,391,218 | 1977 | 2,138,884 |
| 1990 | 12,922,653 | 1983 | 10,024,803 | 1976 | 10,338 |

Total production through 1996 for Cordero: 208,380,166.

Total production through 1997 for Cordero Rojo Complex: 353,648,332.

Recoverable Coal Reserves (million short tons)

Original Leases: 1,003.7 Caballo Rojo and Cordero mines combined

Mined tonnage: 353.6

Remaining Reserves: 650.1

Estimated remaining life of mine: 18 years.

Remaining life of mine at current permit capacity: 11 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|-------------------------------------|------------|--------------------|-----------------|-------|-----------|-------|----------|-------|----------|--------|
| Caballo Rojo | | | | | | | | | | |
| C | 01-Dec-97 | MidAmerican Energy | George Neal 1-4 | IA | 1,536,000 | 8,445 | 0.32 | 5.33 | 65.89 | 11.13 |
| C | 01-Dec-97 | MidAmerican Energy | Louisa | IA | 87,000 | 8,451 | 0.34 | 5.25 | 85.86 | 14.51 |
| C | 01-Dec-97 | MidAmerican Energy | Riverside | IA | 381,000 | 8,447 | 0.33 | 5.41 | 93.26 | 15.76 |
| C | | Electric Energy | Joppa | IL | 600,700 | 8,434 | 0.33 | 5.23 | 88.76 | 14.97 |
| Cordero Rojo Complex (cont.) | | | | | | | | | | |

1998 Directory of Coal Mines in Wyoming

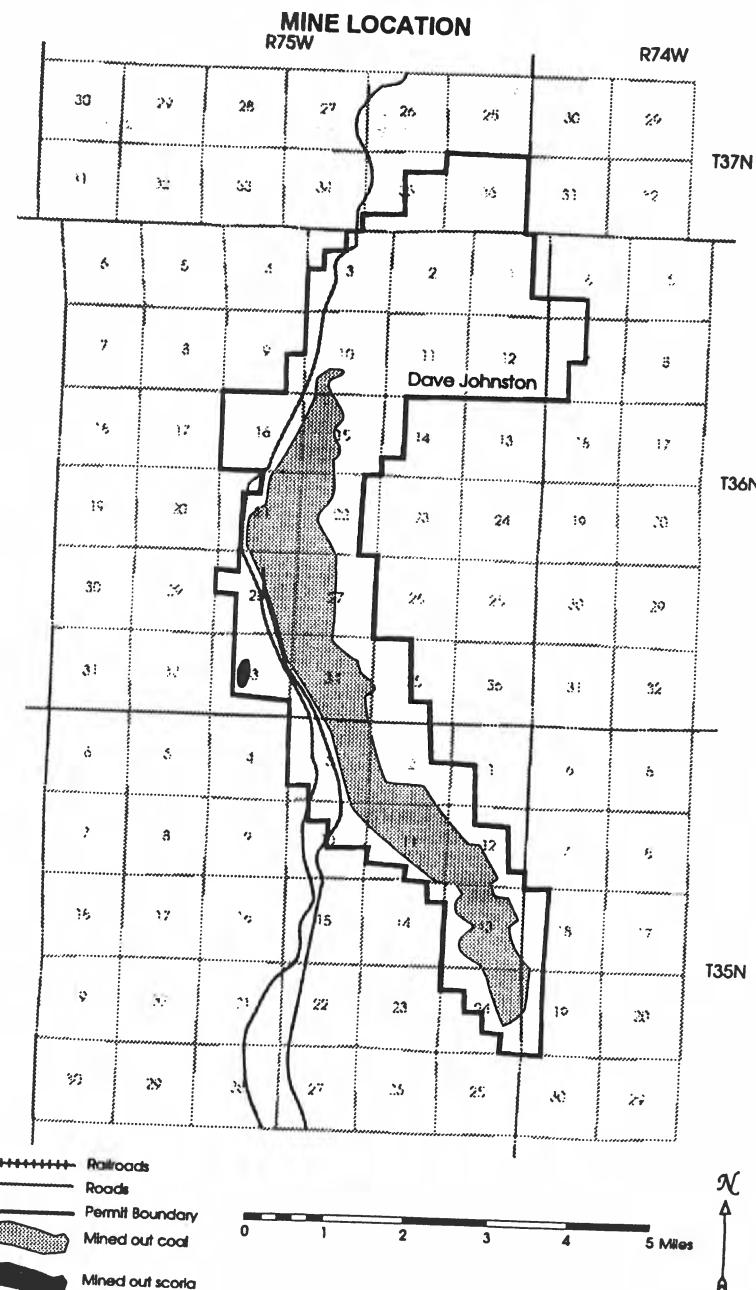
Dave Johnston

Operating Company: Glenrock Coal Company
 Owned By: PacifiCorp
 Mailing Address:

Glenrock Coal Company
 1026 55 Ranch Road
 Glenrock, WY 82637

Telephone: (307) 436-2746
 Fax: (307) 436-8436
 URL: <http://www.pacificorp.com/about/gen/mining.html>

Number of Employees in 1997: 188
 Mine Type: Surface
 Acres permitted: 13,588
 1997 Coal Production: 4,180,407 short tons
 1998 Air Quality Capacity Limit: 4.2 million short tons



Coal Field: Powder River

County: Converse

Rail Service: Unit train loadout served by Pacific Power & Light (private).

1998 Directory of Coal Mines in Wyoming

Dave Johnston (cont.)

Geologic Information:

Overburden thickness: 73 to 128 feet (average thickness 130 feet).

Seams Mined: Badger (average thickness 17 feet).

School (average thickness 32 feet).

Formation: Wasatch.

Age: Tertiary/Eocene.

Mining Method:

Overburden Removal: dragline and truck-shovel.

Coal Removal: truck-shovel.

Production History: (Start up year 1958 through end of 1997 in short tons)

| | | | | | |
|------|-----------|------|-----------|------|-----------|
| 1997 | 4,180,407 | 1983 | 2,684,011 | 1969 | 1,498,664 |
| 1996 | 3,792,706 | 1982 | 3,351,065 | 1968 | 1,387,630 |
| 1995 | 3,268,961 | 1981 | 3,626,932 | 1967 | 1,412,186 |
| 1994 | 3,159,725 | 1980 | 3,803,932 | 1966 | 1,562,157 |
| 1993 | 2,902,306 | 1979 | 3,828,162 | 1965 | 1,248,692 |
| 1992 | 2,783,077 | 1978 | 3,358,899 | 1964 | 999,279 |
| 1991 | 2,776,349 | 1977 | 3,236,616 | 1963 | 1,022,430 |
| 1990 | 2,679,028 | 1976 | 2,714,326 | 1962 | 759,628 |
| 1989 | 2,575,184 | 1975 | 3,231,649 | 1961 | 821,437 |
| 1988 | 2,607,442 | 1974 | 2,687,045 | 1960 | 520,233 |
| 1987 | 2,546,808 | 1973 | 2,897,383 | 1959 | 465,492 |
| 1986 | 3,051,331 | 1972 | 2,620,350 | 1958 | 29,341 |
| 1985 | 3,508,059 | 1971 | 1,730,058 | | |
| 1984 | 3,338,677 | 1970 | 1,842,099 | | |

Total production through 1997: 96,509,756.

Recoverable Coal Reserves (million short tons)

Original Lease: 153.6

Mined tonnage: 96.5

Remaining Reserves: 57.1

Estimated remaining life of mine: 2 years.

Remaining life of mine at current permit capacity: 14 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | ¢/mmBtu | \$/ton |
|----|------------|--------------|---------------|-------|-----------|-------|----------|-------|---------|--------|
| C | | PacifiCorp | Dave Johnston | WY | 4,142,000 | 7,859 | 0.49 | 8.75 | 53.73 | 8.44 |

FERC captured 99.1% of 1997 total production.

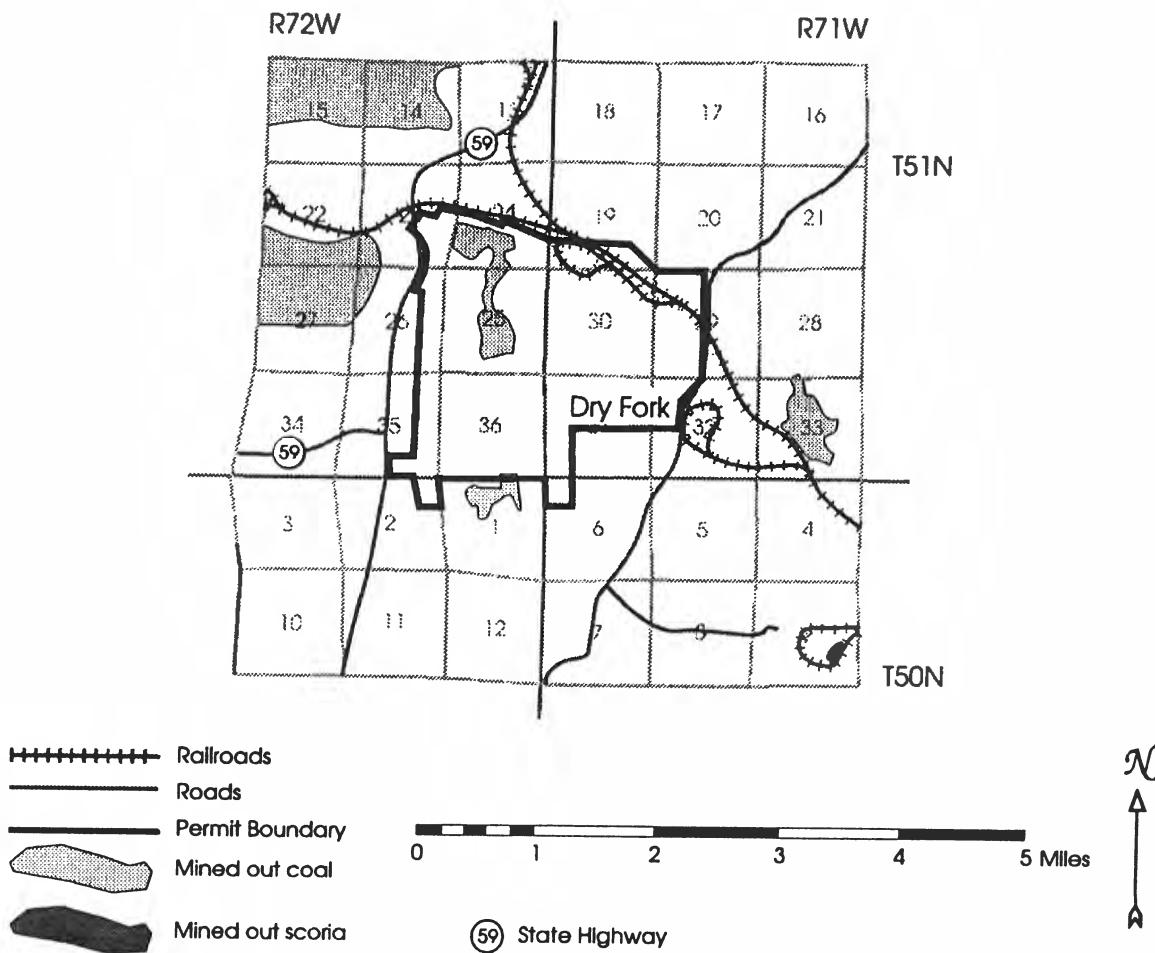
Dry Fork

Operating Company: Dry Fork Coal Company
 Owned By: Phillips/Western Fuels Association
 Mailing Address:

Dry Fork Coal Company
 P.O. Box 1809
 Gillette, WY 82717
 Telephone: (307) 682-0213
 URL: <http://www.westernfuels.org/aboutfr.htm>

Number of Employees in 1997: 8
 Mine Type: Surface
 Acres permitted: 3,798
 1997 Coal Production: 918,224 short tons
 1998 Air Quality Capacity Limit: 15.0 million short tons

MINE LOCATION



Coal Field: Powder River
 County: Campbell
 Rail Service: Unit train loadout served by Burlington Northern/Santa Fe.

Dry Fork (cont.)

1998 Directory of Coal Mines in Wyoming

Geologic Information:

Overburden thickness: 10 to 210 feet (average thickness 95 feet).

Seams Mined: Roland (average thickness 27 feet).

Smith (average thickness 60 feet).

Coal Zone: Wyodak.

Member: Tongue River.

Formation: Fort Union.

Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: truck-shovel.

Coal Removal: truck-shovel.

Production History: (Start up year 1990 through end of 1997 in short tons)

| | |
|------|-----------|
| 1997 | 918,224 |
| 1996 | 2,945,662 |
| 1995 | 3,603,453 |
| 1994 | 3,836,228 |
| 1993 | 3,277,794 |
| 1992 | 3,440,668 |
| 1991 | 2,796,061 |
| 1990 | 815,056 |

Total production through 1997: 21,633,146.

Recoverable Coal Reserves (million short tons)

Original Lease: 247.5

Additions: 117.0 Acquired portion of Clovis Point reserves (1997)

Mined tonnage: 21.6

Remaining Reserves: 342.9

Estimated remaining life of mine: 34 years.

Remaining life of mine at current permit capacity: 23 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|----------------------------------|-------------------|-------|----------|-------|----------|-------|----------|--------|
| C | | Kansas City Bd. Public Utilities | Nearman Creek | KS | 345,900 | 8,241 | 0.38 | 4.90 | 78.99 | 13.02 |
| C | | Basin Electric Power Coop. | Laramie River 1-3 | WY | 547,700 | 8,243 | 0.45 | 5.14 | 53.04 | 8.74 |
| S | | Omaha Public Power District | Nebraska City | NE | 24,600 | 8,014 | 0.33 | 4.60 | 68.60 | 11.00 |
| | | | | | 918,200 | 8,236 | 0.42 | 5.04 | 63.23 | 10.41 |

FERC captured 100.0% of 1997 total production.

Eagle Butte

Operating Company: Cyprus-AMAX Coal West

Owned By: Cyprus-AMAX Corporation

Mailing Address:

Amax Coal West, Inc.

P.O. Box 3040

Gillette, WY 82717-3040

Telephone: (307) 687-3300

Fax: (307) 687-3370

URL: <http://www.cyprusamax.com>

Number of Employees in 1997: 188

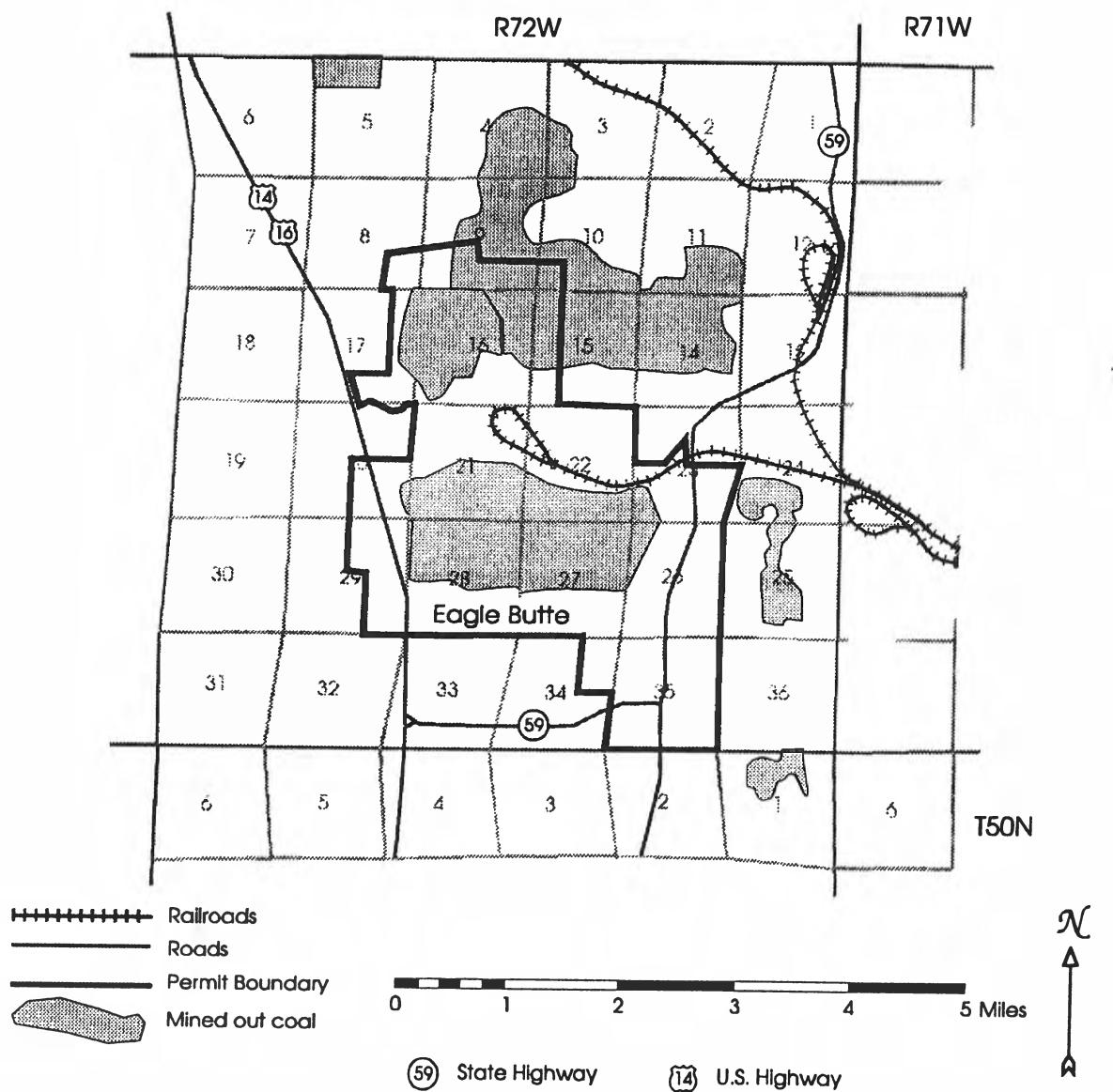
Mine Type: Surface

Acres permitted: 5,717

1997 Coal Production: 17,921,000 short tons

1998 Air Quality Capacity Limit: 35.0 million short tons

MINE LOCATION



Coal Field: Powder River

County: Campbell

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe.

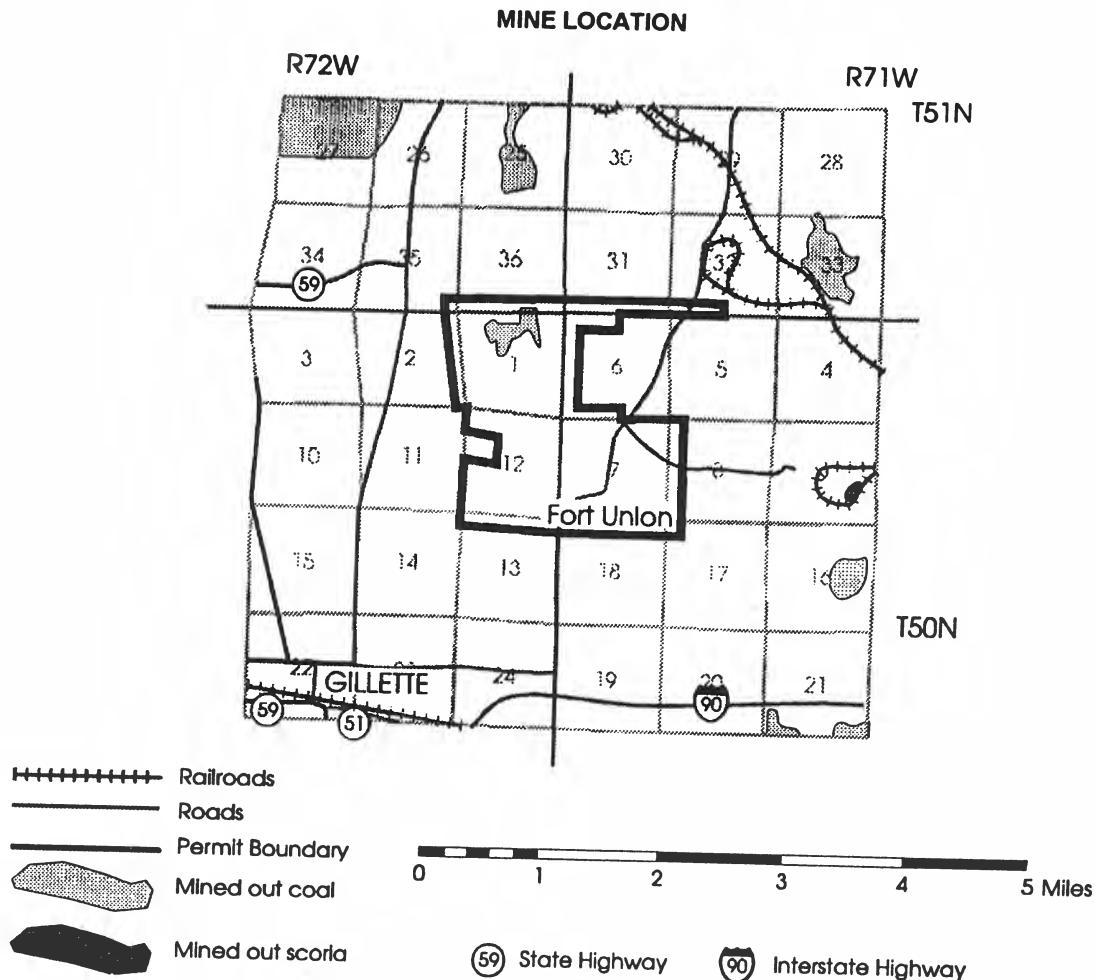
Eagle Butte (cont.)

Fort Union

Operating Company: Wyoming Coal Resources
 Subsidiary of: Kennecott Energy Company
 Owned By: Rio Tinto, PLC
 Mailing Address:

Wyoming Coal Resources
 P.O. Box 1449
 Gillette, WY 82717-1449
 Telephone: (307) 682-7999
 Fax: (307) 682-9492
 URL: <http://www.kenergy.com/kennecott.html>

Number of Employees in 1997: 11
 Mine Type: Surface
 Acres permitted: 2,500
 1997 Coal Production: 591,210 short tons
 1998 Air Quality Capacity Limit: 9.4 million short tons



Coal Field: Powder River
 County: Campbell
 Rail Service: Unit train loadout served by Burlington Northern/Santa Fe.

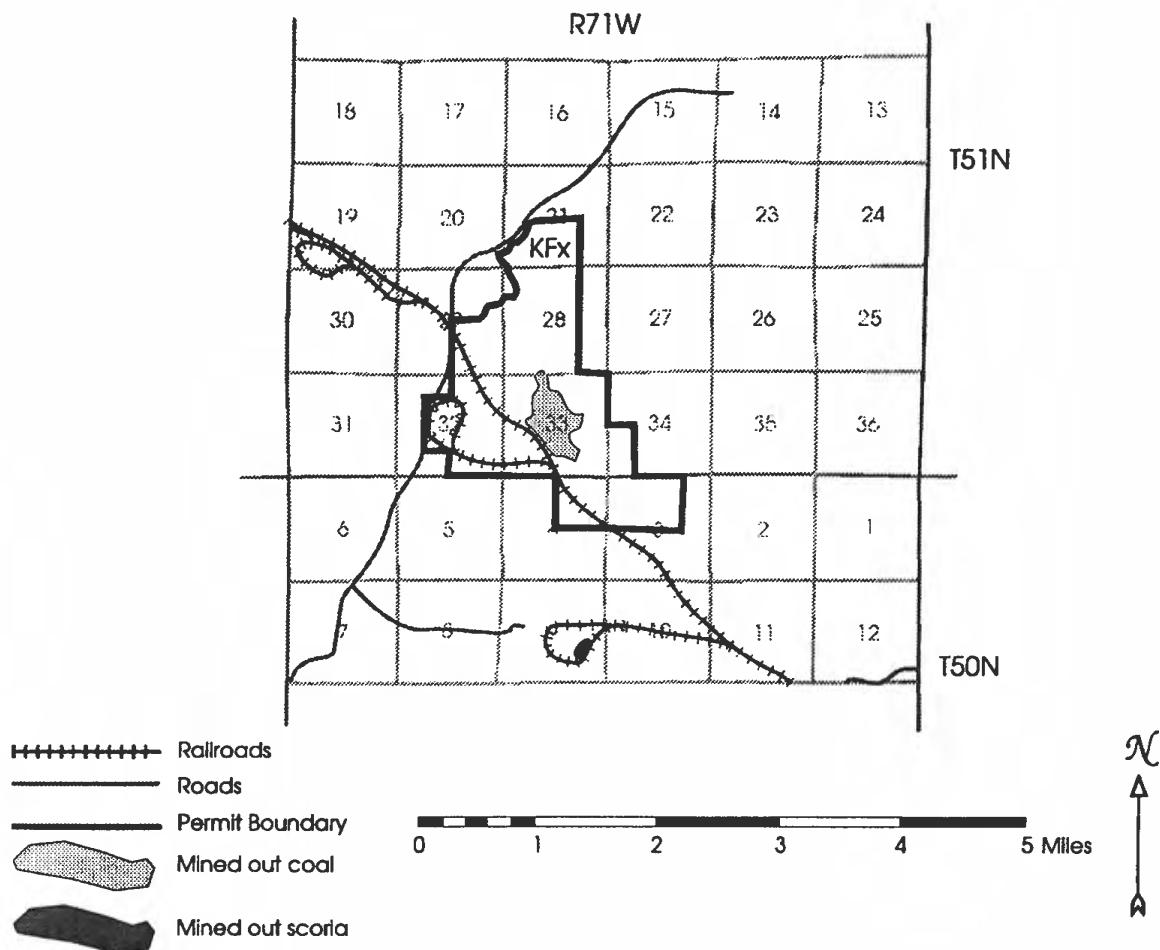
Fort Union (cont.)

KFx

Operating Company: KFx Wyoming, Inc.
 Owned By: Kennecott Energy/KFx Fuels, Inc.
 Mailing Address:
 KFx Wyoming, Inc.
 P.O. Box 2049
 Gillette, WY 82717-2049
 Telephone: (307) 687-0903
 Fax: (307) 687-2009
 URL: <http://www.kfx.com>

Number of Employees in 1997: 6
 Mine Type: Surface
 Acres permitted: 2,327
 1997 Coal Production: 9,788 short tons
 1998 Air Quality Capacity Limit: (see Fort Union mine)

MINE LOCATION



Coal Field: Powder River
 County: Campbell
 Rail Service: Unit train loadout served by Burlington Northern/Santa Fe.

KFx (cont.)

1998 Directory of Coal Mines in Wyoming

Geologic Information:

Overburden thickness: 20 to 120 feet (average thickness 80 feet).

Seams Mined: Roland (average thickness 27 feet).

Smith (average thickness 55 feet).

Coal Zone: Wyodak.

Member: Tongue River.

Formation: Fort Union.

Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: truck-shovel.

Coal Removal: truck-shovel and overland conveyor.

Plant: coal captive to KFx coal upgrade fuel plant. Quality estimate follows.

Capacity: 500,000 tons/year.

Fixed Carbon: 41.01%

Btu/lb: 11,703

% Sulfur: 0.36

% Ash: 6.98

% Moisture: 0.0

Production History: (Start up year 1996 through end of 1997 in short tons)

| | |
|------|-------|
| 1997 | 9,788 |
|------|-------|

Total production through 1997: 9,788. Note: before 1997 mine lease held by Fort Union.

Recoverable Coal Reserves (million short tons)

(see Fort Union Mine)

Estimated remaining life of mine: 20 years.

Remaining life of mine at current permit capacity: (see Fort Union Mine).

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

none

FERC captured 0.0% of 1997 total production.

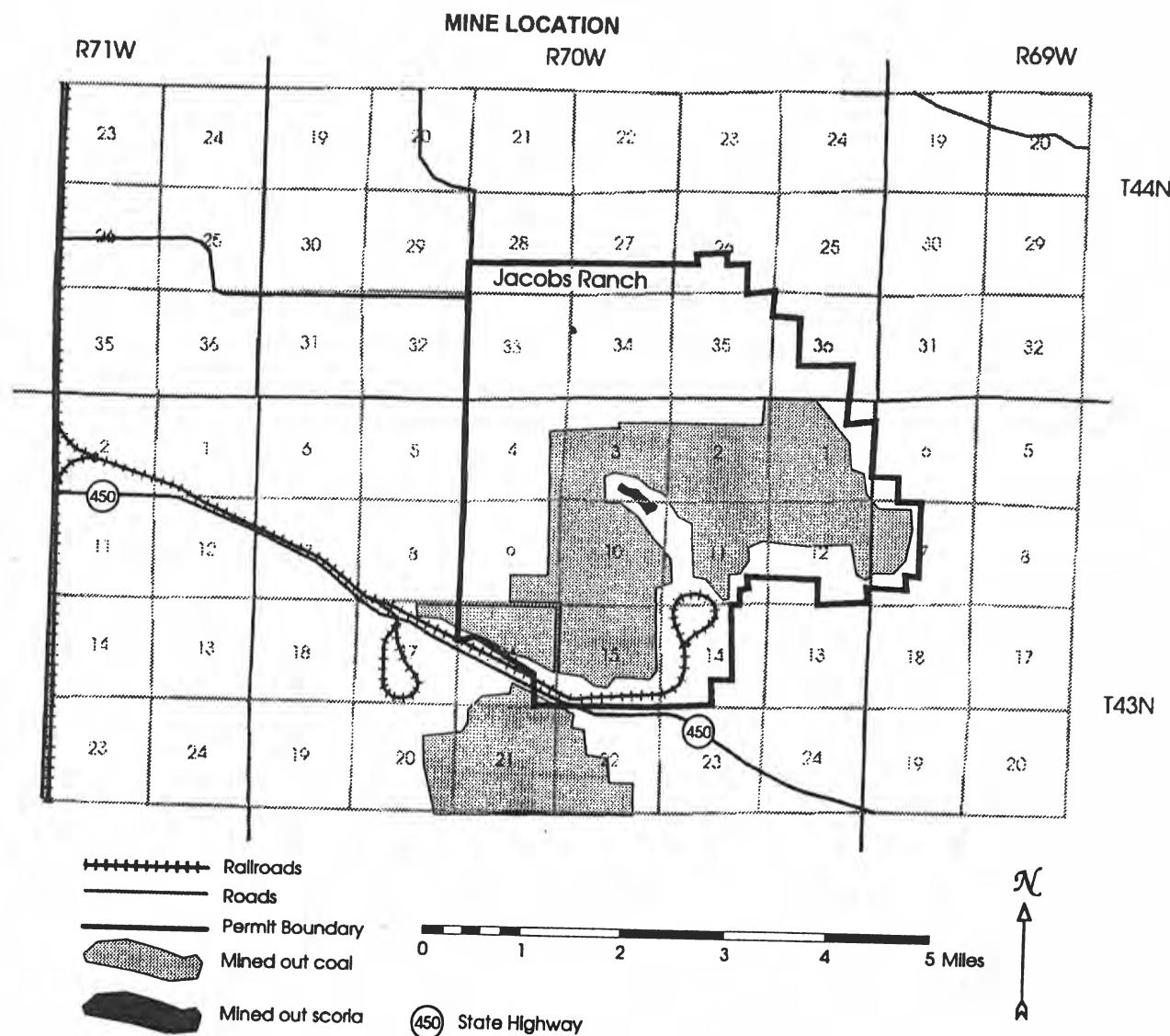
Jacobs Ranch

Operating Company: Jacobs Ranch Mining Company
 Subsidiary of: Kennecott Energy Company
 Owned By: Rio Tinto, PLC
 Mailing Address:

Jacobs Ranch Mining Company
 P.O. Box 3013
 Gillette, WY 82717-3013
 Telephone: (307) 682-0002
 Fax: (307) 682-6579
 URL: <http://www.kenergy.com/kennecott.html>

Number of Employees in 1997: 372
 Mine Type: Surface
 Acres permitted: 9,198
 1997 Coal Production: 27,112,931 short tons
 1998 Air Quality Capacity Limit: 35.0 million short tons

Note: Acquired by Kennecott Energy June, 1998
 from Kerr-McGee Corporation.



Coal Field: Powder River

County: Campbell

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.

1998 Directory of Coal Mines in Wyoming

Jacobs Ranch (cont.)

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|----------------------------------|-----------------|-------|------------|-------|----------|-------|----------|--------|
| S | | Georgia Power (Southern Co.) | Scherer | GA | 3,788,000 | 8,720 | 0.44 | 5.51 | 151.59 | 26.44 |
| S | | Georgia Power (Southern Co.) | Wansley | GA | 81,200 | 8,732 | 0.42 | 5.71 | 138.30 | 24.15 |
| S | 01-Oct-97 | MidAmerican Energy | Council Bluffs | IA | 61,000 | 8,730 | 0.46 | 5.50 | 56.80 | 9.92 |
| S | | Tennessee Valley Authority | Cora Terminal | IL | 143,480 | 8,700 | 0.52 | 6.91 | 83.74 | 14.57 |
| S | | Commonwealth Edison | Crawford | IL | 2,000 | 8,722 | 0.55 | 5.60 | 128.40 | 22.40 |
| S | | Commonwealth Edison | Fisk | IL | 12,000 | 8,722 | 0.55 | 5.60 | 128.40 | 22.40 |
| S | | Commonwealth Edison | Joliet | IL | 180,000 | 8,721 | 0.58 | 6.00 | 98.90 | 17.25 |
| S | | Commonwealth Edison | Powerton | IL | 120,000 | 8,767 | 0.55 | 5.70 | 96.00 | 16.83 |
| S | | Commonwealth Edison | Waukegan | IL | 383,000 | 8,742 | 0.57 | 5.75 | 99.24 | 17.34 |
| S | | Commonwealth Edison | Will County | IL | 83,100 | 8,767 | 0.55 | 5.70 | 86.15 | 15.11 |
| S | | Northern Indiana Public Service | Mitchell | IN | 12,000 | 8,715 | 0.50 | 6.20 | 109.80 | 19.14 |
| S | | Northern Indiana Public Service | Rollin Schahfer | IN | 158,200 | 8,720 | 0.46 | 5.81 | 108.90 | 18.99 |
| S | | Tennessee Valley Authority | BRT Terminal | KY | 478,720 | 8,700 | 0.52 | 6.90 | 92.95 | 16.17 |
| S | | Tennessee Valley Authority | Shawnee | KY | 73,370 | 8,700 | 0.52 | 6.77 | 92.24 | 16.05 |
| S | | Consumers Power | J. C. Weadock | MI | 37,400 | 8,738 | 0.47 | 5.60 | 113.50 | 19.84 |
| S | | Consumers Power | J. H. Campbell | MI | 109,600 | 8,742 | 0.48 | 5.65 | 110.49 | 19.32 |
| S | | Mississippi Power (Southern Co.) | Watson | MS | 285,430 | 8,677 | 0.46 | 5.69 | 133.81 | 23.22 |
| S | | Omaha Public Power District | Nebraska City | NE | 632,700 | 8,696 | 0.46 | 5.40 | 67.98 | 11.82 |
| S | | Omaha Public Power District | North Omaha | NE | 988,900 | 8,732 | 0.54 | 5.77 | 68.55 | 11.97 |
| S | | Central Power and Light (CSW) | Coleto Creek | TX | 252,375 | 8,713 | 0.47 | 5.12 | 134.38 | 23.41 |
| S | | Houston Lighting and Power | Limestone | TX | 22,500 | 8,689 | 0.44 | 5.37 | 137.70 | 23.93 |
| S | | Southwestern Electric Power(CSW) | Welsh Station | TX | 384,000 | 8,726 | 0.44 | 5.45 | 133.63 | 23.32 |
| S | | Wisconsin Power and Light | Edgewater | WI | 480,219 | 8,710 | 0.45 | 5.55 | 107.24 | 18.68 |
| S | | Wisconsin Public Service Corp. | Pulliam | WI | 55,000 | 8,760 | 0.41 | 5.40 | 90.20 | 15.80 |
| | | | | | 24,636,466 | 8,712 | 0.48 | 5.61 | 153.00 | 26.66 |

FERC captured 90.9% of 1997 total production.

North Antelope

Operating Company: Powder River Coal Company
 Subsidiary of: Peabody Coal Company
 Owned By: Lehman Brothers Merchant Banking Group

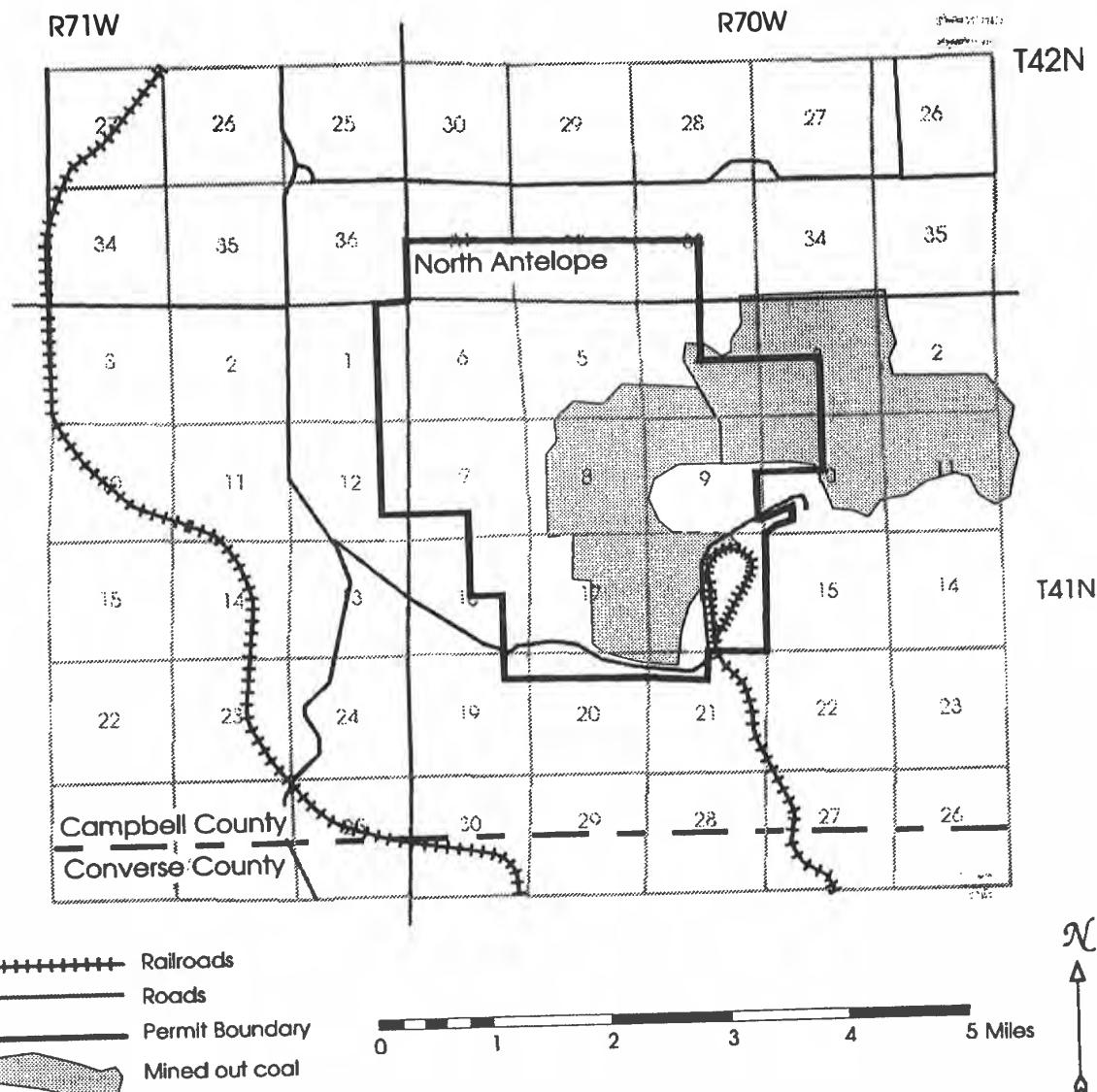
Mailing Address:

North Antelope Mine
 Caller Box 3032
 Gillette, WY 82717-3032
 Telephone: (307) 464-4800
 Fax: (307) 464-4839
 URL: <http://www.peabodygroup.com/menupage.html> or <http://www.peabodygroup.com/PRCC/Default.htm>

Number of Employees in 1997: 250
 Mine Type: Surface
 Acres permitted: 3,541
 1997 Coal Production: 34,978,455 short tons
 1998 Air Quality Capacity Limit: 35.0 million short tons

Note: Mine acquired by Lehman Brothers in May, 1998
 from The Energy Group via Texas Utilities.

MINE LOCATION



Coal Field: Powder River

County: Campbell

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.

North Antelope (cont.)

North Rochelle

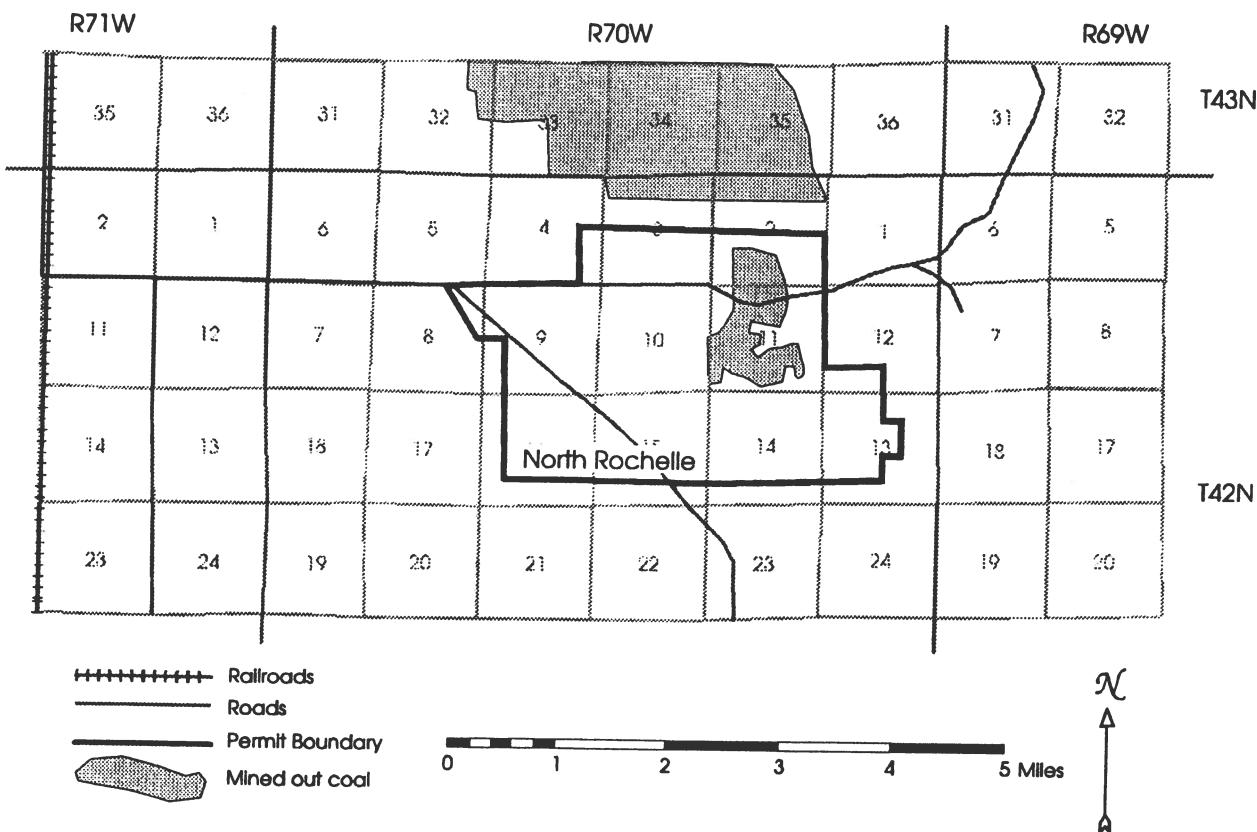
Operating Company: Triton Coal Company
 Owned By: Zeigler Coal Holding Company*
 Mailing Address:

Triton Coal Company
 510 Reno Road
 Gillette, WY 82717
 Telephone: (307) 464-0533
 Fax: (307) 464-0536
 URL: http://www.zeigler-coal.com/prod_n_roche.htm

Number of Employees in 1997: 6
 Mine Type: Surface (under construction)
 Acres permitted: 4,587
 1997 Coal Production: 185 short tons
 1998 Air Quality Capacity Limit: 20.0 million short tons

* Note: AEI Resources, Inc.. on 8/3/98 signed a definitive merger agreement with Zeigler Coal Holding Company.

MINE LOCATION



Coal Field: Powder River
 County: Campbell
 Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.

1998 Directory of Coal Mines in Wyoming

North Rochelle (cont.)

Geologic Information:

Overburden thickness: 110 to 290 feet (average thickness 207 feet).
Seams Mined: Wyodak-Anderson (average thickness 60 feet).
Coal Zone: Wyodak.
Member: Tongue River.
Formation: Fort Union.
Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: truck-shovel.
Coal Removal: truck-shovel.

Production History: (Start up year 1990 through end of 1997 in short tons)

| | |
|------|---------|
| 1997 | 185 |
| 1996 | 380,521 |
| 1995 | 677,409 |
| 1994 | 220,909 |
| 1993 | 21,775 |
| 1992 | 24,085 |
| 1991 | 25,765 |
| 1990 | 13,000 |

Total production through 1997: 1,363,649.

Recoverable Coal Reserves (million short tons)

| | |
|---------------------|-------|
| Original Lease: | 185.0 |
| Addition: | 157.6 |
| Mined tonnage: | 1.4 |
| Remaining Reserves: | 341.2 |

North Rochelle LBA (9/26/97)

Estimated remaining life of mine: 23 years.

Remaining life of mine at current permit capacity: 17 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|--------------|---------------|-------|----------|-------|----------|-------|----------|--------|
| C | | PacifiCorp | Dave Johnston | WY | 107,000 | 8,601 | 0.25 | 4.60 | 72.45 | 12.46 |

1998 Directory of Coal Mines in Wyoming

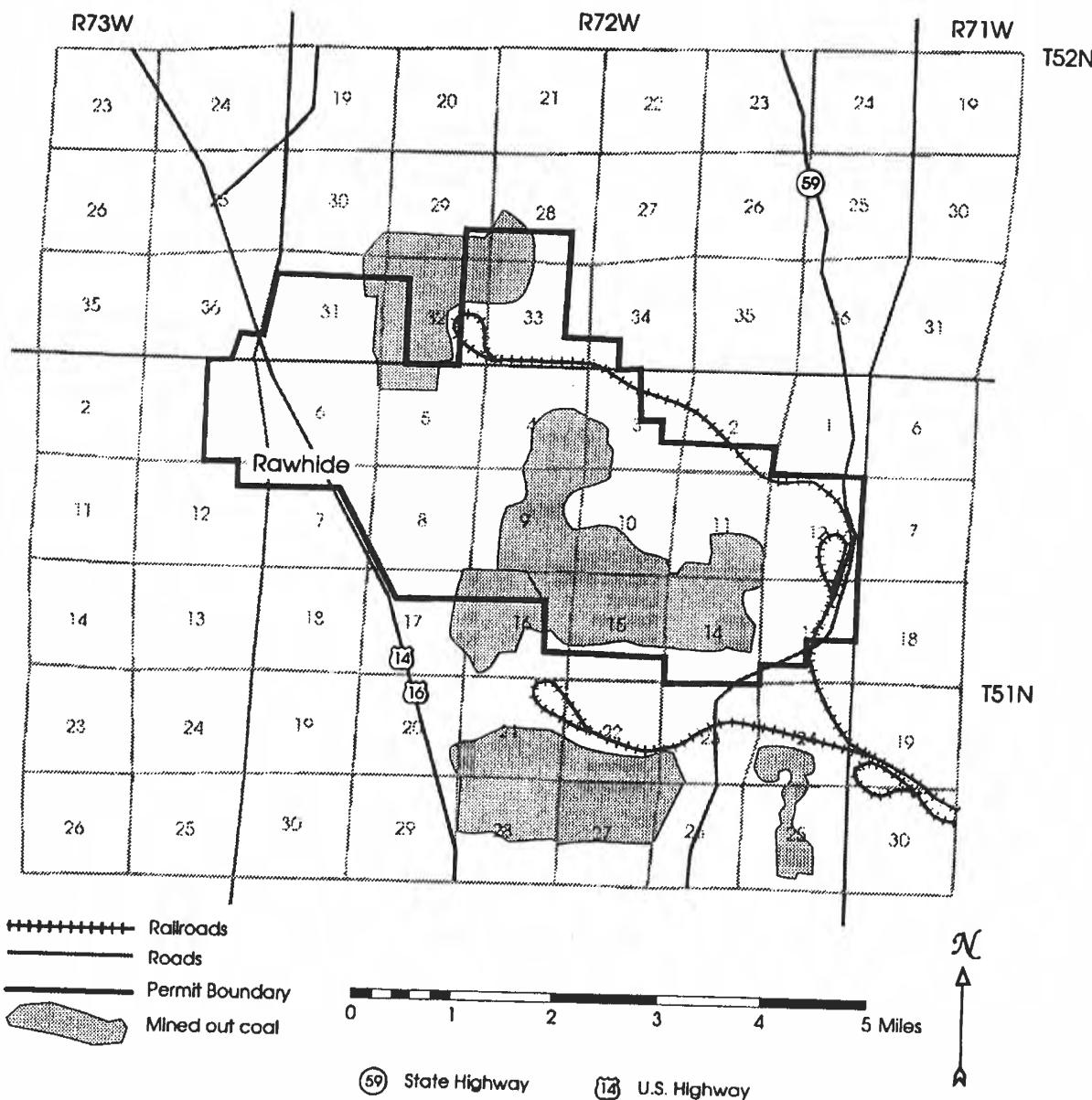
Rawhide

Operating Company: Powder River Coal Company
Subsidiary of: Peabody Coal Company
Owned By: Lehman Brothers Merchant Banking Group
Mailing Address:
 Rawhide Mine
 Caller Box 3042
 Gillette, WY 82717-3042
 Telephone: (307) 682-8081
 Fax: (307) 682-4705
 URL: <http://www.peabodygroup.com/menupage.html> or <http://www.peabodygroup.com/PRCC/Default.htm>

Number of Employees in 1997: 157
Mine Type: Surface
Acres permitted: 9,790
1997 Coal Production: 10,705,680 short tons
1998 Air Quality Capacity Limit: 24.0 million short tons

Note: Mine acquired by Lehman Brothers in May, 1998
 from The Energy Group via Texas Utilities.

MINE LOCATION



Coal Field: Powder River
County: Campbell
Rail Service: Unit train loadout served by Burlington Northern/Santa Fe.
Rawhide (cont.)

1998 Directory of Coal Mines in Wyoming

Geologic Information:

Overburden thickness: 20 to 240 feet (average thickness 120 feet).
Seams Mined: Roland (average thickness 30 feet).
Smith (average thickness 82 feet).

Coal Zone: Wyodak.
Member: Tongue River.
Formation: Fort Union.
Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: truck-shovel.
Coal Removal: truck-shovel and endloader.

Production History: (Start up year 1985 through end of 1997 in short tons)

| | | | | | |
|------|------------|------|------------|------|-----------|
| 1997 | 10,705,680 | 1990 | 11,442,355 | 1983 | 8,627,719 |
| 1996 | 15,068,358 | 1989 | 10,628,737 | 1982 | 8,147,218 |
| 1995 | 15,355,000 | 1988 | 10,810,785 | 1981 | 6,154,313 |
| 1994 | 12,858,787 | 1987 | 10,672,913 | 1980 | 4,472,530 |
| 1993 | 9,864,353 | 1986 | 12,403,975 | 1979 | 3,593,415 |
| 1992 | 8,629,613 | 1985 | 12,236,695 | 1978 | 2,625,000 |
| 1991 | 11,766,870 | 1984 | 9,351,952 | 1977 | 1,096,240 |

Total production through 1997: 196,512,508.

Recoverable Coal Reserves (million short tons)

| | |
|---------------------|--------------|
| Original Lease: | 763.2 |
| Mined tonnage: | <u>196.5</u> |
| Remaining Reserves: | 566.7 |

Estimated remaining life of mine: 30 years.
Remaining life of mine at current permit capacity: 24 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|----------------------------------|-------------------|-------|------------|-------|----------|-------|----------|--------|
| C | 01-Dec-97 | MidAmerican Energy | Council Bluffs | IA | 869,000 | 8,335 | 0.34 | 4.90 | 75.52 | 12.59 |
| C | 01-Dec-97 | MidAmerican Energy | Louisa | IA | 12,000 | 8,476 | 0.26 | 4.60 | 86.90 | 14.73 |
| C | | Indiana Michigan Power (AEP) | Rockport | IN | 879,300 | 8,337 | 0.30 | 4.66 | 101.70 | 16.96 |
| C | | Kansas City Bd. Public Utilities | Nearman Creek | KS | 608,800 | 8,346 | 0.33 | 4.85 | 82.21 | 13.72 |
| C | 01-Dec-98 | Omaha Public Power District | Nebraska City | NE | 1,053,800 | 8,340 | 0.31 | 4.83 | 70.81 | 11.81 |
| C | 01-Dec-98 | Omaha Public Power District | North Omaha | NE | 728,700 | 8,333 | 0.32 | 4.82 | 73.23 | 12.20 |
| C | | Grand River Dam Authority | GRDA 1 & 2 | OK | 2,633,617 | 8,336 | 0.30 | 4.79 | 89.07 | 14.85 |
| C | | Basin Electric Power Coop. | Laramie River 1-3 | WY | 2,242,800 | 8,338 | 0.30 | 4.87 | 51.71 | 8.62 |
| NC | 01-Dec-97 | Montana Power Co. | Corette | MT | 494,800 | 8,325 | 0.23 | 4.47 | 55.75 | 9.28 |
| S | | IES Utilities, Inc. | Ottumwa | IA | 735,000 | 8,334 | 0.32 | 4.86 | 73.34 | 12.22 |
| S | | West Texas Utilities (CSW) | Okaunion | TX | 303,000 | 8,436 | 0.37 | 4.90 | | |
| | | | | | 10,558,617 | 8,339 | 0.31 | 4.81 | 74.69 | 12.45 |

FERC captured 98.6% of 1997 total production.

Rochelle

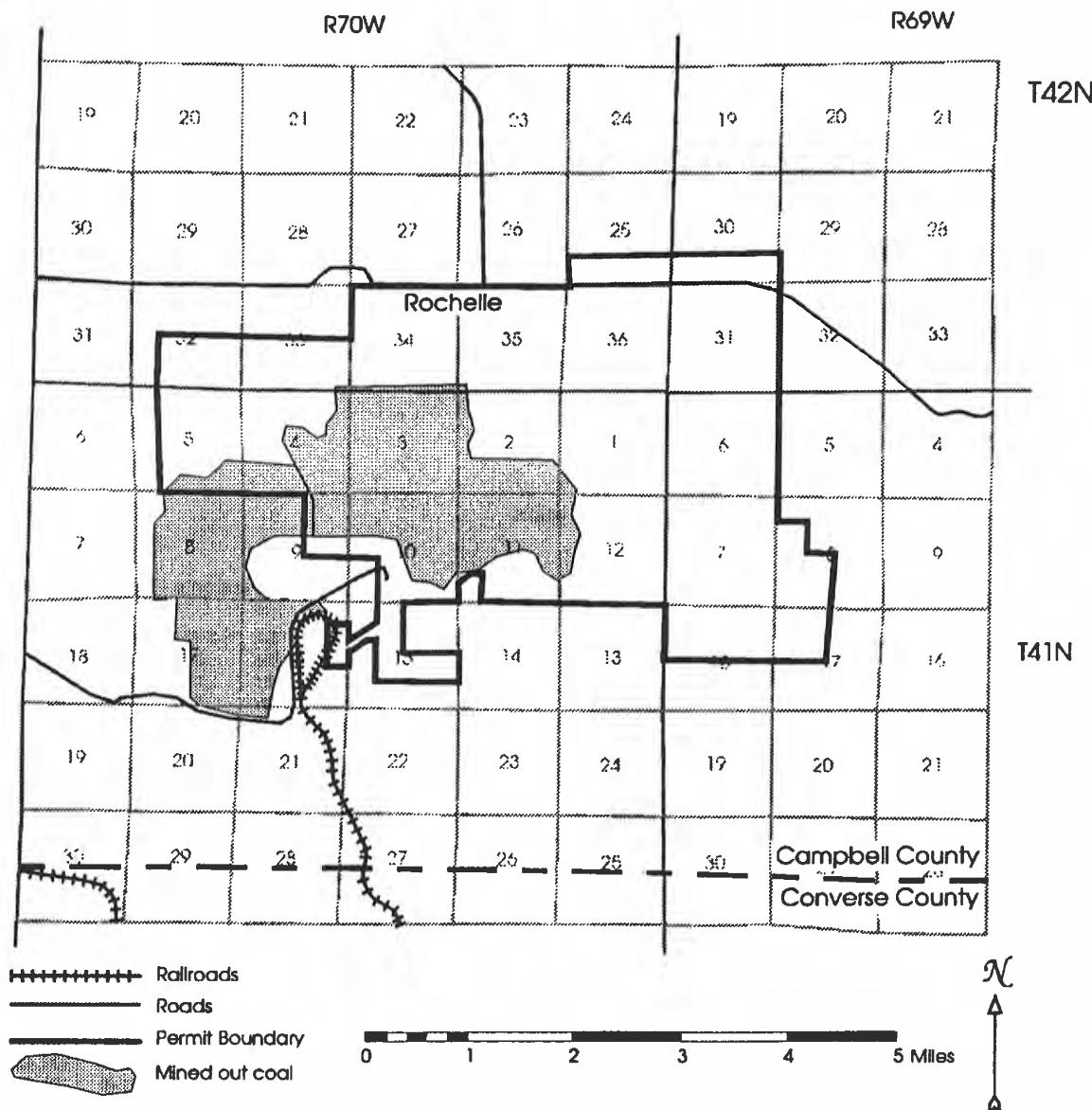
Operating Company: Powder River Coal Company
 Subsidiary of: Peabody Coal Company
 Owned By: Lehman Brothers Merchant Banking Group
 Mailing Address:

Rochelle Mine
 P.O. Box 3035
 Gillette, WY 82717-3035
 Telephone: (307) 464-1512
 Fax: (307) 464-4665
 URL: <http://www.peabodygroup.com/menupage.html> or <http://www.peabodygroup.com/PRCC/Default.htm>

Number of Employees in 1997: 277
 Mine Type: Surface
 Acres permitted: 10,911
 1997 Coal Production: 24,940,431 short tons
 1998 Air Quality Capacity Limit: 30.0 million short tons

Note: Mine acquired by Lehman Brothers in May, 1998
 from The Energy Group via Texas Utilities.

MINE LOCATION



Coal Field: Powder River

County: Campbell

Rail Service: Unit train loadout served by Burlington Northern/Santa Fe and Union Pacific/Southern Pacific Railroads.
Rochelle (cont.)

1998 Directory of Coal Mines in Wyoming

Geologic Information:

Overburden thickness: 40 to 280 feet (average thickness 150 feet).
 Seams Mined: Wyodak-Anderson (average thickness 65 feet).
 Coal Zone: Wyodak.
 Member: Tongue River.
 Formation: Fort Union.
 Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: truck-shovel.
 Coal Removal: truck-shovel.

Production History: (Start up year 1985 through end of 1997 in short tons)

| | | | |
|------|------------|------|------------|
| 1997 | 24,940,431 | 1989 | 10,892,567 |
| 1996 | 26,248,241 | 1988 | 8,694,125 |
| 1995 | 26,035,555 | 1987 | 6,436,359 |
| 1994 | 22,677,048 | 1986 | 3,571,177 |
| 1993 | 21,814,217 | 1985 | 206,565 |
| 1992 | 17,050,965 | | |
| 1991 | 12,635,888 | | |
| 1990 | 12,030,237 | | |

Total production through 1997: 193,233,375.

Recoverable Coal Reserves (million short tons)

| | | |
|---------------------|--------------|--|
| Original Lease: | 552.5 | |
| Additions: | 203.5 | Portion of North Antelope & Rochelle LBA (9/28/92) |
| | 266.0 | Portion of Powder River LBA (7/3/98) |
| Mined tonnage: | <u>193.2</u> | |
| Remaining Reserves: | 828.8 | |

Estimated remaining life of mine: 28 years.

Remaining life of mine at current permit capacity: 28 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | ¢/mmBtu | \$/ton |
|----|------------|---------------------------------|------------------|-------|-----------|-------|----------|-------|---------|--------|
| C | | Public Service Co. of Colorado | Arapahoe | CO | 299,800 | 8,768 | 0.21 | 4.37 | 75.40 | 13.22 |
| C | 01-Jun-99 | Ames, City of | Ames | IA | 225,000 | 8,851 | 0.22 | 4.40 | 147.39 | 26.09 |
| C | 01-Dec-97 | Commonwealth Edison | Crawford | IL | 334,200 | 8,817 | 0.22 | 4.64 | 130.56 | 22.51 |
| C | 01-Dec-97 | Commonwealth Edison | Fisk | IL | 156,300 | 8,809 | 0.22 | 4.65 | 115.13 | 19.82 |
| C | 01-Apr-97 | Commonwealth Edison | Joliet | IL | 27,000 | 8,844 | 0.24 | 4.65 | 157.10 | 27.17 |
| C | | Electric Energy | Joppa | IL | 352,500 | 8,831 | 0.21 | 4.65 | 95.70 | 16.90 |
| C | 01-Apr-97 | Commonwealth Edison | Powerton | IL | 1,767,000 | 8,829 | 0.22 | 4.60 | 168.90 | 29.15 |
| C | 01-Apr-97 | Commonwealth Edison | Waukegan | IL | 572,000 | 8,824 | 0.21 | 4.58 | 155.22 | 26.77 |
| C | 01-Apr-97 | Commonwealth Edison | Will County | IL | 2,203,400 | 8,825 | 0.22 | 4.62 | 152.30 | 26.28 |
| C | | Indiana-Kentucky Electric Corp. | Clifty Creek | IN | 880,000 | 8,858 | 0.21 | 4.45 | 88.62 | 15.70 |
| C | | Indiana Michigan Power (AEP) | Rockport | IN | 1,742,500 | 8,783 | 0.21 | 4.37 | 110.08 | 19.33 |
| C | 01-Dec-97 | Commonwealth Edison | State Line | IN | 70,000 | 8,844 | 0.22 | 4.58 | 131.36 | 22.71 |
| C | | Empire Dist. Electric | Riverton | KS | 206,990 | 8,797 | 0.21 | 4.43 | 114.65 | 20.17 |
| C | | Detroit Edison Co. | Belle River | MI | 50,000 | 8,847 | 0.23 | 4.44 | 105.13 | 18.60 |
| C | | Detroit Edison Co. | Monroe | MI | 307,000 | 8,800 | 0.22 | 4.43 | 103.95 | 18.29 |
| C | | Detroit Edison Co. | River Rouge | MI | 91,000 | 8,800 | 0.20 | 4.41 | 104.03 | 18.31 |
| C | | Detroit Edison Co. | St. Clair | MI | 88,000 | 8,845 | 0.23 | 4.45 | 103.25 | 18.27 |
| C | | Detroit Edison Co. | Trenton Channel | MI | 162,000 | 8,772 | 0.22 | 4.39 | 108.11 | 18.97 |
| C | | Northern States Power | Black Dog | MN | 464,000 | 8,762 | 0.19 | 4.32 | 105.00 | 18.40 |
| C | | Northern States Power | High Bridge | MN | 39,200 | 8,790 | 0.20 | 4.27 | 109.42 | 19.23 |
| C | | Northern States Power | Sherburne County | MN | 322,300 | 8,757 | 0.20 | 4.40 | 109.62 | 19.19 |
| C | | Empire Dist. Electric | Asbury | MO | 652,448 | 8,797 | 0.21 | 4.41 | 101.05 | 17.78 |
| C | 01-Dec-99 | Union Electric | Labadie | MO | 3,082,000 | 8,750 | 0.22 | 4.50 | 91.22 | 15.96 |
| C | 01-Dec-99 | Union Electric | Meramec | MO | 290,000 | 8,750 | 0.22 | 4.50 | 110.82 | 19.39 |
| C | 01-Dec-97 | Kansas City Power and Light | Montrose | MO | 1,584,000 | 8,692 | 0.20 | 5.00 | 97.26 | 16.91 |
| C | | Associated Electric Coop. | New Madrid | MO | 4,157,100 | 8,753 | 0.21 | 4.65 | 95.98 | 16.80 |
| C | | Union Electric | Rush Island | MO | 63,000 | 8,750 | 0.22 | 4.50 | 93.73 | 16.40 |

Rochelle (cont.)

1998 Directory of Coal Mines in Wyoming

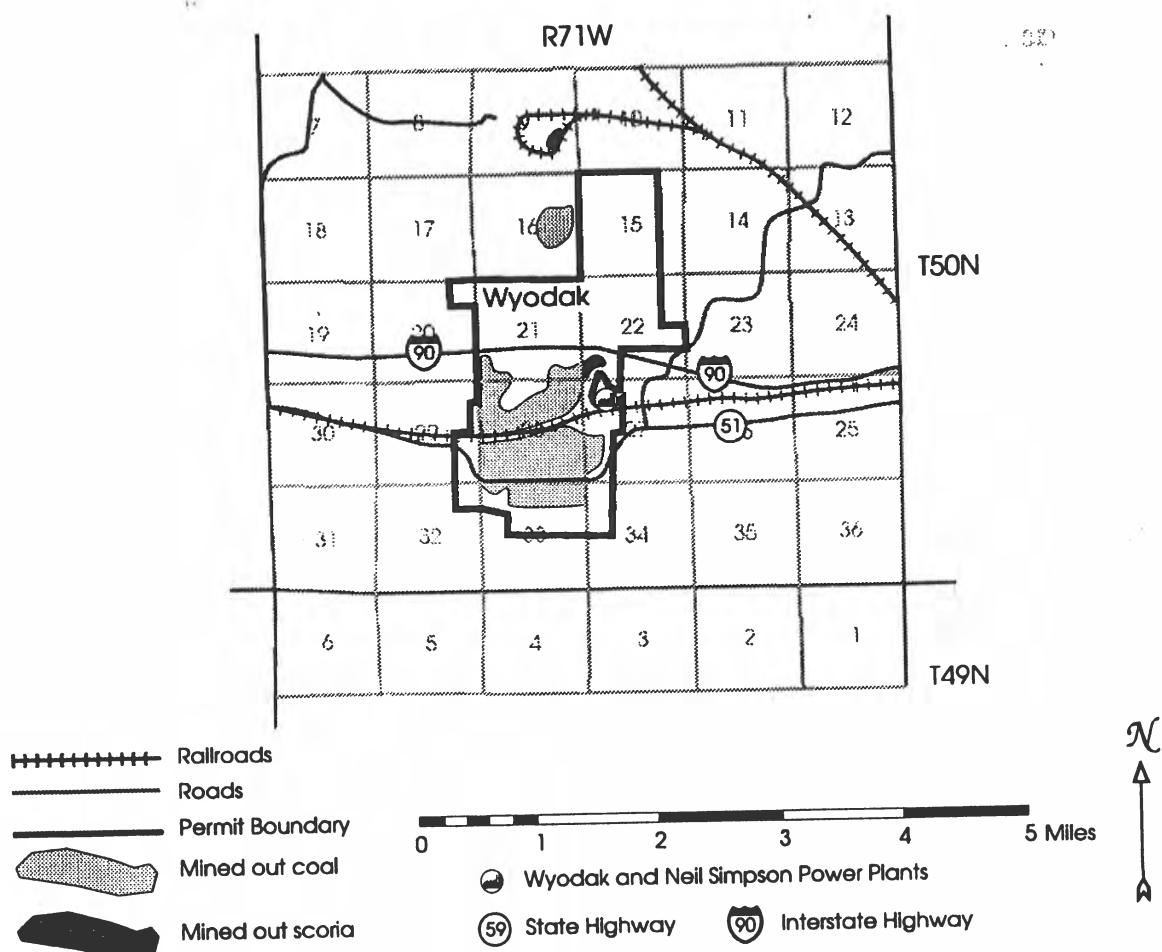
| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----|------------|------------------------------------|------------------|-------|------------|-------|----------|-------|----------|--------|
| C | 01-Mar-00 | Missouri Public Service | Sibley | MO | 323,747 | 8,720 | 0.22 | 4.53 | 74.30 | 12.95 |
| C | 01-Dec-99 | Union Electric | Sioux | MO | 1,115,000 | 8,750 | 0.22 | 4.50 | 92.81 | 16.21 |
| C | | Associated Electric Coop. | Thomas Hill | MO | 4,227,100 | 8,704 | 0.21 | 4.69 | 74.42 | 12.95 |
| C | | Nebraska Public Power System | Gerald Gentleman | NE | 1,159,556 | 8,754 | 0.20 | 4.48 | 49.47 | 8.66 |
| C | | Nebraska Public Power System | Sheldon | NE | 818,260 | 8,740 | 0.20 | 4.41 | 62.90 | 10.99 |
| C | | Oklahoma Gas and Electric | Muskogee | OK | 252,281 | 8,763 | 0.21 | 4.23 | 86.86 | 15.22 |
| C | | Public Serv. Co. of Oklahoma (CSW) | Northeast | OK | 374,544 | 8,792 | 0.20 | 4.26 | 112.43 | 19.77 |
| C | | Oklahoma Gas and Electric | Sooner | OK | 12,511 | 8,851 | 0.21 | 4.40 | 79.40 | 14.06 |
| C | | Dairyland Power Cooperative | Alma | WI | 877,200 | 8,743 | 0.21 | 4.44 | 92.35 | 16.15 |
| S | | Consumers Power | J. C. Weadock | MI | 25,200 | 8,740 | 0.20 | 5.10 | 119.20 | 20.84 |
| S | | Consumers Power | J. H. Campbell | MI | 61,900 | 8,819 | 0.21 | 4.10 | 111.40 | 19.65 |
| S | | Detroit Edison Co. | Monroe | MI | 13,000 | 8,718 | 0.18 | 4.30 | 102.80 | 17.92 |
| S | 01-Dec-97 | Central Elec Power Coop.-Missouri | Chamois | MO | 300 | 8,700 | 0.20 | 4.50 | 87.99 | 15.31 |
| S | | Portland General Electric | Boardman | OR | 90,000 | 8,750 | 0.18 | 4.40 | 113.80 | 19.92 |
| S | | Dairyland Power Cooperative | Alma | WI | 82,000 | 8,692 | 0.18 | 4.36 | 93.05 | 16.18 |
| | | | | | 29,621,337 | 8,729 | 0.21 | 4.56 | 101.50 | 17.70 |

FERC captured 118.8% of 1997 total production.

Wyodak

Operating Company: Wyodak Resources Development Corp.. **Number of Employees in 1997:** 46
Owned By: Black Hills Corporation **Mine Type:** Surface
Mailing Address: **Acres permitted:** 2,934
 Wyodak Resources Development Corporation **1997 Coal Production:** 3,250,969 short tons
 131-26 Hwy. 51 **1998 Air Quality Capacity Limit:** 10.0 million short tons
 Gillette, WY 82717
 Telephone: (307) 682-3410
 Fax: (307) 682-0208
 URL: <http://www.wyodak.com>

MINE LOCATION



Coal Field: Powder River
County: Campbell
Rail Service: Unit train loadout served by Burlington Northern/Santa Fe.

Wyodak (cont.)

1998 Directory of Coal Mines in Wyoming

Geologic Information:

Overburden thickness: 30 to 160 feet (average thickness 60 feet).
Seams Mined: Wyodak A (average thickness 60 feet).
Wyodak B (average thickness 30 feet).

Coal Zone: Wyodak.
Member: Tongue River.
Formation: Fort Union.
Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: truck-shovel.
Coal Removal: front-end loader and conveyor.

Production History: (Start up year 1925 through end of 1997 in short tons)

| | | | | | |
|------|-----------|------|---------|------|---------|
| 1997 | 3,250,969 | 1972 | 622,621 | 1947 | 209,273 |
| 1996 | 3,198,544 | 1971 | 646,589 | 1946 | 174,337 |
| 1995 | 2,984,000 | 1970 | 641,495 | 1945 | 98,355 |
| 1994 | 2,795,942 | 1969 | 558,106 | 1944 | 105,258 |
| 1993 | 3,027,356 | 1968 | 540,084 | 1943 | 119,469 |
| 1992 | 2,957,999 | 1967 | 504,817 | 1942 | 121,435 |
| 1991 | 2,741,809 | 1966 | 475,170 | 1941 | 122,426 |
| 1990 | 2,907,640 | 1965 | 490,527 | 1940 | 118,563 |
| 1989 | 2,348,085 | 1964 | 488,846 | 1939 | 107,923 |
| 1988 | 2,709,526 | 1963 | 495,886 | 1938 | 105,677 |
| 1987 | 2,976,398 | 1962 | 482,781 | 1937 | 112,142 |
| 1986 | 2,600,000 | 1961 | 447,447 | 1936 | 112,782 |
| 1985 | 3,163,026 | 1960 | 458,645 | 1935 | 120,502 |
| 1984 | 2,895,072 | 1959 | 426,609 | 1934 | 113,600 |
| 1983 | 2,486,000 | 1958 | 375,947 | 1933 | 92,136 |
| 1982 | 2,830,000 | 1957 | 365,859 | 1932 | 98,051 |
| 1981 | 2,712,617 | 1956 | 373,958 | 1931 | 92,257 |
| 1980 | 2,568,611 | 1955 | 349,567 | 1930 | 82,611 |
| 1979 | 2,364,000 | 1954 | 314,502 | 1929 | 72,749 |
| 1978 | 1,289,649 | 1953 | 320,654 | 1928 | 71,769 |
| 1977 | 857,038 | 1952 | 320,946 | 1927 | 64,028 |
| 1976 | 838,216 | 1951 | 307,074 | 1926 | 51,900 |
| 1975 | 786,672 | 1950 | 349,560 | 1925 | 33,579 |
| 1974 | 738,248 | 1949 | 314,197 | | |
| 1973 | 727,019 | 1948 | 263,267 | | |

Total production through 1997: 72,090,409.

Recoverable Coal Reserves (million short tons)

| | | |
|---------------------|--------------|--|
| Original Lease: | 222.1 | Acquired portion of Clovis Point reserves (1997) |
| Additions: | 127.0 | |
| Mined tonnage: | <u>72.1</u> | |
| Remaining Reserves: | <u>277.0</u> | |

Estimated remaining life of mine: 40 years.

Remaining life of mine at current permit capacity: 28 years.

1997 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

| CT | Expiration | Company Name | Plant Name | State | Quantity | Btu | % Sulfur | % Ash | ¢/mmBtu | \$/ton |
|----|------------|-----------------------------|--------------------|-------|-----------|-------|----------|-------|---------|--------|
| C | | Black Hills Power and Light | Neil Simpson No. 2 | WY | 499,680 | 7,988 | 0.69 | 7.73 | 50.13 | 8.01 |
| C | | PacifiCorp | Wyodak | WY | 2,153,000 | 7,996 | 0.58 | 6.91 | 70.57 | 11.29 |
| | | | | | 2,652,680 | 7,995 | 0.60 | 7.07 | 66.72 | 10.67 |

FERC captured 81.6% of 1997 total production.

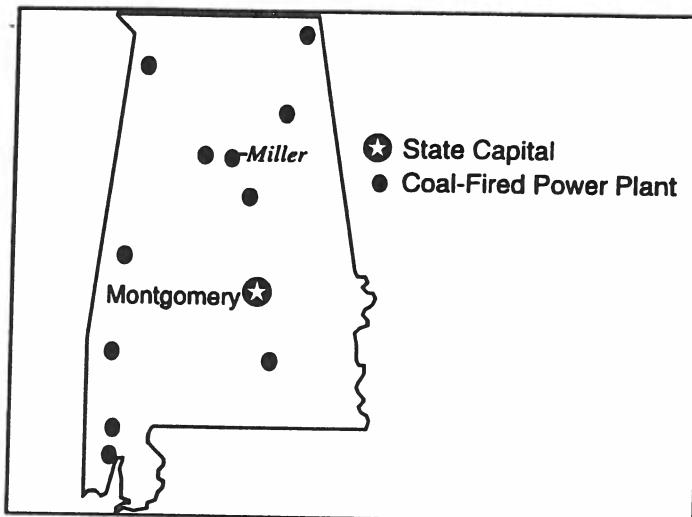
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For abbreviations, definitions and explanations see page 12.

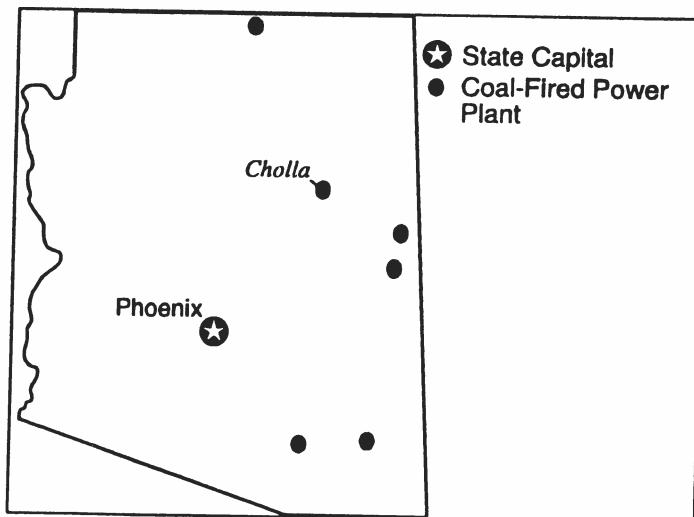
1997 Directory of Power Plants Burning Wyoming Coal

Alabama



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | ¢/mmBtu | \$/ton |
|-----------------------|--------------------|----|--------------|-----------|-------|----------|-------|---------|--------|
| Alabama Power Company | James H. Miller Jr | C | Belle Ayr | 5,188,248 | 8,591 | 0.25 | 4.51 | 113.50 | 19.50 |
| Alabama Power Company | James H. Miller Jr | S | Jacobs Ranch | 13,565 | 8,856 | 0.40 | 5.12 | 112.90 | 20.00 |
| | | | | 5,201,813 | 8,591 | 0.25 | 4.51 | 113.50 | 19.50 |

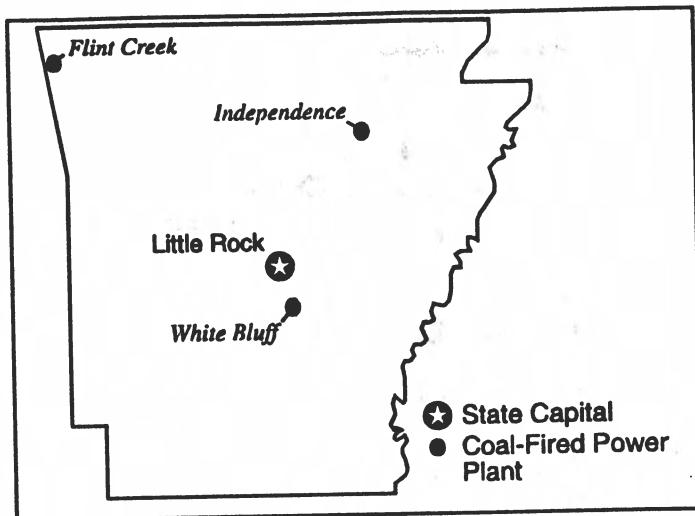
Arizona



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | ¢/mmBtu | \$/ton |
|------------------------|------------|----|---------------|----------|-------|----------|-------|---------|--------|
| Arizona Public Service | Cholla | S | Antelope | 57,000 | 8,757 | 0.29 | 6.09 | 112.51 | 19.70 |
| Arizona Public Service | Cholla | S | Black Thunder | 126,000 | 8,777 | 0.37 | 5.31 | 106.32 | 18.66 |
| | | | | 183,000 | 8,770 | 0.35 | 5.55 | 108.25 | 18.99 |

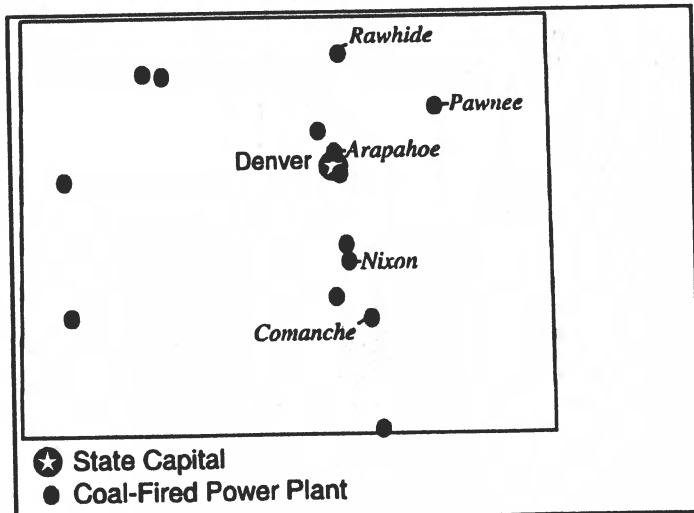
1997 Directory of Power Plants Burning Wyoming Coal

Arkansas



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------------|--------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| Arkansas Power & Light Co. | Independence | C | Cordero | 40,275 | 8,399 | 0.35 | 5.71 | 125.50 | 21.08 |
| Arkansas Power & Light Co. | Independence | C | North Antelope | 4,978,349 | 8,798 | 0.21 | 4.94 | 155.60 | 27.38 |
| | | | | 5,018,624 | 8,795 | 0.21 | 4.94 | 155.36 | 27.33 |
| Arkansas Power & Light Co. | White Bluff | C | Cordero | 108,969 | 8,407 | 0.34 | 5.80 | 125.30 | 21.07 |
| Arkansas Power & Light Co. | White Bluff | C | Jacobs Ranch | 4,063,360 | 8,708 | 0.47 | 5.55 | 185.21 | 32.25 |
| Arkansas Power & Light Co. | White Bluff | C | North Antelope | 673,731 | 8,802 | 0.21 | 4.88 | 156.31 | 27.52 |
| | | | | 4,846,060 | 8,714 | 0.43 | 5.46 | 179.84 | 31.34 |
| Southwestern Electric Power(CSW) | Flint Creek | C | Belle Ayr | 418,000 | 8,382 | 0.32 | 4.45 | 162.71 | 27.27 |
| Southwestern Electric Power(CSW) | Flint Creek | S | Belle Ayr | 116,000 | 8,377 | 0.32 | 4.43 | 131.71 | 22.07 |
| Southwestern Electric Power(CSW) | Flint Creek | S | Buckskin | 11,000 | 8,300 | 0.42 | 5.61 | 103.30 | 17.15 |
| Southwestern Electric Power(CSW) | Flint Creek | C | Eagle Butte | 796,000 | 8,378 | 0.38 | 4.75 | 169.48 | 28.40 |
| Southwestern Electric Power(CSW) | Flint Creek | S | Eagle Butte | 244,000 | 8,397 | 0.38 | 4.76 | 133.67 | 22.45 |
| Southwestern Electric Power(CSW) | Flint Creek | S | Jacobs Ranch | 259,000 | 8,733 | 0.45 | 5.58 | 104.60 | 18.27 |
| Southwestern Electric Power(CSW) | Flint Creek | S | North Antelope | 170,000 | 8,898 | 0.26 | 4.46 | 105.74 | 18.82 |
| | | | | 2,014,000 | 8,469 | 0.36 | 4.76 | 147.47 | 24.91 |

Colorado

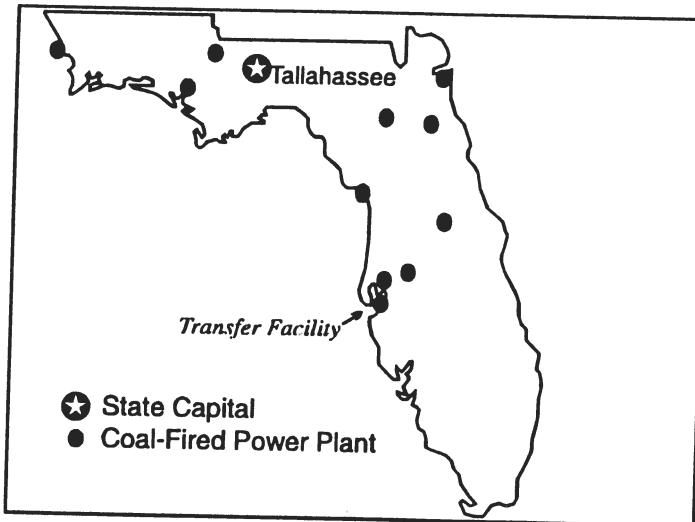


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Colorado (cont.)

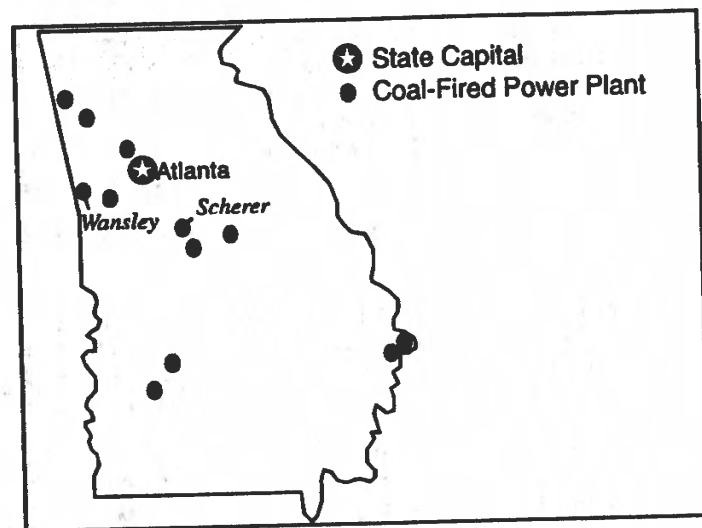
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|--------------------------------|-------------|----|---------------|-----------|-------|----------|-------|----------|--------|
| Colorado Springs Utilities | R. D. Nixon | S | Antelope | 66,600 | 8,819 | 0.24 | 5.14 | 75.10 | 13.25 |
| Colorado Springs Utilities | R. D. Nixon | S | Caballo Rojo | 12,500 | 8,503 | 0.33 | 5.63 | 72.00 | 12.24 |
| Colorado Springs Utilities | R. D. Nixon | S | Cordero | 37,400 | 8,370 | 0.36 | 5.88 | 73.18 | 12.25 |
| Colorado Springs Utilities | R. D. Nixon | S | Jacobs Ranch | 27,000 | 8,833 | 0.40 | 5.76 | 75.00 | 13.25 |
| | | | | 143,500 | 8,677 | 0.31 | 5.49 | 74.31 | 12.90 |
| Platte River Authority | Rawhide | C | Antelope | 1,091,000 | 8,764 | 0.22 | 5.31 | 74.23 | 13.01 |
| Public Service Co. of Colorado | Araphoe | C | Black Thunder | 259,400 | 8,753 | 0.35 | 5.34 | 75.79 | 13.27 |
| Public Service Co. of Colorado | Araphoe | C | Jacobs Ranch | 107,400 | 8,712 | 0.39 | 5.34 | 71.82 | 12.51 |
| Public Service Co. of Colorado | Araphoe | C | Rochelle | 299,800 | 8,768 | 0.21 | 4.37 | 75.40 | 13.22 |
| | | | | 666,600 | 8,753 | 0.29 | 4.90 | 74.98 | 13.13 |
| Public Service Co. of Colorado | Comanche | C | Belle Ayr | 2,159,800 | 8,605 | 0.25 | 4.31 | 95.52 | 16.44 |
| Public Service Co. of Colorado | Comanche | S | Belle Ayr | 345,100 | 8,589 | 0.25 | 4.34 | 96.77 | 16.62 |
| Public Service Co. of Colorado | Comanche | C | Eagle Butte | 11,900 | 8,392 | 0.38 | 4.72 | 81.70 | 13.71 |
| | | | | 2,516,800 | 8,601 | 0.25 | 4.32 | 95.63 | 16.45 |
| Public Service Co. of Colorado | Pawnee | C | Belle Ayr | 403,300 | 8,330 | 0.31 | 4.40 | 87.96 | 14.65 |
| Public Service Co. of Colorado | Pawnee | C | Eagle Butte | 1,379,200 | 8,351 | 0.40 | 4.77 | 89.52 | 14.95 |
| Public Service Co. of Colorado | Pawnee | S | Eagle Butte | 11,100 | 8,315 | 0.43 | 4.78 | 87.73 | 14.59 |
| | | | | 1,793,600 | 8,346 | 0.38 | 4.68 | 89.16 | 14.88 |

Florida



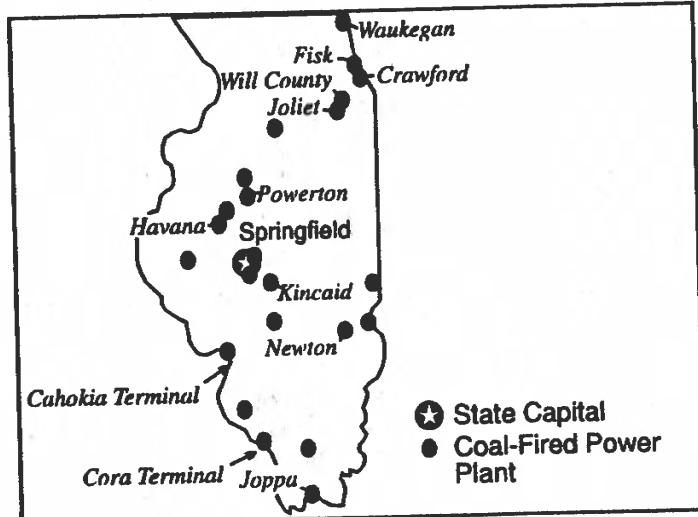
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------|-------------------|----|----------------|----------|-------|----------|-------|----------|--------|
| Tampa Electric | Transfer Facility | S | Jacobs Ranch | 956,426 | 8,719 | 0.43 | 5.30 | 140.86 | 24.56 |
| Tampa Electric | Transfer Facility | S | North Antelope | 14,125 | 8,794 | 0.21 | 4.70 | 151.00 | 26.56 |
| | | | | 970,551 | 8,720 | 0.43 | 5.29 | 141.01 | 24.59 |

Georgia



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|------------------------------|------------|----|---------------|-----------|-------|----------|-------|----------|--------|
| Georgia Power (Southern Co.) | Scherer | S | Antelope | 877,100 | 8,815 | 0.23 | 5.11 | 148.46 | 26.17 |
| Georgia Power (Southern Co.) | Scherer | S | Belle Ayr | 37,900 | 8,608 | 0.27 | 4.30 | 146.50 | 25.22 |
| Georgia Power (Southern Co.) | Scherer | S | Black Thunder | 560,000 | 8,755 | 0.35 | 5.50 | 147.51 | 25.83 |
| Georgia Power (Southern Co.) | Scherer | S | Cordero | 24,500 | 8,766 | 0.22 | 5.27 | 148.40 | 26.02 |
| Georgia Power (Southern Co.) | Scherer | S | Jacobs Ranch | 3,788,000 | 8,720 | 0.44 | 5.51 | 151.59 | 26.44 |
| | | | | 5,287,500 | 8,739 | 0.40 | 5.43 | 150.59 | 26.32 |
| Georgia Power (Southern Co.) | Wansley | S | Jacobs Ranch | 81,200 | 8,732 | 0.42 | 5.71 | 138.30 | 24.15 |

Illinois



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Illinois (cont.)

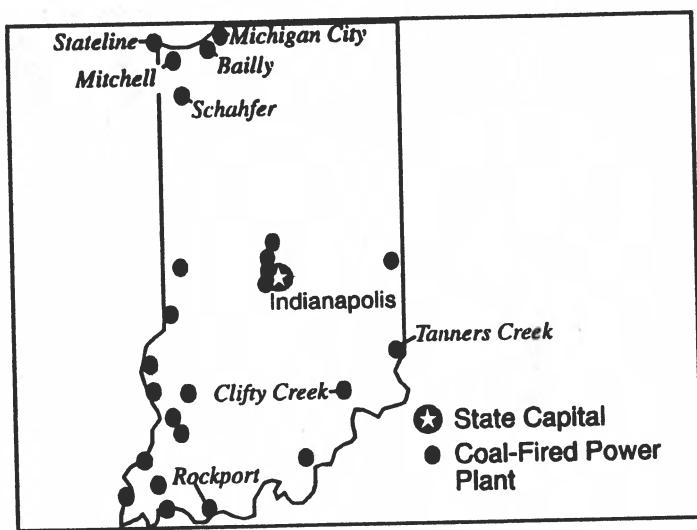
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|---------------------|-------------|----|----------------|-----------|--------|----------|-------|----------|--------|
| | | S | Shoshone No. 1 | 378,500 | 10,816 | 0.62 | 5.89 | 132.11 | 28.58 |
| Commonwealth Edison | Crawford | C | Antelope | 15,000 | 8,775 | 0.32 | 5.27 | 310.00 | 54.42 |
| | Crawford | C | Black Thunder | 105,000 | 8,782 | 0.34 | 5.55 | 230.32 | 40.45 |
| | Crawford | C | Jacobs Ranch | 1,000 | 8,674 | 0.58 | 6.00 | 274.70 | 47.65 |
| | Crawford | S | Jacobs Ranch | 2,000 | 8,722 | 0.55 | 5.60 | 128.40 | 22.40 |
| | Crawford | C | Rochelle | 334,200 | 8,617 | 0.22 | 4.64 | 130.56 | 22.51 |
| | | | | 457,200 | 8,660 | 0.25 | 4.88 | 159.66 | 27.73 |
| Commonwealth Edison | Fisk | C | Antelope | 6,000 | 8,771 | 0.31 | 5.60 | 341.83 | 59.96 |
| | Fisk | C | Black Thunder | 58,000 | 8,777 | 0.33 | 5.58 | 230.52 | 40.47 |
| | Fisk | C | Jacobs Ranch | 45,000 | 8,722 | 0.56 | 5.64 | 260.86 | 45.50 |
| | Fisk | S | Jacobs Ranch | 12,000 | 8,722 | 0.55 | 5.60 | 128.40 | 22.40 |
| | Fisk | C | Rochelle | 156,300 | 8,609 | 0.22 | 4.65 | 115.13 | 19.82 |
| | | | | 277,300 | 8,671 | 0.32 | 5.06 | 168.39 | 29.29 |
| Commonwealth Edison | Joliet | C | Black Thunder | 2,626,000 | 8,778 | 0.35 | 5.45 | 208.03 | 36.52 |
| | Joliet | S | Black Thunder | 980,000 | 8,762 | 0.36 | 5.48 | 89.98 | 15.77 |
| | Joliet | C | Jacobs Ranch | 281,000 | 8,727 | 0.56 | 5.82 | 275.62 | 48.10 |
| | Joliet | S | Jacobs Ranch | 180,000 | 8,721 | 0.58 | 6.00 | 98.90 | 17.25 |
| | Joliet | C | Rochelle | 27,000 | 8,644 | 0.24 | 4.65 | 157.10 | 27.17 |
| | | | | 4,094,000 | 8,767 | 0.37 | 5.50 | 179.28 | 31.44 |
| Commonwealth Edison | Kincaid | C | Antelope | 12,000 | 8,755 | 0.31 | 5.70 | 337.70 | 59.13 |
| | Kincaid | S | Medicine Bow | 244,000 | 10,484 | 0.59 | 6.87 | 162.50 | 34.07 |
| | Kincaid | S | Seminole II | 13,000 | 10,558 | 0.70 | 10.40 | 130.60 | 27.58 |
| | Kincaid | S | Shoshone No. 1 | 106,000 | 10,794 | 0.63 | 6.20 | 168.08 | 36.29 |
| | | | | 375,000 | 10,519 | 0.60 | 6.77 | 168.58 | 35.28 |
| Commonwealth Edison | Powerton | C | Antelope | 1,895,000 | 8,763 | 0.31 | 5.53 | 319.29 | 55.95 |
| | Powerton | S | Caballo Rojo | 329,000 | 8,455 | 0.33 | 5.27 | 116.85 | 19.76 |
| | Powerton | C | Jacobs Ranch | 300,000 | 8,745 | 0.49 | 5.60 | 250.71 | 43.85 |
| | Powerton | S | Jacobs Ranch | 120,000 | 8,767 | 0.55 | 5.70 | 96.00 | 16.83 |
| | Powerton | C | Rochelle | 1,767,000 | 8,629 | 0.22 | 4.60 | 168.90 | 29.15 |
| | | | | 4,411,000 | 8,685 | 0.29 | 5.15 | 233.21 | 40.63 |
| Commonwealth Edison | Waukegan | C | Antelope | 671,000 | 8,757 | 0.30 | 5.42 | 288.39 | 50.51 |
| | Waukegan | C | Black Thunder | 54,000 | 8,762 | 0.35 | 5.60 | 214.95 | 37.67 |
| | Waukegan | C | Jacobs Ranch | 1,281,000 | 8,715 | 0.56 | 5.79 | 269.31 | 46.94 |
| | Waukegan | S | Jacobs Ranch | 383,000 | 8,742 | 0.57 | 5.75 | 99.24 | 17.34 |
| | Waukegan | C | Rochelle | 572,000 | 8,624 | 0.21 | 4.58 | 155.22 | 26.77 |
| | | | | 2,961,000 | 8,711 | 0.43 | 5.46 | 228.60 | 39.86 |
| Commonwealth Edison | Will County | C | Antelope | 122,100 | 8,769 | 0.30 | 5.51 | 327.23 | 57.39 |
| | Will County | C | Black Thunder | 38,300 | 8,774 | 0.35 | 5.48 | 224.65 | 39.42 |
| | Will County | C | Jacobs Ranch | 213,000 | 8,746 | 0.52 | 5.66 | 259.19 | 45.34 |
| | Will County | S | Jacobs Ranch | 83,100 | 8,767 | 0.55 | 5.70 | 86.15 | 15.11 |
| | Will County | C | Rochelle | 2,203,400 | 8,625 | 0.22 | 4.62 | 152.30 | 26.28 |
| | | | | 2,659,900 | 8,648 | 0.26 | 4.79 | 167.86 | 29.07 |
| Electric Energy | Joppa | C | Antelope | 81,100 | 8,833 | 0.24 | 4.89 | 86.79 | 15.33 |
| | Joppa | C | Belle Ayr | 1,833,200 | 8,580 | 0.25 | 4.32 | 89.23 | 15.31 |
| | Joppa | C | Caballo Rojo | 600,700 | 8,434 | 0.33 | 5.23 | 88.76 | 14.97 |
| | Joppa | C | Cordero | 25,700 | 8,403 | 0.35 | 5.70 | 81.90 | 13.76 |
| | Joppa | C | North Antelope | 1,793,600 | 8,861 | 0.22 | 4.42 | 93.40 | 16.55 |
| | Joppa | C | Rochelle | 352,500 | 8,831 | 0.21 | 4.65 | 95.70 | 16.90 |
| | | | | 4,686,800 | 8,691 | 0.25 | 4.51 | 91.17 | 15.85 |

1997 Directory of Power Plants Burning Wyoming Coal

Illinois (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------|------------------|----|----------------|-----------|--------|----------|-------|----------|--------|
| | | C | Medicine Bow | 69,332 | 10,499 | 0.49 | 6.56 | 134.80 | 28.30 |
| Illinois Power | Havana | C | Medicine Bow | 69,332 | 10,499 | 0.49 | 6.56 | 134.80 | 28.30 |
| Tennessee Valley Authority | Cahokia Terminal | S | Black Thunder | 23,880 | 8,818 | 0.32 | 5.41 | 91.97 | 16.22 |
| Tennessee Valley Authority | Cora Terminal | C | Antelope | 95,260 | 8,775 | 0.30 | 6.00 | 84.90 | 14.90 |
| Tennessee Valley Authority | Cora Terminal | S | Antelope | 263,320 | 8,715 | 0.47 | 5.39 | 81.41 | 14.19 |
| Tennessee Valley Authority | Cora Terminal | C | Black Thunder | 524,930 | 8,796 | 0.31 | 5.08 | 88.93 | 15.64 |
| Tennessee Valley Authority | Cora Terminal | S | Jacobs Ranch | 143,480 | 8,700 | 0.52 | 6.91 | 83.74 | 14.57 |
| Tennessee Valley Authority | Cora Terminal | S | North Antelope | 91,090 | 8,824 | 0.31 | 5.60 | 83.50 | 14.73 |
| | | | | 1,118,080 | 8,765 | 0.37 | 5.51 | 85.71 | 15.03 |

Indiana



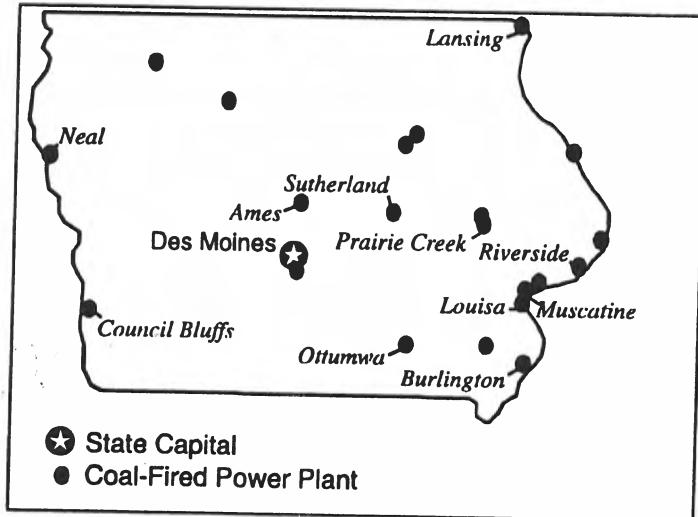
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|---------------------------------|---------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| | | C | Rochelle | 70,000 | 8,644 | 0.22 | 4.58 | 131.36 | 22.71 |
| Commonwealth Edison | State Line | C | Rochelle | 70,000 | 8,644 | 0.22 | 4.58 | 131.36 | 22.71 |
| Indiana Michigan Power (AEP) | Rockport | S | Belle Ayr | 210,100 | 8,577 | 0.24 | 4.21 | 101.44 | 17.40 |
| Indiana Michigan Power (AEP) | Rockport | S | Black Thunder | 224,100 | 8,774 | 0.37 | 5.15 | 99.99 | 17.55 |
| Indiana Michigan Power (AEP) | Rockport | C | Caballo | 2,131,200 | 8,512 | 0.36 | 4.96 | 102.73 | 17.49 |
| Indiana Michigan Power (AEP) | Rockport | S | Cordero Rojo | 680,300 | 8,400 | 0.36 | 5.66 | 99.50 | 16.72 |
| Indiana Michigan Power (AEP) | Rockport | C | North Antelope | 3,228,600 | 8,839 | 0.23 | 4.38 | 110.08 | 19.46 |
| Indiana Michigan Power (AEP) | Rockport | C | Rawhide | 879,300 | 8,337 | 0.30 | 4.66 | 101.70 | 16.96 |
| Indiana Michigan Power (AEP) | Rockport | C | Rochelle | 1,742,500 | 8,783 | 0.21 | 4.37 | 110.08 | 19.33 |
| | | | | 9,096,100 | 8,662 | 0.28 | 4.65 | 106.31 | 18.43 |
| Indiana Michigan Power (AEP) | Tanners Creek | C | North Antelope | 43,300 | 8,922 | 0.21 | 4.12 | 123.06 | 21.96 |
| Indiana-Kentucky Electric Corp. | Clifty Creek | C | Antelope | 782,000 | 8,776 | 0.23 | 5.33 | 102.24 | 17.95 |
| Indiana-Kentucky Electric Corp. | Clifty Creek | S | Antelope | 28,000 | 8,815 | 0.16 | 4.60 | 92.70 | 16.34 |
| Indiana-Kentucky Electric Corp. | Clifty Creek | C | Rochelle | 880,000 | 8,858 | 0.21 | 4.45 | 88.62 | 15.70 |
| | | | | 1,690,000 | 8,819 | 0.22 | 4.86 | 94.99 | 16.75 |

1997 Directory of Power Plants Burning Wyoming Coal

Indiana (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|---------------------------------|-----------------|----|----------------|-----------|--------|----------|-------|----------|--------|
| Northern Indiana Public Service | Bailly | C | Black Thunder | 21,900 | 8,780 | 0.33 | 5.20 | 109.50 | 19.23 |
| Northern Indiana Public Service | Bailly | C | Shoshone No. 1 | 116,500 | 10,814 | 0.62 | 5.92 | 181.50 | 39.25 |
| | | | | 138,400 | 10,492 | 0.58 | 5.80 | 170.11 | 36.09 |
| Northern Indiana Public Service | Michigan City | C | Black Thunder | 648,100 | 8,755 | 0.34 | 5.39 | 108.58 | 19.01 |
| Northern Indiana Public Service | Michigan City | C | Caballo Rojo | 23,100 | 8,446 | 0.32 | 5.25 | 105.64 | 17.84 |
| Northern Indiana Public Service | Michigan City | S | North Antelope | 11,900 | 8,878 | 0.25 | 4.30 | 95.80 | 17.01 |
| Northern Indiana Public Service | Michigan City | C | Shoshone No. 1 | 328,400 | 10,814 | 0.63 | 6.02 | 178.32 | 38.57 |
| | | | | 1,011,500 | 9,418 | 0.43 | 5.58 | 131.01 | 25.31 |
| Northern Indiana Public Service | Mitchell | C | Black Thunder | 697,200 | 8,755 | 0.34 | 5.43 | 116.82 | 20.46 |
| Northern Indiana Public Service | Mitchell | C | Caballo Rojo | 24,700 | 8,432 | 0.32 | 5.55 | 112.83 | 19.03 |
| Northern Indiana Public Service | Mitchell | S | Jacobs Ranch | 12,000 | 8,715 | 0.50 | 6.20 | 109.80 | 19.14 |
| Northern Indiana Public Service | Mitchell | S | North Antelope | 144,000 | 8,873 | 0.24 | 4.53 | 107.01 | 18.99 |
| Northern Indiana Public Service | Mitchell | C | Shoshone No. 1 | 98,100 | 10,832 | 0.62 | 5.87 | 190.79 | 41.33 |
| | | | | 976,000 | 8,973 | 0.36 | 5.35 | 122.62 | 22.29 |
| Northern Indiana Public Service | Rollin Schahfer | S | Belle Ayr | 154,700 | 8,554 | 0.26 | 4.41 | 109.01 | 18.65 |
| Northern Indiana Public Service | Rollin Schahfer | C | Black Thunder | 357,600 | 8,749 | 0.35 | 5.38 | 115.19 | 20.16 |
| Northern Indiana Public Service | Rollin Schahfer | S | Black Thunder | 133,200 | 8,737 | 0.35 | 5.41 | 112.22 | 19.61 |
| Northern Indiana Public Service | Rollin Schahfer | C | Caballo Rojo | 995,100 | 8,431 | 0.33 | 5.35 | 114.94 | 19.38 |
| Northern Indiana Public Service | Rollin Schahfer | S | Caballo Rojo | 117,900 | 8,429 | 0.34 | 5.40 | 109.68 | 18.49 |
| Northern Indiana Public Service | Rollin Schahfer | S | Cordero | 181,300 | 8,385 | 0.33 | 5.85 | 106.95 | 17.94 |
| Northern Indiana Public Service | Rollin Schahfer | S | Jacobs Ranch | 158,200 | 8,720 | 0.46 | 5.81 | 108.90 | 18.99 |
| Northern Indiana Public Service | Rollin Schahfer | S | North Antelope | 155,600 | 8,867 | 0.22 | 4.48 | 109.82 | 19.47 |
| Northern Indiana Public Service | Rollin Schahfer | C | Shoshone No. 1 | 615,600 | 10,818 | 0.62 | 5.92 | 181.12 | 39.19 |
| | | | | 2,869,200 | 9,040 | 0.39 | 5.44 | 127.39 | 23.55 |

Iowa



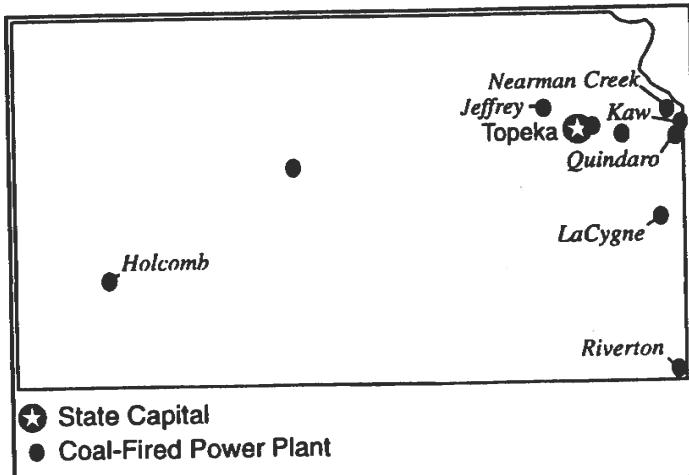
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|---------------------|------------|----|--------------|----------|-------|----------|-------|----------|--------|
| Ames, City of | Ames | C | Rochelle | 225,000 | 8,851 | 0.22 | 4.40 | 147.39 | 26.09 |
| IES Utilities, Inc. | Burlington | S | Caballo Rojo | 90,000 | 8,453 | 0.37 | 5.58 | 72.60 | 12.27 |
| IES Utilities, Inc. | Burlington | C | Cordero | 2,000 | 8,228 | 0.31 | 5.71 | 88.40 | 14.55 |
| IES Utilities, Inc. | Burlington | S | Cordero | 87,000 | 8,372 | 0.38 | 5.97 | 88.83 | 14.87 |
| IES Utilities, Inc. | Burlington | S | Fort Union | 339,000 | 8,080 | 0.39 | 5.37 | 89.63 | 14.48 |
| | | | | 518,000 | 8,194 | 0.39 | 5.51 | 86.53 | 14.16 |

1997 Directory of Power Plants Burning Wyoming Coal

Iowa (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|---------------------------|-------------------|----|----------------|-----------|--------|-------------------|-------|----------|--------|
| IES Utilities, Inc. | Ottumwa | C | Cordero | 1,251,000 | 8,366 | 0.37 | 6.01 | 107.75 | 18.03 |
| IES Utilities, Inc. | Ottumwa | S | Rawhide | 735,000 | 8,334 | 0.32 | 4.86 | 73.34 | 12.22 |
| | | | | 1,986,000 | 8,354 | 0.35 | 5.58 | 95.01 | 15.88 |
| IES Utilities, Inc. | Prairie Creek 1-4 | S | Caballo Rojo | 668,000 | 8,439 | 0.32 | 5.32 | 92.30 | 15.58 |
| IES Utilities, Inc. | Prairie Creek 1-4 | S | Cordero | 135,000 | 8,383 | 0.37 | 6.10 | 95.48 | 16.01 |
| | | | | 803,000 | 8,429 | 0.33 | 5.45 | 92.84 | 15.65 |
| IES Utilities, Inc. | Sutherland | S | Caballo | 438,000 | 8,515 | 0.36 | 5.01 | 79.12 | 13.47 |
| Interstate Power | Lansing | C | Belle Ayr | 412,200 | 8,492 | 0.28 | 4.53 | 212.58 | 36.11 |
| Interstate Power | Lansing | C | Eagle Butte | 149,100 | 8,352 | 0.35 | 4.50 | 211.61 | 35.35 |
| | | | | 561,300 | 8,454 | 0.30 ^a | 4.52 | 212.32 | 35.90 |
| MidAmerican Energy | Council Bluffs | C | Belle Ayr | 265,000 | 8,314 | 0.30 | 4.35 | 102.46 | 17.04 |
| MidAmerican Energy | Council Bluffs | C | Eagle Butte | 1,453,000 | 8,340 | 0.39 | 4.76 | 83.16 | 13.86 |
| MidAmerican Energy | Council Bluffs | S | Jacobs Ranch | 61,000 | 8,730 | 0.46 | 5.50 | 56.80 | 9.92 |
| MidAmerican Energy | Council Bluffs | C | Rawhide | 869,000 | 8,335 | 0.34 | 4.90 | 75.52 | 12.59 |
| | | | | 2,648,000 | 8,344 | 0.37 | 4.78 | 81.98 | 13.67 |
| MidAmerican Energy | George Neal 1-4 | C | Caballo | 3,222,000 | 8,511 | 0.36 | 5.01 | 70.33 | 11.97 |
| MidAmerican Energy | George Neal 1-4 | C | Caballo Rojo | 1,536,000 | 8,445 | 0.32 | 5.33 | 65.89 | 11.13 |
| MidAmerican Energy | George Neal 1-4 | C | Shoshone No. 1 | 400,000 | 10,798 | 0.63 | 5.98 | 105.17 | 22.71 |
| | | | | 5,158,000 | 8,669 | 0.37 | 5.18 | 71.71 | 12.55 |
| MidAmerican Energy | Louisa | C | Belle Ayr | 48,000 | 8,360 | 0.30 | 4.40 | 112.90 | 18.88 |
| MidAmerican Energy | Louisa | C | Caballo | 90,000 | 8,504 | 0.38 | 5.17 | 81.18 | 13.81 |
| MidAmerican Energy | Louisa | C | Caballo Rojo | 87,000 | 8,451 | 0.34 | 5.25 | 85.86 | 14.51 |
| MidAmerican Energy | Louisa | C | Cordero | 1,617,000 | 8,387 | 0.34 | 5.92 | 108.94 | 18.27 |
| MidAmerican Energy | Louisa | C | Eagle Butte | 274,000 | 8,333 | 0.38 | 4.75 | 110.32 | 18.39 |
| MidAmerican Energy | Louisa | C | Fort Union | 45,000 | 8,003 | 0.28 | 4.72 | 82.84 | 13.26 |
| MidAmerican Energy | Louisa | C | Rawhide | 12,000 | 8,476 | 0.26 | 4.60 | 86.90 | 14.73 |
| | | | | 2,173,000 | 8,380 | 0.35 | 5.65 | 106.46 | 17.84 |
| MidAmerican Energy | Riverside | C | Caballo Rojo | 381,000 | 8,447 | 0.33 | 5.41 | 93.26 | 15.76 |
| MidAmerican Energy | Riverside | S | Cordero | 34,000 | 8,360 | 0.36 | 5.94 | 78.45 | 13.12 |
| | | | | 415,000 | 8,440 | 0.33 | 5.45 | 92.04 | 15.54 |
| Muscatine Power and Water | Muscatine | C | Buckskin | 633,600 | 8,500 | 1.09 | 6.53 | 80.70 | 13.72 |

Kansas

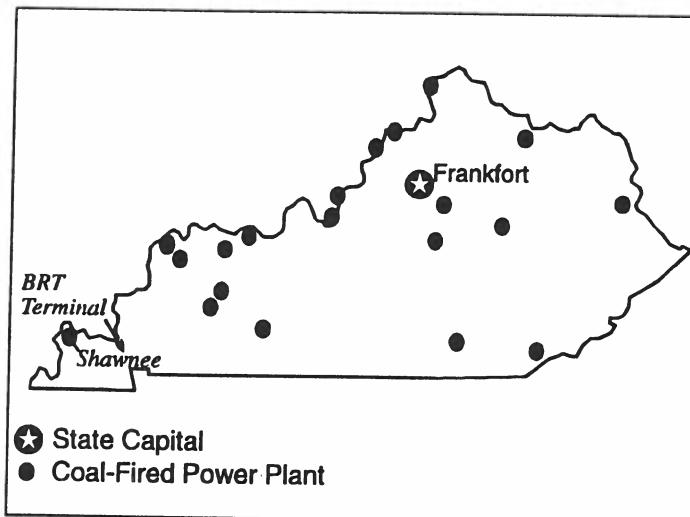


1997 Directory of Power Plants Burning Wyoming Coal

Kansas (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------------|-----------------|----|---------------|-----------|--------|----------|-------|----------|--------|
| Empire Dist. Electric | Riverton | C | Rochelle | 206,990 | 8,797 | 0.21 | 4.43 | 114.65 | 20.17 |
| Kansas City Bd. Public Utilities | Kaw | C | Medicine Bow | 58,500 | 10,512 | 0.46 | 6.62 | 128.86 | 27.09 |
| Kansas City Bd. Public Utilities | Nearman Creek | C | Dry Fork | 345,900 | 8,241 | 0.38 | 4.90 | 78.99 | 13.02 |
| Kansas City Bd. Public Utilities | Nearman Creek | C | Rawhilde | 608,800 | 8,346 | 0.33 | 4.85 | 82.21 | 13.72 |
| | | | | 954,700 | 8,308 | 0.35 | 4.87 | 81.04 | 13.47 |
| Kansas City Bd. Public Utilities | Quindaro | C | Medicine Bow | 283,700 | 10,581 | 0.47 | 6.54 | 128.25 | 27.09 |
| Kansas City Power and Light | La Cygne | C | Black Thunder | 175,000 | 8,786 | 0.35 | 5.46 | 69.16 | 12.15 |
| Kansas City Power and Light | La Cygne | C | Caballo | 2,137,000 | 8,521 | 0.37 | 5.03 | 62.64 | 10.68 |
| Kansas City Power and Light | La Cygne | C | Caballo Rojo | 671,000 | 8,435 | 0.31 | 5.14 | 62.33 | 10.52 |
| Kansas City Power and Light | La Cygne | S | Caballo Rojo | 56,000 | 8,429 | 0.35 | 5.45 | 62.40 | 10.52 |
| Kansas City Power and Light | La Cygne | C | Coal Creek | 566,000 | 8,354 | 0.34 | 5.40 | 69.92 | 11.68 |
| Kansas City Power and Light | La Cygne | C | Jacobs Ranch | 28,000 | 8,678 | 0.38 | 5.10 | 62.60 | 10.86 |
| | | | | 3,633,000 | 8,492 | 0.35 | 5.14 | 64.03 | 10.87 |
| Kansas Power & Light | Jeffrey | C | Eagle Butte | 8,254,320 | 8,348 | 0.37 | 4.71 | 112.19 | 18.73 |
| Sunflower Electric Power Corp. | Holcomb Unit #1 | C | Caballo Rojo | 1,111,546 | 8,440 | 0.34 | 5.31 | 115.59 | 19.51 |

Kentucky



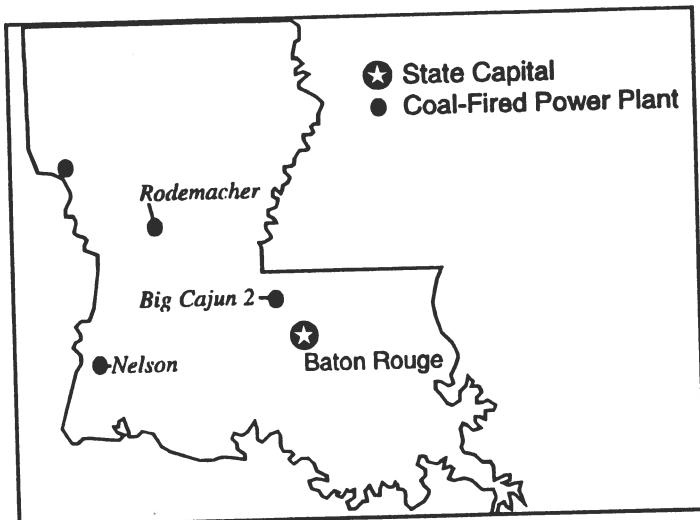
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------|--------------|----|----------------|----------|--------|----------|-------|----------|--------|
| Tennessee Valley Authority | BRT Terminal | C | Antelope | 88,980 | 8,775 | 0.30 | 6.00 | 94.93 | 16.66 |
| Tennessee Valley Authority | BRT Terminal | S | Antelope | 57,270 | 8,735 | 0.27 | 6.22 | 95.44 | 16.67 |
| Tennessee Valley Authority | BRT Terminal | C | Black Thunder | 138,680 | 8,803 | 0.31 | 5.07 | 93.91 | 16.53 |
| Tennessee Valley Authority | BRT Terminal | S | Black Thunder | 87,130 | 8,800 | 0.32 | 7.00 | 94.18 | 16.58 |
| Tennessee Valley Authority | BRT Terminal | S | Jacobs Ranch | 478,720 | 8,700 | 0.52 | 6.90 | 92.95 | 16.17 |
| Tennessee Valley Authority | BRT Terminal | S | North Antelope | 11,490 | 8,800 | 0.35 | 6.00 | 97.22 | 17.11 |
| Tennessee Valley Authority | BRT Terminal | C | Seminole II | 10,640 | 11,021 | 0.65 | 8.00 | 125.46 | 27.65 |
| | | | | 872,910 | 8,766 | 0.43 | 6.49 | 94.05 | 16.51 |

1997 Directory of Power Plants Burning Wyoming Coal

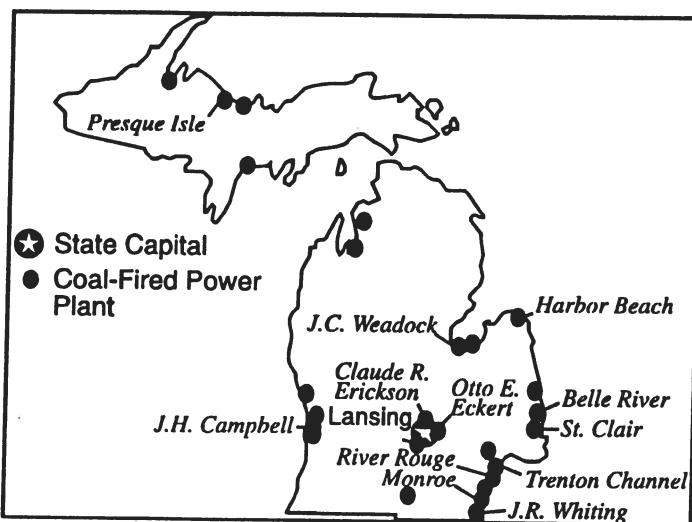
Kentucky (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------|------------|----|---------------|----------|--------|----------|-------|----------|--------|
| Tennessee Valley Authority | Shawnee | C | Antelope | 33,590 | 8,775 | 0.30 | 6.00 | 93.16 | 16.35 |
| Tennessee Valley Authority | Shawnee | S | Black Thunder | 146,570 | 8,804 | 0.31 | 6.61 | 92.86 | 16.35 |
| Tennessee Valley Authority | Shawnee | S | Jacobs Ranch | 73,370 | 8,700 | 0.52 | 6.77 | 92.24 | 16.05 |
| Tennessee Valley Authority | Shawnee | S | Seminoee II | 10,280 | 10,843 | 0.60 | 9.49 | 124.97 | 27.10 |
| Tennessee Valley Authority | Shawnee | C | Seminoee II | 238,110 | 11,041 | 0.65 | 8.00 | 122.47 | 27.04 |
| | | | | 501,920 | 9,890 | 0.51 | 7.31 | 107.49 | 21.60 |

Louisiana



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------|----------------|----|--------------|-----------|-------|----------|-------|----------|--------|
| Cajun Electric Power Coop. | Big Cajun No.2 | C | Buckskin | 5,750,276 | 8,467 | 0.45 | 5.27 | 154.90 | 26.23 |
| Cajun Electric Power Coop. | Big Cajun No.2 | C | Jacobs Ranch | 11,721 | 8,730 | 0.50 | 5.56 | 153.30 | 26.77 |
| | | | | 5,761,997 | 8,467 | 0.45 | 5.27 | 154.90 | 26.23 |
| Central Louisiana Electric | Rodemacher | C | Jacobs Ranch | 1,843,000 | 8,706 | 0.49 | 5.65 | 153.29 | 26.70 |
| Gulf States Utilities | Roy S. Nelson | C | Jacobs Ranch | 1,992,000 | 8,708 | 0.48 | 5.64 | 136.78 | 23.82 |

Michigan

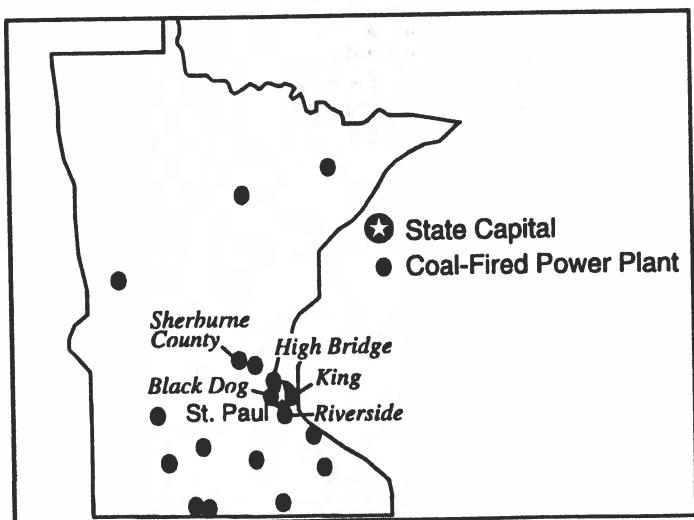
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|--------------------|----------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| Consumers Power | J. C. Weadock | S | Black Thunder | 249,000 | 8,768 | 0.33 | 5.35 | 115.62 | 20.28 |
| Consumers Power | J. C. Weadock | C | Jacobs Ranch | 12,400 | 8,689 | 0.50 | 5.70 | 126.00 | 21.90 |
| Consumers Power | J. C. Weadock | S | Jacobs Ranch | 37,400 | 8,738 | 0.47 | 5.60 | 113.50 | 19.84 |
| Consumers Power | J. C. Weadock | S | Rochelle | 25,200 | 8,740 | 0.20 | 5.10 | 119.20 | 20.84 |
| | | | | 324,000 | 8,759 | 0.34 | 5.37 | 116.05 | 20.33 |
| Consumers Power | J. H. Campbell | S | Black Thunder | 693,000 | 8,745 | 0.35 | 5.35 | 110.84 | 19.39 |
| Consumers Power | J. H. Campbell | C | Jacobs Ranch | 232,900 | 8,706 | 0.48 | 5.47 | 117.08 | 20.38 |
| Consumers Power | J. H. Campbell | S | Jacobs Ranch | 109,600 | 8,742 | 0.48 | 5.65 | 110.49 | 19.32 |
| Consumers Power | J. H. Campbell | S | Rochelle | 61,900 | 8,819 | 0.21 | 4.10 | 111.40 | 19.65 |
| | | | | 1,097,400 | 8,741 | 0.38 | 5.34 | 112.16 | 19.61 |
| Consumers Power | J. R. Whiting | S | Black Thunder | 8,700 | 8,720 | 0.35 | 5.54 | 118.10 | 20.60 |
| Detroit Edison Co. | Belle River | C | Antelope | 91,000 | 8,766 | 0.22 | 5.17 | 105.27 | 18.45 |
| Detroit Edison Co. | Belle River | S | Antelope | 3,000 | 8,780 | 0.24 | 5.10 | 95.10 | 16.70 |
| Detroit Edison Co. | Belle River | C | Black Thunder | 140,000 | 8,744 | 0.36 | 5.26 | 100.99 | 17.66 |
| Detroit Edison Co. | Belle River | C | North Antelope | 199,000 | 8,845 | 0.23 | 4.41 | 101.19 | 17.90 |
| Detroit Edison Co. | Belle River | C | Rochelle | 50,000 | 8,847 | 0.23 | 4.44 | 105.13 | 18.60 |
| | | | | 483,000 | 8,801 | 0.27 | 4.81 | 102.27 | 18.00 |
| Detroit Edison Co. | Harbor Beach | C | Antelope | 9,000 | 8,656 | 0.20 | 5.80 | 102.80 | 17.80 |
| Detroit Edison Co. | Monroe | C | Antelope | 594,000 | 8,766 | 0.21 | 5.15 | 107.19 | 18.79 |
| Detroit Edison Co. | Monroe | S | Antelope | 151,000 | 8,788 | 0.24 | 5.30 | 99.18 | 17.43 |
| Detroit Edison Co. | Monroe | C | Black Thunder | 2,358,000 | 8,756 | 0.35 | 5.40 | 103.24 | 18.08 |
| Detroit Edison Co. | Monroe | C | North Antelope | 1,606,000 | 8,868 | 0.23 | 4.43 | 102.98 | 18.26 |
| Detroit Edison Co. | Monroe | S | North Antelope | 49,000 | 8,836 | 0.24 | 4.60 | 100.00 | 17.67 |
| Detroit Edison Co. | Monroe | S | Rochelle | 13,000 | 8,718 | 0.18 | 4.30 | 102.80 | 17.92 |
| Detroit Edison Co. | Monroe | C | Rochelle | 307,000 | 8,800 | 0.22 | 4.43 | 103.95 | 18.29 |
| | | | | 5,078,000 | 8,797 | 0.28 | 4.99 | 103.51 | 18.21 |

1997 Directory of Power Plants Burning Wyoming Coal

Michigan (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------------|--------------------|----|----------------|----------|-------|----------|-------|----------|--------|
| Detroit Edison Co. | River Rouge | C | Antelope | 48,000 | 8,784 | 0.19 | 5.09 | 109.92 | 19.31 |
| Detroit Edison Co. | River Rouge | S | Antelope | 25,000 | 8,804 | 0.23 | 4.99 | 100.21 | 17.65 |
| Detroit Edison Co. | River Rouge | C | Black Thunder | 412,000 | 8,766 | 0.35 | 5.30 | 102.18 | 17.91 |
| Detroit Edison Co. | River Rouge | C | North Antelope | 87,000 | 8,877 | 0.24 | 4.35 | 102.69 | 18.23 |
| Detroit Edison Co. | River Rouge | S | North Antelope | 12,000 | 8,830 | 0.22 | 4.40 | 99.60 | 17.59 |
| Detroit Edison Co. | River Rouge | C | Rochelle | 91,000 | 8,800 | 0.20 | 4.41 | 104.03 | 18.31 |
| | | | | 675,000 | 8,789 | 0.30 | 5.01 | 102.93 | 18.09 |
| Detroit Edison Co. | St. Clair | C | Antelope | 89,000 | 8,768 | 0.21 | 5.17 | 102.70 | 18.01 |
| Detroit Edison Co. | St. Clair | S | Antelope | 3,000 | 8,780 | 0.24 | 5.10 | 95.10 | 16.70 |
| Detroit Edison Co. | St. Clair | C | Black Thunder | 150,000 | 8,733 | 0.37 | 5.37 | 101.04 | 17.65 |
| Detroit Edison Co. | St. Clair | C | North Antelope | 164,000 | 8,847 | 0.23 | 4.41 | 101.19 | 17.90 |
| Detroit Edison Co. | St. Clair | C | Rochelle | 88,000 | 8,845 | 0.23 | 4.45 | 103.25 | 18.27 |
| | | | | 494,000 | 8,797 | 0.27 | 4.85 | 101.75 | 17.90 |
| Detroit Edison Co. | Trenton Channel | C | Antelope | 144,000 | 8,737 | 0.22 | 5.35 | 109.59 | 19.15 |
| Detroit Edison Co. | Trenton Channel | S | Antelope | 98,000 | 8,789 | 0.25 | 5.38 | 99.46 | 17.48 |
| Detroit Edison Co. | Trenton Channel | C | Black Thunder | 126,000 | 8,711 | 0.34 | 5.45 | 108.13 | 18.84 |
| Detroit Edison Co. | Trenton Channel | C | North Antelope | 444,000 | 8,867 | 0.23 | 4.47 | 105.04 | 18.63 |
| Detroit Edison Co. | Trenton Channel | C | Rochelle | 162,000 | 8,772 | 0.22 | 4.39 | 108.11 | 18.97 |
| | | | | 974,000 | 8,804 | 0.24 | 4.80 | 106.06 | 18.67 |
| Lansing Board of Water and Light | Claude R. Erickson | S | Antelope | 3,300 | 8,940 | 0.33 | 6.02 | 144.16 | 25.77 |
| Lansing Board of Water and Light | Otto E. Eckert | S | Antelope | 107,800 | 8,805 | 0.26 | 5.48 | 146.37 | 25.77 |
| Wisconsin Electric Power | Presque Isle | C | Jacobs Ranch | 149,300 | 9,060 | 0.49 | 5.88 | 110.86 | 20.09 |

Minnesota

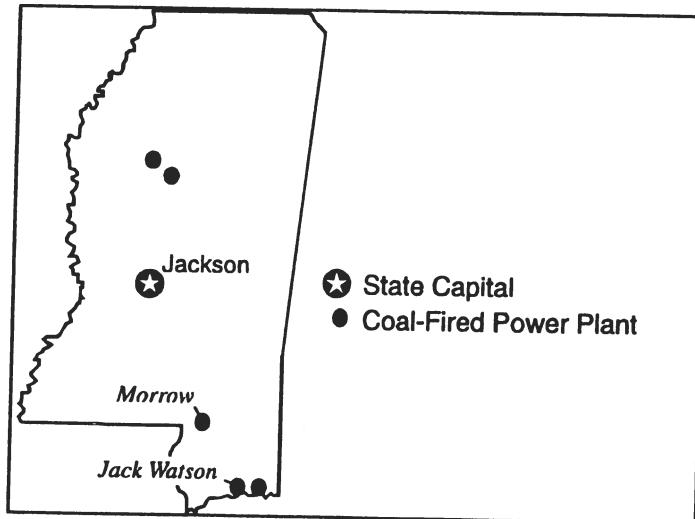


1997 Directory of Power Plants Burning Wyoming Coal

Minnesota (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|-----------------------|------------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| Northern States Power | Black Dog | C | Antelope | 323,900 | 8,784 | 0.28 | 5.38 | 113.63 | 19.96 |
| Northern States Power | Black Dog | C | Jacobs Ranch | 12,900 | 8,733 | 0.43 | 5.80 | 98.10 | 17.13 |
| Northern States Power | Black Dog | C | North Antelope | 36,000 | 8,783 | 0.19 | 4.60 | 104.60 | 18.37 |
| Northern States Power | Black Dog | C | Rochelle | 464,000 | 8,762 | 0.19 | 4.32 | 105.00 | 18.40 |
| | | | | 836,800 | 8,771 | 0.23 | 4.76 | 108.22 | 18.98 |
| Northern States Power | High Bridge | C | Antelope | 6,200 | 8,745 | 0.26 | 5.80 | 116.40 | 20.36 |
| Northern States Power | High Bridge | C | North Antelope | 711,900 | 8,867 | 0.24 | 4.50 | 100.58 | 17.84 |
| Northern States Power | High Bridge | C | Rochelle | 39,200 | 8,790 | 0.20 | 4.27 | 109.42 | 19.23 |
| | | | | 757,300 | 8,862 | 0.23 | 4.50 | 101.17 | 17.93 |
| Northern States Power | King | C | Antelope | 516,500 | 8,780 | 0.23 | 5.21 | 111.05 | 19.50 |
| Northern States Power | King | C | North Antelope | 713,300 | 8,879 | 0.23 | 4.37 | 103.07 | 18.30 |
| | | | | 1,229,800 | 8,837 | 0.23 | 4.72 | 106.42 | 18.81 |
| Northern States Power | Riverside | C | Antelope | 4,800 | 8,745 | 0.26 | 5.80 | 109.50 | 19.15 |
| Northern States Power | Riverside | C | North Antelope | 1,256,300 | 8,865 | 0.23 | 4.47 | 96.34 | 17.08 |
| | | | | 1,261,100 | 8,864 | 0.23 | 4.48 | 96.39 | 17.09 |
| Northern States Power | Sherburne County | C | Black Thunder | 2,523,600 | 8,753 | 0.35 | 5.45 | 114.70 | 20.08 |
| Northern States Power | Sherburne County | C | Jacobs Ranch | 134,900 | 8,738 | 0.47 | 5.76 | 111.20 | 19.43 |
| Northern States Power | Sherburne County | C | North Antelope | 814,000 | 8,870 | 0.24 | 4.41 | 113.75 | 20.18 |
| Northern States Power | Sherburne County | C | Rochelle | 322,300 | 8,757 | 0.20 | 4.40 | 109.62 | 19.19 |
| | | | | 3,794,800 | 8,778 | 0.32 | 5.15 | 113.94 | 20.00 |

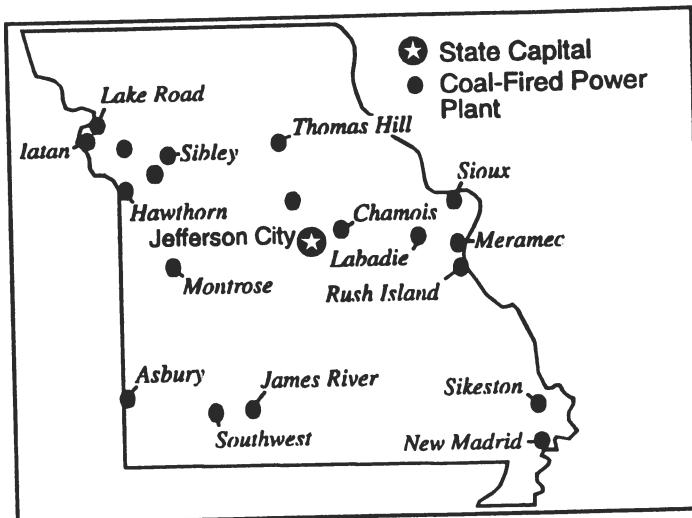
Mississippi



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------------|------------|----|--------------|----------|-------|----------|-------|----------|--------|
| Mississippi Power (Southern Co.) | Watson | S | Jacobs Ranch | 285,430 | 8,677 | 0.46 | 5.69 | 133.81 | 23.22 |

1997 Directory of Power Plants Burning Wyoming Coal

Missouri



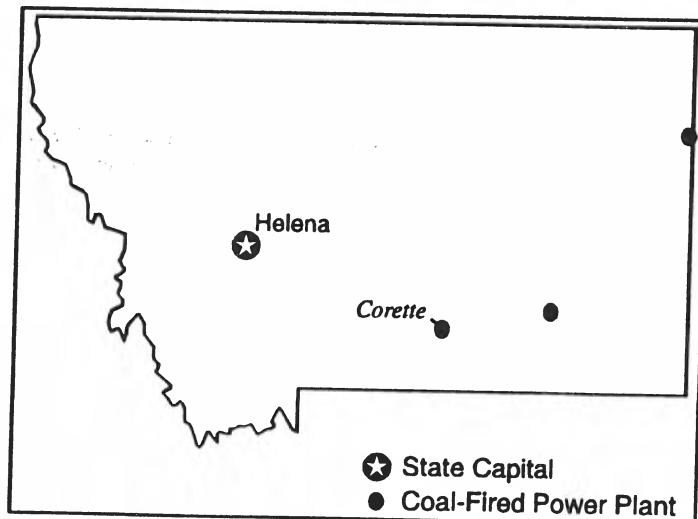
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|--|--------------------------------------|------------------|--|--|---|--------------------------------------|--------------------------------------|---|---|
| | | C | Rochelle | | | | | | |
| Associated Electric Coop. | New Madrid | C | Rochelle | 4,157,100 | 8,753 | 0.21 | 4.65 | 95.98 | 16.80 |
| Associated Electric Coop. | Thomas Hill | C | Rochelle | 4,227,100 | 8,704 | 0.21 | 4.69 | 74.42 | 12.95 |
| Central Elec. Power Coop.-Missouri | Chamois | S | Rochelle | 300 | 8,700 | 0.20 | 4.50 | 87.99 | 15.31 |
| City Utilities of Springfield City Utilities of Springfield | James River James River | C C | Black Thunder North Antelope | 54,600 437,000 491,600 | 8,750 8,874 8,861 | 0.39 0.22 0.24 | 5.50 4.37 4.49 | 108.40 115.61 114.81 | 18.97 20.52 20.35 |
| City Utilities of Springfield City Utilities of Springfield | Southwest Southwest | C C | Black Thunder North Antelope | 54,000 500,800 554,800 | 8,787 8,871 8,862 | 0.38 0.22 0.23 | 5.50 4.37 4.48 | 103.00 110.79 110.03 | 18.10 19.66 19.50 |
| Empire Dist. Electric | Asbury | C | Rochelle | 652,448 | 8,797 | 0.21 | 4.41 | 101.05 | 17.78 |
| Kansas City Power and Light | Hawthorne | C | Black Thunder | 1,328,000 | 8,755 | 0.34 | 5.47 | 67.99 | 11.91 |
| Kansas City Power and Light Kansas City Power and Light Kansas City Power and Light | Iatan Iatan Iatan | C S C | Black Thunder Black Thunder Caballo | 2,057,000 415,000 122,000 2,594,000 | 8,749 8,702 8,528 8,731 | 0.35 0.35 0.36 0.35 | 5.47 5.74 5.10 5.49 | 81.48 74.12 55.75 79.09 | 14.26 12.90 9.51 13.82 |
| Kansas City Power and Light Kansas City Power and Light | Montrose Montrose | C C | Caballo Rochelle | 69,000 1,584,000 1,653,000 | 8,549 8,692 8,686 | 0.40 0.20 0.21 | 5.25 5.00 5.01 | 86.50 97.26 96.81 | 14.79 16.91 16.82 |
| Missouri Public Service Missouri Public Service Missouri Public Service Missouri Public Service | Sibley Sibley Sibley Sibley | C C C C | Medicine Bow North Antelope Rochelle Seminoe II | 795,301 179,990 323,747 87,413 1,386,451 | 10,462 8,805 8,720 11,029 9,876 | 0.57 0.21 0.22 0.78 0.45 | 7.18 4.47 4.53 9.06 6.33 | 107.05 68.57 74.30 106.74 94.39 | 22.40 12.08 12.95 23.55 18.93 |

1997 Directory of Power Plants Burning Wyoming Coal

Missouri (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------|-------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| Sikeston Utilities | Sikeston | S | Black Thunder | 391,000 | 8,763 | 0.36 | 5.28 | 98.47 | 17.26 |
| St. Joseph Light and Power | Lake Road | S | Antelope | 21,900 | 8,850 | 0.25 | 5.70 | 80.30 | 14.21 |
| St. Joseph Light and Power | Lake Road | S | Black Thunder | 11,000 | 8,748 | 0.34 | 5.00 | 87.60 | 15.33 |
| St. Joseph Light and Power | Lake Road | S | North Antelope | 68,800 | 8,859 | 0.24 | 4.49 | 80.13 | 14.20 |
| | | | | 101,700 | 8,845 | 0.25 | 4.80 | 80.98 | 14.32 |
| Union Electric | Labadie | S | Antelope | 481,000 | 8,800 | 0.22 | 5.30 | 86.27 | 15.18 |
| Union Electric | Labadie | S | Black Thunder | 666,000 | 8,820 | 0.33 | 5.00 | 86.19 | 15.20 |
| Union Electric | Labadie | C | Caballo Rojo | 13,000 | 8,450 | 0.32 | 5.10 | 92.50 | 15.63 |
| Union Electric | Labadie | S | Cordero | 460,000 | 8,650 | 0.52 | 5.70 | 82.93 | 14.35 |
| Union Electric | Labadie | C | Jacobs Ranch | 1,288,000 | 8,650 | 0.52 | 5.70 | 87.57 | 15.15 |
| Union Electric | Labadie | S | North Antelope | 1,223,000 | 8,800 | 0.24 | 4.50 | 87.87 | 15.46 |
| Union Electric | Labadie | C | Rochelle | 3,082,000 | 8,750 | 0.22 | 4.50 | 91.22 | 15.96 |
| | | | | 7,213,000 | 8,744 | 0.31 | 4.89 | 88.68 | 15.51 |
| Union Electric | Meramec | S | North Antelope | 172,000 | 8,800 | 0.24 | 4.50 | 108.10 | 19.03 |
| Union Electric | Meramec | C | Rochelle | 290,000 | 8,750 | 0.22 | 4.50 | 110.82 | 19.39 |
| | | | | 462,000 | 8,769 | 0.23 | 4.50 | 109.81 | 19.26 |
| Union Electric | Rush Island | S | Belle Ayr | 503,000 | 8,550 | 0.30 | 4.50 | 87.91 | 15.03 |
| Union Electric | Rush Island | S | Black Thunder | 88,000 | 8,820 | 0.33 | 5.00 | 86.49 | 15.26 |
| Union Electric | Rush Island | S | Buckskin | 335,000 | 8,450 | 0.36 | 5.00 | 86.59 | 14.63 |
| Union Electric | Rush Island | C | Caballo Rojo | 1,796,000 | 8,450 | 0.32 | 5.10 | 94.78 | 16.02 |
| Union Electric | Rush Island | S | Coal Creek | 409,000 | 8,820 | 0.33 | 5.00 | 89.92 | 15.86 |
| Union Electric | Rush Island | S | Cordero | 547,000 | 8,644 | 0.52 | 5.70 | 88.51 | 15.30 |
| Union Electric | Rush Island | C | Rochelle | 63,000 | 8,750 | 0.22 | 4.50 | 93.73 | 16.40 |
| | | | | 3,741,000 | 8,546 | 0.35 | 5.07 | 91.46 | 15.63 |
| Union Electric | Sioux | S | Black Thunder | 143,000 | 8,820 | 0.33 | 5.00 | 85.83 | 15.14 |
| Union Electric | Sioux | S | Buckskin | 264,000 | 8,450 | 0.36 | 5.00 | 86.59 | 14.63 |
| Union Electric | Sioux | S | Coal Creek | 174,000 | 8,820 | 0.33 | 5.00 | 90.24 | 15.92 |
| Union Electric | Sioux | C | Rochelle | 1,115,000 | 8,750 | 0.22 | 4.50 | 92.61 | 16.21 |
| | | | | 1,696,000 | 8,716 | 0.26 | 4.67 | 90.85 | 15.84 |

Montana

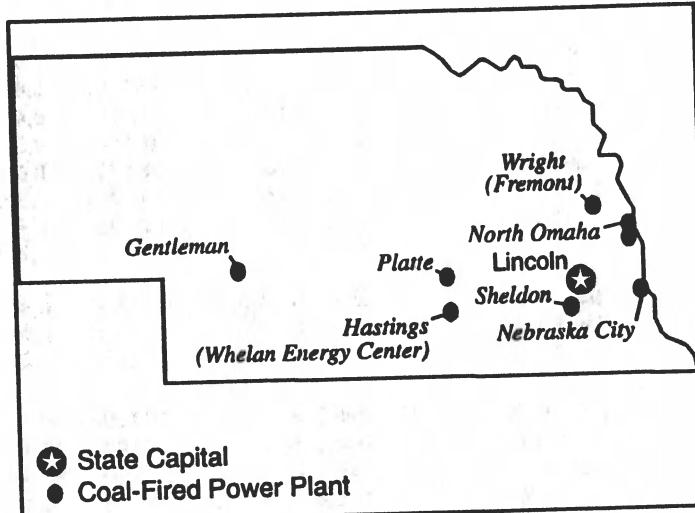


1997 Directory of Power Plants Burning Wyoming Coal

Montana (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|-------------------|------------|----|-------------|----------|-------|----------|-------|----------|--------|
| Montana Power Co. | Corette | NC | Rawhide | 494,800 | 8,325 | 0.23 | 4.47 | 55.75 | 9.28 |

Nebraska



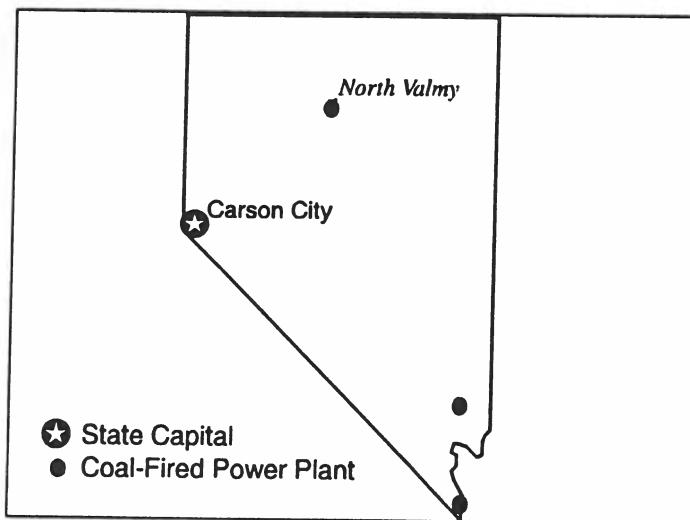
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|-----------------------------------|------------------|----|----------------|-----------|--------|----------|-------|----------|--------|
| Fremont Dept. of Public Utilities | Wright | C | Belle Ayr | 200,173 | 8,565 | 0.26 | 4.42 | 90.43 | 15.49 |
| Fremont Dept. of Public Utilities | Wright | S | Shoshone No. 1 | 11,000 | 10,800 | 0.59 | 6.32 | 134.92 | 29.14 |
| | | | | 211,173 | 8,682 | 0.28 | 4.52 | 92.74 | 16.20 |
| Grand Island Utilities | Platte | C | Caballo Rojo | 253,000 | 8,463 | 0.33 | 5.21 | 70.43 | 11.92 |
| Grand Island Utilities | Platte | C | Cordero Rojo | 65,823 | 8,417 | 0.32 | 5.23 | 68.75 | 11.57 |
| | | | | 318,823 | 8,453 | 0.33 | 5.21 | 70.09 | 11.85 |
| Hastings Utilities | Hastings | S | Caballo | 122,200 | 8,537 | 0.36 | 4.98 | 59.65 | 10.18 |
| Hastings Utilities | Hastings | C | North Antelope | 98,000 | 8,854 | 0.25 | 4.38 | 73.34 | 12.99 |
| | | | | 220,200 | 8,678 | 0.31 | 4.71 | 65.74 | 11.43 |
| Nebraska Public Power System | Gerald Gentleman | NC | Belle Ayr | 3,571,463 | 8,572 | 0.26 | 4.40 | 46.35 | 7.95 |
| Nebraska Public Power System | Gerald Gentleman | S | Belle Ayr | 192,270 | 8,573 | 0.25 | 4.39 | 45.00 | 7.72 |
| Nebraska Public Power System | Gerald Gentleman | C | Black Thunder | 328,933 | 8,741 | 0.37 | 5.41 | 46.10 | 8.06 |
| Nebraska Public Power System | Gerald Gentleman | C | Rochelle | 1,159,556 | 8,754 | 0.20 | 4.48 | 49.47 | 8.66 |
| | | | | 5,252,222 | 8,622 | 0.25 | 4.48 | 46.98 | 8.10 |
| Nebraska Public Power System | Sheldon | S | Black Thunder | 10,786 | 8,793 | 0.35 | 5.50 | 59.30 | 10.43 |
| Nebraska Public Power System | Sheldon | C | Rochelle | 818,260 | 8,740 | 0.20 | 4.41 | 62.90 | 10.99 |
| Nebraska Public Power System | Sheldon | S | Shoshone No. 1 | 33,865 | 10,866 | 0.63 | 5.98 | 109.84 | 23.87 |
| | | | | 862,911 | 8,824 | 0.22 | 4.48 | 64.70 | 11.49 |
| Omaha Public Power District | Nebraska City | S | Cordero | 24,600 | 8,165 | 0.41 | 7.40 | 67.40 | 11.01 |
| Omaha Public Power District | Nebraska City | S | Dry Fork | 24,600 | 8,014 | 0.33 | 4.60 | 68.60 | 11.00 |
| Omaha Public Power District | Nebraska City | S | Jacobs Ranch | 632,700 | 8,696 | 0.46 | 5.40 | 67.98 | 11.82 |
| Omaha Public Power District | Nebraska City | C | Rawhide | 1,053,800 | 8,340 | 0.31 | 4.83 | 70.81 | 11.81 |
| | | | | 1,735,700 | 8,463 | 0.37 | 5.07 | 69.70 | 11.79 |

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Nebraska (cont.)

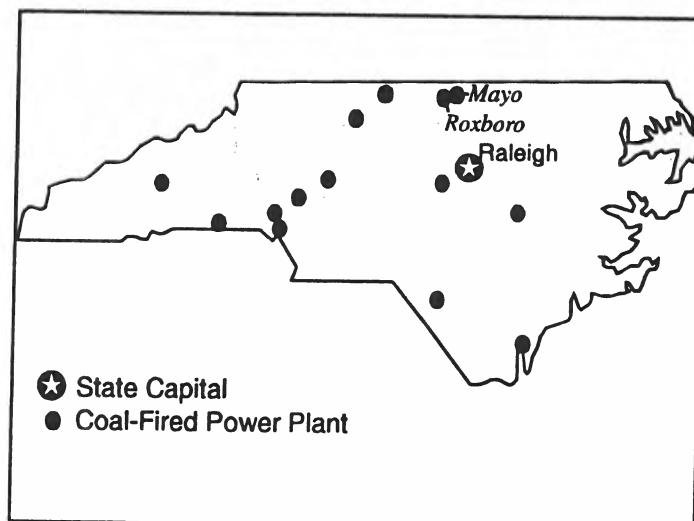
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|-----------------------------|-------------|----|--------------|-----------|-------|----------|-------|----------|--------|
| Omaha Public Power District | North Omaha | S | Buckskin | 280,600 | 8,451 | 0.74 | 5.83 | 67.02 | 11.33 |
| Omaha Public Power District | North Omaha | S | Coal Creek | 38,800 | 8,420 | 0.35 | 5.30 | 67.10 | 11.30 |
| Omaha Public Power District | North Omaha | S | Jacobs Ranch | 988,900 | 8,732 | 0.54 | 5.77 | 68.55 | 11.97 |
| Omaha Public Power District | North Omaha | C | Rawhide | 726,700 | 8,333 | 0.32 | 4.82 | 73.23 | 12.20 |
| | | | | 2,035,000 | 8,545 | 0.48 | 5.43 | 69.98 | 11.95 |

Nevada



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------|-------------|----|-------------|----------|-------|----------|-------|----------|--------|
| Sierra Pacific Power | North Valmy | S | Black Butte | 17,000 | 9,858 | 0.47 | 7.51 | 95.30 | 18.79 |

North Carolina

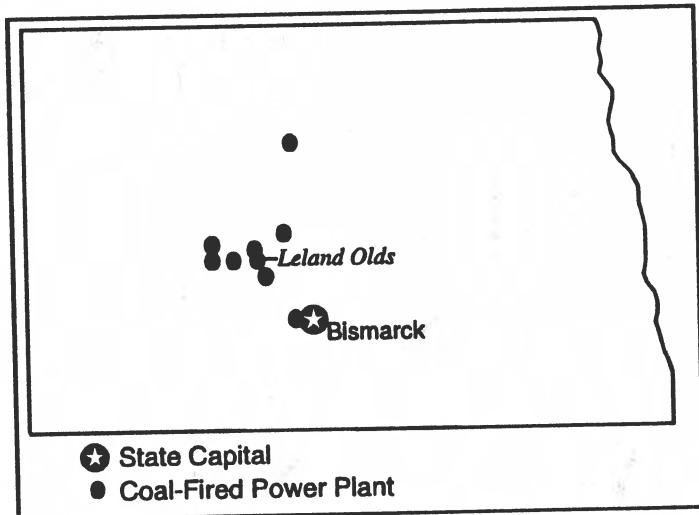


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North Carolina (cont.)

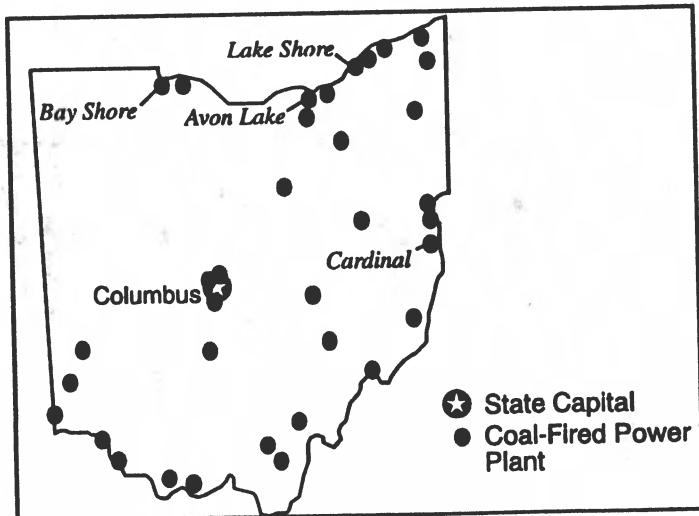
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|--------------------------|------------|----|----------------|----------|-------|----------|-------|----------|--------|
| Carolina Power and Light | Mayo | S | North Antelope | 13,200 | 8,963 | 0.50 | 4.70 | 177.40 | 31.80 |
| Carolina Power and Light | Roxboro | S | North Antelope | 26,600 | 8,857 | 0.50 | 4.80 | 179.50 | 31.80 |

North Dakota



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------|-------------------|----|-------------|----------|-------|----------|-------|----------|--------|
| Basin Electric Power Coop. | Leland Olds 1 & 2 | S | Buckskin | 107,400 | 8,483 | 0.44 | 5.32 | 64.97 | 11.02 |

Ohio

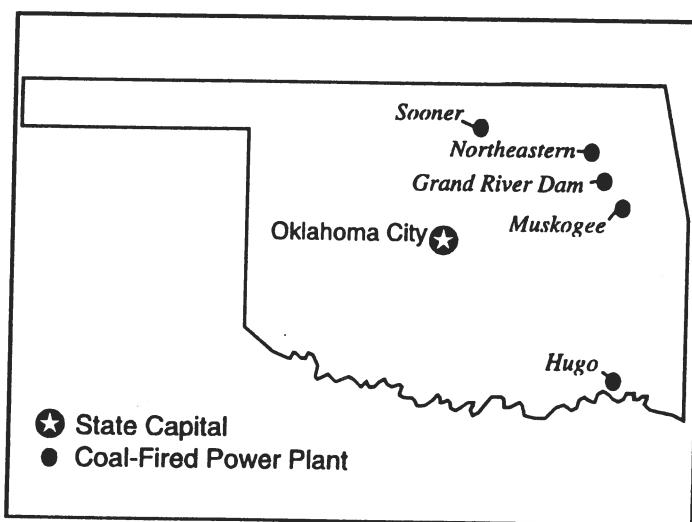


1997 Directory of Power Plants Burning Wyoming Coal

Ohio (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|-------------------------------|------------|----|---------------|-----------|-------|----------|-------|----------|--------|
| Cardinal Operating Co. (AEP) | Cardinal | S | Black Thunder | 73,100 | 8,759 | 0.35 | 5.32 | 136.75 | 23.95 |
| Cleveland Electric Illum. Co. | Avon Lake | S | Antelope | 25,000 | 8,824 | 0.18 | 4.60 | 127.90 | 22.57 |
| Cleveland Electric Illum. Co. | Lake Shore | S | Antelope | 42,000 | 9,049 | 0.28 | 4.63 | 149.35 | 27.03 |
| Toledo Edison Co. | Bay Shore | S | Antelope | 680,000 | 8,741 | 0.22 | 4.93 | 122.06 | 21.34 |
| Toledo Edison Co. | Bay Shore | C | Belle Ayr | 412,000 | 8,565 | 0.26 | 4.24 | 123.14 | 21.09 |
| | | | | 1,092,000 | 8,675 | 0.23 | 4.67 | 122.47 | 21.25 |

Oklahoma



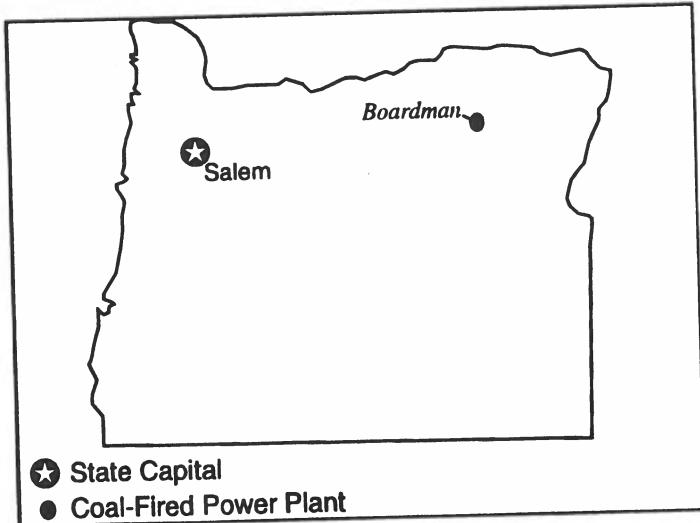
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|---------------------------|------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| Grand River Dam Authority | GRDA 1 & 2 | C | Caballo Rojo | 368,923 | 8,443 | 0.33 | 5.34 | 96.10 | 16.23 |
| Grand River Dam Authority | GRDA 1 & 2 | C | Cordero | 283,421 | 8,409 | 0.35 | 6.05 | 83.50 | 14.04 |
| Grand River Dam Authority | GRDA 1 & 2 | S | Cordero | 11,840 | 8,379 | 0.44 | 6.23 | 84.08 | 14.09 |
| Grand River Dam Authority | GRDA 1 & 2 | C | Fort Union | 175,840 | 8,053 | 0.41 | 5.54 | 86.10 | 13.87 |
| Grand River Dam Authority | GRDA 1 & 2 | C | North Antelope | 191,459 | 8,827 | 0.19 | 4.57 | 84.51 | 14.92 |
| Grand River Dam Authority | GRDA 1 & 2 | C | Rawhide | 2,633,617 | 8,336 | 0.30 | 4.79 | 89.07 | 14.85 |
| | | | | 3,665,100 | 8,364 | 0.31 | 4.97 | 88.95 | 14.88 |
| Oklahoma Gas and Electric | Muskogee | C | Antelope | 222,751 | 8,801 | 0.21 | 4.91 | 85.36 | 15.02 |
| Oklahoma Gas and Electric | Muskogee | C | Belle Ayr | 2,038,519 | 8,579 | 0.26 | 4.47 | 84.32 | 14.47 |
| Oklahoma Gas and Electric | Muskogee | C | Black Thunder | 1,599,613 | 8,763 | 0.34 | 5.45 | 83.75 | 14.68 |
| Oklahoma Gas and Electric | Muskogee | C | Caballo Rojo | 986,216 | 8,445 | 0.33 | 5.23 | 84.42 | 14.26 |
| Oklahoma Gas and Electric | Muskogee | C | North Antelope | 221,784 | 8,771 | 0.20 | 5.15 | 83.13 | 14.58 |
| Oklahoma Gas and Electric | Muskogee | C | Rochelle | 252,281 | 8,763 | 0.21 | 4.23 | 86.86 | 15.22 |
| | | | | 5,321,164 | 8,636 | 0.29 | 4.94 | 84.28 | 14.56 |

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Oklahoma (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|------------------------------------|------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| Oklahoma Gas and Electric | Sooner | C | Belle Ayr | 1,566,909 | 8,568 | 0.25 | 4.40 | 81.02 | 13.88 |
| Oklahoma Gas and Electric | Sooner | C | Black Thunder | 2,015,188 | 8,762 | 0.35 | 5.33 | 80.28 | 14.07 |
| Oklahoma Gas and Electric | Sooner | C | Caballo Rojo | 529,995 | 8,444 | 0.33 | 5.33 | 80.38 | 13.57 |
| Oklahoma Gas and Electric | Sooner | C | North Antelope | 12,349 | 8,701 | 0.18 | 4.30 | 83.50 | 14.53 |
| Oklahoma Gas and Electric | Sooner | C | Rochelle | 12,511 | 8,851 | 0.21 | 4.40 | 79.40 | 14.06 |
| | | | | 4,136,952 | 8,648 | 0.31 | 4.97 | 80.58 | 13.94 |
| Public Serv. Co. of Oklahoma (CSW) | Northeast | C | Buckskin | 537,200 | 8,469 | 0.45 | 5.25 | 113.26 | 19.18 |
| Public Serv. Co. of Oklahoma (CSW) | Northeast | C | North Antelope | 3,150,436 | 8,877 | 0.24 | 4.44 | 112.30 | 19.94 |
| Public Serv. Co. of Oklahoma (CSW) | Northeast | C | Rochelle | 374,544 | 8,792 | 0.20 | 4.26 | 112.43 | 19.77 |
| | | | | 4,062,180 | 8,816 | 0.26 | 4.53 | 112.44 | 19.82 |
| Western Farmers Electric Coop. | Hugo | C | Belle Ayr | 1,042,602 | 8,578 | 0.25 | 4.43 | 100.07 | 17.17 |
| Western Farmers Electric Coop. | Hugo | S | Buckskin | 48,463 | 8,488 | 0.47 | 5.25 | 80.00 | 13.58 |
| | | | | 1,091,065 | 8,574 | 0.26 | 4.46 | 99.18 | 17.01 |

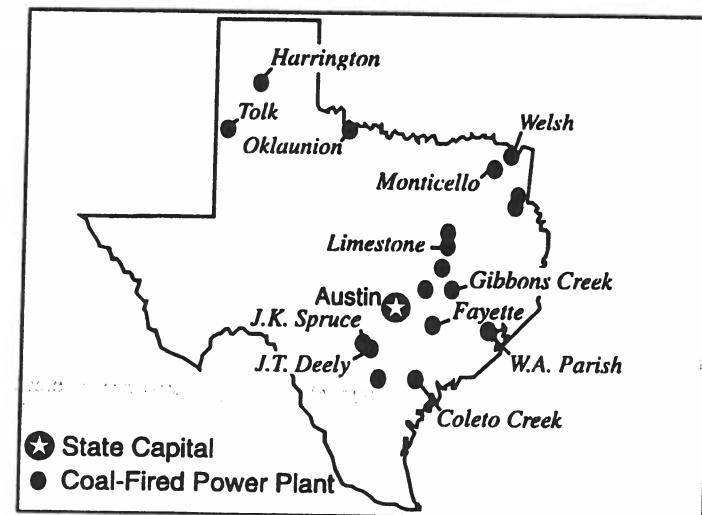
Oregon



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|---------------------------|------------|----|----------------|----------|-------|----------|-------|----------|--------|
| Portland General Electric | Boardman | S | Antelope | 63,000 | 8,870 | 0.25 | 5.08 | 110.91 | 19.67 |
| Portland General Electric | Boardman | S | Black Thunder | 711,000 | 8,746 | 0.36 | 5.58 | 114.20 | 19.98 |
| Portland General Electric | Boardman | S | North Antelope | 11,000 | 8,886 | 0.20 | 4.30 | 113.40 | 20.15 |
| Portland General Electric | Boardman | S | Rochelle | 90,000 | 8,750 | 0.18 | 4.40 | 113.80 | 19.92 |
| | | | | 875,000 | 8,757 | 0.33 | 5.41 | 113.91 | 19.95 |

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Texas



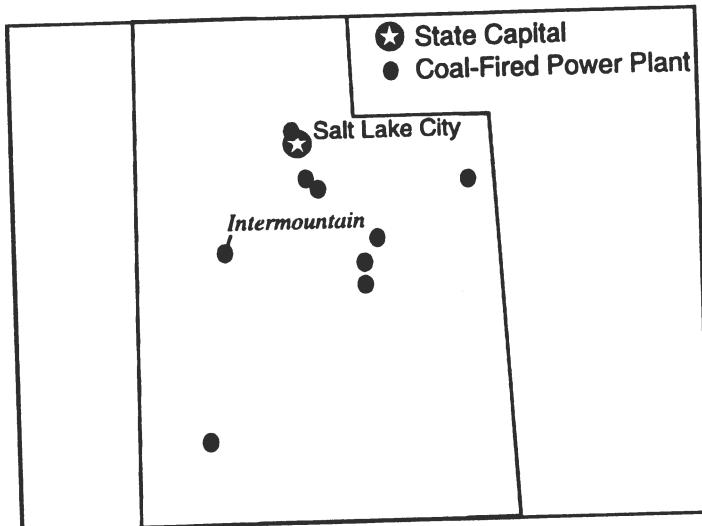
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|----------------------------------|----------------|----|---------------------|-----------|-------|----------|-------|----------|--------|
| | | S | Jacobs Ranch | 252,375 | 8,713 | 0.47 | 5.12 | 134.38 | 23.41 |
| Central Power and Light (CSW) | Coleto Creek | S | Jacobs Ranch | 252,375 | 8,713 | 0.47 | 5.12 | 134.38 | 23.41 |
| City Public Service-San Antonio | Deely & Spruce | C | Cordero | 4,781,000 | 8,350 | 0.36 | 6.00 | 97.21 | 16.23 |
| Houston Lighting and Power | Limestone | S | Jacobs Ranch | 22,500 | 8,689 | 0.44 | 5.37 | 137.70 | 23.93 |
| Houston Lighting and Power | W. A. Parish | C | Antelope | 1,037,300 | 8,600 | 0.40 | 5.24 | 200.36 | 34.46 |
| Houston Lighting and Power | W. A. Parish | C | Belle Ayr | 664,400 | 8,562 | 0.26 | 4.29 | 122.74 | 21.02 |
| Houston Lighting and Power | W. A. Parish | C | Cordero | 1,046,000 | 8,538 | 0.39 | 5.16 | 201.51 | 34.41 |
| Houston Lighting and Power | W. A. Parish | C | Cordero Rojo | 4,166,900 | 8,574 | 0.38 | 5.12 | 196.18 | 33.64 |
| Houston Lighting and Power | W. A. Parish | S | Cordero Rojo | 42,100 | 8,578 | 0.38 | 5.16 | 142.90 | 24.52 |
| Houston Lighting and Power | W. A. Parish | C | Eagle Butte | 61,400 | 8,459 | 0.36 | 4.64 | 129.30 | 21.87 |
| Houston Lighting and Power | W. A. Parish | S | Eagle Butte | 98,300 | 8,445 | 0.34 | 4.65 | 128.36 | 21.68 |
| Houston Lighting and Power | W. A. Parish | C | Jacobs Ranch | 2,385,400 | 8,694 | 0.45 | 5.44 | 196.81 | 34.22 |
| | | | | 9,501,800 | 8,600 | 0.39 | 5.15 | 190.87 | 32.83 |
| Lower Colorado River Authority | Fayette | C | Black Thunder | 2,350,000 | 8,740 | 0.35 | 5.44 | 98.32 | 17.19 |
| Lower Colorado River Authority | Fayette | C | Caballo Rojo | 833,000 | 8,456 | 0.33 | 5.34 | 97.69 | 16.52 |
| Lower Colorado River Authority | Fayette | C | Cordero | 1,215,000 | 8,385 | 0.35 | 5.98 | 93.56 | 15.69 |
| Lower Colorado River Authority | Fayette | C | VITOL (Cordero?) | 1,064,000 | 8,338 | 0.35 | 6.05 | 95.42 | 15.91 |
| | | | | 5,462,000 | 8,539 | 0.35 | 5.66 | 96.60 | 16.50 |
| Southwestern Electric Power(CSW) | Welsh Station | C | Belle Ayr | 1,058,000 | 8,362 | 0.29 | 4.37 | 182.89 | 30.59 |
| Southwestern Electric Power(CSW) | Welsh Station | S | Belle Ayr | 193,000 | 8,365 | 0.30 | 4.37 | 148.05 | 24.77 |
| Southwestern Electric Power(CSW) | Welsh Station | S | Buckskin | 69,000 | 8,436 | 0.46 | 5.36 | 135.20 | 22.81 |
| Southwestern Electric Power(CSW) | Welsh Station | S | Cordero | 151,000 | 8,383 | 0.37 | 6.16 | 135.60 | 22.73 |
| Southwestern Electric Power(CSW) | Welsh Station | C | Eagle Butte | 2,740,000 | 8,386 | 0.37 | 4.70 | 183.46 | 30.77 |
| Southwestern Electric Power(CSW) | Welsh Station | S | Eagle Butte | 965,000 | 8,388 | 0.37 | 4.70 | 142.80 | 23.96 |
| Southwestern Electric Power(CSW) | Welsh Station | S | Jacobs Ranch | 384,000 | 8,726 | 0.44 | 5.45 | 133.63 | 23.32 |
| | | | | 5,560,000 | 8,405 | 0.36 | 4.73 | 169.73 | 28.51 |
| Southwestern Public Service | Harrington | C | Black Thunder | 4,547,000 | 8,700 | 0.36 | 5.32 | 166.15 | 28.91 |

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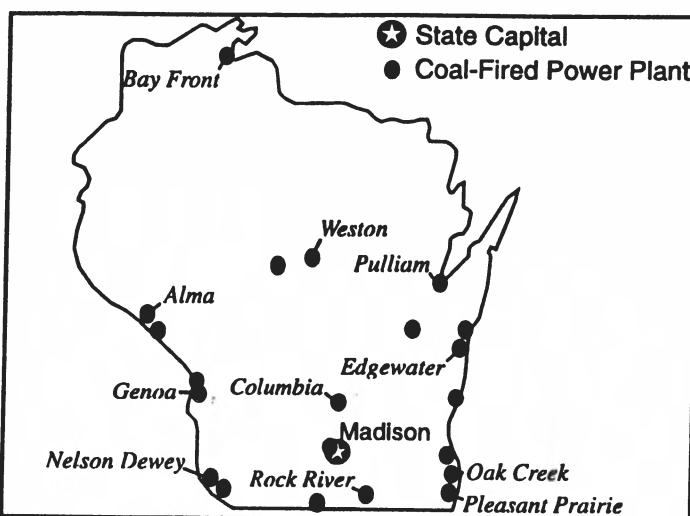
Texas (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|------------------------------|---------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| Southwestern Public Service | Tolk | C | Black Thunder | 4,318,600 | 8,653 | 0.35 | 5.32 | 206.11 | 35.69 |
| Southwestern Public Service | Tolk | S | Black Thunder | 142,000 | 8,661 | 0.33 | 5.38 | 100.80 | 17.46 |
| | | | | 4,460,600 | 8,654 | 0.35 | 5.32 | 202.76 | 35.11 |
| Texas Municipal Power Agency | Gibbons Creek | S | Antelope | 262,745 | 8,771 | 0.24 | 5.15 | 122.82 | 21.55 |
| Texas Municipal Power Agency | Gibbons Creek | S | Black Thunder | 878,498 | 8,743 | 0.34 | 5.52 | 121.77 | 21.29 |
| Texas Municipal Power Agency | Gibbons Creek | S | Caballo | 207,203 | 8,515 | 0.36 | 5.04 | 120.63 | 20.54 |
| Texas Municipal Power Agency | Gibbons Creek | S | Caballo Rojo | 204,027 | 8,413 | 0.33 | 5.32 | 120.47 | 20.27 |
| Texas Municipal Power Agency | Gibbons Creek | S | Cordero | 81,867 | 8,381 | 0.35 | 5.95 | 120.90 | 20.27 |
| Texas Municipal Power Agency | Gibbons Creek | S | North Antelope | 189,807 | 8,840 | 0.21 | 4.53 | 120.66 | 21.33 |
| | | | | 1,824,147 | 8,678 | 0.31 | 5.31 | 121.49 | 21.09 |
| Texas Utilities Electric Co. | Monticello | C | Belle Ayr | 270,000 | 8,591 | 0.27 | 4.50 | 110.45 | 18.98 |
| Texas Utilities Electric Co. | Monticello | C | Black Thunder | 499,000 | 8,667 | 0.36 | 5.17 | 112.66 | 19.53 |
| Texas Utilities Electric Co. | Monticello | C | Caballo | 377,000 | 8,652 | 0.37 | 5.02 | 110.29 | 19.08 |
| Texas Utilities Electric Co. | Monticello | C | Caballo Rojo | 229,000 | 8,614 | 0.32 | 4.94 | 112.98 | 19.47 |
| Texas Utilities Electric Co. | Monticello | C | Jacobs Ranch | 174,000 | 8,657 | 0.46 | 5.50 | 110.30 | 19.10 |
| | | | | 1,549,000 | 8,641 | 0.35 | 5.02 | 111.48 | 19.27 |
| West Texas Utilities (CSW) | Okaunion | C | Buckskin | 1,471,535 | 8,452 | 0.43 | 5.23 | 156.50 | 26.44 |
| West Texas Utilities (CSW) | Okaunion | S | Buckskin | 2,593,726 | 8,437 | 0.45 | 5.24 | 98.80 | 16.68 |
| West Texas Utilities (CSW) | Okaunion | C | Cordero | 10,998 | 8,464 | 0.46 | 5.50 | 98.20 | 16.62 |
| West Texas Utilities (CSW) | Okaunion | S | Fort Union | 71,443 | 8,370 | 0.37 | 5.75 | 98.51 | 16.49 |
| West Texas Utilities (CSW) | Okaunion | S | Rawhide | 303,000 | 8,436 | 0.37 | 4.90 | | |
| | | | | 4,450,702 | 8,441 | 0.43 | 5.22 | 119.26 | 20.14 |

Utah



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|---------------------------------|---------------|----|-------------|----------|-------|----------|-------|----------|--------|
| Los Angeles Dept. Wtr. and Pwr. | Intermountain | S | Antelope | 22,000 | 8,837 | 0.24 | 4.90 | 128.30 | 22.68 |

Wisconsin

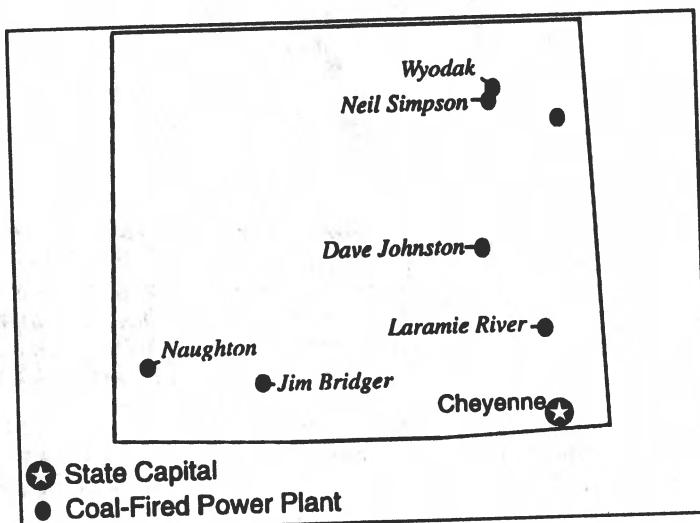
| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|-----------------------------|------------------|----|----------------|-----------|--------|----------|-------|----------|--------|
| Dairyland Power Cooperative | Alma | S | Caballo | 1,600 | 8,481 | 0.39 | 5.50 | 114.50 | 19.42 |
| Dairyland Power Cooperative | Alma | C | North Antelope | 100,600 | 8,877 | 0.28 | 4.47 | 114.94 | 20.41 |
| Dairyland Power Cooperative | Alma | S | Rochelle | 82,000 | 8,692 | 0.18 | 4.36 | 93.05 | 16.18 |
| Dairyland Power Cooperative | Alma | C | Rochelle | 877,200 | 8,743 | 0.21 | 4.44 | 92.35 | 16.15 |
| | | | | 1,061,400 | 8,751 | 0.21 | 4.43 | 94.57 | 16.56 |
| Dairyland Power Cooperative | Genoa No.3 | S | Caballo | 11,200 | 8,481 | 0.39 | 5.50 | 113.59 | 19.27 |
| Dairyland Power Cooperative | Genoa No.3 | C | North Antelope | 382,200 | 8,865 | 0.23 | 4.41 | 112.46 | 19.94 |
| | | | | 393,400 | 8,854 | 0.23 | 4.44 | 112.50 | 19.92 |
| Northern States Power | Bayfront | S | Seminole II | 42,300 | 11,613 | 0.63 | 5.56 | 155.10 | 36.00 |
| Wisconsin Electric Power | Oak Creek | S | Antelope | 672,600 | 8,766 | 0.21 | 5.18 | 95.08 | 16.67 |
| Wisconsin Electric Power | Pleasant Prairie | S | Antelope | 12,800 | 8,664 | 0.23 | 5.80 | 78.10 | 13.53 |
| Wisconsin Electric Power | Pleasant Prairie | C | Caballo | 1,954,600 | 8,520 | 0.36 | 5.01 | 79.43 | 13.54 |
| Wisconsin Electric Power | Pleasant Prairie | C | Caballo Rojo | 2,438,500 | 8,449 | 0.33 | 5.28 | 75.48 | 12.75 |
| Wisconsin Electric Power | Pleasant Prairie | C | Coal Creek | 972,200 | 8,363 | 0.35 | 5.68 | 81.44 | 13.62 |
| | | | | 5,378,100 | 8,460 | 0.34 | 5.25 | 78.00 | 13.20 |
| Wisconsin Power and Light | Columbia | C | Caballo | 3,580,229 | 8,521 | 0.36 | 5.00 | 94.99 | 16.19 |
| Wisconsin Power and Light | Edgewater | C | Black Thunder | 898,524 | 8,755 | 0.35 | 5.53 | 115.66 | 20.25 |
| Wisconsin Power and Light | Edgewater | C | Coal Creek | 987,295 | 8,358 | 0.34 | 5.56 | 128.23 | 21.43 |
| Wisconsin Power and Light | Edgewater | S | Jacobs Ranch | 480,219 | 8,710 | 0.45 | 5.55 | 107.24 | 18.68 |
| Wisconsin Power and Light | Edgewater | S | Shoshone No. 1 | 114,961 | 10,808 | 0.63 | 6.04 | 147.80 | 31.95 |
| | | | | 2,480,999 | 8,683 | 0.38 | 5.57 | 120.52 | 20.96 |
| Wisconsin Power and Light | Nelson Dewey | S | Buckskin | 128,058 | 8,486 | 0.44 | 5.15 | 107.84 | 18.30 |
| Wisconsin Power and Light | Rock River | S | Belle Ayr | 21,847 | 8,544 | 0.26 | 4.37 | 117.07 | 20.00 |
| Wisconsin Power and Light | Rock River | S | Buckskin | 44,865 | 8,445 | 0.45 | 4.97 | 109.90 | 18.56 |
| | | | | 66,712 | 8,477 | 0.39 | 4.77 | 112.25 | 19.03 |

1997 Directory of Power Plants Burning Wyoming Coal

Wisconsin (cont.)

| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|--------------------------------|------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| Wisconsin Public Service Corp. | Pulliam | S | Jacobs Ranch | 55,000 | 8,760 | 0.41 | 5.40 | 90.20 | 15.80 |
| Wisconsin Public Service Corp. | Pulliam | C | North Antelope | 1,352,000 | 8,846 | 0.21 | 4.53 | 99.82 | 17.66 |
| | | | | 1,407,000 | 8,843 | 0.22 | 4.57 | 99.44 | 17.59 |
| Wisconsin Public Service Corp. | Weston 3 | C | Black Thunder | 827,000 | 8,785 | 0.33 | 5.24 | 128.95 | 22.66 |
| Wisconsin Public Service Corp. | Weston 3 | S | Black Thunder | 11,000 | 8,752 | 0.37 | 5.60 | 99.50 | 17.42 |
| Wisconsin Public Service Corp. | Weston 3 | C | Caballo | 13,000 | 8,558 | 0.36 | 5.10 | 89.80 | 15.37 |
| Wisconsin Public Service Corp. | Weston 3 | C | North Antelope | 1,098,000 | 8,856 | 0.23 | 4.58 | 97.70 | 17.30 |
| | | | | 1,949,000 | 8,824 | 0.27 | 4.87 | 110.92 | 19.58 |

Wyoming



| Company Name | Plant Name | CT | Source Name | Quantity | Btu | % Sulfur | % Ash | \$/mmBtu | \$/ton |
|-----------------------------|--------------------|----|----------------|-----------|-------|----------|-------|----------|--------|
| Basin Electric Power Coop. | Laramie River 1-3 | C | Buckskin | 3,202,800 | 8,457 | 0.44 | 5.27 | 51.90 | 8.78 |
| Basin Electric Power Coop. | Laramie River 1-3 | C | Dry Fork | 547,700 | 8,243 | 0.45 | 5.14 | 53.04 | 8.74 |
| Basin Electric Power Coop. | Laramie River 1-3 | C | Rawhide | 2,242,600 | 8,338 | 0.30 | 4.87 | 51.71 | 8.62 |
| | | | | 5,993,100 | 8,393 | 0.39 | 5.11 | 51.93 | 8.72 |
| Black Hills Power and Light | Neil Simpson No. 2 | C | Wyodak | 499,680 | 7,988 | 0.69 | 7.73 | 50.13 | 8.01 |
| PacifiCorp | Dave Johnston | C | Dave Johnston | 4,142,000 | 7,859 | 0.49 | 8.75 | 53.73 | 8.44 |
| PacifiCorp | Dave Johnston | C | North Rochelle | 107,000 | 8,601 | 0.25 | 4.60 | 72.45 | 12.46 |
| | | | | 4,249,000 | 7,877 | 0.48 | 8.64 | 54.20 | 8.54 |
| PacifiCorp | Jim Bridger | C | Black Butte | 819,000 | 9,515 | 0.48 | 8.25 | 92.62 | 17.63 |
| PacifiCorp | Jim Bridger | S | Black Butte | 306,000 | 9,623 | 0.52 | 8.34 | 65.37 | 12.57 |
| PacifiCorp | Jim Bridger | C | Jim Bridger | 5,967,000 | 9,475 | 0.61 | 10.50 | 110.72 | 20.98 |
| PacifiCorp | Jim Bridger | C | Leucite Hills | 91,000 | 9,707 | 0.56 | 9.01 | 118.80 | 23.06 |
| PacifiCorp | Jim Bridger | S | Leucite Hills | 491,000 | 9,744 | 0.51 | 8.82 | 76.87 | 14.99 |
| | | | | 7,874,000 | 9,505 | 0.58 | 10.05 | 104.91 | 19.93 |
| PacifiCorp | Naughton | C | Kemmerer | 2,632,000 | 9,855 | 0.76 | 5.08 | 113.14 | 22.31 |
| PacifiCorp | Wyodak | C | Wyodak | 2,153,000 | 7,996 | 0.58 | 6.91 | 70.57 | 11.29 |