
COAL REPORT CR 99-1

**WYOMING COAL
MINES AND MARKETS**

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WYOMING STATE GEOLOGICAL SURVEY

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

CR 99-1, Coal Report – Wyoming Coal Mines and Markets:

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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 1999 with a review of the State's 1998

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.

Coal Fields of Wyoming

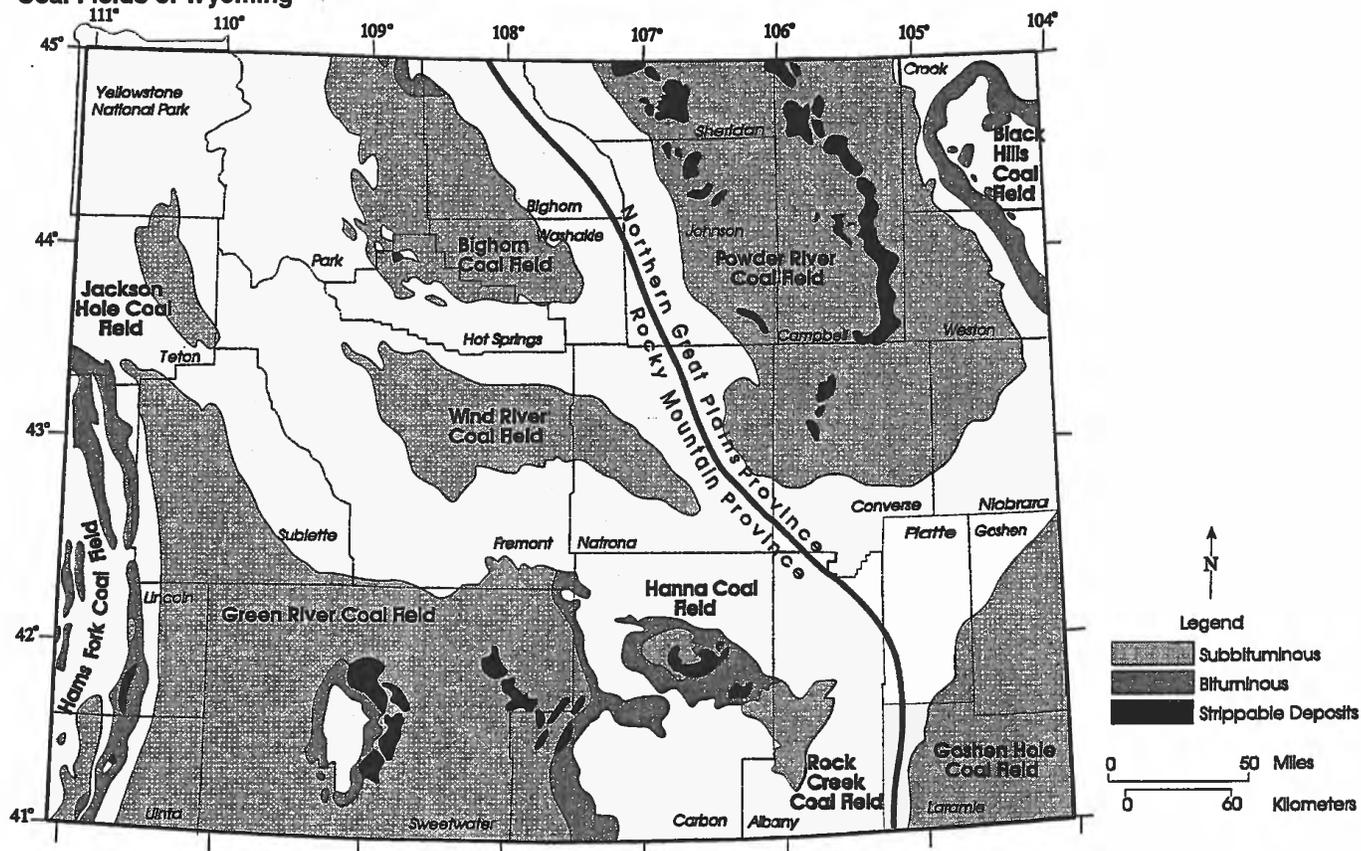


Figure 1. Coal Fields of Wyoming

Wyoming State Geological Survey 1999

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.

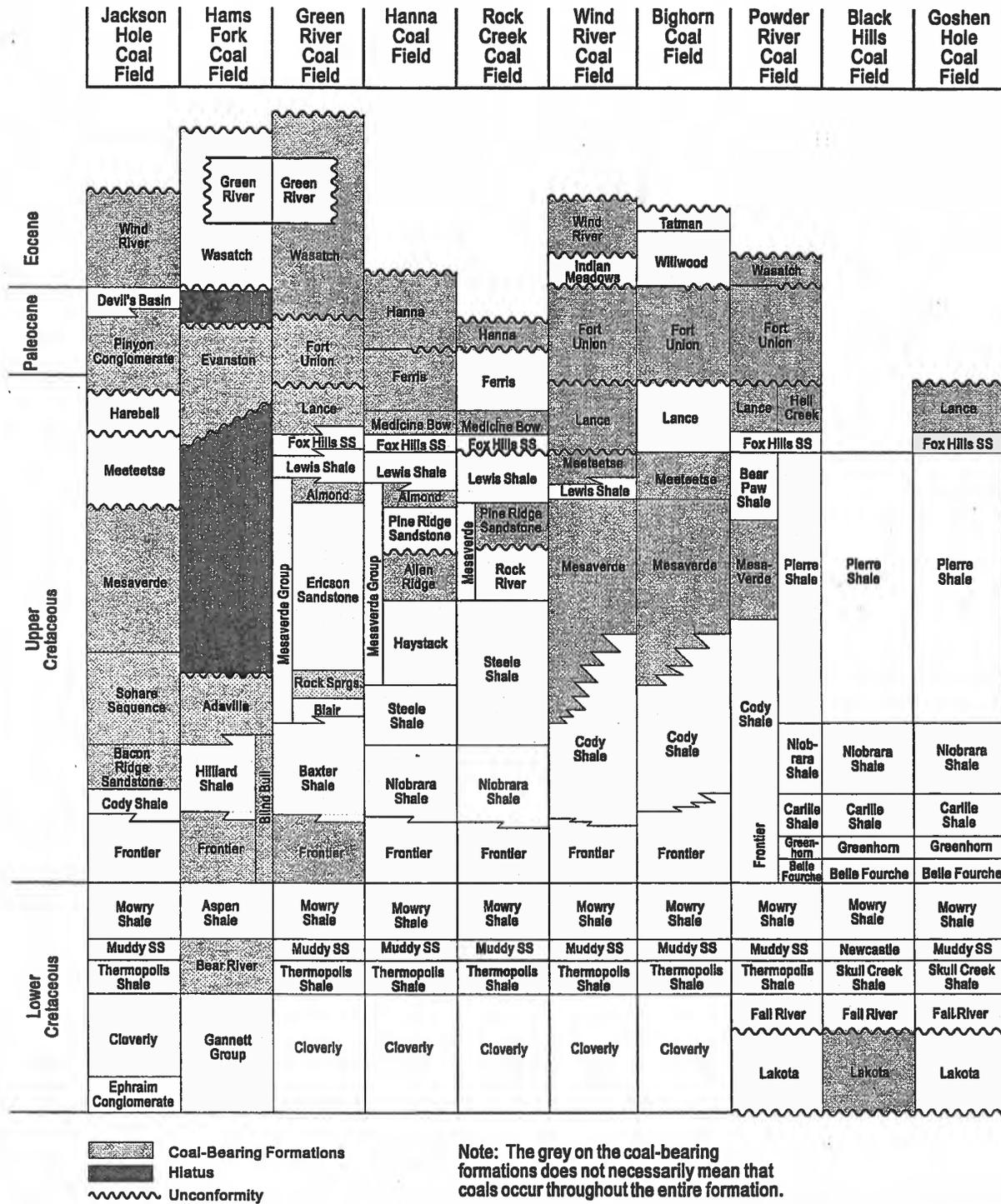


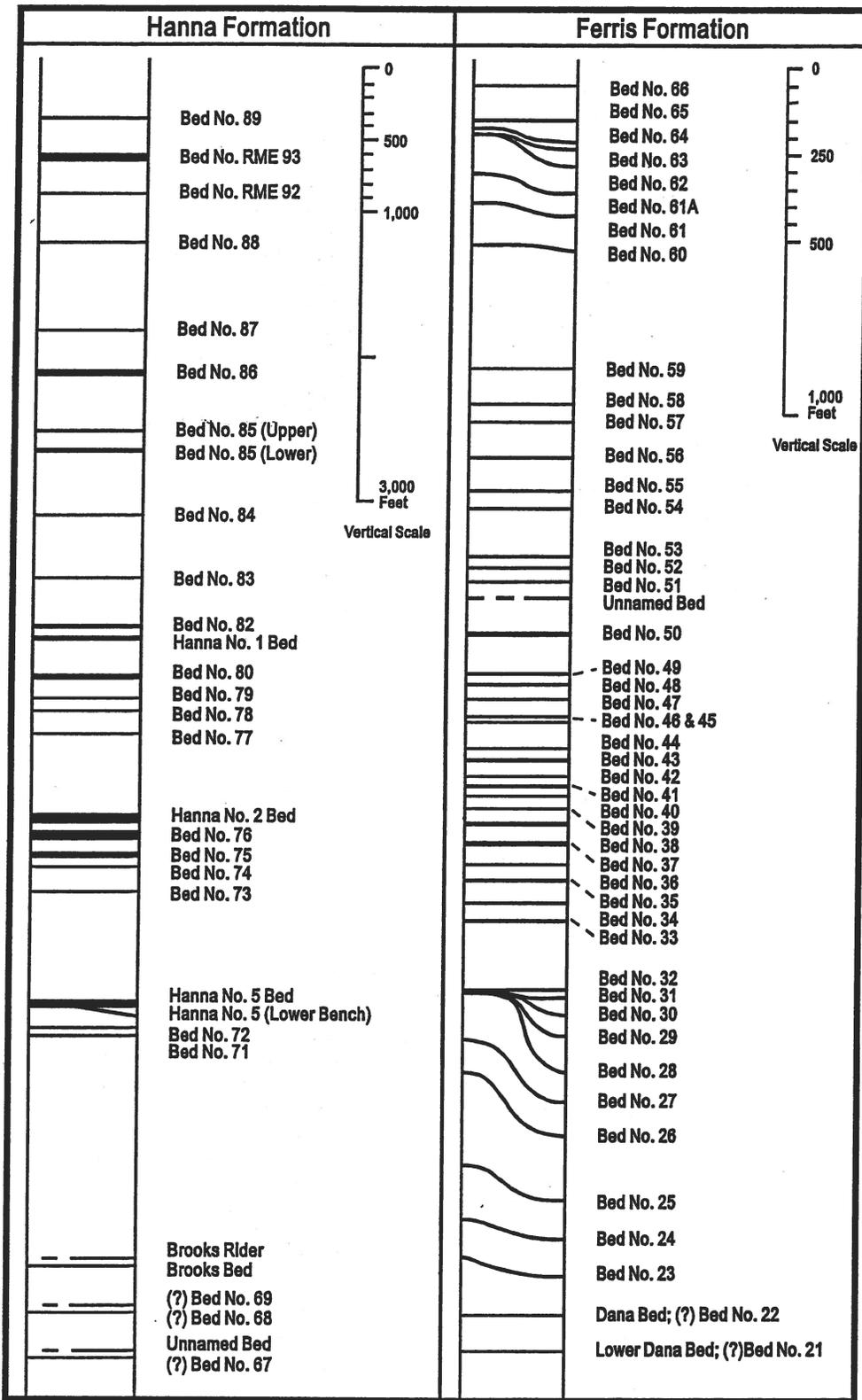
Figure 2. Principle coal bearing formations in the state by coal field.

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 reserves are often faulted or structurally disturbed.

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

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 (Seminole 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 trending beds that dip 10 to 80 degrees. Currently only the Adaville coals are mined in the coal field

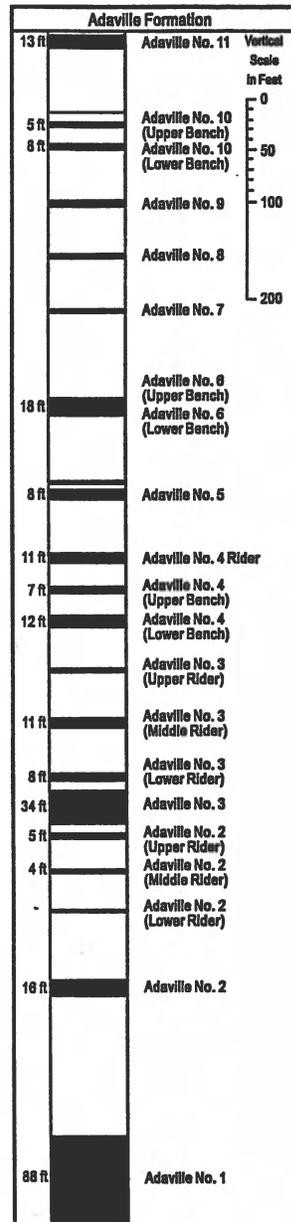


Figure 4. Nomenclature of the Adaville Formation

(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

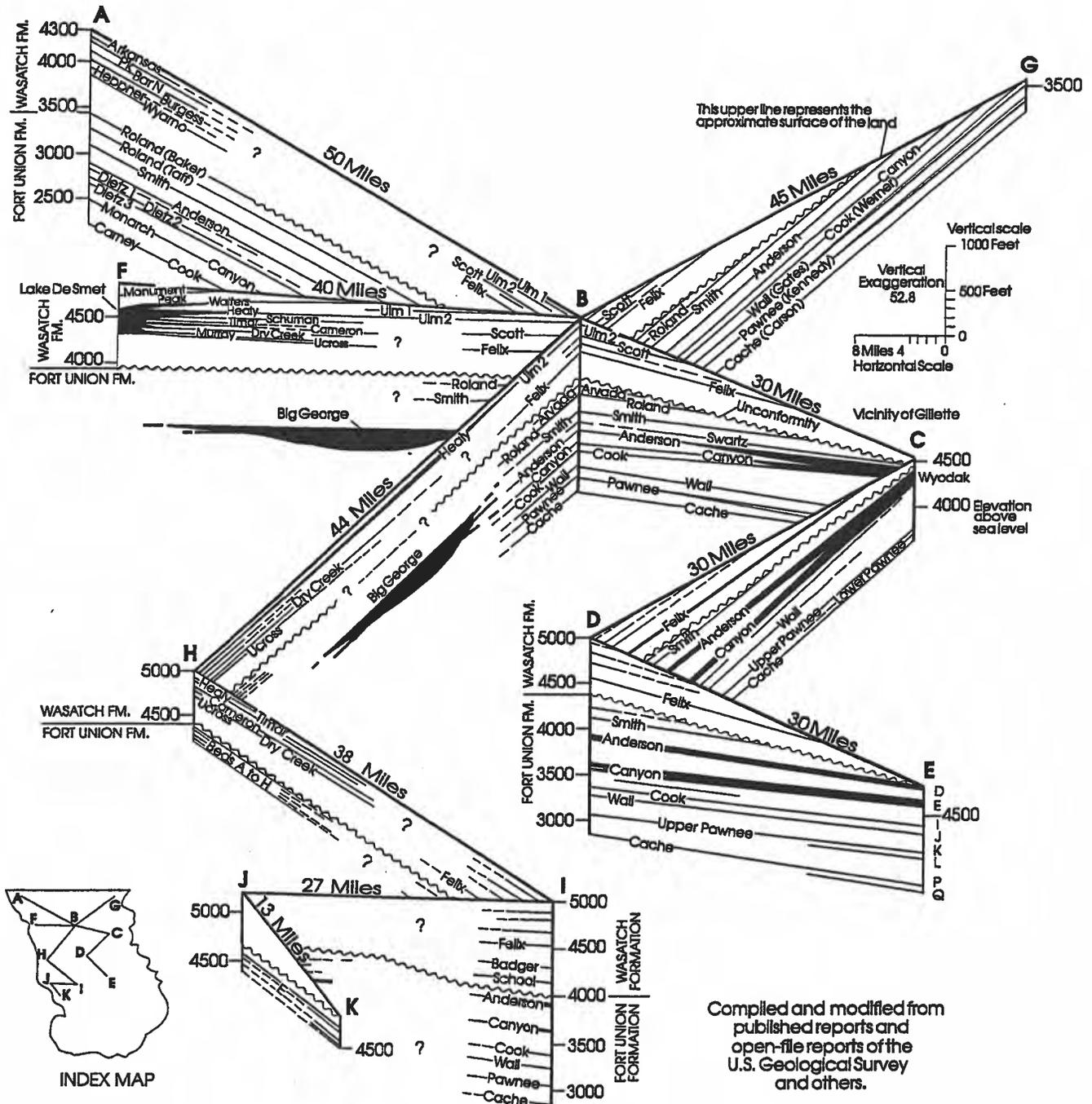
facies related a Cretaceous epeiric seaway. In contrast, the Tertiary Period (36.6-66.4 million years ago) coals are derived from fresh-water swamps associated with fluvial and fluvio-lacustrine depositional systems (Glass, 1977; Moore and Shearer, 1993).

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.



Historic coal mine production by county (1926-1998) in short tons. Data from Wyoming State Mine Inspector's Annual Reports.

Year	Albany	Big Horn	Campbell	Carbon	Converse	Crook	Fremont	Hot Springs	Johnson	Lincoln	Natrona
1926	0	2,750	51,900	496,110	3,311	0	77,668	457,289	12,588	1,277,291	0
1927	0	2,510	64,028	486,544	2,500	0	103,651	530,044	14,821	1,165,113	0
1928	0	2,861	71,769	515,920	6,102	0	87,676	519,928	12,412	1,124,464	0
1929	0	1,409	72,749	532,997	2,080	0	83,005	511,211	15,150	1,030,823	0
1930	0	1,227	83,665	491,568	2,727	800	43,695	403,894	12,286	814,477	0
1931	655	1,141	92,357	452,134	2,489	700	30,838	263,562	12,481	611,534	0
1932	1,342	1,914	98,051	422,164	4,298	163	27,314	201,977	10,223	453,080	0
1933	1,333	1,634	94,760	386,875	8,342	1,605	25,631	175,585	11,024	404,608	154
1934	1,678	861	113,700	415,579	11,291	1,556	30,496	189,806	10,468	392,583	1,144
1935	704	856	121,629	470,736	11,887	1,574	37,898	215,201	6,098	475,171	3,247
1936	0	1,012	113,582	604,376	10,771	0	47,867	231,725	10,842	496,721	14,133
1937	0	839	114,347	654,958	13,311	450	47,397	231,864	11,832	560,082	3,578
1938	0	731	106,343	591,216	8,039	0	44,325	61,892	9,606	428,282	3,195
1939	0	1,030	108,795	584,956	19,441	1,190	38,647	61,601	10,506	449,003	3,481
1940	0	856	119,664	635,901	21,536	853	42,529	72,179	13,344	455,266	3,024
1941	0	1,003	122,775	756,753	15,790	377	35,526	88,305	12,569	487,597	3,006
1942	0	962	121,636	892,378	18,556	0	20,598	135,405	12,969	581,365	1,541
1943	0	573	167,066	1,216,733	17,250	0	10,188	173,998	8,645	617,506	1,480
1944	0	0	223,356	1,308,880	15,407	0	10,055	154,828	9,593	545,208	1,071
1945	0	0	101,209	1,485,513	13,768	0	8,726	160,631	7,547	509,653	885
1946	0	0	174,337	1,079,410	13,933	0	7,194	72,480	6,223	390,934	0
1947	0	0	209,273	1,237,133	12,449	0	8,726	69,502	5,000	420,636	0
1948	0	0	263,267	921,199	11,153	0	9,140	50,795	0	408,290	0
1949	0	0	314,197	896,324	9,748	0	8,662	48,488	3,277	284,158	0
1950	0	0	349,560	1,140,865	7,543	0	3,692	34,273	3,168	450,845	0
1951	0	0	307,074	1,092,213	4,669	0	4,263	24,467	2,797	669,313	0
1952	0	0	320,946	1,022,929	9,660	0	4,044	12,411	1,859	819,824	0
1953	0	0	320,654	735,959	7,347	0	4,099	13,207	1,453	617,015	0
1954	0	0	314,502	234,181	7,214	0	3,826	11,773	1,244	547,349	0
1955	0	0	349,567	191,799	8,055	0	3,624	17,650	1,393	645,721	0
1956	0	0	373,958	164,005	6,608	0	2,880	17,084	1,177	690,098	0
1957	0	0	365,859	119,745	6,250	0	1,971	15,153	574	647,486	0
1958	0	0	375,947	97,215	35,040	0	1,477	11,367	0	443,187	0
1959	0	0	426,609	98,306	471,507	0	1,902	12,725	0	314,015	0
1960	0	0	458,645	129,882	525,999	0	1,534	12,810	0	250,155	0
1961	0	0	447,447	378,592	826,422	0	1,122	11,394	0	283,267	0
1962	0	0	482,781	463,776	769,878	0	952	11,448	0	333,800	0
1963	0	0	495,886	531,786	1,029,996	0	761	9,925	0	612,139	0
1964	0	0	488,846	447,949	1,004,384	0	514	11,789	0	621,484	0
1965	0	0	490,527	417,069	1,250,678	0	417	10,326	0	626,856	0
1966	0	0	475,170	454,736	1,565,012	0	328	9,102	0	726,138	0
1967	0	0	504,817	446,578	1,414,995	0	0	9,794	0	756,980	0
1968	0	0	540,084	476,900	1,389,804	0	0	10,105	0	952,224	0
1969	0	0	558,106	615,235	1,504,244	0	0	8,869	0	1,459,471	0
1970	0	0	641,495	1,613,231	1,844,278	0	0	8,716	0	1,583,429	0
1971	0	0	646,589	1,849,691	1,731,887	0	0	7,657	0	1,503,545	0
1972	0	0	655,578	4,171,038	2,622,150	0	0	5,679	0	2,102,919	0
1973	0	0	1,594,563	6,829,362	2,898,578	0	85	4,870	0	2,946,676	0
1974	0	0	4,039,720	8,707,143	2,687,045	0	0	6,707	0	3,353,157	0
1975	0	0	4,074,672	10,949,596	3,231,649	0	0	2,794	0	2,733,091	0
1976	0	0	8,081,554	11,553,931	2,714,326	0	65	1,686	0	4,206,981	0
1977	0	0	17,466,872	12,119,539	3,236,616	0	0	1,607	0	5,103,936	0
1978	0	0	29,041,896	12,603,170	3,358,899	0	0	4,917	0	4,961,368	0
1979	0	0	41,061,103	10,784,313	3,828,162	0	0	9,346	0	5,094,469	0
1980	0	0	61,423,310	9,829,802	3,803,932	0	0	18,293	0	4,991,158	0
1981	0	0	71,578,962	8,548,019	3,626,932	0	0	35,617	0	4,998,713	0
1982	0	0	81,220,562	4,988,297	3,351,065	0	0	66,711	0	4,315,617	0
1983	0	0	88,180,678	4,818,465	2,684,011	0	0	45,091	0	4,040,464	0
1984	0	0	106,804,601	5,147,121	3,338,677	0	0	42,690	0	4,070,071	0
1985	0	0	113,947,893	3,380,820	3,574,403	0	0	31,208	0	4,329,588	0
1986	0	0	111,668,778	1,609,790	4,761,118	0	0	27,344	0	4,033,561	0
1987	0	0	122,317,310	2,311,598	5,101,141	0	0	10,226	0	3,802,930	0
1988	0	0	135,725,239	4,117,247	5,748,530	0	0	50,300	0	4,895,730	0
1989	0	0	143,847,098	4,267,158	6,116,368	0	0	52,150	0	4,776,294	0
1990	0	0	154,695,691	4,511,202	7,890,670	0	0	101,961	0	4,735,548	0
1991	0	0	164,851,943	4,703,981	8,224,617	0	0	103,285	0	4,391,644	0
1992	0	0	159,550,962	4,055,975	8,517,680	0	0	57,208	0	4,594,061	0
1993	0	0	182,541,842	4,205,120	10,188,916	0	0	41,566	0	4,065,267	0
1994	0	0	205,455,441	4,381,741	11,418,315	0	0	5,564	0	4,290,193	0
1995	0	0	232,394,443	3,803,211	14,135,841	0	0	0	0	4,444,328	0
1996	0	0	244,893,232	1,791,046	15,840,507	0	0	0	0	4,419,445	0
1997	0	0	246,272,967	4,991,199	17,745,238	0	0	0	0	4,607,534	0
1998	0	0	274,069,522	3,467,471	23,383,378	0	0	0	0	4,736,245	0
Total	5,712	26,045	3,020,349,534	193,371,515	199,706,412	9,269	1,020,157	6,552,575	263,984	146,326,268	39,938

Historic coal mine production by county (1926-1998) continued.

Year	Park	Sheridan	Sublette	Sweetwater	Teton	Uinta	Washakie	Weston	Summary for State
1926	0	876,509	0	3,140,361	0	15,473	0	91,196	6,502,445
1927	0	931,185	0	3,339,818	0	16,720	0	81,608	6,738,542
1928	380	775,949	0	3,415,191	0	20,521	0	0	6,553,175
1929	3,067	767,992	610	3,659,179	0	19,509	0	0	6,699,779
1930	3,095	723,338	101	3,474,456	0	15,440	0	0	6,070,770
1931	3,230	565,809	200	2,950,029	125	13,083	0	0	5,000,366
1932	2,543	486,696	156	2,446,405	312	11,782	0	0	4,168,419
1933	2,035	441,405	0	2,434,672	997	13,743	200	0	4,004,602
1934	2,303	466,104	0	2,725,665	226	13,331	0	0	4,376,791
1935	1,429	543,032	0	3,259,863	0	15,974	0	460	5,165,758
1936	672	668,514	0	3,584,496	0	15,952	0	358	5,801,020
1937	719	651,664	0	3,641,890	113	16,520	0	679	5,950,243
1938	1,586	629,692	311	3,315,683	1,082	17,649	0	249	5,219,880
1939	2,763	584,778	1,254	3,527,411	1,540	15,134	0	85	5,411,613
1940	2,964	606,583	685	3,859,427	1,033	14,860	0	0	5,850,702
1941	2,604	602,069	594	4,524,598	1,306	15,935	0	0	6,670,808
1942	1,549	786,251	401	5,565,416	793	15,042	0	0	8,154,861
1943	327	962,681	439	6,047,052	330	13,361	0	0	9,237,629
1944	560	1,140,658	511	6,126,981	1,799	10,686	0	0	9,549,593
1945	0	1,290,672	0	6,251,668	1,113	5,414	0	0	8,836,798
1946	0	1,330,877	0	4,538,617	0	2,675	0	0	7,616,681
1947	0	1,181,252	800	4,907,680	0	2,299	0	0	8,054,751
1948	0	1,048,713	668	3,691,813	222	3,042	0	0	6,408,302
1949	0	1,147,916	997	3,256,627	150	2,128	0	0	5,972,672
1950	0	878,886	1,797	3,469,721	0	1,570	0	0	6,341,919
1951	0	680,426	1,128	3,500,419	0	762	0	0	6,287,530
1952	329	611,438	1,016	3,301,872	0	870	0	0	6,107,198
1953	115	536,677	1,000	3,008,177	0	603	0	0	5,246,306
1954	105	435,634	942	1,276,295	0	289	0	0	2,833,353
1955	0	431,360	610	1,271,095	0	59	0	0	2,920,933
1956	0	411,795	235	887,623	0	0	0	0	2,555,463
1957	0	409,210	372	551,723	0	0	0	0	2,118,345
1958	0	368,564	920	297,515	0	0	0	0	1,631,232
1959	0	385,923	983	264,626	0	0	0	0	1,976,597
1960	0	382,377	0	242,745	0	0	0	0	2,004,147
1961	0	348,828	0	233,638	0	0	0	0	2,530,708
1962	0	356,636	125	155,191	0	0	0	0	2,574,587
1963	0	375,823	284	70,343	0	0	0	0	3,126,943
1964	0	431,521	0	97,312	0	0	0	0	3,103,798
1965	0	349,313	0	112,127	0	0	0	0	3,257,313
1966	0	326,037	0	113,942	0	0	0	0	3,670,465
1967	0	348,180	0	107,305	0	0	0	0	3,588,649
1968	0	217,790	0	107,306	0	0	0	0	3,694,213
1969	0	346,379	0	113,692	0	0	0	0	4,605,995
1970	0	1,464,597	0	225,184	0	0	0	0	7,380,930
1971	0	1,776,836	0	491,560	0	0	0	0	8,007,765
1972	0	973,879	0	389,226	0	0	0	0	10,920,468
1973	0	463,253	0	103,470	0	0	0	0	14,840,857
1974	0	1,017,614	0	838,368	0	0	0	0	20,649,754
1975	0	805,510	0	1,986,816	0	0	0	0	23,784,128
1976	0	748,025	0	3,787,796	0	0	0	0	31,094,364
1977	0	2,394,532	0	5,714,983	0	0	0	0	46,038,085
1978	0	2,860,843	0	5,343,732	0	0	0	0	58,174,825
1979	0	3,544,825	0	7,293,613	0	0	0	0	71,615,831
1980	0	4,327,594	0	10,902,988	0	0	0	0	95,297,077
1981	0	2,753,913	0	11,241,278	0	0	0	0	102,783,434
1982	0	2,991,399	0	11,020,932	0	0	0	0	107,954,583
1983	0	2,947,698	0	9,471,416	0	0	0	0	112,187,823
1984	0	2,531,470	0	8,878,033	0	0	0	0	130,812,663
1985	0	2,402,589	0	13,151,374	0	0	0	0	140,817,875
1986	0	1,360,825	0	12,939,953	0	0	0	0	136,401,369
1987	0	1,201,093	0	11,807,250	0	0	0	0	146,551,548
1988	0	945,116	0	12,167,361	0	0	0	0	163,649,523
1989	0	106,147	0	11,974,789	0	0	0	0	171,140,004
1990	0	134,104	0	11,936,525	0	0	0	0	184,005,701
1991	0	158,055	0	11,430,281	0	0	0	0	193,863,806
1992	0	105,391	0	12,579,979	0	0	0	0	189,461,256
1993	0	120,001	0	9,393,114	0	0	0	0	210,555,826
1994	0	100,733	0	11,256,080	0	0	0	0	236,908,067
1995	0	37,472	0	9,122,728	0	0	0	0	263,938,023
1996	0	15,129	0	8,150,317	0	0	0	0	275,109,676
1997	0	44,202	0	7,820,376	0	0	0	0	281,481,516
1998	0	65,909	0	9,239,566	0	0	0	0	314,962,091
Total	33,225	67,069,745	17,139	346,720,869	11,140	330,949	200	283,664	3,982,138,337

Rank of Wyoming Coal Mines by Annual Production 1993 to 1998.

1998		1997		1996	
<u>Mine</u>	<u>Tons Produced</u>	<u>Mine</u>	<u>Tons Produced</u>	<u>Mine</u>	<u>Tons Produced</u>
1 N. Antelope/Rochelle	64,639,932	1 Black Thunder	37,669,516	1 Black Thunder	39,174,599
2 Black Thunder	42,683,014	2 North Antelope	34,978,455	2 North Antelope	28,623,117
3 Cordero Rojo Complex	36,979,025	3 Cordero Rojo Complex	28,062,574	3 Rochelle	26,248,241
4 Jacobs Ranch	29,078,333	4 Jacobs Ranch	27,112,931	4 Jacobs Ranch	24,522,960
5 Caballo	25,984,949	5 Rochelle	24,940,431	5 Caballo	22,003,064
6 Belle Ayr	22,479,368	6 Belle Ayr	22,800,736	6 Belle Ayr	19,970,300
7 Antelope	19,418,684	7 Caballo	19,946,861	7 Eagle Butte	15,642,744
8 Eagle Butte	18,074,546	8 Eagle Butte	17,921,000	8 Caballo Rojo	15,082,891
9 Buckskin	17,290,730	9 Buckskin	14,443,165	9 Rawhide	15,068,358
10 Coal Creek	7,068,322	10 Antelope	13,564,831	10 Cordero	13,071,242
11 Jim Bridger	6,439,566	11 Rawhide	10,705,680	11 Antelope	12,047,801
12 Rawhide	5,390,400	12 Jim Bridger	5,920,376	12 Buckskin	11,951,798
13 Kemmerer	4,736,245	13 Kemmerer	4,401,644	13 Jim Bridger	6,293,172
14 Dave Johnston	3,964,694	14 Dave Johnston	4,180,407	14 Coal Creek	5,804,419
15 Wyodak	3,280,157	15 Wyodak	3,250,969	15 Dave Johnston	3,792,706
16 Black Butte	2,800,000	16 Coal Creek	2,921,242	16 Kemmerer	3,650,865
17 Shoshone #1	1,903,000	17 Shoshone #1	2,854,936	17 Wyodak	3,198,544
18 Medicine Bow	1,100,970	18 Black Butte	1,900,000	18 Dry Fork	2,945,662
19 Dry Fork	1,030,718	19 Medicine Bow	1,534,904	19 Shoshone #1	2,640,912
20 Seminoe II	463,501	20 Dry Fork	918,224	20 Black Butte	1,857,145
21 Big Horn	65,909	21 Seminoe II	601,359	21 Medicine Bow	1,791,046
22 KFx	48,945	22 Fort Union	591,210	22 Fort Union	1,004,887
23 North Rochelle	41,038	23 Skull Point	205,890	23 Skull Point	768,580
		24 Big Horn	44,202	24 North Rochelle	380,521
		25 KFx	9,788	25 Seminoe II	224,368
		26 North Rochelle	185	26 Clovis Point	199,825
Total	314,962,091	Total	281,481,516	Total	277,974,896

1995		1994		1993	
<u>Mine</u>	<u>Tons Produced</u>	<u>Mine</u>	<u>Tons Produced</u>	<u>Mine</u>	<u>Tons Produced</u>
1 Black Thunder	36,149,282	1 Black Thunder	31,616,222	1 Black Thunder	34,320,470
2 Rochelle	26,035,555	2 Rochelle	22,677,048	2 Rochelle	21,814,217
3 Jacobs Ranch	24,645,109	3 Jacobs Ranch	20,550,847	3 Jacobs Ranch	18,387,422
4 North Antelope	21,248,991	4 Belle Ayr	18,361,866	4 Eagle Butte	16,700,000
5 Belle Ayr	18,771,977	5 Eagle Butte	17,161,000	5 Belle Ayr	15,558,000
6 Caballo	18,357,087	6 Caballo Rojo	16,611,485	6 Caballo Rojo	15,418,125
7 Eagle Butte	16,942,000	7 Cordero	16,413,646	7 Cordero	12,988,628
8 Caballo Rojo	16,809,540	8 Caballo	14,428,600	8 North Antelope	11,761,704
9 Rawhide	15,355,000	9 North Antelope	14,147,809	9 Buckskin	11,180,379
10 Cordero	14,607,000	10 Rawhide	12,858,787	10 Rawhide	9,864,353
11 Buckskin	11,600,000	11 Buckskin	10,955,839	11 Caballo Rojo	8,023,000
12 Antelope	10,866,880	12 Antelope	8,258,590	12 Antelope	7,286,610
13 Jim Bridger	6,967,096	13 Jim Bridger	7,036,084	13 Jim Bridger	6,417,662
14 Coal Creek	4,199,587	14 Black Butte	4,029,069	14 Dry Fork	3,277,794
15 Kemmerer	3,624,328	15 Dry Fork	3,836,228	15 Kemmerer	3,261,818
16 Dry Fork	3,603,453	16 Kemmerer	3,619,259	16 Wyodak	3,027,356
17 Dave Johnston	3,268,961	17 Dave Johnston	3,159,725	17 Dave Johnston	2,902,306
18 Wyodak	2,984,000	18 Wyodak	2,795,842	18 Medicine Bow	2,614,424
19 Black Butte	2,155,632	19 Shoshone #1	2,543,441	19 Black Butte	2,569,713
20 Shoshone #1	1,990,114	20 Coal Creek	2,532,859	20 Shoshone #1	1,590,696
21 Medicine Bow	1,699,106	21 Medicine Bow	1,838,300	21 Skull Point	803,449
22 Skull Point	820,000	22 Skull Point	670,934	22 Pilot Butte	205,279
23 North Rochelle	677,409	23 North Rochelle	220,909	23 Swanson	200,460
24 Clovis Point	408,944	24 Clovis Point	202,202	24 Big Horn	120,000
25 Seminoe II	113,991	25 Swanson	190,936	25 Coal Creek	110,488
26 Big Horn	37,472	26 Seminoe II	100,733	26 Fort Union	58,131
27 Fort Union	450	27 Fort Union	84,122	27 Grass Creek	41,566
		28 Grass Creek	5,564	28 North Rochelle	21,775
Total	263,938,964	Total	236,907,946	Total	210,525,826

Utilization and Market Distribution of Wyoming Coal (1998)

Wyoming's coal industry, in 1998, set a new state annual production record of 314,962,091 short tons (tons). Wyoming remained number one in the nation in coal-production, supplying the country with approximately 29% of the United States' steam coal needs.

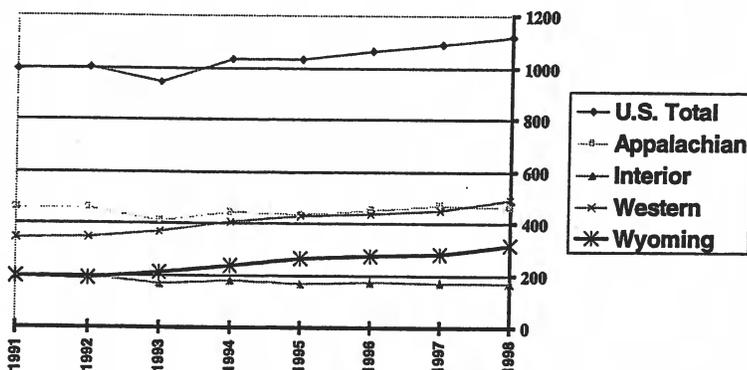
The State's 1998 coal production increased by 11.9 percent.

This increase in growth was due in part to improved transportation services as compared to 1997. Also due to the fact, utilities were beginning

to plan future compliance strategies with the stricter second phase of the Clean Air Act on the horizon.

Figure 6 shows Wyoming coal's role in the United States annual production for the period from 1991 through 1998.

Figure 6. Wyoming Coal Production's Role in U.S. Annual Coal Production, 1991-1998 (millions of short tons)



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

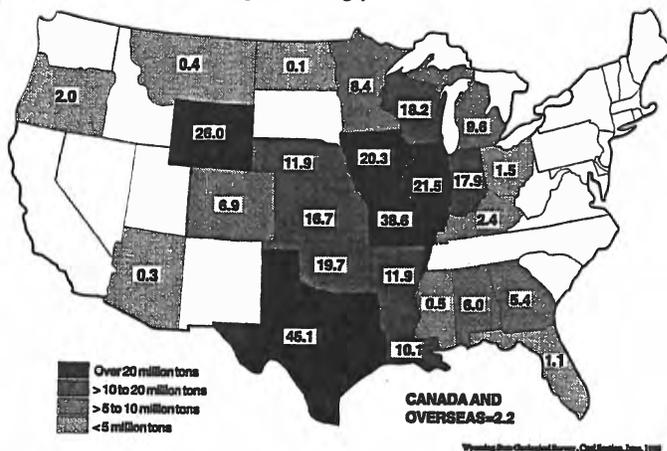
U.S. coal consumption by all users in 1998 totaled 1,045.6 million tons, a 1.6 percent increase over 1997 figures. As coal consumption in the non-electricity sector fell by 3.1 percent, electric utilities and

independent power producers burned 941.6 million tons of coal for electricity generation (Freme and Hong, 1999).

Statistics published by the Energy Information

Administration (EIA), show that utilities in 25 states, as well as Canada and Spain, consumed Wyoming coal in 1998 (EIA, 1999) (Figure 7).

Figure 7. Wyoming coal deliveries to electric generating plants in 1998.



Wyoming State Geological Survey, Coal Section, June, 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.

1999 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 11.

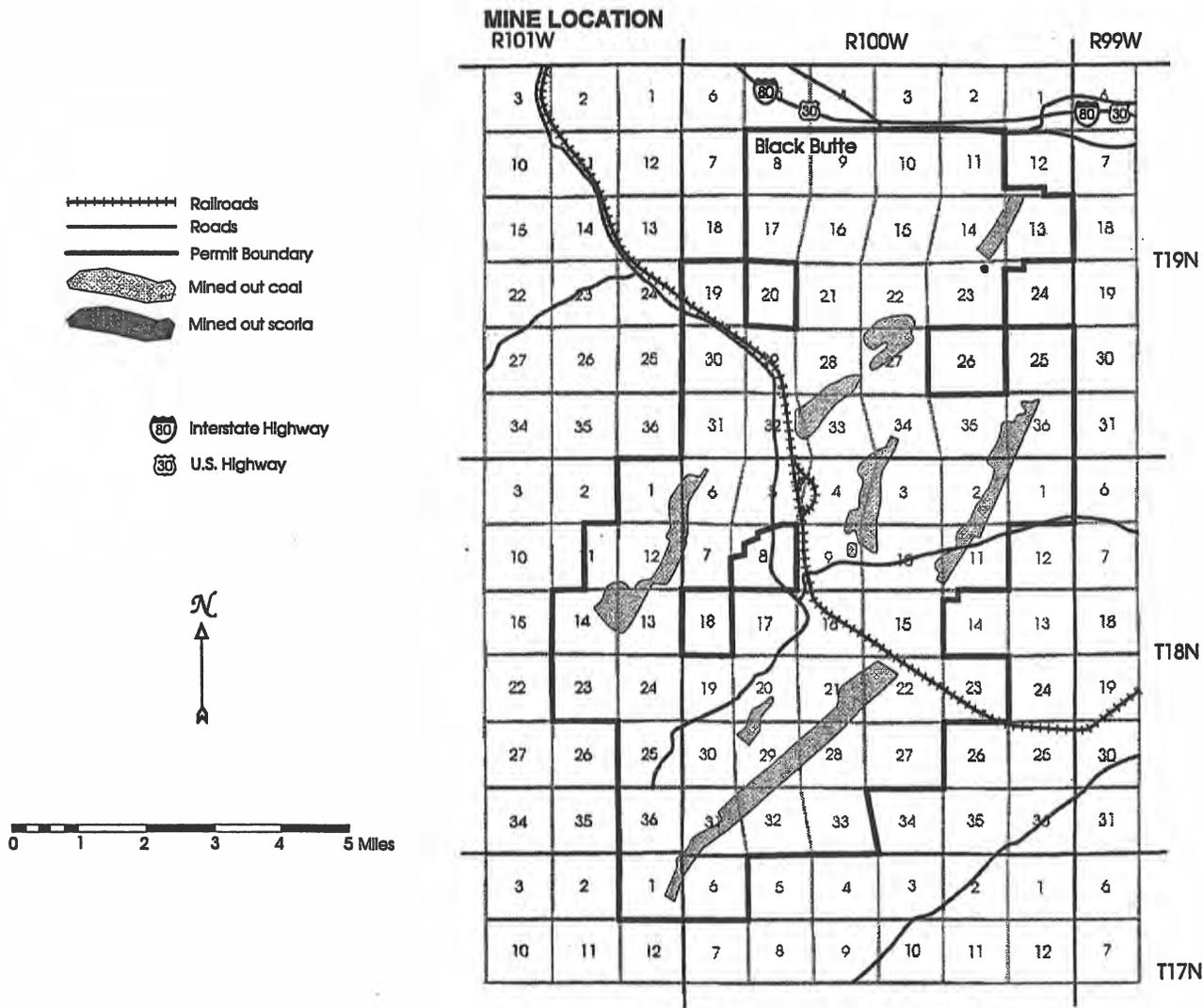
Black Butte and Leucite Hills

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

Number of Employees in 1998: 123
 Mine Type: Surface
 Acres permitted: 44,981
 1998 Coal Production: 2,800,000 short tons
 1999 Air Quality Capacity Limit: 7.0 million short tons (Black Butte)
 2.5 million short tons (Leucite Hills)

URL: <http://www.kiewit.com/projects/mining.htm> or <http://my.uprr.com/pub/energy/coal/wyoming/blkbutte.shtml>



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.

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).

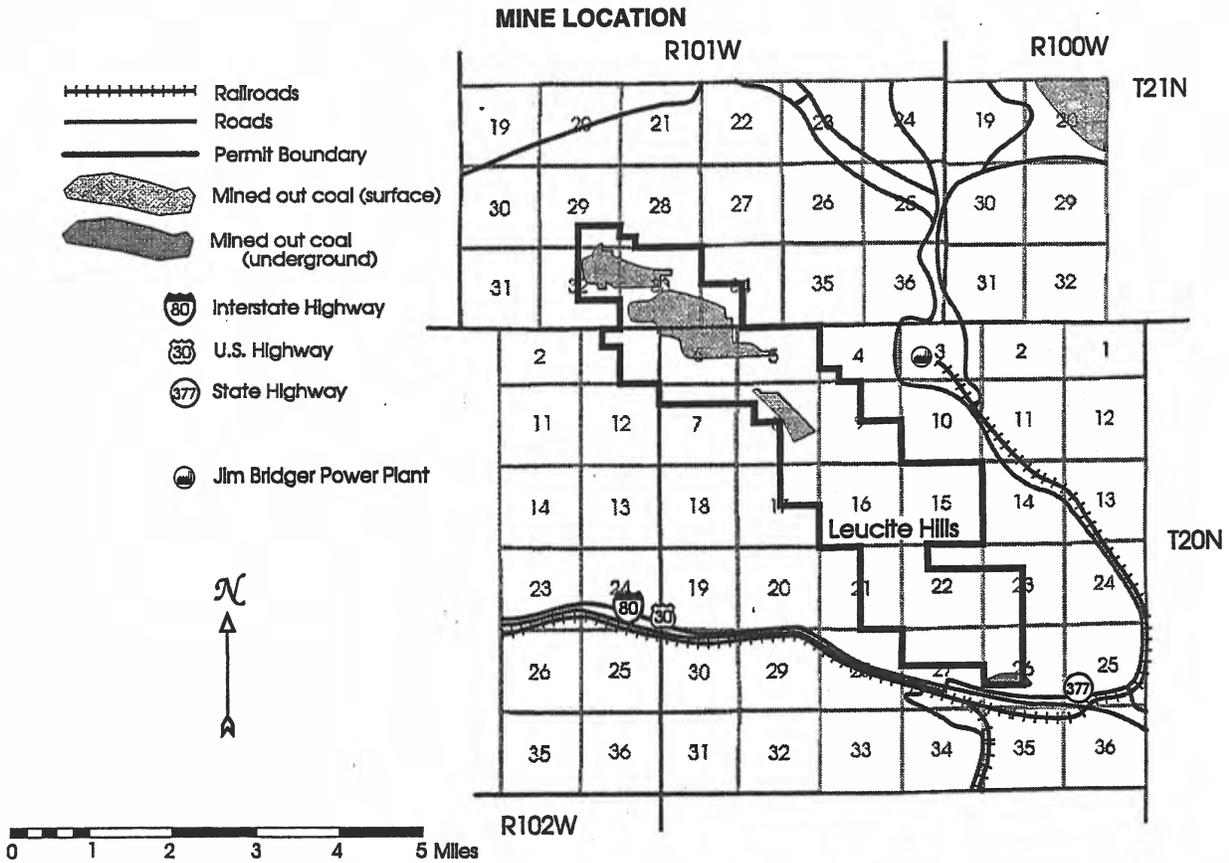
A1 (average thickness: 6 feet).

A (average thickness: 5 feet).

Formation: Almond

Group: Mesaverde.

Age: Late Cretaceous.



1999 Directory of Coal Mines in Wyoming

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.

Production History: (Combined reporting year 1989 through end of 1998 in short tons for the Black Butte and Leucite Hills mines)

1998	2,800,000	1993	2,569,713
1997	1,900,000	1992	5,889,973
1996	1,857,145	1991	5,290,400
1995	2,155,632	1990	5,797,238
1994	4,029,069	1989	5,885,947

Production History: (Start up year 1979 through end of 1988 in short tons for the Black Butte mine)

1988	5,325,380	1983	4,966,000
1987	4,666,660	1982	4,809,123
1986	5,984,526	1981	4,390,072
1985	5,508,428	1980	3,719,106
1984	4,198,256	1979	1,316,078

Production History: (Start up year 1982 through end of 1988 in short tons for the Leucite Hills mine)

1988	381,280	1984	341,356
1987	538,775	1983	187,536
1986	474,200	1982	186,680
1985	417,075		

Total production from Black Butte and Leucite Hills mines through 1998: 85,585,648.

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

Original Lease:	154.7
Mined tonnage:	<u>85.6</u>
Remaining Reserves:	69.1

Estimated remaining life of mine: 22 years.

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

1998 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
S		PacifiCorp	Jim Bridger	WY	2,001,000	9521	0.50	8.07	65.26	12.43
					2,001,000	9521	0.50	8.07	65.26	12.43

1998 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	400,000	9801	0.54	9.26	116.05	22.75
					400,000	9801	0.54	9.26	116.05	22.75

FERC captured 85.7% of 1998 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/paccomp/pacpower/mining.html>

Number of Employees in 1998: 383

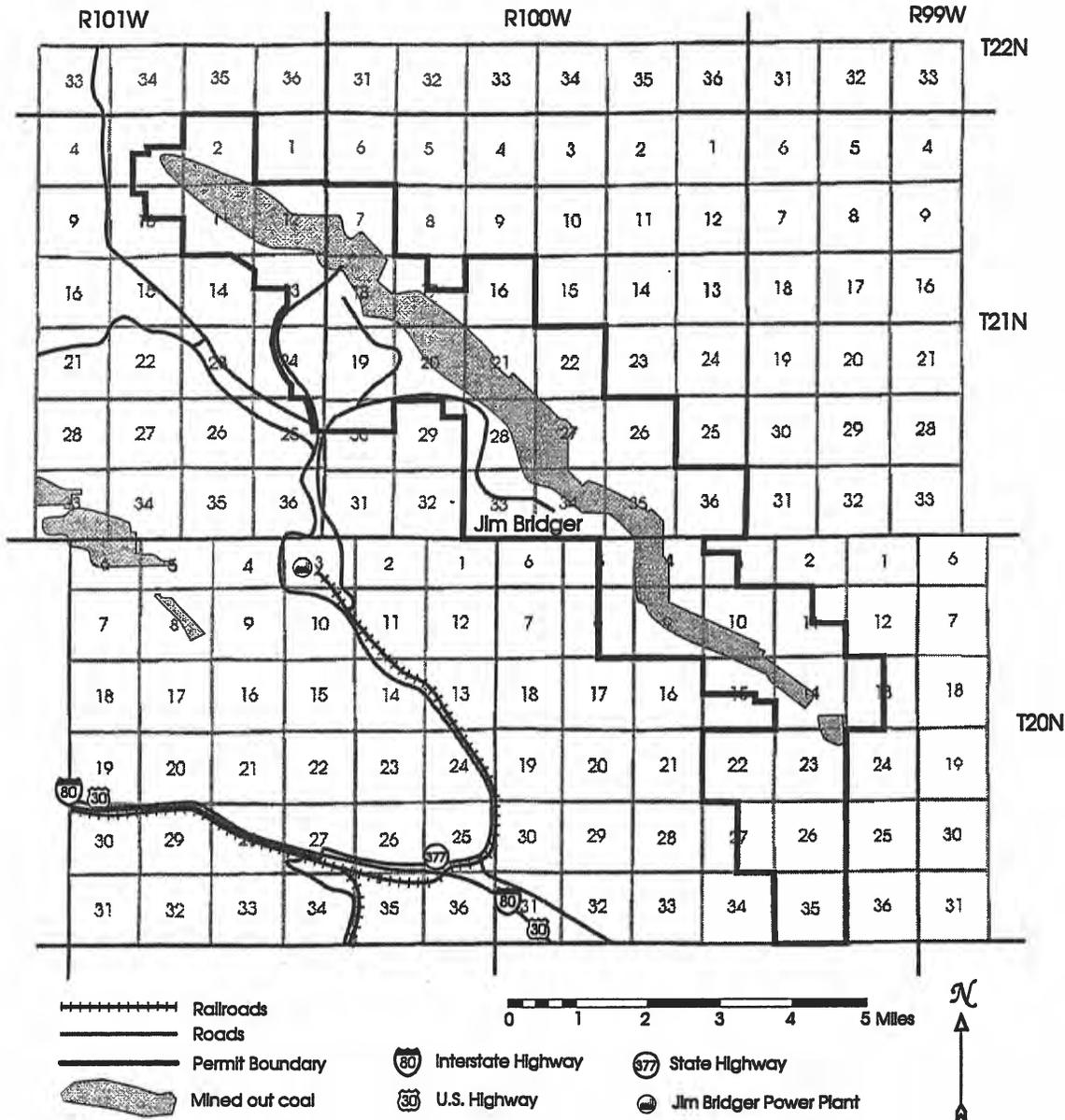
Mine Type: Surface

Acres permitted: 21,110

1998 Coal Production: 6,439,566 short tons

1999 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).

1999 Directory of Coal Mines in Wyoming

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 1998 in short tons)

1998	6,439,566	1984	4,338,421
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

Total production through 1998: 139,827,646.

Recoverable Coal Reserves (million short tons)

Original Lease: 233.2

Mined tonnage: 139.8

Remaining Reserves: 93.4

Estimated remaining life of mine: 16 years.

Remaining life of mine at current permit capacity: 12 years.

1998 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	6,397,000	9344	0.60	11.00	116.06	21.70
					6,397,000	9344	0.60	11.00	116.06	21.70

FERC captured 99.3% of 1998 total production.

Hams Fork Coal Field

<u>MINE</u>	<u>Page</u>
Kemmerer and Skull Point	HF-2

For abbreviations, definitions and explanations see page 11.

Kemmerer and Skull Point

Operating Company: Pittsburg & Midway Coal Company

Owned By: Lodestar Energy*

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> or <http://my.uprr.com/pub/energy/coal/wyoming/kemmerer.shtml>

Number of Employees in 1998: 259

Mine Type: Surface

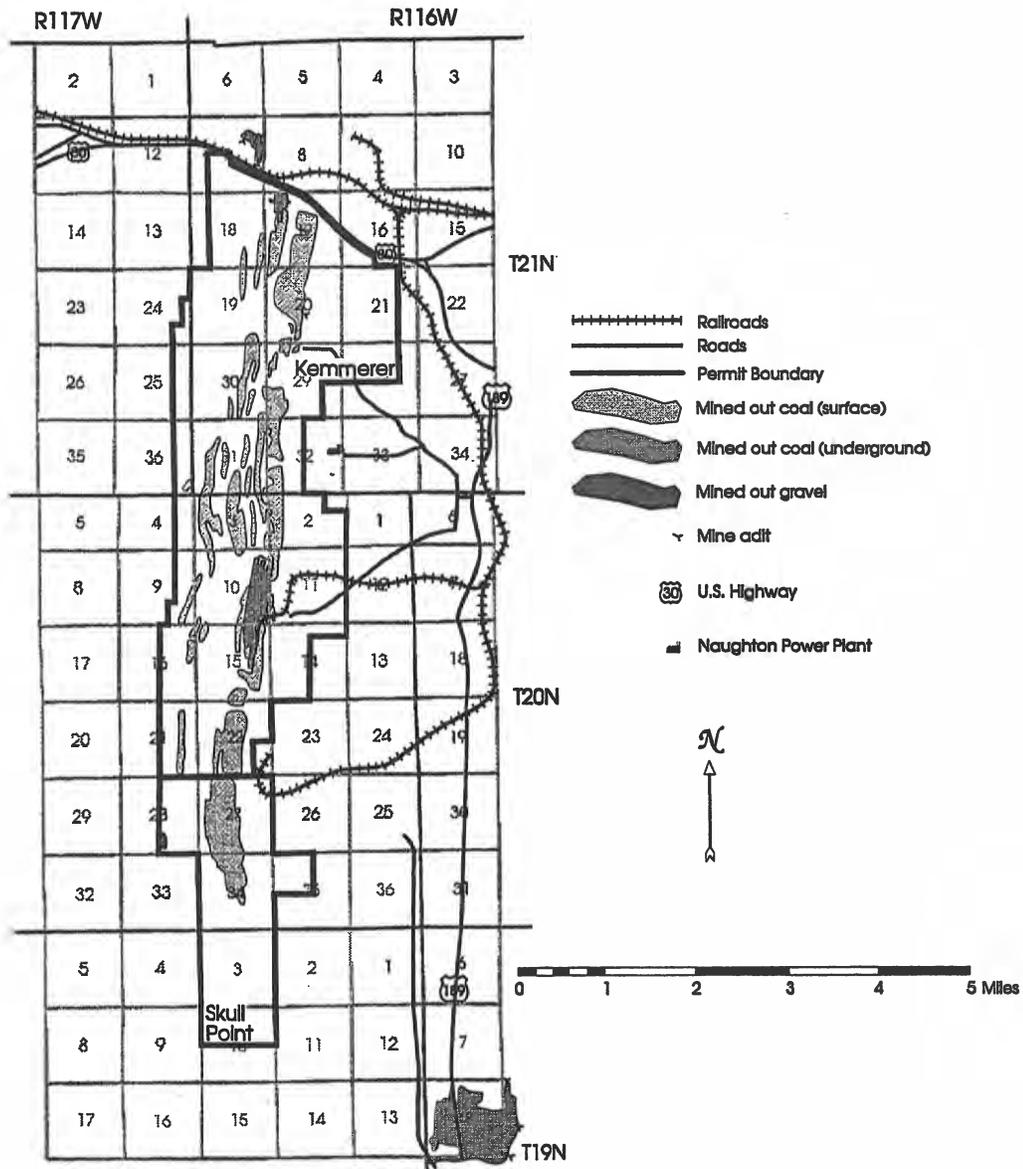
Acres permitted: 13,376

1998 Coal Production: 4,736,245 short tons

1999 Air Quality Capacity Limit: 5.7 million short tons

*in July, 1999, Chevron sold the Kemmerer & Skull Point mine to Lodestar Energy a subsidiary of Renco Group of New York.

MINE LOCATION



Coal Field: Hams Fork

County: Lincoln

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

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: (After acquisition of Skull Point mine in 1998 through end of 1998 in short tons for the Kemmerer mine)

1998	4,736,245
------	-----------

Production History: (After combination of the Elkol and Sorensen mines in 1981 through end of 1997 in short tons for the Kemmerer mine)

1997	4,401,644	1991	3,552,190	1985	3,418,392
1996	3,650,865	1990	3,785,548	1984	3,127,228
1995	3,624,328	1989	3,880,294	1983	3,083,067
1994	3,619,259	1988	3,957,731	1982	3,300,743
1993	3,261,818	1987	3,000,000	1981	4,037,963
1992	3,784,041	1986	3,127,668		

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		

Production History: (Start up year 1963 through end of 1980 in short tons for the Sorensen mine)

1980	4,082,578	1974	3,353,157	1968	952,224
1979	4,281,123	1973	2,946,676	1967	756,980
1978	4,064,332	1972	2,102,919	1966	726,138
1977	4,385,147	1971	1,503,545	1965	626,706
1976	4,122,457	1970	1,583,429	1964	605,086
1975	2,733,091	1969	1,459,471	1963	573,849

1999 Directory of Coal Mines in Wyoming

Kemmerer and Skull Point (cont.)

Production History: (Start up year 1951 through end of 1980 in short tons for the Elkol surface mine)

1980	1,733,740	1970	273,852	1960	195,868
1979	1,778,856	1969	243,475	1959	265,044
1978	1,724,327	1968	245,932	1958	393,659
1977	1,654,491	1967	214,450	1957	577,140
1976	1,845,658	1966	181,655	1956	579,314
1975	1,015,833	1965	182,130	1955	529,424
1974	916,322	1964	161,445	1954	450,997
1973	400,241	1963	179,141	1953	508,494
1972	259,323	1962	271,236	1952	706,660
1971	190,854	1961	224,073	1951	549,558

Production History: (Start up year 1909 through end of 1950 in short tons for the Elkol deep mine)

1950	318,104	1936	43,731	1922	57,965
1949	150,732	1935	40,899	1921	81,772
1948	220,214	1934	30,455	1920	121,952
1947	166,849	1933	50,159	1919	108,026
1946	106,256	1932	54,169	1918	188,494
1945	119,999	1931	73,838	1917	198,045
1944	153,816	1930	67,373	1916	83,667
1943	193,971	1929	69,505	1915	20,478
1942	73,493	1928	62,736	1914	29,405
1941	30,224	1927	68,320	1913	70,000
1940	29,375	1926	67,313	1912	60,974
1939	34,564	1925	72,757	1911	59,000
1938	35,387	1924	78,189	1910	35,000
1937	46,294	1923	67,172	1909	120,000

Total production through 1998: 132,839,624.

Recoverable Coal Reserves (million short tons)

Kemmerer Original Lease:	214.7
Skull Point Original Lease:	24.3
Mined tonnage:	<u>132.8</u>
Remaining Reserves:	106.2

Estimated remaining life of mine: 21 years.

Remaining life of mine at current permit capacity: 18 years.

1998 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	2,712,000	10062	0.80	4.71	113.70	22.87
					2,712,000	10062	0.80	4.71	113.70	22.87

FERC captured 57.3% of 1998 total production.

Hanna Coal Field

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

For abbreviations, definitions and explanations see page 11.

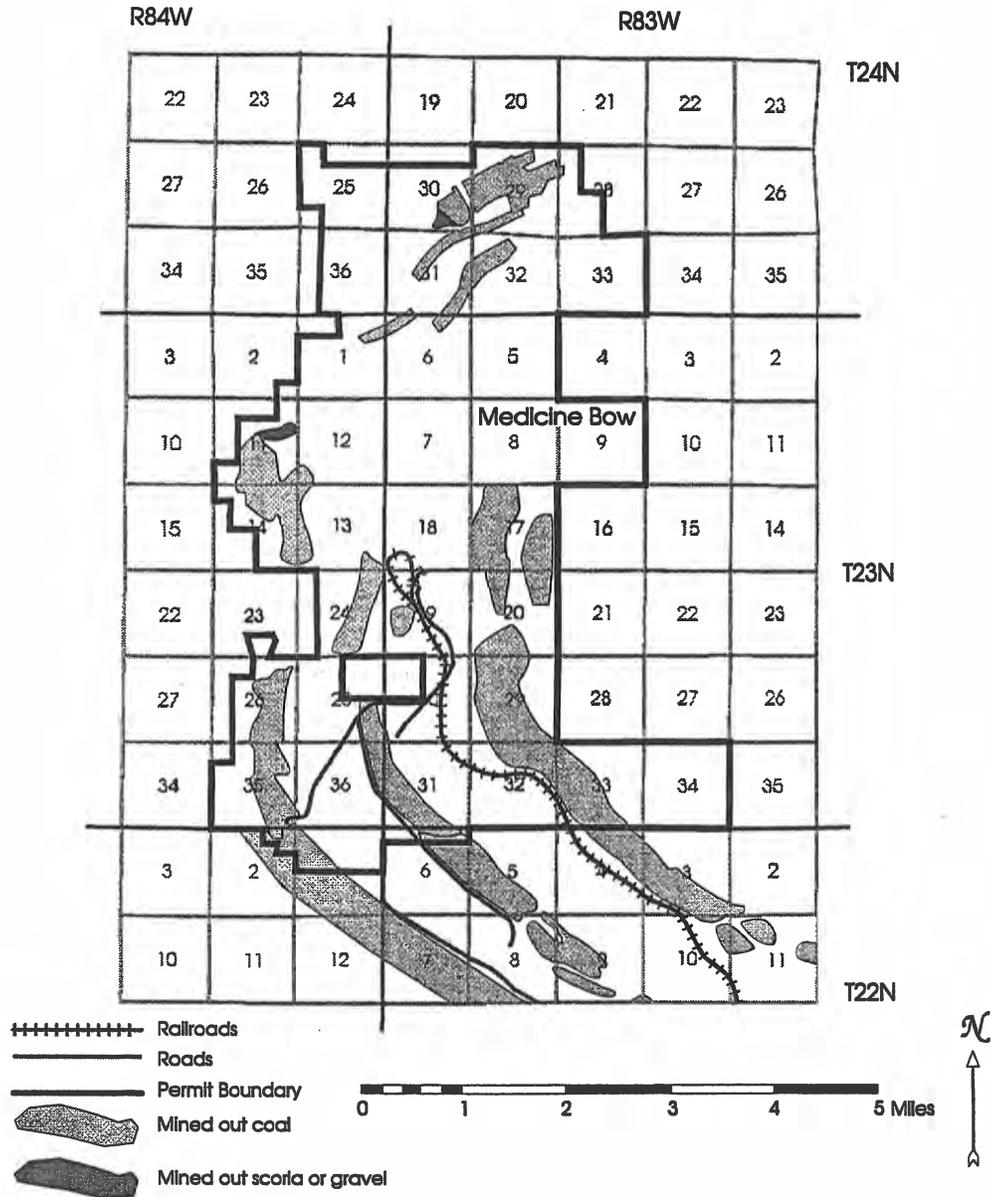
Medicine Bow

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> or http://my.uprr.com.pub/energy/coal/wyoming/med_bow.shtml

Number of Employees in 1998: 46
 Mine Type: Surface
 Acres permitted: 20,352
 1998 Coal Production: 1,100,970 short tons
 1999 Air Quality Capacity Limit: 3.12 million short tons

MINE LOCATION



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

1999 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: dragline, truck-shovel.

Production History: (Start up year 1975 through end of 1998 in short tons)

1998	1,100,970	1990	2,813,212	1982	609,597
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

Total production through 1998: 40,536,469.

Recoverable Coal Reserves (million short tons)

Original Lease:	65.4
Mined tonnage:	<u>40.5</u>
Remaining Reserves:	24.9

Estimated remaining life of mine: 1 year.

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

1998 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	c/mmBtu	\$/ton
C		Illinois Power	Havana	IL	12,125	10279	0.55	7.50	134.59	27.67
C	31-Dec-98	Kansas City Bd Public Utilities	Quindaro	KS	408,100	10431	0.46	6.76	127.73	26.64
C	01-Mar-00	Missouri Public Service	Sibley	MO	777,260	10449	0.56	7.44	105.28	22.00
					<u>1,197,485</u>	<u>10441</u>	<u>0.53</u>	<u>7.21</u>	<u>113.23</u>	<u>23.64</u>

FERC captured 108.8% of 1998 total production.

Seminole 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> or <http://my.uprr.com/pub/energy/coal/wyoming/seminole.shtml>

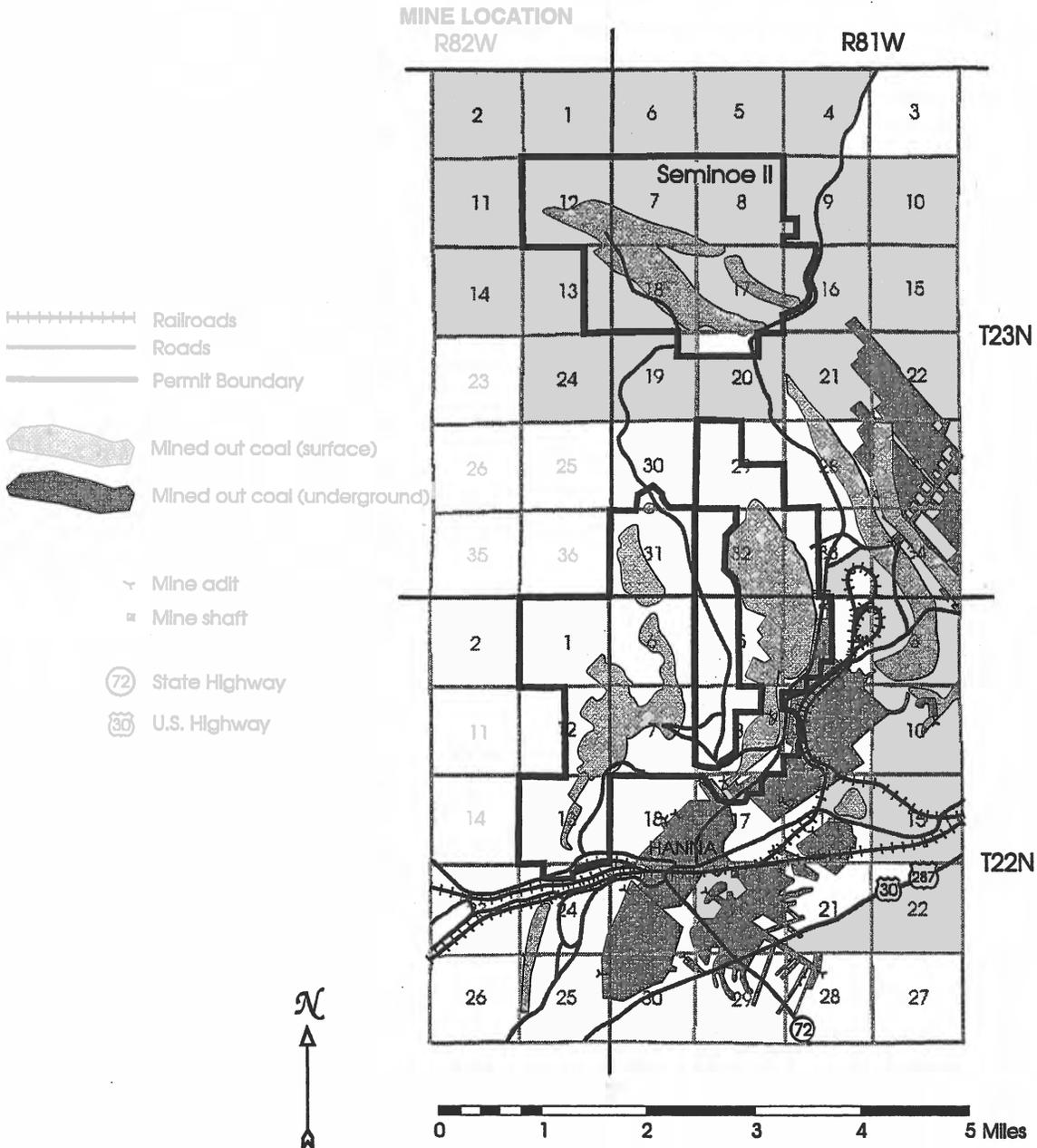
Number of Employees in 1998: 42

Mine Type: Surface

Acres permitted: 9,596

1998 Coal Production: 463,501 short tons

1999 Air Quality Capacity Limit: 0.7 million short tons



Coal Field: Hanna

County: Carbon

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

1999 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 1998 in short tons)

1998	463,501	1989	344,942	1980	1,828,852
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

Total production through 1998: 34,753,548.

Recoverable Coal Reserves (million short tons)

Original Lease: 36.4

Mined tonnage: 34.8

Remaining Reserves: 1.6

Estimated remaining life of mine: 2 years.

Remaining life of mine at current permit capacity: 2 years.

1998 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		Northern States Power	Bayfront	WI	37,800	11451	0.60	5.68	153.40	35.12
S	01-Jul-98	Lower Colorado River Authority	Fayette	TX	54,000	9317	0.37	6.12	93.42	17.41
S		St Joseph Light and Power	Lake Road	MO	45,400	11225	0.61	6.33	113.31	25.44
C		Texas Utilities Electric Co	Monticello	TX	162,000	9479	0.30	5.00	98.80	18.73
S		Wisconsin Electric Power	Presque Isle	MI	12,900	9583	0.38	5.32	119.73	22.92
C	01-Mar-00	Missouri Public Service	Sibley	MO	70,948	11338	0.64	6.53	105.90	24.01
					383,048	10206	0.44	5.68	107.17	22.08

FERC captured 82.6% of 1998 total production.

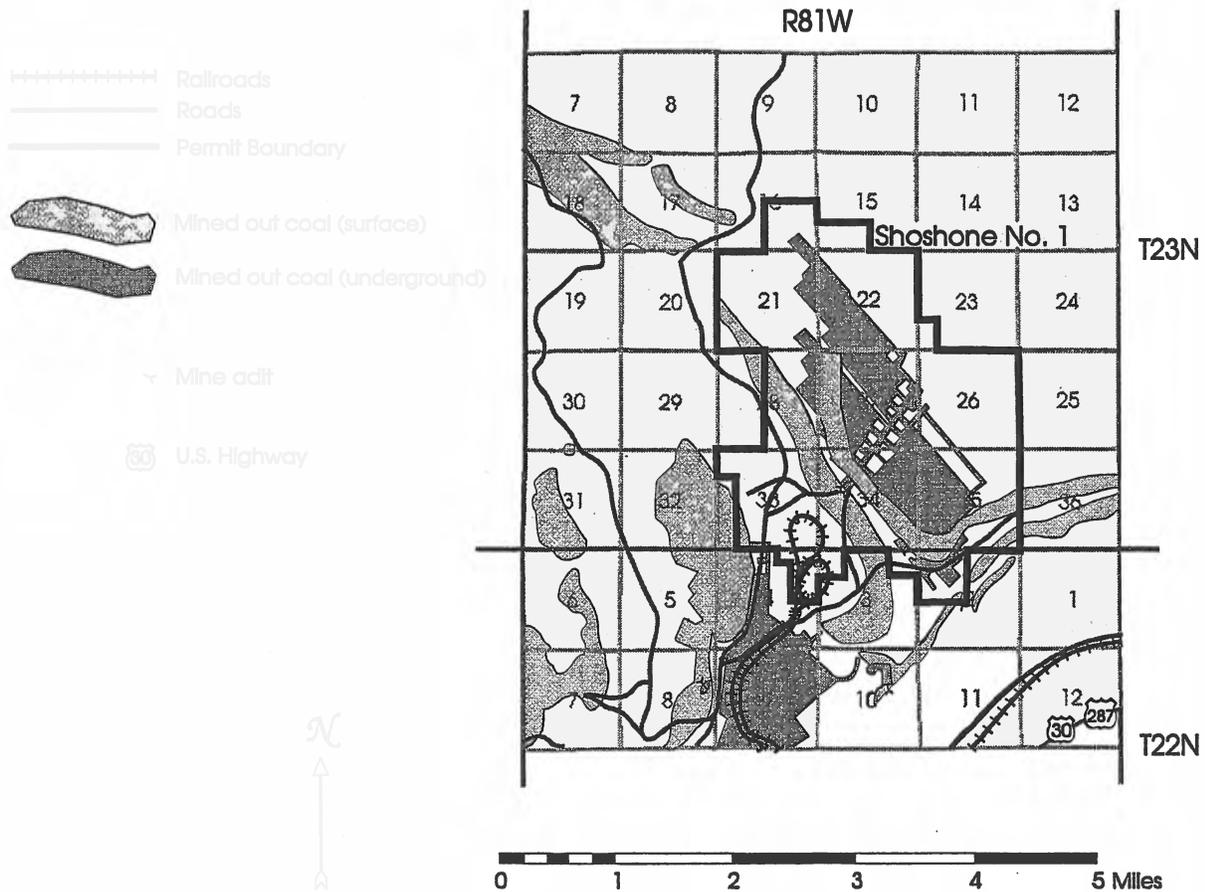
Shoshone No.1

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> or <http://my.uprr.com.pub/energy/coal/wyoming/shoshone.shtml>

Number of Employees in 1998: 108
 Mine Type: Deep (Longwall)
 Acres permitted: 5,295
 1998 Coal Production: 1,903,000 short tons
 1999 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.

1999 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 1998 in short tons)

1998	1,903,000	1988	1,067,305
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

Total production through 1998: 27,935,435. Note: before 1986 this was the Carbon No. 1 mine.

Recoverable Coal Reserves (million short tons)

Original Lease:	35.3
Mined tonnage:	<u>27.9</u>
Remaining Reserves:	7.4

Estimated remaining life of mine: 1 years. (Restricted by geologic faulting.)

Remaining life of mine at current permit capacity: 2 years.

1998 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		Northern Indiana Public Service	Bailey	IN	206,300	10761	0.63	5.99	185.63	39.95
S		Wisconsin Power and Light	Edgewater	WI	164,309	10783	0.62	5.86	149.59	32.26
C	01-Dec-98	MidAmerican Energy	George Neal 1-4	IA	328,000	10787	0.63	5.98	106.76	23.03
S		St Joseph Light and Power	Lake Road	MO	22,300	10820	0.61	5.35	112.97	24.45
C		Northern Indiana Public Service	Michigan City	IN	489,000	10765	0.63	5.97	181.61	39.10
C		Northern Indiana Public Service	Mitchell	IN	283,200	10766	0.63	5.94	193.19	41.60
C		Northern Indiana Public Service	Rollin Schahfer	IN	598,100	10774	0.63	5.91	185.25	39.92
S		Nebraska Public Power District	Sheldon	NE	34,752	10785	0.62	5.71	103.97	22.43
S		Fremont Dept of Public Utilities	Wright	NE	10,100	10795	0.60	5.49	135.00	29.15
					2,136,061	10773	0.63	5.93	168.40	36.28

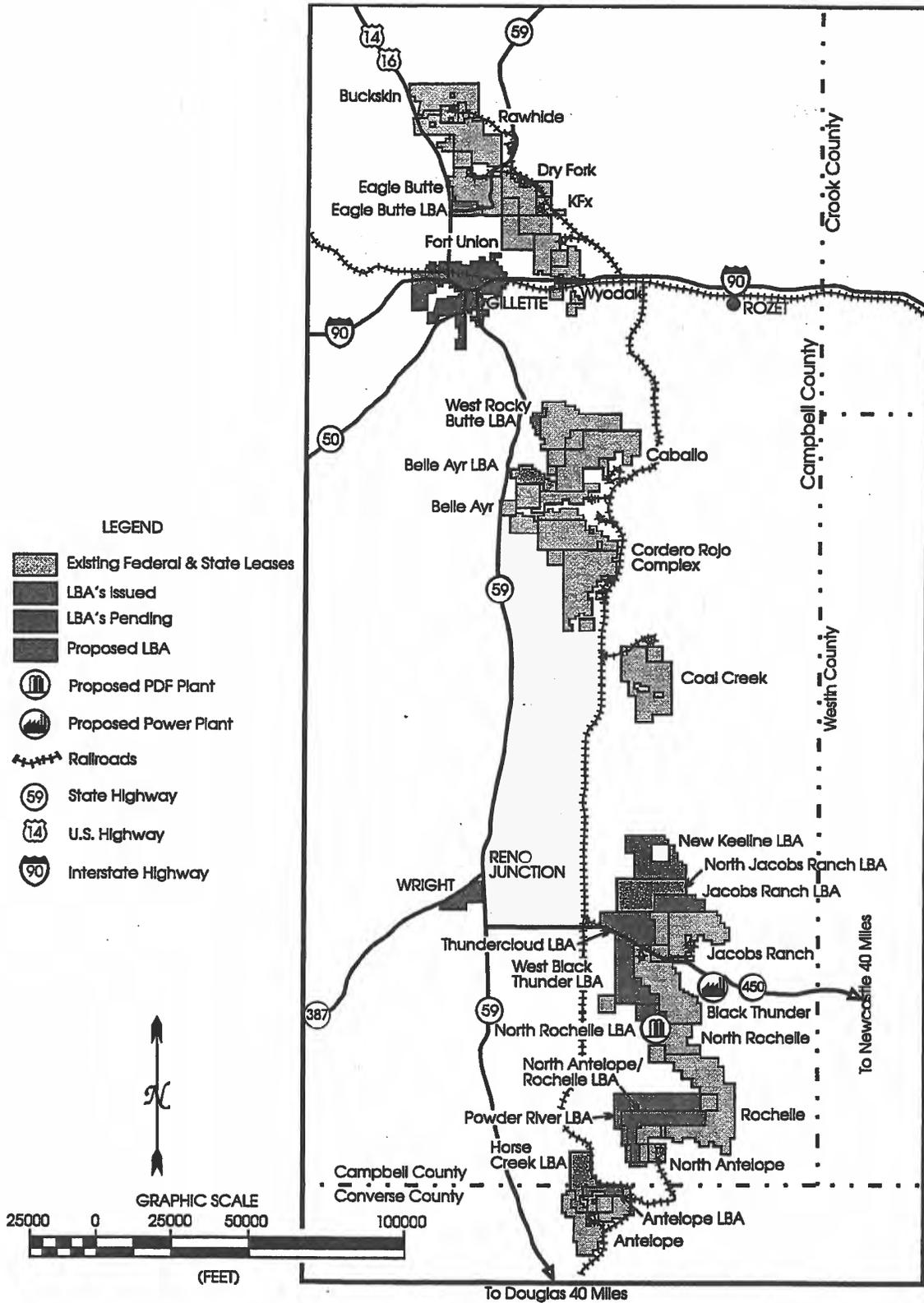
FERC captured 112.2% of 1998 total production.

Powder River Coal Field

<u>MINE</u>	<u>Page</u>
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
Jacobs Ranch	PR-28
KFx	PR-31
North Antelope/Rochelle Complex	PR-33
North Rochelle	PR-37
Rawhide	PR-39
Wyodak	PR-41

For abbreviations, definitions and explanations see page 11.

Figure 8. Coal Mines of the Eastern Powder River Basin.



Antelope

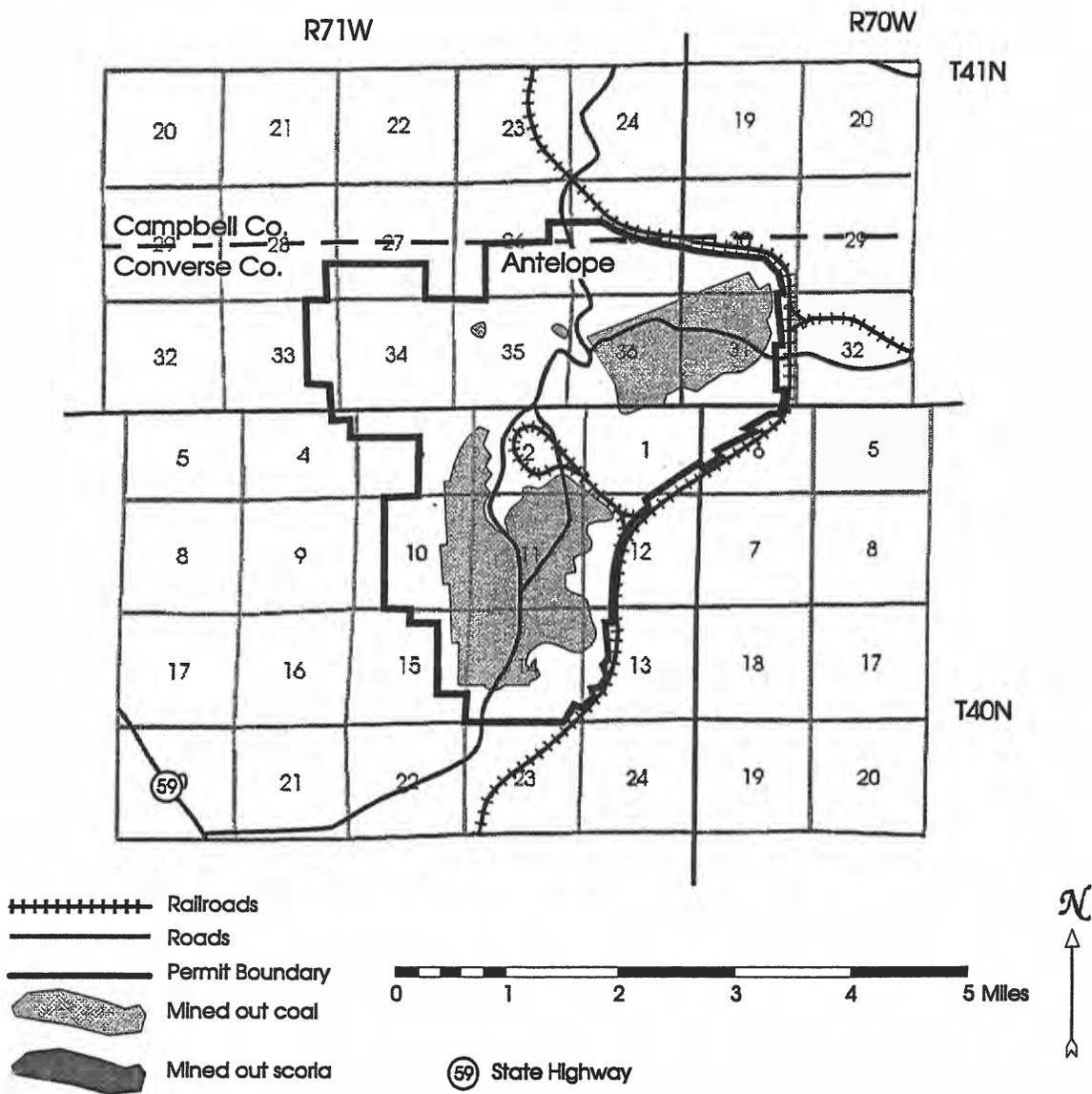
Operating Company: Antelope Coal Company
 Subsidiary of: Kennecott Energy Company
 Owned By: Rio Tinto, PLC.

Mailing Address:

Kennecott Energy
 P.O. Box 2049
 Gillette, WY 82717-2049
 Telephone: (307) 464-1133
 Fax: (307) 464-2588
 URL: <http://www.kenergy.com/antelope/antelope.html> or <http://my.uprr.com/pub/energy/coal/sprb/antelope.shtml>

Number of Employees in 1998: 178
 Mine Type: Surface
 Acres permitted: 7,735
 1998 Coal Production: 19,418,684 short tons
 1999 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.

1999 Directory of Coal Mines in Wyoming

Antelope (cont.)

Geologic Information:

Overburden thickness: 20 to 200 feet (average thickness 84 feet).
 Seams Mined: Anderson (average thickness 38 feet).
 Canyon (average thickness 32 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 and overland conveyor.

Production History: (Start up year 1985 through end of 1998 in short tons)

1998	19,418,684	1990	5,211,642
1997	13,564,831	1989	3,541,184
1996	12,047,801	1988	3,141,088
1995	10,866,880	1987	2,554,333
1994	8,258,590	1986	1,709,787
1993	7,286,610	1985	66,344
1992	5,734,603		
1991	5,448,268		

Total production through 1998: 98,850,645

Recoverable Coal Reserves (million short tons)

Original Lease:	254.7	
Additions:	66.4	Antelope Lease By Application (LBA) (12-4-96)
Mined tonnage:	98.9	
Remaining Reserves:	222.2	
Pending Reserves:	356.5	Horse Creek LBA
Total Reserves:	578.7	

Estimated remaining life of mine: 21 years.

Remaining life of mine at current permit capacity: 19 years.

1998 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-99	Public Service Co of Colorado	Araphoe	CO	510,400	8799	0.25	5.43	82.03	14.44
S		Cleveland Electric Illum Co	Avon Lake	OH	50,600	8793	0.29	5.17	124.93	21.97
S		Toledo Edison	Bay Shore	OH	720,900	8815	0.26	5.31	119.20	21.01
S		Portland General Electric	Boardman	OR	200,000	8849	0.23	5.05	108.85	19.26
C		Tennessee Valley Authority	BRT Terminal	KY	503,660	8794	0.28	5.71	93.99	16.53
S		Arizona Public Service	Cholla	AZ	147,000	8791	0.26	5.37	117.17	20.61
C	01-Dec-98	Lansing Board of Water and Light	Claude R. Erickson	MI	21,100	8763	0.20	5.20	136.22	23.87
S		Lansing Board of Water and Light	Claude R. Erickson	MI	1,000	8878	0.17	7.50	134.50	23.88
C		Indiana-Kentucky Electric Corp	Clifty Creek	IN	1,295,000	8811	0.25	5.37	102.84	18.12
S		Indiana-Kentucky Electric Corp	Clifty Creek	IN	367,000	8810	0.24	5.40	83.17	14.65
C		Tennessee Valley Authority	Cora Terminal	IL	418,260	8806	0.29	5.25	85.95	15.14
S		Tennessee Valley Authority	Cora Terminal	IL	46,000	8700	0.50	5.00	94.83	16.50
S		Southwestern Electric Power(CSW)	Flint Creek	AR	24,000	8872	0.29	5.16	90.15	16.00
C		Texas Municipal Power Agency	Gibbons Creek	TX	123,351	8825	0.31	5.63	119.40	21.07
S		Texas Municipal Power Agency	Gibbons Creek	TX	55,186	8779	0.31	6.07	122.10	21.44
C		Northern States Power	High Bridge	MN	108,700	8832	0.24	4.90	114.24	20.19
S		Consumers Energy	J. C. Weadock	MI	116,800	8808	0.25	5.30	100.48	17.70
S		Consumers Energy	J. H. Campbell	MI	240,600	8804	0.27	5.49	99.07	17.44
S		Consumers Energy	J. R. Whiting	MI	38,900	8769	0.23	5.47	108.82	19.08
C		Electric Energy	Joppa	IL	948,000	8827	0.24	5.13	84.44	14.91
C		Northern States Power	King	MN	488,500	8828	0.25	5.23	108.10	19.09
S		Union Electric	Labadie	MO	2,896,000	8800	0.22	5.30	89.10	15.68
S		St Joseph Light and Power	Lake Road	MO	234,200	8802	0.26	5.50	80.10	14.10
S		Northern Indiana Public Service	Michigan City	IN	36,300	8799	0.28	5.50	157.30	27.68

1999 Directory of Coal Mines in Wyoming

Antelope (cont.)

CT	Expiration	Company Name	Plant Name	State	Quantity	Btu	% Sulfur	% Ash	¢/mmBtu	\$/ton
S		Northern Indiana Public Service	Mitchell	IN	59,600	8825	0.28	5.33	142.71	25.18
S		Detroit Edison Co	Monroe	MI	13,000	8853	0.32	5.30	95.00	16.82
C		Oklahoma Gas and Electric	Muskogee	OK	337,219	8816	0.25	5.55	83.40	14.71
C	01-Dec-99	Wisconsin Electric Power	Oak Creek	WI	619,900	8809	0.26	5.59	92.09	16.22
S		Wisconsin Electric Power	Oak Creek	WI	472,400	8790	0.23	5.19	96.99	17.05
C	01-Dec-99	Lansing Board of Water and Light	Otto E. Eckert	MI	441,800	8810	0.29	5.69	135.53	23.88
C	01-Dec-99	Wisconsin Electric Power	Pleasant Prairie	WI	12,400	8714	0.22	5.60	77.70	13.54
C	01-Dec-97	Commonwealth Edison	Powerton	IL	66,000	8805	0.28	5.00	327.80	57.73
C		Wisconsin Electric Power	Presque Isle	MI	373,600	9077	0.31	4.94	97.09	17.62
C	01-Dec-99	Colorado Springs Utilities	R. D. Nixon	CO	13,200	8962	0.35	5.62	76.70	13.75
C	01-Dec-99	Platte River Authority	Rawhide	CO	924,737	8820	0.25	5.37	59.65	10.52
C		Northern Indiana Public Service	Rollin Schahfer	IN	24,500	8776	0.25	5.40	109.80	19.27
S		Northern Indiana Public Service	Rollin Schahfer	IN	210,500	8816	0.27	5.60	112.49	19.83
S		Georgia Power (Southern Co)	Scherer	GA	1,839,600	8824	0.25	5.40	149.08	26.31
C		Tennessee Valley Authority	Shawnee	KY	77,940	8807	0.28	5.66	96.87	17.06
C		Northern States Power	Sherburne County	MN	163,200	8859	0.25	4.88	126.98	22.50
S		Union Electric	Sioux	MO	331,000	8800	0.22	5.30	88.29	15.54
C		Oklahoma Gas and Electric	Sooner	OK	396,406	8818	0.24	5.28	82.21	14.50
S		Detroit Edison Co	Trenton Channel	MI	12,000	8767	0.32	5.90	97.40	17.08
C		Houston Lighting and Power	W. A. Parish	TX	517,300	8965	0.40	5.32	181.50	32.54
C	01-Dec-97	Commonwealth Edison	Waukegan	IL	28,000	8805	0.28	5.00	316.20	55.68
S		Southwestern Electric Power(CSW)	Welsh Station	TX	47,000	8821	0.29	4.88	162.29	28.64
					16,572,559	8822	0.25	5.35	104.79	18.50

FERC captured 85.3% of 1998 total production.

Belle Ayr

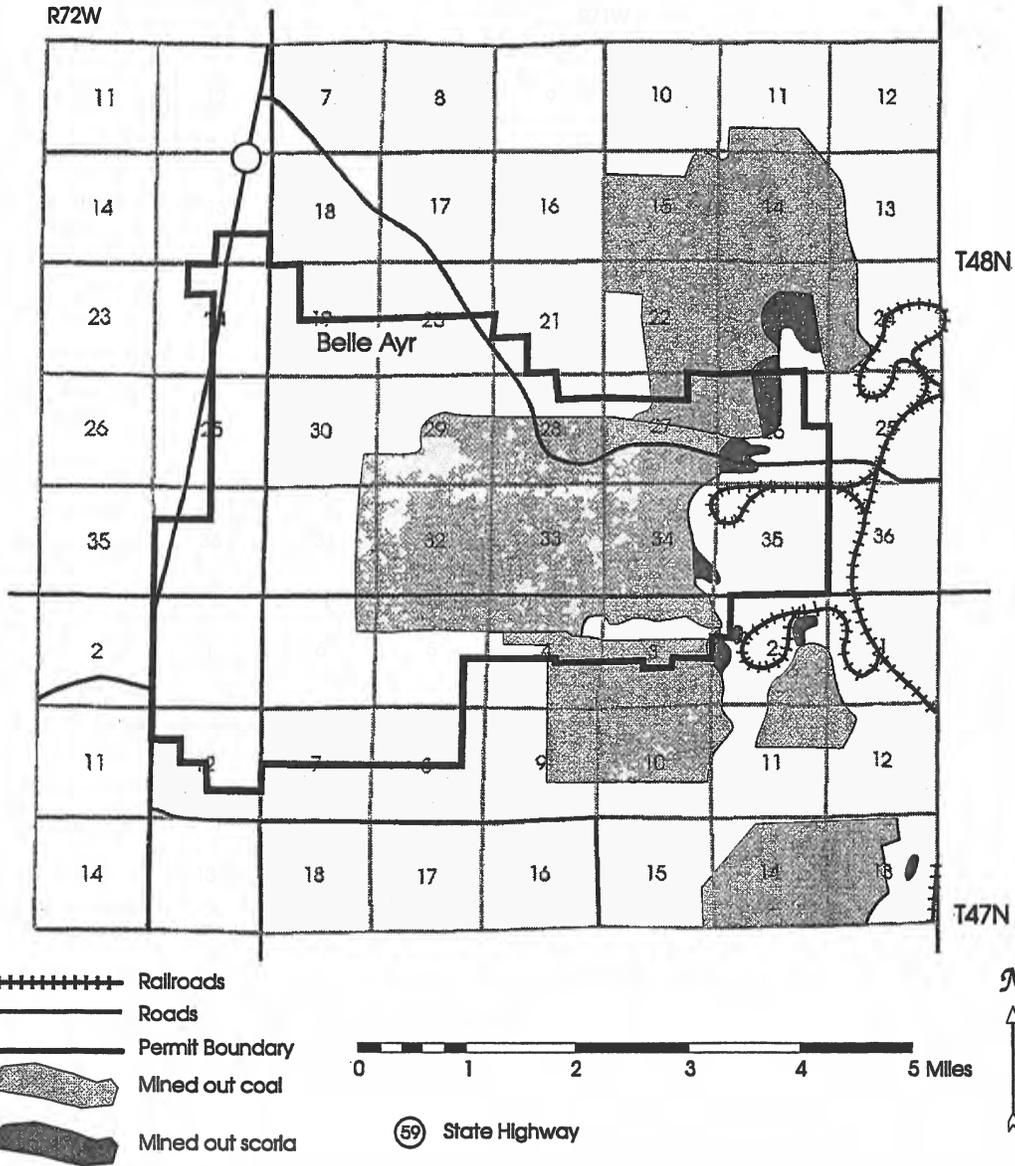
Operating Company: Amax Coal West, Inc.
 Owned By: RAG International Mining Gmbh.*
 Mailing Address:

Amax Coal West, Inc.
 P.O. Box 3039
 Gillette, WY 82717-3039
 Telephone: (307) 687-3400
 Fax: (307) 687-3470
 URL: <http://www.cyprusamax.com> or <http://my.uprr.com/pub/energy/coal/sprb/belleayr.shtml>

Number of Employees in 1998: 280
 Mine Type: Surface
 Acres permitted: 11,872
 1998 Coal Production: 22,479,368 short tons
 1999 Air Quality Capacity Limit: 25.0 million short tons

*Note: Sold to RAG International Mining Gmbh. on 6/30/99

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.

1999 Directory of Coal Mines in Wyoming

Belle Ayr (cont.)

Geologic Information:

Overburden thickness: 15 to 350 feet (average thickness 250 feet).
 Seams Mined: Wyodak (average thickness 72 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 1972 through end of 1998 in short tons)

1998	22,479,368	1989	13,600,000	1980	16,106,093
1997	22,800,736	1988	13,296,739	1979	14,996,875
1996	19,970,300	1987	13,329,591	1978	18,065,710
1995	18,771,977	1986	12,145,900	1977	13,331,844
1994	18,361,866	1985	12,829,379	1976	7,233,000
1993	15,558,000	1984	13,417,422	1975	3,288,000
1992	12,956,204	1983	13,825,240	1974	3,301,472
1991	14,748,346	1982	15,161,298	1973	867,544
1990	15,528,327	1981	15,256,750	1972	32,957

Total production through 1998: 361,260,938.

Recoverable Coal Reserves (million short tons)

Original Lease:	359.4
Additions:	363.2
Mined tonnage:	<u>361.3</u>
Remaining Reserves:	361.3

Pending Reserves:	<u>200.0</u>	(Belle Ayr Lease By Application)
Total Reserves:	561.3	

Estimated remaining life of mine: 20 years.

Remaining life of mine at current permit capacity: 22 years.

1998 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		Toledo Edison Co	Bay Shore	OH	143,600	8503	0.34	4.61	123.53	21.01
C		Public Service Co of Colorado	Comanche	CO	2,838,400	8563	0.27	4.43	90.22	15.45
S		Public Service Co of Colorado	Comanche	CO	71,300	8638	0.25	4.15	100.00	17.28
C		MidAmerican Energy	Council Bluffs	IA	14,000	8640	0.26	4.20	75.70	13.08
S		Wisconsin Power and Light	Edgewater	WI	77,230	8564	0.27	4.33	105.40	18.05
C		Southwestern Electric Power(CSW)	Flint Creek	AR	320,000	8513	0.31	4.60	167.55	28.52
S		Southwestern Electric Power(CSW)	Flint Creek	AR	47,000	8545	0.27	4.42	129.18	22.07
S		MidAmerican Energy	George Neal 1-4	IA	107,000	8514	0.27	4.50	67.12	11.43
C		Nebraska Public Power District	Gerald Gentleman	NE	3,672,020	8545	0.27	4.54	46.49	7.94
C	01-Dec-99	Alabama Power (Southern Co)	James H. Miller Jr	AL	6,039,822	8537	0.27	4.62	118.86	20.29
C		Kansas Power & Light	Jeffrey	KS	1,335,000	8477	0.29	4.45	113.58	19.25
C		Electric Energy	Joppa	IL	1,607,400	8546	0.25	4.23	82.32	14.07
C		MidAmerican Energy	Louisa	IA	12,000	8585	0.26	4.60	103.50	17.77
C		Texas Utilities Electric Co	Monticello	TX	294,000	8607	0.30	4.70	108.72	18.71
C	01-Dec-98	Oklahoma Gas and Electric	Muskogee	OK	4,402,086	8532	0.27	4.55	85.00	14.50
C		Public Service Co of Colorado	Pawnee	CO	71,400	8555	0.27	4.44	83.99	14.37
S		Indiana Michigan Power (AEP)	Rockport	IN	600	8650	0.24	4.40	29.70	5.14
S		Union Electric	Rush Island	MO	497,000	8550	0.30	4.50	90.24	15.43
S		Georgia Power (Southern Co)	Scherer	GA	13,700	8533	0.27	4.50	162.60	27.75
C		Nebraska Public Power System	Sheldon	NE	70,264	8549	0.27	4.60	59.10	10.10
S		Nebraska Public Power District	Sheldon	NE	94,075	8532	0.27	4.51	59.30	10.12
S		Houston Lighting and Power	W. A. Parish	TX	183,800	8493	0.30	4.68	125.47	21.31
S		Southwestern Electric Power(CSW)	Welsh Station	TX	71,000	8769	0.21	5.18	151.00	26.48
C		Fremont Dept of Public Utilities	Wright	NE	211,150	8510	0.27	4.60	89.87	15.29
S		Fremont Dept of Public Utilities	Wright	NE	13,300	8673	0.26	4.30	90.20	15.65
					22,207,147	8539	0.27	4.52	92.48	15.79

FERC captured 98.8% of 1998 total production.

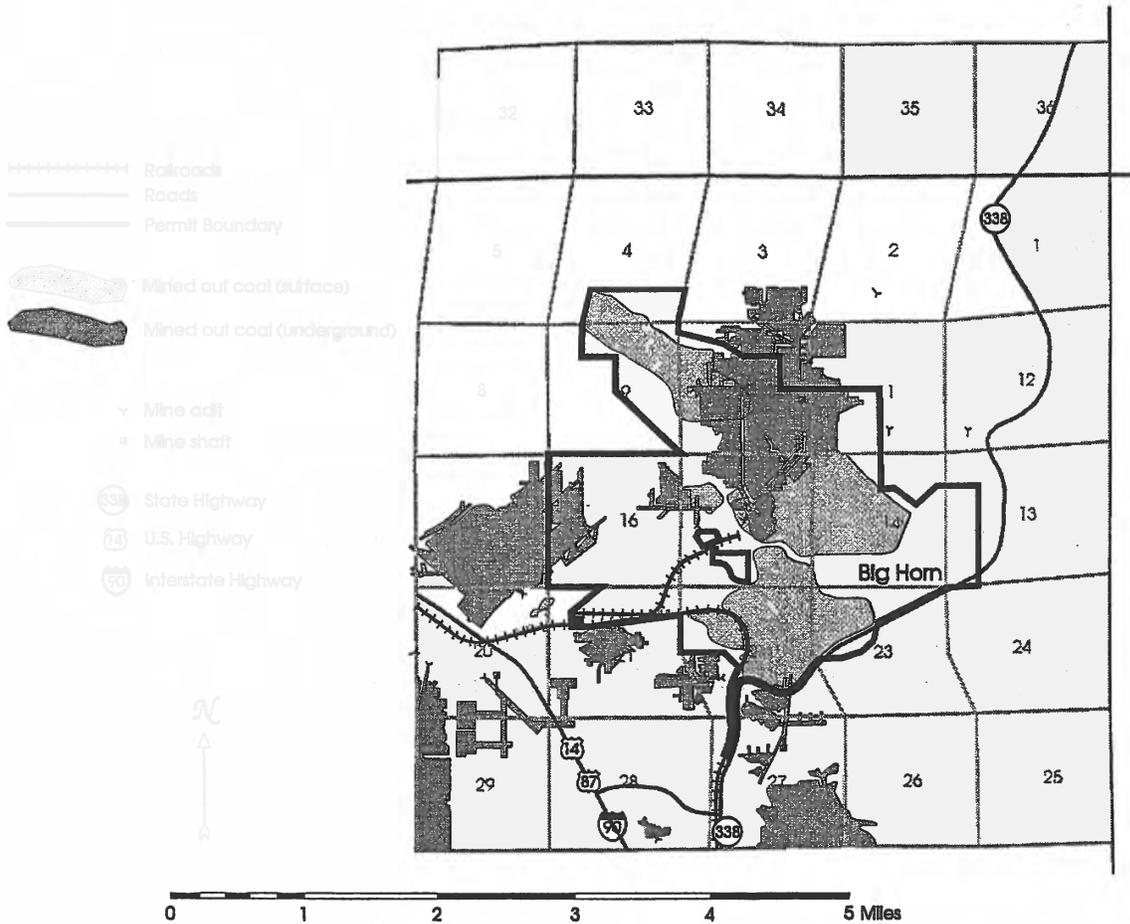
Big Horn

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/projects/mining.htm>

Number of Employees in 1998: 14
Mine Type: Surface (in reclamation)
Acres permitted: 3,700
1998 Coal Production: 65,909 short tons
1999 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.

1999 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 1998 in short tons)

1998	65,909	1979	3,536,608	1960	368,057
1997	44,202	1978	2,844,958	1959	370,063
1996	15,129	1977	2,394,532	1958	344,999
1995	37,472	1976	739,385	1957	378,140
1994	100,733	1975	787,123	1956	380,270
1993	120,000	1974	997,274	1955	398,010
1992	105,391	1973	444,545	1954	402,223
1991	158,055	1972	953,611	1953	435,024
1990	134,104	1971	1,755,104	1952	308,625
1989	106,147	1970	1,442,565	1951	323,012
1988	945,116	1969	323,375	1950	350,841
1987	1,201,093	1968	194,750	1949	425,663
1986	1,360,805	1967	325,248	1948	464,331
1985	2,400,000	1966	306,507	1947	551,429
1984	2,530,755	1965	329,883	1946	483,576
1983	2,946,680	1964	412,761	1945	264,723
1982	2,990,564	1963	361,223	1944	107,201
1981	2,753,913	1962	341,196		
1980	4,327,594	1961	334,218		

Total production through 1998: 47,524,715.

Recoverable Coal Reserves (million short tons)

Original Lease:	58.3
Mined tonnage:	<u>47.5</u>
Remaining Reserves:	10.8

Estimated remaining life of mine: 0 years. (in reclamation, mines from pit 3 on demand and processes Decker coal)

1998 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

none

FERC captured 0.0% of 1998 total production.

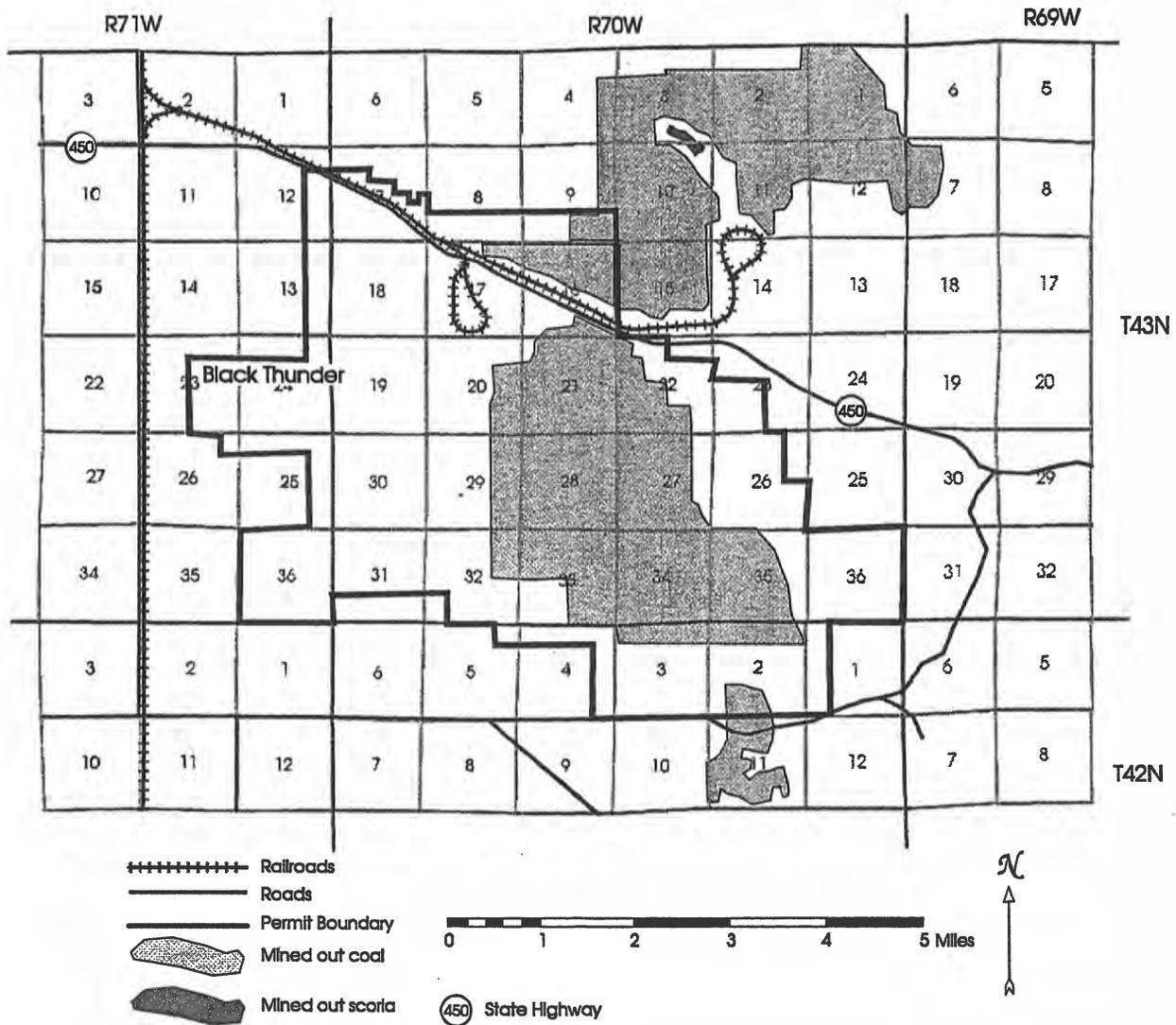
Black Thunder

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> or <http://my.uprr.com/pub/energy/coal/sprb/blkthndr.shtml>

Number of Employees in 1998: 445
 Mine Type: Surface
 Acres permitted: 15,963
 1998 Coal Production: 42,683,014 short tons
 1999 Air Quality Capacity Limit: 55.0 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.

1999 Directory of Coal Mines in Wyoming

Black Thunder (cont.)

Geologic Information:

Overburden thickness: 15 to 240 feet (average thickness 140 feet).
 Seams Mined: Roland, Anderson (average thickness 70 feet).
 Coal Zone: Wyodak.
 Member: Tongue River.
 Formation: Fort Union.
 Age: Tertiary/Paleocene.

Mining Method:

Overburden Removal: dragline, truck-shovel, and cast blasting.
 Coal Removal: truck-shovel.

Production History: (Start up year 1977 through end of 1998 in short tons)

1998	42,683,014	1990	27,919,411	1982	16,828,240
1997	37,669,516	1989	29,536,578	1981	14,694,507
1996	39,174,599	1988	24,862,429	1980	10,548,996
1995	36,149,282	1987	19,272,751	1979	6,244,164
1994	31,616,222	1986	21,868,336	1978	1,982,424
1993	34,320,470	1985	23,207,616	1977	42,866
1992	28,644,138	1984	21,200,000		
1991	30,851,751	1983	15,193,140		

Total production through 1998: 514,510,450.

Recoverable Coal Reserves (million short tons)

Original Lease:	1,187.5	
Additional Lease	412.0	Thundercloud Lease By Application (9/30/98)
Mined tonnage:	514.5	
Remaining Reserves:	1,085.0	

Estimated remaining life of mine: 27 years.

Remaining life of mine at current permit capacity: 20 years.

1998 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		Consumers Energy	B. C. Cobb	MI	284,300	8738	0.36	5.28	102.02	17.83
S		Cajun Electric Power Coop	Big Cajun No.2	LA	28,562	8643	0.39	5.72	146.20	25.27
S		Portland General Electric	Boardman	OR	598,000	8759	0.35	5.48	108.93	19.08
C		Tennessee Valley Authority	BRT Terminal	KY	817,500	8802	0.31	5.16	93.95	16.54
S		IES Utilities, Inc	Burlington	IA	24,351	8859	0.36	4.78	84.20	14.92
S		Minnesota Power	Clay Boswell	MN	40,760	8794	0.28	5.23	121.00	21.28
C		Tennessee Valley Authority	Cora Terminal	IL	762,490	8793	0.33	5.22	86.00	15.12
C	01-Nov-98	MidAmerican Energy	Council Bluffs	IA	1,000	8819	0.30	5.00	32.70	5.77
C	01-Dec-98	Wisconsin Power and Light	Edgewater	WI	1,303,128	8734	0.35	5.36	116.69	20.38
C	31-Dec-01	Lower Colorado River Authority	Fayette	TX	2,682,000	8739	0.36	5.39	95.22	16.64
C		Nebraska Public Power District	Gerald Gentleman	NE	633,685	8737	0.34	5.32	46.25	8.08
S		Texas Municipal Power Agency	Gibbons Creek	TX	94,401	8735	0.34	5.44	120.70	21.09
C		Southwestern Public Service	Harrington	TX	4,592,000	9049	0.36	5.46	124.37	22.49
C	01-Dec-99	Kansas City Power and Light	Hawthorne	MO	871,000	8734	0.36	5.41	68.17	11.91
C	01-Dec-98	Western Farmers Electric Coop	Hugo	OK	1,592,268	8745	0.35	5.36	100.48	17.58
C		Kansas City Power and Light	Iatan	MO	2,302,000	8726	0.35	5.46	80.97	14.13
S		Kansas City Power and Light	Iatan	MO	335,000	8755	0.36	5.41	59.44	10.41
C		Consumers Energy	J. C. Weadock	MI	228,300	8741	0.34	5.32	97.60	17.06
S		Consumers Power	J. C. Weadock	MI	86,700	8785	0.33	5.31	99.40	17.47
C		Consumers Energy	J. H. Campbell	MI	236,100	8718	0.36	5.30	97.03	16.92
C		Consumers Energy	J. R. Whiting	MI	13,100	8800	0.30	5.00	101.20	17.81
C		City Utilities of Springfield	James River	MO	647,100	8729	0.37	5.50	108.62	18.96
C	01-Dec-98	Commonwealth Edison	Joliet	IL	3,324,000	8742	0.36	5.62	306.04	53.52
S		Commonwealth Edison	Joliet	IL	439,000	8750	0.37	5.42	123.74	21.66
C	01-Dec-99	Kansas City Power and Light	La Cygne	KS	27,000	8804	0.35	4.90	68.50	12.06
S		Union Electric	Labadie	MO	124,000	8820	0.33	5.00	84.56	14.92
S		Interstate Power	Lansing	IA	108,075	8749	0.32	5.27	115.57	20.22
C	01-Dec-99	Northern Indiana Public Service	Michigan City	IN	789,500	8749	0.34	5.37	108.80	19.04
S		Northern Indiana Public Service	Michigan City	IN	33,700	8671	0.40	6.10	106.80	18.52
C	01-Dec-99	Northern Indiana Public Service	Mitchell	IN	583,700	8745	0.35	5.36	116.75	20.42

1999 Directory of Coal Mines in Wyoming

Black Thunder (cont.)

CT	Expiration	Company Name	Plant Name	State	Quantity	Btu	% Sulfur	% Ash	¢/mmBtu	\$/ton
S		Northern Indiana Public Service	Mitchell	IN	25,600	8678	0.39	5.40	114.90	19.94
C		Detroit Edison	Monroe	MI	2,878,000	8752	0.35	5.32	96.10	16.82
C	01-Dec-98	Kansas City Power and Light	Montrose	MO	1,317,000	8750	0.35	5.41	88.82	15.54
C		Oklahoma Gas and Electric	Muskogee	OK	89,659	8739	0.34	5.51	80.29	14.03
S		Omaha Public Power District	North Omaha	NE	71,100	8776	0.35	5.63	70.93	12.45
C	01-Dec-97	Grand Island Utilities	Platte	NE	35,000	8672	0.44	5.38	66.90	11.60
C	01-Dec-98	Commonwealth Edison	Powerton	IL	194,000	8736	0.35	5.59	300.46	52.50
C	31-Dec-99	Kansas City Bd Public Utilities	Quindaro	KS	43,500	8808	0.34	5.00	92.40	16.28
C		Detroit Edison	River Rouge	MI	694,000	8733	0.35	5.29	94.15	16.45
S		Indiana Michigan Power (AEP)	Rockport	IN	491,400	8738	0.36	5.29	99.46	17.38
C	01-Dec-99	Northern Indiana Public Service	Rollin Schahfer	IN	307,200	8753	0.35	5.36	116.22	20.34
S	01-Dec-99	Northern Indiana Public Service	Rollin Schahfer	IN	74,200	8732	0.36	5.20	111.48	19.47
S		Union Electric	Rush Island	MO	420,000	8820	0.33	5.00	89.06	15.71
S		Georgia Power (Southern Co)	Scherer	GA	96,500	8796	0.34	5.33	147.80	26.00
C		Tennessee Valley Authority	Shawnee	KY	95,810	8799	0.35	5.13	101.08	17.79
S		Tennessee Valley Authority	Shawnee	KY	71,140	8817	0.29	5.30	94.11	16.59
C		Northern States Power	Sherburne County	MN	2,380,700	8746	0.35	5.36	111.94	19.58
S		Sikeston Utilities	Sikeston	MO	946,000	8741	0.35	5.33	100.08	17.49
S		Union Electric	Sioux	MO	2,109,000	8820	0.33	5.00	89.18	15.73
C		Oklahoma Gas and Electric	Sooner	OK	2,949,545	8744	0.35	5.33	78.80	13.78
C		City Utilities of Springfield	Southwest	MO	789,000	8760	0.36	5.39	103.68	18.17
C		Southwestern Public Service	Tolk	TX	3,865,690	8706	0.35	5.32	215.53	36.82
S	01-Dec-98	Southwestern Public Service	Tolk	TX	64,980	8677	0.34	5.36	126.71	22.00
C		Detroit Edison Co	Trenton Channel	MI	37,000	8723	0.36	5.43	97.36	16.99
S		Houston Lighting and Power	W. A. Parish	TX	81,500	8773	0.32	5.35	123.12	21.60
C	01-Dec-98	Commonwealth Edison	Waukegan	IL	330,000	8738	0.36	5.62	300.59	52.53
S		Commonwealth Edison	Waukegan	IL	15,000	8751	0.37	5.40	124.20	21.74
C		Wisconsin Public Service Corp	Weston 3	WI	832,000	8770	0.35	5.32	125.32	21.98
C	01-Dec-98	Commonwealth Edison	Will County	IL	150,000	8733	0.35	5.52	300.87	52.55
C		Wyandotte Dept of Mun Service	Wyandotte	MI	414	8852	0.32	11.96	126.90	22.47
					45,055,658	8778	0.35	5.37	127.41	22.29

FERC captured 105.6% of 1998 total production.

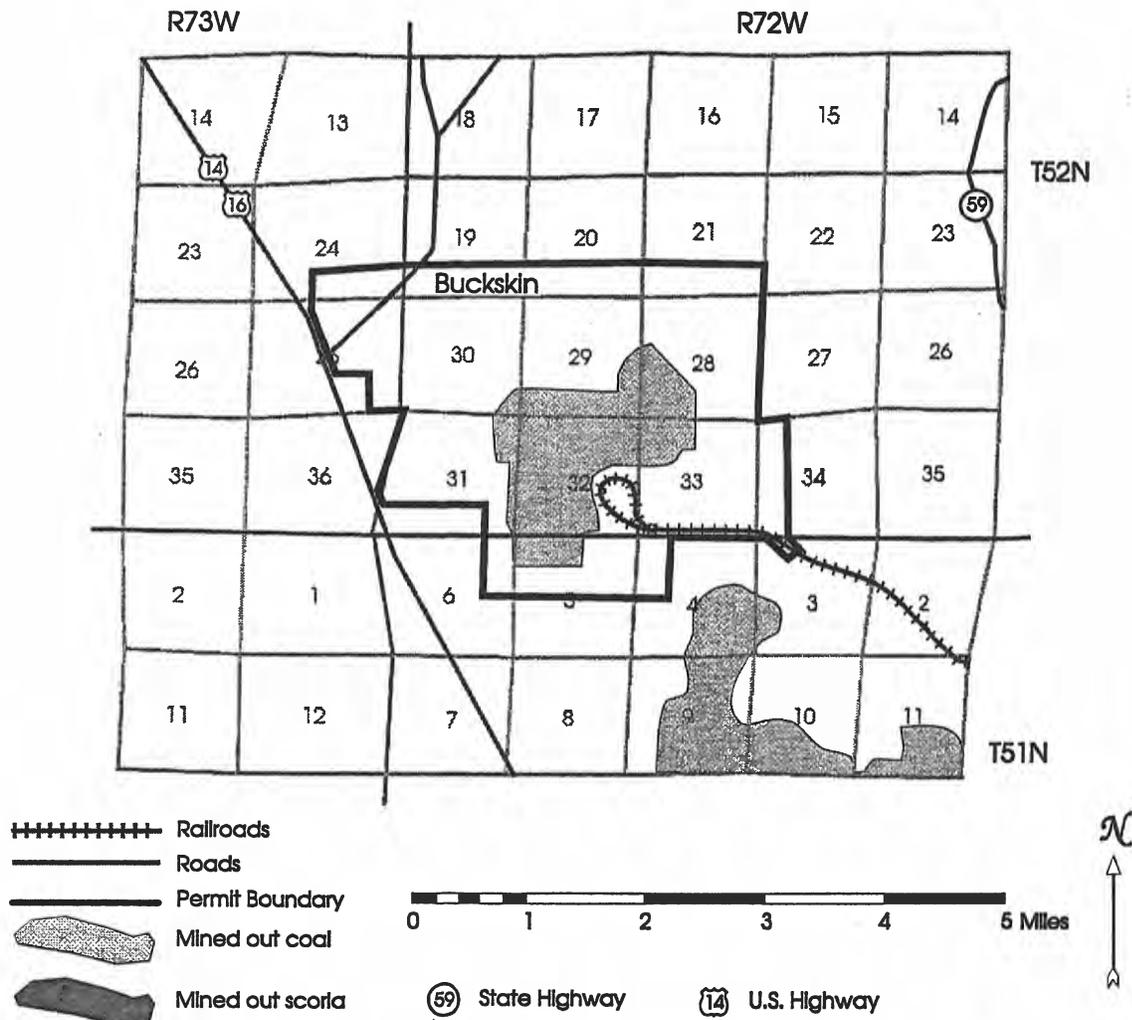
Buckskin

Operating Company: Triton Coal Company
 Subsidiary of: Vulcan Coal Holding Company
 Owned By: Vulcan Capital Management
 Mailing Address:

Triton Coal Company
 P.O. Box 3027
 Gillette, WY 82717-3027
 Telephone: (307) 682-9144
 Fax: (307) 686-5445
 URL:

Number of Employees in 1998: 145
 Mine Type: Surface
 Acres permitted: 5,426
 1998 Coal Production: 17,290,730 short tons
 1999 Air Quality Capacity Limit: 22.0 million short tons

MINE LOCATION



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

1999 Directory of Coal Mines in Wyoming

Buckskin (cont.)

Geologic Information:

Overburden thickness: 20 to 215 feet (average thickness 140 feet).

Seams Mined: Roland (average thickness 40 feet).

Smith (average thickness 64 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 1981 through end of 1998 in short tons)

1998	17,290,730	1989	7,693,929
1997	14,443,165	1988	7,174,718
1996	11,951,798	1987	5,773,967
1995	11,600,000	1986	3,996,492
1994	10,955,839	1985	3,958,420
1993	11,180,379	1984	3,515,426
1992	9,121,349	1983	1,709,958
1991	9,435,021	1982	1,406,343
1990	7,695,009	1981	350,647

Total production through 1998: 139,253,190.

Recoverable Coal Reserves (million short tons)

Original Lease: 440.0

Mined tonnage: 139.3

Remaining Reserves: 300.7

Estimated remaining life of mine: 17 years.

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

1998 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		Cajun Electric Power Coop	Big Cajun No.2	LA	6,152,022	8422	0.45	5.38	145.77	24.55
S		IES Utilities, Inc	Burlington	IA	547,677	8428	0.49	5.35	83.04	14.00
S		Wisconsin Power and Light	Columbia	WI	27,869	8376	0.47	5.87	92.30	15.46
C	01-Dec-98	MidAmerican Energy	Council Bluffs	IA	585,000	8440	0.44	5.33	54.00	9.12
S		Southwestern Electric Power(CSW)	Flint Creek	AR	552,000	8486	0.43	5.19	93.85	15.93
S		Western Farmers Electric Coop	Hugo	OK	89,452	8403	0.46	5.18	81.22	13.65
S		Interstate Power	Lansing	IA	248,020	8424	0.43	5.24	115.64	19.48
C		Basin Electric Power Coop	Laramie River 1-3	WY	5,086,300	8437	0.44	5.26	45.53	7.68
C	01-Dec-98	MidAmerican Energy	Louisa	IA	12,000	8317	0.36	5.20	76.50	12.73
S		Interstate Power	M. L. Kapp	IA	176,938	8446	0.45	5.43	130.73	22.08
C	02-Dec-02	Muscatine Power and Water	Muscatine	IA	742,300	8413	0.92	6.41	82.42	13.87
C		Public Serv Co of Oklahoma (CSW)	Northeast	OK	34,917	8449	0.46	5.30	95.40	16.12
C		West Texas Utilities (CSW)	Oklaunion	TX	2,036,305	8460	0.43	5.23	138.35	23.41
S		West Texas Utilities (CSW)	Oklaunion	TX	201,560	8411	0.45	5.19	100.67	16.94
S		Union Electric	Rush Island	MO	24,000	8450	0.36	5.00	83.70	14.15
S		Union Electric	Sioux	MO	13,000	8450	0.36	5.00	83.70	14.15
S		Southwestern Electric Power(CSW)	Welsh Station	TX	564,000	8419	0.45	5.29	128.08	21.57
					17,093,360	8433	0.46	5.36	103.06	17.38

FERC captured 98.9% of 1998 total production.

Caballo

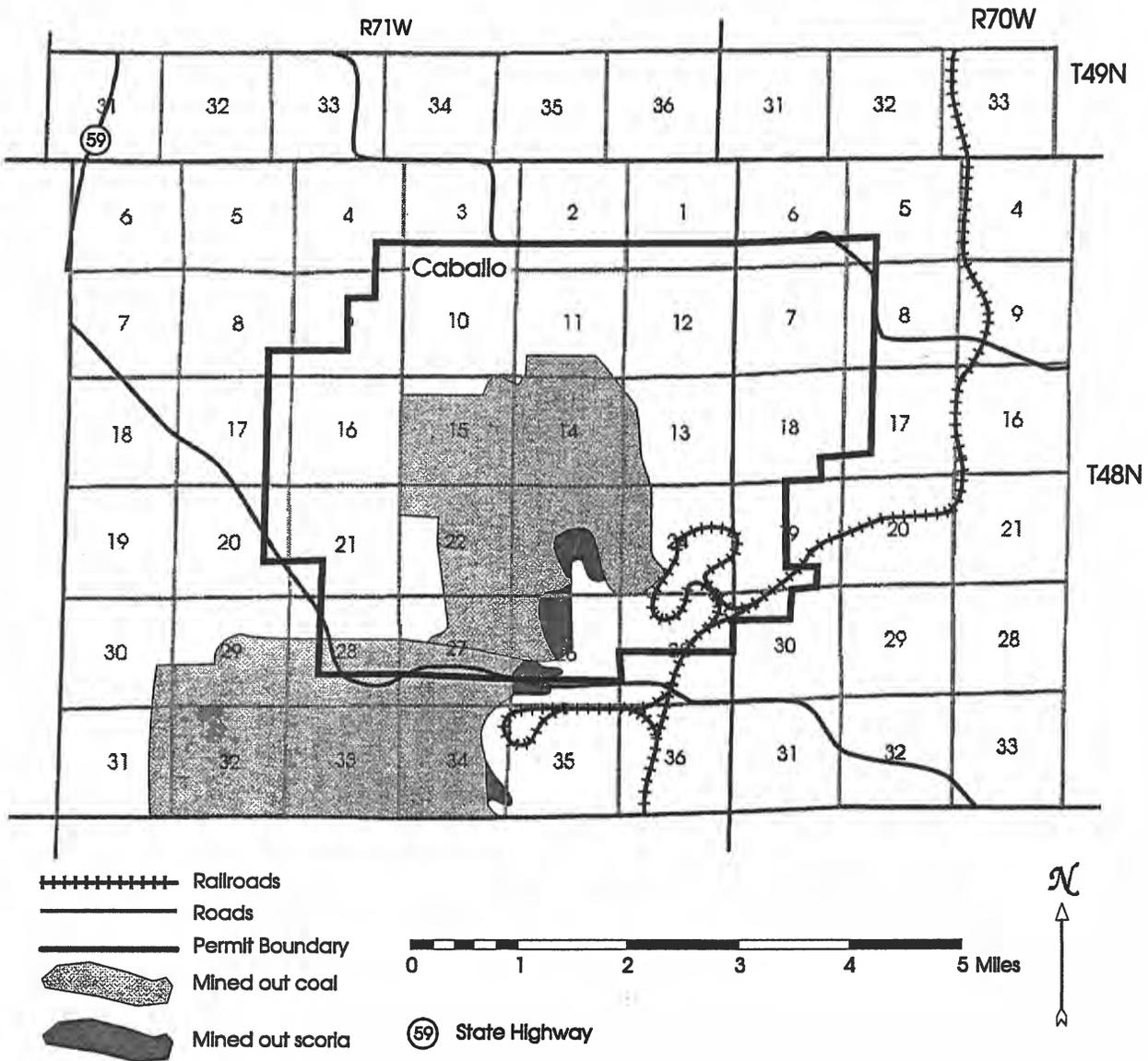
Operating Company: Powder River Coal Company
 Subsidiary of: Peabody Coal Company
 Owned By: Lehman Brothers Merchant Banking Group
 Mailing Address:

Caballo Coal Company
 Caller Box 3041
 Gillette, WY 82717-3041
 Telephone: (307) 686-1991
 Fax: (307) 682-2218

Number of Employees in 1998: 333
 Mine Type: Surface
 Acres permitted: 12,093
 1998 Coal Production: 25,984,949 short tons
 1999 Air Quality Capacity Limit: 51.0 million short tons

URL: <http://www.peabodygroup.com/menupage.html> or <http://www.peabodygroup.com/PRCC/Default.htm> or <http://my.uprr.com/pub/energy/coal/sprb/caballo2.shtml>

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.

1999 Directory of Coal Mines in Wyoming

Caballo (cont.)

Geologic Information:

Overburden thickness: 40 to 280 feet (average thickness 180 feet).
Seams Mined: Roland (average thickness 32 feet).
Anderson-Canyon (average thickness 70 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 1978 through end of 1998 in short tons)

1998	25,984,949	1991	15,267,657	1984	8,164,752
1997	19,946,861	1990	14,312,971	1983	6,706,928
1996	22,003,064	1989	12,856,387	1982	5,537,070
1995	18,357,087	1988	12,779,942	1981	3,523,611
1994	14,428,600	1987	11,684,193	1980	1,974,164
1993	15,418,125	1986	7,272,741	1979	1,272,969
1992	15,378,609	1985	8,977,927	1978	145,000

Total production through 1998: 241,993,607.

Recoverable Coal Reserves (million short tons)

Original Lease:	791.7	
Additions:	280.0	Acquisition of Rocky Butte Reserves (12/22/97)
Mined tonnage:	<u>242.0</u>	
Remaining Reserves:	829.7	

Estimated remaining life of mine: 30 years.

Remaining life of mine at current permit capacity: 16 years.

1998 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-98	Public Service Co of Colorado	Araphoe	CO	116,700	8522	0.33	5.04	83.10	14.16
C	01-Dec-98	Wisconsin Power and Light	Columbia	WI	2,322,594	8486	0.36	5.03	96.24	16.33
C	01-Dec-99	MidAmerican Energy	Council Bluffs	IA	161,000	8441	0.35	5.26	52.94	8.94
S	01-Dec-98	MidAmerican Energy	Council Bluffs	IA	224,000	8485	0.36	4.94	54.43	9.24
C	01-Dec-98	MidAmerican Energy	George Neal 1-4	IA	5,295,000	8487	0.36	5.03	72.43	12.29
C		Grand River Dam Authority	GRDA 1 & 2	OK	2,137,803	8486	0.36	5.01	86.90	14.75
S		Hastings Utilities	Hastings	NE	220,500	8477	0.37	5.10	59.57	10.10
C	01-Dec-98	Kansas City Power and Light	Hawthorne	MO	28,000	8518	0.35	5.00	61.25	10.43
C	01-Dec-99	Kansas City Power and Light	Iatan	MO	152,000	8466	0.34	4.89	55.78	9.44
C	01-Dec-99	Kansas City Power and Light	La Cygne	KS	2,621,000	8480	0.36	5.04	62.53	10.60
C		Basin Electric Power Coop	Laramie River 1-3	WY	425,700	8480	0.36	5.03	45.57	7.73
C	01-Dec-99	MidAmerican Energy	Louisa	IA	214,000	8484	0.36	4.89	75.36	12.79
C	31-Dec-98	Kansas City Bd Public Utilities	Nearman Creek	KS	25,700	8417	0.30	4.90	69.30	11.67
C		Wisconsin Electric Power	Pleasant Prairie	WI	1,856,900	8488	0.36	5.03	71.72	12.17
C	01-Dec-98	Wisconsin Public Service Corp	Pulliam	WI	92,000	8497	0.36	4.93	95.28	16.19
C		Indiana Michigan Power (AEP)	Rockport	IN	2,275,600	8484	0.36	4.96	101.53	17.23
S		IES Utilities, Inc	Sutherland	IA	34,617	8518	0.37	4.99	68.54	11.68
C		Houston Lighting and Power	W. A. Parish	TX	822,400	8517	0.38	4.84	188.23	32.05
C	01-Dec-98	Wisconsin Public Service Corp	Weston 3	WI	56,000	8479	0.37	5.12	102.29	17.35
C		Entergy Arkansas, Inc	White Bluff	AR	2,210,519	8497	0.36	5.05	167.35	28.44
					21,292,033	8487	0.36	5.01	91.75	15.58

FERC captured 81.9% of 1998 total production.

Coal Creek

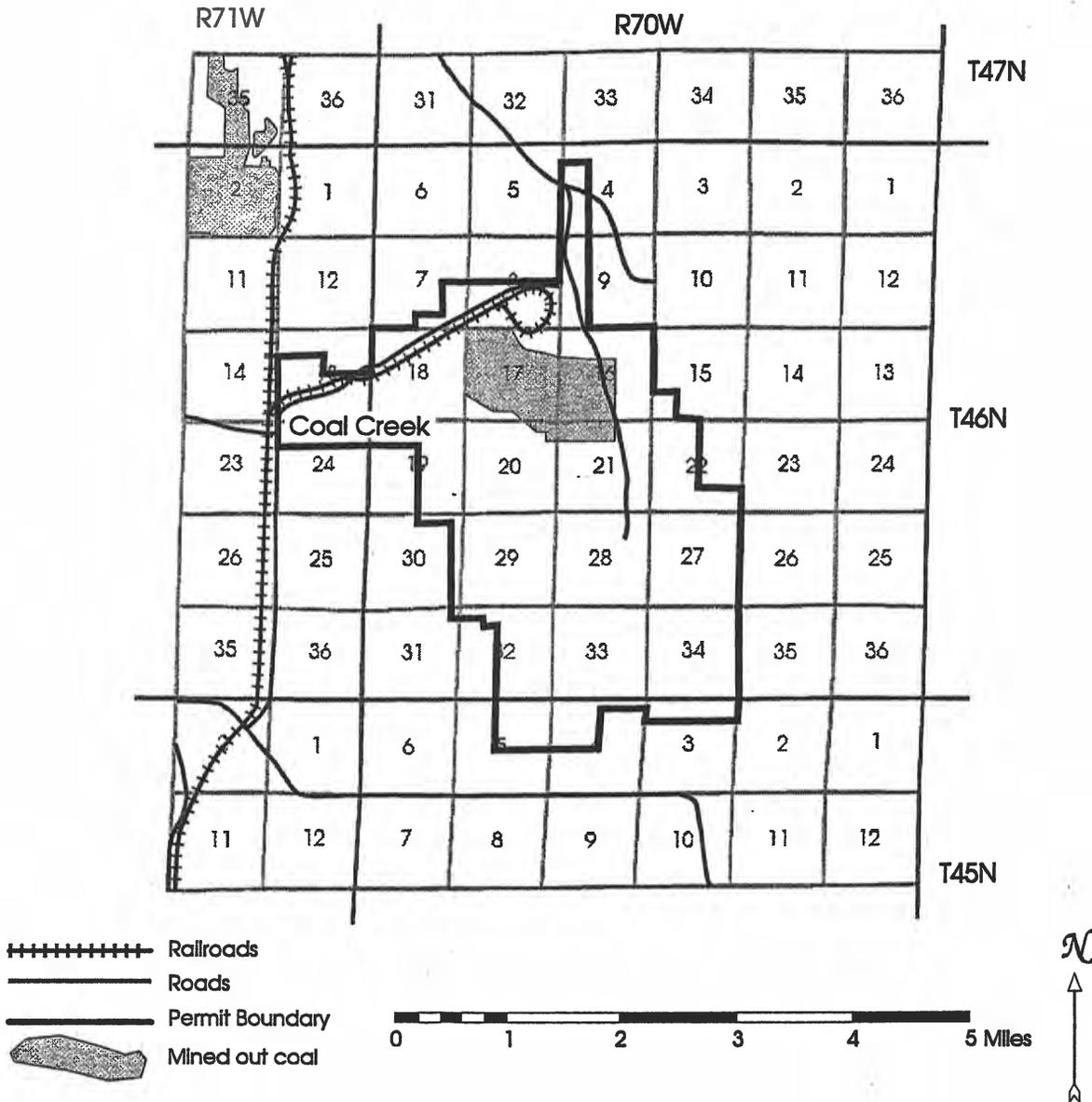
Operating Company: Fuller Construction Company
 Contractor Miner for: Arch Western Resources, LLC.
 Owned By: Arch Coal, Inc.

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> or <http://my.uprr.com/pub/energy/coal/sprb/coalcree.shtml>

Number of Employees in 1998: 114
 (110-Fuller Construction, 4-Thunder Basin Coal)
 Mine Type: Surface
 Acres permitted: 9,560
 1998 Coal Production: 7,068,322 short tons
 1999 Air Quality Capacity Limit: 18.0 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.

1999 Directory of Coal Mines in Wyoming

Coal Creek (cont.)

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 1998 in short tons)

1998	7,068,322	1989	139,116
1997	2,921,242	1988	684,322
1996	5,804,419	1987	2,362,059
1995	4,199,587	1986	1,111,305
1994	2,532,859	1985	2,608,592
1993	110,488	1984	1,800,000
1992	152,760	1983	1,877,056
1991	151,165	1982	1,106,812
1990	140,250		

Total production through 1998: 34,770,354.

Recoverable Coal Reserves (million short tons)

Original Lease: 301.9

Mined tonnage: 34.8

Remaining Reserves: 367.1

Estimated remaining life of mine: 28 years.

Remaining life of mine at current permit capacity: 20 years.

1998 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-98	MidAmerican Energy	Council Bluffs	IA	178,000	8316	0.33	5.39	54.80	9.11
C		Wisconsin Power and Light	Edgewater	WI	764,370	8327	0.33	5.33	127.52	21.24
S		Wisconsin Power and Light	Edgewater	WI	575,378	8323	0.33	5.41	108.47	18.06
C	01-Dec-99	Lower Colorado River Authority	Fayette	TX	533,000	8324	0.34	5.41	92.98	15.48
S	31-Oct-99	Lower Colorado River Authority	Fayette	TX	229,000	8330	0.35	5.64	93.00	15.49
C	01-Dec-99	MidAmerican Energy	George Neal 1-4	IA	122,000	8335	0.36	5.50	66.20	11.04
S		MidAmerican Energy	George Neal 1-4	IA	53,000	8313	0.35	5.50	75.80	12.60
S	01-Dec-98	Grand River Dam Authority	GRDA 1 & 2	OK	200,208	8326	0.34	5.39	85.98	14.32
C	01-Dec-98	Kansas City Power and Light	La Cygne	KS	168,000	8334	0.34	5.33	65.01	10.84
S		Interstate Power	Lansing	IA	116,501	8341	0.34	5.36	106.22	17.72
C	01-Dec-99	MidAmerican Energy	Louisa	IA	359,000	8326	0.32	5.34	75.07	12.50
C	01-Dec-98	Kansas City Power and Light	Montrose	MO	166,000	8330	0.33	5.38	86.20	14.36
S		Omaha Public Power District	Nebraska City	NE	437,200	8331	0.33	5.22	64.62	10.77
S		Omaha Public Power District	North Omaha	NE	1,156,400	8320	0.33	5.43	69.92	11.63
C		Wisconsin Electric Power	Pleasant Prairie	WI	815,600	8329	0.34	5.39	74.92	12.48
S		Sikeston Utilities	Sikeston	MO	100,000	8539	0.35	5.42	101.60	17.35
C		Oklahoma Gas and Electric	Sooner	OK	391,665	8325	0.34	5.35	79.99	13.32
S		IES Utilities, Inc	Sutherland	IA	491,275	8330	0.33	5.40	71.94	11.99
C		Southwestern Public Service	Tolk	TX	375,350	8554	0.36	5.38	148.20	25.35
S	01-Dec-98	Southwestern Public Service	Tolk	TX	10,620	8554	0.36	5.38	104.60	17.89
					7,242,567	8341	0.34	5.39	88.11	14.71

FERC captured 102.5% of 1998 total production.

Cordero Rojo Complex

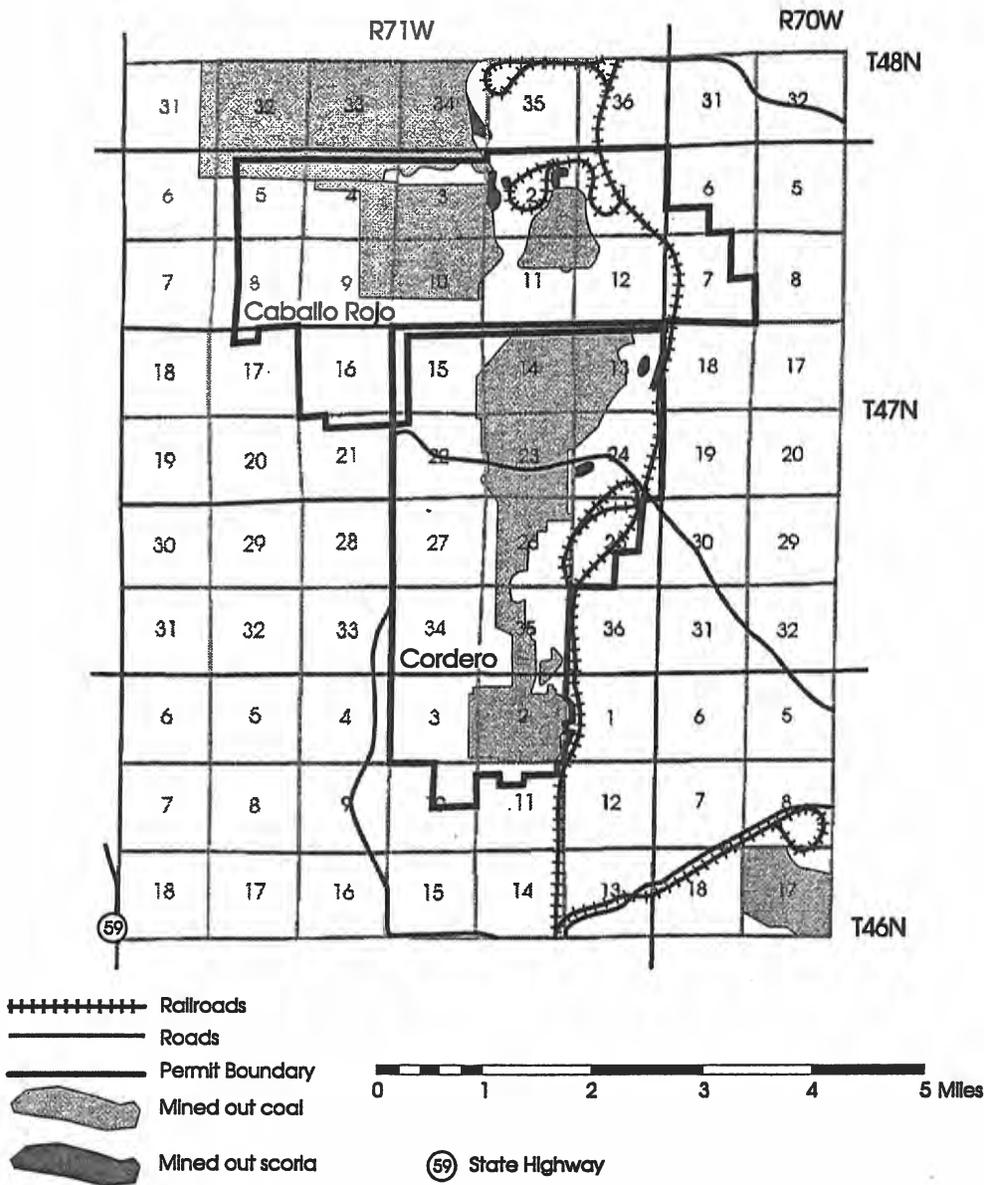
Operating Company: Cordero Mining Company
 Subsidiary of: Kennecott Energy Company
 Owned By: Rio Tinto, PLC.
 Mailing Address:

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> or <http://my.uprr.com/pub/energy/coal/sprb/cabrojo.shtml>
 or <http://my.uprr.com/pub/energy/coal/sprb/cordero.shtml>

Number of Employees in 1998: 361
 Mine Type: Surface
 Acres permitted: 15,823
 1998 Coal Production: 36,979,025 short tons
 1999 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.

1999 Directory of Coal Mines in Wyoming

Cordero Rojo Complex (cont.)

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 through end of 1998 in short tons for Cordero Rojo)

1998	36,979,025	1997	28,062,574
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Total production through 1998 for Cordero Rojo: 65,041,599.

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 1998 for Cordero Rojo Complex: 390,627,357.

Recoverable Coal Reserves (million short tons)

Original Leases:	1,003.7	Caballo Rojo and Cordero mines combined
Mined tonnage:	<u>390.6</u>	
Remaining Reserves:	613.1	

Estimated remaining life of mine: 17 years.

Remaining life of mine at current permit capacity: 10- years.

1998 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-99	Public Service Co of Colorado	Araphoe	CO	82,100	8366	0.34	5.98	84.73	14.18
S		Portland General Electric	Boardman	OR	411,000	8416	0.32	5.53	108.37	18.24
S		IES Utilities, Inc	Burlington	IA	24,271	8430	0.32	4.94	81.08	13.67
S		Arizona Public Service	Cholla	AZ	46,000	8352	0.33	5.90	115.80	19.34

1999 Directory of Coal Mines in Wyoming

Cordero Rojo Complex (cont.)

CT	Expiration	Company Name	Plant Name	State	Quantity	Btu	% Sulfur	% Ash	¢/mmBtu	\$/ton
S		Minnesota Power	Clay Boswell	MN	40,890	8578	0.30	4.99	118.50	20.33
S		Central Power and Light (CSW)	Colet Creek	TX	229,534	8480	0.31	5.19	132.14	22.41
S		Wisconsin Power and Light	Columbia	WI	1,560,367	8387	0.33	5.78	91.00	15.27
C	01-Dec-99	MidAmerican Energy	Council Bluffs	IA	149,000	8396	0.32	5.78	63.20	10.60
S		MidAmerican Energy	Council Bluffs	IA	64,000	8448	0.30	5.23	55.41	9.34
S		PacifiCorp	Dave Johnston	WY	27,000	8502	0.29	5.42	50.22	8.54
C		City Public Service-San Antonio	Deely & Spruce	TX	5,395,000	8371	0.34	5.95	97.11	16.26
C	31-Dec-99	Lower Colorado River Authority	Fayette	TX	1,760,000	8428	0.32	5.53	94.19	15.88
S	31-Jul-99	Lower Colorado River Authority	Fayette	TX	164,000	8413	0.32	5.77	93.54	15.74
C	01-Dec-99	MidAmerican Energy	George Neal 1-4	IA	40,000	8479	0.31	5.40	66.20	11.23
S		MidAmerican Energy	George Neal 1-4	IA	135,000	8442	0.32	5.40	65.90	11.13
C		Texas Municipal Power Agency	Gibbons Creek	TX	971,074	8476	0.30	5.15	118.67	20.12
S		Texas Municipal Power Agency	Gibbons Creek	TX	389,468	8384	0.33	5.76	120.69	20.24
S	01-Dec-98	Grand River Dam Authority	GRDA 1 & 2	OK	306,163	8370	0.32	5.76	84.85	14.20
C	01-Dec-98	Kansas City Power and Light	Hawthorne	MO	108,000	8487	0.29	4.68	61.15	10.38
C		Sunflower Electric Power Corp	Holcomb Unit #1	KS	1,601,447	8476	0.30	5.03	110.75	18.77
C		Arkansas Power & Light Co	Independence	AR	941,863	8382	0.34	5.88	132.33	22.20
C		Electric Energy	Joppa	IL	480,700	8481	0.29	4.89	82.11	13.93
C	01-Dec-98	Kansas City Power and Light	La Cygne	KS	1,595,000	8465	0.31	5.19	62.35	10.56
C	01-Dec-99	MidAmerican Energy	Louisa	IA	2,232,000	8380	0.33	5.87	92.63	15.52
C	01-Dec-98	Northern Indiana Public Service	Michigan City	IN	22,900	8515	0.29	5.18	103.71	17.66
C	01-Dec-98	Northern Indiana Public Service	Mitchell	IN	24,900	8478	0.29	4.60	112.90	19.14
C	01-Dec-98	Kansas City Power and Light	Montrose	MO	55,000	8534	0.30	4.90	85.34	14.57
C	01-Dec-97	Oklahoma Gas and Electric	Muskogee	OK	380,939	8484	0.30	5.09	78.61	13.34
C	31-Dec-98	Kansas City Bd Public Utilities	Nearman Creek	KS	306,200	8362	0.34	5.98	78.73	13.17
S		Omaha Public Power District	Nebraska City	NE	178,100	8411	0.34	5.65	68.94	11.60
S		Omaha Public Power District	North Omaha	NE	213,700	8427	0.31	5.50	71.90	12.12
C		West Texas Utilities (CSW)	Oklaunion	TX	105,925	8370	0.30	5.30	100.10	16.76
S		West Texas Utilities (CSW)	Oklaunion	TX	768,842	8513	0.30	4.96	101.63	17.31
C		IES Utilities, Inc	Ottumwa	IA	1,329,916	8349	0.34	6.09	101.19	16.90
S		IES Utilities, Inc	Ottumwa	IA	1,806,042	8360	0.34	6.01	81.55	13.63
C		Wisconsin Electric Power	Pleasant Prairie	WI	1,756,500	8473	0.30	5.01	75.42	12.78
C		Wisconsin Electric Power	Pleasant Prairie	WI	284,100	8353	0.32	5.98	74.38	12.43
S		Commonwealth Edison	Powerton	IL	242,000	8471	0.30	4.94	137.05	23.22
S		IES Utilities, Inc	Praire Creek 1-4	IA	857,022	8385	0.34	5.92	85.07	14.26
S	01-Dec-98	Colorado Springs Utilities	R. D. Nixon	CO	27,000	8335	0.37	6.21	76.20	12.70
S	01-May-98	Platte River Authority	Rawhide	CO	55,400	8445	0.33	4.95	53.56	9.05
S		Indiana Michigan Power (AEP)	Rockport	IN	844,200	8373	0.34	5.93	98.65	16.52
C	01-Dec-98	Northern Indiana Public Service	Rollin Schahfer	IN	514,900	8468	0.30	5.14	112.19	19.00
S		Northern Indiana Public Service	Rollin Schahfer	IN	24,900	8481	0.28	4.85	109.50	18.57
S		Union Electric	Rush Island	MO	3,507,000	8455	0.32	5.29	89.63	15.16
C		Oklahoma Gas and Electric	Sooner	OK	236,723	8506	0.29	4.88	75.91	12.91
C		Houston Lighting and Power	W. A. Parish	TX	5,340,200	8536	0.38	4.97	190.77	32.57
S		Wisconsin Public Service Corp	Weston 3	WI	12,000	8356	0.29	5.90	93.30	15.59
C		Entergy Arkansas, Inc	White Bluff	AR	984,449	8362	0.33	5.95	122.96	20.56
Cordero Rojo complex					38,632,734	8431	0.33	5.50	107.50	18.15

FERC captured 104.5% of 1998 total production.

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

Number of Employees in 1998: 159

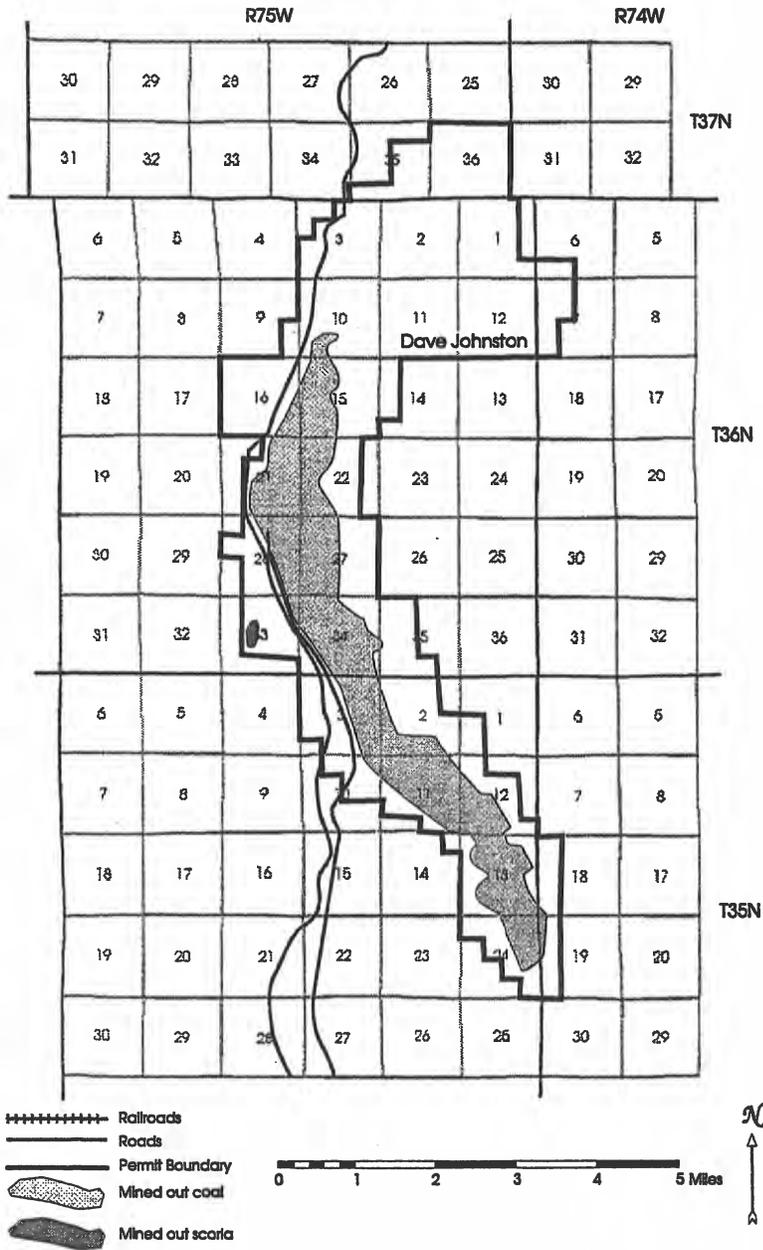
Mine Type: Surface

Acres permitted: 13,588

1998 Coal Production: 3,964,694 short tons

1999 Air Quality Capacity Limit: 4.2 million short tons

MINE LOCATION



Coal Field: Powder River

County: Converse

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

1999 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 1998 in short tons)

1998	3,964,694	1984	3,338,677	1970	1,842,099
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		

Total production through 1998: 100,474,450.

Recoverable Coal Reserves (million short tons)

Original Lease: 153.6

Mined tonnage: 100.5

Remaining Reserves: 53.1

Estimated remaining life of mine: 2 years.

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

1998 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	3,966,000	7849	0.47	8.82	57.31	8.99

FERC captured 100.0% of 1998 total production.

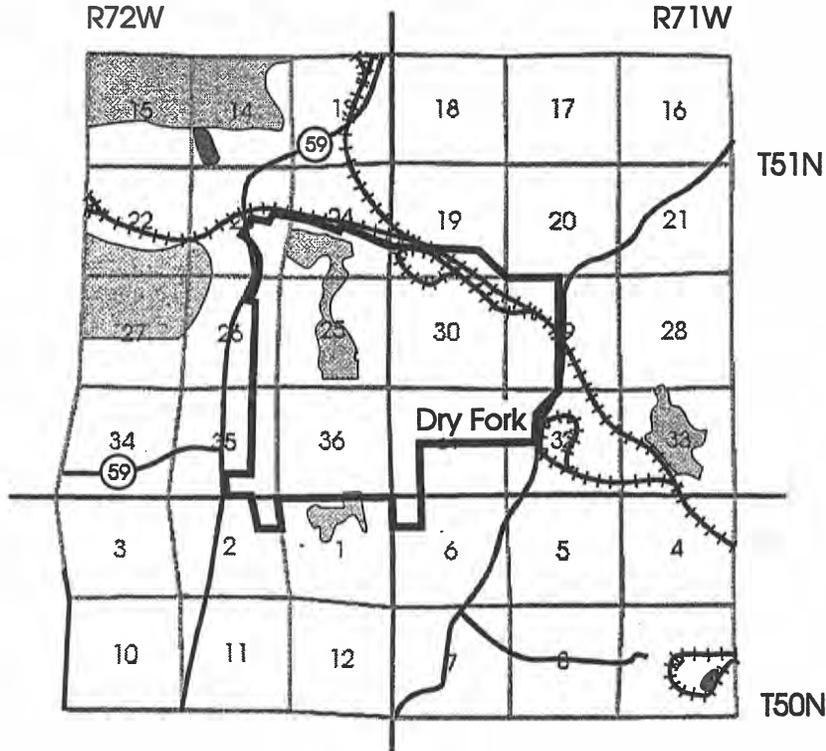
Dry Fork

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>

Number of Employees in 1998: 9
 Mine Type: Surface
 Acres permitted: 3,798
 1998 Coal Production: 1,030,718 short tons
 1999 Air Quality Capacity Limit: 15.0 million short tons

MINE LOCATION



- +++++ Railroads
- Roads
- Permit Boundary
- ▨ Mined out coal
- ▩ Mined out scoria



Ⓢ State Highway



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

1999 Directory of Coal Mines in Wyoming

Dry Fork (cont.)

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 1998 in short tons)

1998	1,030,718
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 1998: 22,663,864.

Recoverable Coal Reserves (million short tons)

Original Lease:	247.5	
Additions:	117.0	Acquired portion of Clovis Point reserves (1997)
Mined tonnage:	<u>22.7</u>	
Remaining Reserves:	341.8	

Estimated remaining life of mine: 35 years.

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

1998 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		Basin Electric Power Coop	Leland Olds 1 & 2	ND	60,700	8226	0.38	5.12	77.52	12.75
C		Kansas City Bd Public Utilities	Nearman Creek	KS	848,300	8252	0.38	5.07	77.20	12.74
S		Omaha Public Power District	Nebraska City	NE	49,400	8052	0.38	4.90	70.60	11.37
S		Omaha Public Power District	North Omaha	NE	24,100	8105	0.36	4.60	72.10	11.69
					982,500	8237	0.38	5.06	76.76	12.65

FERC captured 95.3% of 1998 total production.

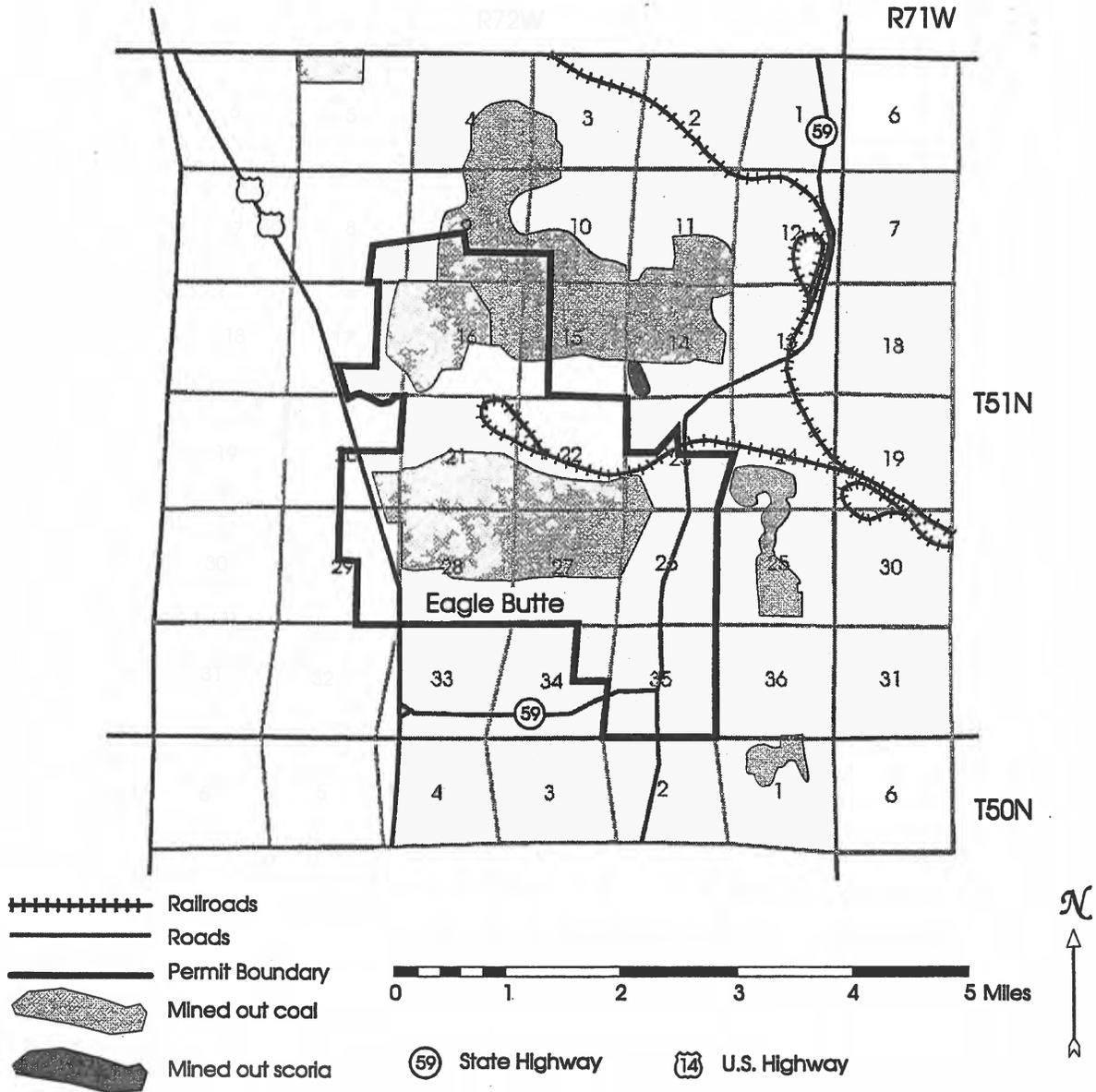
Eagle Butte

Operating Company: Cyprus-AMAX Coal West
 Owned By: RAG International Mining GmbH.
 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 1998: 184
 Mine Type: Surface
 Acres permitted: 5,717
 1998 Coal Production: 18,074,546 short tons
 1999 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.

1999 Directory of Coal Mines in Wyoming

Eagle Butte (cont.)

Geologic Information:

Overburden thickness: 20 to 325 feet (average thickness 200 feet).

Seams Mined: Roland (average thickness 35 feet).

Smith (average thickness 88 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 1978 through end of 1998 in short tons)

1998	18,074,546	1991	13,924,000	1984	13,399,363
1997	17,921,000	1990	15,396,412	1983	11,030,800
1996	15,642,744	1989	13,567,000	1982	9,055,800
1995	16,942,000	1988	12,915,476	1981	8,144,997
1994	17,161,000	1987	12,977,000	1980	8,440,000
1993	16,700,000	1986	12,000,278	1979	3,732,660
1992	13,669,205	1985	11,808,014	1978	250,000

Total production through 1998: 262,752,295.

Recoverable Coal Reserves (million short tons)

Original Lease:	646.9	
Additions:	166.4	Eagle Butte LBA (4/5/95)
Mined tonnage:	<u>262.8</u>	
Remaining Reserves:	550.5	

Estimated remaining life of mine: 27 years.

Remaining life of mine at current permit capacity: 16 years.

1998 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	Comanche	CO	24,200	8319	0.35	4.64	92.82	15.44
C		MidAmerican Energy	Council Bluffs	IA	1,797,000	8359	0.40	4.76	82.25	13.75
C		Southwestern Electric Power(CSW)	Flint Creek	AR	1,007,000	8490	0.33	4.61	162.93	27.66
S		Southwestern Electric Power(CSW)	Flint Creek	AR	344,000	8457	0.35	4.66	134.32	22.72
C		KP&L, A Western Resources Co	Jeffrey	KS	7,205,000	8371	0.39	4.73	112.39	18.82
C	31-Dec-98	Interstate Power	Lansing	IA	512,970	8379	0.39	5.28	198.93	33.34
C	01-Dec-99	MidAmerican Energy	Louisa	IA	26,000	8417	0.42	4.88	103.24	17.38
S		Public Serv Co of Oklahoma (CSW)	Northeast	OK	25,553	8448	0.36	4.60	108.40	18.32
C		Public Service Co of Colorado	Pawnee	CO	2,096,300	8363	0.38	4.64	86.10	14.40
C		Southwestern Electric Power(CSW)	Welsh Station	TX	3,935,000	8370	0.39	4.69	172.18	28.82
S		Southwestern Electric Power(CSW)	Welsh Station	TX	1,159,000	8370	0.38	4.68	143.58	24.03
					18,132,023	8377	0.39	4.72	126.96	21.28

FERC captured 100.3% of 1998 total company production (see also Belle Ayr).

Jacobs Ranch

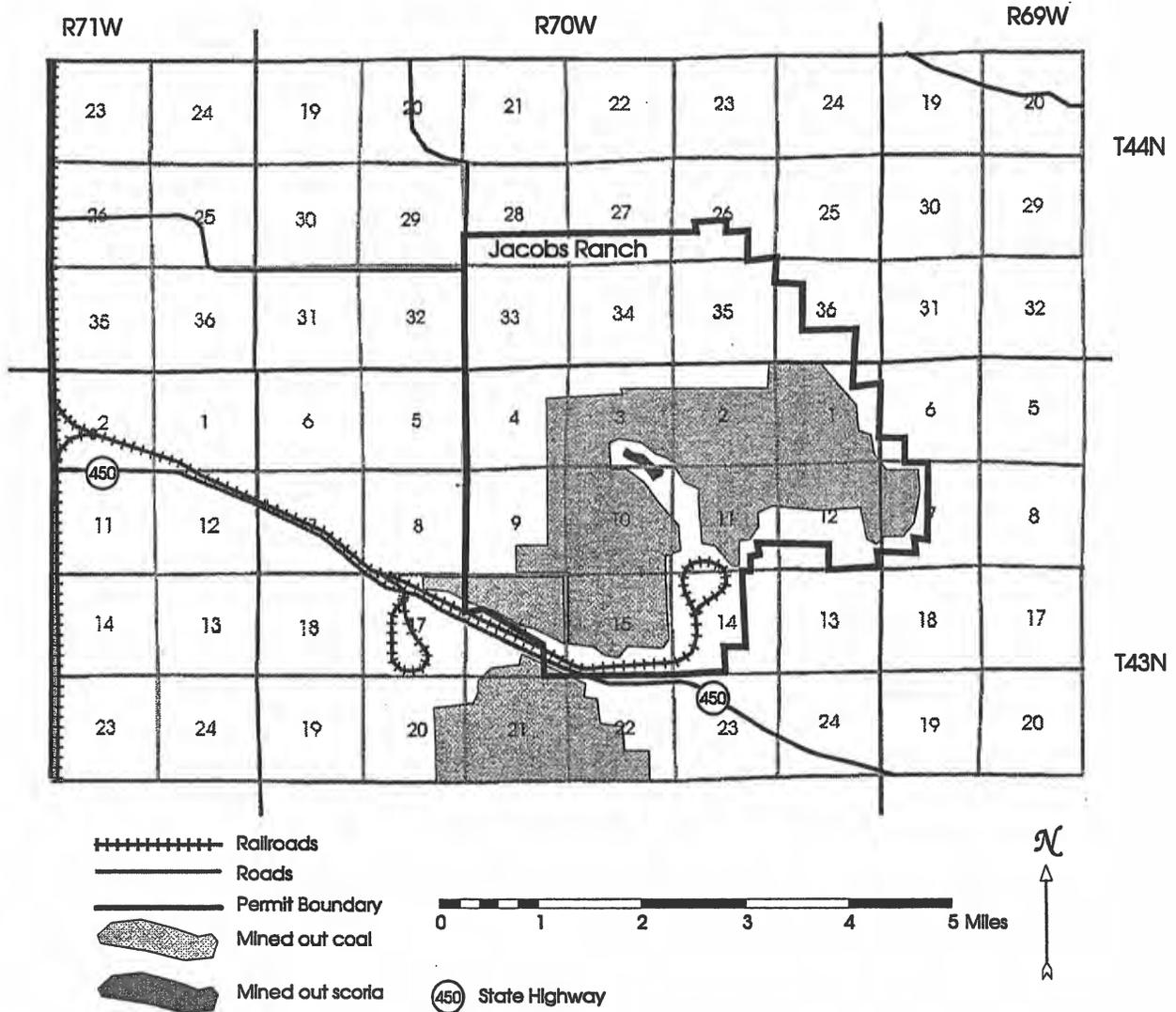
Operating Company: Jacobs Ranch Mining Company
 Subsidiary of: Kennecott Energy Company
 Owned By: Rio Tinto, PLC
 Mailing Address:

Jacobs Ranch Coal Company
 P.O. Box 3013
 Gillette, WY 82717-3013
 Telephone: (307) 682-0002
 Fax: (307) 682-6579

URL: <http://www.kenergy.com/kennecott.html> or <http://my.uprr.com/pub/energy/coal/sprb/jacobs.shtml>

Number of Employees in 1998: 358
 Mine Type: Surface
 Acres permitted: 9,198
 1998 Coal Production: 29,078,333 short tons
 1999 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 and Union Pacific/Southern Pacific Railroads.

1999 Directory of Coal Mines in Wyoming

Jacobs Ranch (cont.)

Geologic Information:

Overburden thickness: 20 to 175 feet (average thickness 84 feet).

Seams Mined: Wyodak A (average thickness 8 feet).

Wyodak B (average thickness 42 feet).

Wyodak C (average thickness 5 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 1978 through end of 1998 in short tons)

1998	29,078,333	1991	17,743,542	1984	14,366,752
1997	27,112,931	1990	16,724,780	1983	11,847,552
1996	24,522,960	1989	14,662,159	1982	10,495,719
1995	24,645,109	1988	14,532,789	1981	8,722,262
1994	20,550,847	1987	11,158,874	1980	8,246,072
1993	18,387,422	1986	12,050,711	1979	4,681,245
1992	16,444,206	1985	12,967,996	1978	1,797,520

Total production through 1998: 320,739,781.

Recoverable Coal Reserves (million short tons)

Original Lease: 488.5

Additions: 123.0 Jacobs Ranch LBA (9/26/91)

35.0 Thunder Cloud LBA reserves from Arch (3/29/99)

Mined tonnage: 320.7

Remaining Reserves: 325.8

Estimated remaining life of mine: 11 years.

Remaining life of mine at current permit capacity: 9 years.

1998 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	¢/mBtu	\$/ton
S		Consumers Energy	B. C. Cobb	MI	85,000	8735	0.44	5.40	101.40	17.71
S		Toledo Edison	Bay Shore	OH	359,700	8672	0.46	5.56	120.96	20.98
C		Cajun Electric Power Coop	Big Cajun No.2	LA	195,261	8740	0.43	5.41	150.16	26.25
S		Portland General Electric	Boardman	OR	501,000	8698	0.40	5.10	109.08	18.98
C		Tennessee Valley Authority	BRT Terminal	KY	761,920	8698	0.36	5.62	94.41	16.42
S		Tennessee Valley Authority	BRT Terminal	KY	105,710	8700	0.52	6.77	94.83	16.50
S		Central Power and Light (CSW)	Coletto Creek	TX	503,690	8740	0.41	5.11	130.83	22.87
S		Tennessee Valley Authority	Cora Terminal	IL	11,650	8700	0.52	6.77	85.00	14.79
S		MidAmerican Energy	Council Bluffs	IA	14,000	8685	0.44	6.00	47.70	8.29
C	01-Dec-99	Lower Colorado River Authority	Fayette	TX	54,000	8721	0.34	5.41	93.98	16.39
S	31-Dec-98	Lower Colorado River Authority	Fayette	TX	192,000	8718	0.35	5.49	97.56	17.01
S		Southwestern Electric Power(CSW)	Flint Creek	AR	165,000	8481	0.30	5.10	102.40	17.37
S		MidAmerican Energy	George Neal 1-4	IA	25,000	8771	0.47	5.40	64.10	11.24
S		Western Farmers Electric Coop	Hugo	OK	11,055	8644	0.41	5.00	100.40	17.36
S		Consumers Energy	J. C. Weadock	MI	176,700	8720	0.46	5.55	96.99	16.92
S		Consumers Energy	J. H. Campbell	MI	761,500	8705	0.45	5.37	97.27	16.93
S	01-Feb-98	Alabama Power Company	James H. Miller Jr	AL	13,555	8778	0.44	5.07	120.40	21.14
S		Kansas City Power and Light	La Cygne	KS	220,000	8695	0.39	5.07	63.79	11.09
C		Union Electric	Labadie	MO	821,000	8650	0.52	5.70	91.02	15.75
C		Northern Indiana Public Service	Michigan City	IN	48,800	8704	0.45	5.55	99.12	17.25
S		Northern Indiana Public Service	Michigan City	IN	12,200	8702	0.41	4.90	102.70	17.87
S		Northern Indiana Public Service	Mitchell	IN	161,100	8730	0.34	5.19	119.86	20.93
C		Texas Utilities Electric Co	Monticello	TX	1,195,000	8653	0.38	5.02	110.12	19.06
C	01-Dec-98	Kansas City Power and Light	Montrose	MO	165,000	8727	0.38	4.97	87.88	15.34
S		West Texas Utilities (CSW)	Oklauinion	TX	226	8703	0.44	0.56	74.70	13.00
C	01-Dec-97	Grand Island Utilities	Platte	NE	371,000	8726	0.45	5.50	67.72	11.82
C	01-Dec-98	Commonwealth Edison	Powerton	IL	203,000	8687	0.54	5.74	235.14	40.86

1999 Directory of Coal Mines in Wyoming

Jacobs Ranch (cont.)

CT	Expiration	Company Name	Plant Name	State	Quantity	Btu	% Sulfur	% Ash	¢/mmBtu	\$/ton
S		Commonwealth Edison	Powerton	IL	14,000	8679	0.45	5.40	95.70	16.61
C		Wisconsin Electric Power	Presque Isle	MI	67,600	9073	0.50	6.26	110.59	20.07
S	01-Dec-98	Colorado Springs Utilities	R. D. Nixon	CO	82,100	8704	0.40	5.17	79.00	13.75
C		Central Louisiana Electric	Rodemacher	LA	1,617,000	8577	0.51	7.25	139.33	23.88
C		Northern Indiana Public Service	Rollin Schahfer	IN	722,300	8684	0.41	5.23	109.77	19.07
S		Northern Indiana Public Service	Rollin Schahfer	IN	355,600	8721	0.34	5.45	121.43	21.18
C		Entergy Gulf States, Inc	Roy S. Nelson	LA	2,141,000	8691	0.44	5.37	137.82	23.96
S		Georgia Power (Southern Co)	Scherer	GA	4,208,700	8723	0.42	5.28	150.76	26.30
C	01-Dec-98	Northern States Power	Sherburne County	MN	685,800	8721	0.41	5.14	105.21	18.35
S		Tampa Electric	Transfer Facility	FL	1,064,384	8724	0.40	5.15	134.42	23.45
C		Houston Lighting and Power	W. A. Parish	TX	2,302,800	8680	0.43	5.28	188.21	32.67
S		Houston Lighting and Power	W. A. Parish	TX	1,867,700	8701	0.42	5.21	110.78	19.28
S		Mississippi Power (Southern Co)	Watson	MS	463,470	8718	0.42	5.23	132.29	23.07
C	01-Dec-98	Commonwealth Edison	Waukegan	IL	1,576,000	8695	0.48	5.48	222.09	38.63
S		Commonwealth Edison	Waukegan	IL	421,000	8712	0.53	5.70	108.41	18.90
S		Southwestern Electric Power(CSW)	Welsh Station	TX	856,000	8685	0.45	5.36	121.44	21.10
C		Arkansas Power & Light Co	White Bluff	AR	1,500,601	8708	0.47	5.49	180.27	31.40
C	01-Dec-98	Commonwealth Edison	Will County	IL	1,105,000	8691	0.47	5.42	216.84	37.70
S		Commonwealth Edison	Will County	IL	82,000	8679	0.45	5.40	85.30	14.81
					28,267,122	8693	0.44	5.45	140.84	24.49

FERC captured 97.2% of 1998 total production.

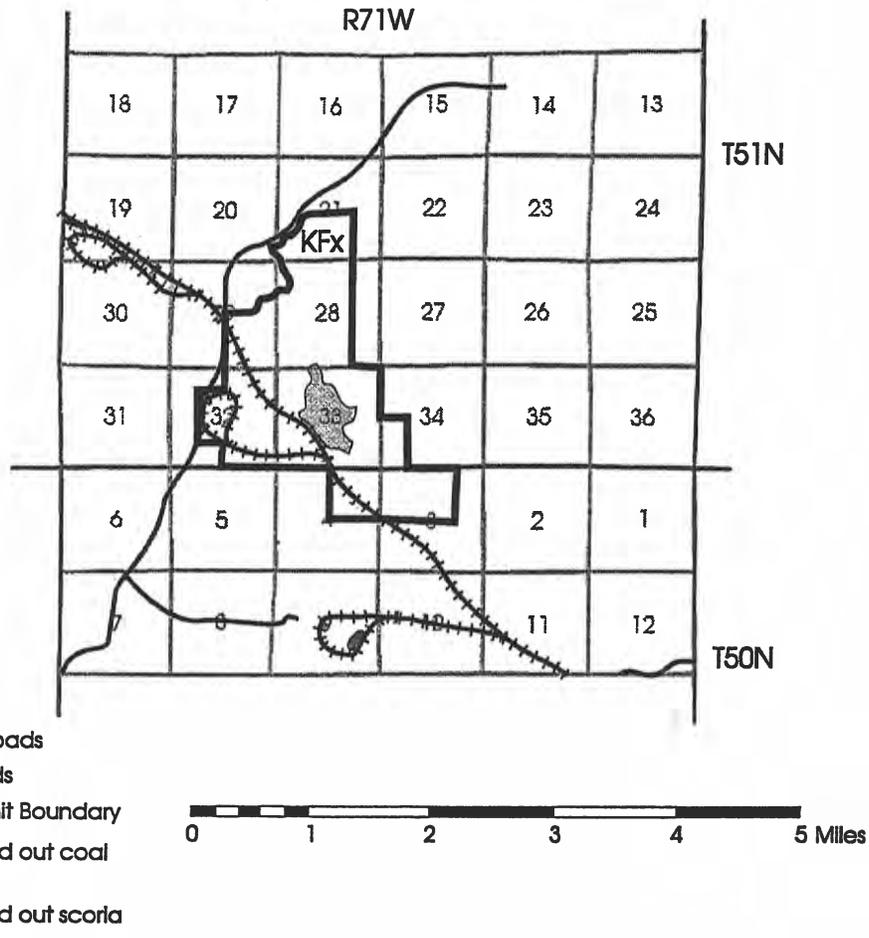
KFx

Operating Company: KFx Fuel Partners L.D.
 Owned By: Kennecott Energy/KFx Fuels, Inc.
 Mailing Address:

KFx Fuel Partners L.D.
 P.O. Box 2049
 Gillette, WY 82717-2049
 Telephone: (307) 687-0903
 Fax: (307) 687-2009
 URL: <http://www.kfx.com/home.htm>

Number of Employees in 1998: 1
 Mine Type: Surface
 Acres permitted: 2,327
 1998 Coal Production: 48,945 short tons
 1999 Air Quality Capacity Limit: 1.1 million short tons

MINE LOCATION



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

1999 Directory of Coal Mines in Wyoming

KFx (cont.)

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

Production History: (Start up year 1996 through end of 1998 in short tons)

1998	48,945
1997	9,788

Total production through 1998: 58,733. Note: before 1997 mine lease held by Fort Union.

Production History: (Start up year 1979 through end of 1996 in short tons for the Fort Union mine)

1996	1,004,887	1990	38,528	1984	298,119
1995	450	1989	42,092	1983	302,032
1994	84,122	1988	508,263	1982	206,650
1993	58,131	1987	394,004	1981	34,887
1992	24,930	1986	219,313	1980	22,046
1991	28,913	1985	532,716	1979	7,737

Total production through 1996: 3,807,820.

Recoverable Coal Reserves (million short tons)

Original Lease:	205.0	
Mined tonnage:	<u>4.5</u>	Note: includes tonnage mined by Fort Union.
Remaining Reserves:	200.5	Note: includes reserves currently mined by Fort Union.

Estimated remaining life of mine: 20 years.
 Remaining life of mine at current permit capacity: 21 years.

1998 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		Indiana-Kentucky Electric Corp	Clifty Creek	IN	11,000	11,424	0.41	7.20	84.60	19.33
					11,000	11,424	0.41	7.20	84.60	19.33

FERC captured 22.5% of 1998 total production.

North Antelope/Rochelle Complex

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

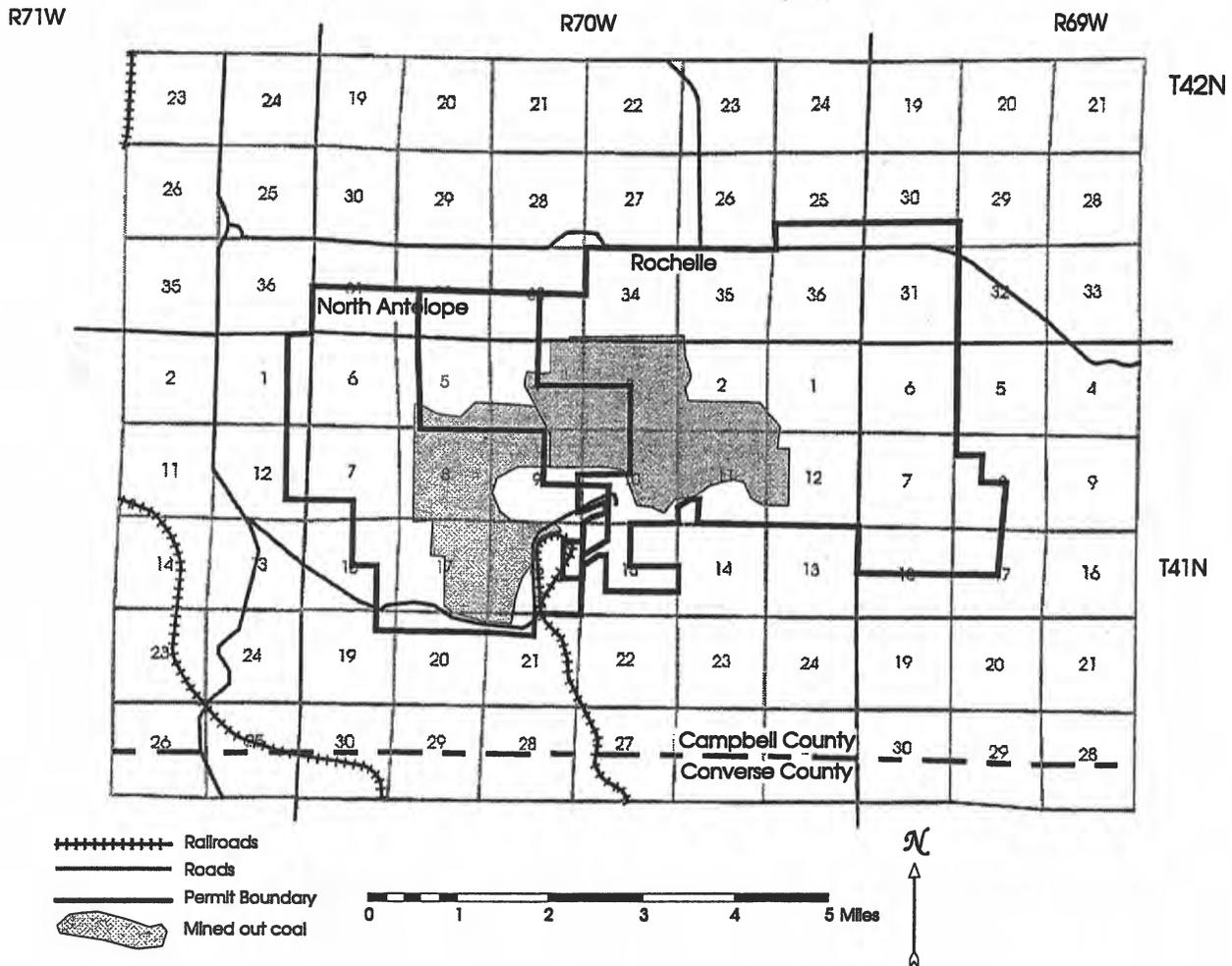
Powder River Coal Company
 Caller Box 3035
 Gillette, WY 82717-3035
 Telephone: (307) 464-0054
 Fax: (307) 464-4665

Number of Employees in 1998: 605
 Mine Type: Surface
 Acres permitted: 12,680

1998 Coal Production: 64,639,932 short tons
 1999 Air Quality Capacity Limit:
 35.0 million short tons (N. Antelope)
 30.0 million short tons (Rochelle)

URL: <http://www.peabodygroup.com/menupage.html> or <http://www.peabodygroup.com/PRCC/Default.htm> or http://my.uprr.com/pub/energy/coal/sprb/n_antelo.shtml

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/Rochelle Complex (cont.)

Geologic Information:

Overburden thickness: 40 to 280 feet (average thickness 130-150 feet).
 Seams Mined: Wyodak-Anderson (average thickness 70-73 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 April, 1998 through end of 1998 in short tons for North Antelope/Rochelle)

1998 49,139,422

Total production through 1998 for North Antelope/Rochelle: 49,139,422.

Production History: (Start up year 1985 through end of March, 1998 in short tons for North Antelope)

1998	8,866,044	1990	8,242,231
1997	34,978,455	1989	6,909,325
1996	28,623,177	1988	6,088,207
1995	21,248,991	1987	5,337,503
1994	14,147,809	1986	5,689,608
1993	11,761,704	1985	5,720,425
1992	10,149,243	1984	3,000,000
1991	9,648,953	1983	64,248

Total production through 1998 for North Antelope: 180,475,923

Production History: (Start up year 1985 through end of March, 1998 in short tons for Rochelle)

1998	6,634,466	1990	12,030,237
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		

Total production through 1998 for Rochelle: 199,867,841.

Total production through 1998 for North Antelope/Rochelle Complex: 429, 483,186

Recoverable Coal Reserves (million short tons)

Original Lease:	423.8	North Antelope Lease
	552.5	Rochelle Lease
Additions:	403.5	North Antelope & Rochelle LBA (9/28/92)
	532.0	Powder River LBA (7/3/98)
Mined tonnage:	<u>429.5</u>	
Remaining Reserves:	1,482.3	

Estimated remaining life of mine: 23 years.

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

1998 Steam Coal Deliveries, as reported from the Federal Energy Regulatory Commission's (FERC's) Form 423.

1999 Directory of Coal Mines in Wyoming

North Antelope/Rochelle Complex (cont.)

CT	Expiration	Company Name	Plant Name	State	Quantity	Btu	% Sulfur	% Ash	¢/mmBtu	\$/ton
North Antelope										
C	01-Dec-99	Dairyland Power Cooperative	Alma	WI	7,500	8963	0.16	4.20	113.90	20.42
C	01-Dec-99	Dairyland Power Cooperative	Genoa No.3	WI	120,500	8909	0.17	4.33	112.10	19.97
C		Grand River Dam Authority	GRDA 1 & 2	OK	308	8820	0.19	4.18	90.82	16.02
C	01-Dec-98	Hastings Utilities	Hastings	NE	83,600	8878	0.18	4.32	71.90	12.77
C	01-Dec-98	Kansas City Power and Light	Hawthorne	MO	40,000	8878	0.19	4.30	64.40	11.43
C		Northern States Power	High Bridge	MN	203,800	8899	0.17	4.14	104.32	18.57
C		Arkansas Power & Light Co	Independence	AR	1,422,619	8871	0.18	4.48	146.83	26.05
C		Electric Energy	Joppa	IL	298,300	8909	0.18	4.20	82.10	14.63
C		Northern States Power	King	MN	95,300	8888	0.19	4.28	101.01	17.96
C	01-Dec-98	Kansas City Power and Light	La Cygne	KS	28,000	8862	0.16	4.30	65.50	11.61
S		Union Electric	Labadie	MO	479,000	8809	0.24	4.50	88.34	15.56
S		Union Electric	Meramec	MO	192,000	8815	0.24	4.50	103.42	18.23
C		Detroit Edison Co	Monroe	MI	446,000	8888	0.18	4.24	99.16	17.63
C	01-Dec-98	Kansas City Power and Light	Montrose	MO	24,000	8911	0.19	4.20	88.70	15.81
C		Oklahoma Gas and Electric	Muskogee	OK	473,685	8893	0.19	4.26	84.65	15.06
C		Public Serv Co of Oklahoma (CSW)	Northeast	OK	940,144	8894	0.19	4.31	112.53	20.02
C	01-Dec-98	Wisconsin Public Service Corp	Pulliam	WI	498,000	8866	0.18	4.38	96.41	17.10
C		Detroit Edison Co	River Rouge	MI	26,000	8910	0.21	4.50	102.10	18.20
C		Northern States Power	Riverside	MN	532,700	8882	0.18	4.36	98.56	17.51
C		Northern Indiana Public Service	Rollin Schahfer	IN	100	8778	0.24	4.90	108.90	19.12
C		Northern States Power	Sherburne County	MN	147,900	8892	0.19	4.20	106.91	19.02
C		Detroit Edison Co	Trenton Channel	MI	320,000	8894	0.17	4.13	98.95	17.60
C		Houston Lighting and Power	W. A. Parish	TX	110,200	8910	0.19	4.31	122.32	21.80
C	01-Dec-98	Wisconsin Public Service Corp	Weston 3	WI	373,000	8889	0.18	4.26	98.60	17.53
C		Arkansas Power & Light Co	White Bluff	AR	27,569	8842	0.17	4.59	154.00	27.23
					6,890,225	8878	0.19	4.34	108.65	19.29
Rochelle										
C	01-Dec-99	Dairyland Power Cooperative	Alma	WI	372,200	8780	0.19	4.40	93.65	16.44
C	01-Jun-99	Ames, City of	Ames	IA	68,000	8909	0.18	4.27	145.20	25.87
S		Toledo Edison Co	Bay Shore	OH	80,500	8605	0.25	4.49	119.74	20.61
C		Northern States Power	Black Dog	MN	356,000	8793	0.19	4.41	105.74	18.60
S		Central Elec Power Coop-Missouri	Chamois	MO	2,040	8399	0.41	4.46	149.96	25.19
C		Indiana-Kentucky Electric Corp	Clifty Creek	IN	487,000	8907	0.19	4.21	101.36	18.05
C	01-Dec-97	Commonwealth Edison	Crawford	IL	9,000	8639	0.19	4.50	149.00	25.74
C		Nebraska Public Power System	Gerald Gentleman	NE	401,566	8790	0.19	4.43	48.90	8.60
C	01-Dec-99	Union Electric	Labadie	MO	812,000	8750	0.22	4.50	94.36	16.51
S		Union Electric	Labadie	MO	67,000	8700	0.44	5.60	93.30	16.23
S	01-Dec-98	MidAmerican Energy	Louisa	IA	14,000	8688	0.18	4.50	75.20	13.07
C	01-Dec-99	Northern Indiana Public Service	Michigan City	IN	12,000	8778	0.24	4.90	99.30	17.43
C		Detroit Edison Co	Monroe	MI	77,000	8785	0.20	4.40	98.53	17.31
C		Oklahoma Gas and Electric	Muskogee	OK	77,757	8716	0.21	4.64	84.77	14.78
S		Central Illinois Public Service	Newton	IL	81,000	8810	0.22	4.50	105.50	18.59
C	01-Dec-98	Omaha Public Power District	North Omaha	NE	155,000	8656	0.19	4.45	74.33	12.86
C		Public Serv Co of Oklahoma (CSW)	Northeast	OK	414,294	8758	0.19	4.48	117.33	20.55
C	01-Dec-98	Commonwealth Edison	Powerton	IL	1,047,000	8658	0.20	4.50	223.88	38.75
C		Detroit Edison Co	River Rouge	MI	25,000	8836	0.19	4.50	96.98	17.14
C	01-Dec-98	MidAmerican Energy	Riverside	IA	56,000	8777	0.23	3.44	72.46	12.72
S	01-Dec-98	MidAmerican Energy	Riverside	IA	56,000	8714	0.20	3.77	72.35	12.61
C		Northern Indiana Public Service	Rollin Schahfer	IN	73,100	8755	0.26	4.90	110.16	19.29
C	01-Dec-99	Union Electric	Rush Island	MO	198,000	8750	0.22	4.50	94.87	16.60
C		Nebraska Public Power System	Sheldon	NE	384,623	8788	0.19	4.38	60.95	10.71
C		Northern States Power	Sherburne County	MN	51,900	8837	0.21	4.30	112.10	19.81
C	01-Dec-99	Union Electric	Sioux	MO	463,318	8788	0.20	4.43	78.67	13.82
C		Detroit Edison Co	Trenton Channel	MI	62,000	8813	0.20	4.42	102.03	17.99
C		Houston Lighting and Power	W. A. Parish	TX	182,100	8690	0.28	4.57	121.90	21.19
C	01-Dec-97	Commonwealth Edison	Waukegan	IL	125,000	8669	0.20	4.50	126.86	21.99
C	01-Dec-97	Commonwealth Edison	Will County	IL	951,000	8660	0.20	4.50	146.25	25.33
					7,161,398	8742	0.20	4.45	118.91	20.74
North Antelope/Rochelle Complex										
C	01-Dec-99	Dairyland Power Cooperative	Alma	WI	1,028,300	8771	0.19	4.43	98.10	17.21
C	01-Jun-99	Ames, City of	Ames	IA	163,000	8856	0.19	4.27	146.02	25.86
C		Empire Dist Electric	Asbury	MO	910,709	8794	0.19	4.37	100.28	17.64
S		Toledo Edison	Bay Shore	OH	97,200	8636	0.23	4.66	123.25	21.29
C		Northern States Power	Black Dog	MN	609,700	8828	0.19	4.37	94.55	16.69
S		Portland General Electric	Boardman	OR	304,000	8775	0.19	4.41	109.35	19.19
S		Central Elec Power Coop-Missouri	Chamois	MO	2,050	8399	0.41	4.46	117.67	19.77
S		Arizona Public Service	Cholla	AZ	58,000	8863	0.18	4.19	123.90	21.96
S		Minnesota Power	Clay Boswell	MN	41,330	8871	0.15	4.23	121.00	21.47
C		Indiana-Kentucky Electric Corp	Clifty Creek	IN	769,000	8879	0.19	4.29	118.82	21.10
S		Central Power and Light (CSW)	Coletto Creek	TX	313,386	8671	0.20	4.42	130.82	22.69
C	01-Dec-97	Commonwealth Edison	Crawford	IL	16,000	8647	0.20	4.40	121.30	20.98

1999 Directory of Coal Mines in Wyoming

North Antelope/Rochelle Complex (cont.)

CT	Expiration	Company Name	Plant Name	State	Quantity	Btu	% Sulfur	% Ash	¢/mmBtu	\$/ton
S		Southwestern Electric Power(CSW)	Flint Creek	AR	47,000	8549	0.33	4.48	113.50	19.41
C	01-Dec-99	Dairyland Power Cooperative	Genoa No.3	WI	260,200	8915	0.18	4.17	112.13	19.99
S	01-Dec-98	MidAmerican Energy	George Neal 1-4	IA	13,000	8669	0.19	4.40	69.00	11.96
C		Nebraska Public Power District	Gerald Gentleman	NE	822,539	8740	0.20	4.45	47.56	8.31
C	01-Dec-98	Hastings Utilities	Hastings	NE	19,100	8986	0.21	4.03	71.44	12.84
C	01-Dec-98	Kansas City Power and Light	Hawthorne	MO	96,000	8896	0.19	4.26	64.33	11.45
C		Northern States Power	High Bridge	MN	617,100	8868	0.19	4.44	86.85	15.41
C		Entergy Arkansas, Inc	Independence	AR	3,506,240	8890	0.18	4.44	137.29	24.41
C		Electric Energy	Joppa	IL	1,856,400	8896	0.18	4.29	83.90	14.93
C		Northern States Power	King	MN	418,000	8920	0.19	4.25	94.20	16.80
C	01-Dec-99	Union Electric	Labadie	MO	1,831,000	8750	0.22	4.50	94.66	16.56
S		Union Electric	Labadie	MO	923,000	8813	0.27	4.64	91.94	16.20
S		St Joseph Light and Power	Lake Road	MO	100	8800	0.30	5.50	57.70	10.16
C		Union Electric	Meramec	MO	77,000	8750	0.22	4.50	109.10	19.09
S		Union Electric	Meramec	MO	488,000	8828	0.24	4.51	102.69	18.13
C		Detroit Edison	Monroe	MI	1,402,000	8836	0.19	4.37	98.99	17.49
C	01-Dec-98	Kansas City Power and Light	Montrose	MO	59,000	8913	0.17	4.28	88.64	15.80
C		Oklahoma Gas and Electric	Muskogee	OK	63,941	8801	0.19	4.15	86.76	15.27
C	01-Dec-98	Omaha Public Power District	Nebraska City	NE	1,568,700	8712	0.21	4.54	68.85	12.00
C		Associated Electric Coop, Inc	New Madrid	MO	4,717,200	8827	0.19	4.39	95.93	16.94
S		Central Illinois Public Service	Newton	IL	1,618,000	8810	0.22	4.50	107.88	19.01
C		Omaha Public Power District	North Omaha	NE	97,200	8688	0.21	4.55	73.28	12.73
C		Public Serv Co of Oklahoma (CSW)	Northeast	OK	2,850,747	8777	0.20	4.41	109.11	19.15
S		Wisconsin Electric Power	Oak Creek	WI	151,700	8884	0.20	4.40	92.66	16.46
S		Wisconsin Electric Power	Pleasant Prairie	WI	15,100	8890	0.21	4.40	77.80	13.83
C	01-Dec-97	Commonwealth Edison	Powerton	IL	1,538,000	8633	0.21	4.57	166.36	28.73
C	01-Dec-98	Wisconsin Public Service Corp	Pulliam	WI	889,000	8904	0.18	4.34	97.81	17.42
C	01-Dec-98	Colorado Springs Utilities	R. D. Nixon	CO	13,300	8809	0.24	5.02	78.90	13.90
S	01-Dec-98	Colorado Springs Utilities	R. D. Nixon	CO	14,000	8952	0.23	4.76	77.60	13.89
C		Detroit Edison	River Rouge	MI	107,000	8814	0.20	4.52	95.73	16.87
C	01-Dec-98	MidAmerican Energy	Riverside	IA	329,000	8577	0.22	3.90	84.98	14.58
C		Northern States Power	Riverside	MN	907,300	8870	0.19	4.42	86.25	15.30
C		Empire Dist Electric	Riverton	KS	243,306	8807	0.18	4.35	115.79	20.39
C		Indiana Michigan Power (AEP)	Rockport	IN	5,091,900	8842	0.19	4.28	109.53	19.37
S		Northern Indiana Public Service	Rollin Schahfer	IN	60,900	8829	0.19	4.36	109.16	19.27
C	01-Dec-99	Union Electric	Rush Island	MO	76,000	8750	0.22	4.50	95.40	16.70
S		Union Electric	Rush Island	MO	101,000	8780	0.23	4.50	94.78	16.84
C		Nebraska Public Power District	Sheldon	NE	363,745	8728	0.20	4.48	61.17	10.68
C		Northern States Power	Sherburne County	MN	427,200	8867	0.19	4.21	106.75	18.93
C	01-Mar-00	Missouri Public Service	Sibley	MO	552,829	8755	0.19	4.44	73.35	12.84
C		Oklahoma Gas and Electric	Sooner	OK	53,151	8831	0.20	4.50	82.38	14.55
C		Associated Electric Coop, Inc	Thomas Hill	MO	4,658,700	8835	0.19	4.37	73.89	13.06
C		Detroit Edison	Trenton Channel	MI	793,000	8828	0.19	4.37	98.08	17.32
C	01-Dec-97	Commonwealth Edison	Waukegan	IL	41,000	8640	0.21	4.60	176.64	30.50
C	01-Dec-98	Wisconsin Public Service Corp	Weston 3	WI	813,000	8898	0.19	4.35	94.25	16.77
C		Entergy Arkansas, Inc	White Bluff	AR	1,287,883	8864	0.18	4.46	147.10	26.08
C	01-Dec-97	Commonwealth Edison	Will County	IL	1,607,000	8635	0.21	4.59	217.79	37.60
S		Fremont Dept of Public Utilities	Wright	NE	1,017	8796	0.19	4.80	91.70	16.13
					47,800,173	8812	0.20	4.40	105.47	18.57
					61,851,796	8811	0.20	4.40	107.38	18.91

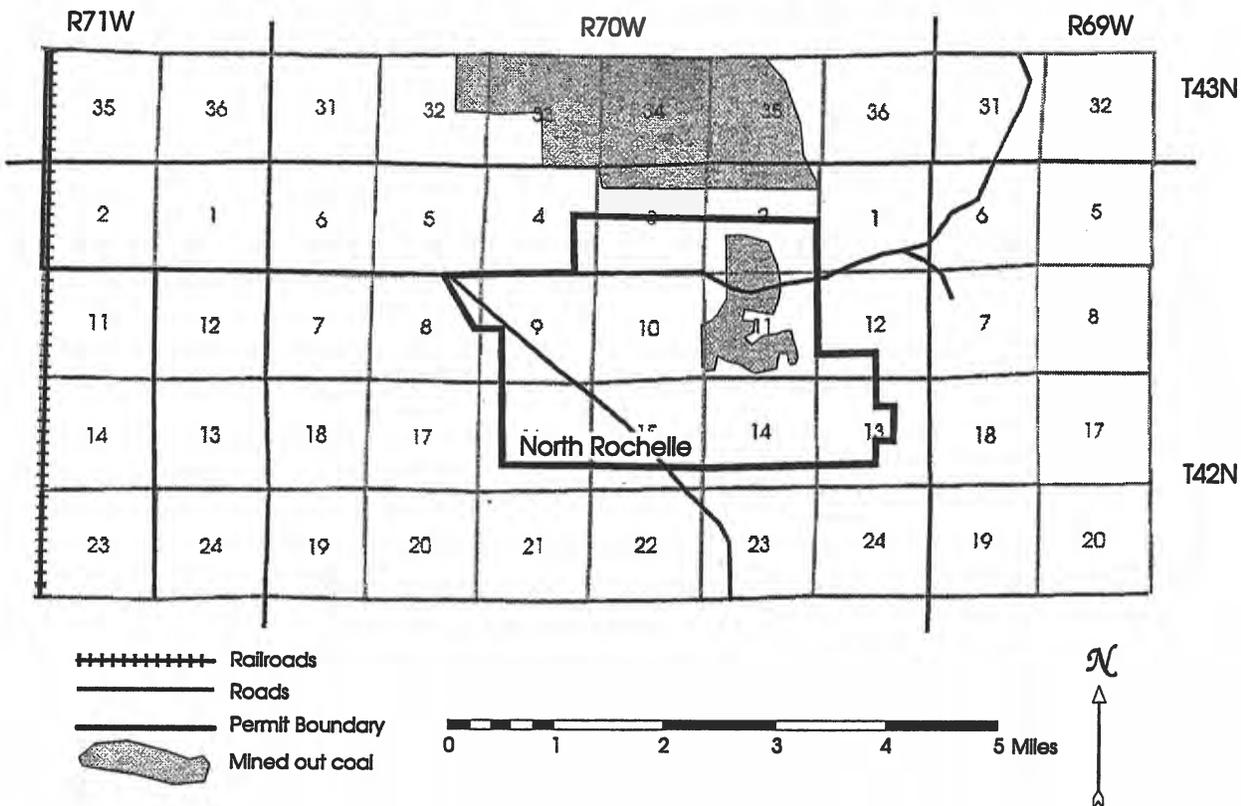
FERC captured 95.7% of 1998 total production.

North Rochelle

Operating Company: Triton Coal Company
 Subsidiary of: Vulcan Coal Holding Company
 Owned By: Vulcan Capital Management:
 Triton Coal Company
 510 Reno Road
 Gillette, WY 82718
 Telephone: (307) 464-0533
 Fax: (307) 464-0536
 URL: http://my.uprr.com/pub/energy/coal/sprb/n_rochel.shtml

Number of Employees in 1998: 70
 Mine Type: Surface
 Acres permitted: 4,587
 1998 Coal Production: 41,083 short tons
 1999 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 and Union Pacific/Southern Pacific Railroads.

North Rochelle (cont.)
 Geologic Information:

1999 Directory of Coal Mines in Wyoming

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 1998 in short tons)

1998	41,083
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 1998: 1,404,732.

Recoverable Coal Reserves (million short tons)

Original Lease:	185.0	
Addition:	157.6	North Rochelle LBA (9/26/97)
Mined tonnage:	<u>1.4</u>	
Remaining Reserves:	341.2	

Estimated remaining life of mine: 25 years.

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

1998 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-Nov-96	PacifiCorp	Dave Johnston	WY	41,000	8601	0.25	4.60	71.60	12.32
C		Western Farmers Electric Coop	Hugo	OK	11,736	8633	0.33	5.30	106.40	18.37
C		Oklahoma Gas and Electric	Muskogee	OK	15,435	8745	0.31	4.40	86.50	15.13
C		Oklahoma Gas and Electric	Sooner	OK	13,912	8798	0.30	4.20	85.80	15.10
					<u>82,083</u>	<u>8666</u>	<u>0.28</u>	<u>4.59</u>	<u>81.78</u>	<u>14.18</u>

FERC captured 199.8% of 1998 total production.

Rawhide

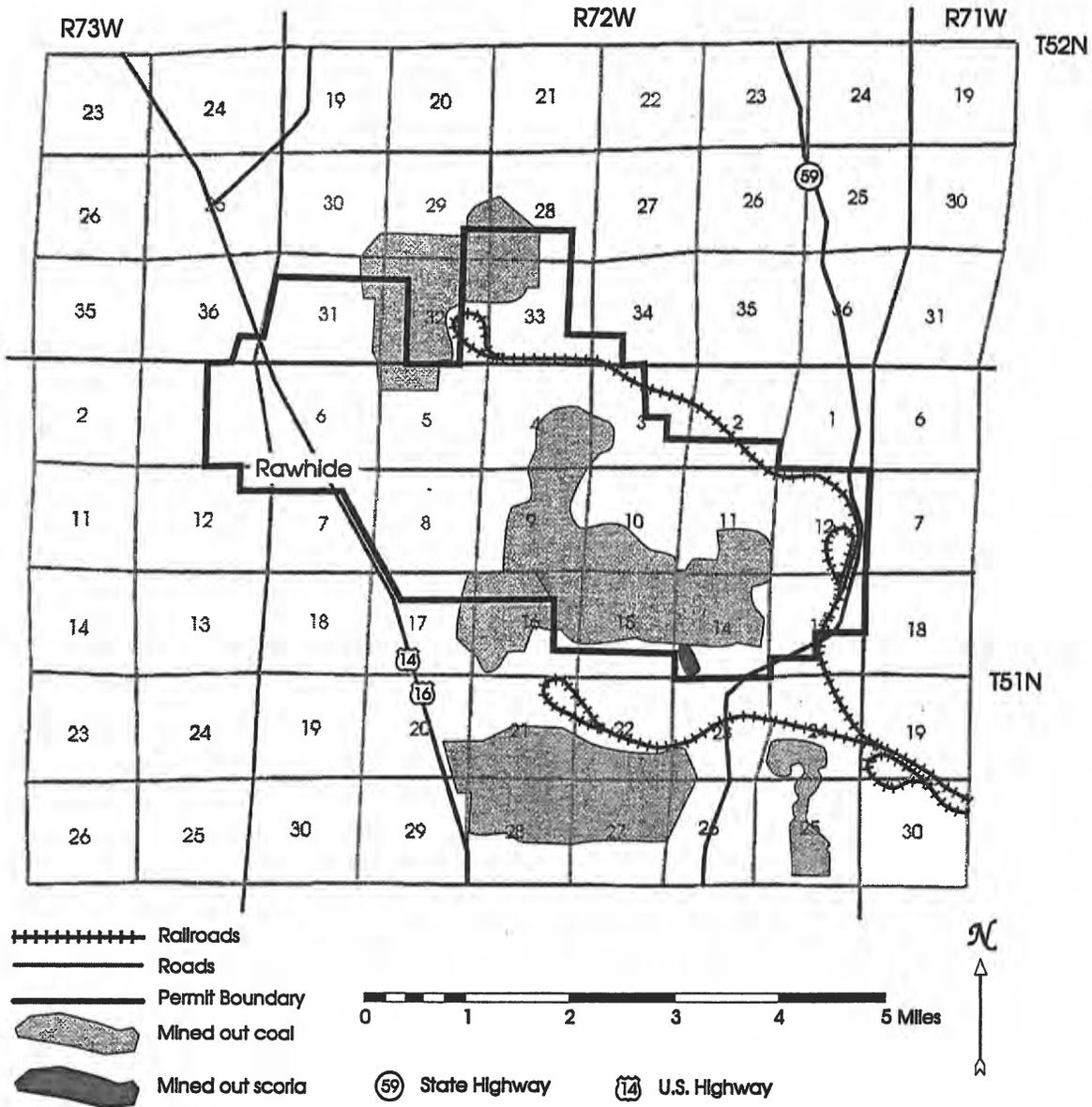
Operating Company: Powder River Coal Company
 Subsidiary of: Peabody Coal Company
 Owned By: Lehman Brothers Merchant Banking Group
 Mailing Address:

Caballo Coal Company
 Caller Box 3042
 Gillette, WY 82717-3042
 Telephone: (307) 682-8081
 Fax: (307) 682-4803

Number of Employees in 1998: 63
 Mine Type: Surface
 Acres permitted: 9,790
 1998 Coal Production: 5,390,400 short tons
 1999 Air Quality Capacity Limit: 24.0 million short tons

URL: <http://www.peabodygroup.com/menupage.html> or <http://www.peabodygroup.com/PRCC/Default.htm>

MINE LOCATION



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

1999 Directory of Coal Mines in Wyoming

Rawhide (cont.)

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 1998 in short tons)

1998	5,390,400	1990	11,442,355	1982	8,147,218
1997	10,705,680	1989	10,628,737	1981	6,154,313
1996	15,068,358	1988	10,810,785	1980	4,472,530
1995	15,355,000	1987	10,672,913	1979	3,593,415
1994	12,858,787	1986	12,403,975	1978	2,625,000
1993	9,864,353	1985	12,236,695	1977	1,096,240
1992	8,629,613	1984	9,351,952		
1991	11,766,870	1983	8,627,719		

Total production through 1998: 201,902,908.

Recoverable Coal Reserves (million short tons)

Original Lease:	763.2
Mined tonnage:	<u>201.9</u>
Remaining Reserves:	561.3

Estimated remaining life of mine: 30 years.

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

1998 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	c/mmBtu	\$/ton
S		IES Utilities, Inc	Burlington	IA	67,000	8290	0.28	4.55	88.19	14.62
NC	01-Dec-97	Montana Power Co	Corette	MT	397,000	8314	0.23	4.45	54.36	9.04
C	01-Dec-98	MidAmerican Energy	Council Bluffs	IA	358,000	8315	0.29	4.63	50.40	8.38
C		Grand River Dam Authority	GRDA 1 & 2	OK	1,163,462	8305	0.29	4.68	87.69	14.57
C		Basin Electric Power Coop	Laramie River 1-3	WY	2,333,500	8309	0.30	4.69	45.84	7.62
C	01-Dec-98	Omaha Public Power District	Nebraska City	NE	146,300	8301	0.30	4.83	70.18	11.65
C	01-Dec-98	Omaha Public Power District	North Omaha	NE	400,400	8319	0.28	4.64	72.19	12.01
S	01-Dec-98	Colorado Springs Utilities	R. D. Nixon	CO	40,400	8347	0.30	5.03	76.30	12.74
C	01-Dec-98	MidAmerican Energy	Riverside	IA	44,000	8336	0.20	4.10	82.10	13.69
C		Indiana Michigan Power (AEP)	Rockport	IN	541,700	8305	0.28	4.59	101.24	16.82
S		Houston Lighting and Power	W. A. Parish	TX	24,700	8429	0.41	5.09	197.70	33.33
					5,516,462	8310	0.29	4.66	65.28	10.85

FERC captured 102.3% of 1998 total production.

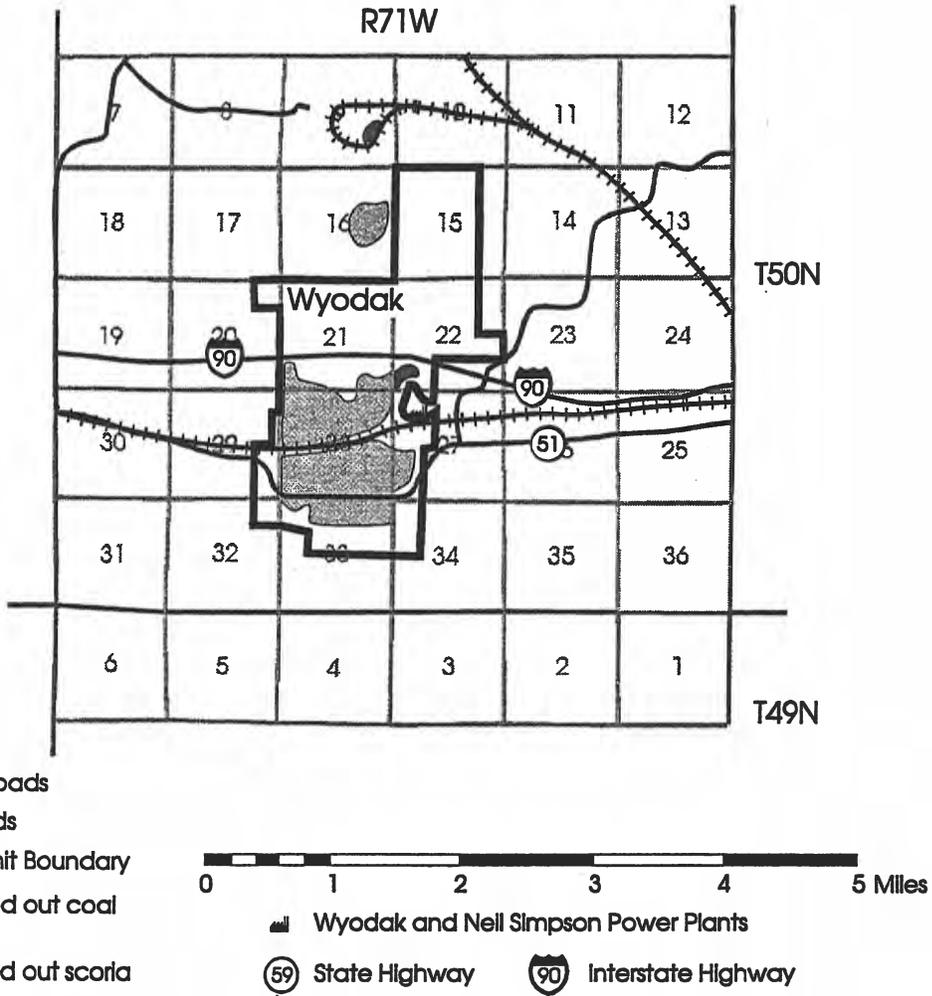
Wyodak

Operating Company: Wyodak Resources Development Corp.
 Owned By: Black Hills Corporation
 Mailing Address:

Wyodak Resources Development Corporation
 131-26 Hwy. 51
 Gillette, WY 82716
 Telephone: (307) 682-3410
 Fax: (307) 682-0208
 URL: <http://www.wyodak.com>

Number of Employees in 1998: 43
 Mine Type: Surface
 Acres permitted: 2,934
 1998 Coal Production: 3,280,157 short tons
 1999 Air Quality Capacity Limit: 5.0 million short tons

MINE LOCATION



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

1999 Directory of Coal Mines in Wyoming

Wyodak (cont.)

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 1998 in short tons)

1998	3,280,157	1973	727,019	1948	263,267
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		

Total production through 1998: 75,370,566.

Recoverable Coal Reserves (million short tons)

Original Lease:	222.1	
Additions:	127.0	Acquired portion of Clovis Point reserves (1997)
Mined tonnage:	<u>75.4</u>	
Remaining Reserves:	273.7	

Estimated remaining life of mine: 40 years.

Remaining life of mine at current permit capacity: 55 years.

1998 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	c/mmBtu	\$/ton
C		Black Hills Power and Light	Neil Simpson No. 2	WY	517,570	8046	0.66	6.98	45.88	7.39
C		PacifiCorp	Wyodak	WY	2,122,000	8052	0.63	6.64	72.75	11.72
					<u>2,639,570</u>	<u>8051</u>	<u>0.64</u>	<u>6.70</u>	<u>67.48</u>	<u>10.87</u>

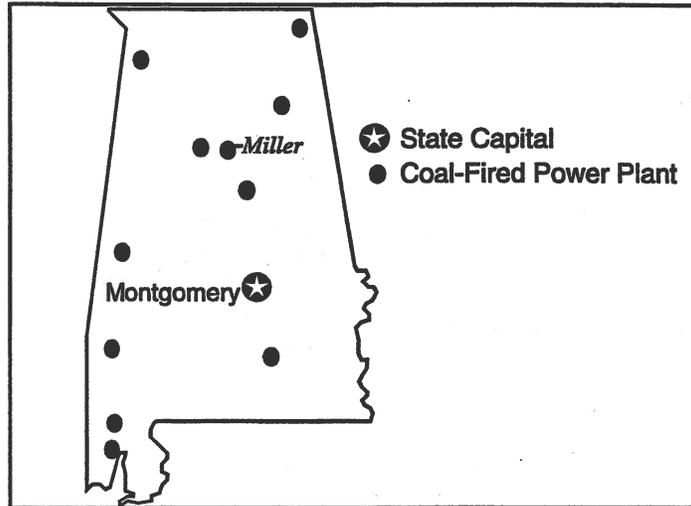
FERC captured 80.5% of 1998 total production.

1998 Directory of Power Plants Burning Wyoming Coal

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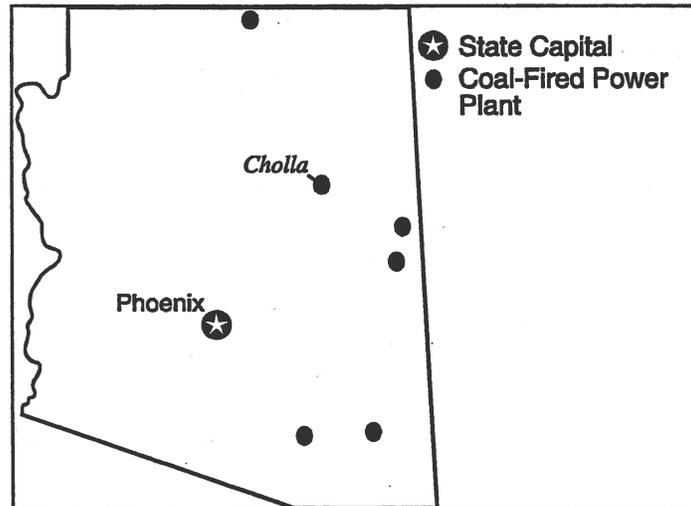
For abbreviations, definitions and explanations see page 11.

Alabama



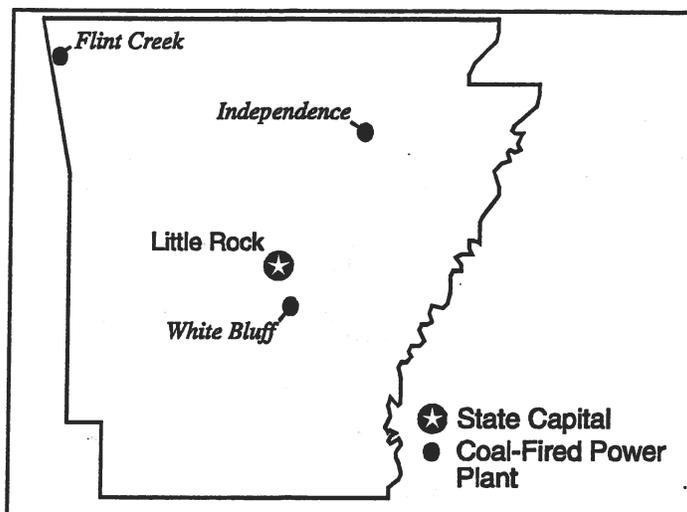
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Alabama Power (Southern Co)	James H. Miller Jr C	Belle Ayr		6,039,822	8,537	0.27	4.62	118.86	20.29
Alabama Power Company	James H. Miller Jr S	Jacobs Ranch		13,555	8,778	0.44	5.07	120.40	21.14
				6,053,377	8,538	0.27	4.62	118.86	20.30

Arizona



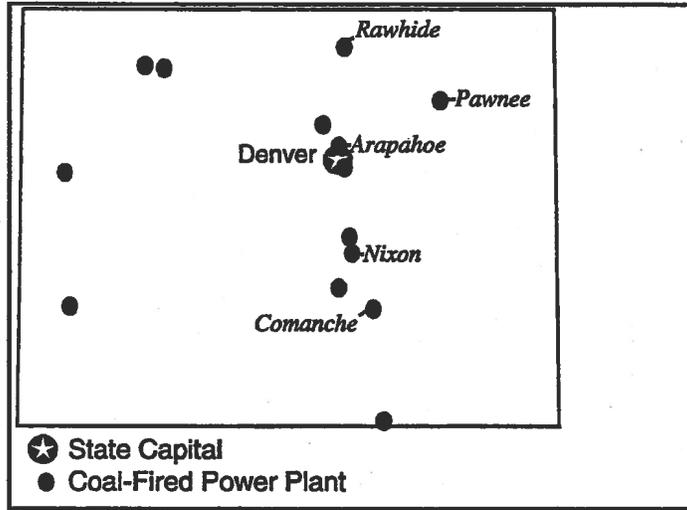
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Arizona Public Service	Cholla	S	Antelope	147,000	8,791	0.26	5.37	117.17	20.61
Arizona Public Service	Cholla	S	Cordero Rojo Cmplx	46,000	8,352	0.33	5.90	115.80	19.34
Arizona Public Service	Cholla	S	N Antelope/Rochelle Cmplx	58,000	8,863	0.18	4.19	123.90	21.96
				251,000	8,727	0.25	5.20	118.48	20.69

Arkansas



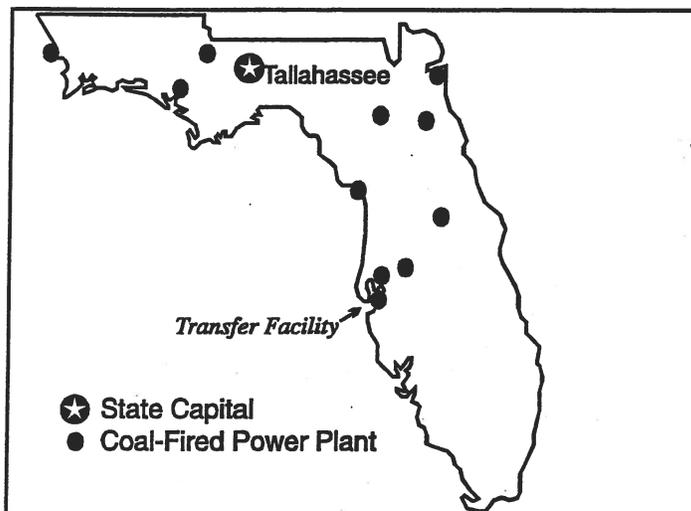
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Arkansas Power & Light Co	Independence	C	Cordero Rojo Cmplx	941,863	8,382	0.34	5.88	132.33	22.20
Arkansas Power & Light Co	Independence	C	North Antelope	1,422,619	8,871	0.18	4.48	146.83	26.05
Entergy Arkansas, Inc	Independence	C	N Antelope/Rochelle Cmplx	3,506,240	8,890	0.18	4.44	137.29	24.41
				5,870,722	8,804	0.21	4.68	138.81	24.45
Entergy Arkansas, Inc	White Bluff	C	Caballo	2,210,519	8,497	0.36	5.05	167.35	28.44
Entergy Arkansas, Inc	White Bluff	C	Cordero Rojo Cmplx	984,449	8,362	0.33	5.95	122.96	20.56
Arkansas Power & Light Co	White Bluff	C	Jacobs Ranch	1,500,601	8,708	0.47	5.49	180.27	31.40
Arkansas Power & Light Co	White Bluff	C	North Antelope	27,569	8,842	0.17	4.59	154.00	27.23
Entergy Arkansas, Inc	White Bluff	C	N Antelope/Rochelle Cmplx	1,287,883	8,864	0.18	4.46	147.10	26.08
				6,011,021	8,608	0.34	5.18	158.91	27.38
Southwestern Electric Power	Flint Creek	S	Antelope	24,000	8,872	0.29	5.16	90.15	16.00
Southwestern Electric Power	Flint Creek	C	Belle Ayr	320,000	8,513	0.31	4.60	167.55	28.52
Southwestern Electric Power	Flint Creek	S	Belle Ayr	47,000	8,545	0.27	4.42	129.18	22.07
Southwestern Electric Power	Flint Creek	S	Buckskin	552,000	8,486	0.43	5.19	93.85	15.93
Southwestern Electric Power	Flint Creek	C	Eagle Butte	1,007,000	8,490	0.33	4.61	162.93	27.66
Southwestern Electric Power	Flint Creek	S	Eagle Butte	344,000	8,457	0.35	4.66	134.32	22.72
Southwestern Electric Power	Flint Creek	S	Jacobs Ranch	165,000	8,481	0.30	5.10	102.40	17.37
Southwestern Electric Power	Flint Creek	S	N Antelope/Rochelle Cmplx	47,000	8,549	0.33	4.48	113.50	19.41
				2,506,000	8,493	0.35	4.77	138.13	23.46

Colorado



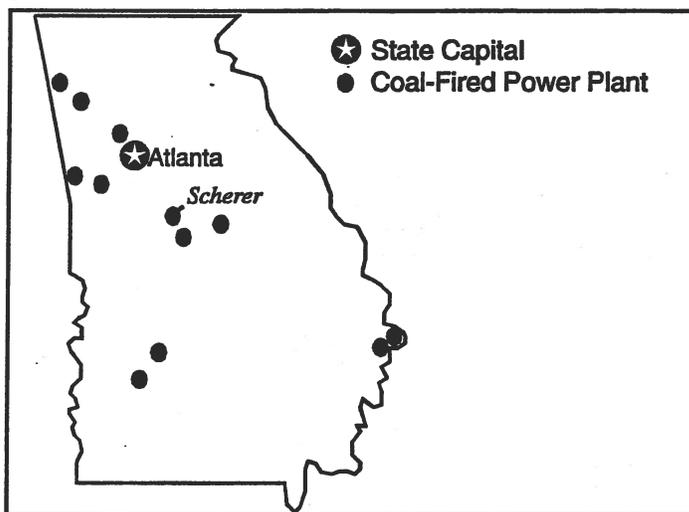
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Colorado Springs Utilities	R. D. Nixon	C	Antelope	13,200	8,962	0.35	5.62	76.70	13.75
Colorado Springs Utilities	R. D. Nixon	S	Cordero Rojo Cmplx	27,000	8,335	0.37	6.21	76.20	12.70
Colorado Springs Utilities	R. D. Nixon	S	Jacobs Ranch	82,100	8,704	0.40	5.17	79.00	13.75
Colorado Springs Utilities	R. D. Nixon	C	N Antelope/Rochelle Cmplx	13,300	8,809	0.24	5.02	78.90	13.90
Colorado Springs Utilities	R. D. Nixon	S	N Antelope/Rochelle Cmplx	14,000	8,952	0.23	4.76	77.60	13.89
Colorado Springs Utilities	R. D. Nixon	S	Rawhide	40,400	8,347	0.30	5.03	76.30	12.74
				190,000	8,619	0.35	5.28	77.76	13.41
Platte River Authority	Rawhide	C	Antelope	924,737	8,820	0.25	5.37	59.65	10.52
Platte River Authority	Rawhide	S	Cordero Rojo Cmplx	55,400	8,445	0.33	4.95	53.56	9.05
				980,137	8,799	0.26	5.35	59.30	10.44
Public Service Co of Colorado	Arapahoe	C	Antelope	510,400	8,799	0.25	5.43	82.03	14.44
Public Service Co of Colorado	Arapahoe	C	Caballo	116,700	8,522	0.33	5.04	83.10	14.16
Public Service Co of Colorado	Arapahoe	C	Cordero Rojo Cmplx	82,100	8,366	0.34	5.98	84.73	14.18
				709,200	8,704	0.27	5.43	82.52	14.36
Public Service Co of Colorado	Comanche	C	Belle Ayr	2,838,400	8,563	0.27	4.43	90.22	15.45
Public Service Co of Colorado	Comanche	S	Belle Ayr	71,300	8,638	0.25	4.15	100.00	17.28
Public Service Co of Colorado	Comanche	C	Eagle Butte	24,200	8,319	0.35	4.64	92.82	15.44
				2,933,900	8,563	0.27	4.42	90.48	15.50
Public Service Co of Colorado	Pawnee	C	Belle Ayr	71,400	8,555	0.27	4.44	83.99	14.37
Public Service Co of Colorado	Pawnee	C	Eagle Butte	2,096,300	8,363	0.38	4.64	86.10	14.40
				2,167,700	8,370	0.37	4.63	86.03	14.40

Florida



Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Tampa Electric	Transfer Facility	S	Jacobs Ranch	1,064,384	8,724	0.40	5.15	134.42	23.45
				1,064,384	8,724	0.40	5.15	134.42	23.45

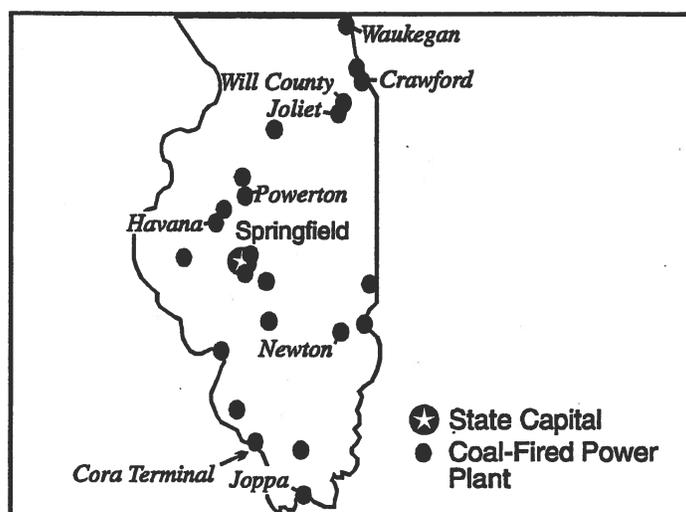
Georgia



Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Georgia Power (Southern Co)	Scherer	S	Antelope	1,839,600	8,824	0.25	5.40	149.08	26.31
Georgia Power (Southern Co)	Scherer	S	Belle Ayr	13,700	8,533	0.27	4.50	162.60	27.75
Georgia Power (Southern Co)	Scherer	S	Black Thunder	96,500	8,796	0.34	5.33	147.80	26.00
Georgia Power (Southern Co)	Scherer	S	Jacobs Ranch	4,208,700	8,723	0.42	5.28	150.76	26.30
				6,158,500	8,754	0.37	5.31	150.24	26.30

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Illinois



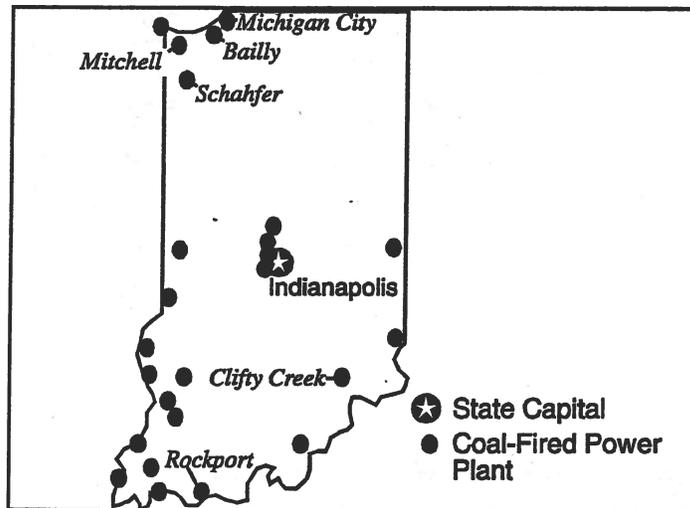
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Central Illinois Public Service	Newton	S	Rochelle	81,000	8,810	0.22	4.50	105.50	18.59
Central Illinois Public Service	Newton	S	N Antelope/Rochelle Cmplx	1,618,000	8,810	0.22	4.50	107.88	19.01
				1,699,000	8,810	0.22	4.50	107.77	18.99
Commonwealth Edison	Crawford	C	Rochelle	9,000	8,639	0.19	4.50	149.00	25.74
Commonwealth Edison	Crawford	C	N Antelope/Rochelle Cmplx	16,000	8,647	0.20	4.40	121.30	20.98
				25,000	8,644	0.20	4.44	131.27	22.69
Commonwealth Edison	Joliet	C	Black Thunder	3,324,000	8,742	0.36	5.62	306.04	53.52
Commonwealth Edison	Joliet	S	Black Thunder	439,000	8,750	0.37	5.42	123.74	21.66
				3,763,000	8,743	0.36	5.60	284.77	49.80
Commonwealth Edison	Powerton	C	Antelope	66,000	8,805	0.28	5.00	327.80	57.73
Commonwealth Edison	Powerton	C	Black Thunder	194,000	8,736	0.35	5.59	300.46	52.50
Commonwealth Edison	Powerton	S	Cordero Rojo Cmplx	242,000	8,471	0.30	4.94	137.05	23.22
Commonwealth Edison	Powerton	C	Jacobs Ranch	203,000	8,687	0.54	5.74	235.14	40.86
Commonwealth Edison	Powerton	S	Jacobs Ranch	14,000	8,679	0.45	5.40	95.70	16.61
Commonwealth Edison	Powerton	C	Rochelle	1,047,000	8,658	0.20	4.50	223.88	38.75
Commonwealth Edison	Powerton	C	N Antelope/Rochelle Cmplx	1,538,000	8,633	0.21	4.57	166.36	28.73
				3,304,000	8,642	0.24	4.72	197.47	34.17
Commonwealth Edison	Waukegan	C	Antelope	28,000	8,805	0.28	5.00	316.20	55.68
Commonwealth Edison	Waukegan	C	Black Thunder	330,000	8,738	0.36	5.62	300.59	52.53
Commonwealth Edison	Waukegan	S	Black Thunder	15,000	8,751	0.37	5.40	124.20	21.74
Commonwealth Edison	Waukegan	C	Jacobs Ranch	1,576,000	8,695	0.48	5.48	222.09	38.63
Commonwealth Edison	Waukegan	S	Jacobs Ranch	421,000	8,712	0.53	5.70	108.41	18.90
Commonwealth Edison	Waukegan	C	Rochelle	125,000	8,669	0.20	4.50	126.86	21.99
Commonwealth Edison	Waukegan	C	N Antelope/Rochelle Cmplx	41,000	8,640	0.21	4.60	176.64	30.50
				2,536,000	8,703	0.45	5.46	208.47	36.30
Commonwealth Edison	Will County	C	Black Thunder	150,000	8,733	0.35	5.52	300.87	52.55
Commonwealth Edison	Will County	C	Jacobs Ranch	1,105,000	8,691	0.47	5.42	216.84	37.70
Commonwealth Edison	Will County	S	Jacobs Ranch	82,000	8,679	0.45	5.40	85.30	14.81
Commonwealth Edison	Will County	C	Rochelle	951,000	8,660	0.20	4.50	146.25	25.33
Commonwealth Edison	Will County	C	N Antelope/Rochelle Cmplx	1,607,000	8,635	0.21	4.59	217.79	37.60
				3,895,000	8,662	0.29	4.86	200.47	34.73

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Illinois (cont.)

Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Electric Energy	Joppa	C	Antelope	948,000	8,827	0.24	5.13	84.44	14.91
Electric Energy	Joppa	C	Belle Ayr	1,607,400	8,546	0.25	4.23	82.32	14.07
Electric Energy	Joppa	C	Cordero Rojo Cmplx	480,700	8,481	0.29	4.89	82.11	13.93
Electric Energy	Joppa	C	North Antelope	298,300	8,909	0.18	4.20	82.10	14.63
Electric Energy	Joppa	C	N Antelope/Rochelle Cmplx	1,856,400	8,896	0.18	4.29	83.90	14.93
				5,190,800	8,737	0.22	4.48	83.24	14.55
Illinois Power	Havana	C	Medicine Bow	12,125	10,279	0.55	7.50	134.59	27.67
				12,125	10,279	0.55	7.50	134.59	27.67
Tennessee Valley Authority	Cora Terminal	C	Antelope	418,260	8,806	0.29	5.25	85.95	15.14
Tennessee Valley Authority	Cora Terminal	S	Antelope	46,000	8,700	0.50	5.00	94.83	16.50
Tennessee Valley Authority	Cora Terminal	C	Black Thunder	762,490	8,793	0.33	5.22	86.00	15.12
Tennessee Valley Authority	Cora Terminal	S	Jacobs Ranch	11,650	8,700	0.52	6.77	85.00	14.79
				1,238,400	8,793	0.32	5.23	86.30	15.18

Indiana



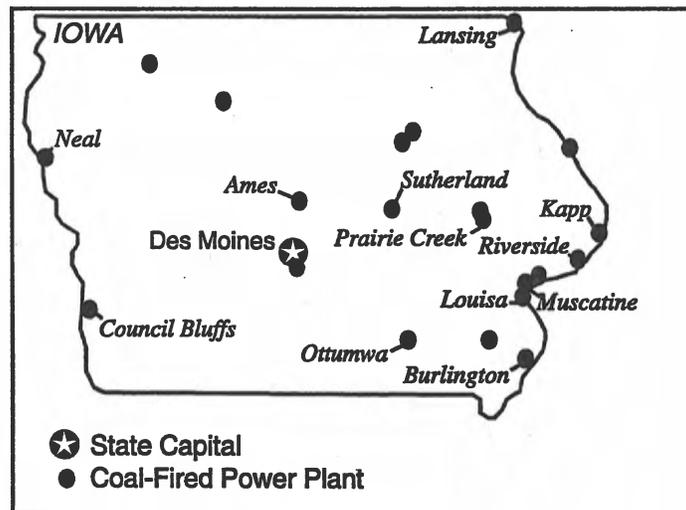
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Indiana-Kentucky Electric Corp	Clifty Creek	C	Antelope	1,295,000	8,811	0.25	5.37	102.84	18.12
Indiana-Kentucky Electric Corp	Clifty Creek	S	Antelope	367,000	8,810	0.24	5.40	83.17	14.65
Indiana-Kentucky Electric Corp	Clifty Creek	S	KFx	11,000	11,424	0.41	7.20	84.60	19.33
Indiana-Kentucky Electric Corp	Clifty Creek	C	Rochelle	487,000	8,907	0.19	4.21	101.36	18.05
Indiana-Kentucky Electric Corp	Clifty Creek	C	N Antelope/Rochelle Cmplx	769,000	8,879	0.19	4.29	118.82	21.10
				2,929,000	8,854	0.22	4.90	104.26	18.46
Indiana Michigan Power (AEP)	Rockport	S	Belle Ayr	600	8,650	0.24	4.40	29.70	5.14
Indiana Michigan Power (AEP)	Rockport	S	Black Thunder	491,400	8,738	0.36	5.29	99.46	17.38
Indiana Michigan Power (AEP)	Rockport	C	Caballo	2,275,600	8,484	0.36	4.96	101.53	17.23
Indiana Michigan Power (AEP)	Rockport	S	Cordero Rojo Cmplx	844,200	8,373	0.34	5.93	98.65	16.52
Indiana Michigan Power (AEP)	Rockport	C	N Antelope/Rochelle Cmplx	5,091,900	8,842	0.19	4.28	109.53	19.37
Indiana Michigan Power (AEP)	Rockport	C	Rawhide	541,700	8,305	0.28	4.59	101.24	16.82
				9,245,400	8,674	0.26	4.67	105.54	18.33

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Indiana (cont.)

Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Northern Indiana Public Service	Bailly	C	Shoshone No. 1	206,300	10,761	0.63	5.99	185.63	39.95
				206,300	10,761	0.63	5.99	185.63	39.95
Northern Indiana Public Service	Michigan City	S	Antelope	36,300	8,799	0.28	5.50	157.30	27.68
Northern Indiana Public Service	Michigan City	C	Black Thunder	789,500	8,749	0.34	5.37	108.80	19.04
Northern Indiana Public Service	Michigan City	S	Black Thunder	33,700	8,671	0.40	6.10	106.80	18.52
Northern Indiana Public Service	Michigan City	C	Cordero Rojo Cmplx	22,900	8,515	0.29	5.18	103.71	17.66
Northern Indiana Public Service	Michigan City	C	Jacobs Ranch	48,800	8,704	0.45	5.55	99.12	17.25
Northern Indiana Public Service	Michigan City	S	Jacobs Ranch	12,200	8,702	0.41	4.90	102.70	17.87
Northern Indiana Public Service	Michigan City	C	Rochelle	12,000	8,778	0.24	4.90	99.30	17.43
Northern Indiana Public Service	Michigan City	C	Shoshone No. 1	489,000	10,765	0.63	5.97	181.61	39.10
				1,444,400	9,425	0.44	5.59	134.08	25.93
Northern Indiana Public Service	Mitchell	S	Antelope	59,600	8,825	0.28	5.33	142.71	25.18
Northern Indiana Public Service	Mitchell	C	Black Thunder	583,700	8,745	0.35	5.36	116.75	20.42
Northern Indiana Public Service	Mitchell	S	Black Thunder	25,600	8,678	0.39	5.40	114.90	19.94
Northern Indiana Public Service	Mitchell	C	Cordero Rojo Cmplx	24,900	8,478	0.29	4.60	112.90	19.14
Northern Indiana Public Service	Mitchell	S	Jacobs Ranch	161,100	8,730	0.34	5.19	119.86	20.93
Northern Indiana Public Service	Mitchell	C	Shoshone No. 1	283,200	10,766	0.63	5.94	193.19	41.60
				1,138,100	9,243	0.41	5.46	137.44	25.97
Northern Indiana Public Service	Rollin Schahfer	C	Antelope	24,500	8,776	0.25	5.40	109.80	19.27
Northern Indiana Public Service	Rollin Schahfer	S	Antelope	210,500	8,816	0.27	5.60	112.49	19.83
Northern Indiana Public Service	Rollin Schahfer	C	Black Thunder	307,200	8,753	0.35	5.36	116.22	20.34
Northern Indiana Public Service	Rollin Schahfer	S	Black Thunder	74,200	8,732	0.36	5.20	111.48	19.47
Northern Indiana Public Service	Rollin Schahfer	C	Cordero Rojo Cmplx	514,900	8,468	0.30	5.14	112.19	19.00
Northern Indiana Public Service	Rollin Schahfer	S	Cordero Rojo Cmplx	24,900	8,481	0.28	4.85	109.50	18.57
Northern Indiana Public Service	Rollin Schahfer	C	Jacobs Ranch	722,300	8,684	0.41	5.23	109.77	19.07
Northern Indiana Public Service	Rollin Schahfer	S	Jacobs Ranch	355,600	8,721	0.34	5.45	121.43	21.18
Northern Indiana Public Service	Rollin Schahfer	C	North Antelope	100	8,778	0.24	4.90	108.90	19.12
Northern Indiana Public Service	Rollin Schahfer	C	Rochelle	73,100	8,755	0.26	4.90	110.16	19.29
Northern Indiana Public Service	Rollin Schahfer	S	N Antelope/Rochelle Cmplx	60,900	8,829	0.19	4.36	109.16	19.27
Northern Indiana Public Service	Rollin Schahfer	C	Shoshone No. 1	598,100	10,774	0.63	5.91	185.25	39.92
				2,966,300	9,094	0.40	5.39	127.71	23.72

Iowa



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Iowa (cont.)

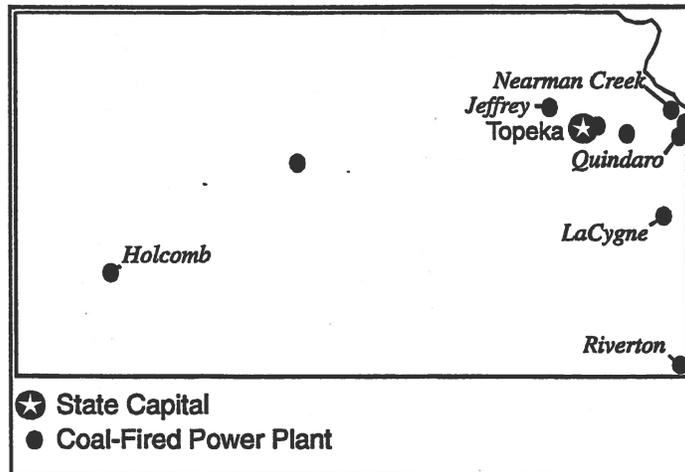
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	c/mmBtu	\$/ton
Ames, City of	Ames	C	Rochelle	68,000	8,909	0.18	4.27	145.20	25.87
Ames, City of	Ames	C	N Antelope/Rochelle Cmplx	163,000	8,856	0.19	4.27	146.02	25.86
				231,000	8,871	0.18	4.27	145.78	25.86
IES Utilities, Inc	Burlington	S	Black Thunder	24,351	8,859	0.36	4.78	84.20	14.92
IES Utilities, Inc	Burlington	S	Buckskin	547,677	8,428	0.49	5.35	83.04	14.00
IES Utilities, Inc	Burlington	S	Cordero Rojo Cmplx	24,271	8,430	0.32	4.94	81.08	13.67
IES Utilities, Inc	Burlington	S	Rawhide	67,000	8,290	0.28	4.55	88.19	14.62
				663,299	8,430	0.46	5.23	83.53	14.08
IES Utilities, Inc	Ottumwa	C	Cordero Rojo Cmplx	1,329,916	8,349	0.34	6.09	101.19	16.90
IES Utilities, Inc	Ottumwa	S	Cordero Rojo Cmplx	1,806,042	8,360	0.34	6.01	81.55	13.63
				3,135,958	8,355	0.34	6.04	89.88	15.02
IES Utilities, Inc	Praire Creek 1-4	S	Cordero Rojo Cmplx	857,022	8,385	0.34	5.92	85.07	14.26
				857,022	8,385	0.34	5.92	85.07	14.26
IES Utilities, Inc	Sutherland	S	Caballo	34,617	8,518	0.37	4.99	68.54	11.68
IES Utilities, Inc	Sutherland	S	Coal Creek	491,275	8,330	0.33	5.40	71.94	11.99
				525,892	8,343	0.33	5.37	71.72	11.97
Interstate Power	Lansing	S	Black Thunder	106,075	8,749	0.32	5.27	115.57	20.22
Interstate Power	Lansing	S	Buckskin	248,020	8,424	0.43	5.24	115.64	19.48
Interstate Power	Lansing	S	Coal Creek	116,501	8,341	0.34	5.36	106.22	17.72
Interstate Power	Lansing	C	Eagle Butte	512,970	8,379	0.39	5.28	198.93	33.34
				983,566	8,426	0.38	5.28	157.96	26.58
Interstate Power	M. L. Kapp	S	Buckskin	176,938	8,446	0.45	5.43	130.73	22.08
				176,938	8,446	0.45	5.43	130.73	22.08
MidAmerican Energy	Council Bluffs	C	Belle Ayr	14,000	8,640	0.26	4.20	75.70	13.08
MidAmerican Energy	Council Bluffs	C	Black Thunder	1,000	8,819	0.30	5.00	32.70	5.77
MidAmerican Energy	Council Bluffs	C	Buckskin	585,000	8,440	0.44	5.33	54.00	9.12
MidAmerican Energy	Council Bluffs	C	Caballo	161,000	8,441	0.35	5.26	52.94	8.94
MidAmerican Energy	Council Bluffs	S	Caballo	224,000	8,485	0.36	4.94	54.43	9.24
MidAmerican Energy	Council Bluffs	C	Coal Creek	178,000	8,316	0.33	5.39	54.80	9.11
MidAmerican Energy	Council Bluffs	C	Cordero Rojo Cmplx	149,000	8,396	0.32	5.78	63.20	10.60
MidAmerican Energy	Council Bluffs	S	Cordero Rojo Cmplx	64,000	8,448	0.30	5.23	55.41	9.34
MidAmerican Energy	Council Bluffs	C	Eagle Butte	1,797,000	8,359	0.40	4.76	82.25	13.75
MidAmerican Energy	Council Bluffs	S	Jacobs Ranch	14,000	8,685	0.44	6.00	47.70	8.29
MidAmerican Energy	Council Bluffs	C	Rawhide	358,000	8,315	0.29	4.63	50.40	8.38
				3,545,000	8,383	0.38	4.96	68.44	11.47
MidAmerican Energy	George Neal 1-4	S	Belle Ayr	107,000	8,514	0.27	4.50	67.12	11.43
MidAmerican Energy	George Neal 1-4	C	Caballo	5,295,000	8,487	0.36	5.03	72.43	12.29
MidAmerican Energy	George Neal 1-4	C	Coal Creek	122,000	8,335	0.36	5.50	66.20	11.04
MidAmerican Energy	George Neal 1-4	S	Coal Creek	53,000	8,313	0.35	5.50	75.80	12.60
MidAmerican Energy	George Neal 1-4	C	Cordero Rojo Cmplx	40,000	8,479	0.31	5.40	66.20	11.23
MidAmerican Energy	George Neal 1-4	S	Cordero Rojo Cmplx	135,000	8,442	0.32	5.40	65.90	11.13
MidAmerican Energy	George Neal 1-4	S	Jacobs Ranch	25,000	8,771	0.47	5.40	64.10	11.24
MidAmerican Energy	George Neal 1-4	S	N Antelope/Rochelle Cmplx	13,000	8,669	0.19	4.40	69.00	11.96
MidAmerican Energy	George Neal 1-4	C	Shoshone No. 1	328,000	10,787	0.63	5.98	106.76	23.03
				6,118,000	8,607	0.37	5.09	73.85	12.79

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Iowa (cont.)

Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
MidAmerican Energy	Louisa	C	Belle Ayr	12,000	8,585	0.26	4.60	103.50	17.77
MidAmerican Energy	Louisa	C	Buckskin	12,000	8,317	0.36	5.20	76.50	12.73
MidAmerican Energy	Louisa	C	Caballo	214,000	8,484	0.36	4.89	75.36	12.79
MidAmerican Energy	Louisa	C	Coal Creek	359,000	8,326	0.32	5.34	75.07	12.50
MidAmerican Energy	Louisa	C	Cordero Rojo Cmplx	2,232,000	8,380	0.33	5.87	92.63	15.52
MidAmerican Energy	Louisa	C	Eagle Butte	26,000	8,417	0.42	4.88	103.24	17.38
MidAmerican Energy	Louisa	S	Rochelle	14,000	8,688	0.18	4.50	75.20	13.07
				2,869,000	8,383	0.33	5.71	89.13	14.94
MidAmerican Energy	Riverside	C	N Antelope/Rochelle Cmplx	329,000	8,577	0.22	3.90	84.98	14.58
MidAmerican Energy	Riverside	C	Rawhide	44,000	8,336	0.20	4.10	82.10	13.69
MidAmerican Energy	Riverside	C	Rochelle	56,000	8,777	0.23	3.44	72.46	12.72
MidAmerican Energy	Riverside	S	Rochelle	56,000	8,714	0.20	3.77	72.35	12.61
				485,000	8,594	0.22	3.85	81.81	14.06
Muscatine Power and Water	Muscatine	C	Buckskin	742,300	8,413	0.92	6.41	82.42	13.87
				742,300	8,413	0.92	6.41	82.42	13.87

Kansas



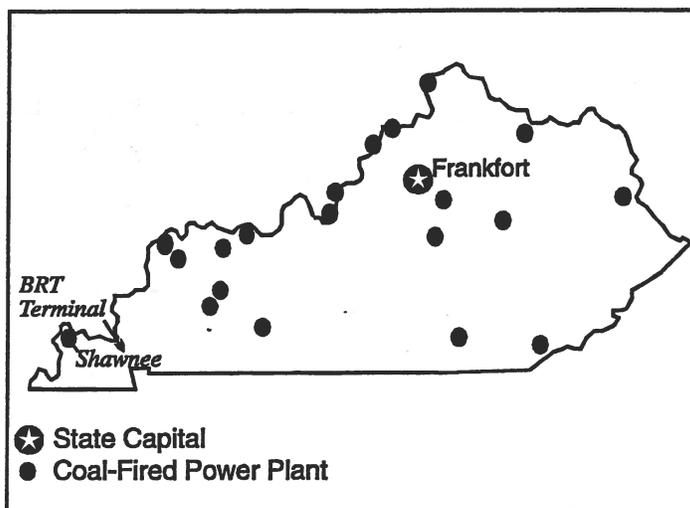
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Empire Dist Electric	Riverton	C	N Antelope/Rochelle Cmplx	243,306	8,807	0.18	4.35	115.79	20.39
				243,306	8,807	0.18	4.35	115.79	20.39
Kansas City Bd Public Utilities	Nearman Creek	C	Caballo	25,700	8,417	0.30	4.90	69.30	11.67
Kansas City Bd Public Utilities	Nearman Creek	C	Cordero Rojo Cmplx	306,200	8,362	0.34	5.98	78.73	13.17
Kansas City Bd Public Utilities	Nearman Creek	C	Dry Fork	848,300	8,252	0.38	5.07	77.20	12.74
				1,180,200	8,284	0.37	5.30	77.42	12.83
Kansas City Bd Public Utilities	Quindaro	C	Black Thunder	43,500	8,808	0.34	5.00	92.40	16.28
Kansas City Bd Public Utilities	Quindaro	C	Medicine Bow	408,100	10,431	0.46	6.76	127.73	26.64
				451,600	10,275	0.45	6.59	124.33	25.64

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Kansas (cont.)

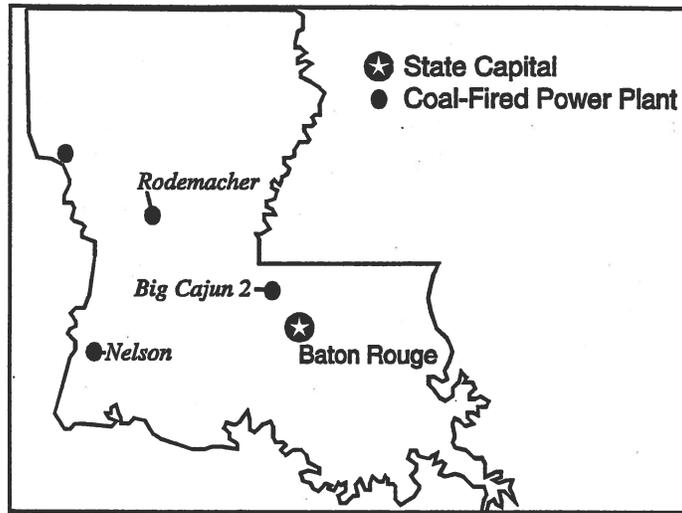
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Kansas City Power and Light	La Cygne	C	Black Thunder	27,000	8,804	0.35	4.90	68.50	12.06
Kansas City Power and Light	La Cygne	C	Caballo	2,621,000	8,480	0.36	5.04	62.53	10.60
Kansas City Power and Light	La Cygne	C	Coal Creek	168,000	8,334	0.34	5.33	65.01	10.84
Kansas City Power and Light	La Cygne	C	Cordero Rojo Cmplx	1,595,000	8,465	0.31	5.19	62.35	10.56
Kansas City Power and Light	La Cygne	S	Jacobs Ranch	220,000	8,695	0.39	5.07	63.79	11.09
Kansas City Power and Light	La Cygne	C	North Antelope	28,000	8,862	0.16	4.30	65.50	11.61
				4,659,000	8,484	0.34	5.10	62.67	10.63
Kansas Power & Light	Jeffrey	C	Belle Ayr	1,335,000	8,477	0.29	4.45	113.58	19.25
Kansas Power & Light	Jeffrey	C	Eagle Butte	7,205,000	8,371	0.39	4.73	112.39	18.82
				8,540,000	8,387	0.38	4.69	112.57	18.88
Sunflower Electric Power Corp	Holcomb Unit #1	C	Cordero Rojo Cmplx	1,601,447	8,476	0.30	5.03	110.75	18.77
				1,601,447	8,476	0.30	5.03	110.75	18.77

Kentucky



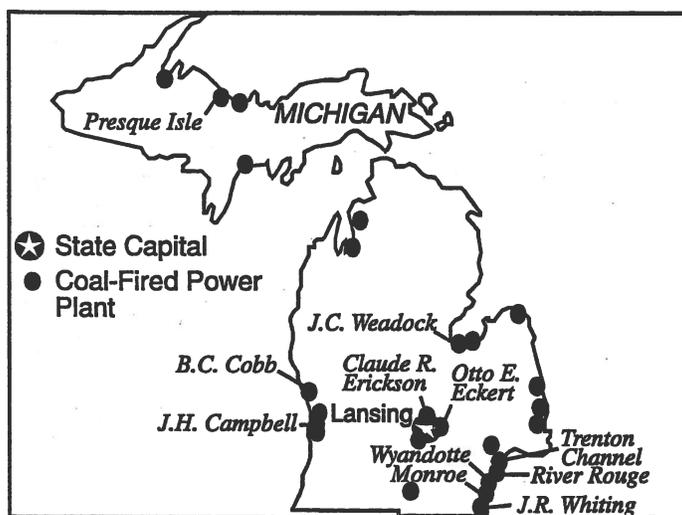
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Tennessee Valley Authority	BRT Terminal	C	Antelope	503,660	8,794	0.28	5.71	93.99	16.53
Tennessee Valley Authority	BRT Terminal	C	Black Thunder	817,500	8,802	0.31	5.16	93.95	16.54
Tennessee Valley Authority	BRT Terminal	C	Jacobs Ranch	761,920	8,698	0.36	5.62	94.41	16.42
Tennessee Valley Authority	BRT Terminal	S	Jacobs Ranch	105,710	8,700	0.52	6.77	94.83	16.50
				2,188,790	8,759	0.33	5.52	94.16	16.49
Tennessee Valley Authority	Shawnee	C	Antelope	77,940	8,807	0.28	5.66	96.87	17.06
Tennessee Valley Authority	Shawnee	C	Black Thunder	95,810	8,799	0.35	5.13	101.08	17.79
Tennessee Valley Authority	Shawnee	S	Black Thunder	71,140	8,817	0.29	5.30	94.11	16.59
				244,890	8,807	0.31	5.35	97.71	17.21

Louisiana



Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Cajun Electric Power Coop	Big Cajun No.2	S	Black Thunder	28,562	8,643	0.39	5.72	146.20	25.27
Cajun Electric Power Coop	Big Cajun No.2	C	Buckskin	6,152,022	8,422	0.45	5.38	145.77	24.55
Cajun Electric Power Coop	Big Cajun No.2	C	Jacobs Ranch	195,261	8,740	0.43	5.41	150.16	26.25
				6,375,845	8,432	0.45	5.38	145.91	24.61
Central Louisiana Electric	Rodemacher	C	Jacobs Ranch	1,617,000	8,577	0.51	7.25	139.33	23.88
				1,617,000	8,577	0.51	7.25	139.33	23.88
Entergy Gulf States, Inc	Roy S. Nelson	C	Jacobs Ranch	2,141,000	8,691	0.44	5.37	137.82	23.96
				2,141,000	8,691	0.44	5.37	137.82	23.96

Michigan

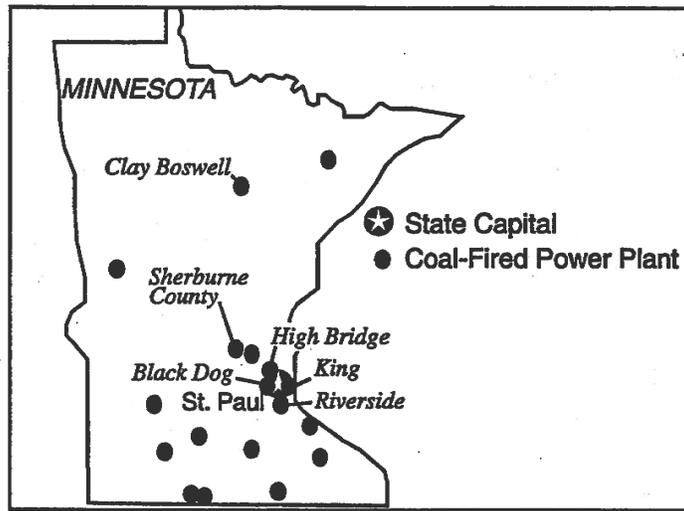


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Michigan (cont.)

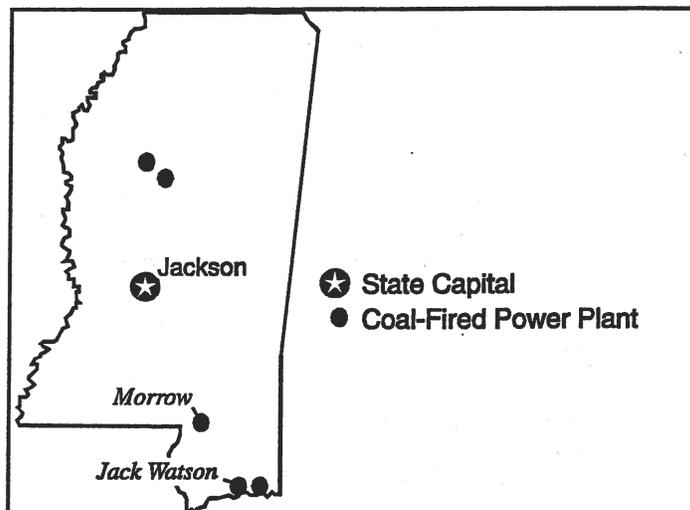
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Consumers Energy	B. C. Cobb	C	Black Thunder	284,300	8,738	0.36	5.28	102.02	17.83
Consumers Energy	B. C. Cobb	S	Jacobs Ranch	85,000	8,735	0.44	5.40	101.40	17.71
				369,300	8,737	0.37	5.31	101.88	17.80
Consumers Energy	J. C. Weadock	S	Antelope	116,600	8,808	0.25	5.30	100.48	17.70
Consumers Energy	J. C. Weadock	C	Black Thunder	228,300	8,741	0.34	5.32	97.60	17.06
Consumers Power	J. C. Weadock	S	Black Thunder	86,700	8,785	0.33	5.31	99.40	17.47
Consumers Energy	J. C. Weadock	S	Jacobs Ranch	176,700	8,720	0.46	5.55	96.99	16.92
				608,300	8,754	0.35	5.38	98.23	17.20
Consumers Energy	J. H. Campbell	S	Antelope	240,600	8,804	0.27	5.49	99.07	17.44
Consumers Energy	J. H. Campbell	C	Black Thunder	236,100	8,718	0.36	5.30	97.03	16.92
Consumers Energy	J. H. Campbell	S	Jacobs Ranch	761,500	8,705	0.45	5.37	97.27	16.93
				1,238,200	8,727	0.40	5.38	97.57	17.03
Consumers Energy	J. R. Whiting	S	Antelope	38,900	8,769	0.23	5.47	108.82	19.08
Consumers Energy	J. R. Whiting	C	Black Thunder	13,100	8,800	0.30	5.00	101.20	17.81
				52,000	8,777	0.25	5.35	106.90	18.76
Detroit Edison Co	Monroe	S	Antelope	13,000	8,853	0.32	5.30	95.00	16.82
Detroit Edison Co	Monroe	C	Black Thunder	2,878,000	8,752	0.35	5.32	96.10	16.82
Detroit Edison Co	Monroe	C	North Antelope	446,000	8,888	0.18	4.24	99.16	17.63
Detroit Edison Co	Monroe	C	Rochelle	77,000	8,785	0.20	4.40	98.53	17.31
Detroit Edison Co	Monroe	C	N Antelope/Rochelle Cmplx	1,402,000	8,836	0.19	4.37	98.99	17.49
				4,816,000	8,790	0.29	4.93	97.26	17.10
Detroit Edison Co	River Rouge	C	Black Thunder	694,000	8,733	0.35	5.29	94.15	16.45
Detroit Edison Co	River Rouge	C	North Antelope	26,000	8,910	0.21	4.50	102.10	18.20
Detroit Edison Co	River Rouge	C	Rochelle	25,000	8,836	0.19	4.50	96.98	17.14
Detroit Edison Co	River Rouge	C	N Antelope/Rochelle Cmplx	107,000	8,814	0.20	4.52	95.73	16.87
				852,000	8,752	0.32	5.15	94.68	16.57
Detroit Edison Co	Trenton Channel	S	Antelope	12,000	8,767	0.32	5.90	97.40	17.08
Detroit Edison Co	Trenton Channel	C	Black Thunder	37,000	8,723	0.36	5.43	97.36	16.99
Detroit Edison Co	Trenton Channel	C	North Antelope	320,000	8,894	0.17	4.13	98.95	17.60
Detroit Edison Co	Trenton Channel	C	Rochelle	62,000	8,813	0.20	4.42	102.03	17.99
Detroit Edison Co	Trenton Channel	C	N Antelope/Rochelle Cmplx	793,000	8,828	0.19	4.37	98.08	17.32
				1,224,000	8,841	0.19	4.36	98.48	17.41
Lansing Bd of Water & Light	Claude R. Erickson	C	Antelope	21,100	8,763	0.20	5.20	136.22	23.87
Lansing Bd of Water & Light	Claude R. Erickson	S	Antelope	1,000	8,878	0.17	7.50	134.50	23.88
				22,100	8,768	0.20	5.30	136.14	23.87
Lansing Bd of Water & Light	Otto E. Eckert	C	Antelope	441,800	8,810	0.29	5.69	135.53	23.88
				441,800	8,810	0.29	5.69	135.53	23.88
Wisconsin Electric Power	Presque Isle	C	Antelope	373,600	9,077	0.31	4.94	97.09	17.62
Wisconsin Electric Power	Presque Isle	C	Jacobs Ranch	67,600	9,073	0.50	6.26	110.59	20.07
Wisconsin Electric Power	Presque Isle	S	Seminole II	12,900	9,583	0.38	5.32	119.73	22.92
				454,100	9,091	0.34	5.15	99.74	18.14
Wyandotte Dept of Mun Srvc	Wyandotte	C	Black Thunder	414	8,852	0.32	11.96	126.90	22.47
				414	8,852	0.32	11.96	126.90	22.47

Minnesota



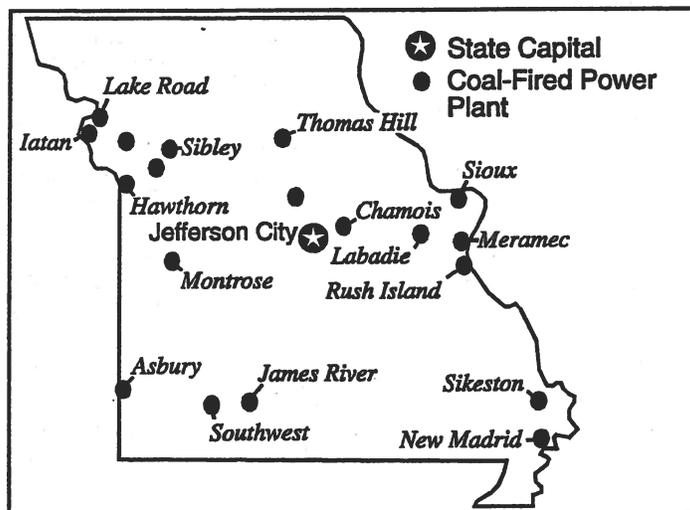
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Minnesota Power	Clay Boswell	S	Black Thunder	40,760	8,794	0.28	5.23	121.00	21.28
Minnesota Power	Clay Boswell	S	Cordero Rojo Cmplx	40,890	8,578	0.30	4.99	118.50	20.33
Minnesota Power	Clay Boswell	S	N Antelope/Rochelle Cmplx	41,330	8,871	0.15	4.23	121.00	21.47
				122,980	8,748	0.24	4.81	120.17	21.03
Northern States Power	Black Dog	C	Rochelle	356,000	8,793	0.19	4.41	105.74	18.60
Northern States Power	Black Dog	C	N Antelope/Rochelle Cmplx	609,700	8,828	0.19	4.37	94.55	16.69
				965,700	8,815	0.19	4.38	98.68	17.39
Northern States Power	High Bridge	C	Antelope	108,700	8,832	0.24	4.90	114.24	20.19
Northern States Power	High Bridge	C	North Antelope	203,800	8,899	0.17	4.14	104.32	18.57
Northern States Power	High Bridge	C	N Antelope/Rochelle Cmplx	617,100	8,868	0.19	4.44	86.85	15.41
				929,600	8,871	0.19	4.43	93.88	16.66
Northern States Power	King	C	Antelope	488,500	8,828	0.25	5.23	108.10	19.09
Northern States Power	King	C	North Antelope	95,300	8,888	0.19	4.28	101.01	17.96
Northern States Power	King	C	N Antelope/Rochelle Cmplx	418,000	8,920	0.19	4.25	94.20	16.80
				1,001,800	8,872	0.22	4.73	101.62	18.03
Northern States Power	Riverside	C	North Antelope	532,700	8,882	0.18	4.36	98.56	17.51
Northern States Power	Riverside	C	N Antelope/Rochelle Cmplx	907,300	8,870	0.19	4.42	86.25	15.30
				1,440,000	8,874	0.19	4.40	90.80	16.12
Northern States Power	Sherburne County	C	Antelope	163,200	8,859	0.25	4.88	126.98	22.50
Northern States Power	Sherburne County	C	Black Thunder	2,380,700	8,746	0.35	5.36	111.94	19.58
Northern States Power	Sherburne County	C	Jacobs Ranch	685,800	8,721	0.41	5.14	105.21	18.35
Northern States Power	Sherburne County	C	North Antelope	147,900	8,892	0.19	4.20	106.91	19.02
Northern States Power	Sherburne County	C	Rochelle	51,900	8,837	0.21	4.30	112.10	19.81
Northern States Power	Sherburne County	C	N Antelope/Rochelle Cmplx	427,200	8,867	0.19	4.21	106.75	18.93
				3,856,700	8,767	0.33	5.12	110.61	19.40

Mississippi



Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Mississippi Power (Southern Co)	Watson	S	Jacobs Ranch	463,470	8,718	0.42	5.23	132.29	23.07
				463,470	8,718	0.42	5.23	132.29	23.07

Missouri



Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Associated Electric Coop, Inc	New Madrid	C	N Antelope/Rochelle Cmplx	4,717,200	8,827	0.19	4.39	95.93	16.94
				4,717,200	8,827	0.19	4.39	95.93	16.94
Associated Electric Coop, Inc	Thomas Hill	C	N Antelope/Rochelle Cmplx	4,658,700	8,835	0.19	4.37	73.89	13.06
				4,658,700	8,835	0.19	4.37	73.89	13.06

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Missouri (cont.)

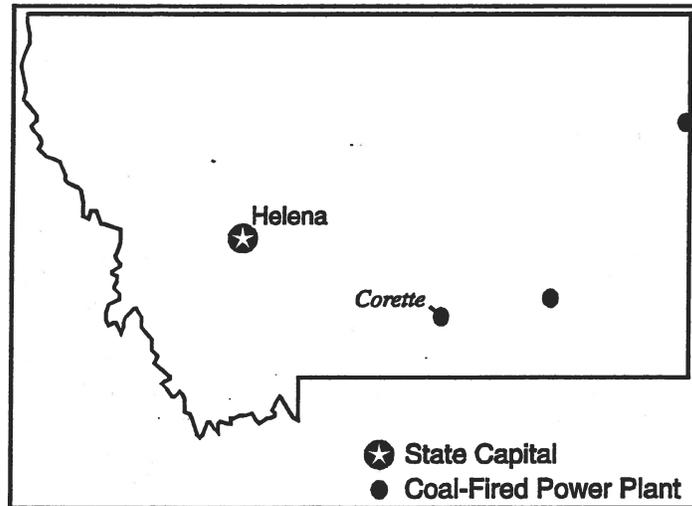
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Central Elec Power Coop-Missouri	Chamois	S	Rochelle	2,040	8,399	0.41	4.46	149.96	25.19
Central Elec Power Coop-Missouri	Chamois	S	N Antelope/Rochelle Cmplx	2,050	8,399	0.41	4.46	117.67	19.77
				4,090	8,399	0.41	4.46	133.78	22.47
City Utilities of Springfield	James River	C	Black Thunder	647,100	8,729	0.37	5.50	108.62	18.96
				647,100	8,729	0.37	5.50	108.62	18.96
City Utilities of Springfield	Southwest	C	Black Thunder	789,000	8,760	0.36	5.39	103.68	18.17
				789,000	8,760	0.36	5.39	103.68	18.17
Empire Dist Electric	Asbury	C	N Antelope/Rochelle Cmplx	910,709	8,794	0.19	4.37	100.28	17.64
				910,709	8,794	0.19	4.37	100.28	17.64
Kansas City Power and Light	Hawthorne	C	Black Thunder	871,000	8,734	0.36	5.41	68.17	11.91
Kansas City Power and Light	Hawthorne	C	Caballo	28,000	8,518	0.35	5.00	61.25	10.43
Kansas City Power and Light	Hawthorne	C	Cordero Rojo Cmplx	108,000	8,487	0.29	4.68	61.15	10.38
Kansas City Power and Light	Hawthorne	C	North Antelope	40,000	8,878	0.19	4.30	64.40	11.43
Kansas City Power and Light	Hawthorne	C	N Antelope/Rochelle Cmplx	96,000	8,896	0.19	4.26	64.33	11.45
				1,143,000	8,724	0.33	5.19	66.88	11.67
Kansas City Power and Light	Iatan	C	Black Thunder	2,302,000	8,726	0.35	5.46	80.97	14.13
Kansas City Power and Light	Iatan	S	Black Thunder	335,000	8,755	0.36	5.41	59.44	10.41
Kansas City Power and Light	Iatan	C	Caballo	152,000	8,466	0.34	4.89	55.78	9.44
				2,789,000	8,716	0.35	5.42	77.01	13.43
Kansas City Power and Light	Montrose	C	Black Thunder	1,317,000	8,750	0.35	5.41	88.82	15.54
Kansas City Power and Light	Montrose	C	Coal Creek	166,000	8,330	0.33	5.38	86.20	14.36
Kansas City Power and Light	Montrose	C	Cordero Rojo Cmplx	55,000	8,534	0.30	4.90	85.34	14.57
Kansas City Power and Light	Montrose	C	Jacobs Ranch	165,000	8,727	0.38	4.97	87.88	15.34
Kansas City Power and Light	Montrose	C	North Antelope	24,000	8,911	0.19	4.20	88.70	15.81
Kansas City Power and Light	Montrose	C	N Antelope/Rochelle Cmplx	59,000	8,913	0.17	4.28	88.64	15.80
				1,786,000	8,710	0.34	5.30	88.37	15.40
Missouri Public Service	Sibley	C	Medicine Bow	777,260	10,449	0.56	7.44	105.28	22.00
Missouri Public Service	Sibley	C	N Antelope/Rochelle Cmplx	552,829	8,755	0.19	4.44	73.35	12.84
Missouri Public Service	Sibley	C	Seminole II	70,948	11,338	0.64	6.53	105.90	24.01
				1,401,037	9,826	0.42	6.21	92.71	18.49
Sikeston Utilities	Sikeston	S	Black Thunder	946,000	8,741	0.35	5.33	100.08	17.49
Sikeston Utilities	Sikeston	S	Coal Creek	100,000	8,539	0.35	5.42	101.60	17.35
				1,046,000	8,721	0.35	5.34	100.22	17.48
St Joseph Light and Power	Lake Road	S	Antelope	234,200	8,802	0.26	5.50	80.10	14.10
St Joseph Light and Power	Lake Road	S	N Antelope/Rochelle Cmplx	100	8,800	0.30	5.50	57.70	10.16
St Joseph Light and Power	Lake Road	S	Seminole II	45,400	11,225	0.61	6.33	113.31	25.44
St Joseph Light and Power	Lake Road	S	Shoshone No. 1	22,300	10,820	0.61	5.35	112.97	24.45
				302,000	9,315	0.33	5.62	87.51	16.57
Union Electric	Labadie	S	Antelope	2,896,000	8,800	0.22	5.30	89.10	15.68
Union Electric	Labadie	S	Black Thunder	124,000	8,820	0.33	5.00	84.56	14.92
Union Electric	Labadie	C	Jacobs Ranch	821,000	8,650	0.52	5.70	91.02	15.75
Union Electric	Labadie	S	North Antelope	479,000	8,809	0.24	4.50	88.34	15.56
Union Electric	Labadie	C	Rochelle	812,000	8,750	0.22	4.50	94.36	16.51
Union Electric	Labadie	S	Rochelle	67,000	8,700	0.44	5.60	93.30	16.23
Union Electric	Labadie	C	N Antelope/Rochelle Cmplx	1,831,000	8,750	0.22	4.50	94.66	16.56
Union Electric	Labadie	S	N Antelope/Rochelle Cmplx	923,000	8,813	0.27	4.64	91.94	16.20
				7,953,000	8,769	0.26	4.95	91.36	16.02

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Missouri (cont.)

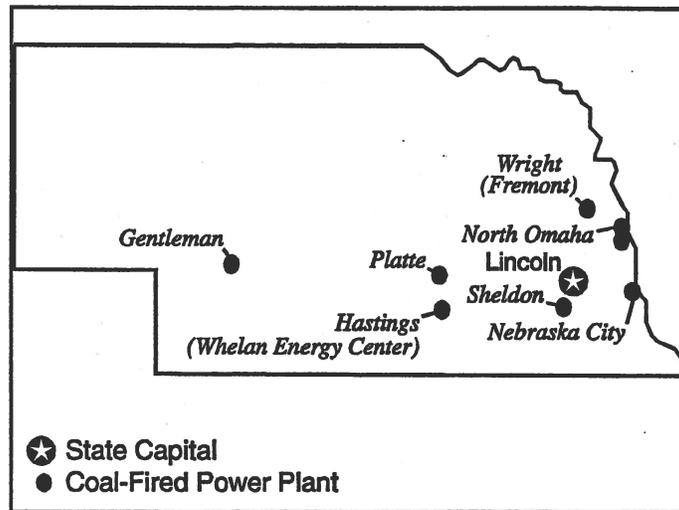
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Union Electric	Meramec	S	North Antelope	192,000	8,815	0.24	4.50	103.42	18.23
Union Electric	Meramec	C	N Antelope/Rochelle Cmplx	77,000	8,750	0.22	4.50	109.10	19.09
Union Electric	Meramec	S	N Antelope/Rochelle Cmplx	488,000	8,828	0.24	4.51	102.69	18.13
				757,000	8,816	0.24	4.51	103.53	18.25
Union Electric	Rush Island	S	Belle Ayr	497,000	8,550	0.30	4.50	90.24	15.43
Union Electric	Rush Island	S	Black Thunder	420,000	8,820	0.33	5.00	89.06	15.71
Union Electric	Rush Island	S	Buckskin	24,000	8,450	0.36	5.00	83.70	14.15
Union Electric	Rush Island	S	Cordero Rojo Cmplx	3,507,000	8,455	0.32	5.29	89.63	15.16
Union Electric	Rush Island	C	Rochelle	198,000	8,750	0.22	4.50	94.87	16.60
Union Electric	Rush Island	C	N Antelope/Rochelle Cmplx	76,000	8,750	0.22	4.50	95.40	16.70
Union Electric	Rush Island	S	N Antelope/Rochelle Cmplx	101,000	8,780	0.23	4.50	94.78	16.64
				4,823,000	8,520	0.31	5.12	90.03	15.34
Union Electric	Sioux	S	Antelope	331,000	8,800	0.22	5.30	88.29	15.54
Union Electric	Sioux	S	Black Thunder	2,109,000	8,820	0.33	5.00	89.18	15.73
Union Electric	Sioux	S	Buckskin	13,000	8,450	0.36	5.00	83.70	14.15
Union Electric	Sioux	C	Rochelle	463,318	8,788	0.20	4.43	78.67	13.82
				2,916,318	8,811	0.30	4.94	87.38	15.40

Montana



Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Montana Power Co	Corette	NC	Rawhide	397,000	8,314	0.23	4.45	54.36	9.04
				397,000	8,314	0.23	4.45	54.36	9.04

Nebraska



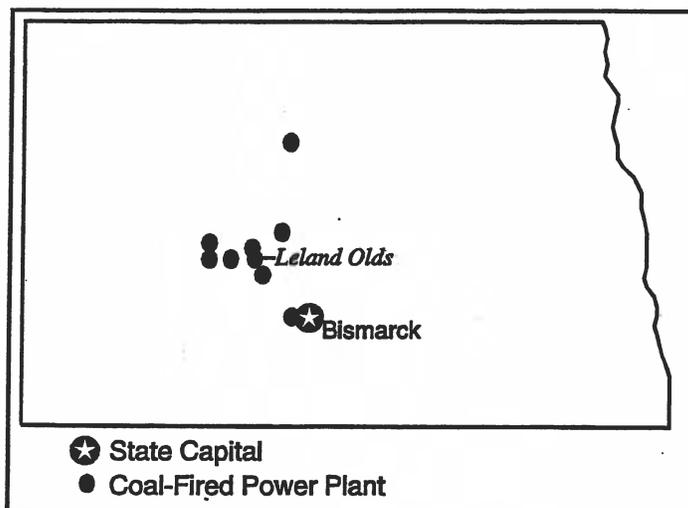
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Fremont Dept of Public Utilities	Wright	C	Belle Ayr	211,150	8,510	0.27	4.60	89.87	15.29
Fremont Dept of Public Utilities	Wright	S	Belle Ayr	13,300	8,673	0.26	4.30	90.20	15.65
Fremont Dept of Public Utilities	Wright	S	N Antelope/Rochelle Cmplx	1,017	8,796	0.19	4.80	91.70	16.13
Fremont Dept of Public Utilities	Wright	S	Shoshone No. 1	10,100	10,795	0.60	5.49	135.00	29.15
				235,567	8,618	0.28	4.63	91.83	15.91
Grand Island Utilities	Platte	C	Black Thunder	35,000	8,672	0.44	5.38	66.90	11.60
Grand Island Utilities	Platte	C	Jacobs Ranch	371,000	8,726	0.45	5.50	67.72	11.82
				406,000	8,721	0.45	5.49	67.65	11.80
Hastings Utilities	Hastings	S	Caballo	220,500	8,477	0.37	5.10	59.57	10.10
Hastings Utilities	Hastings	C	North Antelope	83,600	8,878	0.18	4.32	71.90	12.77
Hastings Utilities	Hastings	C	N Antelope/Rochelle Cmplx	19,100	8,986	0.21	4.03	71.44	12.84
				323,200	8,611	0.31	4.84	63.46	10.95
Nebraska Public Power District	Gerald Gentleman	C	Belle Ayr	3,672,020	8,545	0.27	4.54	46.49	7.94
Nebraska Public Power District	Gerald Gentleman	C	Black Thunder	633,685	8,737	0.34	5.32	46.25	8.08
Nebraska Public Power District	Gerald Gentleman	C	Rochelle	401,566	8,790	0.19	4.43	48.90	8.60
Nebraska Public Power District	Gerald Gentleman	C	N Antelope/Rochelle Cmplx	822,539	8,740	0.20	4.45	47.56	8.31
				5,529,810	8,614	0.26	4.61	46.79	8.06
Nebraska Public Power District	Sheldon	C	Belle Ayr	70,264	8,549	0.27	4.60	59.10	10.10
Nebraska Public Power District	Sheldon	S	Belle Ayr	94,075	8,532	0.27	4.51	59.30	10.12
Nebraska Public Power District	Sheldon	C	Rochelle	384,623	8,788	0.19	4.38	60.95	10.71
Nebraska Public Power District	Sheldon	C	N Antelope/Rochelle Cmplx	363,745	8,728	0.20	4.48	61.17	10.68
Nebraska Public Power District	Sheldon	S	Shoshone No. 1	34,752	10,785	0.62	5.71	103.97	22.43
				947,459	8,795	0.22	4.50	62.31	11.03
Omaha Public Power District	Nebraska City	S	Coal Creek	437,200	8,331	0.33	5.22	64.62	10.77
Omaha Public Power District	Nebraska City	S	Cordero Rojo Cmplx	178,100	8,411	0.34	5.65	68.94	11.60
Omaha Public Power District	Nebraska City	S	Dry Fork	49,400	8,052	0.38	4.90	70.60	11.37
Omaha Public Power District	Nebraska City	C	N Antelope/Rochelle Cmplx	1,568,700	8,712	0.21	4.54	68.85	12.00
Omaha Public Power District	Nebraska City	C	Rawhide	146,300	8,301	0.30	4.83	70.18	11.65
				2,379,700	8,580	0.25	4.78	68.20	11.71

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Nebraska (cont.)

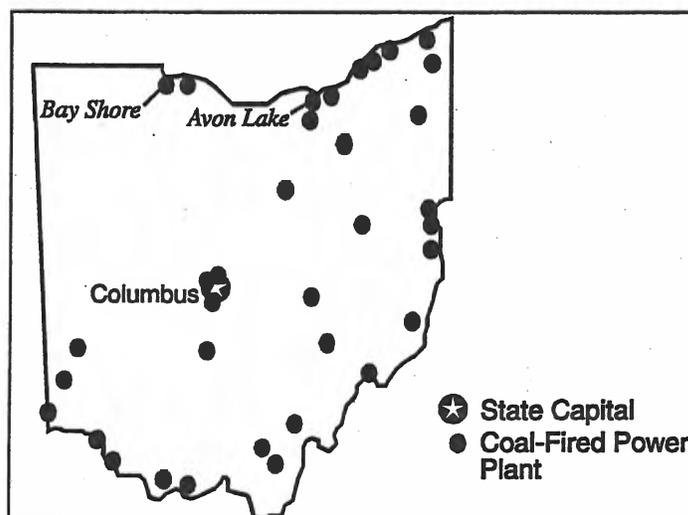
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Omaha Public Power District	North Omaha	S	Black Thunder	71,100	8,776	0.35	5.63	70.93	12.45
Omaha Public Power District	North Omaha	S	Coal Creek	1,156,400	8,320	0.33	5.43	69.92	11.63
Omaha Public Power District	North Omaha	S	Cordero Rojo Cmplx	213,700	8,427	0.31	5.50	71.90	12.12
Omaha Public Power District	North Omaha	S	Dry Fork	24,100	8,105	0.36	4.60	72.10	11.69
Omaha Public Power District	North Omaha	C	Rochelle	155,000	8,656	0.19	4.45	74.33	12.86
Omaha Public Power District	North Omaha	C	N Antelope/Rochelle Cmplx	97,200	8,688	0.21	4.55	73.28	12.73
Omaha Public Power District	North Omaha	C	Rawhide	400,400	8,319	0.28	4.64	72.19	12.01
				2,117,900	8,385	0.30	5.17	71.09	11.92

North Dakota



Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Basin Electric Power Coop	Leland Olds 1 & 2	C	Dry Fork	60,700	8,226	0.38	5.12	77.52	12.75
				60,700	8,226	0.38	5.12	77.52	12.75

Ohio

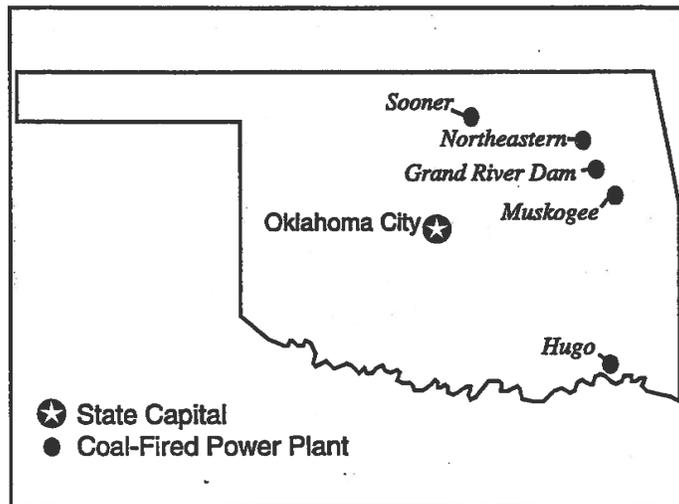


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Ohio (cont.)

Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Cleveland Electric Illum Co	Avon Lake	S	Antelope	50,600	8,793	0.29	5.17	124.93	21.97
				50,600	8,793	0.29	5.17	124.93	21.97
Toledo Edison Co	Bay Shore	S	Antelope	720,900	8,815	0.26	5.31	119.20	21.01
Toledo Edison Co	Bay Shore	C	Belle Ayr	143,600	8,503	0.34	4.61	123.53	21.01
Toledo Edison Co	Bay Shore	S	Jacobs Ranch	359,700	8,672	0.46	5.56	120.96	20.98
Toledo Edison Co	Bay Shore	S	Rochelle	80,500	8,605	0.25	4.49	119.74	20.61
Toledo Edison Co	Bay Shore	S	N Antelope/Rochelle Cmplx	97,200	8,636	0.23	4.66	123.25	21.29
				1,401,900	8,722	0.32	5.21	120.41	21.00

Oklahoma



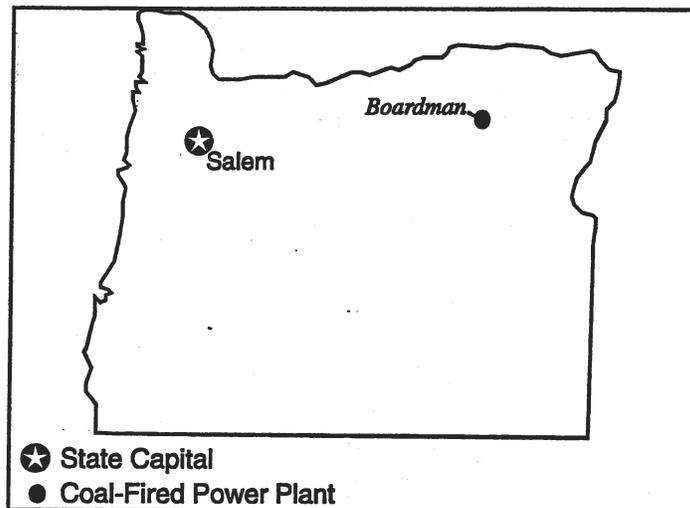
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Grand River Dam Authority	GRDA 1 & 2	C	Caballo	2,137,803	8,486	0.36	5.01	86.90	14.75
Grand River Dam Authority	GRDA 1 & 2	S	Coal Creek	200,208	8,326	0.34	5.39	85.98	14.32
Grand River Dam Authority	GRDA 1 & 2	S	Cordero Rojo Cmplx	306,163	8,370	0.32	5.76	84.85	14.20
Grand River Dam Authority	GRDA 1 & 2	C	North Antelope	308	8,820	0.19	4.18	90.82	16.02
Grand River Dam Authority	GRDA 1 & 2	C	Rawhide	1,163,462	8,305	0.29	4.68	87.69	14.57
				3,807,943	8,413	0.33	4.99	86.93	14.63
Oklahoma Gas and Electric	Muskogee	C	Antelope	337,219	8,816	0.25	5.55	83.40	14.71
Oklahoma Gas and Electric	Muskogee	C	Belle Ayr	4,402,086	8,532	0.27	4.55	85.00	14.50
Oklahoma Gas and Electric	Muskogee	C	Black Thunder	89,659	8,739	0.34	5.51	80.29	14.03
Oklahoma Gas and Electric	Muskogee	C	Cordero Rojo Cmplx	380,939	8,484	0.30	5.09	78.61	13.34
Oklahoma Gas and Electric	Muskogee	C	North Antelope	473,685	8,893	0.19	4.26	84.65	15.06
Oklahoma Gas and Electric	Muskogee	C	Rochelle	77,757	8,716	0.21	4.64	84.77	14.78
Oklahoma Gas and Electric	Muskogee	C	N Antelope/Rochelle Cmplx	63,941	8,801	0.19	4.15	86.76	15.27
Oklahoma Gas and Electric	Muskogee	C	North Rochelle	15,435	8,745	0.31	4.40	86.50	15.13
				5,840,721	8,583	0.27	4.63	84.41	14.49
Oklahoma Gas and Electric	Sooner	C	Antelope	396,406	8,818	0.24	5.28	82.21	14.50
Oklahoma Gas and Electric	Sooner	C	Black Thunder	2,949,545	8,744	0.35	5.33	78.80	13.78
Oklahoma Gas and Electric	Sooner	C	Coal Creek	391,665	8,325	0.34	5.35	79.99	13.32
Oklahoma Gas and Electric	Sooner	C	Cordero Rojo Cmplx	236,723	8,506	0.29	4.88	75.91	12.91
Oklahoma Gas and Electric	Sooner	C	N Antelope/Rochelle Cmplx	53,151	8,831	0.20	4.50	82.38	14.55
Oklahoma Gas and Electric	Sooner	C	North Rochelle	13,912	8,798	0.30	4.20	85.80	15.10
				4,041,402	8,698	0.33	5.29	79.15	13.77

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Oklahoma (cont.)

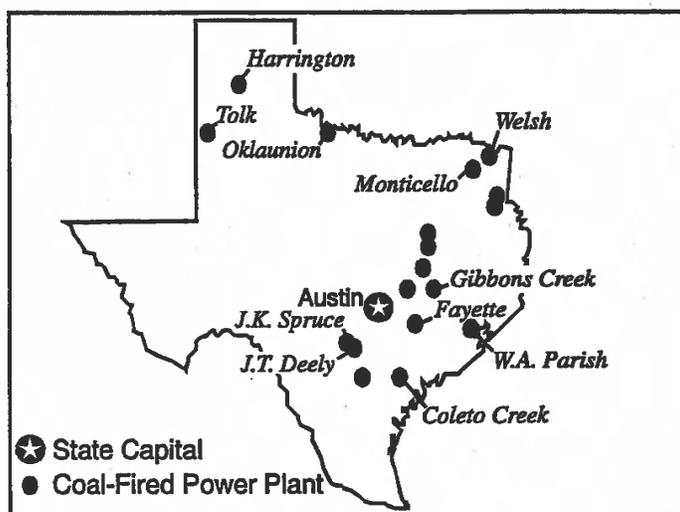
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Public Serv Co of Oklahoma	Northeast	C	Buckskin	34,917	8,449	0.46	5.30	95.40	16.12
Public Serv Co of Oklahoma	Northeast	S	Eagle Butte	25,553	8,448	0.36	4.60	108.40	18.32
Public Serv Co of Oklahoma	Northeast	C	North Antelope	940,144	8,894	0.19	4.31	112.53	20.02
Public Serv Co of Oklahoma	Northeast	C	Rochelle	414,294	8,758	0.19	4.48	117.33	20.55
Public Serv Co of Oklahoma	Northeast	C	N Antelope/Rochelle Cmplx	2,850,747	8,777	0.20	4.41	109.11	19.15
				4,265,655	8,796	0.20	4.40	110.55	19.45
Western Farmers Electric Coop	Hugo	C	Black Thunder	1,592,268	8,745	0.35	5.36	100.48	17.58
Western Farmers Electric Coop	Hugo	S	Buckskin	89,452	8,403	0.46	5.18	81.22	13.65
Western Farmers Electric Coop	Hugo	S	Jacobs Ranch	11,055	8,644	0.41	5.00	100.40	17.36
Western Farmers Electric Coop	Hugo	C	North Rochelle	11,736	8,633	0.33	5.30	106.40	18.37
				1,704,511	8,726	0.36	5.35	99.51	17.37

Oregon



Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Portland General Electric	Boardman	S	Antelope	200,000	8,849	0.23	5.05	108.85	19.26
Portland General Electric	Boardman	S	Black Thunder	598,000	8,759	0.35	5.48	108.93	19.08
Portland General Electric	Boardman	S	Cordero Rojo Cmplx	411,000	8,416	0.32	5.53	108.37	18.24
Portland General Electric	Boardman	S	Jacobs Ranch	501,000	8,698	0.40	5.10	109.08	18.98
Portland General Electric	Boardman	S	N Antelope/Rochelle Cmplx	304,000	8,775	0.19	4.41	109.35	19.19
				2,014,000	8,685	0.32	5.19	108.91	18.92

Texas



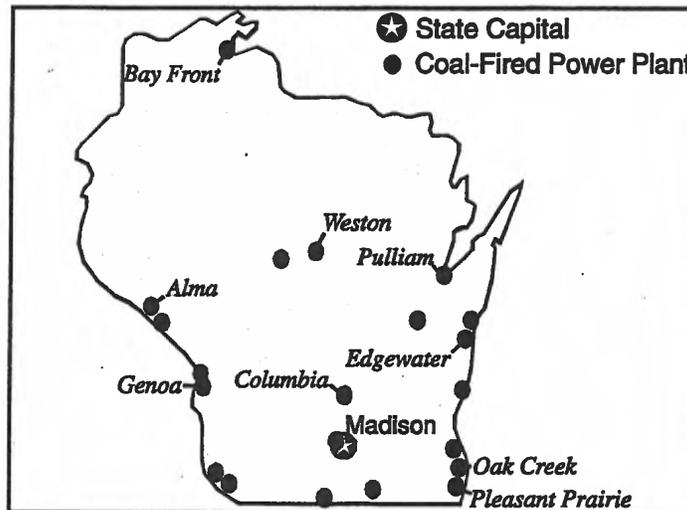
Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Central Power and Light (CSW)	Coletto Creek	S	Cordero Rojo Cmplx	229,534	8,480	0.31	5.19	132.14	22.41
Central Power and Light (CSW)	Coletto Creek	S	Jacobs Ranch	503,690	8,740	0.41	5.11	130.83	22.87
Central Power and Light (CSW)	Coletto Creek	S	N Antelope/Rochelle Cmplx	313,386	8,671	0.20	4.42	130.82	22.69
				1,046,610	8,662	0.33	4.92	131.12	22.71
City Public Service-San Antonio	Deely & Spruce	C	Cordero Rojo Cmplx	5,395,000	8,371	0.34	5.95	97.11	16.26
				5,395,000	8,371	0.34	5.95	97.11	16.26
Houston Lighting and Power	W. A. Parish	C	Antelope	517,300	8,965	0.40	5.32	181.50	32.54
Houston Lighting and Power	W. A. Parish	S	Belle Ayr	183,800	8,493	0.30	4.68	125.47	21.31
Houston Lighting and Power	W. A. Parish	S	Black Thunder	81,500	8,773	0.32	5.35	123.12	21.60
Houston Lighting and Power	W. A. Parish	C	Caballo	822,400	8,517	0.38	4.84	188.23	32.05
Houston Lighting and Power	W. A. Parish	C	Cordero Rojo Cmplx	5,340,200	8,536	0.38	4.97	190.77	32.57
Houston Lighting and Power	W. A. Parish	C	Jacobs Ranch	2,302,800	8,680	0.43	5.28	188.21	32.67
Houston Lighting and Power	W. A. Parish	S	Jacobs Ranch	1,867,700	8,701	0.42	5.21	110.78	19.28
Houston Lighting and Power	W. A. Parish	C	North Antelope	110,200	8,910	0.19	4.31	122.32	21.80
Houston Lighting and Power	W. A. Parish	C	Rochelle	182,100	8,690	0.28	4.57	121.90	21.19
Houston Lighting and Power	W. A. Parish	S	Rawhide	24,700	8,429	0.41	5.09	197.70	33.33
				11,432,700	8,617	0.39	5.06	173.31	29.84
Lower Colorado River Authority	Fayette	C	Black Thunder	2,682,000	8,739	0.36	5.39	95.22	16.64
Lower Colorado River Authority	Fayette	C	Coal Creek	533,000	8,324	0.34	5.41	92.98	15.48
Lower Colorado River Authority	Fayette	S	Coal Creek	229,000	8,330	0.35	5.64	93.00	15.49
Lower Colorado River Authority	Fayette	C	Cordero Rojo Cmplx	1,760,000	8,428	0.32	5.53	94.19	15.88
Lower Colorado River Authority	Fayette	S	Cordero Rojo Cmplx	164,000	8,413	0.32	5.77	93.54	15.74
Lower Colorado River Authority	Fayette	C	Jacobs Ranch	54,000	8,721	0.34	5.41	93.98	16.39
Lower Colorado River Authority	Fayette	S	Jacobs Ranch	192,000	8,718	0.35	5.49	97.56	17.01
Lower Colorado River Authority	Fayette	S	Seminole II	54,000	9,317	0.37	6.12	93.42	17.41
				5,668,000	8,582	0.34	5.47	94.60	16.24
Southwestern Electric Power	Welsh Station	S	Antelope	47,000	8,821	0.29	4.88	162.29	28.64
Southwestern Electric Power	Welsh Station	S	Belle Ayr	71,000	8,769	0.21	5.18	151.00	26.48
Southwestern Electric Power	Welsh Station	S	Buckskin	564,000	8,419	0.45	5.29	128.08	21.57
Southwestern Electric Power	Welsh Station	C	Eagle Butte	3,935,000	8,370	0.39	4.69	172.18	28.82
Southwestern Electric Power	Welsh Station	S	Eagle Butte	1,159,000	8,370	0.38	4.68	143.58	24.03
Southwestern Electric Power	Welsh Station	S	Jacobs Ranch	856,000	8,685	0.45	5.36	121.44	21.10
				6,632,000	8,422	0.40	4.83	156.59	26.35

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Texas (cont.)

Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Southwestern Public Service	Harrington	C	Black Thunder	4,592,000	9,049	0.36	5.46	124.37	22.49
				4,592,000	9,049	0.36	5.46	124.37	22.49
Southwestern Public Service	Tolk	C	Black Thunder	3,865,690	8,706	0.35	5.32	215.53	36.82
Southwestern Public Service	Tolk	S	Black Thunder	64,980	8,677	0.34	5.36	126.71	22.00
Southwestern Public Service	Tolk	C	Coal Creek	375,350	8,554	0.36	5.38	148.20	25.35
Southwestern Public Service	Tolk	S	Coal Creek	10,620	8,554	0.36	5.38	104.60	17.89
				4,316,640	8,692	0.35	5.32	208.07	35.55
Texas Municipal Power Agency	Gibbons Creek	C	Antelope	123,351	8,825	0.31	5.63	119.40	21.07
Texas Municipal Power Agency	Gibbons Creek	S	Antelope	55,186	8,779	0.31	6.07	122.10	21.44
Texas Municipal Power Agency	Gibbons Creek	S	Black Thunder	94,401	8,735	0.34	5.44	120.70	21.09
Texas Municipal Power Agency	Gibbons Creek	C	Cordero Rojo Cmplx	971,074	8,476	0.30	5.15	118.67	20.12
Texas Municipal Power Agency	Gibbons Creek	S	Cordero Rojo Cmplx	389,468	8,384	0.33	5.76	120.69	20.24
				1,633,480	8,505	0.31	5.38	119.44	20.32
Texas Utilities Electric Co	Monticello	C	Belle Ayr	294,000	8,607	0.30	4.70	108.72	18.71
Texas Utilities Electric Co	Monticello	C	Jacobs Ranch	1,195,000	8,653	0.38	5.02	110.12	19.06
Texas Utilities Electric Co	Monticello	C	Seminole II	162,000	9,479	0.30	5.00	98.80	18.73
				1,651,000	8,726	0.36	4.96	108.76	18.96
West Texas Utilities (CSW)	Oklaunion	C	Buckskin	2,036,305	8,460	0.43	5.23	138.35	23.41
West Texas Utilities (CSW)	Oklaunion	S	Buckskin	201,560	8,411	0.45	5.19	100.67	16.94
West Texas Utilities (CSW)	Oklaunion	C	Cordero Rojo Cmplx	105,925	8,370	0.30	5.30	100.10	16.76
West Texas Utilities (CSW)	Oklaunion	S	Cordero Rojo Cmplx	768,842	8,513	0.30	4.96	101.63	17.31
West Texas Utilities (CSW)	Oklaunion	S	Jacobs Ranch	226	8,703	0.44	0.56	74.70	13.00
				3,112,858	8,467	0.39	5.17	125.54	21.25

Wisconsin



Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Dairyland Power Cooperative	Alma	C	North Antelope	7,500	8,963	0.16	4.20	113.90	20.42
Dairyland Power Cooperative	Alma	C	Rochelle	372,200	8,780	0.19	4.40	93.65	16.44
Dairyland Power Cooperative	Alma	C	N Antelope/Rochelle Cmplx	1,028,300	8,771	0.19	4.43	98.10	17.21
				1,408,000	8,775	0.19	4.42	97.01	17.03

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Wisconsin (cont.)

Company Name	Plant Name	CT	Source Name	Quantity	Btu	%Sulfur	%Ash	¢/mmBtu	\$/ton
Dairyland Power Cooperative	Genoa No.3	C	North Antelope	120,500	8,909	0.17	4.33	112.10	19.97
Dairyland Power Cooperative	Genoa No.3	C	N Antelope/Rochelle Cmplx	260,200	8,915	0.18	4.17	112.13	19.99
				380,700	8,913	0.18	4.22	112.12	19.99
Northern States Power	Bayfront	S	Seminole II	37,800	11,451	0.60	5.68	153.40	35.12
				37,800	11,451	0.60	5.68	153.40	35.12
Wisconsin Electric Power	Oak Creek	C	Antelope	619,900	8,809	0.26	5.59	92.09	16.22
Wisconsin Electric Power	Oak Creek	S	Antelope	472,400	8,790	0.23	5.19	96.99	17.05
Wisconsin Electric Power	Oak Creek	S	N Antelope/Rochelle Cmplx	151,700	8,884	0.20	4.40	92.66	16.46
				1,244,000	8,811	0.24	5.29	94.02	16.57
Wisconsin Electric Power	Pleasant Prairie	C	Antelope	12,400	8,714	0.22	5.60	77.70	13.54
Wisconsin Electric Power	Pleasant Prairie	C	Caballo	1,856,900	8,488	0.36	5.03	71.72	12.17
Wisconsin Electric Power	Pleasant Prairie	C	Coal Creek	815,600	8,329	0.34	5.39	74.92	12.48
Wisconsin Electric Power	Pleasant Prairie	C	Cordero Rojo Cmplx	1,756,500	8,473	0.30	5.01	75.42	12.78
Wisconsin Electric Power	Pleasant Prairie	S	Cordero Rojo Cmplx	284,100	8,353	0.32	5.98	74.38	12.43
Wisconsin Electric Power	Pleasant Prairie	S	N Antelope/Rochelle Cmplx	15,100	8,890	0.21	4.40	77.80	13.83
				4,740,600	8,449	0.33	5.14	73.83	12.48
Wisconsin Power and Light	Columbia	S	Buckskin	27,869	8,376	0.47	5.87	92.30	15.46
Wisconsin Power and Light	Columbia	C	Caballo	2,322,594	8,486	0.36	5.03	96.24	16.33
Wisconsin Power and Light	Columbia	S	Cordero Rojo Cmplx	1,560,367	8,387	0.33	5.78	91.00	15.27
				3,910,830	8,446	0.35	5.33	94.12	15.90
Wisconsin Power and Light	Edgewater	S	Belle Ayr	77,230	8,564	0.27	4.33	105.40	18.05
Wisconsin Power and Light	Edgewater	C	Black Thunder	1,303,128	8,734	0.35	5.36	116.69	20.38
Wisconsin Power and Light	Edgewater	C	Coal Creek	764,370	8,327	0.33	5.33	127.52	21.24
Wisconsin Power and Light	Edgewater	S	Coal Creek	575,378	8,323	0.33	5.41	108.47	18.06
Wisconsin Power and Light	Edgewater	S	Shoshone No. 1	164,309	10,783	0.62	5.86	149.59	32.26
				2,884,415	8,656	0.35	5.36	119.49	20.76
Wisconsin Public Service Corp	Pulliam	C	Caballo	92,000	8,497	0.36	4.93	95.28	16.19
Wisconsin Public Service Corp	Pulliam	C	North Antelope	498,000	8,866	0.18	4.38	96.41	17.10
Wisconsin Public Service Corp	Pulliam	C	N Antelope/Rochelle Cmplx	889,000	8,904	0.18	4.34	97.81	17.42
				1,479,000	8,866	0.19	4.39	97.18	17.23
Wisconsin Public Service Corp	Weston 3	C	Black Thunder	832,000	8,770	0.35	5.32	125.32	21.98
Wisconsin Public Service Corp	Weston 3	C	Caballo	56,000	8,479	0.37	5.12	102.29	17.35
Wisconsin Public Service Corp	Weston 3	S	Cordero Rojo Cmplx	12,000	8,356	0.29	5.90	93.30	15.59
Wisconsin Public Service Corp	Weston 3	C	North Antelope	373,000	8,889	0.18	4.26	98.60	17.53
Wisconsin Public Service Corp	Weston 3	C	N Antelope/Rochelle Cmplx	813,000	8,898	0.19	4.35	94.25	16.77
				2,086,000	8,831	0.26	4.75	107.63	18.99