

Existing and Proposed
Surface and Underground Coal Mines
Region VIII Summary

Environmental Protection Agency
Rocky Mountain - Prairie Region
Region VIII
February 1979



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII
1860 LINCOLN STREET
DENVER, COLORADO 80295

May 30, 1979

REF: 8EA

Dear Colleague:

EPA Region VIII is pleased to make the enclosed report on coal mining available to you. The report discusses and summarizes the current and projected mining activity for the five coal producing states (Colorado, Montana, North Dakota, Utah and Wyoming) in our Region. Data are presented for both surface and underground mining. Information is also presented on mine location, mine ownership, and market destination. It should be noted that most of this information was collected during early 1978. Therefore, the data do not reflect recent mining plans.

Coal production in the Region is expected to increase from the 1977 level of 104 million tons to about 328 million tons in 1987. Mining plans which must be considered as extremely speculative at this time if developed could increase the late 1980's figure to as much as 500 million tons. Coal produced from surface mining contributed 87 percent of the 1977 production in the Region and is projected to account for 86 percent of the "firm" 1987 production. The 1977 total of 74 mines is expected to reach 134 ("firm") to 215 ("speculative") by the late 1980's.

If you have any questions or comments regarding this publication, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry L. Thoen".

Terry L. Thoen
Acting Director
Energy Policy Coordination Office

Enclosure

Existing and Proposed
Surface and Underground Coal Mines
Region VIII Summary

U.S. Environmental Protection Agency
Region VIII
February 1979

Prepared by The
Office of Energy

DISCLAIMER

This report has been reviewed by the Office of Energy Activities, Region VIII, U. S. Environmental Protection Agency, and approved for publication. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

TABLE OF CONTENTS

	<u>Page</u>
Introduction	iv
Chapter 1 Summary Tables - Regional Coal Production	1
Chapter 2 Coal Mines - Existing	
Colorado	5
Montana	10
North Dakota	12
Utah	13
Wyoming	14
Chapter 3 Coal Mines - Planned	
Colorado	18
Montana	20
North Dakota	21
Utah	22
Wyoming	24
Chapter 4 Coal Mines - Speculative	
Colorado	27
Montana	29
North Dakota	30
Utah	31
Wyoming	34
Sources of Information	36

INTRODUCTION

This report provides a summary of existing and proposed surface and underground coal mines on a State-by-State basis for the five coal-producing states (Colorado, Montana, North Dakota, Utah and Wyoming) of EPA Region VIII.

With regard to "existing" mines, the summary includes surface and underground coal mines with a 1977 production rate of 25,000 tons or more. The "proposed" mine category has been divided into two subcategories. The "planned" subcategory includes coal mining operations which have been addressed in an application to a State reclamation authority or included in an Environmental Impact Statement. The second subcategory of proposed coal mines had been termed "speculative" due to the fact that although many proposed coal mining operations have been identified, applications covering many of these operations have not been submitted to State reclamation authorities nor have they been addressed in Environmental Impact Statements.

It should be noted that the majority of information included in this summary report was collected during the Summer of 1978. Therefore, the information presented may not reflect recent mine start-ups, recent submittals of mining applications, or recent Environmental Impact Statements.

Chapter 1 provides tables which summarize regional coal production. Table 1 indicates 1977 coal production by State and divides this production into that derived from surface mining and that resulting from underground mining. Total coal production in 1977 in EPA Region VIII was 104,389,805 tons. Table 1 also shows that surface mines contributed 90,702,165 tons (or about 87%) of this production while underground mines contributed 13,687,640 tons (or about 13%). Table 2 provides an estimate of expanded coal production by State if "planned" development by about 1987 is also considered. As indicated in this table, total region production is estimated to increase to 327,941,861 tons (i.e., over a three-fold increase) as compared to 1977 production. Table 3 shows estimated regional coal production by State if both "planned" and "speculative" development are considered. As shown in Table 3, total coal production with this level of coal development would be projected to reach 501,171,861 tons (or almost a five-fold increase as compared to existing production in 1977). Projects included in this latter subcategory should be considered nothing more than in the early planning phase. The projects may never come into being. Table 4 gives the number of coal mines in Region VIII by State. As this table indicates, the number of mines, considering both "planned" and "speculative" development is expected to reach 215 (as compared to 74 mines existing in 1977).

Chapters 2,3, and 4 of the report provide lists of the "existing", "planned", and "speculative" coal mines, respectively. Each chapter contains lists of mines by State. These tables also include information such as the county in which the mine is located, the mine name, the operator, the type of mine (i.e., surface or underground), production (with potential expansion), and the market for the coal (if it could be identified). Information for these chapters was obtained from numerous sources, which have been listed in the Sources of Information section of this report.

It is hoped that this summary report will provide assistance in identifying the extent, location, and type of existing and proposed coal mining activities in EPA Region VIII. Please direct any inquiries regarding information contained in this publication to the Office of Energy, EPA Region VIII (303-837-5914). Your comments on the format, details, and distribution of this report are welcomed. It is planned to provide annual or bi-annual updates of this document.

Table 1
1977 REGION VIII COAL PRODUCTION (TONS)*

<u>STATE</u>	<u>SURFACE</u>	<u>UNDERGROUND</u>	<u>TOTAL</u>
Colorado	7,714,232	4,206,791	11,921,023
Montana	27,340,905	0	27,340,905
North Dakota	12,224,499	0	12,224,499
Utah	0	8,856,536	8,856,536
Wyoming	43,422,529	624,313	44,046,842
	<hr/>	<hr/>	<hr/>
Total	90,702,165	13,687,640	104,389,805

*Includes production not specified on existing mine list (i.e., \leq 25,000 tons per year)

Table 2

REGION VIII COAL PRODUCTION (TONS)

EXISTING AND PLANNED DEVELOPMENT **

<u>STATE</u>	<u>SURFACE</u>	<u>UNDERGROUND</u>	<u>TOTAL</u>
Colorado	9,210,695	10,472,884	19,683,579
Montana	53,240,905	100,000	53,340,905
North Dakota	40,724,499	0	40,724,499
Utah	10,000,000	31,246,036	41,246,036
Wyoming	167,822,529	5,124,313	172,946,842
	<hr/>	<hr/>	<hr/>
TOTAL	280,998,628	46,943,233	327,941,861

*Using maximum expected productions for planned operations.

Table 3

REGION VIII COAL PRODUCTION (TONS)
EXISTING, PLANNED, AND SPECULATIVE DEVELOPMENT *

<u>STATE</u>	<u>Surface</u>	<u>Underground</u>	<u>Total</u>
Colorado	15,060,695	27,072,884	42,733,579
Montana	78,240,905	100,000	78,340,905
North Dakota	65,624,499	0	65,624,499
Utah	15,500,000	59,626,036	75,126,036
Wyoming	<u>234,222,529</u>	<u>5,124,313</u>	<u>239,346,842</u>
TOTAL	408,648,628	92,523,233	501,171,861

*Using maximum expected production for planned and speculative operations.

Table 4

REGION VIII - Number of Coal Mines

STATE	<u>EXISTING</u>		<u>PLANNED</u>		<u>SPECULATIVE</u>		<u>TOTAL</u>		<u>TOTAL</u>	
	Surface	Underground	Surface	Underground	Surface	Underground	Surface	Underground	Surface	Underground
Colorado	13	16	6	9	6	11	25	36	61	
Montana	5	0	5	1	5	1	15	2	17	
North Dakota	9	0	2	0	7	0	18	0	18	
Utah	0	14	1	14	5	31	6	59	65	
Wyoming	15	2	20	2	15	0	50	4	54	
TOTAL	42	32	34	26	38	43	114	101	215	

COAL MINES - EXISTING
STATE: COLORADO

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Delta</u> Orchard Valley Colorado Westmoreland Inc.		U	286,129 (1,250,000)	Mitchell Station, Northern Indiana Public Service Company Local domestic sales
<u>Fremont</u> Black Diamond Strip	GEC Minerals Inc.	S	30,079	Clark Station, Southern Colorado Power
Twin Pines	Twin Pines Coal Company	U	37,114	Clark Station, Southern Colorado Power
<u>Garfield</u> McClane Canyon (Loma Project)	Sheridan Enterprises	U	46,021 (3,500,000)	Unspecified out-of-state utilities
<u>Gunnison</u> Bear	Bear Coal Company	U	226,220 (243,000)	Cameo Station, Public Service of Colorado Various public utilities and indus- tries; local domestic sales
Hawk's Nest	West Slope Carbon, Inc.	U	190,349 (750,000)	CF & I Steel; Duck Creek Station, Central Illinois Light Company Wood River Station, Illinois Power Colorado Fuel and Iron Co., Pueblo, Colorado, Local Domestic Sales
Somerset	U.S. Steel Corporation	U	914,552 (9,400,000)	U.S. Steel Mill, Geneva Works, Orem, Utah
<u>Jackson</u> Canadian Strip	R. Flesch & Son (Sigma - Consol)	S	148,560	Duck Creek Station No. 1, Central Illinois Light Company

COAL MINES - EXISTING
STATE: COLORADO (CONTINUED)

COUNTY-MINE	OPERATOR	TYPE(S: SURFACE, U: UNDERGROUND)	1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)	MARKET
<u>Jackson (Cont.)</u> Marr Strip No. No. 1	The Mining Company (TMC) (Kerr Coal Company)	S	344,672	Streeter Station (IA), Cedar Falls Utilities Wright Station, Fremont (NE) Dept. of Public Utilities
<u>Las Animas</u> Allen	CF & I	U	582,257 (1,900,000)	CF & I coking coal
Healey Strip	Viking Coal Company	S	95,952	Brick and cement operations in TX
Jewell Strip	Viking Coal Company	S	25,591	In-state power generation
Maxwell	CF & I	U	31,815 (500,000)	CF & I coking coal
<u>Mesa</u> C.M.C.	Cambridge Mining Corpora- tion (General Exploration)	U	300,199 (1,400,000)	Cameo Station, Public Service of Colorado Navajo Station, Salt River Project Local domestic markets
<u>Moffat</u> Colowyo	Colowyo Coal Company	S	290,531 (3,000,000)	Drake Station, Colorado Springs Dept. of Public Utilities Coletto Creek Station, Central Power & Light Colorado, Corpus Cristi, Texas Ames Iowa Station, Ames Municipal Utility
Trapper	Utah International, Inc.	S	345,948 (2,200,000)	Craig Station, Colorado-Ute Electric Association Labadie Station, Union Electric
Wise Hill Nos. 5, 6, 7 & 9	Empire Energy Corp.	U	444,198 (2,400,000)	Prairie Creek, Sixth Street, and Sutherland Stations Iowa Electric Light & Power Drake Station, Colorado Springs Dept. of Public Utilities CF & I Steel

COAL MINES - EXISTING
STATE: COLORADO (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Jackson (Cont.)</u> Marr Strip No. 1	The Mining Company (TMC) (Kerr Coal Company)	S	344,672	Streeter Station (IA), Cedar Falls Utilities
<u>Las Animas</u> Allen	CF & I	U	582,257 (1,900,000)	CF & I coking coal
Healey Strip	Viking Coal Company	S	95,952	Brick and cement operations in TX
Jewell Strip	Viking Coal Company	S	25,591	In-state power generation
Maxwell	CF & I	U	31,815 (500,000)	CF & I coking coal
<u>Mesa</u> C.M.C.	Cambridge Mining Corpora- tion (General Exploration)	U	300,199 (1,400,000)	Cameo Station, Public Service of Colorado Navajo Station, Salt River Project Local domestic markets
<u>Moffat</u> Colowyo	Colowyo Coal Company	S	290,531 (3,000,000)	Drake Station, Colorado Springs Dept. of Public Utilities Coletto Creek Station, Central Power & Light Colorado, Corpus Cristi, Texas Ames Iowa Station, Ames Municipal Utility
Trapper	Utah International, Inc.	S	345,948 (2,200,000)	Craig Station, Colorado-Ute Electric Association Labadie Station, Union Electric
Wise Hill Nos. 5, 6, 7 & 9	Empire Energy Corp.	U	444,198 (2,400,000)	Prairie Creek, Sixth Street, and Sutherland Stations Iowa Electric Light & Power Drake Station, Colorado Springs Dept. of Public Utilities CF & I Steel

COAL MINES - EXISTING
STATE: COLORADO (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Montrose</u> Nucla	Peabody Coal Company	S	94,403 (100,000)	Nucla Station, Colorado-Ute Electric Association Local & domestic markets
<u>Pitkin</u> Bear Creek	Mid-Continent Coal & Coke Company	U	58,351 (400,000)	Metallurgical Coal (U.S. Steel Geneva Works, Orem, Utah; Kaiser Steel Fontana Plant, Fontana, CA)
Coal Basin	Mid-Continent Coal & Coke Company	U	123,182 (200,000)	Metallurgical Coal (U.S. Steel Geneva Works, Orem, Utah; Kaiser Steel Fontana Plant, Fontana, CA)
Dutch Creek No. 1	Mid-Continent Coal & Coke Company	U	232,481 (400,000)	Metallurgical Coal (U.S. Steel Geneva Works, Orem, Utah; Kaiser Steel Fontana Plant, Fontana, CA)
Dutch Creek No. 2	Mid-Continent Coal & Coke Company	U	208,142 (300,000)	Metallurgical Coal (U.S. Steel Geneva Works, Orem, Utah; Kaiser Steel Fontana Plant, Fontana, CA)
L.S. Wood	Mid-Continent Coal & Coke Company	U	298,405 (300,000)	Metallurgical Coal (U.S. Steel Geneva Works, Orem, Utah; Kaiser Steel Fontana Plant, Fontana, CA)
<u>Routt</u> Edna Strip	Pittsburg & Midway Coal Mining Company	S	1,081,255 (1,100,000)	Duck Creek #1, Central Illinois Light Company Wright Station, Fremont (NE) Dept. of Utilities

COAL MINES - EXISTING
STATE: COLORADO (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
Edna Strip (Cont.)				Drake Station, Colorado Springs, Dept. of Public Utilities
Energy Nos. 1 & 2	Energy Fuels Corp.	S	3,465,035	Arapahoe, Cherokee, & Cameo Stations, Public Service of Colorado
Energy No. 3	Energy Fuels Corp.	S	385,520	Midwestern Utilities Wood River Station, Illinois Power
Meadows Strip No. 1	Sun Coal Company	S	62,912	Central Illinois Light Company
Seneca	Peabody Coal Co.	S	1,291,025 (1,500,000)	Hayden Station, Colorado-Ute Electric Association
<u>Weld</u> Lincoln	Imperial Coal Company (Adolph Coors Company)	U	105,103 (300,000)	Arapahoe Station, Colorado Public Service Coors Industries

COAL MINES - EXISTING
STATE: MONTANA

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Big Horn</u> Absaroka	Westmoreland Resources	S	4,529,053 (14,000,000)	Sherburne County, Riverside, and High Bridge Stations, Northern States Power Company Kapp, Lansing, Dubuque, and Fox Lake Stations, Interstate Power Edwards Station, Central Illinois Light Company Alma and Genoa Station, Dairyland Power Pulliam Station, Wisconsin Public Service Company
Decker West	Decker Coal Company (Peter Kiewit Sons' Co. and Pacific Power and Light Company)	S	10,357,708 (11,500,000)	St. Clair Station, Detroit Edison Fisk, Crawford, Juliet, Powerton, Will County and Waukegan Stations, Commonwealth Edison State Line Station, Commonwealth Edison of Indiana
<u>Richland</u> Savage	Knife River Coal Mining Company (Montana - Dakota Utilities)	S	311,390 (400,000)	Lewis & Clark Station, Montana-Dakota Utilities
<u>Rosebud</u> Big Sky	Peabody Coal Company	S	2,333,460 (5,000,000)	Boswell and Laskin Stations, Minnesota Power and Light Co.
Colstrip	Western Energy Company (Montana Power Company)	S	9,773,675 (20,000,000)	Corette and Colstrip Stations, Montana Power Company Sherburne County, Riverside High Bridge and Minnesota Valley Stations Northern States Power

COAL MINES - EXISTING
STATE: MONTANA (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
Colstrip (Cont.)				Bay Front Station, Lake Superior District Power Virginia Municipal Power Station (MN), Dept. of Public Utilities Willmar Station (MN), Municipal Also stations of Commonwealth Edison

COAL MINES - EXISTING
STATE: NORTH DAKOTA

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Bowman</u> Gascoyne	Knife River Coal Mining Company (Montana - Dakota Utilities)	S	2,520,363 (3,100,000)	Big Stone Station, Montana-Dakota Utilities Otter Tail Power American Colloid Company
<u>Burke</u> Noonan	Baukol-Noonan, Inc.	S	463, 201	Stations in Larson, ND; Dreyton, ND, Grand Forks, ND; and Crookston, MN
<u>McClean</u> Falkirk	Falkirk Mining Company (North American Coal Company)	S	48,641 (7,000,000)	Coal Creek Station, Cooperative Power Association
<u>Mercer</u> Beulah	Knife River Coal Mining Company (Montana-Dakota Utilities)	S	1,882,569 (2,500,000)	Heskett, Knife River, and Coyote Stations, Montana-Dakota Utilities Hoot Lake Station, Otter Tail Power
Glenharold	Consolidation Coal Co.	S	3,381,885 (3,800,000)	Leland Olds Station, Basin Electric Power Cooperative
Indian Head	North American Coal Co.	S	787,897 (1,500,000)	Stanton Station, United Power Assoc.
<u>Oliver</u> Center	Baukol-Noonan, Inc.	S	2,647,187 (4,300,000)	M.R. Young Station, Minnkota Power Cooperative, Inc. and Minnesota Power and Light Company
<u>Stark</u> Husky Strip	Husky Industries, Inc.	S	131,179	Husky Industries (briquet process)
<u>Ward</u> Velva	Consolidation Coal Co.	S	319,197	W.J. Neal Station, Basin Electric Power Cooperative

COAL MINES - EXISTING
STATE: UTAH

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS)* (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Carbon</u>				
Belina No. 1	Valley Camp of Utah, Inc.	U	51,000 (800,000)	Gardner Station, Nevada Power
Braztah Nos. 3 & 5	Braztah Corp. (American Electric Power Corp.)	U	973,000 (3,500,000)	Midwest Power Generation
Gordon Creek Nos. 2 & 3 & Huntington No. 4	Swisher Coal Company	U	449,000 (1,000,000)	Power Station, (Mississippi), Southern Services
King	U.S. Fuel Company		822,000 (1,300,000)	Utah Industrial Use (Kennebecott) Gardner Station, Nevada Power
Soldier Canyon	Soldier Creek Coal Co. (California Portland Cement Co. and Premium Coal Co.)	U	536,353 (700,000)	California Portland Cement Co. Plants
Starpoint Nos. 1 & 2	Plateau Mining Co. (United Nuclear Corp.)	U	688,000 (1,200,000)	Mitchell Station, Northern Indiana Public Service Co. Gardner Station, Nevada Power Rush Island Station (MO), Union Electric
Sunnyside Nos. 1, 2, & 3	Kaiser Steel Corporation	U	708,000 (1,000,000)	Steel Production, Fontana, Californi.
<u>Emery</u>				
Church (for- merly Deseret and Beehive)	American Coal Co. (Utah Power and Light)	U	935,000 (1,000,000)	Carbon and Gadsby Stations, Utah Power and Light
Co-op	Co-op Mining Company	U	144,000	Utah Commercial

COAL MINES - EXISTING
STATE: UTAH (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS)* (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
Deer Creek	American Coal Co. (Utah Power and Light)	U	940,000 (2,400,000)	Huntington Canyon Station, Utah Power and Light
Dog Valley	Western States Coal Corp.	U	84,000 (500,000)	Domestic, industrial, and power generation in Utah, Washington, Idaho, California and Nevada
Geneva (Horse Canyon)	U.S. Steel Corporation	U	505, 000 (700,000)	U.S. Steel Geneva Steel Mill, Orem, Utah
Utah No. 2	Valley Camp of Utah, Inc.	U	163, 000 (300,000)	Utah Commercial Gardner Station, Nevada Power
Wilberg	American Coal Company (Utah Power and Light)	U	244,000 (2,200,000)	Emery Station, Utah Power and Light
<u>Sevier</u> Convulsion Canyon	Southern Utah Fuels Co.	U	1,336,000 (2,200,000)	Gavin Station, Ohio Electric Navajo Station, Salt River Project Labadie Station (MO), Union Electric Valmy Station (NV), Sierra Pacific Power Company (1981)

*Approximate production rates

COAL MINES - EXISTING
STATE: WYOMING

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
Campbell Belle Ayr	AMAX	S	13,303,000 (20,000,000)	La Cygne Station, Kansas City Power & Light Jeffrey Energy Center, Kansas City Power & Light Harrington Station, Southwest Public Service Comanche Station, Public Service of Colorado Muskogee Station, Oklahoma Electric Flint Creek Power Station, Southwestern Electric Power Council Bluffs Power Station, Iowa Power & Light Power Stations in Boulder & Pueblo, Colorado and Burlington, Iowa John Amos Station (W. VA), Appala- chian Power Company James E. Gavin Station (OH), American Electric Power Systems
Black Thunder	Thunder Basin Coal Co. (Atlantic Richfield Co.)	S	42,865 (30,000,000)	Columbus Station, Nebraska Public Power District Muskogee Station, Oklahoma Gas & Electric Amarillo, Southwest Public Service Green Bay, Wisconsin Public Service Corporation Fayette Power Project, Lower Colorado River Authority
Cordero	Sunedco (Sunoco Energy Development Company)	S	2,128,545 (24,000,000)	Deely Station (TX), City Public Service San Antonio, San Antonio Public Service

COAL MINES - EXISTING
STATE: WYOMING (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
Cordero (Cont.)				Laramie River Station, Basin Electric Power Corporation Ottumwa Station, Iowa Electric Utilities Louisa Station, Iowa-Illinois Gas & Electric Co., Iowa Public Service Co., Iowa Power & Light Co., Eastern Iowa Light & Power Cooperative & City of Tipton, Iowa (1982)
Rawhide	Carter Coal Company	S	1,096,240 (12,000,000)	Iowa Public Service Grand River Dam Authority Sioux City Station, Union Electric Nebraska City Station, Omaha Public Power District
Wyodak	Wyodak Resources Develop- ment Company	S	857,038 (5,000,000)	Neil Simpson, Osage, Ben French and Kirk Stations, Black Hills Power & Light Company
<u>Carbon</u> Medicine Bow	Medicine Bow Coal Company (Arch Minerals Corporation and Rocky Mountain Energy)	S	1,200,000 (3,000,000)	Neal Station, Iowa Public Service Tecumseh and Lawrence Station, Kansas City Power and Light Co. Mitchell Station, Northern Indiana Public Service Co., Labadie Station (MO), Union Electric, Rush Island Station (MO), Union Electric
Rimrock No. 1, 2, & 3	Energy Development (Iowa Public Service)	S	1,017,003 (To close in 1978)	Neal Station, Iowa Public Service
Rosebud	Rosebud Coal Sales (Peter Kiewit and Sons')	S	2,806,239	Neal Station, Iowa Public Service Rush Island Station (MO), Union Electric Valmont Station, Public Service of Colorado Omaha Public Service District North Omaha Station, Omaha Public River

COAL MINES - EXISTING
STATE: WYOMING (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Carbon</u> (Cont.) Seminole #1	Arch Mineral Corporation	S	2,242,137 (2,500,000)	Sheldon Station, Nebraska Public Power Hawthorn Station, Kansas City Power & Light Waukegan Station, Commonwealth Edison
Seminole #2	Arch Mineral Corporation	S	2,543,900 (3,500,000)	North Omaha Station, Omaha Public Power Michigan City, Schahfer, and Mitchell Stations, Northern Indiana Public Service Company Labadie Station (MO), Union Electric
Vanguard No. 2	Energy Development (Iowa Public Service)	U	387,936 (1,200,000)	Neal Station, Iowa Public Service
<u>Converse</u> Dave Johnston	Pacific Power and Light (NERCO)	S	3,236,616	Dave Johnston Station, Pacific Power and Light
<u>Lincoln</u> Skull Point	FMC	S	718,789 (1,000,000)	FMC Trona Plant and Formcoke Plant
South Block	Kemmerer Coal Company	S	4,385,065	Naughton Station, Utah Power & Light Kramer Station, Nebraska Public Power Allied Chemical Trona Plant Amalgamated Sugar
<u>Sheridan</u> Big Horn	Big Horn Coal Company (Peter Kiewit and Sons')	S	2,394,532	Fisk and Will County Stations, Commonwealth Edison Other Markets: MO, IL, WY, IA, SD, ND, MT, and MN

COAL MINES - EXISTING
STATE: WYOMING (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>1977 PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Sweetwater</u> Jim Bridger	Pacific Power and Light (NERCO)	S	5,448,953 (7,100,000)	Jim Bridger Station, Pacific Power and Light Spot markets in Idaho, Oregon, and Nevada
Stansbury No. 1	Rocky Mountain Energy and Ideal Basic Industries, Inc.	U	230,000 (1,000,000)	Ideal Cement Company Texas-Gulf Corporation Spot markets in Montana, Washington, Utah, Colorado, and Nebraska

COAL MINES - PLANNED
STATE: COLORADO

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Archuleta</u> Chimney Rock	Chimney Rock Coal Company	S	4,366 (1977) to 250,000 (by 1979)	CF&I (Pueblo, Colorado) and domestic uses.
<u>Delta</u> Blue Ribbon	Sunflower Energy Corp.	U	8,320 (1977) to 70,000 (by 1980)	Local domestic markets and public utilities
Tomahawk	Quinn Coal Co.	S	24,171 (1977) to 25, 000 (by 1980)	Various unspecified out-of-state utilities and local domestic sales
<u>Garfield</u> Sunlight	Carbon King Ltd.	U	1,792 (1977) to 500,000 (by 1985)	Local and domestic markets
<u>Gunnison</u> Mt. Gunnison	Atlantic Richfield Co.	U	2,130,000 (by 1985)	Unspecified utilities market (most likely out-of-state)
<u>Huerfano</u> Pryor Strip	Viking Coal Company	S	100,000 (by 1978)	In-state power generation and Texas cement plants
<u>Mesa</u> Cameo Nos. 1 & 2	General Exploration	U	800,000 (by 1980) to 1,400,000 (by 1985)	Mississippi Power Company, Jackson County, Mississippi
Coal Canyon	Mid-Continent Coal and Coke Co.	U	200,000 (by 1985)	Unspecified out-of-state utilities
Cottonwood Creek Nos. 1 & 2	Mid-Continent Coal and Coke Co.	U	400,000 (by 1985)	Unspecified out-of-state utilities
<u>Pitkin</u> Thompson Creek Nos. 1 & 3	Anshutz Coal Company	U	14,959 (1977) to 1,000,000 (by 1985)	Western metallurgical markets

COAL MINES - PLANNED
STATE: COLORADO (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Rio Blanco</u> Rienau No. 2 (Sewanee)	Northern Coal Group Northern Natural Gas Co.	U	8,836 (1977) to 300,000 (by 1980)	Utilities out-of-state & Indiana Public Service Company
<u>Routt</u> Grassy Creek	Rockcastle Coal Company	S	250,000 (by 1980)	Unspecified
Hayden Gulch	Yampa River Mining Co.	S	600,000 (by 1979)	Corpus Christi, TX utility
Milner	Northern Coal Group Northern Natural Gas Co.	S	300, 000 (by 1980)	Unspecified
Sun	Ruby Construction	U	300,000 (by 1978)	In-state markets

COAL MINES - PLANNED
STATE: MONTANA

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Big Horn</u> East Decker	Decker Coal Company (Peter Kiewit Sons' Co. and Pacific Power & Light)	S	4,900,000 (by 1980)	Power plants, City of Austin, TX, Commonwealth Edison, and Detroit Edison
North Decker	Decker Coal Company (Peter Kiewit Sons' Company and Pacific Power and Light)	S	2,000,000 (by 1981), to 4,000,000 (by 1985)	Power plants, City of Austin, TX, Commonwealth Edison, and Detroit Edison
Pearl	Shell Oil Company	S	1,000,000 (by 1981) to 2,000,000 (by 1982)	Unspecified
Spring Creek	Northern Energy Resources Company (NERCO)	S	3,000,000 (by 1980) to 10,000,000 (by 1982)	Contract with Utility Fuels, Inc. (subsidiary of Houston Industries)
<u>Carbon</u> Beartooth	Beartooth Coal Corp.	U	100,000 (by 1979)	Local markets
<u>Rosebud</u> Nance	MONTCO	S	3,000,000 (by 1982) to 5,000,000 (by 1965)	Unspecified

COAL MINES - PLANNED
STATE: NORTH DAKOTA

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Dunn</u> Unnamed (AMAX)	Natural Gas Pipeline Co. of America / AMAX	S	13,900,000 (1985)	Natural Gas Pipeline Co. Coal Gasification Plant
<u>Mercer</u> Coteau (Beulah North)	North American Coal Co. (Coteau Properties, Inc.)	S	14,600,000 (1985)	Antelope Valley Station, Basin Electric Power Cooperative (5,200,000 tons per year) American Natural Gas Co. Coal Gasifi- cation Plant (9,400,000 tons per year)

COAL MINES - PLANNED
STATE: UTAH

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Carbon</u> "B" Canyon	U.S. Steel Corporation	U	500,000 (by 1985) to 1,000,000 (by 1990)	U.S. Steel Mill, Geneva Works, Orem, Utah
Belina No. 2	Valley Camp of Utah, Inc.	U	700,000 (by 1985) to 1,000,000 (by 1990)	Unspecified
Deadman Canyon	AMCA Coal Leasing Inc.	U	700,000 (by 1985) to 1,000,000 (by 1990)	Unspecified
Dugout Canyon and Fish Creek (Sage Point)	Pacific Gas and Electric	U	2,000,000 (by 1985) to 3,200,000 (by 1990)	Proposed Pacific Gas and Electric power plant in northern California
McKinnon Nos. 1 & 2	Routt County Development Ltd.	U	2,200,000 (by 1985) to 3,500,000 (by 1990)	Unspecified
O'Connor No. 1	Valley Camp of Utah, Inc.	U	1,000,000 (by 1985) to 1,400,000 (by 1990)	Unspecified
<u>Emery</u> Mountain States Re- sources No. 1	Mountain States Resources	U	500,000 (by 1985)	Nevada Power, Intermountain Power Project, and Portland Cement Company of Utah (potential)
Trial Mountain	Trial Mountain Coal Company	U	10,500 (1977) to 1,000,000 (by 1985)	Sold to Swisher Coal Company
<u>Kane</u> Alton	Utah International, Inc. (Nevada Power Company)	S	5,000,000 (by 1985) to 10,000,000 (by 1990)	Proposed Harry Allen and Warner Valley Power Stations, Nevada Power Company
Blue	El Paso Energy Resources Company	U	350,000 (by 1985) to 500,000 (by 1990)	Arizona power plants

COAL MINES - PLANNED
STATE: UTAH (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Kane (Cont.)</u> John Henry	5 M Corporation	U	1,000,000 (by 1990)	Unspecified
Kaiparowits Nos. 1, 2, 3, 4, & 5	Mono Power (et. al.)	U	650,000 (by 1985) to 12,000,000 (by 1990)	Arizona power plant (1,000,000 TPY), full market unspecified
Red	El Paso Energy Resources Company	U	0 by (1985) to 6,300,000 (by 1990)	Unspecified
<u>Sevier</u> Knight	Coal Search Corporation	U	20,000 (1978) to 1,000,000 (by 1983)	Domestic markets in southern Idaho and power generation
Skumpah Canyon (Accord Lake)	Energy Reserves Group	U	700, 000 (by 1985) to 1,000,000 (by 1990)	Unspecified

COAL MINES - PLANNED
STATE: WYOMING

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
Campbell Buckskin	Shell Oil Company	S	4,000,000 (by 1981)	Unspecified
Caballo	Carter Coal Company	S	1,000,000 (by 1979) to 10,000,000 (by 1983) (under constru- ction)	Omaha Public Power
Coal Creek	Atlantic Richfield Co.	S	2,000,000 (by 1982) to 18,000,000 (by 1985)	Fayette Power Project, Lower Colorado River Authority Western Unit #3, Wisconsin Public Service Corporation
Eagle Butte	AMAX	S	3,800,000 (by 1978) to 16,300,000 (by 1985) (under construction)	Power stations in Southern, Mid- western, and Ohio River Valley States
East Gillette No. 16	Kerr-McGee Corporation	S	3,000,000 (by 1980) to 4,000,000 (by 1981) (under construction)	Power Station (LA), Cajun Electric Cooperative, Inc.
East Gillette	Kerr-McGee Corporation	S	1,200,000 (by 1980) to 12,500,000 (by 1982)	Unspecified
Jacobs Ranch	Kerr-McGee Corporation	S	2,500,000 (by 1978) to 15,000,000 (by 1985) (under construction)	Power stations, Arkansas Power & Light, Central Louisiana Electric Company, Gulf States Utilities, Public Service of Oklahoma, and Houston Power and Light
Pronghorn	Mobil Oil Company and Consolidation Coal Co.	S	2,000,000 (by 1980) to 5,000,000 (by 1982)	Unspecified
Rochelle	Peabody Coal Company	S	5,000,000 (by 1980) to 11,000,000 (by 1985)	Panhandle Eastern coal gasification plant

COAL MINES - PLANNED
STATE: WYOMING (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Campbell</u> (Cont.) <u>WYMO</u>	WYMO Fuels Inc. (Kansas City Power & Light)	S	4,000,000 (by 1979)	Kansas City Power and Light power stations
<u>Carbon</u> <u>Carbon County</u>	Carbon County Coal Co. (Dravo Corp. and Rocky Mountain Energy Co.)	U	200,000 (by 1979) to 2,500,000 (by 1980)	Northern Indiana Public Service Co.
<u>Cherokee</u>	Pacific Power and Light (NERCO)	S	2,000,000 (by 1984) to 3,500,000 (by 1985)	Pacific Power and Light power stations
<u>Fremont</u> <u>Muddy Creek</u> <u>Strip</u>	Muddy Creek Coal Company	S	350,000 (by 1979) to 1,000,000 (by 1985)	Utilities in Chicago area
<u>Lincoln</u> <u>North Block</u>	Kemmerer Coal Company	S	1,500,000 (by 1983)	Unspecified
<u>Twin Creek</u>	Cumberland Coal Company (Peter Kiewit Sons' Company and Rocky Mountain Energy Company)	S	3,000,000 (by 1983)	Customers in Idaho, Nevada, and Texas
<u>Sheridan</u> <u>Ash Creek</u> <u>(PSO #1)</u>	Public Service of Oklahoma	S	100,000 (by 1978) to 500,000 (by 1979)	Power plants, Public Service of Oklahoma
<u>Dutchman</u>	Great Plains Resources and Development Company	S	250,000 (by 1979)	Presently local industrial and domestic markets
<u>Welch</u>	Sheridan Enterprises	S	300,000 (by 1979) to 3,000,000 (by 1981)	Unspecified
<u>Whitney</u>	Peter Kiewit Sons' Company	S	1,000,000 (by 1980)	Unspecified

COAL MINES - PLANNED
STATE: WYOMING (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Sweetwater</u> Black Butte	Black Butte Coal Co. (Peter Kiewit Sons' Company and Rocky Mountain Energy Company)	S	7,000,000 (by 1984)	Power stations of Commonwealth Edison of Chicago and Idaho Power Company
Long Canyon	Sunoco Energy Development Company and Rocky Mountain Energy Company	U	2,000,000 (by 1984)	Power stations on the East Coast and in the Pacific Northwest
<u>Uinta</u> South Haystack	Cumberland Coal Company (Peter Kiewit Sons' Company and Rocky Mountain Energy Company)	S	3,000,000 (by 1980)	Power stations in Nevada and Pacific Northwest

COAL MINES - SPECULATIVE
STATE: COLORADO

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Adams</u> Watkins	Mintech Corp. (Cameron Engineers)	U	2,000,000 (by 1980) to 10,000,000 (by 1983)	Mine-Mouth Gasification
<u>Delta</u> King	Adolph Coors Co.	U	250,000 (by 1980) to 500,000 (by 1981)	Coors Industries
Fairview	Western States Coal Co.	U	250,000 (by 1985)	Local industry and domestic markets
Farmers	Coal Fuels Corporation	U	500,000 (by 1980)	Unspecified
<u>Elbert</u> Station Creek	Cameron Engineers	S	500,000 (by 1979) to 1,000,000 (by 1980)	Industrial fuel
<u>Gunnison</u> Edward's	Empire Energy	U	500,000 (by 1985)	Unspecified
<u>Jackson</u> Unnamed	Zapata-Getty	S	2,000,000 (by 1981)	Unknown
<u>Las Animas</u> Lorencito	Freeport Coal Company	U	200,000 (by 1982) to 1,000,000 (by 1984)	Eastern Steel Mills
Unnamed	Tipperary Oil and Gas Corp.	U	500,000 (1978)	Iron ore reduction plant in Western Kansas
<u>Mesa</u> McKinley	Eagle Head Coal Co.	U	300,500 (by 1978) to 500,000 (by 1984)	Unknown
McKinley No. 1	Energy and Export Co. Ltd.	U	100,000 (by 1978) to 300,000 (by 1982)	Unknown

COAL MINES - SPECULATIVE
STATE: COLORADO (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Rio Blanco</u> N.E. Rangely (Gordon)	Moon Lake Electric Co.	S & U	500,000 (by 1983) to 2,300,000 (by 1985)	Proposed Power Station, Moon Lake Electric Company
Rio Blanco County	Midland Coal Co.	S	200,000 (by 1981) to 300,000 (by 1982)	Unknown
<u>Routt</u> Dawson Unit	Coal Fuels Corp.	U	500,000 (by 1978) to 2,000,000 (by 1980)	Unknown
Routt County	American Electric Power Service Corporation	S	1,000,000 (by 1981) to 1,400,000 (by 1982)	Midwest power plants

COAL MINES - SPECULATIVE
STATE: MONTANA

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Big Horn</u> CX Ranch	Consolidation Coal Co.	S	1,500,000 (by 1981) to 5,000,000 (by 1983)	Unknown
<u>Blaine</u> Warburton	Blane Warburton	S	Unspecified	Local markets
<u>Carbon</u> Bridger	Don Morse	U	100,000 (by 1985)	Local markets
<u>Crow Reser- vation</u> East Sarpy Creek	AMAX	S	5,000,000 (by 1984)	Unknown
Youngs Creek	Shell Oil Company	S	4,000,000 (by 1982) to 10,000,000 (by 1985)	Contracts with Cajun Electric
<u>McCone</u> Circle West	Dreyer Brothers	S	1,000,000 (by 1984) to 5,000,000 by 1985)	Proposed Circle West Ammonia Plant

COAL MINES - SPECULATIVE
STATE: NORTH DAKOTA

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Grant</u> Sprecher	Knife River Coal Co.	S	3,101 (1977) to 1,500,000 (by 1985)	Unspecified
<u>McClean</u> Nokota No. 1 (Garrison)	Nokota Company	S	6,600,000 (by 1983)	Unspecified
No. 2 Mine	Nokota Company	S	3,300,000 (by 1983)	Unspecified
Underwood	Consolidation Coal Co.	S	1,500,000 (by 1985)	Unspecified
Washburn	Consolidation Coal Co.	S	5,000,000 (by 1985)	Unspecified
<u>Mercer</u> Dakota Star	Consolidation Coal Co.	S	4,000,000 (by 1982)	American Natural Gas Co. Coal Gasification Plant
Renner's Cove	Consolidation Coal Co.	S	3,000,000 (by 1984)	Unspecified

COAL MINES - SPECULATIVE
STATE: UTAH

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Carbon</u>				
Centennial	Centennial Resources Co.	U	1,000,000 (by 1981)	Unspecified
Clear Creek No. 7	Swisher Coal Company	U	300,000 (by 1990)	Unspecified
McKinnon No. 3	Routt County Development Ltd.	U	Unknown	Unknown
Mohrland	U.S. Fuels Company	U	400,000 (by 1980) to 2,500,000 (by 1984)	Unknown
Tip Top	John Sanders	U	50,000 (by 1990)	Unknown
Unnamed	Island Creek Coal Company	U	200,000 (by 1978)	Proposed California power plant
<u>Emery</u>				
Cedar Creek Canyon (King No. 6)	U.S. Fuel Company	U	1,500,000 (1990)	Unknown
Coal Creek No. 7	Swisher Coal Company	U	Unknown	Unknown
Cottonwood	Utah Power and Light	U	Unknown	Unknown
Crandall Canyon	Utah Power and Light	U	Unknown	Unknown
Emery No. 1	Emery Coal, Inc.	U	1,000,000 (by 1982)	Unspecified
Emery Strip	Consolidation Coal Company	S	1,500,000 (by 1982)	Unspecified
Huntington Canyon No. 5	Swisher Coal Company	U	500,000 (by 1985)	Unspecified

COAL MINES - SPECULATIVE
STATE: UTAH (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Emery (Cont.)</u>				
Meetinghouse	Utah Power and Light	U	Unknown	Unknown
North Horn Mountain	Utah Power and Light	U	2,000,000 (by 1990)	Unknown
Rilda Canyon	Western American Energy Corporation	U	200,000 (by 1978)	Unspecified
Thompson	Western American Energy Corporation (Wes-Pac Energy)	U	3,500 (1978) to 500,000 (by 1980)	Unspecified
<u>Garfield</u>				
Carcass Canyon	Utah Resources International, Phelps Dodge Corporation, and Belco Petroleum	U	Unknown	Unknown
Garfield	Utah Power and Light	U	4,000,000 (by 1990)	Unknown
Garfield County	Meadowlark Farms, Inc.	U & S	2,000,000 (by 1990)	Unknown
Lieu Lands	Utah Power and Light Company	U	Unknown	Unknown
Shakespeare	Fulton and Denton	U	30,000 (by 1990)	Unknown
White Mountain	Woods Petroleum Corporation	U & S	5,000,000 (by 1990)	Unknown
<u>Kane</u>				
Escalante	Utah Power and Light	U	2,000,000 (by 1983) to 6,000,000 (by 1985)	Proposed Garfield Power, Utah Power and Light Company
South Nipple Butte	Hiko Bell Mining and Oil Co.	U	500,000 (by 1990)	Unknown

COAL MINES - SPECULATIVE
STATE: UTAH (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Sanpete</u> Sanpete County	Canyon Fuel Company	U	400,000 (by 1990)	Unknown
<u>Sevier</u> Coastal States	Coastal States	U	Unknown	Unknown
Hansen	L.B. Hansen	U	700,000 (by 1990)	Unknown
Knight	Energy Reserves Group	U	500,000 (by 1978) to 1,500,000 (by 1980)	Unknown
Mountain States Resources Nos. 2, 3, 4, 5, & 6	Mountain States Resources	U	Unknown	Unknown
Old Woman Plateau	Utah Power and Light	U	Unknown	Unknown
Rock Canyon	Energy Reserves Group	U	700,000 (by 1979) to 1,500,000 (by 1980)	Unknown
Unnamed	Clinton Oil Company	U	1,000,000 (by 1980)	Commercial
<u>Uintah</u> Mill Draw	Energy Plus (Kandahar Resources)	S	Unknown	Unknown
<u>Wayne</u> Factory Butte	Atlas Minerals	S	300,000 (by 1978) to 500,000 (by 1980)	Unknown

COAL MINES - SPECULATIVE
STATE: WYOMING

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Campbell</u> 100% Mine	Mobil Oil Corporation	S	3,000,000 (by 1983) to 15,000,000 (by 1988)	Power stations in Upper Mississippi River Valley and Gulf Coast States
North Antelope	Peabody Coal Company and Panhandle Eastern Pipeline Company	S	3,000,000 (by 1982) to 5,000,000 (by 1984)	Power stations of Arkansas Power and Light and Middle South Utilities
South Rawhide	Carter Coal Company	S	7,000,000 (by 1985)	Unspecified
Wildcat Creek	Pittsburgh and Midway Coal Mining Company (Gulf Oil Company)	S	3,000,000 (by 1983) to 10,000,000 (by 1986)	Unknown
<u>Carbon</u> Atlantic Rim	Rocky Mountain Energy Company and Drummand	S	2,000,000 (by 1984)	Unknown
Carbon Basin	Commonwealth Edison	S	5,000,000 (by 1985)	Commonwealth Edison Power Stations
China Butte	Arch Minerals Corporation and Rocky Mountain Energy Company	S	4,000,000 (by 1982)	Unknown
Hanna South	Arch Minerals Corporation	S	Unknown	Unknown
North Knobs	Iowa Public Service (Energy Development)	S	500,000 (by 1982)	Iowa Public Service Power Stations
Red Rim	Iowa Public Service (Energy Development and Rocky Mountain Energy Company)	S	2,000,000 (by 1981)	Iowa Public Service Power Stations
<u>Converse</u> Antelope	Pacific Power and Light (NERCO)	S	3,000,000 (by 1983) to 10,000,000 (by 1985)	Pacific Power and Light Power stations

COAL MINES - SPECULATIVE
STATE: WYOMING (CONTINUED)

<u>COUNTY-MINE</u>	<u>OPERATOR</u>	<u>TYPE(S: SURFACE, U: UNDERGROUND)</u>	<u>EXPECTED PRODUCTION(TONS) (WITH POTENTIAL EXPANSION)</u>	<u>MARKET</u>
<u>Converse</u> (Cont.) <u>Unnamed</u>	Western Fuels	S	5,000,000 (by 1985)	Unknown
<u>Hot Springs</u> <u>Grass Creek</u>	Northwest Resources (Western Energy Company)	S	700,000 (by 1980)	Unknown
<u>Johnson</u> <u>Lake Desmet</u>	Texaco, Inc.	S	Unknown	Coal gasification
<u>Lincoln</u> <u>Deadman</u>	Cravat Coal	S	200,000 (by 1979)	Unknown

Sources of Information

1. Colorado Division of Mines, State Coal Mine Inspection Report, Colorado Department of Natural Resources.
2. Denver Federal Executive Board and Mountain Plains Federal Regional Council, A Listing of Proposed, Planned or Under Construction Energy Projects in Federal Region VIII (A joint report), August 1975.
3. Federal Energy Administration, Office of Coal Energy Resource Development, Western Coal Development Monitoring System Quarterly Summaries.
4. Geological Survey of Wyoming, The Wyoming Mineral Industry, A Survey of Wyoming, Public Information Circular No. 8, Laramie, Wyoming. 1978.
5. Glass, Gary B., Review of Wyoming Coal Fields, Geological Survey of Wyoming, Public Information Circular No. 4, September, 1976.
6. Magazines: Coal Age and American Mining Congress Journal.
7. Montana Department of Revenue, Tons of Coal Produced in Montana during 1977(as reported on Montana Coal Severence Tax Returns, 1978).
8. National Coal Association, Study of New Mine Additions and Major Expansion Plans of The Coal Industry and the Potential for Future Coal Production, November, 1977.
9. Newspapers: Rocky Mountain News, Denver, Colorado, and Star-Tribune, Casper, Wyoming, June 21, 1978.
10. Personal Communication with various State and Federal officials.
11. State of North Dakota, Office of State Tax Commissioner, Bismarck, North Dakota, July 11, 1978.
12. State of Utah, Department of Natural Resources, Utah Energy Resource Data, March 1976.
13. State of Utah, Industrial Commission of Utah - General Summary of Coal Production in 1977, 1978.
14. U.S. Department of Interior, Mining Enforcement and Safety Administration, Coal Mine Health and Safety, District 9, Mine Inventory List, July 23, 1976.

15. U.S. Department of Interior, Bureau of Mines, Projects to Expand Energy Sources in the Western United States - An Update of Information Circular 8719, (by Charles H. Rich, Jr.), Bureau of Mines Information Circular 8772, 1978.
16. U.S. Department of Interior, Bureau of Mines, Projects to Expand Fuel Sources in Western States, (by John S. Corsentino). Bureau of Mines Information Circular 8719, 1976.
17. U.S. Environmental Protection Agency, Region VIII, Surface Coal Mining in the Northern Great Plains of the Western United States, An Introduction and Inventory Utilizing Aerial Photography, Collected in 1974-75, OEA 76-1, June 1976.

TECHNICAL REPORT DATA <i>(Please read Instructions on the reverse before completing)</i>		
1. REPORT NO.	2.	3. RECIPIENT'S ACCESSION NO.
4. TITLE AND SUBTITLE Existing and Proposed Surface and Underground Coal Mines Region VIII Summary		5. REPORT DATE February 1979
		6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) Dan B. Kimball		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Office of Energy U.S. Environmental Protection Agency, Region VIII 1860 Lincoln Street Denver, Colorado 80295		10. PROGRAM ELEMENT NO.
		11. CONTRACT/GRANT NO.
12. SPONSORING AGENCY NAME AND ADDRESS U.S. Environmental Protection Agency, Region VIII 1860 Lincoln Street Denver, Colorado 80295		13. TYPE OF REPORT AND PERIOD COVERED In House
		14. SPONSORING AGENCY CODE
15. SUPPLEMENTARY NOTES		
16. ABSTRACT <p>Coal mining is expected to increase three-fold between 1978 and about 1985 in the EPA Region VIII States (Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming). This report provides detailed information on existing, proposed, and speculative mines. The information includes, location, mine operator, quantity of coal mined and type of mine.</p>		
17. KEY WORDS AND DOCUMENT ANALYSIS		
a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Coal Mining	Coal	
18. DISTRIBUTION STATEMENT Distribution Unlimited	19. SECURITY CLASS (This Report) Unclassified	21. NO. OF PAGES 45
	20. SECURITY CLASS (This page) Unclassified	22. PRICE

INSTRUCTIONS

- 1. REPORT NUMBER**
Insert the EPA report number as it appears on the cover of the publication.
- 2. LEAVE BLANK**
- 3. RECIPIENTS ACCESSION NUMBER**
Reserved for use by each report recipient.
- 4. TITLE AND SUBTITLE**
Title should indicate clearly and briefly the subject coverage of the report, and be displayed prominently. Set subtitle, if used, in smaller type or otherwise subordinate it to main title. When a report is prepared in more than one volume, repeat the primary title, add volume number and include subtitle for the specific title.
- 5. REPORT DATE**
Each report shall carry a date indicating at least month and year. Indicate the basis on which it was selected (*e.g., date of issue, date of approval, date of preparation, etc.*).
- 6. PERFORMING ORGANIZATION CODE**
Leave blank.
- 7. AUTHOR(S)**
Give name(s) in conventional order (*John R. Doe, J. Robert Doe, etc.*). List author's affiliation if it differs from the performing organization.
- 8. PERFORMING ORGANIZATION REPORT NUMBER**
Insert if performing organization wishes to assign this number.
- 9. PERFORMING ORGANIZATION NAME AND ADDRESS**
Give name, street, city, state, and ZIP code. List no more than two levels of an organizational hierarchy.
- 10. PROGRAM ELEMENT NUMBER**
Use the program element number under which the report was prepared. Subordinate numbers may be included in parentheses.
- 11. CONTRACT/GRANT NUMBER**
Insert contract or grant number under which report was prepared.
- 12. SPONSORING AGENCY NAME AND ADDRESS**
Include ZIP code.
- 13. TYPE OF REPORT AND PERIOD COVERED**
Indicate interim final, etc., and if applicable, dates covered.
- 14. SPONSORING AGENCY CODE**
Leave blank.
- 15. SUPPLEMENTARY NOTES**
Enter information not included elsewhere but useful, such as: Prepared in cooperation with, Translation of, Presented at conference of, To be published in, Supersedes, Supplements, etc.
- 16. ABSTRACT**
Include a brief (*200 words or less*) factual summary of the most significant information contained in the report. If the report contains a significant bibliography or literature survey, mention it here.
- 17. KEY WORDS AND DOCUMENT ANALYSIS**
 - (a) DESCRIPTORS - Select from the Thesaurus of Engineering and Scientific Terms the proper authorized terms that identify the major concept of the research and are sufficiently specific and precise to be used as index entries for cataloging.
 - (b) IDENTIFIERS AND OPEN-ENDED TERMS - Use identifiers for project names, code names, equipment designators, etc. Use open-ended terms written in descriptor form for those subjects for which no descriptor exists.
 - (c) COSATI FIELD GROUP - Field and group assignments are to be taken from the 1965 COSATI Subject Category List. Since the majority of documents are multidisciplinary in nature, the Primary Field/Group assignment(s) will be specific discipline, area of human endeavor, or type of physical object. The application(s) will be cross-referenced with secondary Field/Group assignments that will follow the primary posting(s).
- 18. DISTRIBUTION STATEMENT**
Denote releasability to the public or limitation for reasons other than security for example "Release Unlimited." Cite any availability to the public, with address and price.
- 19. & 20. SECURITY CLASSIFICATION**
DO NOT submit classified reports to the National Technical Information service.
- 21. NUMBER OF PAGES**
Insert the total number of pages, including this one and unnumbered pages, but exclude distribution list, if any.
- 22. PRICE**
Insert the price set by the National Technical Information Service or the Government Printing Office, if known.