

STATE OF MONTANA
BUREAU OF MINES AND GEOLOGY
Uno M. Sahinen, Director

BULLETIN 82

DIRECTORY OF MINING ENTERPRISES FOR 1970

with a

LIST OF COAL MINES, 1970

Compiled by

Miller Hansen
Montana Bureau of Mines and Geology

and a section on

THE MINERAL INDUSTRY OF MONTANA IN 1970

by

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U. S. Department of the Interior, Bureau of Mines

This bulletin has been prepared with the cooperation of Max Salazar
State Mine Inspector



MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY
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DIRECTORY OF MINING ENTERPRISES

FOR 1970

by

Miller Hansen

INTRODUCTION

Each year Bureau geologists visit many mining properties in Montana in addition to work on their regular field projects. As it is not possible to visit in person all properties in the state during the year, information is requested from Montana mine operators and owners relating to mining activities. The responses to this canvassing and personal interviews are then compiled and published annually in our Directory of Mining Enterprises.

Mining enterprises are listed systematically in categories in the main body of the Directory, either under Metal Mines or under Nonmetal Mines, Pits, and Quarries. In order, these categories are kind of ore or mineral produced; county in which the mine is situated; and the name of the mine. Additional information includes location of the property based on legal subdivisions of land survey; type of ore mined; mining district in which the property is situated; number of employees; mill capacity, if any; operator's name and address; owner's name and address; and yearly status, i.e., whether the property produced ore during the year, is still producing, developed ore without producing, or remained totally inactive. To facilitate looking up a mining enterprise, an index of mines, mine owners, and operators is included at the back of the Directory.

The Directory also contains a list of presently inactive mines. The list is not a complete one, as it is not possible to list all such mining properties in Montana in a publication this size. For this reason, the list is a compilation of only those properties that have undergone development work or have produced ore within recent years but were inactive for a period of more than one year. Mines inactive for a period of three consecutive years are dropped entirely from the Directory.

The rest of the Directory contains a list of Montana coal mines active in 1970 and a report entitled "The Mineral Industry of Montana in 1970," by F. V. Carrillo, W. N. Hale, and Mary Anne McComb, of the Bureau of Mines, U. S. Department of the Interior, Region I.

The compiler thanks the many Montana mine owners and operators for allowing information on their activities to be published. Special acknowledgment is due Mr. Carrillo, Mr. Hale, and Mrs. McComb for their part in this publication.

Every effort has been made to publish exact and complete information. The fact that a property is listed in the Directory, however, is not to be regarded as an endorsement of the property by the Montana Bureau of Mines and Geology. Conversely, if a property is omitted from the Directory, the omission is not to be taken as questioning its value or future. Such omissions are known to occur, but most are traceable to failure by the last known operator to respond to repeated requests for necessary information. Nevertheless, in most such cases, the missing data have been supplied from the best sources available.

If any additional facts or corrections can be provided, please submit such information to the Montana Bureau of Mines and Geology, Butte, Montana, 59701. Your help is needed to keep this yearly publication as up to date and accurate as possible.

The abbreviations used throughout the Directory are: sec., section; T., township; R., range; and t/d, tons per day.

PART 1, METAL MINES

ANTIMONY MINES

LINCOLN COUNTY: Libby

WHITE PINE CLAIM Stibnite, molybdenite
Troy district
Operator: Richard Fifield, Box 432
Troy, MT 59935
Owner: Same as operator
Status: Developing

SANDERS COUNTY: Thompson Falls

BABBIT MINE Stibnite
Prospect Creek dist., sec. 17, T. 21 N., R. 31 W.
Operator: John C. Lawrence, Box 643
Thompson Falls, MT 59873
Owner: U. S. Antimony Corp., Box 643
Thompson Falls, MT 59873
Employees: 15
Mill capacity: 300 t/d
Status: Producing and developing

CHROME MINES

STILLWATER COUNTY: Columbus

MOUAT MINE Chrome ore
Nye dist., sec. 20, T. 5 S., R. 15 E.
Owner-Operator: The Anaconda Co.
Butte, MT 59701
Status: Inactive

GOLD, SILVER, COPPER, LEAD, ZINC MINES

BEAVERHEAD COUNTY: Dillon

AJAX MINE Gold, silver, lead
Swamp Creek dist., sec. 7, T. 6 S., R. 17 W.
Operator: Clayton Jenkins
Sula, MT 59871
Owner: H. E. Morse
Dillon, MT 59725
Status: Developing

COMET GROUP Gold, silver, lead
Elkhorn dist., sec. 26, T. 4 S., R. 12 W.
Operator: Blue Sky Mining Corp.
Dillon, MT 59725
Owner: Same as operator
Employees: 2
Status: Developing and producing

BLUE EYED ANNIE MINE Silver
Elkhorn dist., unsurveyed, T. 4 S., R. 12 W.
Owner: John Miller
Polaris, MT 59746
Status: Inactive

COTTONTAIL MINE Silver, copper, lead
Blue Wing dist., sec. 28, 33, T. 7 S., R. 11 W.
Operator: Spokane National Mines, Inc.
424 Hutton Bldg., Spokane, WA 99204
Owner: Same as operator
Employees: 6
Status: Developing

CLEVE-AVON and FRANKLIN MINE Gold, silver
Bryant (Hecla) dist., sec. 2, T. 3 S., R. 11 W.
Operator: Lively's Inc.
Melrose, MT 59743
Owner: Same as operator
Status: Unknown

*DIADEM GROUP (ARNOLD) MINE Gold, silver,
copper, lead, zinc
Wisdom dist., sec. 7, 18, T. 3 S., R. 14 W.
Owner: Diadem Co.
618 S. Jefferson Ave., Spokane, WA 99204
Status: Unknown

*Open pit.

BEAVERHEAD COUNTY--Continued

- **FAITHFUL MINE** Silver
Vipond Park dist., sec. 3, T. 2 S., R. 11 W.
Operator: Jim Arnoldi
2920 Quincy, Butte, MT 59701
Owner: Jim Arnoldi and others
2920 Quincy, Butte, MT 59701
Employees: 1
Status: Inactive
- GOLDSMITH MINE** Gold, silver, lead, zinc
Argenta dist., NW¼ NE¼ sec. 30, T. 6 S., R. 10 W.
Operator: Argenta Silver Development Co.
Dillon, MT 59725
Owner: Goldsmith Mining Corp.
Bannack Star Rte., Dillon, MT 59725
Status: Developing
- *GREEN LIZARD MINE** Silver
Vipond Park dist., sec. 2, T. 2 S., R. 11 W.
Operator: Silver Valley Mining Co.
Salt Lake City, UT 84100
Owner: Omer H. Boeh
2121 Locust St., Butte, MT 59701
Status: Producing and developing
- HECLA MINE** Gold, silver
Bryant (Hecla) dist., sec. 2, T. 3 S., R. 11 W.
Owner-Operator: Lively's Inc.
Melrose, MT 59743
Status: Unknown
- *HORN SILVER MINE** Silver
Argenta dist., sec. 18, 19, T. 6 S., R. 10 W.
Operator: Kenneth Langstaff
Dillon, MT 59725
Owner: Big West Resources
905 E. Third, Spokane, WA 99202
Status: Produced
- *INGERSOL GROUP** Gold, silver, lead, zinc
Blue Wing dist., sec. 3, T. 7 S., R. 11 W.;
sec. 4, T. 8 S., R. 11 W.
Owner-Operator: Rex Land Co.
Box 1771, Seattle, WA 98111
Employees: 4
Status: Developing
- LEADVILLE MINE** Silver, lead
Vipond Park dist., sec. 34, T. 1 S., R. 11 W.
Owner-Operator: Art Semsak
Butte, MT 59701
Status: Unknown
- LUCKY STRIKE MINE** Gold, silver, copper
Chinatown (Horse Prairie) dist., sec. 14, T. 11 S., R. 13 W.
Owner-Operator: Owen Adams
Box 64, Teasdale, UT 84773
Status: Developing
- *MAIDEN CREEK COPPER MINE** Copper
Chinatown dist., sec. 23, T. 11 S., R. 13 W.
Owner-Operator: Chester A. Given
Rte. 1, Box 44-C, Arco, ID 83213
Status: Inactive
- HAND MINE** Gold, silver, lead
Argenta dist., NW¼ NW¼ sec. 29, T. 6 S., R. 10 W.
Operator: William M. Hand
30 S. Arizona, Dillon, MT 59725
Owner: John Hand Estate
Employees: 6
Status: Producing
- NEW ARIADNE MINE** Gold, silver
Hecla dist., sec. 2, T. 3 S., R. 11 W.
Owner-Operator: Lively's Inc.
Melrose, MT 59743
Status: Unknown
- NEW DEPARTURE MINE** Gold, silver, lead, zinc
Blue Wing dist., NW¼ NW¼ sec. 26, T. 7 S., R. 11 W.
Owner-Operator: Spokane National Mines, Inc.
424 Hutton Bldg., Spokane, WA 99204
Status: Producing and developing
- **POLARIS MINE** Silver
Polaris (Lost Cloud) dist., sec. 28, T. 5 S., R. 12 W.
Operator: Midnite Mines, Inc.
North 711 Lincoln, Spokane, WA 99201
Owner: Milton E. Hayes
Dillon, MT 59725
Status: Developing
- QUARTZ HILL GROUP** Silver
Quartz Hill dist., sec. 25, T. 1 S., R. 11 W.
Operator: New Park Mining Co.
c/o Leonard Garrand, Divide, MT 59727
Owner: Quartz Hill Mining Co.
Box 2902, Portland, OR 97208
Employees: 3
Status: Developing
- QUEEN OF THE HILLS 1, 2, 3, and 4** Gold, silver, lead
Vipond Park dist., sec. 10, T. 2 S., R. 11 W.
Owner-Operator: Otis Redwine
80 E. Park, Butte, MT 59701
Status: Unknown

*Open pit; **Open pit and underground

BEAVERHEAD COUNTY—Continued

SILVER BELLE GROUP Silver, lead
Blue Wing dist., sec. 29, T. 7 S., R. 11 W.
Owner-Operator: Spokane National Mines, Inc.
424 Hutton Bldg., Spokane, WA 99204
Status: Inactive

SILVER QUEEN MINE Silver
Jake Canyon dist., sec. 17, T. 10 S., R. 7 W.
Operator: Silver Queen Exploration Ltd.
2114 Curtis St., Denver, CO 80205
Owner: Silver Queen Exploration Ltd.
Dillon, MT 59725
Employees: 3
Status: Developing

TENDER GROUP Gold, silver, copper, lead, zinc, antimony
Argenta dist., sec. 24, T. 6 S., R. 11 W.
Owner-Operator: Claude H. Brown
Box 94, Dillon, MT 59725
Status: Producing and developing

VIRGINIA GULCH MINE Gold, silver
Argenta dist., sec. 15, T. 6 S., R. 11 W.
Owner-Operator: Kenneth Langstaff
Dillon, MT 59725
Status: Developing

***WEST ERMONT MINE**
Argenta dist., sec. 35, T. 6 S., R. 11 W.
Owner-Operator: Big West Resources
905 E. Third, Spokane, WA 99202
Status: Producing and developing

YELLOW BAND (SHAFER) GROUP Gold, silver
Argenta dist., SE¼ SE¼ sec. 2, T. 6 S., R. 11 W.
Operator: John Shafer
205 W. Center, Dillon, MT 59725
Owner: John Shafer and Associates
Dillon, MT 59725
Status: Unknown

BLAINE COUNTY: Chisnoek

LINDA MINE Silver, lead
Bearpaw Mountains dist., sec. 19, T. 29 N., R. 19 E.
Owner-Operator: Bearpaw Development Co., Homer Pike, Secy.
1639 - 5th Ave. NW, Great Falls, MT 59401
Employees: 2
Status: Developing

BROADWATER COUNTY: Townsend

BONANZA MINE Silver, lead
Radersburg dist., sec. 19, T. 6 N., R. 1 W.
Operator: John Byrd
York Rte., Helena, MT 59601
Owner: George Porte
528 Dearborn, Helena, MT 59601
Status: Inactive

JANUARY MINE Silver, lead
Winston dist., sec. 26, T. 8 N., R. 1 W.
Owner-Operator: Mineral Resources Development Co.
2433 N. Montana Ave., Helena, MT 59601
Status: Developing

JEANETTE MINE Gold, silver, lead
Winston district
Owner-Operator: Harold Hogan
1243 N. 160th, Seattle, WA 98133
Status: Unknown

JO DANDY MINE Silver, lead, zinc
Radersburg dist., sec. 28, T. 5 N., R. 1 W.
Operator: Kinley Enterprises, c/o A. D. Brown
1315 W. Granite, Butte, MT 59701
Owner: Kinley Enterprises
Round Hill Rd., Greenwich, CT 06830
Employees: 5
Status: Producing and developing

LOOMIS MINE
Operator: Robert Loomis
Cleo Springs, OK 73729

***MOUNTAIN VIEW MINE** Gold, silver, lead
Winston dist., T. 8 N., R. 1 W.
Owner-Operator: R. Gleason,
Winston, MT 59647
Status: Producing

*Open pit.

BROADWATER COUNTY—Continued

PIONEER MINE Silver
Indian Creek dist., sec. 35, T. 7 N., R. 1 W.
Owner-Operator: Bill Lowery
Box 93, Townsend, MT 59644
Status: Developing

RUBY SILVER MINE Silver, copper, lead, zinc
Radersburg dist., sec. 33, T. 5 N., R. 1 W.
Owner-Operator: W. R. Wade
Marysville, MT 59640
Status: Developing and producing

SANTA ANITA MINE Gold, silver, lead, zinc
Cedar Plains dist., sec. 28, 35, T. 5 N., R. 1 W.
Operator: Kinley Enterprises, c/o A. D. Brown
1315 W. Granite, Butte, MT 59701
Owner: Kinley Enterprises
Round Hill Rd., Greenwich, CT 06830
Employees: 3
Status: Producing and developing

CASCADE COUNTY: Great Falls

DACOTA MINE Silver, lead, zinc
Neihart dist., sec. 29, 30, 31, 32, T. 14 N., R. 8 E.
Owner-Operator: Carroll R. Bennett
Box 2267, Great Falls, MT 59401
Status: Inactive

FLORENCE MINE Silver, lead, zinc
Neihart dist., sec. 29, 30, 31, 32, T. 14 N., R. 8 E.
Owner-Operator: Carroll R. Bennett
Box 2267, Great Falls, MT 59401
Status: Exploring

LEXINGTON MINE Gold, silver, lead
Montana dist., sec. 28, T. 14 N., R. 8 E.
Owner-Operator: Lexington Silver-Lead Mining Co.
621 Columbia Bldg., Spokane, WA 99204
Status: Developing

MOGUL LODGE MINE Silver, lead
Neihart dist., sec. 32, T. 14 N., R. 8 E.
Owner-Operator: Arthur Schaub
Chester, MT 59522
Status: Unknown

*Open pit.

SUMMIT (OLD SUMMIT) and BLACKHAWK MINE
Silver, lead, zinc
Cedar Plains dist., sec. 16, 17, 20, T. 4 N., R. 1 W.
Owner-Operator: Roy E. Nicolls
Toston, MT 59643
Employees: 2
Status: Developing

*VALLEY VIEW MINE Gold, silver, lead, zinc
Park (Indian Creek) dist., sec. 24, T. 7 N., R. 1 E.
Owner-Operator: Warren Schreiner
Box 665, Townsend, MT 59644
Status: Developing

MORNING STAR MINE Silver, lead, zinc
Neihart dist., unsurveyed sec. 29, T. 14 N., R. 8 E.
Owner-Operator: Northwest Mines Development Corp.
W. 714 Sprague, Spokane, WA 99201
Employees: 15
Mill capacity: 75 t/d
Status: Developing

MOULTON-BROADWATER MINE Silver, lead, zinc
Neihart dist., unsurveyed sec. 29, 32, T. 14 N., R. 8 E.
Owner-Operator: Peter J. Antonioli and Sons
1001 W. Gold, Butte, MT 59701
Employees: 5
Status: Producing

*PONDEROSA MINE Silver, copper, lead, zinc
Neihart dist., sec. 15, T. 14 N., R. 8 E.
Operator: James M. Morgan
Box 653, Billings, MT 59101
Owner: Montana Mining and Development Co.
Box 653, Billings, MT 59101
Employees: 5
Status: Developing

*SILVER DYKE MINE Silver, lead, zinc
Neihart dist., sec. 10, T. 14 N., R. 8 E.
Owner-Operator: Peter J. Antonioli and Sons
1001 W. Gold, Butte, MT 59701
Employees: 4
Status: Developing

DEER LODGE COUNTY: Anaconda

ALTURAS MINE Gold, silver
T. 5 N., R. 13 W.
Operator: Lee Wattula
Philipsburg, MT 59858
Status: Unknown

APEX MINE Gold
Georgetown dist., sec. 4, T. 5 S., R. 13 W.
Owner: Albert Sletton
2905 Cable Rd., Anaconda, MT 59711
Status: Developing

CHAMPION SILVER MINE Gold, silver
Oro Fino dist., sec. 28, 33, T. 6 N., R. 8 W.
Operator: Champion Silver Mining Co.
411 Metals Bank Bldg., Butte, MT 59701
Owner: The Anaconda Co.
Butte, MT 59701
Employees: 5
Status: Producing and developing

COTTONWOOD MINE Silver
Oro Fino dist., sec. 8, T. 5 N., R. 8 W.
Operator: Forest Berglund
Box 231, Lincoln, MT 59639
Owner: Cottonwood Silver Mining Co.
Great Falls, MT 59401
Status: Developing

**GREAT EASTERN MINE Silver, copper, zinc
Lost Creek dist., sec. 9, 10, 34, T. 5 N., R. 11 W.
Owner-Operator: C. L. Bergloff
6082 Florence, Riverside, CA 92504
Status: Developing

MINNEHAHA, HORSESHOE, and HELENA, Gold, silver
Georgetown dist., sec. 9, T. 5 N., R. 13 W.
Owner-Operator: William J. Dean and Son
309 S. Arizona, Butte, MT 59701
Status: Inactive

PYRITE MINE Gold
Georgetown dist., sec. 4, T. 5 N., R. 13 W.
Owner: Albert Sletton
2905 Cable Rd., Anaconda, MT 59711
Status: Inactive

SILVER MOSS MINE Gold, silver
Silver Lake dist., T. 5 N., R. 13 W.
Operator: Allen Loobey
Philipsburg, MT 59858
Status: Produced

SILVER REEF MINE Gold, silver
Silver Lake dist., sec. 22, T. 5 N., R. 13 W.
Owner-Operator: W. C. Montgomery
1818 W. Park, Anaconda, MT 59711
Status: Produced

FERGUS COUNTY: Lewistown

BARNES-KING and KENDALL MINE Gold, silver
North Moccasin dist., sec. 32, T. 18 N., R. 18 E.
Owner-Operator: Judith Gold Corp.
Box 68, Kellogg, ID 83837
Status: Inactive

BIG GRASSY GROUP Gold, silver
Warm Springs dist., sec. 30, T. 17 N., R. 20 E.
Operator: Blue Range Mining Co.
Rte. 3, Box 35, Lewistown, MT 59457
Owner: L. C. Hoffman
Lewistown, MT 59457
Status: Inactive

BLACK BULL MINE Gold, silver, copper, lead, zinc
Warm Springs dist., sec. 7, T. 16 N., R. 20 E.
Owner-Operator: G. S. Abbott
Gilt Edge Rte., Lewistown, MT 59457
Status: Developing

*Open pit; **Open pit and underground.

*MINE NO. 4 MINE Gold, silver, copper, lead, zinc
Warm Springs dist., sec. 7, 18, T. 16 N., R. 20 E.
Operator: S & P Mining Co.
204 E. Washington St., Lewistown, MT 59457
Owner: Thomas A. Pentecost & Sons
204 E. Washington St., Lewistown, MT 59457
Status: Developing

*MYRANDA CLAIM Gold, silver, lead
Warm Springs dist., sec. 8, T. 16 N., R. 20 E.
Operator: L. A. Sandman
Box 189, Lewistown, MT 59457
Owner: L. A. Sandman and others
Box 189, Lewistown, MT 59457
Status: Developing

REPUBLIC MINE Silver, lead, zinc
South Moccasin dist., sec. 23, T. 16 N., R. 17 E.
Owner-Operator: C. L. Kuhnhausen
4906 NE 60th St., Vancouver, WA 98661
Status: Unknown

FERGUS COUNTY—Continued

SHEEP MOUNTAIN MINE Gold, silver, copper, lead
 Warm Springs dist., sec. 4, 5, T. 16 N., R. 20 E.
 Owner-Operator: Lawrence Lenling and others
 Box 74, Lewistown, MT 59457
 Employees: 3
 Status: Developing

SPOTTED HORSE MINE Gold, silver, tellurium, lead,
 zinc
 Warm Springs dist., sec. 5, T. 16 N., R. 20 E.
 Operator: L. C. Hoffman, Blue Range Mining Co.
 Rte. 3, Box 35, Lewistown, MT 59457
 Owner: First Trust Co. of Montana, trustee
 Great Falls, MT 59401
 Status: Developing

FLATHEAD COUNTY: Kalispell

***FLATHEAD-WEST FLATHEAD MINE** Silver,
 copper, lead
 Hog Heaven dist., sec. 17, T. 25 N., R. 23 W.
 Operator: Waino Lindbom
 1545½ - 7th Ave. W., Kalispell, MT 59901
 Owner: The Anaconda Co.
 Butte, MT 59701
 Employees: 9
 Status: Producing and developing

****SANKO CREEK MINE** Gold, silver, copper
 Star Meadow dist., NW¼ sec. 29, T. 31 N., R. 24 W.
 Operator: Kenneth Fishel
 Rte. 3, Kalispell, MT 59901
 Status: Unknown

GALLATIN COUNTY: Bozeman

***SUNSHINE MINE** Lead
 Hyalite dist., sec. 31, T. 3 S., R. 6 E.
 Owner: Ernest Wehren
 421½ Perkins Pl., Bozeman, MT 59715
 Status: Unknown

GRANITE COUNTY: Philipsburg

BANNER TAILINGS Gold, silver
 Moose Lake dist., sec. 36, T. 4 N., R. 16 W.
 Operator: Dick Tunstill
 Philipsburg, MT 59858
 Status: Unknown

BLUE BIRD MINE Gold, silver, copper
 Rose Mountain dist., sec. 26, T. 8 N., R. 12 W.
 Owner-Operator: Ben Walkup
 Philipsburg, MT 59858
 Status: Developing

BIG EXPECTATION MINE
 Philipsburg dist., T. 7 N., R. 13 W.
 Operator: Spartan Research & Development Co.
 Philipsburg, MT 59858
 Status: Unknown

****BROOKLYN MINE** Silver, copper, lead, zinc, bismuth
 Boulder Creek dist., SW¼ NE¼ sec. 4, 5, T. 7 N., R. 12 W.
 Owner-Operator: Black and White Mining Co.
 c/o R. F. Little, 4207 - 21st Ave., Missoula, MT 59801
 Status: Produced and developing

***BLACK PINE TAILINGS** Gold, silver, silica
 Black Pine dist., sec. 16, T. 8 N., R. 14 W.
 Operator: Ben Walkup
 Philipsburg, MT 59858
 Owner: August Buschmann Estate
 Seattle, WA 98100
 Status: Produced

CADGIE-TAYLOR LEASE Gold, silver, copper, lead,
 zinc
 Flint Creek dist., SW¼ NE¼ sec. 19, T. 7 N., R. 13 W.
 Operator: James W. Young
 Box 342, Philipsburg, MT 59858
 Status: Produced

 *Open pit; **Open pit and underground.

CADGIE-TAYLOR MINE
 Flint Creek dist., SW¼ NE¼ sec. 19, T. 7 N., R. 13 W.
 Operator: Cadgie-Taylor Co.
 Philipsburg, MT 59858
 Status: Unknown

GRANITE COUNTY—Continued

COMANCHE EXTENSION LEASE (5797)

Flint Creek district
 Operator: James W. Young
 Box 342, Philipsburg, MT 59858
 Status: Produced

*COMANCHE EXTENSION MINE (6788) Silver

Flint Creek dist., sec. 19, T. 7 N., R. 13 W.
 Operator: Ben Walkup
 Philipsburg, MT 59858
 Owner: William F. Flynn
 Anaconda, MT 59711
 Status: Developing

ELK-MOOSE MINE Gold, silver

Operator: Joe Metesh
 Philipsburg, MT 59858
 Status: Unknown

GOLD REEF MINE Gold, silver

South Boulder dist., T. 7 N., R. 13 W.
 Operator: Keith Rush & Associates
 2905 Harrison Ave., Butte, MT 59701
 Owner: Larry McLane
 212 Washington, Anaconda, MT 59711
 Status: Unknown

GRANITE BI-METALLIC MINE Silver

Philipsburg dist., sec. 31, T. 7 N., R. 13 W.
 Operator: Hecla Mining Co.
 Wallace, ID 83873
 Owner: Frank Antonioli
 724 S. Western, Butte, MT 59701
 Status: Inactive

*GWYNN TAILINGS

Operator: Ernest Mazza
 Philipsburg, MT 59858
 Status: Unknown

**HATTA & MAGNET MINES Silver, lead, zinc

Dunkleberg dist., sec. 14, T. 9 N., R. 12 W.
 Owner-Operator: E. C. Ecklesdafer, Sr.
 532 North Ave. W., Missoula, MT 59801
 Status: Developing

HOLLY NO. 1 Gold, silver, copper

Dunkleberg dist., sec. 15, T. 9 N., R. 12 W.
 Owner-Operator: Larry A. McLane
 212 Washington, Anaconda, MT 59711
 Status: Developing

 *Open pit; **Open pit and underground.

*LAST CHANCE TAILINGS Copper, silica

Maxville dist., sec. 36, T. 8 N., R. 14 W.
 Operator: William R. McLure
 Box 5, Philipsburg, MT 59858
 Status: Unknown

LYCOMING MINE

Philipsburg dist., sec. 17, T. 7 N., R. 13 W.
 Operator: Cadgie-Taylor Co.
 Philipsburg, MT 59858
 Status: Produced

*MAXVILLE TAILINGS Gold, silver

Philipsburg dist., sec. 4, T. 8 N., R. 13 W.
 Operator: James W. Young
 Box 342, Philipsburg, MT 59858
 Owner: Granite County
 Philipsburg, MT 59858
 Status: Producing

MICKEY MINE Gold, silver

Red Lion dist., sec. 22, 27, T. 6 N., R. 13 W.
 Owner-Operator: Eugene Garrett
 Box 324, Anaconda, MT 59711
 Employees: 1
 Mill capacity: 15 t/d
 Status: Developing

**MOONLIGHT MINE Gold, silver, copper, lead

Princeton dist., T. 8 N., R. 12 W.
 Owner-Operator: John C. Bork
 519 W. Porphyry, Butte, MT 59701
 Status: Developing

MOOSE TRAIL MINE Gold, silver

Moose Lake district
 Operator: Gene Marker
 Garrison, MT 59731
 Status: Produced

NANCY HANKS, DEWEY, MITCHELL, and MUSSIGBROD
CLAIMS Gold

Garnet dist., sec. 3, T. 12 N., R. 14 W.
 Owner-Operator: American Mining Co.
 700 Securities Bldg., Seattle, WA 98101
 Status: Inactive

**NEW SEATTLE (DOLLY QUARTZ) MINE Gold, silver

Maxville dist., sec. 4, T. 8 N., R. 13 W.
 Operator: Dick Tunstill
 Philipsburg, MT 59858
 Owner: Grace Maehl
 Maxville, MT 59850
 Status: Developing and producing

GRANITE COUNTY--Continued

PARNELL GROUP MINE Silver, copper, lead
Flint Creek dist., sec. 7, 8, T. 7 N., R. 13 W.
Owner-Operator: P. J. Heaney, Sr.
Box 130, Philipsburg, MT 59858
Status: Developing

**QUEEN MINE Silver
Boulder dist., SW $\frac{1}{4}$ sec. 33, T. 8 N., R. 12 W.
Operator: R. J. MacCalman
1010 - 5th St., Deer Lodge, MT 59722
Owner: Mrs. K. W. MacPherson
St. Helena, CA 94574
Employees: 2
Status: Developing

ROYAL BASIN DUMP Gold, silver
Princeton dist., T. 8 N., R. 12 W.
Operator: Frank Rupinski
Hayden Lake, ID 83835
Status: Unknown

ROYAL BASIN MINE Gold, silver
Princeton dist., T. 8 N., R. 12 W.
Operator: George Knapp
Philipsburg, MT 59858
Status: Unknown

*RUMSEY TAILINGS Gold, silver, silica
Flint Creek dist., sec. 8, T. 6 N., R. 13 W.
Operator: Lindy Fortunati
Anaconda, MT 59711
Status: Unknown

SARANAC MINE Gold, silver
Philipsburg dist., T. 8 N., R. 13 W.
Owner: Princeton Mining Co.
Maxville, MT 59850
Status: Produced

SCRATCH AWL MINE Gold, silver
Flint Creek dist., sec. 29, T. 7 N., R. 13 W.
Operator: William Schneider
Philipsburg, MT 59858
Owner: Contact Mining Co.
724 S. Western, Butte, MT 59701
Employees: 6
Status: Producing

SEPTEMBER MINE Gold, silver
Operator: George and Jack Knapp
Philipsburg, MT 59858
Status: Unknown

SILVER KING MINE Gold, silver
Rock Creek dist., sec. 5, T. 6 N., R. 15 W.
Operator: Albert Walkup
Philipsburg, MT 59858
Owner: Charles Byam
Philipsburg, MT 59858
Employees: 2
Status: Developing

SWEET HOME MINE Gold, silver
Philipsburg dist., T. 7 N., R. 13 W.
Operator: Joe Metesh
Philipsburg, MT 59858
Status: Unknown

TRUE FISSURE MINE Silver, lead, zinc
Flint Creek dist., W $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 29, T. 7 N., R. 13 W.
Owner-Operator: Taylor-Knapp Co.
Philipsburg, MT 59858
Employees: 40
Mill capacity: 50 t/d
Status: Producing

VAN DORSTAN MINE Gold, silver
Operator: Otis Redwine
Butte, MT 59701
Status: Unknown

YOUNG AMERICA MINE Gold, silver
Philipsburg dist., T. 7 N., R. 13 W.
Operator: James R. Hunter
Philipsburg, MT 59858
Status: Produced

*Open pit; **Open pit and underground.

JEFFERSON COUNTY: Boulder

- ALTA MINE Gold, silver, copper, lead, zinc, silica
Colorado (Corbin-Wickes) dist., sec. 10, T. 7 N., R. 4 W.
Operator: Lahey Leasing Co.
Corbin, MT
Owner: Alta Mines Corp., c/o Fred Small
Helena, MT 59601
Status: Unknown
- B and G MINE Gold, silver, lead
Alhambra-Warm Springs dist., sec. 31, T. 8 N., R. 2 W.
Owner-Operator: Carl Benson
716 N. Davis, Helena, MT 59601
Status: Unknown
- *BULLION MINE Gold, silver, lead, zinc
Cataract dist., sec. 13, T. 7 N., R. 6 W.
Operator: D. M. Bullock
Basin, MT 59631
Status: Producing
- CARLSON PROSPECT (NORTH BOULDER GROUP)
Gold, silver, copper, lead, zinc
Alta Gulch-Bernice dist., sec. 13, 14, 23, 24, T. 6 N.,
R. 7 W.
Operator: The Anaconda Co.
Butte, MT 59701
Owner: Carlson Estate
Basin, MT 59631
Status: Inactive
- CRESCENT MINE Gold, silver, copper, lead
Cataract (Basin) dist., sec. 28, T. 8 N., R. 5 W.
Owner: Holter Estate
Helena, MT 59601
Status: Unknown
- CRYSTAL MINE Gold, silver, copper, lead
Cataract (Basin) dist., sec. 20, T. 7 N., R. 5 W.
Operator: Crystal Mines, Inc.
8 First National Bank Bldg., Butte, MT 59701
Owner: Delbert Bullock
Basin, MT 59631
Status: Producing and developing
- EDELWEISS MINE Silver, lead, zinc
Wickes dist., sec. 1, 2, T. 7 N., R. 5 W.
Operator: Inar Norgaard
Box 544, Helena, MT 59801
Owner: Ivor Jenkins and others
Jefferson City, MT 59638
Status: Developing
- *EDGE NO. 1, NORWAY NO. 6, OUR TICKET, and
EASY MONEY Gold, silver, copper, lead
Montana dist., sec. 14, 15, 23, 26, T. 9 N., R. 3 E.
Owner-Operator: Earl Lutzenhiser
2331 National Ave., Helena, MT 59601
Status: Developing
- ELKHORN MINE Silver, lead, zinc
Elkhorn dist., sec. 9, 11, 14, 15, 16, 22, 27, 33, 34,
T. 6 N., R. 3 W.
Operator: Development Operating Corp.
Box 14, Boulder, MT 59632
Owner: Mrs. D. C. Walker and others
Butte, MT 59701
Status: Exploration
- ELKHORN QUEEN MINE Silver, lead, zinc
Elkhorn dist., sec. 26, T. 6 N., R. 3 W.
Owner: John Rothfus
2100 Oregon Ave., Butte, MT 59701
Status: Inactive
- *EVA MAY MINE and TAILINGS Silver, copper, zinc
Basin-Cataract dist., sec. 21, 22, T. 7 N., R. 5 W.
Operator: W. K. Miller
Basin, MT 59631
Owner: Neuberg Bros. & Sloan, Inc.
First National Bank, Butte, MT 59701
Status: Inactive
- *GOLDEN ASSETS MINE Gold, silver, copper, lead,
zinc
Golconda dist., sec. 29, T. 7 N., R. 5 W.
Owner-Operator: Fred K. Madison
1302 W. Geyser, Livingston, MT 59047
Status: Developing
- GOLDEN CURRY (SOURDOUGH) MINE Gold, silver,
copper, lead, zinc
Elkhorn dist., sec. 10, T. 6 N., R. 3 W.
Owner-Operator: John Rothfus
2100 Oregon Ave., Butte, MT 59701
Employees: 2
Status: Developing
- HARDMORE GROUP Silver, lead
Elkhorn dist., sec. 5, T. 7 N., R. 2 W.
Operator: Wayne Miller
Radersburg, MT 59641
Owner: Ed Hilterbrand
Status: Unknown

*Open pit.

JEFFERSON COUNTY—Continued

HOPE and BULLION MINE Gold, silver, and base metals

Comet (Boulder) dist., sec. 6, 31, T. 6 and 7 N.,
R. 4 W.

Operator: Romerio Co.

Owner: Mrs. A. K. Romerio

19320 Hinsdale, Torrance, CA 90503

Employees: 5

Status: Developing

HUMBOLT MINE Gold, silver

Homestake dist., sec. 9, T. 3 N., R. 6 W.

Owner-Operator: Stanley L. Boyce

Rte. 1, Box 206, Butte, MT 59701

Status: Developing

JIB MINE Gold, silver, copper, lead

Basin-Cataract dist., sec. 18, T. 6 N., R. 5 W.

Owner: Sylvanite, Inc.

43 E. Broadway, Butte, MT 59701

Status: Developing

KLONDYKE MINE Gold, silver

Elkhorn dist., sec. 11, T. 6 N., R. 3 W.

Operator: Klondyke Gold Mines, Inc.

Boulder, MT 59632

Owner: C. W. Schreiner and others

3011 Richardson, Butte, MT 59701

Status: Developing

LEADVILLE MINE Silver, lead, zinc

Leadville dist., sec. 36, T. 7 N., R. 8 W.

Operator: I. W. Stocks

1118 O'Neil, Deer Lodge, MT 59722

Status: Unknown

LITTLE GOLDIE MINE Gold, silver, lead

Elkhorn district

Operator: Richard Arnold

Boulder, MT 59632

Owner: Sam Arnold

Boulder, MT 59632

Status: Inactive

*LIVERPOOL DUMP Silver, lead

Clancy dist., sec. 33, T. 9 N., R. 3 W.

Operator: Liverpool Mining Co., c/o Louis Peura

Clancy, MT 59634

Status: Produced

LOTTA MINE Gold

Basin dist., sec. 17, 18, T. 6 N., R. 5 W.

Operator: Amazon Minerals Exploration Co., Inc.
1703 Lakeshore Dr., Michigan City, IN 46360

Owner: Sylvanite, Inc.

43 E. Broadway, Butte, MT 59701

Status: Unknown

MAMMOTH MINE Gold, silver, lead, zinc

Corbin dist., sec. 35, T. 8 N., R. 4 W.

Operator: Norman Peura and others

Jefferson City, MT 59638

Owner: Ed Kyler

Boulder, MT 59632

Status: Inactive

MAY and LITTLE SALLIE MINE Gold, silver, copper, lead, zinc

Colorado (Katy Gulch) dist., sec. 1, T. 7 N., R. 5 W.

Operator: John K. Saari

305 Clancy St., Helena, MT 59601

Owner: Paul Keller

Power Block, Helena, MT 59601

Status: Developing

MEADOW MINE Silver, lead

Clancy dist., sec. 34, T. 9 N., R. 3 W.

Operator: Mascot Mines, Inc.

Box 544, Helena, MT 59601

Owner: Albert Haab

Clancy, MT 59634

Status: Developing

MOUNTAIN QUEEN MINE Silver, lead, zinc

Big Foot dist., sec. 27, T. 4 N., R. 5 W.

Owner-Operator: William Mulcahy

Box 21, Butte, MT 59701

Status: Developing

NELLIE GRANT MINE Gold, silver, lead, zinc

Clancy (Lump Gulch) dist., sec. 14, T. 8 N., R. 5 W.

Operator: Barmont Mines, Inc.

2624 Edwards St., Butte, MT 59701

Owner: C. E. Pew

Helena, MT 59601

Status: Unknown

*NEW BALD EAGLE MINE Gold, silver

Big Foot dist., sec. 16, T. 4 N., R. 5 W.

Owner-Operator: William Mulcahy

Box 21, Butte, MT 59701

Status: Developing

*Open pit.

JEFFERSON COUNTY—Continued

- *NEW STATE DUMP Silver, copper, lead, zinc
Clancy dist., sec. 9, T. 8 N., R. 3 W.
Operator: Clifford Main
Clancy, MT 59634
Status: Unknown
- NORTH SUNLIGHT GROUP Gold, silver, copper,
lead, zinc
Cardwell district
Operator: William G. Wegener
Box 144, Whitehall, MT 59759
Owner: Wegener Bros.
Whitehall, MT 59759
Status: Developing
- *REDEMPTION MINE Gold, silver, silica
Comet district
Operator: E. H. Battermann
Box 461, Basin, MT 59631
Owner: Poore, Poore & Poore
Butte, MT 59701
Status: Developing
- RUBY SILVER MINE Gold, silver
Lowland dist., sec. 2, 11, T. 5 N., R. 7 W.
Owner-Operator: Ruby Silver Mines, Inc.
101 W. Granite, Butte, MT 59701
Status: Inactive
- *RUMLEY DUMP Gold, silver, copper, lead, zinc
Comet dist., sec. 36, T. 7 N., R. 5 W.
Operator: Harold J. Giulio
Boulder, MT 59632
Status: Unknown
- SILVER HILL MINE Gold, silver, copper, lead, zinc
Cataract dist., sec. 36, T. 7 N., R. 5 W.
Operator: Harold Giulio
Boulder, MT 59632
Status: Unknown
- SILVER QUEEN MINE Gold, silver
Whitehall dist., sec. 6, T. 2 N., R. 5 W.
Operator: William Beete
655 W. Granite, Butte, MT 59701
Status: Inactive
- SOUTH VIEW MINE Gold, silver, lead
St. Paul Gulch dist., SE¼ sec. 24, T. 2 N., R. 4 W.
Owner-Operator: Charles O. Weber
Box 235, Whitehall, MT 59759
Status: Inactive
- SUNNYSIDE MINE Gold, silver
Cardwell dist., SE¼ sec. 13, T. 2 N., R. 4 W.
Owner-Operator: Lester Lindquist
Box 373, Whitehall, MT 59759
Status: Inactive
- VERA AND MARIE MINE Silver
Cataract dist., sec. 33, T. 7 N., R. 5 W.
Operator: W. K. Miller
Basin, MT 59631
Owner: Drew Jackson
3065 E. 4th St., Casper, WY 82601
Status: Developing

JUDITH BASIN COUNTY: Stanford

- CAPE NOME MINE Silver, lead, zinc
Barker dist., sec. 31, T. 16 N., R. 9 E.
Owner-Operator: Frank Davis
1109 First Ave. S., Great Falls, MT 59401
Employees: 2
Status: Developing
- LIBERTY MINE Silver, lead, zinc
Barker dist., sec. 6, 7, 18, T. 15 N., R. 9 E.
Operator: Anderson and Antonioli
1001 W. Gold, Butte, MT 59701
Owner: Faith Mining Co.
Box 1681, Helena, MT 59601
Status: Developing
- MONTGOMERY and SAN MIGUEL MINE Gold
silver, copper, lead, zinc
Barker dist., sec. 21, T. 15 N., R. 9 E.
Owner-Operator: Mrs. G. V. R. McBride
Monarch, MT 59463
Status: Developing
- TIGER MINE Silver, lead
Barker dist., sec. 5, 6, T. 15 N., R. 9 E.
Operator: Croff and Montague
Box 69, Monarch, MT 59463
Owner: Clendennin Mines, Inc., c/o J. T. Nightengale
Boston, MA 02100
Status: Developing

*Open pit.

LEWIS AND CLARK COUNTY: Helena

- AMERICAN BOY (NORTH GOULD GROUP) MINE
Gold, silver
Stemple Pass dist., sec. 10, 11, 14, 15, T. 13 N., R. 7 W.
Owner-Operator: Glenn Allman
Lincoln, MT 59639
Status: Developing
- CONSOLATION MINES Silver, copper, molybdenum
Heddleston dist., sec. 21, T. 15 N., R. 6 W.
Operator: The Anaconda Co.
Butte, MT 59701
Owner: J. A. Thompson
Lincoln, MT 59639
Status: Inactive
- *COME AGAIN and CROWN GROUP Gold, silver, silica
Iowa dist., sec. 26, 27, T. 11 N., R. 4 W.
Owner-Operator: Edwin W. Castle, Inc.
Box 949, Helena, MT 59601
Status: Unknown
- **COPPER BOWL MINE Copper
Heddleston dist., sec. 30, T. 16 N., R. 6 W.
Owner-Operator: Clarence J. Erickson
Box 253, Lincoln, MT 59639
Status: Developing
- *DRUMLUMMON TAILINGS Gold, silver, copper,
lead, zinc
Marysville dist., S½ sec. 36, T. 12 N., R. 6 W.
Operator: Carlos Hieber
1035 - 12th Ave., Helena, MT 59601
Owner: St. Louis Drumlummon Mines, Inc.
St. Louis, MO 63100
Status: Inactive
- EMPIRE MINE Gold, silver, lead
Marysville dist., sec. 33, 34, T. 12 N., R. 6 W.
Operator: Herbert Carver
802 - 5th Ave., Helena, MT 59601
Owner: Albert Fritsche
Point Lookout, New Ulm, MN 56073
Status: Unknown
- EVENING STAR MINE Gold, silver
Nevada district
Owner-Operator: Ray N. Peterson and others
98 Post St., San Francisco, CA 94104
Employees: 2
Status: Developing
- FRANKLIN MINE Gold, silver, copper, lead
Tenmile (Scratch Gravel) dist., sec. 11, T. 10 N., R. 4 W.
Operator: Helena Minerals Co., Inc., c/o Chester Leirness
1900 - 11th Ave., Helena, MT 59601
Owner: Thomas Cruse Mining & Development Co.
c/o Fergus Fay, 446 W. Lawrence, Helena, MT 59601
Status: Producing and developing
- FREE SPEECH MINE Gold, silver, lead
Rimini dist., sec. 4, T. 8 N., R. 5 W.
Operator: T. L. Thompson
Box 1435, Anaconda, MT 59711
Owner: Red Mountain Consolidated Mining Co.
St. Paul, MN 55100
Status: Unknown
- LUCKY LINDA MINE Silver, lead
Rimini dist., sec. 16, T. 8 N., R. 5 W.
Owner-Operator: George Phillips
Rimini Rte., Helena, MT 59601
Status: Developing
- *MILJOUR-VIOLET JANE MINE Gold, silver, lead
Cedar Hills dist., sec. 7, 8, 17, 18, T. 11 N., R. 3 W.
Owner-Operator: Cal-Mont Associates, Inc.
Box 548, East Helena, MT 59635
Status: Unknown
- MONTE CHRISTO MINE Gold, silver, copper, lead
Rimini (Vaughn) dist., sec. 17, T. 8 N., R. 5 W.
Owner-Operator: Hans Mo
1500 Madison Ave., Helena, MT 59601
Status: Produced and developing
- OLD BACHELOR MINE
Stemple Pass dist., sec. 15, T. 13 N., R. 7 W.
Owner-Operator: Dillsworth and Smith
1509 River Rd., Missoula, MT 59801
Status: Inactive
- ORO FINO MINE Silver, molybdenum
Marysville dist., sec. 2, T. 12 N., R. 6 W.
Owner-Operator: W. R. Wade
Marysville, MT 59640
Status: Developing
- PEN-UTE CONSOLIDATED MINING CO. Gold,
silver, lead
Stemple and Rimini district (6 mines)
Owner-Operator: E. J. Young, Pres., Pen-Ute Consolidated
Mining Co., Box 2713, Great Falls, MT 59401
Employees: 6
Status: Developing
- *Open pit; **Open pit and underground.

LEWIS AND CLARK COUNTY—Continued

SAM GATY MINE Gold, silver, copper, lead
Tenmile dist., sec. 11, T. 10 N., R. 4 W.
Operator: Helena Minerals Co., Inc.,
c/o Chester Leirness
1900 - 11th Ave., Helena, MT 59601
Owner: C. E. Pew and others
c/o Monida Vaughn
937 - 11th Ave., Helena, MT 59601
Mill capacity: 150 t/d
Status: Producing and developing

**STEMPLE and JAY GOULD MINES Gold, silver
Stemple Pass dist., sec. 10, T. 13 N., R. 7 W.
Owner-Operator: Vern C. Knopf
1621 Cannon St., Helena, MT 59601
Status: Developing

TWILIGHT CLAIMS GROUP Gold, silver, copper
Helena dist., sec. 2, T. 9 N., R. 2 W.
Owner-Operator: J. R. Stimps
Box 665, Shelby, MT 59474
Status: Developing

LINCOLN COUNTY: Libby

BLUE JAY and STAR CLAIMS Silver, lead
Troy district
Owner-Operator: Richard F. Fifield
Box 432, Troy, MT 59935
Status: Developing

**SILVER BUTTE MINE Gold, silver, lead, zinc
Silver Butte dist., unorganized, T. 25 N., R. 30 W.
Operator: Idaho-Cibola Mining Co., c/o Al Chambers
Star Rte. 1, Libby, MT 59923
Employees: 6
Mill capacity: 100 t/d
Status: Developing and producing

CABINET LEASE (BIG EIGHT MINE) Silver, lead,
zinc
Callahan Creek dist., sec. 19, T. 31 N., R. 34 W.
Operator: Eugene F. Tunstill
Box 522, Troy, MT 59935
Owner: Bruce R. Taylor
1314 E. 43d Ave., Spokane, WA 99203
Status: Developing and produced

SNOWSHOE MINE Gold, silver, lead
Libby (Snowshoe) dist., sec. 11, T. 28 N., R. 32 W.
Operator: Sidney Mining Co.
Box 1049, Kellogg, ID 83837
Owner: W. B. Foote
Kalispell, MT 59901
Status: Developing

IRON MASK MINE
Troy dist., sec. 11, 14, T. 30 N., R. 34 W.
Operator: Ernie Williams
Troy, MT 59935
Status: Unknown

SNOWSTORM MINE Silver, lead, zinc
Troy dist., sec. 19, 20, T. 31 N., R. 34 W.
Operator: Trojan Silver-Lead Mining Co.
Knute Kirkeberg, Mgr., Box 549, Troy, MT 59935
Employees: 4
Mill capacity: 120 t/d
Status: Developing and exploring

MADISON COUNTY: Virginia City

*ALAMEDA and BAMBOO CHIEF MINE Gold, silver
Virginia City dist., sec. 27, 28, T. 6 S., R. 3 W.
Owner-Operator: Alameda Metals, Inc.
Box 205, Virginia City, MT 59755
Status: Inactive

*BEVERLY CLAIM Gold, silver
Silver Star dist., sec. 8, 9, T. 2 S., R. 6 W.
Owner-Operator: John Patterson
Box 145, Sheridan, MT 59749
Status: Developing

BESSIE and GOLDEN WAVE MINE Gold, silver
copper, tungsten
Mineral Hill district
Owner-Operator: W. G. Forbes
Pony, MT 59747
Status: Developing

BINS MINE Gold, silver
California Creek (Tobacco Root Range) dist., sec. 5,
T. 5 S., R. 3 W.
Owner-Operator: Goldstream Mining Co.
6715 Village Rd., Salt Lake City, UT 84121
Status: Developing

*Open pit; **Open pit and underground.

MADISON COUNTY—Continued

BLACK ACE MINE Gold, silver, lead, zinc
Tidal Wave Dist., NW¼ NE¼ sec. 34, T. 3 S., R. 5 W.
Owner: Lewis C. Rollins
Box 4, Waterloo, MT 59757
Status: Inactive

BLUE BELL GROUP MINES Silver
Virginia City dist., sec. 31, T. 6 S., R. 3 W.
Owner-Operator: Silver Hill Mines, Inc.
Rte. 1, Chattaroy, WA 99003
Status: Inactive

DIVIDEND LODGE MINE
Mineral Hill dist., sec. 15, T. 2 S., R. 3 W.
Owner: Chester G. Horton, Jr.
Pony, MT 59747
Status: Developing

*EASTON-PACIFIC MINE Gold, silver
Virginia City dist., sec. 9, T. 7 S., R. 3 W.
Operator: Ed Scheitlin
Virginia City, MT 59755
Owner: Easton Pacific Co. and Riverside Mining Corp.
Virginia City, MT 59755
Employees: 3
Status: Producing

FORKS MINE Gold, silver Sec. 3, 4, T. 7 S., R. 3 W.
Virginia City dist., sec. 33, 34, T. 6 S., R. 3 W.
Owner-Operator: R. W. Leighton
Box 116, Osburn, ID 83849
Status: Developing

FRIDA MARIE CLAIM Gold, silver
Silver Star dist., sec. 10, 11, T. 2 S., R. 6 W.
Owner-Operator: James King
Box 583, Sheridan, MT 59749
Status: Unknown

*GREEN CAMPBELL MINE
Silver Star dist., sec. 3, T. 2 S., R. 6 W.
Owner-Operator: United Investors Corp.
860 - 18th Ave., Salt Lake City, UT 84103
Status: Developing

HILL TOP MINE Gold, silver, copper, lead, zinc
Owner-Operator: Ed Scheitlin
Virginia City, MT 59755
Employees: 1
Status: Developing
Virginia City dist., sec. 4, T. 7 S., R. 3 W.

BOULDER-COBALT MINE Gold, silver, copper, lead
Tidal Wave dist., sec. 5, T. 3 S., R. 4 W.
Owner-Operator: Blue Mountain Mines, Inc.
A. A. Moser, Hardin, MT 59034
Status: Developing

COMMONWEALTH GROUP (CALVIN MINE) Gold,
silver, lead, zinc
McCartney Mountain dist., sec. 28; T. 2 S., R. 8 W.
Operator: Kibbe & Co., W. J. Franklin, Supt.
Box 278, Twin Bridges, MT 59754
Owner: Commonwealth Lead Mining Co.
Provo, UT 84601
Status: Inactive

JACK RABBIT MINE
Rochester dist., sec. 21, T. 2 S., R. 8 W.
Owner-Operator: Mountain Gold and Silver, Inc., and
others, c/o Jim McLaughlin
Rte. 1, Box 22, Sheridan, MT 59749
Employees: 3
Status: Producing and developing

JUMPER CLAIMS Gold, silver, copper
Pony dist., sec. 27, T. 2 S., R. 3 W.
Owner-Operator: Harold Neal
Pony, MT 59747
Status: Developing

KEARSARGE MINE Gold
Virginia City dist., sec. 23, T. 7 S., R. 3 W.
Operator: Virgil Smith
Virginia City, MT 59755
Status: Unknown

MORNING STAR MINE Silver, zinc
Lower Hot Springs dist., sec. 28, 29, T. 3 S., R. 1 E.
Owner-Operator: R. B. Farnsworth
109 Willson, Bozeman, MT 59715
Employees: 2
Status: Developing

MOUNTAIN FLOWER MINE Gold, silver
Williams Gulch dist., sec. 33, T. 6 S., R. 3 W.
Owner-Operator: R. H. Rogers
Box 11, Alder, MT 59710
Status: Developing

NELLIE BLY GROUP Gold
Fairweather dist., T. 7 S., R. 3 W.
Operator: Janus Mining Co.
Virginia City, MT 59755
Status: Unknown

*Open pit

MADISON COUNTY—Continued

RED PINE MINE Gold, silver
 Sheridan dist., sec. 5, T. 4 S., R. 4 W.
 Operator: Shermont Mining Co., c/o John Magnus
 Twin Bridges, MT 59745
 Owner: Ruby Valley Development Co., Inc.
 14503 Washington Ave. SW, Tacoma, WA 98498
 Employees: 2
 Mill capacity: 100 t/d
 Status: Developing

ST. LAWRENCE CONSOLIDATED MINE Gold, silver
 Nevada City dist., sec. 31, 32, 33, T. 6 S., R. 3 W.
 Operator: D. W. Thomas, St. Lawrence Consolidated
 Mines, Inc., Box 114, Virginia City, MT 59755
 Owner: E. W. Smith
 Virginia City, MT 59755
 Status: Developing

SCALDED CAT MINE Gold, silver, copper, tungsten
 Mineral Hill dist., sec. 14, T. 2 S., R. 3 W.
 Owner-Operator: Emmett Clary
 Box 628, Pony, MT 59747
 Employees: 2
 Status: Developing

SHORT SHIFT MINE Gold
 Rabbit dist., SE¼ sec. 6, T. 2 S., R. 7 W.
 Owner-Operator: John A. Layton
 3104 Busch, Butte, MT 59701
 Mill capacity: 20 t/d
 Status: Developing

SMUGGLER MINE Gold, silver
 Mill Creek dist., sec. 13, T. 4 S., R. 4 W.
 Owner-Operator: Goldstream Mining Co.
 6715 Village Rd., Salt Lake City, UT 84121
 Status: Developing

SURPRISE CLAIMS GROUP Gold, silver, lead
 California (Harris) Creek dist., sec. 5, 6, 7, 8, T. 5 S., R. 3 W.
 Owner-Operator: Harry Bennetts
 Sheridan, MT 59749
 Status: Developing

**TAMARACK MINE Gold
 Sheridan dist., sec. 17, T. 4 S., R. 4 W.
 Operator: R. L. Holladay
 Box 302, Sheridan, MT 59749
 Owner: Broadgauge Mine, Inc.
 Box 302, Sheridan, MT 59749
 Employees: 3
 Status: Developing

**UNCLE SAM MINE Gold, silver
 Mill Creek dist., SE¼ sec. 8, T. 4 S., R. 3 W.
 Owner-Operator: Mark Mortenson
 Sheridan, MT 59749
 Status: Unknown

WHITE PINE MINE Gold, silver
 Mineral Hill dist., sec. 9, T. 2 S., R. 3 W.
 Operator: Fred Box
 Pony, MT 59747
 Owner: Norma Carmin and others
 Pony, MT 59747
 Employees: 1
 Status: Inactive

MEAGHER COUNTY: White Sulphur Springs

**LUCKY DOLLAR MINE Silver, lead
 Castle (unorganized) dist., sec. 12, T. 8 N., R. 8 E.
 Owner-Operator: Robinson Mining Co.
 c/o Carl Berg
 Box 61, Martinsdale, MT 59053
 Employees: 2
 Status: Producing and developing

YELLOWSTONE MINE Lead, zinc
 Castle Mountains dist., sec. 18, T. 8 N., R. 8 E.
 Operator: George Voldseth
 Hamilton Mines, Inc.
 Martinsdale, MT 59053
 Status: Produced

 *Open pit; **Open pit and underground.

VOSS MINE Copper
 Castle dist., sec. 1, 2, 3, 11, T. 8 N., R. 8 E.
 Owner: Carl W. Voss
 Helena, MT 59601
 Status: Developing

MINERAL COUNTY: Superior

*BLACK TRAVELER and BULORING MINES

Silver, copper
 St. Regis-Saltese dist., sec. 5, T. 19 N., R. 30 W.
 Operator: Charles P. Buls
 416 E. Beckwith Ave., Missoula, MT 59801
 Owner: Buloring Mining Co.
 416 E. Beckwith Ave., Missoula, MT 59801
 Status: Developing

**BONANZA GROUP MINE Gold, silver, copper, lead

Cedar Creek dist., sec. 17, T. 15 N., R. 26 W.
 Owner-Operator: G. M. Gildersleeve
 Box 565, Superior, MT 59872
 Status: Developing

BRYAN MINE Silver, lead

Saltese dist., sec. 28, T. 20 N., R. 31 W.
 Owner-Operator: Jupiter Mining Co.
 Box 1010, Wallace, ID 83873
 Status: Inactive

EAST COEUR D'ALENE SILVER MINE Silver,
copper, lead, zinc

Keystone dist., T. 17, 18 N., R. 26, 28 W.
 Operator: Tierra Exploration Inc.
 Superior, MT 59872
 Owner: East Coeur d'Alene Silver Mines, Inc.
 Scott Bldg., Wallace, ID 83873
 Status: Inactive

LAST CHANCE MINE Silver, lead

Saltese dist., sec. 34, T. 20 N., R. 31 W.
 Owner-Operator: Jupiter Mining Co.
 Box 1010, Wallace, ID 83873
 Status: Inactive

MINERAL KING MINE Silver, lead, zinc

Saltese-St. Regis dist., sec. 36, T. 20 N., R. 31 W.
 Operator: Sunshine Mining Co.
 Big Creek, ID
 Owner: Mineral King Mining Co., c/o Max Swanson
 144 W. Front, Missoula, MT 59801
 Status: Developing

NANCY LEE MINE Silver, lead, zinc

Keystone dist., sec. 31, 32, T. 18 N., R. 26 W.
 Operator: Tierra Exploration Inc.
 Superior, MT 59872
 Owner: Nancy Lee Mines, Inc.
 Box 67, Kellogg, ID 83837
 Employees: 30
 Mill capacity: 150 t/d
 Status: Producing

PROSPERITY MINE Silver, copper, lead

Keystone dist., T. 18 N., R. 26 W.
 Operator: Par-D Mining and Development Co.
 c/o R. L. Helterline
 1317 Dakota St., Missoula, MT 59801
 Owner: Prosperity Mines, Inc.
 1716 S. 9th W., Missoula, MT 59801
 Status: Inactive

SPITFIRE MINE Gold, silver, copper

Sevenmile Creek dist., sec. 35, T. 19 N., R. 27 W.
 Operator: Silver Trend Mining Corp.
 Box 157, St. Regis, MT 59866
 Owner: Donald A. Graham
 Box 157, St. Regis, MT 59866
 Status: Developing

MISSOULA COUNTY: Missoula

HIDDEN TREASURE-CAPE NOME MINE

Gold, silver, copper, lead
 Wallace Creek dist., sec. 19, 24, T. 12 N., R. 16, 17 W.
 Operator: Silver Ledge, Inc.
 Box 56, Clinton, MT 59825
 Owner: Hera, Inc.
 Box 40, Missoula, MT 59801
 Status: Inactive

**SAN MARTINA MINE Gold, silver, copper, lead

Ninemile dist., sec. 21, 22, 27, 28, T. 17 N., R. 24 W.
 Operator: K & N Minerals, c/o W. A. Nagy
 Huson, MT 59846
 Owner: Frank Realty Co.
 204 Professional Bldg., Butte, MT 59701
 Status: Developing

*WALDBILLIG MINE Silver, copper

Miller Creek dist., sec. 1, 2, T. 11 N., R. 19 W.
 Owner-Operator: Joe and O. R. Waldbillig
 Rte. 5, Miller Creek, Missoula, MT 59801
 Status: Developing and exploring

WARD LODE MINE Gold, silver, copper, lead, zinc

Sec. 22, T. 11 N., R. 22 W.
 Owner-Operator: Ward Development Co.
 321 N. Higgins Ave., Missoula, MT 59801
 Employees: 5
 Status: Developing

 *Open pit; **Open pit and underground.

PARK COUNTY: Livingston

*GLENGARRY (WHITE) CLAIMS Gold, silver, copper
 New World dist., sec. 12, T. 9 S., R. 14 E.
 Operator: Earl Nott
 Cooke City, MT 59020
 Owner: Harriet White
 Spokane, WA 99200
 Employees: 1
 Status: Developing

PHILLIPS COUNTY: Malta

GOLD BUG-LITTLE BEN MINE Gold, silver
 Little Rockies dist., sec. 15, T. 25 N., R. 24 E.
 Operator: Niseka Mining, Ltd.
 Landusky, MT 59533
 Owner: Little Rockies Mining & Development Co.
 Lewistown, MT 59457
 Employees: 4
 Status: Developing

RUBY GULCH MINE Gold, silver
 Little Rockies dist., sec. 18, T. 25 N., R. 25 E.
 Owner: Gold Reserve Mining Co.
 c/o Henry Kolstad, Chester, MT 59522
 Employees: 3
 Mill capacity: 500 t/d
 Status: Exploration

POWELL COUNTY: Deer Lodge

BUMBLEBEE MINE Gold, copper
 Ophir dist., sec. 20, T. 11 N., R. 7 W.
 Owner-Operator: Clarke J. Smith
 Rte. 2, Valencia, PA 16059
 Status: Developing

MONARCH MINE Gold, silver, copper
 Ontario dist., sec. 30, 31, T. 8 N., R. 6 W.
 Owner-Operator: Monarch Minerals, Inc., D. L. Jones, Mgr.
 Box 33, Helena, MT 59601
 Employees: 3 part time
 Status: Developing

FAIRVIEW MINE Gold, silver, copper
 Ophir dist., sec. 25, T. 11 N., R. 8 W.
 Owner-Operator: Wesley Dix
 1109 W. Woolman, Butte, MT 59701
 Employees: 3
 Status: Developing

NANCY HELEN MINE Gold, copper
 Ophir district
 Owner-Operator: Clarke J. Smith
 Rte. 2, Valencia, PA 16059
 Status: Developing

**HARD LUCK MINE Silver, copper, lead, zinc
 Elliston dist., sec. 14, 16, 17, 20, 21, T. 8 N., R. 6 W.
 Operator: C. J. Ward and others
 Elliston, MT 59728
 Owner: Hard Luck Mines
 Elliston, MT 59728
 Status: Developing

NEGROS MINE Gold, silver, lead, zinc
 Negro Hill dist., SE¼ SW¼ sec. 36, T. 9 N., R. 7 W.
 Owner-Operator: J. F. Hopkins
 401 N. Montana, Helena, MT 59601
 Status: Producing and developing

*HIDDEN HAND MINE Gold, silver, lead, zinc
 Zosell dist., NW¼ SW¼ sec. 2, T. 7 N., R. 8 W.
 Operator: Bill Hall
 Box 295, Helena, MT 59601
 Owner: Mrs. Fern Johnson
 400 Milwaukee Ave., Deer Lodge, MT 59722
 Status: Developing and producing

**NELSON and DAN 1 & 2 MINES Gold, silver, copper
 Elk Creek dist. (Powell and Granite Counties)
 sec. 5, 6, 7, 8, T. 12 N., R. 13 W.
 Owner-Operator: Nelson Mines, Harold G. Nelson, Sr.
 Greenough, MT 59836
 Employees: 2
 Status: Developing

**PRICE GROUP MINE Gold, silver, copper
 Ophir dist., NE¼ NE¼ sec. 29, T. 11 N., R. 7 W.
 Owner: W. C. Boellard Estate, Elliston, MT 59728
 Status: Unknown

 *Open pit; **Open pit and underground

POWELL COUNTY—Continued

**SUNRISE MINE Gold, silver, lead
 Negro Hill dist., sec. 12, T. 8 N., R. 7 W.
 Owner-Operator: Enard A. Lindquist
 Box 334, Elliston, MT 59728
 Status: Developing

WOLVERINE MINE Gold, silver, lead
 Elliston dist., sec. 18, 19, 20, T. 8 N., R. 6 W.
 Owner-Operator: Wolverine Corp.
 c/o M. M. Butler, Pres.
 2711 Miles Ave., Billings, MT 59102
 Status: Developing

RAVALLI COUNTY: Hamilton

*CURLEW MINE Silver, lead
 Pleasant View dist., sec. 13, T. 8 N., R. 21 W.
 Operator: Dee Mines, c/o H. W. Ebbett
 Box 142, Victor, MT 59875
 Owner: H. W. Ebbett and others
 Box 142, Victor, MT 59875
 Status: Produced

*WHIPPERWILL MINE Gold, silver, lead, zinc
 Pleasant View dist., T. 8 N., R. 21 W.
 Operator: Bill Elsasser
 Samuels, ID 83862
 Owner: Albert Smith
 Victor, MT 59875
 Employees: 2
 Status: Inactive

LOGGER CLAIMS GROUP Silver, copper, beryl
 East Fork dist., sec. 6, T. 1 N., R. 17 W.
 Operator: Tom Nash
 Darby, MT 59829
 Owner: Tom Nash and others
 Darby, MT 59829
 Status: Unknown

SANDERS COUNTY: Thompson Falls

BLUE CREEK (LUCKY STAR) MINE Silver, lead, zinc
 Blue Creek dist., sec. 3, 10, T. 27 N., R. 34 W.
 Operator: Lucky Star Mining Co.
 Spokane, WA 99205
 Owner: G. D. Kile
 Grandview, WA 98930
 Status: Developing

GOPHER HOLE MINE Gold, silver, lead, zinc
 Blue Creek dist., sec. 10, T. 27 N., R. 34 W.
 Owner-Operator: J. C. Brooks
 Star Rte., Clark Fork, ID 83811, and
 others from Noxon, MT 59853
 Status: Developing

BROKEN HILL MINE Silver, lead, zinc
 Heron dist., sec. 10, T. 27 N., R. 34 W.
 Operator: E. R. Schenkel
 6268 Crystal Cove Dr., Long Beach, CA 90803
 Owner: J. P. Swann and others
 E. 910½ Hawthorne Rd., Spokane, WA 99218
 Status: Inactive

HEIDELBERG MINE Gold, silver
 Noxon dist., SE¼ sec. 29, NW¼ sec. 32, T. 27 N.,
 R. 31 W.
 Owner-Operator: Heidelberg Mining Company of
 Montana, c/o G. A. Myers
 1001 Court St., Pasco, WA 99301
 Status: Developing

EDDY CREEK MINE
 Eddy Creek dist., sec. 16, 21, T. 20 N., R. 28 W.
 Operator: Silver Mountain Exploration Co., Rm 708
 N. 4407 Division St., Spokane, WA 99207
 Owner: The State Mining Co., W. W. Stearns
 Box 141, Plains, MT 59859
 Status: Developing

HOLLIDAY MINE Silver, lead
 Pilgrim Creek dist., sec. 25, 36, T. 26 N., R. 34 W.
 Owner-Operator: Silver Mark Mines, Inc.
 Box 197, Noxon, MT 59853
 Status: Unknown

 *Open pit; **Open pit and underground

SANDERS COUNTY—Continued

RED FIR (AMAZON) MINE Gold, silver, copper
Blue Creek dist., sec. 25, T. 27 N., R. 34 W.
Owner-Operator: J. C. Brooks and others
Star Rte., Clark Fork, ID 83811
Status: Developing

SALES MINE Silver, copper
Thompson River dist., sec. 1, T. 25 N., R. 28 W.
Operator: Thomas Watts
8 Spruce St., Wallace, ID 83873
Owner: Ruth Sales
Kalispell, MT 59901
Status: Inactive

SILVER BOW COUNTY: Butte

BADGER MINE Gold, silver, lead, zinc
Summit Valley dist., NE¼ NW¼ sec. 7, T. 3 N.,
R. 7 W.
Owner-Operator: The Anaconda Co.
Butte, MT 59701
Status: Inactive

KELLEY MINE Gold, silver, copper
Summit Valley dist., SW¼ SW¼ sec. 7, T. 3 N., R. 7 W.
Owner-Operator: The Anaconda Co.
Butte, MT 59701
Status: Inactive

*BERKELEY PIT Gold, silver, copper
Summit Valley dist., NE¼ NW¼ sec. 18, T. 3 N.,
R. 7 W.
Owner-Operator: The Anaconda Co.
Butte, MT 59701
Status: Producing

LEONARD MINE Gold, silver, copper
Summit Valley dist., center SW½ sec. 8, T. 3 N., R. 7 W.
Owner-Operator: The Anaconda Co.
Butte, MT 59701
Status: Inactive

CARVER TAILINGS Gold, silver, copper, lead, zinc
Butte dist., sec. 21, T. 3 N., R. 7 W.
Operator: Frank Antonioli
724 S. Western Ave., Butte, MT 59701
Status: Produced

*LITTLE BUTTE ORE MINE Copper
Camp Creek dist., sec. 2, T. 2 S., R. 8 W.
Owner-Operator: James L. White
1112 Missouri, Butte, MT 59701
Status: Inactive

**CLIMAX (APEX) LODGE GROUP Gold, silver
Divide Creek dist., sec. 5, 6, T. 1 N., R. 8 W.
Operator: James S. Knowlson, III
805 W. Granite, Butte, MT 59701
Owner: Intermountain Deaconess Home for Children
Helena, MT 59601
Employees: 2
Status: Developing

MOUNTAIN CON MINE Gold, silver, copper
Summit Valley dist., NE¼ SW¼ sec. 12, T. 3 N., R. 8 W.
Owner-Operator: The Anaconda Co.
Butte, MT 59701
Status: Producing

**OVERLOOK GROUP MINE Gold, silver, copper
Highland dist., sec. 15, 22, 23, 26, 27, T. 1 N., R. 7 W.
Operator: Universe Minerals Co.
Butte, MT 59701
Owner: E. W. Sharak and others
3365 S. 22d St., Milwaukee, WI 53215
Status: Developing

*COLORADO TAILINGS Gold, silver, copper
Summit Valley dist., sec. 23, T. 3 N., R. 7 W.
Operator: Frank Antonioli
724 S. Western Ave., Butte, MT 59701
Employees: 1
Status: Producing

STEWARD MINE Gold, silver, copper
Summit Valley dist., NW¼ NE¼ sec. 13, T. 3 N., R. 8 W.
Owner-Operator: The Anaconda Co.
Butte, MT 59701
Status: Producing

*COPPER HILL MINE Silver, copper
Camp Creek dist., sec. 3, T. 2 S., R. 8 W.
Owner-Operator: Frank Bissell
319 N. Excelsior, Butte, MT 59701
Status: Exploration and developing

WRONG FONT CLAIMS GROUP Gold, silver
Summit Valley dist., sec. 19, 24, T. 3 N., R. 9 W.
Owner-Operator: Tom Helehan
Fox Hotel, Butte, MT 59701
Status: Developing

*Open pit; **Open pit and underground.

IRON, MOLYBDENUM, THORIUM MINES

SWEET GRASS COUNTY: Big Timber

**SKY BABY CLAIMS Gold, silver
 Boulder River dist., sec. 25, T. 4 S., R. 12 E.
 Owner-Operator: Ben Taylor
 Box 516, Big Timber, MT 59011
 Status: Developing

IRON MINES

BROADWATER COUNTY: Townsend

*IRON CROSS MINE Iron ore
 Cedar Plains dist., sec. 12, T. 5 N., R. 1 W.
 Operator: R & S Iron Co., Inc.
 Radersburg, MT 59644
 Owner: John M. Ralls
 Radersburg, MT 59644
 Employees: 3
 Status: Producing

*LUPINE MINE Iron ore
 Cedar Plains dist., sec. 21, T. 6 N., R. 1 E.
 Operator: R & S Iron Co., Inc.
 Radersburg, MT 59641
 Owner: John M. Ralls
 Radersburg, MT 59641
 Status: Developing

SILVER BOW COUNTY: Butte

IRON KING MINE Iron ore
 Little Pine district
 Owner-Operator: Tom Helehan
 Fox Hotel, Butte, MT 59701
 Status: Inactive

MOLYBDENUM MINES

RAVALLI COUNTY: Hamilton

*MOLLY 1, 2, 3, 4, and 5 Molybdenite
 Skalkaho dist., unorganized, T. 5 N., R. 18 W.
 Owner-Operator: Leif Aune
 Box 303, Darby, MT 59829
 Employees: 1
 Status: Developing

THORIUM MINES

BEAVERHEAD COUNTY: Dillon

LAST CHANCE MINE Thorium, rare earths
 Le'mhi Pass dist., sec. 20, 28, 29, T. 10 S., R. 15 W.
 Owner-Operator: Sawyer-Adecor Inter., Inc.
 3780 Wilshire Blvd., Los Angeles, CA 90005
 Status: Developing

 *Open pit; **Open pit and underground.

TUNGSTEN MINES

BEAVERHEAD COUNTY: Dillon

*CALVERT MINE Scheelite

Wise River dist., sec. 12, T. 1 N., R. 12 W.
 Owner-Operator: Minerals Engineering Co.
 817 - 17th St., Denver, CO 80202
 Mill capacity: 250 t/d
 Status: Inactive as of June 1969

**GREENSTONE MINE Scheelite

Utopia dist., sec. 11, T. 5 S., R. 10 W.
 Operator: Carl Kennedy
 Box 862, Dillon, MT 59725
 Owner: Rex Land Co., c/o Carl Kennedy
 Box 1771, Seattle, WA 98111
 Status: Developing

DEER LODGE COUNTY: Anaconda

OLD BONANZA MINE Scheelite

Silver Lake dist., sec. 21, 22, T. 5 N., R. 13 W.
 Operator: Tri-City Concrete Products, Inc.
 Anaconda, MT 59711
 Owner: Mrs. Mary McCabe
 Anaconda, MT 59711
 Employees: 4
 Mill capacity: 100 t/d
 Status: Inactive

SILVER BOW COUNTY: Butte

**OVERLOOK GROUP MINE Scheelite

Highland dist., sec. 15, 22, 23, 26, 27, 28, T. 1 N., R. 7 W.
 Operator: Universe Minerals Co., Butte, MT 59701
 Owner: E. W. Sharak and others
 3365 S. 22d St., Milwaukee, WI 53215
 Status: Developing

URANIUM MINES

CARBON COUNTY: Red Lodge

**SWAMP FROG MINE Uranium

Pryor Mountains dist., sec. 17, 20, 21, T. 9 S., R. 27 E.
 Owner-Operator: James J. Stoick
 2515 Sunnyview Ln., Billings, MT 59101
 Status: Developing and exploring

 *Open pit; **Open pit and underground.

GOLD PLACERS

GRANITE COUNTY: Philipsburg

CONFIDENT, RADAR, CASTLE PLACER 1, and
 CASTLE PLACER 2 Gold, silver
 Granite dist., sec. 22, 34, T. 6 N., R. 13 W.
 Owner-Operator: William J. Dean & Son
 309 S. Arizona, Butte, MT 59701
 Status: Unknown

MASTER PLACER Gold
 Gold Creek dist., T. 8 N., R. 12 W.
 Owner-Operator: O. Perl Smith
 745 Sherman, Denver, CO 80203
 Status: Unknown

JEFFERSON COUNTY: Boulder

BLUEBIRD NO. 1 and 2 PLACER Gold
 Whitehall district
 Owner-Operator: Maurice R. Haigh
 Box 293, Three Forks, MT 59752
 Employees: 1
 Status: Producing and developing

SKOOKUM PLACER Gold
 Comet dist., sec. 12, T. 5 N., R. 6 W.
 Owner-Operator: Theodore Nyquest
 Box 133, Boulder, MT 59632
 Status: Developing

MADISON COUNTY: Virginia City

BUBANY PLACER Gold
 Virginia City dist., sec. 16, 21, T. 6 S., R. 3 W.
 Operator: Death Valley Tungsten
 325 S. Third, Las Vegas, NV 89101
 Owner: Tony Bubany
 Virginia City, MT 59755
 Employees: 1
 Status: Developing

NEVADA CITY PLACER Gold
 Virginia City (Nevada) dist., sec. 16, 21, T. 6 S.,
 R. 4 W.
 Operator: Joe Highsmith
 Box 223, Virginia City, MT 59755
 Status: Unknown

MEAGHER COUNTY: White Sulphur Springs

CAMP ROBBER PLACER Gold
 Thompson Gulch dist., sec. 22, T. 9 N., R. 4 E.
 Owner-Operator: E. L. Burns
 Box 324, White Sulphur Springs, MT 59645
 Status: Producing

YERDON PLACER Gold
 Meagher district, unorganized
 Owner: Vern Knopf
 1621 Cannon St., Helena, MT 59601
 Status: Unknown

MINERAL COUNTY: Superior

OREGON CREEK PLACER Gold
 Oregon Creek district
 Owner: Oremont, Inc.
 417 Paulsen Bldg., Spokane, WA 99201
 Status: Unknown

STEMWINDER PLACER Gold
 Cedar Creek dist., sec. 17, T. 15 N., R. 26 W.
 Owner-Operator: George Gildersleeve
 Box 565, Superior, MT 59872
 Status: Developing and producing

GOLD PLACERS—Continued

PARK COUNTY: Livingston

HENKE-BEER PLACER Gold
Boulder River dist., sec. 20, T. 7 S., R. 12 E.
Owner-Operator: Donald N. Henke
Box 206, Big Timber, MT 59011
Employees: 2
Status: Developing

W. M. CLAYTON PLACER Gold
Emigrant dist., sec. 7, T. 6 S., R. 9 E.
Owner-Operator: W. J. Clayton
Box 54, Pray, MT 59065
Status: Inactive

POWELL COUNTY: Deer Lodge

JEFFERSON CREEK PLACER Gold
Finn dist., sec. 11, T. 12 N., R. 9 W.
Owner-Operator: Elmer J. Wagner
Box 292, Avon, MT 59713
Employees: 1
Status: Developing

OLD SHOE NO. 1 PLACER Gold
Finn district
Owner-Operator: A. H. Roat and Sons
Box 266, Alberton, MT 59820
Status: Unknown

MASTER PLACER Gold
Gold Creek dist., T. 9 N., R. 11 W.
Owner-Operator: O. Perl Smith
745 Sherman, Denver, CO 80203
Status: Unknown

PART 2, NONMETAL MINES, PITS, AND QUARRIES

ASBESTOS MINES

GALLATIN COUNTY: Bozeman

*KARST MINE Anthophyllite asbestos
 Karst Kamp dist., sec. 36, T. 5 S., R. 4 E.
 Operator: Galaxy Mining Co.
 Box 63, Billings, MT 59101
 Owner: Interstate Products Co., Doyle S. Potts, Pres.
 Big Fork, MT 59911
 Status: Developing

BARITE MINES

BEAVERHEAD COUNTY: Dillon

*LUCKY JIM BEAM GROUP MINE Barite
 Jackson dist., sec. 25, 26, T. 4 S., R. 14 W.
 Owner-Operator: R. P. Jackson
 Jackson, MT 59736
 Status: Developing

MISSOULA COUNTY: Missoula

FROST BARITE DEPOSIT Barite
 Elk Creek dist., sec. 20, T. 13 N., R. 14 W.
 Operator: Bill Frost
 4405 - 23d Ave., Missoula, MT 59801
 Status: Unknown

BENTONITE PITS

CARTER COUNTY: Ekalaka

*COLONY OPEN PITS Bentonite
 T. 9 S., R. 58, 59 E.
 Operator: National Lead Co., Baroid Div.
 Box 638, Belle Fourche, SD 57717
 Owner: National Lead Co., Baroid Div.
 Box 1675, Houston, TX 77001
 Employees: 45
 Mill capacity: 1,000 t/d
 Status: Producing

JUDITH BASIN COUNTY: Stanford

*RALPH MODIC PIT Bentonite
 Sec. 14, 24, 25, 36, T. 17 N., R. 11 E.; sec. 6, T. 16 N., R. 12 E.;
 sec. 7, 8, 9, 10, 13, 35, T. 17 N., R. 11 E.
 Operator: Ralph Modic
 Harlem, MT 59526
 Status: Inactive

 *Open pit.

BENTONITE PITS—Continued

PHILLIPS COUNTY: Malta

*AMERICAN COLLOID Bentonite
 Operator: American Colloid Co.
 5100 Suffield Ct., Skokie, IL 60076
 Status: Developing

*BRAZIL CREEK PIT Bentonite
 Owner-Operator: Brazil Creek Bentonite Co.
 Box 907, Glasgow, MT 59230
 Status: Developing

ROSEBUD COUNTY: Forsyth

*HALLETT MINERALS PIT Bentonite
 Sec. 33, 34, 35, T. 8 N., R. 37 E.
 Operator: Hallett Minerals
 Vananda, MT 59230
 Owner: Hallett Minerals
 Box 7024, Duluth, MN 55807
 Employees: 19
 Mill capacity: 100 t/hr
 Status: Producing

TREASURE COUNTY: Hysham

*HALLETT MINERALS PIT Bentonite
 Sec. 2, 3, 4, 12, T. 7 N., R. 37 E.
 Operator: Hallett Minerals
 Vananda, MT 59230
 Owner: Hallett Minerals
 Box 7024, Duluth, MN 55807
 Employees: 19
 Mill capacity: 100 t/hr
 Status: Producing

VALLEY COUNTY: Glasgow

*GLASGOW PITS Bentonite
 Owner-Operator: Federal Bentonite Co.
 4614 Prospect Ave., Cleveland, OH 44103
 Status: Developing

BRAZIL CREEK PIT Bentonite
 Operator: Federal Bentonite Co.
 4614 Prospect Ave., Cleveland, OH 44103
 Owner: Brazil Creek Bentonite Co.
 Box 907, Glasgow, MT 59230
 Status: Developing

CLAY MINES AND PITS

CASCADE COUNTY: Great Falls

*TREASURELITE PIT Clay
 Sec. 13, T. 21 N., R. 3 E.
 Owner-Operator: Treasurelite, Div. Treasure State Industrial Products, Inc.
 Box 2750, Great Falls, MT 59401
 Status: Unknown

 *Open pit.

CLAY MINES—Continued

DEER LODGE COUNTY: Anaconda

*PLACER FIRE CLAY PIT Fire clay
 Sec. 34, T. 5 N., R. 11 W.
 Owner-Operator: Harold Snow
 Box 1155, Anaconda, MT 59711
 Status: Producing

FERGUS COUNTY: Lewistown

*LEWISTOWN PIT Clay
 Sec. 15, T. 15 N., R. 18 E.
 Operator: Lewistown Brick & Tile Co.
 Box 573, Lewistown, MT 59457
 Status: Producing

JEFFERSON COUNTY: Boulder

*CALICO CLAY PIT Pottery clay
 Sec. 36, T. 2 N., R. 3 W.
 Owner-Operator: Wesley Van Gorden
 Box 5, Cardwell, MT 59721
 Status: Produced

SILVER BOW COUNTY: Butte

*GAVIN PLACER Refractory clay
 Summit Valley dist., sec. 24, T. 3 N., R. 9 W.
 Operator: Stauffer Chemical Co.
 Box 3146, Butte, MT 59701
 Owner: Tom Helehan
 Fox Hotel, Butte, MT 59701
 Status: Produced

FLUORSPAR MINES

RAVALLI COUNTY: Hamilton

*CRYSTAL MOUNTAIN MINE Fluorspar
 Sec. 18, T. 3 N., R. 19 W.
 Operator: Roberts Mining Co.
 Box 365, Darby, MT 59829
 Employees: 25
 Mill capacity: 50 t/hr
 Status: Produced

 *Open pit.

GYPSUM MINES

BEAVERHEAD COUNTY: Dillon

- | | |
|---|---|
| <p>*McCARTHY (DEADWOOD) DEPOSIT Gypsum
 Sec. 6, 7, T. 14 S., R. 9 W.
 Operator: Tim McCarthy
 Lima, MT 59739
 Owner: Tim McCarthy and others
 Lima, MT 59739
 Status: Developing</p> | <p>*PETERSON DEPOSIT Gypsum
 N½ sec. 1, T. 15 S., R. 9 W.
 Owner-Operator: Mrs. Lanora Peterson
 Box 185, Willow Creek, MT 59760
 Status: Inactive</p> |
|---|---|

CARBON COUNTY: Red Lodge

- *JAY KAY MINE Gypsum
 NE¼ SE¼ sec. 19, T. 7 S., R. 24 E.
 Owner-Operator: Jay Kay, Inc.
 607 Garden Ave., Billings, MT 59101
 Status: Developing

FERGUS COUNTY: Lewistown

- SHOEMAKER (HEATH) MINE Gypsum
 Sec. 1, 2, T. 14 N., R. 19 E.
 Operator: U. S. Gypsum Co.
 Heath, MT 59449
 Owner: U. S. Gypsum Co.
 101 S. Wacker Dr., Chicago, IL 60606
 Employees: 4
 Mill capacity: 400 t/d
 Status: Producing

MADISON COUNTY: Virginia City

- *PIKA GYPSUM DEPOSIT Gypsum
 Cottonwood dist., unorganized, sec. 25, T. 10 S., R. 3 W.
 Owner-Operator: Roy Kitson
 Alder, MT 59710
 Status: Developing

LIMESTONE MINES AND QUARRIES

CARBON COUNTY: Red Lodge

- *WARREN QUARRY Chemical limestone
 Sec. 16, T. 5 S., R. 25, 26 E.
 Operator: Big Horn Calcium Co.
 Box 118, Frannie, WY 82423
 Owner: The Big Horn Limestone Co.
 Box 5308, Denver, CO 80200
 Employees: 28
 Mill capacity: 10 t/hr
 Status: Producing

 *Open pit.

LIMESTONE MINES—Continued

DEER LODGE COUNTY: Anaconda

*BROWNS QUARRY Metallurgical limestone
 Sec. 23, T. 5 N., R. 12 W.
 Owner-Operator: The Anaconda Co.
 Butte, MT 59701
 Status: Producing

GALLATIN COUNTY: Bozeman

*TRIDENT QUARRY Portland cement limestone
 Sec. 9, 10, T. 2 N., R. 2 E.
 Owner-Operator: Ideal Cement Co.
 420 Ideal Cement Bldg., Denver, CO 80202
 Status: Producing

JEFFERSON COUNTY: Boulder

*McCLELLAN QUARRY Limestone
 McClellan dist., sec. 7, T. 9 N., R. 3 W.
 Operator: Maronick Construction Co., Inc.
 East Helena, MT 59635
 Owner: E. P. Maronick, Pres.
 East Helena, MT 59635
 Status: Producing

*MONTANA CITY QUARRY Portland cement limestone
 Sec. 12, 13, T. 9 N., R. 2 W.
 Operator: Kaiser Cement Co.
 Montana City, MT 59602
 Owner: Kaiser Cement and Gypsum Corp.
 Kaiser Center, Oakland, CA 94600
 Employees: 75
 Mill capacity: 5,000 b/d
 Status: Producing

POWELL COUNTY: Deer Lodge

*WARM SPRINGS CREEK QUARRY Limestone
 Sec. 5, T. 10 N., R. 9 W.
 Owner-Operator: Janney Trucking Co., Inc.
 Garrison, MT 59731
 Status: Producing and developing

PHOSPHATE MINES

POWELL COUNTY: Deer Lodge

BROCK (ANDERSON, WARM SPRINGS CREEK)
 Phosphate rock
 Garrison dist., sec. 21, 22, T. 10 N., R. 10 W.
 Owner-Operator: Cominco American, Inc.
 Garrison, MT 59731
 Employees: 150
 Status: Producing and developing

JACKSON MINE Phosphate rock
 Elliston dist., sec. 1, 2, T. 9 N., R. 7 W.
 Operator: Vernon Gillman
 Garrison, MT 59731
 Owner: A. G. Jackson
 Elliston, MT 59728
 Status: Inactive

EMERY RIDGE (PIKES PEAK) LEASE Phosphate rock
 Pikes Peak Creek dist., sec. 5, 8, 9, T. 8 N., R. 11 W.;
 sec. 32, T. 9 N., R. 11 W.
 Owner-Operator: R. M. Parson Co.
 617 W. 7th St., Los Angeles, CA 90017
 Status: Developing

RELYEA MINE Phosphate rock
 Garrison dist., S½ sec. 12, T. 10 N., R. 10 W.
 Owner-Operator: George Relyea
 Box 85, Garrison, MT 59731
 Employees: 10
 Status: Producing

 *Open pit.

SAPPHIRE MINES

GRANITE COUNTY: Philipsburg

- *AMERICAN SAPPHIRE GEM MINE Sapphire
 West Fork Rock Creek, T. 6 N., R. 16 W.
 Operator: Wil Chaussee
 Box 26, Philipsburg, MT 59858
 Owner: Chaussee Sapphire, Inc.
 Bothell, WA 98011
 Status: Developing

LEWIS AND CLARK COUNTY: Helena

- *EL DORADO BAR SAPPHIRE DIGGINGS Sapphire
 Sec. 2, 10, 11, T. 11 N., R. 12 W.
 Operator: Dr. James Peterson
 2428 No. Highland, Altadena, CA 91001
 Owner: Eldorado, Inc.
 York Rte., Helena, MT 59601
 Status: Producing and developing

SEMIPRECIOUS STONES

MISSOULA COUNTY: Missoula

- *FOUR V's CLAIMS Smoky quartz
 Fish Creek dist., sec. 22, T. 11 N., R. 24 W.
 Owner-Operator: Albert E. Volker
 2835 Woodland St., Missoula, MT 59801
 Status: Producing and developing

SHALE PITS

CASCADE COUNTY: Great Falls

- *TREASURELITE PIT Expanded shale
 Sec. 13, T. 21 N., R. 3 E.
 Owner-Operator: Treasurelite, Div. Treasure State Industrial Products, Inc.
 Box 2750, Great Falls, MT 59401
 Status: Unknown

GALLATIN COUNTY: Bozeman

- *KANTA PIT Expanded shale
 Sec. 13, T. 2 N., R. 2 E.
 Owner-Operator: Kanta Products, Inc.
 Box 96, Three Forks, MT 59752
 Status: Unknown

YELLOWSTONE COUNTY: Billings

- *MONTANA SHALE PIT Expanded shale
 Owner-Operator: Montana Liteweight Aggregate Co.
 Box 20317, Billings, MT 59102
 Status: Inactive

 *Open pit.

SILICA MINES AND QUARRIES

BEAVERHEAD COUNTY: Dillon

- *CANYON CREEK QUARRY Metallurgical silica
 Melrose dist., sec. 32, T. 1 S., R. 9 W.
 Operator: Industrial Chemical, Div. Stauffer Chemical Co.
 Box 3146, Butte, MT 59701
 Status: Producing

DEER LODGE COUNTY: Anaconda

- *LUKE QUARRY Metallurgical silica
 Blue Eyed Nellie dist., NW¼ sec. 24, T. 5 N., R. 12 W.
 Operator: Montana Ores, Inc.
 110 West 3d St., Anaconda, MT 59711
 Owner: The Anaconda Co.
 Butte, MT 59701
 Status: Producing

JEFFERSON COUNTY: Boulder

- | | |
|--|--|
| *BASIN QUARTZ QUARRY Industrial silica
Basin dist., sec. 16, T. 6 N., R. 5 W.
Operator: Pacific Silica Co.
Basin, MT 59631
Owner: Union Carbide Co.
Portland, OR 97200
Status: Producing | *KYLER SILICA DEPOSIT Portland cement silica
Colorado-Corbin dist., sec. 13, T. 7 N., R. 4 W.
Owner: Ed Kyler
Boulder, MT 59632
Status: Inactive |
|--|--|

SOIL CONDITIONERS

BEAVERHEAD COUNTY: Dillon

- *PEAT LEASE Peat
 Sec. 16, 20, T. 4 S., R. 16 W.
 Operator: Intermountain Peat Moss Corp., John M. Peart, Pres.
 Box 2285, Salt Lake City, UT 84110
 Owner: Columbia Beneficial Holdings, Ltd.
 203 - 14th St., Vancouver, B. C., Canada
 Status: Unknown

GOLDEN VALLEY COUNTY: Ryegate

- *R.K.R. PIT Shell rock
 Sec. 23, T. 7 N., R. 22 E.
 Owner-Operator: R.K.R. Soil Amendment, Inc.
 Cushman, MT 59023
 Status: Inactive

LAKE COUNTY: Polson

- *HOWARD W. MARTIN PEAT Peat
 Sec. 16, 17, T. 24 N., R. 17 W.
 Owner-Operator: Martin's Peat & Potting Soils, Howard W. Martin
 Swan Lake, MT 59911
 Employees: 1
 Status: Producing

*Open pit.

STONE QUARRIES

CARBON COUNTY: Red Lodge

- *DEADMAN QUARRY Ornamental stone
 Sec. 1, 12, 13, T. 8 S., R. 28 E.; sec. 26, 35, T. 7 S.,
 R. 28 E.
 Operator: Montana Marble, Inc.
 1813 Broadwater, Billings, MT 59101
 Employees: 5
 Mill capacity: 30 t/d
 Status: Produced and developing

CASCADE COUNTY: Great Falls

- *FORZLEY SALES CO. QUARRIES Building stone
 Four mi. S. Monarch
 Owner-Operator: Forsley Sales Co.
 Box 2070, Great Falls, MT 59401
 Status: Producing

FERGUS COUNTY: Lewistown

- *SURPRISE STONE QUARRY Ornamental stone
 Sec. 32, 33, T. 14 N., R. 22 E.
 Owner-Operator: Charles B. Allen
 Box 117, Grassrange, MT 59032
 Status: Produced and developing

FLATHEAD COUNTY: Kalispell

- *FLATHEAD SUNSET QUARRY Building stone,
 pozzolan, volcanic ash
 Sec. 24, T. 25 N., R. 24 W.; sec. 34, T. 25 N., R. 24 W.
 Owner-Operator: Henry Lozeau
 535 Ford, Missoula, MT 59801
 Status: Produced

GALLATIN COUNTY; Bozeman

- *PICTURE FLAGSTONE QUARRY Picture flagstone
 Sec. 29, T. 2 N., R. 4 E.
 Owner-Operator: Orié B. McElwee
 Box 474, Manhattan, MT 59741
 Status: Producing

MADISON COUNTY: Virginia City

- *WHITE ANGEL QUARRY Onyx marble
 Tidal Wave dist., sec. 27, T. 3 S., R. 5 W.
 Operator: Norman Rogers
 Box 1719, Helena, MT 59601
 Owner: American Chemet Corp.
 East Helena, MT 59635
 Status: Inactive

MISSOULA COUNTY: Missoula

- *McQUARRIE QUARRY Railroad ballast, road metal
 Clinton (Wallace) dist., sec. 17, T. 12 N., R. 17 W.
 Operator: Lyon Construction Co.
 Clinton, MT 59825
 Owner: Burlington Northern, Inc.
 St. Paul, MN 55101
 Employees: 15
 Mill capacity: 200 t/hr
 Status: Producing

PARK COUNTY: Livingston

- *LIVINGSTON MARBLE and GRANITE QUARRY
 Ashlar, cut stone, rubble
 Sec. 14, 24, T. 9 S., R. 8 E.
 Operator: Livingston Marble and Granite Works
 Livingston, MT 59047
 Owner: D. A. Strong
 711 E. Park, Livingston, MT 59047
 Status: Producing

RAVALLI COUNTY: Hamilton

- *BITTERROOT VALLEY STONE QUARRY
 Ornamental stone
 Sec. 7, T. 32 N., R. 21 W.
 Owner-Operator: Henry Andrews
 Rte. 1, Box 274, Hamilton, MT 59840
 Status: Produced and developing

SANDERS COUNTY: Thompson Falls

- *FISHTRAP QUARRIES Ornamental stone
 Sec. 23, 26, T. 24 N., R. 28 W.
 Owner-Operator: U. C. Campbell
 Box 427, Thompson Falls, MT 59873
 Status: Producing

 *Open pit.

TALC MINES

MADISON COUNTY: Virginia City

*BEAVERHEAD MINE Talc
 Stone Creek dist., sec. 11, 14, T. 7 S., R. 6 W.
 Owner-Operator: United Sierra Division
 Cyprus Mines Corp., Box 1201, Trenton, NJ 08618
 Status: Producing

*REGAL MINE Talc
 Sweetwater dist., N½ sec. 2, T. 8 S., R. 7 W.
 Owner-Operator: Chas. Pfizer & Co.
 Box 1147, Dillon, MT 59725
 Employees: 2
 Status: Producing

*RUBY NO. 1 and NO. 2 MINE Talc
 Warm Springs dist., sec. 11, T. 8 S., R. 4 W.
 Owner-Operator: Sam Maloney
 Box 174, Alder, MT 59710
 Status: Developing

*SNOW CAP MINE Talc
 Owner-Operator: W. M. Cocanougher
 Twin Bridges, MT 59754
 Mill capacity: 30,000 t/d
 Status: Developing

*TALC RIDGE (RUBY) GROUP Talc
 Willow Creek dist., sec. 30, T. 8 S., R. 3 W.
 Operator: Madison Minerals Corp., c/o C. W. Hafer, Sr.
 1967 Yale, Butte, MT 59701
 Owner: Carl Garrison and others
 1967 Yale, Butte, Mt 59701
 Employees: 2 to 3
 Status: Producing and developing

*TREASURE STATE MINE Talc
 Stone Creek dist., NE¼ NE¼ sec. 15, T. 7 S., R. 6 W.
 Owner-Operator: Chas. Pfizer & Co.
 Box 1147, Dillon, MT 59725
 Employees: 2
 Status: Producing

*YELLOWSTONE (CAMERON) MINE Talc
 Johnny Gulch dist., sec. 4, T. 9 S., R. 1 W.
 Owner-Operator: United Sierra Division
 Cyprus Mines Corp., Box 1201, Trenton, NJ 08618
 Status: Producing

VERMICULITE MINES

LINCOLN COUNTY: Libby

*VERMICULITE MOUNTAIN MINE Vermiculite
 Rainy Creek dist., sec. 14, 15, 22, 23, T. 31 N., R. 30 W.
 Owner-Operator: Construction Materials Division
 W. R. Grace & Co.
 62 Whittemore Ave., Cambridge, MA 02140
 Employees: 160
 Mill capacity: 3,000 t/d
 Status: Producing

MADISON COUNTY: Virginia City

GILLIAM VERMICULITE DEPOSIT Vermiculite
 Mineral Hill dist., sec. 25, T. 1 S., R. 3 W.
 Operator: W. G. Forbes
 Pony, MT 59747
 Owner: Celesta Gilliam
 Cardwell, MT 59721
 Status: Developing

 *Open pit.

PART 3, COAL MINES

BIG HORN COUNTY: Hardin

*ROSEBUD TONGUE RIVER MINE Coal
 Owner-Operator: Rosebud Coal Sales Co.
 Box 724, Sheridan, WY 82801
 Status: Produced; inactive after April 1970

BLAINE COUNTY: Chinook

MILK RIVER MINE Coal
 Owner-Operator: Lauren Sargent
 Box 472, Chinook, MT 59523
 Employees: 4
 Status: Closed April 1970

CUSTER COUNTY: Miles City

STORM KING MINE Coal
 Operator: Ralph E. Bair
 Box 113, Miles City, MT 59301
 Status: Unknown

DAWSON COUNTY: Glendive

PEUSE MINE Coal
 Sec. 13, T. 16 N., R. 53 E.
 Owner-Operator: Gordon Peuse
 Lindsay, MT 59339
 Status: Developing

McCONE COUNTY: Circle

No. 1 MINE Coal
 Operator: R. D. Stephenson
 Circle, MT 59215
 Status: Produced

MUSSELSHELL COUNTY: Roundup

BLUE FLAME MINE Coal
 Sec. 23, T. 6 N., R. 26 E.
 Owner-Operator: Victor Carlson
 Box 342, Roundup, MT 59072
 Employees: 7
 Mill capacity: 100 t/d
 Status: Producing

COW CREEK MINE Coal
 Sec. 9, T. 6 N., R. 28 E.
 Owner-Operator: George Badovinus
 Klein Star Rte., Roundup, MT 59072
 Status: Developing

 *Open pit.

MUSSELSHELL COUNTY—Continued**DIVIDE MINE** Coal

Operator: Divide Coal Mining Co.
Roundup, MT 59072
Owner: Victor Carlson
Box 342, Roundup, MT 59072
Employees: 6
Status: Produced

JOHNNY'S MINE Coal

Sec. 15, T. 7 N., R. 26 E.
Owner-Operator: Johnny Keosky
1011 - 1st St., Roundup, MT 59072
Employees: 3
Status: Produced

NIES MINE Coal

Sec. 21, T. 8 N., R. 25 E.
Operator: Nies Coal Co.
Roundup, MT 59072
Owner: William F. Nies
Roundup, MT 59072
Employees: 7
Status: Producing and developing

P and M MINE Coal

Sec. 13, T. 6 N., R. 27 E.
Owner-Operator: Paul Meged
Golden Creek Rte., Roundup, MT 59072
Status: Producing

SQUARE DEAL MINE Coal

Sec. 16, T. 8 N., R. 25 E.
Owner-Operator: Virgil Cross
220 - 1st St. W., Roundup, MT 59072
Employees: 12
Status: Producing and developing

WESTERN MINE Coal

Operator: Glenn Johnson
Roundup, MT 59072
Status: Producing

POWDER RIVER COUNTY: Broadus**COAL CREEK MINE** Coal

Operator: John Schoonover
Box 94, Ashland, MT 59003
Status: Unknown

RICHLAND COUNTY: Sidney**BEMER MINE** Coal

Operator: Neville Bemer
Culbertson, MT 59218
Status: Unknown

***KNIFE RIVER MINE** Coal

Operator: Knife River Coal Co.
Savage, MT 59262
Employees: 17
Status: Producing

ROSEBUD COUNTY: Forsyth**BIG SKY MINE** Coal

Owner-Operator: Peabody Coal Co.
Colstrip, MT 59323
Employees: 13
Status: Producing

***ROSEBUD NO. 6 MINE** Coal

Operator: Western Energy Co.
Colstrip, MT 59323
Owner: Montana Power Co.
Butte, MT 59701
Employees: 9
Status: Producing

LAME DEER MINE Coal

Operator: Lester Scott
Lame Deer, MT 59043
Status: Unknown

*Open pit.

COAL MINES—Continued

SHERIDAN COUNTY: Plentywood

ACME MINE Coal
Operator: M. F. Brenteson
Coalridge, MT 59216
Status: Inactive

*LAGERQUIST MINE Coal
Sec. 4, T. 35 N., R. 58 E.
Owner-Operator: E. C. Lagerquist
Rte. 1, Westby, MT 59275
Status: Inactive

PART 4, THE MINERAL INDUSTRY OF MONTANA IN 1970

	<h1>MINERAL INDUSTRY SURVEYS</h1>	
<p>U. S. DEPARTMENT OF THE INTERIOR BUREAU OF MINES</p>		
Fred J. Russell, Acting Secretary	Elburt F. Osborn, Director	

Albany Mineral Supply Field Office
Mark L. Wright, Acting Chief
Albany, Oregon

THE MINERAL INDUSTRY OF MONTANA IN 1970

Preliminary Annual Report

The value of mineral production in 1970 rose to \$309.8 million, an increase of almost 10 percent over the previous year, according to preliminary estimates by the Bureau of Mines, U.S. Department of the Interior. The metallic values were mixed, with gold, lead, manganese, and zinc all declining in value, and copper and silver increasing 45 and 26 percent, respectively. Copper's value of mineral production was 46 percent of the State total, which was partially due to a 24-percent increase in the annual average price.

Petroleum production value, at one time the State's dominant mineral commodity in terms of value, fell 12 percent to \$103.7 million. In spite of increases in coal and natural gas, mineral fuels value of production declined to 36 percent of the total value of mineral production, compared with 44 percent in 1969 and 56 percent in 1968. Both losses were due to petroleum.

The value of construction materials (cement, clay, sand and gravel and stone) dropped compared with 1969. This was paralleled by a decline in employment in the construction industry.

Prepared by Fred V. Carrillo and William N. Hale, Geologists, and Mary Anne McComb, Economist, Bureau of Mines, Albany, Oreg., Dec. 14, 1970, under the direction of A.J. Kauffman, Jr., Physical Science Administrator.

TABLE 1.- Mineral production in Montana 1/

Mineral	1969		P/ 1970	
	Quantity	Value (thousands)	Quantity	Value (thousands)
Antimony ore and concentrate.....short tons, antimony content	-	-	125	\$200
Clays 2/.....thousand short tons	34	\$63	31	60
Coal (bituminous and lignite).....do.....	1,030	2,199	1,740	4,100
Copper (recoverable content of ores, etc.).....short tons	103,314	98,219	121,663	142,759
Gem stones.....	NA	109	NA	109
Gold (recoverable content of ores, etc.).....troy ounces	24,189	1,004	22,333	801
Iron ore (usable).....thousand long tons, gross weight	13	W	15	W
Lead (recoverable content of ores, etc.).....short tons	1,753	522	1,581	497
Lime.....thousand short tons	255	2,737	227	2,802
Manganese ore and concentrate (35 percent or more Mn).....	775	26	672	21
Natural gas.....short tons, gross weight	41,229	4,205	46,680	4,855
Petroleum (crude).....thousand 42-gallon barrels	43,954	118,359	37,550	103,675
Pumice.....thousand short tons	134	102	W	W
Sand and gravel and stone.....do.....	24,262	24,962	22,000	22,500
Silver (recoverable content of ores, etc.).....thousand troy ounces	3,429	6,141	4,281	7,767
Zinc (recoverable content of ores, etc.).....short tons	6,143	1,794	5,131	1,572
Value of items that cannot be disclosed: Cement, clays (bentonite), fluorspar, gypsum, natural gas liquids, peat, phosphate rock, talc, tungsten (1969), vermiculite, and values indicated by symbol W.....	XX	22,189	XX	18,032
Total.....	XX	282,631	XX	309,750

P/ Preliminary. NA Not available. W Withheld to avoid disclosing individual company confidential data.

XX Not applicable.

1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

2/ Excludes bentonite; included with "Value of items that cannot be disclosed."

Montana, having one of the largest strip-minable coal reserves in the Nation, low in sulfur and high in heat value, was seeking legislation to guarantee land restoration after strip mining. Up to this time, restoration had been done on a voluntary basis, and firms were granted special tax privileges on reclamation. The State hoped to parallel the restrictions on Federal lands bearing leasable minerals. The Dredge Mining Law was ruled unconstitutional as it did not cover all developers equally; for example, gravel extraction and strip coal mining were not covered.

According to estimates of the Montana Department of Employment, the State had not experienced the serious economic downturn that was generally true in the Pacific Northwest. In October, the rate of unemployment in Montana was less than Oregon, Idaho, or Washington, and below that of the Nation by over 1 percent. Employment in the mining industry posted a gain of 12 percent compared with that of 1969. Average hourly earnings in mining were \$3.93 in October, as compared with \$3.62 in October of the previous year.

In 1970, the category "All Nonagricultural Industries" was replaced by "Total Employment" in table 2. By comparison, total employment for 1969 and 1968 was 260,300 and 258,100, respectively.

TABLE 2.- Estimated average monthly employment
(thousands)

	First 10 months, 1968	First 10 months, 1969	First 10 months, p/ 1970	Change 1969-70, percent <u>1/</u>
Mining.....	5.4	6.0	6.8	+12.1
Metal mining.....	2.2	3.2	4.1	+28.0
Quarrying and nonmetallic mining, including coal.....	1.0	0.8	0.7	-5.3
Petroleum and natural gas production.....	2.1	2.1	1.9	-6.3
Manufacturing.....	23.0	24.1	23.8	-1.2
Lumber and timber products....	8.9	8.9	8.6	-3.5
Primary metals.....	3.6	4.7	4.7	-
Petroleum refining.....	1.0	1.0	1.1	+11.3
Contract construction.....	11.7	10.4	10.2	-1.4
Transportation and utilities....	17.7	17.6	17.1	-2.9
All nonagricultural industries..	194.6	196.6	<u>2/</u>	
Total employment.....	<u>2/</u>	<u>2/</u>	262.8	

p/ Preliminary.

1/ Percentages cannot be calculated from table because of rounding.

2/ As of 1970, the category "All Nonagricultural Industries" has been replaced by "Total Employment." See text.

REVIEW BY MINERAL COMMODITIES

METALS

Aluminum.- Capacity operation of the Anaconda Aluminum Co. plant at Columbia Falls, Flathead County, resulted in comparable production to that of 1969.

Antimony.- U.S. Antimony Corp. began developing a new domestic source of antimony from the Agau Mines, Inc., property in the Prospect Creek drainage near Thompson Falls, Sanders County. Construction of a mill capable of processing 1,800 tons of ore daily was completed in October. Approximately 125 tons of antimony concentrates valued at \$200,000 was produced since October when the new mill was put on stream.

Copper.- Annual production of 121,633 tons of copper was 18 percent higher than that of 1969, as The Anaconda Company stepped up operations at its Butte facilities. Higher prices and the increased production resulted in a 45-percent increase in value to \$143 million. Anaconda company mines accounted for 121,550 tons or 99.9 percent of the total copper mined in the State.

The Anaconda Company continued its program to increase production at the Butte copper operations. The capacity of the copper precipitation plant to produce precipitates for shipment to the smelter at Anaconda was doubled, and a new ore crushing-conveying system for the Berkeley pit was also installed. The ore-hauling fleet at the Berkeley pit was upgraded with the addition of fourteen 100-ton trucks, two drills, and a 15-cubic-yard shovel.

Major improvements in the copper smelter at Anaconda were begun in January. Construction of 1,200 feet of insulated steel flue to replace an obsolete flue section was the principal part of the project, which also included modernization of portions of the reverberatory furnace and converter departments.

Exploration for copper was reported 20 miles south of Troy in the area of the Bear Creek Mining Co. Spar Lake copper deposit in Lincoln and Sanders Counties. Kennecott Copper Corp. announced plans to put the Spar Lake copper deposit into production in 1971. Plans were to include construction of a 20,000-ton-per-day ore crusher and concentrator. Underground drilling and detailed geologic studies were undertaken to define the characteristics of the ore body. Phelps-Dodge Corp. entered into a preliminary work agreement with Hillside Mines, Inc., covering a copper prospect near Troy, in the general area of Kennecott's Spar Lake discovery.

Gold.- Most of the gold recovered during the year was byproduct gold from copper operations. Despite the increase in copper production, gold production declined 7 percent to 22,330 ounces. A \$5.63-per-ounce decrease in the average annual price resulted in a 20-percent drop in estimated value of production to \$801,000.

Iron Ore.- The total iron ore production in the State was from the open-pit Iron Cross mine of R & S Iron Co. near Radersburg. Production increased 15 percent from 1969 to 15,000 long tons of ore. As in past years, the iron ore was used by the cement industry.

TABLE 3.- Mine production of gold, silver, copper, lead, and zinc, in terms of recoverable metals ^{1/}

Year	Mines producing		Material sold or treated ^{2/} (thousand short tons)	Gold (lode and placer)		Silver (lode and placer)	
	Lode	Placer		Troy ounces	Value (thousands)	Troy ounces (thousands)	Value (thousands)
1966.....	117	5	17,645	25,009	\$875	5,320	\$6,878
1967.....	62	3	9,093	9,786	343	2,066	3,203
1968.....	143	3	10,215	13,385	525	2,133	4,574
1969.....	88	2	16,131	24,189	1,004	3,429	6,141
1970 ^{3/}	95	2	18,997	22,333	801	4,281	7,767

Year	Copper		Lead		Zinc		Total value (thousands)
	Short tons	Value (thousands)	Short tons	Value (thousands)	Short tons	Value (thousands)	
1966.....	128,061	\$92,639	4,409	\$1,333	29,120	\$8,445	\$110,171
1967.....	65,483	50,063	898	251	3,341	925	54,785
1968.....	69,480	58,151	1,870	494	3,778	1,020	64,764
1969.....	103,314	98,219	1,753	522	6,143	1,794	107,679
1970 ^{3/}	121,663	142,759	1,581	497	5,131	1,572	153,397

^{1/} Includes recoverable metal content of gravel washed (placer operation), ore milled, old tailings re-treated, and ore, old slag, and mill cleanings shipped to smelters during the calendar year indicated. Data may not add to totals shown because of independent rounding.

^{2/} Does not include gravel washed.

^{3/} Preliminary figures. Values calculated at 1970 average New York selling price: gold, \$35.88 a troy ounce; silver, \$1.8143 a troy ounce; copper, \$0.5867 a pound; lead, \$0.15731 a pound; and zinc, \$0.15319 a pound.

TABLE 4.- Mine production of gold, silver, copper, lead, and zinc in 1970, by months, in terms of recoverable metals

Month	Gold (troy ounces)	Silver (troy ounces)	Copper (short tons)	Lead (short tons)	Zinc (short tons)
January.....	1,863	316,045	10,055	83	397
February....	1,793	365,845	8,416	176	413
March.....	1,926	310,767	9,275	112	368
April.....	1,946	342,505	10,501	155	424
May.....	2,274	387,506	10,748	144	407
June.....	1,801	387,432	11,116	128	398
July.....	2,036	377,669	10,708	103	393
August.....	1,721	381,688	9,712	154	454
September...	1,541	349,710	10,874	132	431
October.....	1,726	335,766	10,244	142	576
November....	1,853	363,000	10,007	126	435
December....	1,853	363,000	10,007	126	435
Total....	22,333	4,280,933	121,663	1,581	5,131

TABLE 5.- Mine production of gold, silver, copper, lead, and zinc in Silver Bow County, in terms of recoverable metals

Year	Mines producing		Material sold or treated ^{1/} (thousand short tons)	Gold, lode and placer (troy ounces)	Silver, lode and placer (thousand troy ounces)
	Lode	Placer			
1966.....	5	-	17,503	21,608	4,864
1967.....	5	-	9,041	8,339	1,856
1968.....	6	-	10,089	9,782	1,466
1969.....	5	-	16,022	15,428	2,563
1970 <u>p/</u> ...	4	-	18,906	19,320	3,610

Year	Copper (short tons)	Lead (short tons)	Zinc (short tons)	Total value (thousands)
1966.....	127,885	2,411	22,284	\$106,749
1967.....	65,448	64	816	53,450
1968.....	69,362	-	-	61,580
1969.....	103,179	-	W	103,321
1970 <u>p/</u> ...	121,556	-	-	149,577

p/ Preliminary. W Withheld to avoid disclosing individual company confidential data.

^{1/} Does not include gravel washed.

Lead.- Byproduct lead from The Anaconda Company's zinc fume plant and the American Smelting and Refining Co. (Asarco) smelter at East Helena continued to supply most of the State's production. Output declined 10 percent from 1969 to 1,581 tons. Value declined only 5 percent to \$497,000 as a 0.8-cent increase in the average annual price to 15.7 cents per pound was registered.

Manganese.- Shipments from The Anaconda Company stockpile accounted for all the manganese production attributed to the State, as no manganese ore was mined in Montana during the year. Shipments of manganese, valued at \$21,000, totaled 672 tons, which was 13 percent less than that of the previous year.

Silver.- Byproduct silver from copper operations in the Butte area continued to be the chief source. Silver production registered a 25-percent increase, reflecting increased copper production for 1970. Total value for the year was up 26 percent to approximately \$7.8 million.

Interest in locating and developing silver deposits remained high in mining regions throughout the State. Diamond-drilling and surface exploration were conducted at the Nancy Lee mine near Superior, Mineral County. Evaluation drilling was reported on the 1,200-foot level of the Snowstorm mine near Troy, Lincoln County, and at the Mascot Silver-Lead Mines, Inc., Meadow mine in Jefferson County.

Sierra Silver Mining Co. explored the No. 1 vein of the Cadgie Taylor property near Philipsburg. Golden Eagle Mining Co. made its first shipment of ore from the Hi Tariff mine in the Remini mining district west of Helena. Midnight Mines, Inc., made shipments from its Polaris mine in Beaverhead County to the Anaconda smelter.

Tungsten.- No tungsten production was reported in the State during the year. Asarco completed exploration drilling for tungsten and molybdenum on claims near Goat Creek about 6 miles northeast of Thompson Falls in Sanders County.

Zinc.- Output was derived from both byproduct production from copper mining operations and various small lead-zinc-silver operations. Production dropped 16 percent from the 1969 total to 5,131 tons. The Anaconda Company zinc refinery at Great Falls reduced production from domestic and foreign ores about 12 percent in July because of heavy inventories of slab zinc and lessening demand. The lower output also resulted in a 12-percent decline in value to \$1,572,000.

NONMETALS

Cement.- The quantity and value of portland cement shipments declined 27 percent below the 1969 figures. The decline largely was due to less cement used in the concrete pour at Libby Dam. Production was by Kaiser Cement & Gypsum Corp. at Montana City and by Ideal Basic Industries, Inc., at Trident.

To meet necessary environmental control, increase efficiency, and boost production capacity 12 percent at the Trident plant, Ideal Basic Industries, Inc., announced plans to replace four small kilns, currently in operation, by a large single kiln. The changes along with other improvements, estimated to cost about \$10 million, were expected to be completed by mid-1973.

Clays.- Output of common clays and shale for use in making building products declined an estimated 9 percent due to adverse economic conditions affecting the market for clay products. Bentonite production advanced 4 percent over the 1969 total.

National Lead Co. mined bentonite near Colony, Carter County, for use as oil-well-drilling mud. Hallett Minerals Co. mined bentonite near Vananda and shipped the material to Burnett, Minn., for milling into a product suitable for use as a binder in pelletizing taconite iron ore concentrate.

Ashland Oil, Inc., sold its bentonite processing plant, under construction at Glasgow, and its northeastern Montana bentonite reserves to Federal Bentonite Co. The plant, linked to the Great Northern Railway by an 18-mile spur, was being constructed to process bentonitic clay from reserves delimited in the area during the 1950's. The Montana plant, which made Federal Bentonite Co. potentially one of the larger suppliers of clay binders to the iron ore pelletizing industry, was scheduled to start operations in 1971.

Beds of bentonite within the Bearpaw Shale, exposed in the Ingomar-Vananda area in Treasure and Rosebud Counties, were described in a report 1/.

Fluorspar.- Roberts Mining Co. continued producing fluorspar at the Crystal Mountain mine in Ravalli County. The ore was trucked 26 miles to the firm's heavy-media separation mill at Darby for processing; metallurgical-grade fluorspar from the milling operation was shipped to industrial consumers.

Gypsum.- The estimated production of gypsum declined 27 percent from the 1969 total. The Shoemaker mine, Fergus County, of United States Gypsum Co., continued to be the source of gypsum.

Lime.- Lime output declined an estimated 11 percent from the 1969 total. The Anaconda Company made quicklime in Deer Lodge County for metallurgical use and for water treatment in tailing disposal systems at its own operations. Sugar companies calcined limestone to quicklime for use in sugar refining in Big Horn, Richland, and Yellowstone Counties.

1/ Berg, Richard B. Bentonite Deposits in the Ingomar-Vananda Area, Treasure and Rosebud Counties, Montana. Montana Bureau of Mines and Geology Spec. Publ. 51, September 1970.

Phosphate Rock.- Output of marketable phosphate rock continued to decline, falling an estimated 38 percent below the 1969 total, largely from effects of continued weakening of the fertilizer market. Production, all from operations in Powell County, went to consumers in the Rocky Mountain area and to Trail, British Columbia, Canada, for manufacturing phosphate fertilizers. The weakened fertilizer market made phasing out and curtailment of operations necessary by Cominco American, Inc., at the Anderson and Warm Springs sections of the Brock mine. The firm centered all phosphate mining operations at the Brock mine proper at Garrison.

Stauffer Chemical Co. continued operating its elemental phosphorus plant at Silver Bow on rock mined at Soda Springs, Idaho.

Rocky Mountain Phosphates, Inc., operating a phosphate-rock defluorinating plant at Garrison, was involved in its seventh year of varied litigations over alleged responsibility by the firm for air pollution at the Garrison plant.

Phosphorus, the major resource of Permian rocks of southwest Montana, along with the distribution of fluorine, uranium, oil shale, and several other elements, was the subject of a report 2/.

Sand and Gravel and Stone.- Combined output of sand and gravel and stone was estimated at 22 million tons valued at \$22.5 million, a decline of 9 percent from the 1969 production. There was less use of sand and gravel and stone in highway construction and at the Libby Dam project on the Kootenai River in northwestern Montana, one of the larger construction projects in the Pacific Northwest.

Sulfur.- Output of high-purity elemental sulfur declined compared with the 1969 total. Sulfur was recovered by Montana Sulphur & Chemical Co. from hydrogen sulfide gas byproducts obtained from two oil-refining operations at Billings, and by Farmers Union Central Exchange from a recovery system that was contingent upon byproduct hydrogen sulfide gas received at its oil-refining operation at Laurel.

Talc.- Talc output did not change appreciably from the 1969 total. Production from mines in Beaverhead and Madison Counties by Chas. Pfizer & Co., Inc., was ground and sized by the firm at Barratts, Beaverhead County. Output from mines in Madison County by United Sierra Division of Cyprus Mines Corp. was processed at a company grinding plant at Three Forks; some was shipped out-of-State for processing at grinding plants in Nebraska and California.

Vermiculite.- There was no significant change in vermiculite output from the 1969 total. The open-pit mine near Libby, Lincoln County, of Zonolite Division, W.R. Grace & Co., continued to be the principal source of vermiculite in the United States. The transfer point at the mine site, the receiving and distributing site for ore and waste products, was revamped to more effectively utilize a conveyor transporting system. The firm continued research directed toward recovering asbestos as a byproduct at the vermiculite operation.

2/ Swanson, Roger W. Mineral Resources in Permian Rocks of Southwest Montana. U.S. Geol. Survey Prof. Paper 313-E, pp. 661-777, 1970.

MINERAL FUELS

Coal.- Output of bituminous coal and lignite increased an estimated 69 percent above the 1969 production. The increase continued to be due to expansion of coal-mining facilities at Colstrip, Rosebud County, by Western Energy Co. and by Peabody Coal Co. Western Energy Co. furnished coal to the coal-fired steam-electric generating plant of Montana Power Co. at Billings. Under terms of a 6-year contract, the company began shipping $\frac{1}{2}$ million tons of coal annually to Northern States Power Co., Minneapolis, Minn. Peabody Coal Co. supplied coal to the Minnesota Power & Light Co. steam-generating plant at Cohasset, Minn. Richland County was the major source of lignite, which was mined by Knife River Coal Mining Co. for use at the Montana-Dakota Utilities Co. coal-fired steam-electric generating plant at Sidney. Montana-Dakota Utilities announced construction at Miles City, Custer County, of a 20-megawatt natural gas-fired steam-electric generating plant, to be operational by May 1972. The plant was to burn natural gas received from a Montana-Dakota Utilities high-pressure transmission line between Baker, Fallon County, and Worland, Wyo.

Pacific Power & Light Co. signed an agreement with Rosebud Coal Sales Co. for mining and marketing 5 million tons of coal annually from southeastern Montana coal deposits near Decker, Big Horn County. The cooperative project was established to furnish coal for use in coal-fired steam-electric generating plants in the Midwest and Rocky Mountain States. A 60,000-ton shipment of coal mined from a pit at the Decker coal field was tested in Illinois at Commonwealth Edison Co. steam generating plants.

A legislative committee considered the feasibility and legality of a proposal for transporting coal slurry by pipeline over 700 miles from Colstrip to Midwest terminals.

Reconnaissance of coal resources in McCone County by drilling 17 holes and taking five core samples resulted in delimiting two strippable coal deposits $\frac{3}{1}$.

Petroleum and Natural Gas.- Estimated recovery of crude oil declined 15 percent from 44 million barrels in 1969 to 37.6 million barrels valued at \$103.7 million. The Bell Creek field in the Powder River basin continued to be the greatest source of petroleum; by October, over 6 million barrels of crude oil was produced from the field.

Marketed production of natural gas increased 13 percent to 46.7 billion cubic feet valued at \$4.9 million. Bell Creek field was the largest source of natural gas, followed by the Cut Bank field. Development of natural gas reserves in the Tiger Ridge gas field, discovered in 1967 by High Crest Oils, Inc., continued to await an outlet to major markets. Northern Natural Gas Co. contracted with field developers for natural gas reserves in Tiger Ridge field.

$\frac{3}{1}$ Matson, Robert E. Preliminary Report, Strippable Coal Resources, McCone County, Montana. Montana Bureau of Mines and Geology Bulletin 78, 1970, 13 pp.

The National Energy Board of Canada rejected an application by the firm for constructing a gas-transmission line from Alberta, Canada, to Minnesota that included a spur line, along with necessary compressor facilities, to the Montana field. The rejected application thereby curtailed any immediate plans for an outlet from the Tiger Ridge natural gas source.

Exploration drilling activities in northwestern and eastern Montana were described 4/ 5/ 6/.

Geologic structure, surface features, stratigraphic sequence of rock units, and other features related to mining and petroleum exploration and development were subjects of reports 7/ 8/ 9/ 10/.

This report summarizes mineral industry activity in Montana in 1970 and contains preliminary production data for the year as estimated from company monthly and quarterly production canvasses, smelter receipt reports, and information contained in industry publications.

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- 4/ McCaslin, John C. The Red River Flows New Hope for Oil Hunters in Three-State Area. The Oil and Gas Journal, v. 68, No. 42, Oct. 19, 1970, p. 117.
- 5/ McCaslin, John C. Wildcatters Trying Again at the Doorstep of the Montana Rockies. The Oil and Gas Journal, v. 68, No. 46, Nov. 16, 1970, p. 203.
- 6/ Kinnard, John C. Wyoming's Central Williston Basin Activity Spills Into Saskatchewan. The Oil and Gas Journal, v. 68, No. 30, July 27, 1970, pp. 160-166.
- 7/ Berg, R.B. Current Geological and Geophysical Studies in Montana. Montana Bureau of Mines and Geology Spec. Publ. 50, May 1970, 24 pp.
- 8/ Botz, M.K. Conversion of Section-Township-Range to Latitude-Longitude -- A Computer Technique. Montana Bureau of Mines and Geology Spec. Publ. 48, 1969, 15 pp.
- 9/ Botz, M.K. Hydrogeology of the Upper Silver Bow Creek Drainage Area, Montana. Montana Bureau of Mines and Geology Bulletin 75, 1969, 32 pp.
- 10/ Fraser, G.D., H.A. Waldrop, and H.J. Hyden. Geology of the Gardiner Area, Park County, Montana. U.S. Geol. Survey Bulletin 1277, 1969, 118 pp.
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SUPPLEMENTAL LIST OF MINING ENTERPRISES

This list includes mining enterprises that have been inactive up to three years or that have not returned our questionnaires. The abbreviations used to describe their former status are: A, active; D, developing; I, inactive; P, producing; and U, unknown.

BEAVERHEAD COUNTY

Burgierosa	I	1970
Canyon Creek and East LaMarche	I	1970
Capitol (Cave Gulch)	I	1969
Coolidge		

BLAINE COUNTY

Peter Kiewit Sons pit	I	1969
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BROADWATER COUNTY

Gold Bug and Mary Rose	I	1969
------------------------	---	------

CARBON COUNTY

Brophy	I	1969
Carbon Series pits	I	1969
Daisy	I	1969
Roadside	I	1969

DEER LODGE COUNTY

Ruby	I	1969
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FERGUS COUNTY

Montago	I	1969
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GRANITE COUNTY

Algonquin	I	1969
Bi-Metallic	I	1969
Carlin-One Dollar	I	1969
Carter Hall	I	1969
Cliff Millsite manganese	I	1969
Douglas Creek	I	1969
Granite tailings	I	1969
Hawkeye	I	1969
Hobo	I	1969
Hope tailings	I	1969
Mountain Boy	I	1969
Myers quartz	I	1969
Powell	I	1969
Sally Ellen	I	1970
Sunset placer	I	1970
True Fissure manganese	I	1969

HILL COUNTY

Rocky Boy quartz deposit	I	1969
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JEFFERSON COUNTY

Camp Owen	I	1969
Good Cheer	U	1969
King Solomon	I	1969

LIBERTY COUNTY

Sweetgrass	I	1969
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MADISON COUNTY

Mistake	I	1969
Silver Queen	I	1970

MISSOULA COUNTY

LaChambre placer	I	1969
------------------	---	------

PARK COUNTY

Crown Butte and Melissa	U	1969
-------------------------	---	------

PHILLIPS COUNTY

Little Rock No. 1 pit	I	1969
-----------------------	---	------

POWELL COUNTY

Charter Oak	I	1969
-------------	---	------

SILVER BOW COUNTY

Maiden Rock	I	1969
-------------	---	------

TOOLE COUNTY

Gold Butte	I	1969
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LIST OF NEW MINING COMPANIES INCORPORATED IN MONTANA IN 1970

ARGO, INC.

Helena (December 29, 1970)
Walter H. Bolkovatz
Box 1691, Helena, MT 59601

THE BEST CORPORATION

Butte (April 23, 1970)
Arthur E. Benson
1000 California Street, Butte, MT 59701

BIG SKY SAND AND GRAVEL, INC.

Choteau (March 13, 1970)
Richard L. Headington
Box 779, Choteau, MT 59422

BROAD GAUGE MINE, INC.

Sheridan (November 18, 1970)
Robert L. Holladay
302 Mill Street, Sheridan, MT 59749

CROSS MINING CORPORATION

Superior (October 24, 1969)
George E. Casler
510 Diamond Rd., Superior, MT 59872

THE 5 PARTNERS MINING COMPANY

Billings (December 16, 1969)
A. L. Rankin
716 N. 29th Street, Billings, MT 59101

GOLD AND SILVER CORPORATION OF AMERICA

Virginia City (December 30, 1969)
Chester L. Jones, Esq.
Virginia City, MT 59755

HIDDEN HAND MINING, INC.

Helena (January 30, 1970)
Walter H. Bolkovatz
27 Edwards Street, Helena, MT 59601

HI-TARIFF SILVER, INC.

Helena (October 22, 1969)
A. L. Libra
27 Edwards Street, Helena, MT 59601

JOHNSTON-REID, INC.

Butte (April 20, 1970)
George W. Richardson
215 Medical Arts Bldg., Butte, MT 59701

LAST CHANCE SILVER GOLD MINING CO.

Helena (September 14, 1970)
Inar Norgaard
Box 544, Helena, MT 59601

MONTANA NUCLEAR CORPORATION

Billings (December 8, 1969)
James L. Sandall
2501 - 4th Avenue N., Billings, MT 59101

MONTIDA SILVER, INC.

Hamilton (December 16, 1969)
Gerald D. Schultz
172 S. 3d Street, Hamilton, MT 59840

PHILIPSBURG SILVER & TUNGSTEN MINES, INC.

Philipsburg (November 3, 1969)
Richard C. Tunstill
Box H, Philipsburg, MT 59858

REGALA MINING COMPANY

Missoula (January 15, 1970)
E. W. Thomas
118 E. Broadway, Missoula, MT 59801

REUSTACO CORPORATION

White Sulphur Springs (November 19, 1970)
Richard J. Conklin
15 W. Main, White Sulphur Springs, MT 59645

VICTOR CURLEW MINING COMPANY

Helena (October 13, 1970)
John H. Risken
415 Power Block, Box 225, Helena, MT 59601

WEGENER ENTERPRISES, INC.

Butte (February 13, 1970)
Robert A. Poore
400 Silver Bow Block, Butte, MT 59701

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Helterline, R. L. -----	17	Jenkins, Ivor -----	10
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Henke, Donald N. -----	24	Jo Dandy mine -----	4
Hera, Inc. -----	17	Johnny's mine -----	35
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Hidden Hand Mining Co. -----	49	Johnson, Glenn -----	35
Hidden Treasure-Cape Nome mine -----	17	Johnson-Reid, Inc. -----	49
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Hilterbrand, Ed -----	10	Jumper claims -----	15
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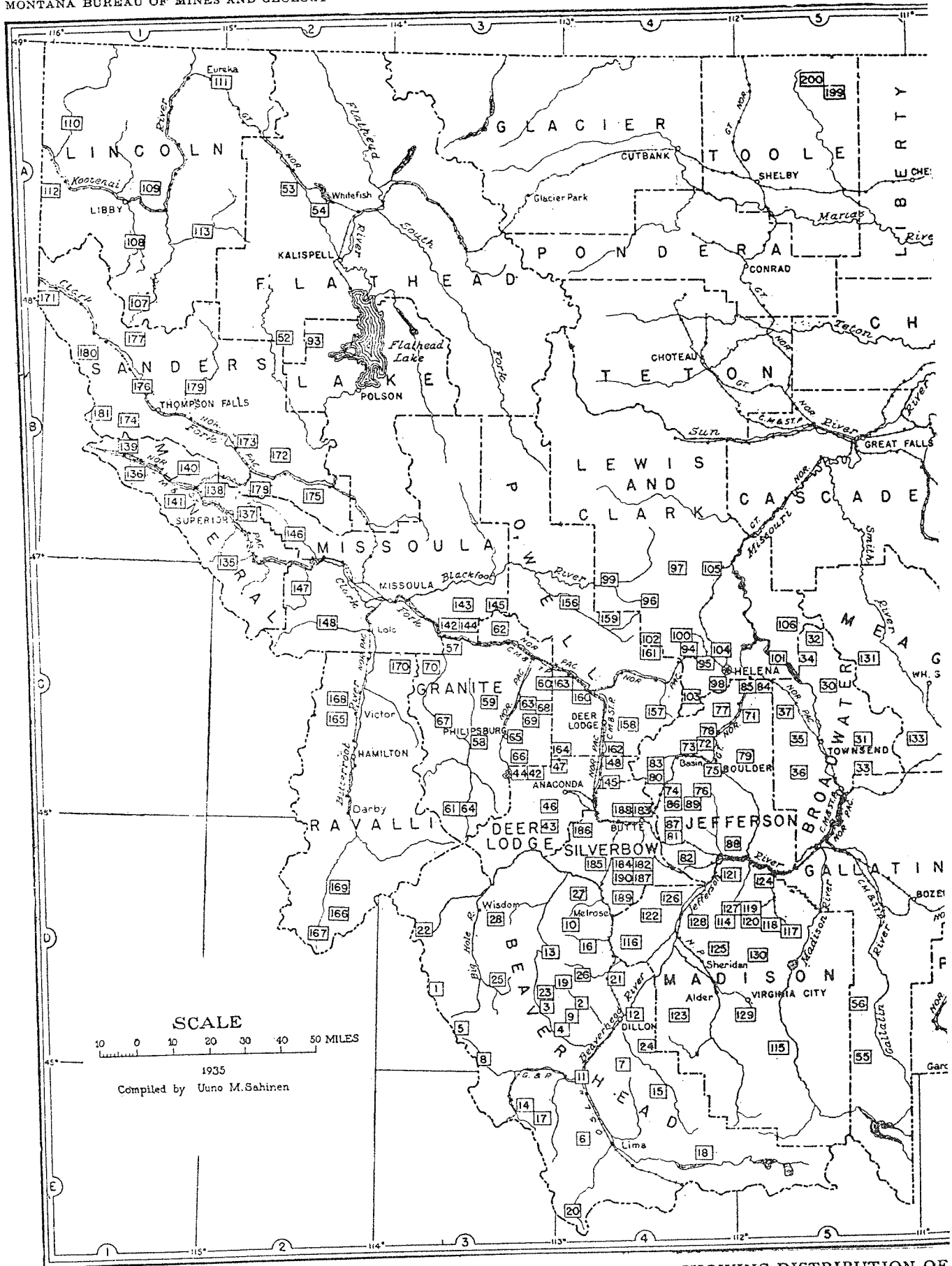
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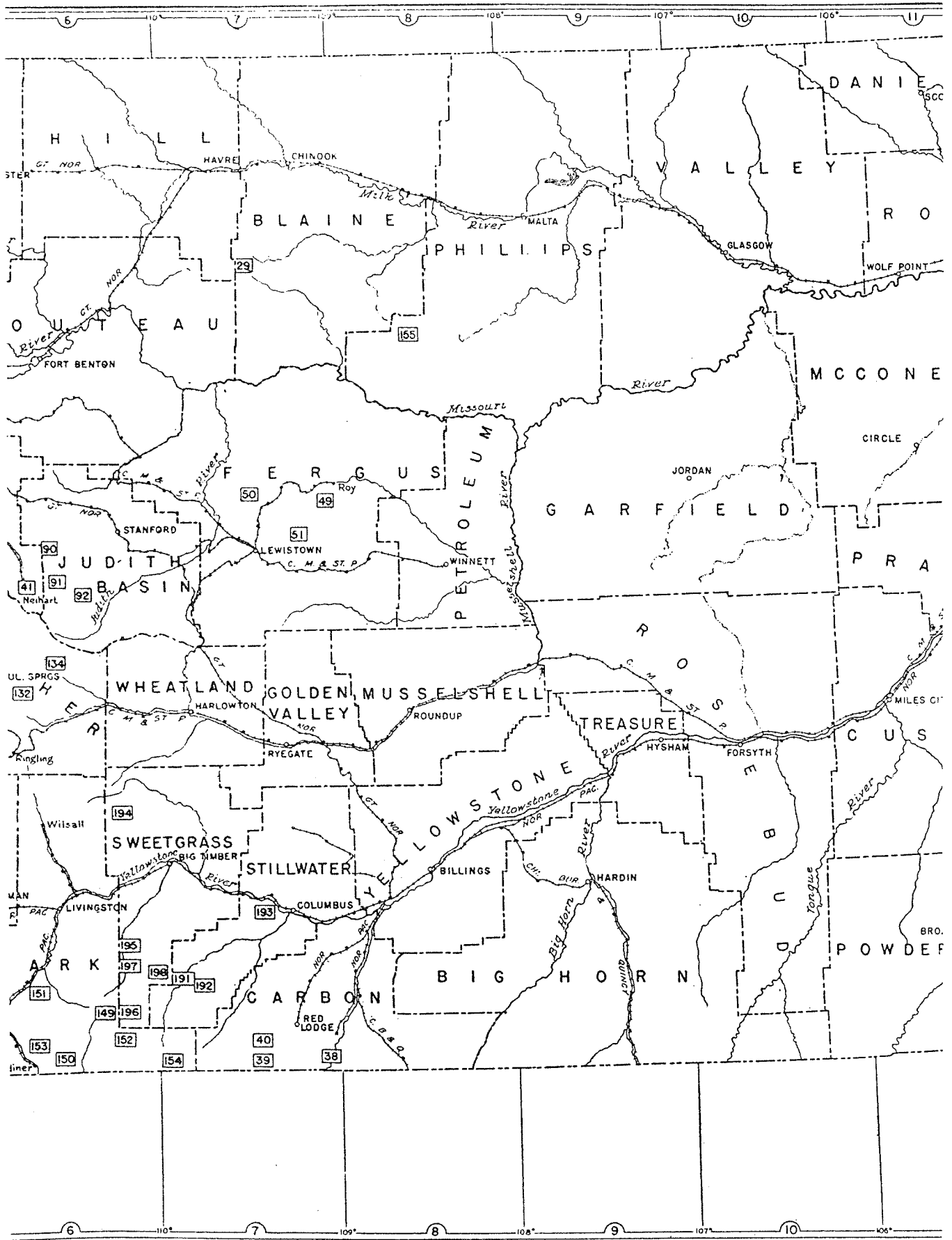
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MINING DISTRICTS

- Beaverhead County, D-4**
1. Ajax
 2. Argenta (Montana)
 3. Bald Mountain
 4. Bannack
 5. Beaverhead (Dark Horse) (Mulchy Creek)
 6. Big Muddy
 7. Blacktail
 8. Bloody Dick (Beaverhead)
 9. Blue Wing
 10. Bryant (Hecla) (Glendale)
 11. Chinatown (Armstead)
 12. Dillon (Carter Creek) (Frying Pan Basin)
 13. Elkhorn (Coolidge) (Wise River)
 14. Horse Prairie
 15. Jake Creek
 16. Lost Creek (Brown's Lake) (Rock Creek)
 17. Medicine Lodge
 18. Monida
 19. Mount Torrey
 20. Niccolia
 21. Nogo (Apex)
 22. Pioneer
 23. Polaris (Lost Cloud)
 24. Ruby
 25. Saginaw (Jackson)
 26. Utopia (Birch Creek)
 27. Vipond
 28. Wisdom (Big Hole)
- Blaine County, A-8**
29. Bearpaw
- Broadwater County, C-5**
30. Confederate Gulch (Backer) (Canton) (Diamond City)
 31. Deep Creek
 32. Helligate
 33. Lone Mountain
 34. Magpie Gulch
 35. Park (Hassel) (Indian Creek) (Townsend)
 36. Radersburg (Cedar Plains)
 37. Winston (Beaver Creek)
- Carbon County, D-7**
38. Clark Fork
 39. Hellroaring
 40. Silver Run
- Cascade County, B-5**
41. Nelhart (Montana)
- Deer Lodge County, D-3**
42. Blue Eyed Nellie (Silver Lake)
 43. French Gulch
 44. Georgetown (Southern Cross) (Cable)
 45. Girard
 46. Heber (Mill Creek)
 47. Lost Creek (Dry Gulch) (Antelope Creek)
 48. Oro Fino (Dry Cottonwood)
- Fergus County, B-7**
49. Cone Butte
 50. North Moccasin (Kendall)
 51. Warm Springs (Gilt Edge) (Maiden)
- Flathead County, A-2**
52. Hog Heaven (Flathead) (Kila)
 53. Star Meadow (Lupfer)
 54. Whitefish
- Gallatin County, D-5**
55. Eldridge
 56. West Gallatin (Spring Hill)
- Granite County, C-3**
57. Alps (Bonita)
 58. Antelope Creek
 59. Combination (Henderson) (Black Pine)
 60. Dunkleburg
 61. Frog Pond Basin
 62. Garnet (Top-o'-Deep) (First Chance)
 63. Maxville (Wyman) (Gird Creek)
 64. Moose Lake
 65. Philipsburg (Flint Creek) (Granite)
 66. Red Lion (Cable Mountain)
 67. Rock Creek
 68. Rose Mountain (Gold Creek)
 69. South Boulder (Princeton)
 70. Welcome Creek
- Jefferson County, C-4**
71. Alhambra (Hot Springs) (Goconda)
 72. Amazon
 73. Basin (Cataract) (Comet)
 74. Beaver Gulch
 75. Boulder
 76. Big Foot (State Creek)
 77. Clancy (Lump Gulch) (Buffalo Creek)
 78. Colorado (Corbin) (Gregory) (Wickes)
 79. Elkhorn
 80. Elk Park
 81. Homestake
 82. Little Pipestone
 83. Lowland
 84. McClellan (Mitchell Creek)
 85. Montana City
 86. Nez Perce
 87. Pipestone
 88. Whitehall (Cardwell)
 89. Whitetail
- Judith Basin County, B-6**
90. Barker (Hughesville)
 91. Running Wolf
 92. Yogo
- Lake County, B-2**
92. Elmo (Chief Cliff)
- Lewis and Clark County, B-4**
94. Austin (Greenhorn) (Blue Cloud)
 95. Blue Cloud
 96. Gould-Stemple (Fool Hen) (Poorman)
 97. Heddleston (Blackfoot) (Silver)
 98. Helena (Last Chance) (Springhill) (Unionville) (Owyhee)
 99. Lincoln (McClellan Gulch) (Seven-up Pete Gulch) (Keep Cool Creek) (Liverpool Creek) (Stonewall Mountain)
 100. Marysville (Bald Butte) (Ottawa)
 101. Missouri River
 102. Ophir
- Lincoln County, A-1**
103. Rimini (Vaughn) (Bear Gulch)
 104. Scratchgravel Hills (Grass Valley)
 105. Wolf Creek (Gladstone)
 106. York
- Lincoln County, A-1**
107. Cabinet (Fish River)
 108. Libby (Snowshoe)
 109. Rainy Creek
 110. Sylvanite
 111. Tobacco River
 112. Troy (Grouse Mountain) (Calahan)
 113. Wolf Creek
- Madison County, D-5**
114. Bismark (Wilma)
 115. Cherry Creek
 116. McCarthy Mountain
 117. Norris (Lower Hot Springs) (Upper Hot Springs)
 118. Norwegian Creek
 119. Pony (Mineral Hill)
 120. Potosi
 121. Renova (Bone Basin) (Mayflower)
 122. Rochester (Rabbit)
 123. Ruby Mountains
 124. Sand Creek
 125. Sheridan (Mill Creek) (Brandon) (Indian Creek) (Pamshorn)
 126. Silver Star (Iron Rod)
 127. South Boulder (Mammoth)
 128. Beaver Tidal Wave (Twin Bridges)
 129. Virginia City (Summit) (Pine Grove) (Highland) (Fairweather) (Nevada) (Junction) (Alder Gulch) (Brown's Gulch) (Granite Creek) (William's Gulch) (Barton Gulch)
 130. Washington (Meadow Creek) (McAllister)
- Meagher County, C-6**
131. Beaver (Elk Creek) (Thompson Creek)
 132. Castle Mountains
 133. Murray (Battle Creek)
 134. Musselshell (Copperopolis)
- Mineral County, B-2**
135. Cedar Creek (Quartz Creek) (Trout Creek)
 136. Denemora (Big Elk) (Saltese)
 137. Iron Mountain (Superior)
 138. Keystone
 139. Packer Creek
 140. Rock Island
 141. St. Regis (Deer Creek) (Ward)
- Missoula County, C-3**
142. Clinton (Wallace)
 143. Coloma (Potomac)
 144. Copper Cliff
 145. Elk Creek
 146. Nine Mile Creek (Kennedy Creek)
 147. Petty Creek
 148. Woodman (Lolo)
- Park County, D-6**
149. Cowles (Haystack)
 150. Crevasse
- Phillips County, A-9**
151. Emigrant (Chico)
 152. Horseshoe
 153. Jardine (Bear Gulch) (Sheepwater)
 154. New World (Cooke City) (Blackmore)
- Phillips County, A-9**
155. Little Rockies (Landusky) (Zortman)
- Powell County, C-4**
156. Big Blackfoot (Helmville)
 157. Elliston (Ontario) (Nigger Hill)
 158. Emery (Zosell)
 159. Finn (Washington) (Jefferson, and) (Buffalo Gulches)
 160. Garrison
 161. Ophir (Snowshoe) (Deadwood)
 162. Oro Fino (Gold Creek)
 163. Pioneer (Gold Creek)
 164. Racetrack (Danielsville)
- Ravalli County, C-2**
165. Curlew
 166. Hughes Creek (Alta) (Overwich)
 167. Mineral Point
 168. Pleasant View
 169. Slate Creek
 170. Three Mile
- Sanders County, B-1**
171. Blue Creek (Heron)
 172. Camas Prairie (Perma)
 173. Plains
 174. Prospect Creek
 175. Revals Creek (Dixon)
 176. Sleepy Creek (Belknap)
 177. Silver Butte (Vermillion) (Cabinet)
 178. Spring Gulch
 179. Thompson River
 180. Trout Creek
 181. White Pine (Eagle)
- Silver Bow County, D-4**
182. Basin Creek
 183. Butte (Summit Valley) (Lost Child)
 184. Divide Creek
 185. Fleecer Mountain
 186. German Gulch (Siberia)
 187. Highland
 188. Independence
 189. Melrose (Camp Gulch) (Soap Gulch)
 190. Moose Creek
- Stillwater County, D-7**
191. Nye
 192. Stillwater
 193. Yellowstone River
- Sweet Grass County, D-6**
194. Big Timber Canyon
 195. Boulder River
 196. Independence
 197. Natural Bridge
 198. West Stillwater
- Toole County, A-5**
199. Gold Butte
 200. West Butte



MAP SHOWING DISTRIBUTION OF



MINING DISTRICTS IN MONTANA