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

BULLETIN 77

DIRECTORY OF MINING ENTERPRISES FOR 1969

with a

LIST OF ACTIVE COAL MINES, 1969

Compiled by

Miller Hansen Montana Bureau of Mines and Geology

and a section on

THE MINERAL INDUSTRY OF MONTANA IN 1969

by

Fred V. Carrillo, William N. Hale, and Mary Anne McComb U. S. Department of the Interior, Bureau of Mines

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



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DIRECTORY

OF

MINING ENTERPRISES FOR 1969

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 their 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 1969 and a report entitled "The Mineral Industry of Montana in 1969," 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 author 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 and Charles Johnson, Box 400

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: Knute Kirkeberg
Box 549, Troy MT 59935
Owner: Same as operator

Employees: 2 Status: Developing

CHROME MINES

STILLWATER COUNTY: Columbus

MOUAT MINE Chrome ore

Nye dist., sec. 20, 21, 28, 29, 30, T. 5 S., R. 15 E.

Operator: Monte Vista Co. Box 1084, Billings MT 59101

Status: Unknown

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

BLUE EYED ANNIE MINE Silver

Elkhorn dist., unsurveyed, T. 4 S., R. 12 W.

Owner: John Miller Polaris MT 59746

Status: Inactive

**BURGIEROSA GROUP Silver, lead

Vipond Park dist., sec. 34, 35, T. 1 S., R. 11 W.

Operator: Vipond Mining Co. Box 63, Billings MT 59101

Owner: George Gluck Ramsay MT 59748

Employees: 2 Status: Unknown

*Open pit

**Open pit and underground

*CAPITOL (CAVE GULCH) MINE Silver, lead

Argenta dist., sec. 5, T. 6 S., R. 10 W. Operator: Spokane National Mines, Inc. 424 Hutton Bldg., Spokane WA 99204

Owner: Same as operator

Status: Inactive

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

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: Development and producing

BEAVERHEAD COUNTY-Continued

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

*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

**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, Butte MT 59701, and Burr and Leonard Lively, Melrose MT 59743

Employees: 1 Status: Inactive

GOLDSMITH MINE Gold, 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: Producing and developing

*GREEN LIZARD MINE Silver

Vipond Park dist., sec. 2, T. 2 S., R. 11 W.

Operator: Herald Ellingston Owner: Omer H. Boeh

2121 Locust St., Butte MT 59701, and

W. B. Hussman, 1900 Hamburg, Anaconda MT 59711

Status: Produced and developing

HECLA 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

*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

*Open pit; **Open pit and underground.

*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.

Operator: Rex Land Co.

Box 1771, Seattle WA 98111

Owner: Same as operator

Employees: 4
Status: Developing

LEADVILLE MINE Silver, lead

Vipond Park dist., sec. 34, T. 1 S., R. 11 W.

Operator: Art Semsak and Julius Jackelini

Butte MT 59701 Owner: Same as operator

Status: Unknown

LUCKY STRIKE MINE Gold, silver, copper

Chinatown (Horse Prairie) dist., sec. 14, T. 11 S., R. 13 W.

Operator: Owen Adams and G. T. Adams

Box 64, Teasdale UT 84773 Owner: Same as operator

Status: Developing

*MAIDEN CREEK COPPER MINE Copper

Chinatown dist., sec. 23, T. 11 S., R. 13 W.

Operator: Chester A. Given

Rte. 1, Box 44-C, Arco ID 83213

Owner: Same as operator

Status: Inactive

MAULDEN (HAND) MINE Gold, silver, lead

Argenta dist., NW¼ NW¼ sec. 29, T. 6 S., R. 10 W.

Operator: Hand Mines

30 S. Arizona, Dillon MT 59725

Owner: John Hand

Box 105, Bannack Star Rte., Dillon MT 59725

Employees: 6
Status: Producing

NEW ARIADNE MINE Gold, silver

Hecla dist., sec. 2, T. 3 S., R. 11 W.

Operator: Lively's Inc. Melrose MT 59743 Owner: Same as operator

Status: Unknown

NEW DEPARTURE MINE Gold, silver, lead, zinc

Blue Wing dist., NW¼ NW¼ sec. 26, T. 7 S., R. 11 W.

Operator: Spokane National Mines, Inc. 424 Hutton Bldg., Spokane WA 99204

Owner: Same as operator

Employees: 20 Mill capacity: 250 t/d

Status: Producing and developing

BEAVERHEAD COUNTY-Continued

**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: Producing and developing

*OUARTZ 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: Producing and developing

QUEEN OF THE HILLS 1, 2, 3, and 4

Gold, silver, lead

Vipond Park dist., sec. 10, T. 2 S., R. 11 W.

Operator: Otis Redwine and Ray Jennette

80 E. Park St., Butte MT 59701

Owner: Same as operator

Status: Unknown

SILVER BELLE GROUP Silver, lead

Blue Wing dist., sec. 29, T. 7 S., R. 11 W.

Operator: Spokane National Mines, Inc.

424 Hutton Bldg., Spokane WA 99204

Owner: Same as operator

Status: Developing

SILVER QUEEN MINE Silver

Jake Canyon dist., sec. 17, T. 10 S., R. 7 W.

Operator: Silver Queen Exploration Co.

2114 Curtis St., Denver CO 80205

Owner: Jess Roberts, Frank Actis, and Frank White

Dillon MT 59725

Employees: 5

Status: Unknown

SLEEPING PRINCESS GROUP Gold, copper

Bannack dist., sec. 8, T. 8 S., R. 11 W.

Operator: Spokane National Mines, Inc. 424 Hutton Bldg., Spokane WA 99204

Owner: Same as operator

Status: Developing

TENDER GROUP Gold, silver, copper, lead, zinc, antimony

Argenta dist., sec. 24, T. 6 S., R. 11 W.

Operator: Claude H. Brown Box 94, Dillon MT 59725

Owner: Same as operator

Status: Producing and developing

VIRGINIA GULCH MINE Gold, silver

Argenta dist., sec. 15, T. 6 S., R. 11 W.

Operator: Kenneth Langstaff

Dillon MT 59725

Owner: Same as operator Status: Developing

*WEST ERMONT MINE

Argenta dist., sec. 35, T. 6 S., R. 11 W.

Operator: Big West Resources

905 E. Third, Spokane WA 99202

Owner: Same as operator

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: Chinook

LINDA MINE Silver, lead

Bearpaw Mountains dist., sec. 19, T. 29 N., R. 19 E.

Operator: Bearpaw Development Co., Homer Pike, Secy.

1639 - 5th Ave. NW, Great Falls MT 59401

Owner: Same as operator

Employees: 2 Status: Developing

^{*}Open pit; **Open pit and underground

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: Produced

JANUARY MINE Silver, lead

Winston dist., sec. 26, T. 8 N., R. 1 W.

Operator: Mineral Resources Development Co. Tim M. Babcock, 2433 N. Montana Ave.

Helena MT 59601 Owner: Same as operator Status: Developing

JEANETTE MINE Gold, silver, lead

Winston district

Operator: Harold Hogan

1243 N. 160th, Seattle WA 98133

Owner: Same as operator 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

*MOUNTAIN VIEW MINE Gold, silver, lead

Winston dist., T. 8 N., R. 1 W.

Operator: R. Gleason, Winston MT 59647, and

R. Herndon, Townsend MT 59644

Owner: Same as operator Status: Producing

PIONEER MINE Silver

Indian Creek dist., sec. 35, T. 7 N., R. 1 W.

Operator: Bill Lowery

Box 93, Townsend MT 59644

Owner: Same as operator

Status: Unknown

RUBY SILVER MINE Silver, copper, lead, zinc

Radersburg dist., sec. 33, T. 5 N., R. 1 W.

Owner: W. R. Wade Marysville MT 59640

Status: Developing

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

SUMMIT (OLD SUMMIT) and BLACKHAWK MINE

Silver, lead, zinc

Cedar Plains dist., sec. 16, 17, 20, T. 4 N., R. 1 W.

Operator: Roy E. Nicolls Toston MT 59643 Owner: Same as operator

Owner: Same as operato.

Employees: 2 Status: Developing

*VALLEY VIEW MINE Gold, silver, lead, zinc

Park (Indian Creek) dist., sec. 24, T. 7 N., R. 1 E.

Operator: Warren Schreiner

Box 665, Townsend MT 59644

Owner: Same as operator Status: Developing

CASCADE COUNTY: Great Falls

DACOTAH MINE Silver, lead, zinc

Neihart dist., sec. 29, 30, 31, 32, T. 14 N., R. 8 E.

Operator: Carroll R. Bennett

Box 2267, Great Falls MT 59401 Owner: Carroll R. and Richard C. Bennett

Great Falls MT 59401

Status: Inactive

FLORENCE MINE Silver, lead zinc

Neihart dist., sec. 29, 30, 31, 32, T. 14 N., R. 8 E.

Operator: Carroll R. Bennett

Box 2267, Great Falls MT 59401

Owner: Carroll R. and Richard C. Bennett

Great Falls MT 59401

Status: Inactive

^{*}Open pit.

CASCADE COUNTY-Continued

LEXINGTON MINE Gold, silver, lead Montana dist, sec. 28, T. 14 N., R. 8 E.

Operator: Lexington Silver-Lead Mining Co. 621 Columbia Bldg., Spokane WA 99204

Owner: Same as operator Status: Developing

MOGUL LODE MINE Silver, lead

Neihart dist., sec. 32, T. 14 N., R. 8 E.

Operator: Arthur Schaub Cheste: MT 59522 Owner: Same as operator Status: Unknown

MORNING STAR MINE Silver, lead, zinc

Neihart dist. (unsurveyed), sec. 29, T. 14 N., R. 8 E.

Operator: Northwest Mines Development Corp. 504 Paulsen Bldg., Spokane WA 99201

Owner: Same as operator

Employees: 15 Mill capacity: 50 t/d Status: Developing MOULTON-BROADWATER MINE Süver, lead, zinc Neihart dist., unsurveyed, sec. 29, 32, T. 14 N., R. 8 E.

Operator: Peter J. Antonioli and Sons 1001 W. Gold, Butte MT 59701

Owner: Same as operator

Employees: 5

Status: Producing and developing

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: Producing and developing

*SILVER DYKE MINE Silver, lead, zinc

Neihart dist., sec. 10, T. 14 N., R. 8 E. Operator: Peter J. Antonioli and Sons 1001 W. Gold, Butte MT 59701

Owner: Same as operator

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

*Open pit.

**Open pit and underground.

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.

Operator: C. L. Bergloff, 6082 Florence, Riverside CA 92504,

and Lyman Thayer and L. E. Scott Rte. 1, Box 201, Anaconda MT 59711

Owner: Same as operator Status: Developing

MINNEHAHA, HORSESHOE, and HELENA Gold, silver

Georgetown dist., sec. 9, T. 5 N., R. 13 W.

Operator: William J. Dean and Son 309 S. Arizona, Butte MT 59701

Owner: Same as operator

Status: Inactive

DEER LODGE COUNTY-Continued

PYRITE MINE Gold

Georgetown dist., sec. 4, T. 5 N., R. 13 W.

Owner: Albert Sletton

2905 Cable Rd., Anaconda MT 59711

Status: Inactive

RUBY MINE Silver

Oro Fino dist., sec. 28, T. 6 N., R. 8 W.

Operator: Leo Powell Middleton TN 38052 Owner: C. Paul Grosenick

9505 - 44th NE, Seattle WA 99115

Status: Unknown

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.

Operator: W. C. Montgomery

1818 W. Park, Anaconda MT 59711

Owner: Same as operator

Operator: L. A. Sandman

Status: Produced

FERGUS COUNTY: Lewistown

BARNES-KING and KENDALL Gold, silver

North Moccasin dist., sec. 32, T. 18 N., R. 18 E.

Operator: K-D Mining Co.

E. 15 Walton Ave., Spokane WA 99207

Owner: Mrs. Margharite McLean

c/o W. H. Ringer, Rte. 1, Wayzata MN 55391

Status: Inactive

BIG GRASSY GROUP Gold, silver

Warm Springs dist., sec. 30, T. 17 N., R. 20 E.

Operator: Blue Range Mining Co. Box 534, Lewistown MT 59457 Owner: L. C. Hoffman and S. C. Martin

Lewistown MT 59457

Status: Inactive

REPUBLIC MINE Silver, lead, zonc

*MYRANDA CLAIM Gold, silver, lead

Box 189, Lewistown MT 59457

Warm Springs dist., sec. 8, T. 16 N., R. 20 E.

Owner: L. A. Sandman, William McVeda, and Lawrence Lenling, Lewistown MT 59457

South Moccasin dist., sec. 23, T. 16 N., R. 17 E.

Operator: C. L. Kuhnhausen

4906 NE 60th St., Vancouver WA 98661

Owner: Same as operator

Status: Unknown

Status: Unknown

BLACK BULL MINE Gold, silver, copper, lead, zinc Warm Springs dist., sec. 7, T. 16 N., R. 20 E.

Operator: G. S. Abbott

Gilt Edge Rte., Lewistown MT 59457

Owner: Same as operator Status: Developing

*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

*MONTAGO MINE Gold, silver, copper

Warm Springs dist., sec. 30, 31, T. 17 N., R. 20 E. Operator: Helen W. Goll

3109 W. McKinley Blvd., Milwaukee WI 53208

Owner: Same as operator

Status: Inactive

SHEEP MOUNTAIN MINE Gold, silver, copper, lead

Warm Springs dist., sec. 4, 5, T. 16 N., R. 20 E. Operator: Lawrence Lenling, L. A. Sandman, and

William McVeda, Box 74, Lewistown MT 59457

Owner: Same as operator

Employees: 3 Status: Developing

SPOTTED HORSE MINE Gold, silver, tellurium, lead,

Warm Springs dist., sec. 5, T. 16 N., R. 20 E.

Operator: L. C. Hoffman Blue Range Mining Co.

Box 534, Lewistown MT 59457

Owner: First Trust Co. of Montana, trustee

Great Falls MT 59401

Status: Developing

^{*}Open pit.

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, and Frank McHenry, 425 E. Aspen, 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

BIG EXPECTATION MINE

Philipsburg dist., T. 7 N., R. 13 W.

Operator: Spartan Research & Development Co.

Philipsburg MT 59858

Status: Unknown

*BI-METALLIC TAILINGS Gold, silver

Flint Creek dist., T. 7 N., R. 13 W.

Operator: Frank Antonioli

724 S. Western, Butte MT 59701

Owner: Contact Mining Co.

724 S. Western, Butte MT 59701

Status: Inactive

*BLACK PINE DUMP Gold, silver, copper, tungsten

Fling Creek dist., sec. 16, T. 8 N., R. 14 W.

Operator: John C. Bork

519 W. Porphyry, Butte MT 59701

Owner: Same as operator

Status: Producing

*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: Inactive BLUE BIRD MINE Gold, silver, copper

Rose Mountain dist., sec. 26, T. 8 N., R. 12 W.

Operator: Ben Walkup Philipsburg MT 59858 Owner: Same as operator

Employees: 2 Status: Developing

**BROOKLYN MINE Silver, copper, lead, zinc, bismuth

Boulder Creek dist., SW¼ NE¼ sec. 4, 5, T. 7 N., R. 12 W.

Operator: Black and White Mining Co., R. F. Little

4207 - 21st Ave., Missoula MT 59801

Owner: Same as operator Status: Developing

CADGIE-TAYLOR LEASE Gold, silver, copper, lead, zinc

Flint Creek dist., SW¼ NE ¼ sec. 19, T. 7 N., R. 13 W.

Operator: James W. Young

Box 342, Philipsburg MT 59858

Status: Produced

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

CARLIN-ONE DOLLAR MINE Silver, copper

Philipsburg dist., sec. 9, T. 6 N., R. 12 W.

Operator: Harold Sletton

1700 Tammany Ave., Anaconda MT 59711

Owner: Same as operator

Status: Inactive

*Open pit; **Open pit and underground.

GRANITE COUNTY-Continued

CARTER HALL MINE

Princeton district Operator: Frank Puyear Philipsburg MT 59858

Status: Inactive

CLIFF MILLSITE Silver, copper, zinc

Philipsburg dist., sec. 31, T. 7 N., R. 13 W.

Operator: Taylor-Knapp Co.
Philipsburg MT 59858
Owner: Trout Mining Co.

233 Broadway, New York NY 10007

Status: Inactive

COMANCHE EXTENSION LEASE (5797)

Flint Czeek 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: Produced

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: Exploration

*GRANITE TAILINGS Gold, silver

Flint Creek district

Operator: Frank Antonioli, 724 S. Western, Butte MT Owner: Contact Mining Co., 724 S. Western, Butte MT

Status: Inactive

*GWYNN TAILINGS

Operator: Ernest Mazza and Ben Gwynn

Philipsburg MT 59858

Status: Unknown

**HATTA MINE Silver, lead, zinc

Dunkleberg dist., sec. 14, T. 9 N., R. 12 W.

Operator: E. C. Ecklesdafer

532 North Ave. W., Missoula MT 59801

Owner: Same as operator Status: Developing

HAWKEYE MINE Gold, silver, lead

Operator: Frank Puyear Philipsburg MT 59858 Owner: Pat McDonald Philipsburg MT 59858

Status: Inactive

HOBO (NORTH GRANITE) MINE Gold, silver, lead, zinc

Philipsburg dist., T. 7 N., R. 13 W.

Operator: W. B. Hynes Philipsburg MT 59858 Owner: Hynes-Patten-Wright Philipsburg MT 59858

Status: Inactive

HOLLY NO. 1 Gold, silver, copper

Dunkleberg dist., sec. 15, T. 9 N., R. 12 W.

Operator: Larry A. McLane

212 Washington, Anaconda MT 59711

Owner: Same as operator Status: Developing

*HOPE TAILINGS Silver

Hope Hill dist., sec. 19, T. 7 N., R. 13 W.

Operator: Frank Antonioli

724 S. Western, Butte MT 59701

Owner: Contact Mining Co.

724 S. Western, Butte MT 59701

Status: Inactive

*HOPE TAILINGS

Operator: Albert Walkup

Box 416, Philipsburg MT 59858

Owner: Same as operator

Status: Inactive

*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

*Open pit; **Open pit and underground

GRANITE COUNTY-Continued

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.

Operator: Eugene Garrett

Box 324, Anaconda MT 59711

Owner: Same as operator

Employees: 1 Mill capacity: 15 t/d Status: Developing

**MOONLIGHT MINE Gold, silver, copper, lead

Princeton dist., T. 8 N., R. 12 W.

Operator: John C. Bork

519 W. Prophyry, Butte MT 59701

Owner: Same as operator

Status: Producing and developing

MOOSE TRAIL MINE Gold, silver

Moose Lake district

Operator: Gene and Monte Marker

Garrison MT 59731 Status: Produced

MOUNTAIN BOY MINE Gold, silver

Philipsburg dist., sec. 19, T. 7 N., R. 13 W.

Operator: Frank Puyear Philipsburg MT 59858 Owner: James Patten Philipsburg MT 59858

Status: Inactive

*MYERS QUARTZ CLAIM Gold

Moose Lake dist., sec. 25, T. 4 N., R. 16 W.

Operator: Charles Byam
Philipsburg MT 59858
Owner: Same as operator

Status: Inactive

*Open pit; **Open pit and underground

NANCY HANKS, DEWEY, MITCHELL, and MUSSIGBROD CLAIMS Gold

Garnet dist., sec. 3, T. 12 N., R. 14 W.

Operator: American Mining Co.

700 Securities Bldg., Seattle WA 98101

Owner: Same as operator

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 and Fannie Collins

Maxville MT 59850

Status: Developing and producing

PARNELL GROUP MINE Silver, copper, lead

Flint Creek dist., sec. 7, 8, T. 7 N., R. 13 W.

Operator: P. J. Heaney, Sr.

Box 130, Philipsburg MT 59858 Owner: P. J. Heaney and Ethel Heaney Box 130, Philipsburg MT 59858

Status: Developing

POWELL MINE Gold, silver

Philipsburg dist., T. 7 N., R. 12 W.

Operator: Frank Puyear Philipsburg MT 59858

Status: Inactive

**QUEEN MINE Silver

Boulder dist., SW¼ 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

GRANITE COUNTY-Continued

*RUMSEY TAILINGS Gold, silver, silica Flint Creek dist., sec. 8, T. 6 N., R. 13 W.

Operator: Lindy Fortunati Anaconda MT 59711

Status: Unknown

*RUMSEY TAILINGS Gold, silver, silica Flint Creek dist., sec. 8, T. 6 N., R. 13 W.

Operator: Albert Walkup and William Crncevich

Philipsburg MT 59858

Owner: Jo Wilson

Philipsburg MT 59858

Status: Inactive

*SALLY ELLEN MINE Gold, silver, lead, zinc

Maxville dist., sec. 16, T. 8 N., R. 12 W.

Operator: Ben Walkup
Philipsburg MT 59858
Owner: Walkup and Puyear
Philipsburg MT 59858
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 and Wm. Crncevich Philipsburg MT, and Frank Antonioli, Butte MT

Owner: Contact Mining Co.

724 S. Western, Butte MT 59701

Employees: 6

Status: Producing and developing

SEPTEMBER MINE Gold, silver

Operator: George and Jack Knapp

Philipsburg MT 59858

Status: Unknown

SWEET HOME MINE Gold, silver

Philipsburg dist., T. 7 N., R. 13 W.

Operator: Joe Metesh Philipsburg MT 59858

Status: Unknown

SUNRISE MINE Gold, silver

T. 9 N., R. 14 W.

Operator: Sanderson Trucking Co.

Philipsburg MT 59858

Status: Unknown

TRUE FISSURE MINE Silver, lead, zinc

Flint Creek dist., W½ NW¼ sec. 29, T. 7 N., R. 13 W.

Operator: Taylor-Knapp Co-Philipsburg MT 59858 Owner: Same as operator Employees: 40

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

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.

Operator: Carl Benson

716 N. Davis, Helena MT 59601

Owner: Same as operator Status: Unknown

*BULLION MINE Gold, silver, lead, zinc

Cataract dist., sec. 13, T. 7 N., R. 6 W.

Operator: D. M. and John Bullock

Basin MT 59631 Status: Unknown

CAMP OWEN MINE Silver, lead

Whitehall district

Operator: Lester Lindquist Whitehall MT 59759 Owner: Same as operator

Status: Inactive

*Open pit

JEFFERSON COUNTY-Continued

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 and A. J. 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 and Henning Norgaard

Box 544, Helena MT 59601

Owner: Ivor and Glen Jenkins, Russell Tintinger,

and R. E. Nicolls, Jefferson City MT 59638

Employees: 3
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.

Operator: Earl Lutzenhiser

2331 National Ave., Helena MT 59601

Owner: Same as operator 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, C. S. Youlden Estate, and Anker Henningsen, Butte MT, and Victoria, B. C.

Status: Exploration

*Open pit

ELKHORN QUEEN MINE Silver, lead, zinc

Elkhorn dist., sec. 26, T. 6 N., R. 3 W.

Operator: Shipman Mining and Exploration Co.

Boulder MT 59632 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: Unknown

*GOLDEN ASSETS MINE Gold, silver, copper, lead, zinc

Golconda dist., sec. 29, T. 7 N., R. 5 W.

Operator: Fred K. Madison

1302 W. Geyser, Livingston MT 59047

Owner: Same as operator Status: Developing

GOLDEN CURRY (SOURDOUGH) MINE Gold, silver,

copper, lead, zinc

Elkhorn dist., sec. 10, T. 6 N., R. 3 W.

Operator: John Rothfus

2100 Oregon Ave., Butte MT 59701

Owner: Same as operator

Employees: 2

Status: Producing and developing

GOOD CHEER MINE Silver

Warm Springs dist., sec. 18, T. 8 N., R. 2 W.

Operator: Associated Mining & Metals, Inc.

Box 95, Clancy MT 59634

Owner: Same as operator

Status: Unknown

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

HOPE and BULLION MINE Gold, silver, and base metals

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

Operator: J. Mueller Co. Owner: Mrs. A. K. Romerio

19320 Hinsdale, Torrance CA 90503

Employees: 5

Status: Producing and developing

JEFFERSON COUNTY-Continued

*HOPE TAILINGS

Boulder district

Operator: Frank Antonioli

724 S. Western Ave., Butte MT 59701

Status: Inactive

HUMBOLT MINE Gold, silver

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

Operator: Stanley L. Boyce

Rte. 1, Box 206, Butte MT 59701

Owner: Same as operator Status: Developing

JIB MINE Gold, silver, copper, lead

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

Operator: Conda Butte Exploration, Inc.

8 First National Bank Bldg., Butte MT 59701

Owner: Sylvanite, Inc.

43 E. Broadway, Butte MT 59701

Status: Developing

*KING SOLOMON MINE DUMP Silver, lead, zinc

Clancy dist., sec. 6, 7, T. 8 N., R. 3 W.

Operator: Norman Peura, John Saari, and J. Reilly

Jefferson City MT 59638 Owner: R. L. and B. M. Marks

Clancy MT 59634 Status: Inactive

KLONDYKE MINE Gold, silver

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

Operator: Klondyke Gold Mines, Inc.

Wade V. Lewis, Boulder MT 59632

Owner: C. W. and Lilah Schreiner, et al

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 and Norman Boe

Boulder MT 59632 Owner: Sam Arnold Boulder MT 59632

Status: Produced

*LITTLE OWEN MINE

Basin dist., sec. 12, T. 7 N., R. 6 W.

Operator: H. A. Bolinger, Jr.

136 E. Main, Bozeman MT 59715

Owner: Same as operator

Status: Produced

*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, John Saari, and J. Reilly

Jefferson City MT 59638

Owner: Ed Kyler Boulder MT 59632

Status: Developing

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

Employees: 3
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

Employees: 3
Status: Developing

*Open pit

JEFFERSON COUNTY-Continued

MOUNTAIN QUEEN MINE Silver, lead, zinc

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

Operator: William Mulcahy Box 21, Butte MT 59701 Owner: Same as operator

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.

Operator: William Mulcahy Box 21, Butte MT 59701 Owner: Same as operator Status: Developing

*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

*NEW YORK DUMP Silver, lead, zinc

Comet dist., sec. 6, T. 6 N., R. 4 W.

Operator: Shipman Mining and Exploration Co.

Box 72, Boulder MT 59632

Owner: St. Paul's Methodist Church and Intermountain Deaconess Home

Helena MT 59601 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

**PETERSON DUMP Gold, silver, lead

Colorado district

Operator: The Anaconda Co., Butte MT 59701

Owner: John Peterson, Sr. Jefferson City MT 59638

Status: Inactive

*Open pit; **Open pit and underground

*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.

Operator: Ruby Silver Mines, Inc. 101 W. Granite, Butte MT 59701

Owner: Same as operator

Employees: 3
Status: Developing

*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.

Operator: Charles O. Weber Box 235, Whitehall MT 59759 Owner: Same as operator

Status: Producing

SUNNYSIDE MINE Gold, silver

Cardwell dist., SE¼ sec. 13, T. 2 N., R. 4 W.

Operator: Lester Lindquist Box 373, Whitehall MT 59759

Owner: Same as operator

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: Inactive

JUDITH BASIN COUNTY: Stanford

CAPE NOME MINE Silver, lead, zinc

Barker dist., sec. 31, T. 16 N., R. 9 E.

Operator: Frank and Bill Davis

1109 First Ave. S., Great Falls MT 59401

Owner: Same as operator

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.

Operator: Mrs. G. V. R. McBride

Monarch MT 59463 Owner: Same as operator 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

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.

Operator: Glenn Allman Lincoln MT 59639 Owner: Same as operator Status: Developing

CONSOLATION MINES Silver, copper, molybdenum

Heddleston dist., sec. 21, T. 15 N., R. 6 W.

Operator: J. A. Thompson Lincoln MT 59639 Owner: Same as operator Status: Developing

*COME AGAIN and CROWN GROUP Gold, silver, silica

Iowa dist., sec. 26, 27, T. 11 N., R. 4 W.

Operator: Edwin W. Castle, Inc. Box 949, Helena MT 59601

Owner: E. W. Castle, Inc, and Walwynn Co.

Helena MT 59601 Employees: 2 to 5 Status: Unknown

**COPPER BOWL MINE Copper

Heddleston dist., sec. 30, T. 16 N., R. 6 W.

Operator: Clarence J. Erickson Box 253, Lincoln MT 59639

Owner: Same as operator

Status: Unknown

*Open pit; **Open pit and underground

*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: Developing

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

Operator: Ray N. Peterson, Lassalle Travel International

98 Post St., San Francisco CA 94104

Owner: Ray N. Peterson, F. Weick, and J. Hamilton

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

LEWIS AND CLARK COUNTY-Continued

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.

Operator: George Phillips

Rimini Rte., Helena MT 59601

Owner: Same as operator Status: Developing

*MILJOUR-VIOLET JANE MINE Gold, silver, lead

Cedar Hills dist., sec. 7, 8, 17, 18, T. 11 N., R. 3 W.

Operator: Cal-Mont Associates, Inc. Earl Enger, Gen. Mgr., Box 548

East Helena MT 59635 Owner: Same as operator

Status: Unknown

MONTE CHRISTO MINE Gold, silver, copper, lead

Rimini (Vaughn) dist., sec. 17, T. 8 N., R. 5 W.

Operator: Hans Mo

1500 Madison Ave., Helena MT 59601

Owner: Same as operator

Status: Produced and developing

OLD BACHELOR MINE

Stemple Pass dist., sec. 15, T. 13 N., R. 7 W.

Operator: Dillsworth and Smith

1509 River Rd., Missoula MT 59801

Owner: Same as operator

Status: Inactive

ORO FINO MINE Silver, molybdenum

Marysville dist., sec. 2, T. 12 N., R. 6 W.

Operator: W. R. Wade Marysville MT 59640 Owner: Same as operator

Status: Developing

PENNUTE CONSOLIDATED MINING CO. Gold, silver, lead

Stemple and Rimini district (6 mines)

Operator: E. J. Young

409 - 25th Ave. NE, Great Falls MT 59401

Employees: 6
Status: Unknown

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, et al, 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.

Operator: Vern C. Knopf

1621 Cannon St., Helena MT 59601

Owner: Same as operator Status: Developing

TWILIGHT CLAIMS GROUP Gold, silver, copper

Helena dist., sec. 2, T. 9 N., R. 2 W. Operator: J. R. Stimps and C. W. Kohl Box 665, Shelby MT 59474

Owner:Same as operator Status: Developing

LIBERTY COUNTY: Chester

**SWEETGRASS MINE Silver, copper

East Butte dist., sec. 25, T. 36 N., R. 4 E. Operator: L. R. Hannah and Cedor Aronow

Box 651, Shelby MT 59474

Owner: Same as operator

Status: Inactive

*Open pit; **Open pit and underground

LINCOLN COUNTY: Libby

BLUE JAY and STAR CLAIMS Silver, lead

Troy district

Operator: Richard F. Fifield Box 432, Troy MT 59935 Owner: Same as operator

Status: Developing

CABINET LEASE (BIG EIGHT MINE) Silver, lead, zinc

Callahan Creek dist., sec. 19, T. 31 N., R. 34 W.

Operator: Eugene F. Tunstill Box 375, Troy MT 59935 Owner: Bruce R. Taylor

1314 E. 43d Ave., Spokane WA 99203

Status: Developing

IRON MASK MINE

Troy dist., sec. 11, 14, T. 30 N., R. 34 W.

Operator: Ernie Williams Troy MT 59935 Status: Unknown **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

SNOWSHOE MINE Gold, silver, lead

Libby (Snowshoe) dist., sec. 11, T. 28 N., R. 32 W.

Operator: Mascot Silver Mines

Wallace ID 83873 Owner: W. B. Foote Kalispell MT 59901

Status: Inactive

SNOWSTORM MINE Gold, 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: 8
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.

Operator: Alameda Metals, Inc. Box 205, Virginia City MT 59755

Owner: Same as operator Status: Developing

BESSIE and GOLDEN WAVE MINE Gold, silver,

copper, tungsten Mineral Hill district Operator: W. G. Forbes

Pony MT 59747 Owner: Same as operator

Status: Developing

*BEVERLY CLAIM Gold, silver

Silver Star dist., sec. 8, 9, T. 2 S., R. 6 W.

Operator: John Patterson

Box 145, Sheridan MT 59749

Owner: Same as operator Status: Developing

BINS MINE Gold, silver

California Creek (Tobacco Root Range) dist.,

sec. 5, T. 5 S., R. 3 W.

Operator: Goldstream Mining Co.

6715 Village Rd., Salt Lake City UT 84121

Owner: Same as operator Status: Developing

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 (see page 18)

BOULDER-COBALT MINE Gold, silver, copper, lead

Tidal Wave dist., sec. 5, T. 3 S., R. 4 W.

Operator: Blue Mountain Mines, Inc., A. A. Moser

Hardin MT 59034 Owner: Same as operator Status: Developing

COMMONWEALTH GROUP (CALVIN MINE) Gold,

silver, lead, zinc

McCartney Mountain dist., sec. 28, T. 2 S., R. 8 W.

Operator: Kibbe & Co.

304 First Security Bank Bldg., Salt Lake City UT 84111

W. J. Franklin, Supt.

Box 278, Twin Bridges MT 59754

Owner: Commonwealth Lead Mining Co.

Provo UT 84601

Employees: 6

Status: Producing and developing

^{*}Open pit; **Open pit and underground

MADISON COUNTY-Continued

BLUE BELL GROUP MINES Silver

Virginia City dist., sec. 31, T. 6 S., R. 3 W.

Operator: Silver Hill Mines, Inc.

E. 12707 Valley Way, Spokane WA 99216Owner: Silver Hill Mines, Inc., and othersE. 12707 Valley Way, Spokane WA 99216

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

Virginia City dist., sec. 33, 34, T. 6 S., R. 3 W.;

sec. 3, 4, T. 7 S., R. 3 W. Operator: R. W. Leighton Osburn ID 83849

Owner: R. W. Leighton and Warren Duffield

Box 116, Osburn ID 83849

Status: Developing

FRIDA MARIE CLAIM Gold, silver

Silver Star dist., sec. 10, 11, T. 2 S., R. 6 W.

Operator: James King

Box 583, Sheridan MT 59749

Owner: Same as operator Status: Unknown

*GREEN CAMPBELL MINE

Silver Star dist., sec. 3, T. 2 S., R. 6 W.

Operator: United Investors Corp.

860 - 18th Ave., Salt Lake City UT 84103

Owner: Same as operator Status: Producing

HILL TOP MINE Gold, silver, copper, lead, zinc

Virginia City dist., sec. 4, T. 7 S., R. 3 W.

Operator: Ed Scheitlin Virginia City MT 59755 Owner: Same as operator

Employees: 1 Status: Developing

HIRST MINE

McCarthy Mountain dist., sec. 18, T. 4 S., R. 8 W.

Operator: Spokane National Mines, Dillon MT 59725

Owner: Spokane National Mines

424 Hutton Bldg., Spokane WA 99204

Status: Producing

JACK RABBIT MINE

Rochester dist., sec. 21, T. 2 S., R. 8 W.

Operator: Mountain Gold and Silver, Inc., and others

c/o Jim McLaughlin, Rte. 1, Box 22, Sheridan MT 59749

Owner: Same as operator

Employees: 3

Status: Producing and developing

JUMPER CLAIMS Gold, silver, copper

Pony dist., sec. 27, T. 2 S., R. 3 W.

Operator: Carl Masterson, Fishtail MT 59028

and Harold Neal, Pony MT 59747

Owner: Same as operator 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

MISTAKE MINE Gold, silver

Cherry Creek dist., sec. 31, T. 2 S., R. 2 E.

Operator: Marion DuBeau
Box 124, Norris MT 59745
Owner: Same as operator

Status: Inactive

MORNING STAR MINE Silver, zinc

Lower Hot Springs dist., sec. 28, 29, T. 3 S., R. 1 E.

Operator: R. B. Farnsworth

109 Willson, Bozeman MT 59715

Owner: Same as operator

Employees: 2 Status: Developing

MOUNTAIN FLOWER MINE Gold, silver

Williams Gulch dist., sec. 33, T. 6 S., R. 3 W.

Operator: R. H. Rogers
Box 11, Alder MT 59710
Owner: Same as operator
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 CHIEF MINE Gold, silver

Norwegian dist., sec. 1, T. 3 S., R. 2 W.

Operator: Ray Alger Deer Lodge MT 59722 Owner: Thomas Durham Pony MT 59747

Status: Producing and developing

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: Unknown

ST. LAWRENCE CONSOLIDATED MINE Gold, silver

Nevada City dist., 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

Mineral Hill dist., sec. 14, T. 2 S., R. 3 W.

Operator: Emmett Clary Box 628, Pony MT 59747 Owner: Same as operator

Employees: 2 Status: Developing

SHORT SHIFT MINE Gold

Rabbit dist., SE¼ sec. 6, T. 2 S., R. 7 W.

Operator: John A. Layton 3104 Busch, Butte MT 59701

Owner: Same as operator Mill capacity: 20 t/d Status: Developing

SILVER QUEEN MINE

Virginia City district

Operator: Silver Hill Mines, Inc.

E. 12707 Valley Way, Spokane WA 99216 Owner: Silver Hill Mines, Mic-Mac Mines, and

Silver Minerals, Inc.,

E. 12707 Valley Way, Spokane WA 99216

Employees: 4
Status: Unknown

SMUGGLER MINE Gold, silver

Mill Creek dist., sec. 13, T. 4 S., R. 4 W.

Operator: Goldstream Mining Co.

6715 Village Rd., Salt Lake City UT 84121

Owner: Same as operator Status: Developing

SURPRISE CLAIMS GROUP Gold, silver, lead

California (Harris) Creek dist., sec, 5, 6, 7, 8, T. 5 S.,

R. 3 W.

Operator: Harry Bennetts
Sheridan MT 59749
Owner: Same as operator
Status: Developing

TRIANGLE MINE Gold, silver

Norris district

Operator: Triangle Mining Co.

1016 Nevada Ln., Billings MT 59101

Owner: Same as operator

Employees: 4
Status: Unknown

**UNCLE SAM MINE Gold, silver

Mill Creek dist., SE¼ sec. 8, T. 4 S., R. 3 W.

Operator: Mark Mortenson Sheridan MT 59749 Owner: Same as operator 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 and Hester Carmin, and Oleta Box

Pony MT 59747 Employees: 1 Status: Inactive

^{*}Open pit; **Open pit and underground

MEAGHER COUNTY: White Sulphur Springs

CUMBERLAND MINE Silver, lead, zinc

Castle Mountains dist., sec. 14, T. 8 N., R. 8 E.

Operator: HOCO, Inc.

Box 469, White Sulphur Springs MT 59645

Status: Unknown

**LUCKY DOLLAR MINE Silver, lead

Castle (unorganized) dist., sec. 12, T. 8 N., R. 8 E.

Operator: Robinson Mining Co., c/o Carl Berg

Box 61, Martinsdale MT 59053 Owner: Carl Berg and George Voldseth

Box 61, Martinsdale MT 59053

Employees: 2

Status: Producing and developing

VOSS MINE Copper

Castle dist., sec. 1, 2, 3, 11, T. 8 N., R. 8 E.

Operator: Mt. Castle Mines, Inc.

8 First National Bank Bldg., Butte MT 59701

Owner: Carl W. Voss and Owen S. Winters

Helena MT 59601 Status: 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 and developing

LAST CHANCE MINE Silver, lead

Operator: Jupiter Mining Co. Box 1010, Wallace ID 83873

Owner: Same as operator

MINERAL COUNTY: Superior

*BLACK TRAVELER and BULORING MINES

Silver, copper

St. Regis-Saltese dist., sec. 5, T. 19 N., R. 30 W.

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

Cedar Creek dist., sec. 17, T. 15 N., R. 26 W.

Operator: Charles F. Buls Saltese MT 59867 Owner: Same as operator

Employees: 3

Status: Produced and developing

Operator: G. M. Gildersleeve

Box 565, Superior MT 59872

MINERAL KING MINE Silver, lead, zinc

Saltese dist., sec. 34, T. 20 N., R. 31 W.

Saltese-St. Regis dist., sec. 36, T. 20 N., R. 31 W.

Operator: Sunshine Mining Co.

Big Creek ID

Status: Producing

Owner: Mineral King Mining Co., c/o Max Swanson

144 W. Front, Missoula MT 59801

Status: Developing

BRYAN MINE Silver, lead

Status: Developing

Owner: Same as operator

Saltese dist., sec. 28, T. 20 N., R. 31 W.

Operator: Jupiter Mining Co. Box 1010, Wallace ID 83873

Owner: Same as operator Status: Producing

EAST COEUR D'ALENE SILVER MINE Silver,

copper, lead, zinc

Keystone dist., T. 17, 18 N., R. 26, 28 W.

Operator: Elcor Chemical Corp.

Superior MT 59872

Owner: East Coeur d'Alene Silver Mines, Inc.

Scott Bldg., Wallace ID 83873

Status: Developing

*Open pit; **Open pit and underground

NANCY LEE MINE Silver, lead, zinc

Keystone dist., sec. 31, 32, T. 18 N., R. 26 W.

Operator: Nancy Lee Mines, Inc. Box 67, Kellogg ID 83837

Mill capacity: 100 t/d Status: Developing

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: Developing

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

Employees: 9
Mill capacity: 50 t/d
Status: Developing

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.

Operator: Joe and O. R. Waldbillig Rte. 5, Missoula Mt 59801 Owner: Same as operator Status: Developing and exploring

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

Sec. 22, T. 11 N., R. 22 W.

Operator: Ward Development Corp.

321 N. Higgins Ave., Missoula MT 59801

Owner: Same as operator

Employees: 3
Status: Developing

PARK COUNTY: Livingston

*CROWN BUTTE and MELISSA MINE

Gold, silver, copper, lead

New World dist., unsurveyed, T. 9 S., R. 14 E.

Operator: Beartooth Mining Co. Cooke City MT 59020 Owner: Same as operator Status: Unknown *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: Produced and developing

PHILLIPS COUNTY: Malta

GOLD BUG-LITTLE BEN MINE Gold, silver

Little Rockies dist., sec. 15, T. 25 N., R. 24 E.

Operator: Little Rocky Mining Co., Ltd.

Landusky MT 59533

Owner: Little Rockies Mining & Development Co.

Lewistown MT 59457

Employees: 4
Status: Unknown

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.

Operator: Clarke J. Smith Rte. 2, Valencia PA 16059

Owner: Same as operator

Status: Inactive

CHARTER OAK MINE Gold, silver, lead, zinc Negro Hill dist., NW4 SE4 sec. 36, T. 9 N., R. 7 W.

Operator: John F. Hopkins

401 N. Montana, Helena MT 59601

Owner: Same as operator Mill capacity: 50 t/d Status: Inactive

*Open pit

POWELL COUNTY-Continued

FAIRVIEW MINE Gold, silver, copper Ophir dist., sec. 25, T. 11 N., R. 8 W. Operator: Wesley Dix and Schryver 1109 W. Woolman, Butte MT 59701

Owner: Same as operator

Employees: 3
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., L. F., and R. L. Ward

Elliston MT 59728 Owner: Hard Luck Mines Elliston MT 59728 Status: 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

MONARCH MINE Gold, silver, copper Ontario dist., sec. 30, 31, T. 8 N., R. 6 W.

Operator: Monarch Minerals, Inc., D. L. Jones, Mgr.

Box 33, Helena MT 59601 Owner: Same as operator Employees: 3 part time Status: Developing

NANCY HELEN MINE Gold, copper

Ophir district

Operator: Clarke J. Smith Rte. 2, Valencia PA 16059 Owner: Same as operator

Status: Inactive

NEGROS MINE Gold, silver, lead, zinc

Negro Hill dist., SE¼ SW¼ sec. 36, T. 9 N., R. 7 W.

Operator: J. F. Hopkins

401 N. Montana, Helena MT 59601

Owner: Same as operator Status: Producing

**NELSON and DAN 1 & 2 MINES Silver, copper, iron

Elk Creek dist., (Powell and Granite Counties)

sec. 5, 6, 7, 8, T. 12 N., R. 13 W.

Operator: Nelson Mines, Inc., Harold G. Nelson, Sr.

Greenough MT 59836 Owner: Same as operator

Employees: 2 Status: Unknown

**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

**SUNRISE MINE Gold, silver, lead

Negro Hill dist., sec. 12, T. 8 N., R. 7 W.

Operator: Enard A. Lindquist Box 334, Elliston MT 59728 Owner: Same as operator

Status: Unknown

WOLVERINE MINE Gold, silver, lead

Elliston dist., sec. 18, 19, 20, T. 8 N., R. 6 W.

Operator: Wolverine Corp. c/o M. M. Butler, Pres. 2711 Miles Ave., Billings MT 59102

Owner: M. M. and Bernice Butler

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, Roy Davidson, and

William Elsasser, Box 142, Victor MT 59875

Status: Produced

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

*WHIPPERWILL MINE Gold, silver, lead, zinc

Pleasant View dist., T. 8 N., R. 21 W.

Operator: Bill Elsasser and Harold Ebbett

Samuels ID 83862

Owner: Albert Smith

Victor MT 59875

Employees: 2

Status: Inactive

*Open pit; **Open pit and underground

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

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. and William Swann and Ruth Goddard E. 910½ Hawthorne Rd., Spokane WA 99218

Status: Inactive

EDDY CREEK MINE

Eddy Creek dist., sec, 16, 21, T. 20 N., R. 28 W.

Operator: Coeur d'Alene Silver Development Co.

Spokane WA 99200

Owner: The State Mining Co., W. W. Stearns

Box 141, Plains MT 59859

Status: Developing

GOPHER HOLE MINE Gold, silver, lead, zinc

Blue Creek dist., sec. 10, T. 27 N., R. 34 W.

Operator: J. C. Brooks

Star Rte., Clark Fork ID 83811, and

Arthur and Ralph Dettwiler

Noxon MT 59853

Owner: Same as operator

Status: Developing

HEIDELBERG MINE Gold, silver

Noxon dist., SE¼ sec. 29, NW¼ sec. 32, T. 27 N.,

R. 31 W.

Operator: Heidelberg Mining Company of Montana

c/o G. A. Myers, 1001 Court St., Pasco WA 99301

Owner: Same as operator Status: Developing

HOLLIDAY MINE Silver, lead

Pilgrim Creek dist., sec. 25, 36, T. 26 N., R. 34 W.

Operator: Silver Mark Mines, Inc. Box 197, Noxon MT 59853

Owner: Same as operator

Status: Unknown

RED FIR (AMAZON) MINE Gold, silver, copper

Blue Creek dist., sec. 25, T. 27 N., R. 34 W.

Operator: Cominco American Inc. W. 818 Riverside, Spokane WA 99201

Owner: J. C. Brooks, C. R. Weare, and Dettwiler Bros.

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 and Nick Sharette

8 Spruce St., Wallace ID 83873

Owner: Ruth Sales and Louise Sales

Kalispell MT 59901

Status: Inactive

SILVER BOW COUNTY: Butte

BADGER MINE Gold, silver, lead, zinc

Summit Valley (Butte) dist., NE¼ NW¼ 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 (Butte) dist., NE¼ NW¼ sec. 18,

T. 3 N., R. 7 W.

Owner-Operator: The Anaconda Co.

Butte MT 59701

Status: Producing

*Open pit; **Open pit and underground

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: Inactive

**CLIMAX (APEX) LODE GROUP Gold, silver

Divide Creek dist., sec. 5, 6, T. 1 N., R. 8 W.

Operator: James S. Knowlson

805 W. Granite, Butte MT 59701

Owner: Intermountain Deaconess Home for Children

Helena MT 59601

Employees: 2 Status: Unknown

SILVER BOW COUNTY-Continued

*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

*COPPER HILL MINE Silver, copper

Camp Creek dist., sec. 3, T. 2 S., R. 8 W.

Operator: Frank Bissell

319 N. Excelsior, Butte MT 59701

Owner: Same as operator

Status: Exploration and developing

KELLEY MINE Gold, silver, copper

Summit Valley (Butte) dist., SW¼ SW¼ sec. 7,

T. 3 N., R. 7 W.

Owner-Operator: The Anaconda Co.

Butte MT 59701 Status: Inactive

LEONARD MINE Gold, silver, copper

Summit Valley (Butte) dist., cen. SW½ sec. 8,

T. 3 N., R. 7 W.

Owner-Operator: The Anaconda Co.

Butte MT 59701 Status: Inactive

*LITTLE BUTTE ORE MINE Copper

Camp Creek dist., sec. 2, T. 2 S., R. 8 W.

Operator: James L. White

1112 Missouri, Butte MT 59701

Owner: Same as operator

Status: Inactive

MOUNTAIN CON MINE Gold, silver, copper

Summit Valley (Butte) 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

Mill capacity: 150 t/d Status: Developing

STEWARD MINE Gold, silver, copper

Summit Valley (Butte) dist., NW4 NE4 sec. 13, T. 3 N.,

R. 8 W.

Owner-Operator: The Anaconda Co.

Butte MT 59701 Status: Producing

WRONG FONT CLAIMS GROUP Gold, silver

Summit Valley (Butte) dist., sec. 19, 24, T. 3 N.,

R. 9 W.

Operator: Tom Helehan

Fox Hotel, Butte MT 59701

Owner: Same as operator

Status: Developing

SWEET GRASS COUNTY: Big Timber

**SKY BABY CLAIMS Gold, silver

Boulder River dist., sec. 25, T. 4 S., R. 12 E.

Operator: Ben Taylor

Box 516, Big Timber MT 59011 Owner: Ben L. and Martha L. Taylor Box 516, Big Timber MT 59011

Status: Developing

TOOLE COUNTY: Shelby

*GOLD BUTTE MINE Gold

Gold Butte dist., T. 36 N., R. 3 E.

Operator: Ham Mining Co., c/o Cedor B. Aronow

Box 651, Shelby MT 59474

Owner: Same as operator

Status: Inactive

*Open pit; **Open pit and underground

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 59641

Owner: John M. Ralls and A. W. Sitton

Radersburg MT 59641

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 and A. W. Sitton

Radersburg MT 59641

Status: Producing and developing

SILVER BOW COUNTY: Butte

IRON KING MINE Iron ore

Little Pine district Operator: Tom Helehan

Fox Hotel, Butte MT 59701 Owner: Same as operator

Status: Developing

MANGANESE MINES

GRANITE COUNTY: Philipsburg

ALGONQUIN MINE Manganese

Philipsburg dist., sec. 31, T. 7 N., R. 13 W.

Owner: Trout Mining Co.

233 Broadway, New York NY 10007

Status: Inactive

CLIFF MILLSITE MINE Manganese

Philipsburg dist., sec. 31, T. 7 N., R. 13 W.

Operator: Taylor-Knapp Co.

Box 250, Philipsburg MT 59858

Status: Inactive

TRUE FISSURE MINE Manganese

Flint Creek dist., W½ NW¼ sec. 29, T. 7 N., R. 13 W.

Operator: Taylor-Knapp Co.

D. S. Johnson, Mgr.

Box 250, Philipsburg MT 59858

Owner: Same as operator Mill capacity: 125 t/d

Status: Inactive

MOLYBDENUM MINES

RAVALLI COUNTY: Hamilton

*MOLLY 1, 2, 3, 4, and 5 Molybdenite

Skalkaho dist., unorganized, T. 5 N., R. 18 W.

Operator: Leif Aune

Box 303, Darby MT 59829 Owner: Same as operator

Employees: 1
Status: Developing

^{*}Open pit

THORIUM MINES

BEAVERHEAD COUNTY: Dillon

LAST CHANCE MINE Thorium

Lemhi Pass dist., sec. 20, 28, 29, T. 10 S., R. 15 W.

Operator: Union Pacific Railroad Co.

Spokane WA 99201 Owner: Sawyer Petroleum Co.

Suite 314, 650 S. Grand Ave., Los Angeles CA 90008

Status: Inactive

TUNGSTEN MINES

BEAVERHEAD COUNTY: Dillon

*CALVERT MINE Scheelite

Wise River dist., sec. 12, T. 1 N., R. 12 W.

Operator: Minerals Engineering Co. 817 - 17th St., Denver CO 80202

Owner: Same as operator 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: Unknown

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 and Joe 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.

Operator: James J. Stoick

2515 Sunnyview Ln., Billings MT 59101

Owner: Same as operator

Status: Developing and exploration

*Open pit; **Open pit and underground

GOLD PLACERS

GRANITE COUNTY: Philipsburg

CONFIDENT, RADER, CASTLE PLACER 1, and

CASTLE PLACER 2 Gold, silver

Granite dist., sec. 22, 34, T. 6 N., R. 13 W.

Operator: William J. Dean & Son 309 S. Arizona, Butte MT 59701

Owner: Same as operator

Status: Unknown

MASTER PLACER Gold

Gold Creek dist., T. 8 N., R. 12 W.

Operator: O. Perl Smith

745 Sherman, Denver CO 80203

Owner: Same as operator

Status: Unknown

SUNSET PLACER Gold

Maxville dist., sec. 20, 21, T. 8 N., R. 12 W.

Operator: Ben Walkup

Box 644, Philipsburg MT 59858

Owner: Same as operator

Status: Unknown

JEFFERSON COUNTY: Boulder

BLUEBIRD NO. 1 and 2 PLACER Gold

Whitehall district

Operator: Maurice R. Haigh

Box 293, Three Forks MT 59752

Owner: Same as operator

Employees: 1

Status: Producing and developing

SKOOKUM PLACER Gold

Comet dist., sec. 12, T. 5 N., R. 6 W.

Operator: Theodore Nyquest Box 133, Boulder MT 59632

Owner: Same as operator

Status: Inactive

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.

Operator: E. L. Burns

Box 324, White Sulphur Springs MT 59645

Owner: Same as operator

Status: Producing

YERDON PLACER Meagher district, unorganized

Owner: Vern Knopf

1621 Cannon St., Helena MT 59601

Status: Unknown

MISSOULA COUNTY: Missoula

LaCHAMBRE PLACER Gold

Ninemile dist., sec. 24, T. 17 N., R. 24 W.

Operator: J. T. LaChambre

Heron MT 59844

Owner: Same as operator

Status: Inactive

Gold placers-continued

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.

Operator: George Gildersleeve Box 565, Superior Mt 59872 Owner: Same as operator

Status: Developing

PARK COUNTY: Livingston

HENKE-BEER PLACER Gold

Boulder River dist., sec. 20, T. 7 S., R. 12 E.

Operator: Donald N. Henke

Box 206, Big Timber MT 59011

Owner: Same as operator

Employees: 2 Status: Developing W. M. CLAYTON PLACER Gold

Emigrant dist., sec. 29, T. 6 S., R. 9 E.

Operator: W. J. Clayton Box 54, Pray MT 59065 Owner: Same as operator Status: Developing

POWELL COUNTY: Deer Lodge

JEFFERSON CREEK PLACER Gold

Finn dist., sec. 11, T. 12 N., R. 9 W.

Operator: Elmer J. Wagner Box 294, Avon MT 59713

Owner: Same as operator Employees: 1

Employees: 1
Status: Developing

OLD SHOE NO. 1 PLACER Gold

Finn district

Operator: A. H. Roat and Sons Box 266, Alberton MT 59820

Owner: Same as operator Status: Unknown

MASTER PLACER Gold

Gold Creek dist., T. 9 N., R. 11 W.

Operator: O. Perl Smith

745 Sherman, Denver CO 80203

Owner: Same as operator 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., East Shore, Polson MT 59860

Status: Inactive

BARITE MINES

BEAVERHEAD COUNTY: Dillon

*LUCKY JIM BEAM GROUP MINE Barite Jackson dist., sec. 25, 26, T. 4 S., R. 14 W. Operator: R. P. Jackson and R. M. Shepard

Jackson MT 59736 Owner: Same as operator 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

BLAINE COUNTY: Chinook

*PETER KIEWIT SONS' PIT Bentonite Operator: Peter Kiewit Sons' Co. Box 724, Sheridan WY 82801

Owner: State of Montana and others

Status: Inactive

CARBON COUNTY: Red Lodge

*CARBON SERIES PITS Bentonite

Bridger-Warren area

Operator: Wyo-Ben Productions, Inc. Box 1979, Billings MT 59101

Owner: Wyo-Ben Products and Big Horn Minerals Co.

Box 1979, Billings MT 59101

Status: Inactive

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

*Open pit

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

Bentonite pits-continued

PHILLIPS COUNTY: Malta

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

Status: Exploration

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

Owner: Same as operator 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 *LITTLE ROCK NO. 1 PIT Bentonite

Operator: Lloyd Knudsen Malta MT 59538 Owner: Jerad Welch Zortman MT 59546

Status: Inactive

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

*ASHLAND CHEMICAL PITS Bentonite

Operator: Ashland Chemical Co. Box 2219, Columbus OH 43216

Owner: Same as operator Status: Developing

*BRAZIL CREEK PIT Bentonite

Operator: Brazil Creek Bentonite Co. Box 907, Glasgow MT 59230

Owner: Same as operator Status: Developing

CLAY MINES AND PITS

CASCADE COUNTY: Great Falls

*TREASURELITE PIT Clay Sec. 13, T. 21 N., R. 3 E.

Operator: Treasurelite, Div. Treasure State Industrial Products, Inc., Box 2750, Great Falls MT 59401

Owner: Same as operator Status: Unknown

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

*Open pit

DEER LODGE COUNTY: Anaconda

*PLACER FIRE CLAY PIT Fire clay

Sec. 34, T. 5 N., R. 11 W. Operator: Harold Snow

Box 1155, Anaconda MT 59711

Owner: Same as operator Status: Producing

JEFFERSON COUNTY: Boulder

*CALICO CLAY PIT Pottery clay

Sec. 36, T. 2 N., R. 3 W.

Operator: Wesley Van Gorden Box 5, Cardwell MT 59721

Owner: Same as operator

Status: Produced

Clay mines and pits-continued

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: Inactive

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 (summer only)

GYPSUM MINES

BEAVERHEAD COUNTY: Dillon

*McCARTHY (DEADWOOD) DEPOSIT Gypsum

Sec. 6, 7, T. 14 S., R. 9 W. Operator: Tim McCarthy Lima MT 59739

Owner: Tim McCarthy, Jack Brown, and Bennett Owens, Lima MT 59739

Status: Developing

*PETERSON DEPOSIT Gypsum
N½ sec. 1, T. 15 S., R. 9 W.
Operator: Mrs. Lanora Peterson
Box 185, Willow Creek MT 59760

Owner: Same as operator Status: Developing

CARBON COUNTY: Red Lodge

DAISY MINE Gypsum

Sec. 20, T. 7 S., R. 24 E.

Operator: Bridger Gypsum Co. Box 63, Billings MT 59101 Owner: Bridger Mercantile Co. Minneapolis MN 55400

Status: Inactive

*JAY KAY MINE Gypsum NE¼ SE¼ sec. 19. T. 7 S...

NE¼ SE¼ sec. 19, T. 7 S., R. 24 E.

Operator: Jay Kay, Inc.

607 Garden Ave., Billings MT 59101

Owner: Same as operator 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.

Operator: Roy Kitson Alder MT 59710 Owner: Same as operator Status: Developing

*Open pit

LIMESTONE MINES AND QUARRIES

CARBON COUNTY: Red Lodge

*WARREN OUARRY 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

GALLATIN COUNTY: Bozeman

*TRIDENT QUARRY Portland cement limestone

Sec. 9, 10, T. 2 N., R. 2 E. Operator: Ideal Cement Co

420 Ideal Cement Bldg., Denver CO 80202

Owner: Same as operator 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

DEER LODGE COUNTY: Anaconda

*BROWNS QUARRY Metallurgical limestone

Sec. 23, T. 5 N., R. 12 W.

Butte MT 59701

Status: Producing

Owner: Same as operator

Operator: The Anaconda Co.

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.

Operator: Janney Trucking Co., Inc.

Garrison MT 59731 Owner: Same as operator

Starus: Producing and developing

PHOSPHATE MINES

BEAVERHEAD COUNTY: Dillon

CANYON CREEK and EAST LaMARCHE MINES

Phosphate rock

Melrose dist., sec. 30, 31, 32, T. 1 S., R. 9 W.;

sec. 5, 6, 7, T. 2 S., R. 9 W.

Operator: Stauffer Chemical Co. Box 3146, Butte MT 59701

Status: Inactive

*Open pit; **Open pit and underground

GRANITE COUNTY: Philipsburg

**DOUGLAS CREEK MINE AND MILL Phosphate rock

Maxville dist., sec. 31, T. 9 N., R. 12 W.

Operator: Cominco American, Inc.

Garcison MT 59731

Owner: Same as operator

Status: Inactive

Phosphate mines—continued

POWELL COUNTY: Deer Lodge

BROCK (ANDERSON, WARM SPRINGS CREEK)

Phosphate rock

Garrison dist., sec. 21, 22, T. 10 N., R. 10 W.

Operator: Cominco American, Inc.

Garrison MT 59731 Owner: Same as operator

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: Produced

SILVER BOW COUNTY: Butte

MAIDEN ROCK MINE Phosphate rock

Melrose dist., sec. 32, T. 1 S., R. 9 W. Operator: Stauffer Chemical Co. Box 3146, Butte MT 59701

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.

Operator: R. M. Parson Co. and J. V. Robinson 617 W. 7th St., Los Angeles CA 90017

Owner: Same as operator Status: Developing

RELYEA MINE Phosphate rock

Garrison dist., S½ sec. 12, T. 10 N., R. 10 W.

Operator: George Relyea
Box 85, Garrison MT 59731
Owner: Same as operator

Employees: 10 Status: Producing

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 and limited production

LEWIS AND CLARK COUNTY: Helena

*EL DORADO BAR SAPPHIRE DIGGINGS Sapphire

Sec. 2, 10, 11, T. 11 N., R. 12 W. Operator: Craig Winterburn York Rte., Helena MT 59601

Owner: Lazy B-H Ranch, Inc. York Rte., Helena MT 59601

Status: Producing

SEMIPRECIOUS STONES

HILL COUNTY: Havre

ROCKY BOY QUARTZ DEPOSIT Smoky quartz

Bearpaw Mountains dist., sec. 5, 25, T. 28 N., R. 16 E.

Operator: Chippewa-Cree Tribal Council

Rocky Boy Indian Reservation, Box Elder MT

59521

Owner: Same as operator

Status: Inactive

*Open pit

MINERAL COUNTY: Superior

*FOUR V's CLAIMS Smoky quartz

Fish Creek dist., sec. 22, T. 11 N., R. 24 W.

Operator: Albert E. Volker

2835 Woodland St., Missoula MT 59801

Owner: Same as operator

Status: Producing

SHALE PITS

CASCADE COUNTY: Great Falls

*TREASURELITE PIT Expanded shale

Sec. 13, T. 21 N., R. 3 E.

Operator: Treasurelite, Div. Treasure State Industrial Products, Inc., Box 2750, Great Falls MT 59401

Owner: Same as operator

Status: Unknown

YELLOWSTONE COUNTY: Billings

*MONTANA SHALE PIT Expanded shale

Operator: Montana Liteweight Aggregate Co.

Box 20317, Billings MT 59102

Owner: Same as operator Status: Producing

GALLATIN COUNTY: Bozeman

*KANTA PIT Expanded shale

Sec. 13, T. 2 N., R. 2 E.

Operator: Kanta Products, Inc.

Box 96, Three Forks MT 59752

Owner: Same as operator

Status: Unknown

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: Produced

DEER LODGE COUNTY: Anaconda

*LUKE QUARRY Metallurgical silica

Blue Eyed Nellie dist., NW1/4 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.

Operator: R.K.R. Soil Amendment, Inc.

Cushman MT 59023

Owner: Same as operator

Status: Inactive

LAKE COUNTY: Polson

*HOWARD W. MARTIN PEAT Peat

Sec. 16, 17, T. 24 N., R. 17 W.

Operator: Martin's Peat & Potting Soils

Swan Lake MT 59911

Owner: Howard W. Martin, Swan Lake MT 59911

Employees: 1 Status: Producing

STONE QUARRIES

CARBON COUNTY: Red Lodge

*DEADMAN OUARRY 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: Developing and produced

FERGUS COUNTY: Lewistown

*SURPRISE STONE QUARRY Ornamental stone

Sec. 32, 33, T. 14 N., R. 22 E. Operator: Charles B. Allen

Box 117, Grassrange MT 59032

Owner: Same as operator

Status: Produced and developing

GALLATIN COUNTY: Bozeman

*PICTURE FLAGSTONE QUARRY Picture flagstone

Sec. 29, T. 2 N, R. 4 E. Operator: Orie B. McElwee

Box 474, Manhattan MT 59741

Owner: Same as operator Status: Producing

MISSOULA COUNTY: Missoula

*McOUARRIE QUARRY Railroad ballast, road metal Clinton (Wallace) dist., sec. 17, T. 12 N., R. 17 W.

Operator: Lyon Construction Co.

Clinton MT 59825

Owner: Northern Pacific Railway Co.

St. Paul MN 55101

Employees: 15

Mill capacity: 200 t/hr

Status: Producing

RAVALLI COUNTY: Hamilton

*BITTERROOT VALLEY STONE QUARRY

Ornamental stone

Sec. 7, T. 32 N., R. 21 W.

Operator: Henry Andrews

Rte. 1, Box 274, Hamilton MT 59840

Owner: Same as operator

Status: Produced and developing

*Open pit

CASCADE COUNTY: Great Falls

Building stone

*FORZLEY SALES CO. QUARRIES

4 Mi. S. Monarch

Operator: Forzley Sales Co.

Box 2070, Great Falls MT 59401

Owner: Joe Forzley

Box 2070, Great Falls MT 59401

Status: Unknown

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.

Operator: Henry Lozeau

535 Ford, Missoula MT 59801

Owner: Same as operator

Status: Produced

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: Producing

PARK COUNTY: Livingston

*LIVINGSTON MARBLE and GRANITE QUARRY

Ashiar, cut stone, tubble

Sec. 14, 24, T. 9 S., R. 8 E.

Operator: Livingston Marble and Granite Works

Livingston MT 59047

Owner: D. A. and H. W. Strong

711 E. Park, Livingston MT 59047

Status: Intermittent operation

SANDERS COUNTY: Thompson Falls

*FISHTRAP QUARRIES Ornamental stone

Sec. 23, 26, T. 24 N., R. 28 W.

Operator: U. C. Campbell

Box 427, Thompson Falls MT 59873

Owner: Same as operator

Status: Producing

TALC MINES

BEAVERHEAD COUNTY: Dillon

*CROWN-SMITH-DILLON MINE Talc Axes Creek dist., sec. 23, T. 8 S., R. 8 W.

Operator: Chas. Pfizer & Co. Box 1147, Dillon MT 59725

Owner: Clyde Smith Dillon MT 59725 Status: Inactive

MADISON COUNTY: Virginia City

*REGAL MINE

Employees: 2 Status: Producing

*SNOW CAP MINE Talc

Status: Developing

*TREASURE STATE MINE

Talc

Box 1147, Dillon MT 59725

Operator: Chas. Pfizer & Co.

Operator: W. M. Cocanougher

Twin Bridges MT 59754

Owner: Same as operator

Mill capacity: 30,000 t/d

Operator: Chas. Pfizer & Co. Box 1147, Dillon MT 59725

Status: Producing and developing

Owner: Same as operator

Employees: 2

Owner: Same as operator

Sweetwater dist., N½ sec. 2, T. 8 S., R. 7 W.

*BEAVERHEAD MINE Talc

Stone Creek dist., sec. 11, 14, T. 7 S., R. 6 W.

Operator: United Sierra Division,

Cyprus Mines Corp., Box 1201, Trenton NJ 08618

Owner: Same as operator Status: Producing

*RUBY NO. 1 and NO. 2 MINE Talc

Warm Springs dist., sec. 11, T. 8 S., R. 4 W. Operator: Sam Maloney and William Pettus

Box 174, Alder MT 59710 Owner: Same as operator Status: Developing

*TALC RIDGE (RUBY) GROUP Talc

Willow Creek dist., sec. 30, T. 8 S., R. 3 W. Operator: Madison Minerals Co., c/o C. W. Hafer

1967 Yale, Butte MT 59701 Owner: Carl Garrison and others

Sheridan MT 59749 Employees: 2 to 3 Status: Developing

*YELLOWSTONE (CAMERON) MINE Talc

Johnny Gulch dist., sec. 4, T. 9 S., R. 1 W.

Operator: United Sierra Division, Cyprus Mines Corp.

Box 1201, Trenton NJ 08618

Owner: Same as operator 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.

Operator: Zonolite Division, W. R. Grace & Co. 62 Whittemore Ave., Cambridge MA 02140

Owner: Same as operator

Employees: 160 Mill capacity: 3,000 t/d Status: Producing

MADISON COUNTY: Virginia City

Talc Stone Creek dist., NE¼ NE¼ sec. 15, T. 7 S., R. 6 W.

GILLIAM VERMICULITE DEPOSIT Vermiculite

Sec. 25, T. 1 S., R. 3 W.

Operator: W. G. Forbes and Emmett Clary

Pony MT 59747 Owner: Celesta Gilliam Cardwell MT 59721 Status: Developing

*Open pit

PART 3, COAL MINES

BIG HORN COUNTY: Hardin

BLAINE COUNTY: Chinook

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*ROSEBUD TONGUE RIVER MINE Coal

Operator: Rosebud Coal Sales Co. Box 724, Sheridan WY 82801

Owner: Same as operator Status: Producing

MILK RIVER MINE Coal
Operator: Lauren Sargent

Box 472, Chinook MT 59523

Owner: Same as operator

Employees: 4
Status: Producing

CARBON COUNTY: Red Lodge

BROPHY MINE Coal

Operator: James Brophy Red Lodge MT 59068

Status: Inactive

ROADSIDE MINE Coal
Operator: Frank Janskovitch
Bearcreek MT 59007

Status: Unknown

CUSTER COUNTY: Miles City

STORM KING MINE Coal

Operator: Ralph E. Bair Box 113, Miles City 59301

Status: Unknown

DAWSON COUNTY: Glendive

PEUSE MINE Coal

Sec. 13, T. 16 N., R. 53 E. Operator: Gordon Peuse Lindsay MT 59339 Owner: Same as operator

Status: Developing

McCONE COUNTY: Circle

NO.1 MINE Coal

Operator: R. D. Stephenson

Circle MT 59215 Status: Unknown

MUSSELSHELL COUNTY: Roundup

BLUE FLAME MINE Coal

Sec. 23, T. 6 N., R. 26 E.

Operator: Victor and Jack Carlson Box 342, Roundup MT 59072 Owner: Divide Coal Mining Co. Box 342, Roundup MT 59072

Employees: 7
Status: Producing

COW CREEK MINE Coal

Sec. 9, T. 6 N., R. 28 E.

Operator: George Badovinus and Larry Trudeau Klein Star Rte., Roundup MT 59072

Owner: Same as operator Status: Developing

*Open pit

DIVIDE MINE Coal

Operator: Divide Coal Mining Co.

Roundup MT 59072

Owner: Victor and Jack Carlson

Box 342, Roundup MT 59072

Employees: 6

Status: Produced

JOHNNY'S MINE Coal

Sec. 15, T. 7 N., R. 26 E.

Operator: Johnny Keosky

1011 - 1st St., Roundup MT 59072

Owner: Same as operator

Employees: 3

Status: Produced

Musselshell County-continued

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

P and M MINE Coal

Sec. 13, T. 6 N., R. 27 E. Operator: Paul Meged

Golden Creek Rte., Roundup MT 59072

Owner: Same as operator Status: Producing

SQUARE DEAL MINE Coal

Sec. 16, T. 8 N., R. 25 E.

Operator: Virgil Cross and Buster Ray 220 - 1st St. W., Roundup MT 59072

Owner: Same as operator

Employees: 12

Status: Producing and developing

WESTERN MINE Coal

Operator: Glenn Johnson Roundup MT 59072

Status: Unknown

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

Operator: Peabody Coal Co. Colstrip MT 59323 Owner: Same as operator

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

Operator: Lester Scott Lame Deer MT 59043

LAME DEER MINE Coal

Status: Unknown

SHERIDAN COUNTY: Plentywood

ACME MINE Coal

Operator: M. F. Brenteson Coalridge MT 59216

Status: Inactive

*Open pit

*LAGERQUIST MINE Coal

Sec. 4, T. 35 N., R. 58 E. Operator: E. C. Lagerquist

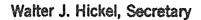
Rte. 1, Westby MT 59275

Owner: Same as operator

Status: Developing







John F. O'Leary, Director

Albany Office of Mineral Resources

Mark L. Wright, Chief

Albany, Oregon

THE MINERAL INDUSTRY OF MONTANA IN 1969

Preliminary Annual Report

The value of Montana mineral production in 1969 rose to \$285.7 million, an increase of 25 percent over the previous year, according to preliminary estimates prepared by the Bureau of Mines, U.S. Department of the Interior. Mineral production value recovered from the effects of the 8-month (1967-68) strike and surpassed the 1966 value of production of \$245.3 million.

Petroleum value, the State's dominant mineral commodity in terms of value, fell 4 percent to \$119.1 million. In spite of this decline, the value of fuels (petroleum, coal, and natural gas) increased, but constituted only 43 percent of total production value, as compared with 56 percent in 1968.

Gold production value almost doubled compared with 1968, and silver increased 29 percent in value in spite of a 17-percent drop in the estimated average annual price. Copper rose 84 percent in value of production and 16 percent when compared with the pre-strike level in 1966.

The value of construction materials rose, with sand and gravel and stone up 69 percent in value of production. The value of clay production rose due to an increase in price while output fell.

Prepared by Fred V. Carrillo and William N. Hale, Geologists, and Mary Anne McComb, Economist, Bureau of Mines, Albany, Oreg., Dec. 17, 1968, under the direction of A.J. Kauffman, Jr., Physical Science Administrator.

7 TABLE 1. - Mineral production in Montana

	1968	89	P/ 1969	99
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)
olans 9/	30	\$54	27	\$28
Con (hitiminous and lighte)	519	1,214	850	2/2,100
etc.)	69,480	58,151	112,766	107,008
	NA -	109	NA 700	109
ţċ.	13,385	4/ 727 727	25,500	- ON
sand	1 870	92 101	1.490	244
Lead (recoverable content of ores, etc.)suort come	179	2,005	184	1,969
Manganese ore and concentrateshort tons, gross weight	649*4	213	1,996	84
(35 percent or more Mn)	270 0	000	ı	
Manganiferous ore and concentrate (5 to 35 percent Mn)do	700,7	1 757	048 840	2.408
Natural gas Harmand LD-sallon barrels	18,160	124,488	14,260	119,059
Petroleum (crude)thousand short tons	93	527	M	М
Cand and arawel and stonedodo	12,076	12,632	20,000	21,300
Silver (recoverable content of ores, etc.). thousand troy ounces	2,133	4,574	3,303	5,911 1,120
et	3,778	1,020	4,0%) († • • • • • • • • • • • • • • • • • • •
Value of items that cannot be disclosed: Cement, fluorspar,				
gypsum, natural gas liquids, peat, phosphate rock, tale, tungsten, vermiculite, and values indicated by symbol W	X	20,474	XX	22,854
Total	XX	228,131	X	285,653
1				

W Withheld to avoid disclosing individual company confidential data. Not available. Preliminary. NA Not applicable. 一点数字

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

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

Based on average U.S. Treasury price (\$35.00 per ounce) Jan. 1, 1968 through Mar. 15, 1963 and the average New York selling price for the remainder of the year. Based primarily on railroad car loadings. IEMIN

The State legislature passed a law to control dredge mining. The new law, which went into effect on July 1, 1969, was drafted to guarantee land restoration after dredge mining but not to prohibit such mining. The act applies to public and private land in and near stream beds and will be administered by the State Board of Health. To insure compliance, miners must post bonds of \$1,000 per acre. It is believed that although there is little dredge mining in the State at present, this law will inhibit future dredge mining.

The Anaconda Company closed its electrolytic zinc refinery at Anaconda and reactivated two units at its Great Falls refinery. About 300 workers were employed at the Anaconda plant, and most were given the option to transfer. Also, the company reopened its Anaconda copper concentrator to handle increased ore production from the nearby Butte Hill mines. This year, the city of Anaconda enjoyed the highest employment since the late 1950's.

Employment in all nonagricultural industries rose 2 percent to 198,800 (based on a 10-month average). In August, the total civilian work force peaked at 300,200 with an unemployment rate of almost 4 percent. The largest percentage gain (36 percent) was in metal mining, which averaged 3,000; however, this was still below pre-strike levels.

TABLE 2.- Estimated average monthly employment (thousands)

	First 10	First 10	First 10	Change
	months,	months,	months,	1968-69,
	1967	1968	P/ 1969	percent
Mining Metal mining Quarrying and nonmetallic mining, including coal Petroleum and natural gas	6.2	5.2	5.8	+11.5
	3.6	2.2	3.0	+36.4
	1.0	1.0	0.9	-10.0
production	1.6 22.6	2.0 23.1	2.0 23.8	+3.0
Lumber and timber products Primary metals	8.6	9.0	8.5	-5.6
	3.5	3.6	4.6	+27.8
	1.0	1.1	1.0	-9.1
Petroleum refining	11.6 17.8 189.9	11.8 17.7 195.0	11.6 17.7 198.8	-1.7 -1.9

p/ Preliminary.

Source: Montana Labor Market, State Employment Service.

REVIEW BY MINERAL COMMODITIES

METALS

Aluminum. - Output of aluminum from the Anaconda Aluminum Co. plant at Columbia Falls surpassed 1968's record production by 49 percent as the first year of capacity operation was achieved following the installation of two potlines in 1968. Shipments of alumina from Jamaica began arriving at the reduction plant in September through newly constructed unloading facilities, designed to handle 350,000 tons of alumina per year, at Everett, Wash.

Copper. - Annual production of 112,766 tons of copper was 62 percent higher than that produced in 1968 as The Anaconda Company maintained a full production schedule during the year following the 1968 strike. Higher prices and the increased production resulted in an 84-percent increase in value to \$107 million. Anaconda company mines accounted for 112,616 tons or 99.8 percent of the total copper mined in the State. Byproduct copper was produced from silver ores at the American Smelting and Refining Company (Asarco) smelter at East Helena.

The Anaconda Company initiated a program to increase production at its Butte copper operation as the emphasis at Anaconda's Butte mines continued to shift from underground to open pit. Berkeley Pit ore output was increased by 7,500 tons daily in August, and a section of the concentrator at Anaconda was reactivated to handle the increase. Additional increases were made at the Berkeley Pit in October, raising production to 56,000 tons daily. Production at the underground vein mines remained at about 8,000 tons of ore per week. Construction began on a new ore crushing-conveying system estimated to cost about \$6 million and described as the largest gyratory crushing plant in the American mining industry.

The announcement of two Montana properties available for immediate development was made by The Anaconda Company. The Heddleston district, north of Helena, was reported to contain a large low-grade copper-molybdenum deposit with significant silver values. Another property, in the Stillwater area near Nye, was claimed to contain large tonnages of copper-nickel ore which could be mined by open-pit methods.

Exploratory drilling and underhand stoping along a strike length of 650 feet was conducted at the New Departure mine near Dillon. Plans were announced by Spokane National Mines, Inc., to add flotation cells and a closed circuit crushing and grinding section to the company mill at Bannock to boost capacity to 250 tons per day.

Silver Ledge, Inc., stockpiled copper-silver ore from the 1,000-foot level of the Cape Nome mine near Clinton, in Missoula County's Wallace district.

Silver Hill Mining Co. reported small shipments of high-grade ore from a new mine east of Alder.

Gulf Resources & Chemical Corp. and Sun Oil Co. reported a copper discovery in Judith Basin County. A core-drilling program on Cordero Mining Co. property (a wholly owned subsidiary of Sun Oil) indicated ore-grade copper mineralization, with byproduct values in gold and silver.

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

			Materia1						
	·		sold or	Gold	d (1od	Gold (lode and placer	(cer	Silver (lode and placer	and placer)
Year	Mines	Mines producing	treated 2,		Troy	Value	1e	Troy	
	; ;	F	(thousand		onnces	(thousands)	l (spu	onnces	Value
	годе	Flacer	short tons	(8)				(thousands)	(thousands)
,									
1965	121	11	15,634		,772	\$75	7.	5,207	\$6,733
1966	117	5	17,645		600,	87	75	5,320	6,878
1967	82	2	9,093		,786	34	53	2,066	3,203
1968	143	77	10,215		,385	55	, (,)	2,133	4,224
1969 2/	145	К.	16,319		23,388	186	37	3,303	5,911
)	Copper		Lead		Zi	Zinc		Total
Year	Short	Value	Short	Value	6)	Short	Value	ne	value
	tons	(thousan	ids) tons	(thousands	lds)	tons	(thousands	ands)	(thousands)
									and a few sections and the section of the section o
1965	115,489	\$ \$1,766	6,981	-63-	_ &2	33,786	\$	998	\$101,340
1966	128,061				53	29,120	ထၳ	445	110,171
1967	65,483				51	3,341		925	54,785
1968	69,480		1,870		1 76	3,778	1,	020	64,763
1969 2/	112,766				٠ ما	4,897	T,	1,430	115,778
	-				_				
1/ Includes	recoverable	metal	content of gr	gravel washed (placer	i (pla		operation),	ore milled, ol	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. Does not include gravel washed.

Preliminary figures. Values calculated at 1969 average New York selling price: gold, \$42.19 a troy ounce; silver, \$1.7898 a troy ounce; copper, \$0.47447 a pound; lead, \$0.1484 a pound; and zinc, \$0.146 a pound. બાજ

Bear Creek Mining Co. completed a 3,000-foot exploration adit at its Spar Lake copper prospect, 20 miles south of Troy. The tunnel was driven into the south side of Mount Vernon to confirm mineral showings found by earlier diamond drilling from the surface.

Gold. - An increase in the average market price of gold to \$42.19 per ounce stimulated interest in gold production and exploration throughout the State. Most of the gold recovered in the State was byproduct gold from copper operations. Increased output from copper operations resulted in a 75-percent increase in production to 23,388 ounces of gold, which had an estimated value of \$987,000.

Pacific Mines, Inc., shipped gold and silver ore from the Eureka and Pacific mines in the Alder-Virginia City region of Madison County. Gold mineralization in blue shale was reported at the Miller mine in Confederate Gulch, Broadwater County.

<u>Iron Ore.</u> The total iron ore production in the State was from the Iron Cross open-pit mine of R & S Iron Co. near Radersburg. Production increased 17 percent from 1968 to 14,000 tons of ore. The ore was used by the cement industry.

Lead. - Output of lead declined 2 percent from 1968 because of smaller ore shipments from the Mauldin, Jo Dandy, and Sam Gaty mines to the Asarco smelter at East Helena. Despite a 1.6-cent-per-pound increase in the average annual price of lead, the value also decreased \$52,000 to \$442,000. Increased lead production at the Anaconda zinc fuming plant at East Helena was not sufficient to offset the decline in mine output.

Manganese. - No manganese ore was mined in the State during the year, and shipments from The Anaconda Company stockpile accounted for all the manganese production attributed to the State. Shipments of manganese, valued at \$48,000, totaled 1,996 tons which was 51 percent less than that of the previous year.

<u>Silver.</u>- Byproduct silver from copper operations in the State continued to be the chief source. Silver production registered a 55-percent increase reflecting increasing copper production for 1969. Because of a drop in the average annual price of silver to \$1.79 an ounce, the total value for the year was down 28 percent to approximately \$3.3 million.

Interest in locating and developing silver deposits in mining regions throughout the State remained high. Rehabilitation work continued at the Nancy Lee mine near Superior where the main adit (640 level) was advanced to the west, the deepest operating level (940) was extended and rehabilitated, and surface geochemical and drilling programs were initiated. A drilling program was conducted at the Crystal mine near Basin by Utica Mines, Ltd., of Vancouver, British Columbia, Canada.

Spokane National Mines, Inc., reported additional reserves were developed at the New Departure and Cottontail mines near Dillon. Big West Resources, Inc., shipped ore from a new discovery in the Argenta district of Beaverhead County. Midnite Mines, Inc., explored the Polaris mine in Beaverhead County with crosscutting and diamond drilling.

TABLE 4. - Mine production of gold, silver, copper, lead, and zinc in 1969, by months, in terms of recoverable metals

Month	Gold (troy ounces)	Silver (troy ounces)	Copper (short tons)	Lead (short tons)	Zinc (short tons)
January February March April May June July August September October November December	1,268 1,536 2,098 1,806 1,280 2,133 2,269 3,165 1,712 1,421 2,350 2,350	198,981 228,346 226,312 237,172 269,669 264,405 271,903 319,590 354,681 281,659 325,000	8,243 8,820 9,876 8,727 9,882 9,018 7,606 8,119 9,189 9,264 12,011	127 152 96 134 119 100 129 72 172 109 140 140	577 445 422 326 384 603 539 143 622 196 320 320
Total	23,388	3,302,718	112,766	1,490	4,897

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

Year	Mines		cing	solo trea (the	erial d or sted <u>1</u> / ousand ct tons)	Gol lode plac (tro ounc	and er y	Silver, lode and placer (thousand troy ounces)
1965 1966 1967 1968 1969 p/	8 5 6 4	. F.L	2 -	15,462 17,503 9,041 10,089 16,167		18,4 21,6 8,3 9,7 15,9	20 08 39 82	4,790 4,864 1,856 1,466 2,652
Year	Copper (short	Ε	Lea (sho ton	ort (short				Total value (thousands)
1965 1966 1967 1968 1969 p/,	115,279 127,889 65,446 69,362 112,626	3	4,5 2,4		25,629 22,284 816 -	25,629 22,284		\$9 7 ,373 106,749 53,450 61,580 112,296

p/ Preliminary.1/ Does not include gravel washed.

<u>Thorium</u>. A research paper was published by the Idaho Nuclear Energy Commission describing thorium deposits of the Lemhi Pass area 1/.

Tungsten. - A 62-percent decline was recorded; no tungsten production was reported in the State during the second half of the year. Tungsten production at the Calvert Creek properties in Beaverhead County was halted in June by foreclosure proceedings initiated against Minerals Engineering Co. by General Electric Co. The mine was closed, and the mill was placed on a standby basis.

Asarco acquired a lease and began surface investigation on a small group of claims near Thompson Falls, which were reported to have tungsten and molybdenum.

Zinc. Output continued to be derived from both byproduct production from copper mining operations and various small lead-zinc-silver operations. Increased recovery from Anaconda's zinc fuming plant at East Helena accounted for most of the 30-percent rise in the State total to 4,897 tons.

The Anaconda Company closed the electrolytic zinc refinery at Anaconda in August because of insufficient foreign concentrates to continue production at both the Anaconda and the Great Falls refineries. The shutdown involved four refining units at the plant which produced over 48,000 tons of zinc in 1968. At the same time, two additional zinc units were reactivated at the Great Falls refinery. The Anaconda plant's roaster was kept in operation.

NONMETALS

Cement. The estimated quantity of portland cement shipments increased 60 percent over the 1968 figure. The increase was largely due to cement used in the concrete pour, averaging 6,000 cubic yards per day toward yearend, at Libby Dam. Production continued from operations at Montana City by Kaiser Cement & Gypsum Corp., and at Trident by Ideal Basic Industries, Inc. (formerly Ideal Cement Co.). The complex system of cement, fly ash, and mineral aggregate supply for concrete production at Libby Dam was the subject of a report 2/.

Clays. - Output of common clays and shales for use in making building products and in manufacturing cement declined an estimated 9 percent. Bentonite production declined 21 percent from the 1968 total.

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

^{1/} Geach, Robert. Thorium Reserves in Montana. Transactions of Thorium Information Meeting, Idaho Nuclear Energy Commission, 1969.

Pacific Builder & Engineer. Access at Libby Dam -- Tall Trestle in Dam Axis. Published by Construction Publications/West, Inc., Sept. 19, 1969, pp. 28-30.

Ashland Chemical Co., Division of Ashland Oil & Refining Co., began construction 18 miles south of Glasgow, Valley County, on a bentonitic-clay processing facility. Construction continued on a railroad spur to serve the plant, designed to make granular and pulverized material from clay dug at the Brazil Creek Bentonite Co. deposit.

Bentonite deposits in Montana were described 3/.

Treasure State Industrial Products, Inc., improved instrumentation of the kiln and cooler and increased the capacity of expanded shale at the Great Falls, Cascade County, Treasurelite lightweight-aggregate plant from 3 to 8 cubic yards (about 5.4 tons) per hour. The firm planned to revamp crushing and screening facilities at the plant over the next 2 years. Operation of plant facilities was described $\frac{14}{5}$.

<u>Fluorspar.</u> Roberts Mining Co., producing fluorspar from the Crystal Mountain mine in Ravalli County, trucked the ore 26 miles to the company heavy-media separation mill at Darby for processing. Metallurgical-grade fluorspar from the milling operation was shipped to industrial consumers.

<u>Gem Stones.</u> Sapphire properties in Judith Basin and Lewis and Clark Counties were the subjects of articles 6/7/.

Gypsum. - The tonnage and value of gypsum mined were greater than the 1968 figures. The Shoemaker mine, Fergus County, owned by United States Gypsum Co., continued to be the source of gypsum.

<u>Lime.</u>- Lime output increased an estimated 3 percent over the 1968 total. The Anaconda Company continued making quicklime in Deer Lodge County for metallurgical use and for water treatment purposes at its own operations. Sugar companies calcined limestone to quicklime for use in sugar refining in Big Horn, Richland, and Yellowstone Counties.

Phosphate Rock. - Output and value of marketable phosphate rock declined an estimated 36 percent below the 1968 total, largely from effects of phasing out, late in 1967 and in 1968, operations in Beaverhead, Granite, and Silver Bow Counties. 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. Late in the year, Cominco American, Inc., announced that continued weakening of the fertilizer market made curtailment necessary at the Anderson and Warm Spring sections of the Brock mine, and the firm centered all remaining phosphate mining operations in Montana at the Brock mine proper at Garrison.

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

^{3/} Berg, R.B. Bentonite in Montana. Montana Bureau of Mines and Geology. Bull. No. 74, 1969.

Levine, Sidney. Montana Lightweight Producer Expands to Satisfy Growing Market. Rock Products, v. 72, No. 3, March 1969, pp. 64-66.

^{5/} Trauffer, Walter E. Montana Lightweight Aggregate Plant Expanded. Pit and Quarry, v. 61, No. 11. May 1969, pp. 169-171, 178.

^{6/} Yaras, Herman. Precious Yogo Sapphires Will Again Gleam Among the World's Precious Jewels. Lapidary Journal, April 1969, pp. 178-180.

Young, Marjorie Williams. Sapphires on Eldorado Bar. Gems and Minerals, August 1969, pp. 29-31.

Sand and Gravel and Stone. - Combined output of sand and gravel and stone was estimated at 20 million tons valued at \$21.3 million, an increase of 66 percent over the 1968 production. Much of the increase was due to continued greater use of sand and gravel and stone in constructing Libby Dam, on the Kootenai River in northwestern Montana. Also, there was increased use of sand and gravel and stone at highway construction projects.

Sulfur. - Production of high-purity elemental sulfur increased over the 1968 total. Montana Sulphur & Chemical Co. recovered sulfur from hydrogen sulfide gas byproducts obtained from oil-refining operations at Billings of Continental Oil Co. and Humble Oil & Refining Co. Farmers Union Central Exchange began operating a 28-ton-per-day elemental sulfur recovery system that was contingent upon byproduct hydrogen sulfide gas received from its oil-refining operation at Laurel.

Talc. - There was an estimated 50-percent increase in the quantity of talc output. Talc produced by Charles Pfizer & Co., Inc., from mines in Beaverhead and Madison Counties was ground and sized at the company grinding plant at Barratts, south of Dillon, Beaverhead County. Output by the United Sierra Division of Cyprus Mines Corp. from mines in Madison County was processed at a company grinding plant at Three Forks, Gallatin County; some was shipped out-of-State for grinding.

<u>Vermiculite.</u>- There was an estimated 5-percent increase in the tonnage of crude vermiculite mined by Zonolite Division, W.R. Grace & Co., at its open-pit operation near Libby, in Lincoln County. The mine continued as the principal source of vermiculite in the United States.

MINERAL FUELS

<u>Coal.</u> - Production of bituminous coal and lignite increased an estimated 64 percent above the 1968 output of over one-half million tons. The increase continued to be due to expansion of coal-mining facilities at Colstrip, Rosebud County, for meeting requirements of coal-fired steam-electric plants of Montana Power Co. at Billings, and of Minnesota Power & Light Co. at Cohasset, Minn. Lignite mines in Richland County were the source of fuel for the Montana Dakota Utilities Co. steam-electric generating plant at Sidney. The estimated selling price of the lignite from Richland County was \$1.94 per ton; coal taxes -- license, net proceeds, and property levies -- total 16 cents per ton or about 8.25 percent of the total price.

The unit train technique of coal transportation has sharply reduced the fuel costs of the coal-fired steam-electric plant and has improved the competitive position of Montana coal reserves. Reportedly since June, four unit trains of 100 cars each delivered about 50,000 tons of coal per month from the Peabody Coal Co. operation at Colstrip over 850 miles to the Cohasset, Minn., steam-electric generating station of Minnesota Power & Light Co. Shipments were started under terms of a freight rate established by the Interstate Commerce Commission (ICC) at \$3.65 per ton for the haul from Colstrip to Cohasset, Minn. By 1973, when Minnesota Power & Light Co. completes construction of the coal-fired steam-electric generating plant at Cohasset, and shipments of coal from Colstrip approach 2 million tons per year, the freight rate will be reduced to \$2.74 per ton. Throughout the year, coal was delivered over 100 miles by unit train from the Western Energy Co. (a subsidiary of Consolidation Coal Co.) operation at Colstrip to the Montana Power Co. coal-fired steam-electric generating plant at Billings.

The Montana legislature enacted a measure supplementing a 1967 law under which surface coal mine operators were encouraged to enter into voluntary mined-land reclamation agreements with the State. Although the new law makes previous voluntary agreements compulsory, it provided a credit incentive among operators whereby one-half the cost of reclamation applied against the State's coal mine license tax.

The socio-political aspects related to establishment of a workable system for mined-land reclamation was the subject of a report 8/.

The feasibility of developing Montana coal reserves by strip mining was discussed 9/.

A report was published on the Foster Creek coal deposit in southeastern Montana 10/.

Petroleum and Natural Gas. - Estimated production of crude oil, after reaching an alltime high in 1968, dropped from 48.5 million barrels to 44.3 million barrels valued at \$119 million. The Bell Creek field in the Powder River Basin continued to be the largest source of petroleum in the State; by October, over 10 million barrels of crude oil was produced from the field. Cumulative production since its discovery in 1967 was estimated at 28.6 million barrels of oil and 12 billion cubic feet of natural gas. Crude oil reserves of the field are estimated at 200 million barrels by the Montana Oil and Gas Conservation Commission.

Following the Bell Creek field discovery in Montana, exploration for petroleum and natural gas in the lower Cretaceous Muddy formation has spread to correlative rock units in Wyoming and North and South Dakota, but major production from reservoirs in the formation is centered in Powder River County, Mont., and Campbell County, Wyo. An estimated 12 to 15 million acres of petroleum leases on private and public land in the four-State area were held for exploring rock units correlating with the lower Cretaceous Muddy formation.

Marketed production of natural gas increased to 23.8 billion cubic feet from output of 19.3 billion cubic feet in 1968. Development of natural gas reserves in the Tiger Ridge gas field, discovered by High Crest Oils, Inc., in 1967, has awaited an outlet to major markets. Early in the year, Northern Natural Gas Co. contracted with High Crest Oils, Inc., and other field developers for natural gas reserves in the Tiger Ridge field. The firm announced plans to build a pipeline from Tiger Ridge field to Saskatchewan, Canada, to connect with a major line from Alberta. Canada, to North Branch, Minn.

Petroleum exploration and development on Northern Pacific Railway lands (over 3 million acres in Montana and North Dakota) were described $\underline{11}$ /.

This report summarizes mineral industry activity in Montana in 1969 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.

- 8/ Groff, Sidney L. Voluntary Mined-Land Reclamation in Montana. Mining Congress Journal, v. 55, No. 10, October 1969, pp. 46-50.
- Phelps, E.R. Recent Developments in Lignite and Subbituminous Coal in Montana. Skillings Mining Review, March 15, 1969, pp. 11, 12, 20.
- 10/ Gilmour, Ernest H., and Loren A. Williams. Geology and Coal Resources of the Foster Creek Coal Deposit, Eastern Montana. Montana Bureau of Mines and Geology, Bull. 73, June 1969, 9 pp.
- 11/ Go With Northern Pacific Railway. Oil Black Gold. Published by Northern Pacific Railway Co., v. 1, No. 4, August 1969, pp. 2-6.

SUPPLEMENTAL LIST OF MINING ENTERPRISES

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

BEAVERHEAD COU	JNTY	LEWIS AND CLARK CO	UNTY
Coolidge	I 1967	Emma Miller	U 1967
Grey Jockey	I 1967	Nick and Dick	U 1967
BROADWATER CO	INTY	Sambo	U 1967
Bonanza	U 1967	LINCOLN COUNT	Ϋ́
Gold Bug and Mary Rose		Black Diamond	U 1967
Kleinschmidt	- 1,01	Memory (Bi-Metallic)	I 1967
Kienischindt	U 1967	MADICON COUNT	ΓV
DEER LODGE COU	NTY	MADISON COUNT	
Lucky Sunday	U 1967	Antelope Bedford	U 1967
Silver Reef	U 1967	·	U 1967 I 1967
Snow White silica quarry	U 1967	Castle Blue dump Cornucopia and Cabin lodes	I 1967 I 1967
1	- 252,	Golconda	I 1967
FERGUS COUNT	Ϋ́	Jack Rabbit	U 1967
Hanover gypsum mine	I 1967	McMurtrey placer	U 1967
Swanson coal mine	I 1967	Midnight	U 1967
Tuss coal mine	I 1967	St. Lawrence	I 1967
War Eagle	U 1967	Skyline	I 1968
EL TARLET D'COLD	TOWN Z	Surprise	U 1967
FLATHEAD COUN		MINERAL COUNT	ſΥ
Ole	U 1967	Amazon-Dixie	I 1967
GRANITE COUN	ΓY	MISSOULA COUNT	ſΥ
Men Five	U 1967	Blue Lode	U 1967
Potosi	U 1967	Silver Streak	U 1967
Scratch All	U 1967	Twin Creeks placer	U 1967
Spring Gulch quarry	U 1967	MUSSELSHELL COU	NTY
		Gildroy coal mine	I 1967
JEFFERSON COU	NTY	POWELL COUNT	Y
Bertha tailings	I 1967	Champion tailings	I 1967
Lahey silica quarry	I 1967	Jack Pine (Trout Creek) Kirbey	I 1967 U 1967
Mammoth	I 1967	Silver Reef	U 1967
HIDIMII DAGIN CON	Th Trees I	SANDERS COUN	
JUDITH BASIN COU		Jack Waite	U 1967
Kibbey gypsum deposits	I 1967	SILVER BOW COUN	
Yogo sapphire mine	I 1967	Jane placer claim	U 1967
		Pratta timin	

LIST OF NEW MINING COMPANIES INCORPORATED IN MONTANA IN 1969

CONDA BUTTE EXPLORATION, INC.

Butte (June 24, 1969) Keith P. Johnson

8 First National Bank Bldg., Butte MT 59701

COTTONWOOD SILVER MINING CO.

Great Falls (March 31, 1969)

Albert H. Neumann

Store 11, Holiday Village, Great Falls MT 59401

CRYSTAL MINES, INC.

Butte (February 10, 1969)

Howard A. Johnson

9 W. Broadway, Butte MT 59701

GOLD AND SILVER CORPORATION OF AMERICA

Virginia City (December 30, 1969)

Chester Lloyd Jones, Esq., Virginia City MT 59755

LAST CHANCE MINING INC.

Helena (April 10, 1969)

A. L. Libra

27 Edwards Street, Box 1691, Helena MT 59601

LITTLE OWEN MINING COMPANY, INC.

Bozeman (June 19, 1969)

H. A. Bolinger

136 E. Main, Box 1047, Bozeman MT 59715

MADISON-MINERALS, INC.

Butte (April 4, 1969)

Carl Hafer, Sr.

1967 Yale Avenue, Butte MT 59701

MONTANA NUCLEAR CORPORATION

Billings (December 8, 1969)

James L. Sandall

2501 - 4th Avenue North, Billings MT 59101

CROSS MINING CORPORATION

Superior (October 24, 1969)

George E. Casler

510 Diamond Rd., Superior MT 59872

IVANHOE MINING CORPORATION

Missoula (September 3, 1969)

Kenneth C. Bradford

5832 Kerr Drive, Missoula MT 59801

HI-TARIFF SILVER, INC.

Helena (October 22, 1969)

A. L. Libra

27 Edwards Street, Helena MT 59601

MONTIDA SILVER INC.

Hamilton (December 16, 1969)

Gerald D. Schultz

172 S. Third Street, Hamilton MT 59840

MOUNTAIN GOLD AND SILVER, INC.

Sheridan (June 26, 1969)

James G. McLaughlin

Rte. 1, Sheridan MT 59479

MT. CASTLE MINES, INC.

Butte (February 4, 1969)

Keith P. Johnson

8 First National Bank Bldg., Butte MT 59701

PHILIPSBURG SILVER & TUNGSTEN MINES, INC.

Philipsburg (November 3, 1969)

Richard G. Tunstill

Box "N", Philipsburg MT 59858

RAMCO, INC.

Helena (June 23, 1969)

Truman J. Ames

1034 North Davis Street, Helena MT 59601

SILVER CREEK MINING CO., INC.

Libby (April 23, 1969)

Oscar Hahn

Rte. 2, Box 80, Libby MT 59923

THE 5 PARTNERS MINING COMPANY

Billings (December 16, 1969)

A. L. Rankin

716 N. 29th Street, Billings MT 59101

THE SETTER MINING COMPANY

Helena (July 11, 1969)

James A. Casper

4 Aspen Street, Helena MT 59601

JUMBO SILVER MINING CO., INC.

Kalispell (September 15, 1969)

Roy Norden

14 Meridian Rd., Kalispell MT 59901

KEESA SILVER MINING CO., INC.

Superior (August 11, 1969)

Arthur L. Case

506 Second Avenue West, Superior MT 59872

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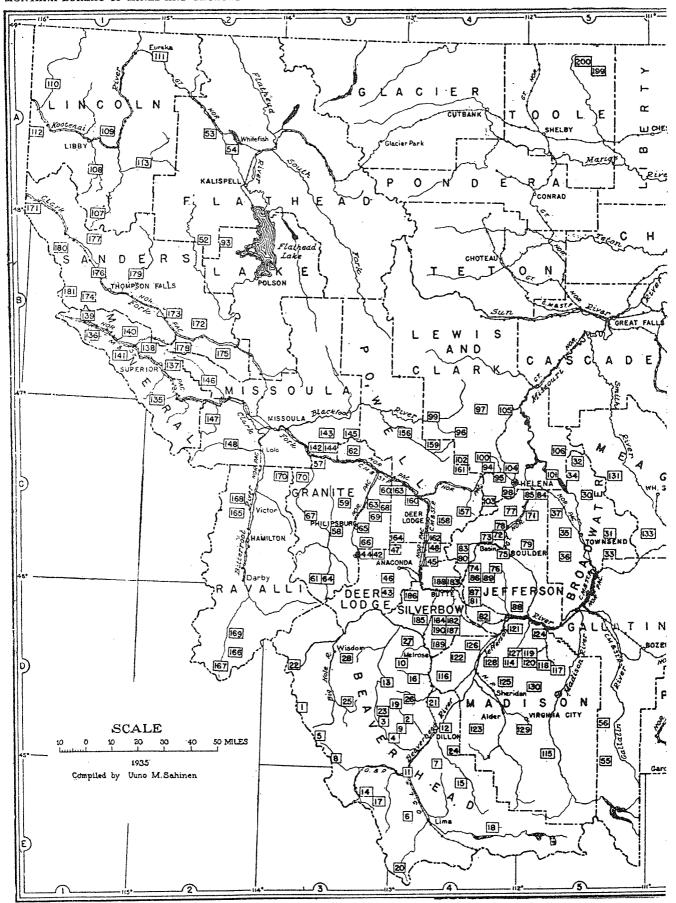
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