

STATE OF MONTANA
BUREAU OF MINES AND GEOLOGY
E. G. Koch, Director

BULLETIN 72

DIRECTORY OF
MINING ENTERPRISES FOR 1968

with a

LIST OF ACTIVE COAL MINES, 1968

Compiled by

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Montana Bureau of Mines and Geology

and a section on

THE MINERAL INDUSTRY OF MONTANA IN 1968

by

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

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



MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY
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D I R E C T O R Y
O F
M I N I N G E N T E R P R I S E S F O R 1 9 6 8

by

Kenneth T. Bondurant and Don C. Lawson

I N T R O D U C T I O N

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 1968 and a report entitled "The Mineral Industry of Montana in 1968," 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 authors thank 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 I. 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 396, Thompson Falls MT 59873
Owner: Same as operator
Employees: 2
Status: Developing

GOLD, SILVER, COPPER, LEAD, ZINC MINES

BEAVERHEAD COUNTY: Dillon

BLUE EYED ANNIE MINE Silver
Eikhorn dist., unsurveyed, T. 4 S., R. 12 W.
Operator: John McDonald and Cleve Metcalf, Jr.
Philipsburg MT 59858
Owner: John Miller
Polaris MT 59746
Status: Inactive

**FAITHFUL MINE

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: Produced and developing

**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: Developing

GOLDSMITH MINE Gold, lead, zinc
Argenta dist., NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 6 S., R. 10 W.
Operator: Argenta Silver Development Co.
Dillon MT 59725
Owner: Goldsmith Mining Corp.
Status: Producing and 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

*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., NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 6 S. R. 10 W.
Operator: Hand Mines
30 S. Arizona, Dillon 59725
Owner: Ida B. Hand
30 S. Arizona, Dillon MT 59725
Employees: 6
Status: Producing

GOLD, SILVER, COPPER, LEAD, ZINC MINES: BEAVERHEAD COUNTY—Continued

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

SLEEPING PRINCESS GROUP Gold, copper
Bannaack 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: Inactive

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

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: 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

YELLOW BAND (SHAFER) GROUP Gold, silver
Argenta dist., SE $\frac{1}{4}$ SE $\frac{1}{4}$ 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

BROADWATER COUNTY: Townsend

JEANETTE MINE Gold, silver, lead
Winston district
Operator: Harold Hogan
1243 N. 160th, Seattle WA 98133
Owner: Same as operator
Status: Developing

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: 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
Employees: 2
Status: Developing

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

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: Inactive

*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

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: Developing

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

CASCADE COUNTY: Great Falls

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: Same as operator
Employees: 5
Status: Producing

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

MOULTON-BROADWATER MINE Silver,
lead, zinc
Neihart dist., sec. 29, 32, T. 14 N., R. 8 E.
Operator: Peter J. Antonioli
1001 W. Gold, Butte MT 59701
Owner: Same as operator
Employees: 3 to 4
Status: Producing

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

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

*Open pit.

**Open pit and underground.

DEER LODGE COUNTY: Anaconda

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

**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
Rtc. 1, Box 201, Anaconda MT 59711
Owner: Same as operator
Status: Developing

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

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: 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: Developing

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

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, Rtc. 1, Wayzata MN 55391
Status: Producing

*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

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: Producing and developing

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

REPUBLIC MINE Silver, lead, zinc
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: Exploration

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: 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: Producing and developing

BLACK HULL 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: Produced

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

SPOTTED HORSE MINE Gold, silver, tellurium
 lead, zinc
 Warm Springs dist., sec. 5, T. 16 N., R. 20 E.
 Operator: L. C. Hoffman
 Blue Range Mining Co., Box 534
 Lewistown MT 59457
 Status: Developing

FLATHEAD COUNTY: Kalispell

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

.....
 *Open pit.
 **Open pit and underground.

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: Inactive

****SANKO CREEK MINE** Gold, silver, copper
 Star Meadow dist., NW¼ sec. 29, T. 31 N.,
 R. 24 W.
 Operator: Marion Fishel
 742 - 6th Ave. W., Kalispell MT 59901
 Owner: Same as operator
 Status: Developing

GRANITE COUNTY: Philipsburg

- ALGONQUIN MINE (CLIFF MILL SITE)
Silver, copper, zinc, manganese
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
Employees: 8
Status: Unknown
- CARTER HALL MINE
Operator: Frank Puyear
Philipsburg MT 59858
Status: Produced
- *COMANCHE EXTENSION LEASE (5797)
Flint Creek district
Operator: James W. Young
Box 342, Philipsburg MT 59858
Status: Produced
- *COMANCHE EXTENSION MINE (6788) Silver
Flint Creek dist., sec. 19, T. 7 N., R. 13 W.
Operator: Ben Walkup
Philipsburg MT 59858
Owner: William F. Flynn
Anaconda MT 59711
Status: Produced
- ELK-MOOSE MINE Gold, silver
Operator: Joe Metesh
Philipsburg MT 59858
Status: Produced
- 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
- HOLLY NO. 1 Gold, silver, copper
Dunkelberg 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: Produced
- *HOPE TAILINGS
Operator: Albert Walkup
Box 416, Philipsburg MT 59858
Owner: Same as operator
Status: Produced
- *LAST CHANCE TAILINGS Copper, silica
Maxville dist., sec. 36, T. 8 N., R. 14 W.
Operator: William R. McLure
Box 5, Philipsburg MT 59858
Status: Unknown
- LYCOMING MINE
Philipsburg dist., sec. 17, T. 7 N., R. 13 W.
Operator: Cadgie-Taylor Co.
Philipsburg MT 59858
Status: Produced
- BANNER TAILINGS Gold, silver
Moose Lake dist., sec. 36, T. 4 N., R. 16 W.
Operator: Dick Tunstall
Philipsburg MT 59858
Status: Produced
- BIG EXPECTATION MINE
Philipsburg dist., T. 7 N., R. 13 W.
Operator: Spartan Research & Development Co.
Philipsburg MT 59858
Status: Produced
- *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
Flint 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: Produced

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

*GRANITE TAILINGS Gold, silver
Flint Creek district
Operator: Frank Antonioli
724 S. Western, Butte MT 59701
Owner: Contact Mining Co.
724 S. Western, Butte MT 59701
Status: Inactive

*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: Produced

**BROOKLYN MINE Gold, silver, copper, lead, zinc
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: Produced

*GWYNN TAILINGS
Operator: Ernest Mazza and Ben Gwynn
Philipsburg MT 59858
Status: Produced

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

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

**HATTA MINE Silver, lead, zinc
Dunkelberg 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

**MOONLIGHT MINE Gold, silver, copper, lead
Princeton dist., T. 8 N., R. 12 W.
Operator: John C. Bork
519 W. Porphyry, Butte MT 59701
Owner: Same as operator
Status: Producing and developing

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

HAWKEYE MINE Gold, silver, lead
Operator: Frank Puyear
Philipsburg MT 59858
Status: Produced

MOOSE TRAIL MINE Gold, silver
Moose Lake district
Operator: Gene and Monte Marker
Garrison MT 59731
Status: Produced

CARLJONE 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

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: Produced

MOUNTAIN BOY MINE Gold, silver
Philipsburg dist., sec. 19, T. 7 N., R. 13 W.
Operator: Frank Puyear
Philipsburg MT 59858
Status: Produced

*Open pit.

**Open pit and underground.

GOLD, SILVER, COPPER, LEAD, ZINC MINES: GRANITE COUNTY--Continued

- *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: Unknown
- ROYAL BASIN DUMP Gold, silver
Princeton dist., T. 8 N., R. 12 W.
Operator: Frank Rupinski
Hayden Lake ID 83835
Status: Produced
- 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: Developing
- **NEW SEATTLE (DOLLY QUARTZ) MINE
Gold, silver
Maxville dist., sec. 4, T. 8 N., R. 13 W.
Operator: Evald Olson
Philipsburg MT 59858
Owner: Grace Maehl and Fannie Collins
Maxville MT 59850
Status: Developing and producing
- ROYAL BASIN MINE Gold, silver
Princeton dist., T. 8 N., R. 12 W.
Operator: George Knapp
Philipsburg MT 59858
Status: Produced
- *RUMSEY TAILINGS Gold, silver, silica
Flint Creek dist., sec. 8, T. 6 N., R. 13 W.
Operator: Lindy Fortunati
Anaconda MT 59711
Status: Produced
- *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: Produced
- *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
- 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. 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: Produced
- *SECOND CHANCE ORE MINE Silver
Maxville dist., sec. 16, T. 8 N., R. 13 W.
Operator: Ben Walkup
Philipsburg MT 59858
Owner: Albert and Ben Walkup
Philipsburg MT 59858
Status: Unknown
- SEPTEMBER MINE Gold, silver
Operator: George and Jack Knapp
Philipsburg MT 59858
Status: Produced
- SWEET HOME MINE Gold, silver
Philipsburg dist., T. 7 N., R. 13 W.
Operator: Joe Metcsh
Philipsburg MT 59858
Status: Produced
- SUNRISE MINE Gold, silver
T. 9 N., R. 14 W.
Operator: Sanderson Trucking Co.
Philipsburg MT 59858
Status: Produced
- TRUE FISSURE MINE Silver, lead, zinc, manganese
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
Mill capacity: 50 t/d
Status: Producing and developing
- VAN DORSTAN MINE Gold, silver
Operator: Otis Redwine, Butte MT 59701
Status: Produced

****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

SARANAC MINE Gold, silver
 Philipsburg dist., T. 8 N., R. 13 W.
 Operator: John McDonald
 Philipsburg MT 59858
 Status: Developing

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

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: Unknown

**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

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

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

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: Exploitation

***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

CRYSTAL MINE Gold, silver, copper, lead, zinc
 Cataract (Basin) dist., sec. 20, T. 7 N., R. 5 W.
 Operator: Delbert and A. J. Bullock
 Basin MT 59631
 Owner: Same as operator
 Status: Producing and developing

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

CAMP OWEN MINE Silver, lead
 Whitehall district
 Operator: Lester Lindquist
 Whitehall MT 59759
 Owner: Same as operator
 Status: 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

***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: Neuberger Bros. & Sloan, Inc.
 First National Bank, Butte MT 59701
 Status: Produced

*Open pit.
 **Open pit and underground.

*HOPE TAILINGS
Boulder district
Operator: Frank Antonioli
724 S. Western Ave., Butte MT 59701
Status: Produced

HUMBOLT MINE Gold, silver
Homestake dist., sec. 9, T. 3 N., R. 6 W.
Operator: Stanley L. Boyce
Rtc. 1, Box 206, Butte MT 59701
Owner: Same as operator
Status: Produced and 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 and Norman Peura
Clancy MT 59634
Status: Produced

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

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: Produced

*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: Inactive

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: Produced

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: Produced

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: Unknown

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: Developing

VERA MINE Silver
Cataract dist., sec. 33, T. 7 N., R. 5 W.
Operator: Elmer J. Wagner
Basin MT 59631
Owner: Drew Jackson
3065 E. 4th St., Casper WY 82601
Employees: 1
Status: Developing and producing

*Open pit.

**Open pit and underground.

JUDITH BASIN COUNTY: Stamford

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: Producing and developing

LIBERTY MINE Silver, lead, zinc
Barker dist., sec. 6, 7, 18, T. 15 N., R. 9 E.
Operator: Anderson and Antonoli
1001 W. Gold, Butte MT 59701
Owner: Faith Mining Co.
Box 1681, Helena MT 59601
Status: Unknown

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: Clendenin Mines, Inc.
c/o J. T. Nightengale, Boston MA 02100
Employees: 3
Status: Produced

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: 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

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

CONSOLATION MINES Silver, copper, molybdenum
Hedleston dist., sec. 21, T. 15 N., R. 6 W.
Operator: J. A. Thompson
Lincoln MT 59639
Owner: Same as operator
Status: Unknown

OLD BACHELOR MINE
Stemple Pass dist., sec. 15, T. 13 N., R. 7 W.
Operator: Dillsworth and Smith
Canyon Ferry Rte., Helena MT 59601
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: Edwin W. Castle, Inc. and Walwynn Co.
Helena MT 59601
Employees: 2 to 5
Status: Produced and 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

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: Unknown

PENNUTE CONSOLIDATED MINING CO. Gold, silver, lead
Stemple and Rimini dist. (6 mines)
E.J. Young, 409 - 25 Ave. NE., Great Falls MT 59401
Employees: 6
Status: Developing

****COPPER BOWL MINE** Copper
Hedleston dist., sec. 30, T. 16 N., R. 6 W.
Operator: Clarence J. Erickson
Box 253, Lincoln MT 59639
Owner: Same as operator
Status: Developing

***DRUMLUMMON TAILINGS** Gold, silver, copper,
lead, zinc
Marysville dist., S½ sec. 36, T. 12 N., R. 6 W.
Operator: Carlos Hieber
1035 - 12th Ave., Helena MT 59601
Owner: St. Louis Drumlummon Mines, Inc.
St. Louis MO 63100
Status: Inactive

EMPIRE MINE Gold, silver, lead
Marysville dist., sec. 33, 34, T. 12 N., R. 6 W.
Operator: Herbert Carver
802 - 5th Ave., Helena MT 59601
Owner: Albert Fritsche
Point Lookout, New Ulm MN 56073
Status: Developing

FREE SPEECH MINE Gold, silver, lead
Rimini dist., sec. 4, T. 8 N., R. 5 W.
Operator: T. L. Thompson
Box 1435, Anaconda MT 59711
Owner: Red Mountain Consolidated Mining Co.
St. Paul MN 55100
Status: Unknown

LUCKY LINDA MINE Silver, lead
Rimini dist., sec. 16, T. 8 N., R. 5 W.
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: Developing

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 Leitness, 1900 - 11th Ave.
Helena MT 59601
Owner: C. E. Pew, et al, c/o Monida Vaughn
937 - 11th Ave., Helena MT 59601
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. Stamps 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: Unknown

*Open pit.
**Open pit and underground.

GOLD, SILVER COPPER, LEAD, ZINC MINES --Continued

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

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

SNOWSHOE MINE Gold, silver, lead
Libby (Snowshoe) dist., sec. 11, T. 28 N., R. 32 W.
Operator: Mascot Silver Mines
Wallace ID 83873
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

**SILVER BUTTE MINE Gold, silver, lead
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
Status: Developing

SNOWSTORM MINE Gold, silver, lead, zinc
Troy dist., sec. 19, 20, T. 31 N., R. 34 W.
Operator: Trojan Silver-Lead Mining Co.
Knute Kikkeberg, Mgr.
Box 549, Troy MT 59935
Employees: 8
Mill capacity: 120 t/d
Status: Developing and exploring

MADISON COUNTY: Virginia City

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

*COPPER MINT GROUP Copper
Cardwell district
Operator: Lester Lindquist
Box 373, Whitehall MT 59759
Owner: John Claxton
Butte MT 59701
Status: Inactive

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: Unknown

*BEVERLY CLAIM Gold, silver
Silver Star dist., sec. 8, 9, T. 2 S., R. 6 W.
Operator: John Patterson
Silver Star MT 59751
Owner: Same as operator
Status: Developing

*EASTON-PACIFIC MINE Gold, silver
Virginia City dist., sec. 9, T. 7 S., R. 3 W.
Operator: Ed Scheitlin
Virginia City MT 59733
Owner: Easton Pacific Co. and Riverside
Mining Corp., Virginia City MT 59755
Employees: 3
Status: Producing and developing

MORNING STAR MINE Silver, copper, 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

BINS MINE Gold, silver
California Creek (Tobacco Root Range) dist.,
sec. 5, T. 5 S., R. 3 W.
Operator: Goldstream Mining Co.
375 N. 750 E., Orem UT 84057
Owner: Same as operator
Status: Inactive

BLACK ACE MINE Gold, silver, lead, zinc
Tidal Wave dist., NW¼ NE¼ sec. 34, T. 3 S., R. 5 W.
Operator: Louis R. Lepp
Whitehall MT 59759
Owner: Lewis C. Rollins
Box 4, Waterloo MT 59757
Status: Inactive

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: Exploration

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

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: Developing

HILL TOP MINE Gold, silver, copper, lead, zinc
Virginia City dist., sec. 4, T. 7 S., R. 3 W.
Operator: Ed Scheiflin
Virginia City MT 59755
Owner: Same as operator
Employees: 1
Status: Produced

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

MOUNTAIN FLOWER MINE Gold, silver
Williams Gulch dist., sec. 5, 33, T. 6 S., R. 3 W.
Operator: R. H. Rogeis
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

RED PINE MINE Gold, silver
Sheridan dist., sec. 5, T. 4 S., R. 4 W.
Operator: Sherment 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: Producing

ST. LAWRENCE CONSOLIDATED MINE (see page 38)

SCALDED CAT MINE Gold, silver, copper
Mineral Hill dist., sec. 14, T. 2 S., R. 3 W.
Operator: Emmett Clary
Box 132, Pony MT 59747
Owner: Same as operator
Employees: 2
Status: Unknown

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

*Open pit.
**Open pit and underground.

GOLD, SILVER, COPPER, LEAD, ZINC MINES: MADISON COUNTY--Continued

SILVER BELL MINE Silver
Virginia City dist., sec. 31, T. 6 S., R. 3 W.
Operator: Silver Hill Mines, Inc.
E. 12707 Valley Way, Spokane WA 99216
Owner: Sam W. Maloney
Box 174, Alder MT 59710
Status: Producing

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., Spokane WA 99216
Employees: 4
Status: Developing and produced

SKYLINE MINE Gold, silver
Mineral Hill-Pony district
Operator: Kuebler Bros. and Harold Giulio
Box 273, Boulder MT 59632
Owner: Same as operator
Status: Inactive

SMUGGLER MINE Gold, silver
Mill Creek (Tobacco Root Range) district
Owner: Goldstream Mining Co.
375 N. 750th E., Orcem UT 84057
Status: Inactive

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: Exploring

TRIANGLE MINE (see page 38)

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: Produced

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

****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: Developing

MINERAL COUNTY: Superior

*BLACK TRAVELER and BULORING MINES
Silver, copper
St. Regis-Saltsee dist., sec. 5, T. 19 N., R. 30 W.
Operator: Charles F. Buls
Saltsee MT 59867
Owner: Same as operator
Status: Produced and developing

**BONANZA GROUP MINE Gold, silver, copper, lead
Cedar Creek dist., sec. 17, T. 15 N., R. 26 W.
Operator: G. M. Gildersleeve
Box 565, Superior MT 59872
Owner: Same as operator
Status: Developing

DRY CREEK MINE

Operator: Dry Creek Mining Co.
Spokane WA 99200
Status: Produced

EAST COEUR D'ALENE SILVER MINE
Silver, copper, lead, zinc
Keystone dist., T. 17, 18 N., R. 26, 28 W.
Operator: East Coeur d'Alene Silver Mines, Inc.
Scott Bldg., Wallace ID 83873
Owner: Same as operator
Status: Unknown

MINERAL KING MINE Silver, lead, zinc
Saltsee-St. Regis dist., sec. 36, T. 20 N., R. 31 W.
Operator: Mineral King Mining Co.
c/o Max Swanson,
144 W. Front, Missoula MT 59801
Owner: Same as operator
Status: Unknown

NANCY LEE MINE Silver, lead, zinc
Keystone dist., sec. 31, 32, T. 18 N., R. 26 W.
Operator: Nancy Lee Mines, Inc.
410 Main St., Kellogg ID 83837
Mill capacity: 100 t/d
Status: Producing and 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 Copper
Sevenmile Creek dist., sec. 35, T. 19 N., R. 27 W.
Operator: Martin C. Thompson
Kellogg ID 83837
Owner: Donald A. Graham
St. Regis MT 59866
Status: Produced

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

BLUE LODGE MINE Gold, silver, copper
Clinton dist., sec. 13, 24, T. 12 N., R. 17 W.
Owner: John Sheets and Ralph Miltner
Clinton MT 59825
Status: Inactive

SILVER STREAK MINE Gold, silver, copper,
lead, zinc, antimony
Clinton district
Operator: Gerald L. Richards
Clinton MT 59825
Owner: L. A. Richards and G. L. Richards
Clinton MT 59825
Status: Inactive

*WALDBILLIG MINE Silver, copper
Miller Creek dist., sec. 1, 2, T. 11 N., R. 19 W.
Operator: Joe and O. R. Waldbilling
Rte. 5, Missoula MT 59801
Owner: Same as operator
Status: Developing and exploring

WARD LODGE MINE Copper, silver, zinc, lead, gold
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

*Open pit.

**Open pit and underground

GOLD, SILVER, COPPER, LEAD, ZINC MINES--Continued

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: Inactive

*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

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: Exploring and developing

RUBY GULCH MINE Gold, silver
Little Rockies dist., sec. 18, T. 25 N., R. 25 E.
Operator: American Exploration & Mining Co.
23d Floor, Russ Bldg., San Francisco CA 94104
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: G. G. Potratz
Avon MT 59713
Status: Produced and developing

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

**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: Produced and developing

CHARTER OAK MINE Gold, silver, lead, zinc
Negro Hill dist., NW¼ SE¼ sec. 36, T. 9 N., R. 7 W.
Operator: Charter Oak Mining Co., J. T. Bonner
Box 566, Elliston MT 59728
Owner: Same as operator
Mill capacity: 50 t/d
Status: Unknown

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

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

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: Producing and developing

NANCY HELEN MINE Gold, copper
Ophir district
Operator: Clarke J. Smith
Rte. 2, Valencia PA 16059
Owner: Same as operator
Status: Produced and developing

****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

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

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

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

***CURLLEW 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
Employees: 8
Status: Producing and developing

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, Leroy Sargent, Claire Thompson,
and James Allison
Darby MT 59829
Status: Developing

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

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: Exploration

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: Unknown

SANDERS COUNTY: Thompson Falls

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: Unknown

*Open pit.

**Open pit and underground

GOLD, SILVER, COPPER, LEAD, ZINC MINES: SANDERS COUNTY—Continued

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., SE $\frac{1}{4}$ sec. 29, NW $\frac{1}{4}$ 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

HOLIDAY MINE Silver, lead
Pilgrim Creek dist., sec. 26, 31, T. 26 N., R. 34 W.
Operator: Silver Mark Mines, Inc.
Box 197, Noxon MT 59853
Owner: Same as operator
Status: Exploring

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: Exploration

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: Developing

SILVER BOW COUNTY: Butte

BADGER MINE Gold, silver, lead, zinc
Summit Valley (Butte) dist., NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7,
T. 3 N., R. 7 W.
Owner-Operator: The Anaconda Co.
Butte MT 59701
Status: Inactive

***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

****OVERLOOK MINE** Gold, silver, copper, scheelite
Highland dist., sec. 22, 23, 26, 27, 28, T. 1 N., R. 7 W.
Operator: George Sharak, Sr.
132 W. Granite, Butte MT 59701
Owner: Same as operator
Status: Unknown

***BERKELEY PIT** Gold, silver, copper
Summit Valley (Butte) dist., NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18,
T. 3 N., R. 7 W.
Owner-Operator: The Anaconda Co.
Butte MT 59701
Status: Producing

KELLEY MINE Gold, silver, copper
Summit Valley (Butte) dist., SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7,
T. 3 N., R. 7 W.
Owner-Operator: The Anaconda Co.
Butte MT 59701
Status: Inactive

STEWARD MINE Gold, silver, copper
Summit Valley (Butte) dist., NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13,
T. 3 N., R. 8 W.
Owner-Operator: The Anaconda Co.
Butte MT 59701
Status: Producing

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

LEONARD MINE Gold, silver, copper
Summit Valley (Butte) dist., cen. SW $\frac{1}{2}$ sec. 8,
T. 3 N., R. 7 W.
Owner-Operator: The Anaconda Co.
Butte MT 59701
Status: Inactive

WEED CONCENTRATOR
Summit Valley (Butte) dist., sec. 17, T. 3 N., R. 7 W.
Owner-Operator: The Anaconda Co.
Butte MT 59701
Mill capacity: 40,000 t/d
Status: Producing

**CLIMAX (APEX) LODGE 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: Exploration

*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: Produced

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
Status: Developing

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

MOUNTAIN CON MINE Gold, silver, copper
Summit Valley (Butte) dist., NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12,
T. 3 N., R. 8 W.
Owner-Operator: The Anaconda Co.
Butte MT 59701
Status: Producing

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: Unknown

*Open pit.

**Open pit and underground.

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

CLIFF MILL SITE (ALGONQUIN) MINE Manganese

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

Operator: Taylor-Knapp Co.

Box 250, Philipsburg MT 59858

Status: Inactive

MANGANESE MINES

GRANITE COUNTY: Philipsburg

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:

Employees: 40

Mill capacity: 125 t/d

Status: Producing and developing

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

SILVER BOW COUNTY: Butte

IRON KING MINE Iron ore

Little Pine district

Operator: Tom Helchan

Fox Hotel MT 59701

Owner: Same as operator

Status: Inactive

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

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: Unknown

SILVER BOW COUNTY: Butte

****OVERLOOK MINE** Scheelite, gold, silver, copper
Highland dist., sec. 22, 23, 26, 27, 28,
T. 1 N., R. 7 W.
Operator: George Sharak, Sr.
132 W. Granite, Butte MT 59701
Owner: Same as operator
Employees: 5 part time
Status: Unknown

BEAVERHEAD COUNTY: Dillon

***CALVERT MINE** Scheelite
Wise River dist., sec. 12, T. 1 N., R. 12 W.
Operator: Minerals Engineering Co.
Box 431, Dillon MT 59725
Owner: Same as operator
Employees: 35
Mill capacity: 250 t/d
Status: Producing and developing

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

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. Storck
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, RADAR, 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: Developing

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: Unknown

MADISON COUNTY: Virginia City

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

BUBANY PLACER (see page 38)

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: Developing

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: Produced

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: Exploration

YERDON PLACER Gold

Meagher district, unorganized
Operator: Beaver Creek Placer Mining Co.
R. J. Williamson, Belt MT 59412
Owner: Same as operator
Employees: 1
Status: Produced

PARK COUNTY: Livingston

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: Unknown

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

POWELL COUNTY: Deer Lodge

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

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
 Status: Developing

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: Exploration

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: Exploration

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: Developing

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

*VARIOUS OPEN PITS Bentonite
 T. 9 S., R. 58, 59 E.
 Operator: National Lead Co., Bartiod Div.
 Box 1675, Houston TX 77001
 Owner: Same as operator
 Status: Unknown

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
 Hatlem MT 59526
 Status: Inactive

PHILLIPS COUNTY: Malta

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

*LITTLE ROCK NO. 1 PIT Bentonite
 Operator: Lloyd Knudsen
 Malta MT 59538
 Owner: Jerad Welch
 Zortman MT 59546
 Status: Inactive

*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

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

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: Inactive

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

SILVER BOW COUNTY: Butte

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

*Open pit.

NONMETALLIC MINES --Continued

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

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 55430
 Status: Inactive

*JAY KAY MINE Gypsum
 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
 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, and
 Milton Pulver, Seattle WA 98100
 Owner: Roy Kitson
 Alder MT 59710
 Status: Unknown

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

LIMESTONE MINES AND QUARRIES

CARBON COUNTY: Red Lodge

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

DEER LODGE COUNTY: Anaconda

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

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

*MONTANA CITY QUARRY Portland cement limestone
 Sec. 12, 13, T. 9 N., R. 2 W.
 Operator: Permanente Cement Co.
 Montana City MT 59744
 Owner: Kaiser Cement and Gypsum Corp.
 Kaiser Center, Oakland CA 94600
 Employees: 75
 Mill capacity: 5,000 b/d
 Status: Producing

PHOSPHATE MINES

BEAVERHEAD COUNTY: Dillon

CANYON CREEK and EAST LaMARCHÉ 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

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: 250
 Status: Producing and developing

PIKES PEAK (EMERY RIDGE) 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.
 617 W. 7th St., Los Angeles, CA 90017
 Status: Unknown

GRANITE COUNTY: Philipsburg

**DOUGLAS CREEK MINE AND MILL
 Phosphate rock
 Maxville dist., sec. 31, T. 9 N., R. 12 W.
 Operator: Cominco American, Inc.
 Garrison MT 59731
 Owner: Same as operator
 Status: Produced

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

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
 Status: Producing

*Open pit.

NONMETALLIC MINES - Continued

PHOSPHATE - Continued

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

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

HILL COUNTY: Havre

ROCKY BOY QUARTZ DEPOSIT Smoky quartz
Bearpaw Mountains dist., sec. 5, 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

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

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

SHALE PITS

LEWIS and CLARK COUNTY: Helena

*EL DORADO BAR SAPPHIRE DIGGINGS Sapphire
Sec. 11, 12, T. 11 N., R. 12 W.
Operator: Craig Winterburn
York Rte., Helena MT 59601
Owner: Same as operator
Status: Producing

SEMIPRECIOUS STONES

MINERAL COUNTY: Superior

*FOUR VS 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 and developing

YELLOWSTONE COUNTY: Billings

*MONTANA SHALE PIT Expanded shale
Operator: Montana Lightweight Aggregate Co.
Box 20317, Billings MT 59102
Owner: Same as operator
Status: Producing

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: Unknown

DEER LODGE COUNTY: Anaconda

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

JEFFERSON COUNTY: Boulder

*BASIN QUARTZ QUARRY Industrial silica
Basin dist., sec. 16, T. 6 N., R. 5 W.
Operator: Pacific Silica Co.
Basin MT 59631
Owner: Union Carbide Co.
Portland OR 97200
Status: Producing

*KYLER SILICA DEPOSIT Portland cement silica
Colorado-Corbin dist., sec. 13, T. 7 N., R. 4 W.
Operator: Richard Hansen
Jefferson City MT 59638
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 QUARRY Ornamental stone
 Sec. 26, 35, 1, 12, 13, T. 7, 8 S., R. 28 E.
 Operator: Montana Marble, Inc.
 1813 Broadwater, Billings MT 59101
 Owner: Same as operator
 Employees: 5
 Mill capacity: 30 t/d
 Status: Developing and produced

CASCADE COUNTY: Great Falls

*FORZLEY SALES CO. QUARRIES Building stone
 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

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

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

GALLATIN COUNTY: Bozeman

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

MADISON COUNTY: Virginia City

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

MISSOULA COUNTY: Missoula

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

PARK COUNTY: Livingston

*LIVINGSTON MARBLE and GRANITE QUARRY
 Ashlar, cut stone, rubble
 Sec. 14, 24, T. 9 S., R. 8 E.
 Operator: Livingston Marble and Granite Works
 Livingston MT 59047
 Status: Intermittent operation

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

SANDERS COUNTY: Thompson Falls

*FISH TRAP 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: Producing

MADISON COUNTY: Virginia City

*BEAVERHEAD MINE Talc
Stone Creek dist., sec. 11, 14, T. 7 S., R. 6 W.
Operator: United Sierra Division,
Cyrus Mines Corp., Trenton NJ 08618
Owner: Same as operator
Status: Unknown

MADISON COUNTY: Virginia City

*REGAL MINE Talc
Sweetwater dist., N½ sec. 2, T. 8 S., R. 7 W.
Operator: Chas. Pfizer & Co.
Box 1147, Dillon MT 59725
Owner: Same as operator
Employees: 2
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. W. Hafer
1967 Yale, Butte MT 59701
Owner: C. W. Hafer and John Pyner
1967 Yale, Butte MT 59701
Employees: 2 to 3
Status: Producing and developing

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

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

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

VERMICULITE MINES

LINCOLN COUNTY: Libby

*VERMICULITE MOUNTAIN MINE Vermiculite
Rainy Creek dist., sec. 14, 15, 22, 23, T. 31 N., R. 30 W.
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

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

PART 3, COAL MINES

BLAINE COUNTY: Chinook

MILK RIVER MINE Coal
 Operator: Lauren Sargent
 Box 472, Chinook MT 59501
 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 MT 59301
 Status: Unknown

MUSSELSHELL COUNTY: Roundup

DIVIDE MINE Coal
 Operator: Divide Coal Mining Co.
 Roundup MT 59072
 Owner: Victor and Jack H. 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

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: Produced

P and M MINE Coal
 Operator: Paul Meged
 Golden Creek Rte., Roundup MT 59072
 Status: Unknown

RICHLAND COUNTY: Sidney

BEMER MINE Coal
 Operator: Neville Bemmer
 Culbertson MT 59218
 Status: Unknown

KNIFE RIVER MINE Coal
 Operator: Knife River Coal Co.
 Savage MT 59262
 Employees: 17
 Status: Producing

ROSEBUD COUNTY: Forsyth

LAME DEER MINE Coal
 Operator: Lester Scott
 Lane Deer MT 59043
 Status: Unknown

*ROSEBUD NO. 6 MINE Coal
 Operator: Western Energy Co.
 Colstrip MT 59323
 Owner: Montana Power Co.
 Butte MT 59701
 Employees: 9
 Status: Producing

DAWSON COUNTY: Glendive

PEUSE MINE Coal
Operator: Gordon Peuse
Lindsay MT 59339
Owner: Same as operator
Status: Produced

McCONE COUNTY: Circle

NO. 1 MINE Coal
Operator: R. D. Stephenson
Circle MT 59215
Status: Unknown

SQUARE DEAL MINE Coal

Operator: Virgil Cross and Buster Ray
Roundup MT 59072
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

SHERIDAN COUNTY: Plentywood



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

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

MADISON COUNTY: Virginia City

BUBANY PLACER	Gold	TRIANGLE MINE	Gold, silver
Operator: Tony Bubany		Norris dist.	
Virginia City MT 59755		Operator: Triangle Mining Co.	
Owner: Same as operator		1016 Nevada Ln.	
Employees: 1		Billings MT 59101	
Status: Producing		Owner: Same as operator	
		Employees: 4	
		Status: Exploration and developing	
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			

PART 4

	<h2 style="margin: 0;">MINERAL INDUSTRY SURVEYS</h2> <p style="margin: 0;">U. S. DEPARTMENT OF THE INTERIOR BUREAU OF MINES</p>	
<p>Stewart L. Udall, Secretary</p>		<p>John F. O'Leary, Director</p>

Albany Office of Mineral Resources
Mark L. Wright, Chief
Albany, Oregon

THE MINERAL INDUSTRY OF MONTANA IN 1968

Preliminary Annual Report

The value of Montana mineral production in 1968 rose to \$234.0 million, an increase of 25 percent over the previous year, according to preliminary estimates prepared by the Bureau of Mines, Department of the Interior. However, this figure was still below the total value of production for 1966, \$245.3 million. The nationwide copper strike, which began in July 1967 and continued for the first 3 months of 1968, affected production totals for 2 years. Most of the metal industries affected by the strike were able to recover to normal production by yearend.

Petroleum was the State's dominant mineral commodity in terms of value, \$125.4 million, an increase of 43.2 percent over last year. In spite of a decline in the value of natural gas production, fuels (petroleum, coal, and natural gas) increased from 49 percent of the total value of mineral production in 1967 to 55 percent in 1968.

The Anaconda Company announced that as of January 1, 1968, total loss due to the copper strike was just under \$60 million, based on wages, services, freight, supplies, and taxes. The average wage loss to the striker by January 1 was \$3,300. This strike proved to be Montana's longest, lasting 8 months.

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.

TABLE 1.- Mineral production in Montana 1/

Mineral	1967		P/ 1968	
	Quantity (thousands)	Value (thousands)	Quantity	Value (thousands)
Clays 2/.....thousand short tons	46	\$50	45	\$48
Coal (bituminous and lignite).....do....	371	996	W	W
Copper (recoverable content of ores, etc.).....short tons	65,483	50,063	64,862	54,284
Gem stones.....	NA	109	NA	109
Gold (recoverable content of ores, etc.).....troy ounces	9,786	343	12,799	496
Iron ore (usable).....thousand long tons, gross weight	10	81	13	91
Lead (recoverable content of ores, etc.).....short tons	898	251	1,890	497
Lime.....thousand short tons	143	1,765	171	1,888
Manganese ore and concentrate.....short tons, gross weight	W	W	4,010	W
(35 percent or more Mn)				
Manganiferous ore and concentrate.....do....	2,763	10	2,063	W
(5 to 35 percent Mn)				
Natural gas.....million cubic feet	25,866	2,173	21,500	1,871
Petroleum (crude).....thousand 42-gallon barrels	34,959	87,543	49,560	125,387
Sand and gravel and stone.....thousand short tons	17,121	16,692	22,600	22,436
Silver (recoverable content of ores, etc.)thousand troy ounces	2,066	3,203	2,066	4,426
Zinc (recoverable content of ores, etc.).....short tons	3,341	925	2,209	596
Value of items that cannot be disclosed: Antimony ore, cement, fluorspar, gypsum, natural gas liquids, peat, phosphate rock, talc, tungsten ore, vermiculite, and values indicated by symbol W.....	XX	22,314	XX	21,866
Total.....	XX	186,524	XX	233,995

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

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

2/ Excludes fire clay (1967) and bentonite; included with "Value of items that cannot be disclosed."

The U.S. Bureau of Mines, Spokane Office of Mineral Resources, studied potential mineral deposits in the wilderness area of the Spanish Peaks. Work was done in cooperation with the U.S. Geological Survey, and reports will be used by the U.S. Forest Service and the President in making proposals to Congress as to the inclusion of this area in the "Wilderness System" as provided in the Wilderness Act.

Beryllium resources in the Northwest were chemically and spectroscopically tested in a mobile laboratory and were reported to have too low a beryllium content to be economically mined. ^{1/} Montana and Idaho were considered to be potential sources of 500,000 to 700,000 tons of beryllium-bearing tactite containing 0.03 to 0.08 percent beryllium oxide.

Until the copper strike cut heavily into the Montana economy, the State had experienced 7 years of consecutive growth. In spite of 5 months of strike in 1967, employment set new records. This year, even though the strike ended after 3 months, employment totals for all nonagricultural industries rose only 1.4 percent, based on 9 months' data. July, August, and September experienced a post-strike boom; new records of over 200,000 employed were set each month. However, the 9-month average employment figures declined in all industries except petroleum and construction. Insured unemployment through September averaged 1.2 percent; 29 States had higher ratios, and the national average was 1.5 percent.

^{1/} Pattee, Eldon C., Ronald M. Van Noy, and Robert D. Weldin. Beryllium Resources in Idaho, Washington, Montana, and Oregon. BuMines Rept. of Inv. 7148, July 1968, 169 pp.

TABLE 2.- Estimated average monthly employment
(thousands)

	First 9 months, 1966	First 9 months, 1967	First 9 months, p/ 1968	Change 1967-68, percent
Mining.....	7.63	6.30	4.81	-23.7
Metal mining.....	4.88	3.87	2.29	-40.8
Quarrying and nonmetallic mining, including coal.....	1.06	0.94	0.89	-5.3
Petroleum and natural gas production.....	1.70	1.49	1.63	+9.4
Manufacturing.....	22.80	22.82	22.60	-0.9
Lumber and timber products.....	8.99	8.77	8.62	-1.7
Primary metals.....	3.86	3.53	3.38	-4.2
Petroleum refining.....	1.04	1.03	1.06	+2.9
Contract construction.....	11.72	11.11	11.16	+0.4
Transportation and utilities.....	17.71	17.86	17.82	-0.2
All nonagricultural industries...	186.12	189.35	191.94	+1.4

p/ Preliminary.

Source: Montana Labor Market, State Employment Service.

REVIEW BY MINERAL COMMODITIES

METALS

Aluminum.- Anaconda Aluminum Co. completed installation of its fourth and fifth potlines at the Columbia Falls plant. All 120 reduction cells in two new 1,080-foot-long potroom buildings were producing at rated capacity, boosting the current annual production capacity to 175,000 tons. A new continuous rod-casting facility at the same location started operating in July.

Copper.- The nationwide copper strike, begun in July 1967, continued through March 1968. Settlement of the strike in April saw a gradual return to production at The Anaconda Company's facilities at Butte, Anaconda, and Great Falls and at the American Smelting and Refining Co. smelter at East Helena. As a result, production of copper dropped to less than 65,000 tons, nearly 50 percent below the pre-strike 1966 level and 1 percent lower than the 1967 total of 65,483 tons.

As production resumed in the State following the 8-month copper strike, firm prices for copper led to increasing production during the latter part of the year. The Anaconda open-pit operation at Butte set a 1-day production record of 306,944 tons of material removed, exceeding the current daily average by more than 25,000 tons. Included were 57,947 tons of ore, 69,430 tons of leach material, and 179,567 tons of waste.

The Anaconda Company continued its program of expansion and modernization at Butte and Anaconda. At the Berkeley Pit, an old heating plant was deactivated and dismantled to make way for pit expansion to the northwest. Expansion also continued eastward, and additional pumps were installed in the deeper portion of the pit to cope with a water problem. Construction of a new heating plant was started in the vicinity of the Kelley mine. The central underground pumping station on the 3900 level of the Kelley mine was completed. A new slime treatment plant addition to the Weed concentrator was activated. Construction of the No. 7 reverberatory furnace was completed at the Anaconda Reduction Works. The high-grade ore concentrator at Anaconda was closed as the Weed concentrator became fully equipped to handle all Butte copper ores.

Uuno M. Sahinen, Associate Director of the Montana Bureau of Mines and Geology, reported at the December meeting of the Northwest Mining Association that 251 mining operations were active in the State. At least 134 of these operations reported some production during the year. Several major exploration companies were active in the State, and 23 new mining companies were incorporated during the year.

Silver Ledge Mining Co. discovered copper-lead-silver ore in a second vein crosscut at the Cape Nome mine near Clinton. Diamond drilling to 2,200 feet was undertaken at the Basin Comstock Mining Co. property, midway between Helena and Butte, to help delineate a newly found copper prospect.

The Montana Bureau of Mines and Geology described geochemical investigations in Lincoln and Flathead Counties in a new publication. 2/

2/ Sahinen, U.M., W.M. Johns, and D.C. Lawson. Geochemical Investigations in Lincoln and Flathead Counties, Montana. Montana Bureau of Mines and Geology, Bull. 61, 1967, 18 pp.

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

Year	Mines producing		Material sold or treated <u>2/</u> (thousand short tons)	Gold (lode and placer)		Silver (lode and placer)		Total value (thousands)
	Lode	Placer		Troy ounces	Value (thousands)	Troy ounces (thousands)	Value (thousands)	
1964.....	110	8	14,872	29,115	\$1,019	5,290	\$6,840	
1965.....	121	11	15,634	22,772	797	5,207	6,733	
1966.....	117	5	17,645	25,009	875	5,320	6,878	
1967.....	62	3	9,093	9,786	343	2,066	3,203	
1968 <u>3/</u> ...	150	-	10,202	12,799	496	2,066	4,426	

Year	Copper		Lead		Zinc		Total value (thousands)
	Short tons	Value (thousands)	Short tons	Value (thousands)	Short tons	Value (thousands)	
1964.....	103,806	\$67,682	4,538	\$1,189	29,059	\$7,904	\$84,633
1965.....	115,489	81,766	6,981	2,178	33,786	9,866	101,340
1966.....	128,061	92,639	4,409	1,333	29,120	8,445	110,171
1967.....	65,483	50,063	898	251	3,341	925	54,785
1968 <u>3/</u> ...	64,862	54,284	1,890	497	2,209	596	60,299

1/ Includes recoverable metal content of gravel washed (placer operations); ore milled, old tailings and old slag re-treated, copper precipitates and ore shipped to smelters during the calendar year indicated. Owing to rounding, individual items may not add to totals shown.

2/ Does not include gravel washed.

3/ Preliminary figures. Gold value calculated at a preliminary average price of \$38.739 a troy ounce, and silver at a preliminary average price of \$2.143 a troy ounce. In calculating production values for copper, lead, and zinc, preliminary average prices in 1968 per pound of refined metal were used, as follows: Copper, \$0.41846; Lead, \$0.13152; Zinc, \$0.135.

Gold.- An increase in the average market price of gold to \$38.74 per ounce, stimulated interest in gold production and exploration throughout the State and resulted in a 31-percent increase in gold production from 9,786 ounces in 1967 to 12,799 ounces in 1968.

Pacific Mines, Inc., shipped gold and silver ore from an open-pit operation at the Pacific mine in the Alder-Virginia City region of Madison County. Three men produced and hauled 1,000 tons of ore per month to Alder for shipment to Helena and Butte. The K-D Co. explored and drilled on the Kendall-Barnes King properties in the North Moccasin Mountains.

The U.S. Bureau of Mines and Geological Survey investigated several potentially large low-grade gold deposits with engineering and economic studies, conducted under the Heavy Metals Program. The Golden Sunlight deposit in the Whitehall district of Jefferson County was evaluated; preliminary bulk sampling on a reportedly large low-grade gold deposit south of Anaconda was undertaken; and reconnaissance investigations were made in Broadwater, Mineral, and Powell Counties.

Iron Ore.- The total iron ore production in the State came from the Iron Cross mine of R & S Iron Co. near Radersburg. Production increased 30 percent from 1967 to 13,000 tons of ore. The ore, mined by open-pit methods, was used by the cement industry.

Lead.- Although less than half the total production in 1966, lead output more than doubled over the previous year to 1,890 tons. Byproduct lead output, affected by the copper strike, was still far below normal, but an increase in shipments from small lead-zinc-silver mines added to the total production. Lead production was reported from 89 operations throughout the State.

Manganese.- Continuing declines in demand for manganese concentrates resulted in a reduction in the total amount of manganese shipped to approximately 6,000 tons of concentrates. No manganese ore was mined in the State during the year, and stockpile shipments from The Anaconda Company and Taylor-Knapp Co. to other users accounted for all the manganese production attributed to the State in 1968.

Nickel.- The Anaconda Company announced the discovery of nickel-bearing ore near Columbus in both Stillwater and Sweetgrass Counties. About 30 men were engaged in exploration efforts which included geological mapping, geophysical and geochemical work, diamond drilling, and sampling. The diamond-drilling program indicated nickel-copper values lying close to the surface where open-pit mining methods would be feasible.

Silver.- Production continued to be more than 60 percent below the 1966 level as the total byproduct silver output was reduced by the copper strike. The rising price of silver continued to arouse interest in locating and developing silver deposits in mining regions throughout the State.

Hecla Mining Co. explored for silver at the Granite-BiMetallic mine property near Philipsburg, but reportedly no important discoveries were made. Lucky Star Mining Co. completed 1,000 feet of exploratory diamond drilling at its Blue Creek silver-lead-zinc mine in Sanders County. Sierra Silver Mining Co. began diamond core drilling for silver at the Cadgie Taylor property, 2 miles east of Philipsburg.

TABLE 4.- Mine production of gold, silver, copper, lead, and zinc in 1968, 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....	-	W	-	W	W
March.....	-	W	-	W	W
April.....	324	W	11	W	W
May.....	1,465	218,052	6,598	139	244
June.....	1,776	247,583	7,903	185	293
July.....	1,643	288,109	7,845	333	315
August.....	2,043	249,826	8,917	122	197
September...	1,344	223,946	7,832	151	222
October.....	1,303	240,604	8,726	146	211
November....	1,450	257,000	8,515	160	211
December....	1,451	257,000	8,515	160	211
Total <u>1/</u> .	12,799	2,065,551	64,862	1,890	2,209

W Withheld to avoid disclosing individual company confidential data.

1/ Includes months indicated by symbol W.

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

Year	Mines producing		Material sold or treated <u>1/</u> (thousand short tons)	Gold, lode and placer (troy ounces)	Silver, lode and placer (thousand troy ounces)
	Lode	Placer			
1964.....	10	-	14,694	20,999	4,614
1965.....	8	2	15,462	18,420	4,790
1966.....	5	-	17,503	21,608	4,864
1967.....	5	-	9,041	8,339	1,856
1968 <u>p/</u> ...	4	-	10,110	8,617	1,516
Year	Copper (short tons)		Lead (short tons)	Zinc (short tons)	Total value (thousands)
1964.....	103,600		2,678	20,239	\$80,455
1965.....	115,279		4,594	25,629	97,373
1966.....	127,885		2,411	22,284	106,749
1967.....	65,448		64	816	53,450
1968 <u>p/</u> ...	64,742		247	1,389	58,265

p/ Preliminary.

1/ Does not include gravel washed.

Midnight Mines, Inc., purchased the Polaris mine near Dillon and shipped silver ore to the Anaconda smelter. The ore was stockpiled from surface development work on a newly discovered southerly extension of the Polaris vein. A new 600-foot adit was driven to within 400 feet of the vein at an intermediate level 200 feet below the surface.

Mascot Silver-Lead Mines, Inc., obtained a \$21,250 OME loan and continued development work at its Meadow mine in Jefferson County. The shaft was sunk 65 feet to the 200 level where drifting on the vein 175 feet east and 500 feet west exposed two oreshoots.

Also in Jefferson County, Development Operating Corp. rehabilitated the shaft at the Elkhorn mine to the 550-foot level and did 1,600 feet of drifting, raising, and crosscutting under an Office of Mineral Exploration loan. New pumps, head frames, compressor, and hoist were installed, and the shaft was dewatered 700 feet. Exploration for silver and gold was undertaken at the Golden Curry mine and the Klondyke mine.

A total of 700 feet of development drifts and crosscuts were driven on the 500 level of the Jo Dandy mine in Broadwater County. Silver Hill Co. started making small shipments of high-grade silver-copper ore from a new mine east of Alder. The Curlew mine in Ravalli County was reopened, and production totaled over \$100,000 in silver ore. Production of silver and lead continued from the Hand mine in the Argenta district.

Elcor Chemical Corp. of Midland, Tex., became operator of the Nancy Lee mine near Superior, Mineral County. A Worthington ball mill and jaw crusher were added to the concentrator at the mine. Spokane National Mines operated its 130-ton mill at Bannack and continued production from the New Departure mine in Beaverhead County. The company installed a screening plant at the mine to upgrade dump material, which was then blended with the mine ore to obtain a satisfactory mill-head grade. Surface trenching and 12,000 feet of exploratory drilling were completed at the Florence mine in Cascade County.

Tungsten. - Minerals Engineering Co. reopened its Beaverhead County tungsten mill which had been idle for 7 years. Full production, employing 25 men, was resumed in August. The plant, which processed tungsten from the Calvert mine about 9 miles west of Wise River, was operated on a 24-hour basis. The mill, which was shut down for economic reasons, was rebuilt, and a chemical plant which produces ammonium paratungstate was added to the complex. Another 30 men were employed for mining at the Calvert mine.

Zinc. - Output continued to be derived from both byproduct production from copper mining operations and various small lead-zinc-silver operations. Production declined 34 percent from 1967 as only 2,209 tons of zinc was recovered from ores mined in the State.

After the strike, Anaconda resumed processing concentrates from Canada at the electrolytic zinc plant at the Anaconda Reduction Works. The Great Falls electrolytic zinc plant also resumed processing foreign ores, including shipments from Canada, Mexico, Africa, and South America.

NONMETALS

Cement.- The quantity of portland cement shipments increased 11 percent, and value was 12 percent over the 1967 figure. Production was by Kaiser Cement & Gypsum Corp. at Montana City and by Ideal Cement Co. at Trident.

Clays.- Output of common clays and shales for use in making building products remained about the same as in 1967. Bentonite production advanced 45 percent over the 1967 total.

National Lead Co. mined bentonite near Colony, Carter County, for use as oil-well-drilling mud. Hallett Minerals Co., recovering bentonite from a mine 2 miles west of Vananda, Rosebud County, expected to double current production of 1,100 tons per day. The material was shipped by railroad to Burnett, Minn., for milling into a product suitable for use as a binder in pelletizing taconite iron ore concentrate.

Design was underway for constructing a railroad spur 18 miles south of Glasgow, Valley County, to serve the bentonitic-clay processing plant planned by Ashland Chemical Co. on the Brazil Creek Bentonite Co. bentonite deposit.

Fluorspar.- Output of fluorspar by Roberts Mining Co. from the Crystal Mountain mine was trucked to Darby for processing at the company heavy-media separation mill. Metallurgical-grade fluorspar from the milling operation went to industrial consumers.

Gypsum.- Estimated production of gypsum was slightly greater than the 1967 output. The Shoemaker mine, Fergus County, owned by United States Gypsum Co., continued to be the sole marketing source.

Lime.- Lime output increased an estimated 20 percent over the 1967 total. The Anaconda Company made quicklime in Deer Lodge County for metallurgical use at its own operations. Sugar companies calcined limestone to quicklime for use in sugar refining in Big Horn, Richland, and Yellowstone Counties.

Phosphate Rock.- Estimated output and value of marketable phosphate rock declined 35 percent from the 1967 totals. Production came from operations in Granite and Powell Counties.

Rocky Mountain Phosphates, Inc., did not operate its phosphate-rock defluorinating plant at Garrison, but continued to be involved with litigation over alleged responsibility by the company for air pollution at Garrison.

Cominco American, Inc., suspended operations at its Douglas Creek mine and concentrator near Hall, Granite County, in October. The company had operated the concentrator since 1963.

There was no production of phosphate rock by Stauffer Chemical Co. from deposits in Beaverhead and Silver Bow Counties near Melrose, but the company operated its elemental phosphorus plant at Silver Bow from rock mined at Soda Springs, Idaho. The cost of underground mining was a large factor in closing the Melrose properties, and equipment was stripped from the mines early in the year. The higher grade ore from company strip-mining operations at Soda Springs did not have to be upgraded to meet plant requirements.

Sand and Gravel and Stone.- Combined output of sand and gravel and stone was estimated at 22 million tons valued at \$22.4 million. There were increased requirements for sand and gravel and stone at highway and dam construction projects. Intensive use of sand and gravel and stone continued at Libby Dam on the Kootenai River in northwestern Montana, one of the larger projects in Pacific Northwest construction history.

A high-calcium limestone deposit in western Montana was described. ^{3/}

Sulfur.- Output of high-purity elemental sulfur increased sharply over the 1967 production.

The sulfur recovery plant of Montana Sulphur & Chemical Co. at Billings removed sulfur from hydrogen sulfide gas byproducts obtained from oil-refining operations of Continental Oil Co. and Humble Oil & Refining Co. In addition to the existing facility at Billings for producing elemental sulfur, the company installed a 20-ton-per-day high-purity hydrogen sulfide recovery system.

Farmers Union Central Exchange, Inc., began installing a sulfur recovery system that was contingent upon byproduct hydrogen sulfide gas received from its oil-refining operation at Laurel. The 28-ton-per-day elemental sulfur recovery unit will be placed in service by March 1969.

Talc.- Quantity and value of talc output declined 14 and 5 percent, respectively, compared with 1967 totals. Production was by Chas. Pfizer & Co., Inc., from mines in Beaverhead County and the United Sierra Division, Cyprus Mines Corp., from an open-pit mine in Madison County. Crude material was ground and sized at mills in Beaverhead and Gallatin Counties; some was shipped out-of-State to grinding plants.

Vermiculite - The quantity of crude vermiculite mined increased 1 percent over the 1967 figure. Zonolite Division, W.R. Grace & Co., the State's sole producer from a pit near Libby, Lincoln County, continued to be the principal source of vermiculite in the United States.

Exploration and testing continued on a Madison County vermiculite deposit near Pony.

MINERAL FUELS

Coal.- Output of bituminous and subbituminous coal and lignite increased substantially over the 1967 figure, largely due to subbituminous coal mining at Colstrip, Rosebud County, for meeting requirements of coal-fired steam-electric generating plants of Montana Power Co. at Billings and of Minnesota Power & Light Co. at Cohasset, Minn. Musselshell County continued to be the leading source of bituminous coal; mines in Richland County were the major sources of lignite, which was used in the Montana Dakota Utilities Co. coal-fired steam-electric generating plant at Sidney.

In August, testing began on the Montana Power Co. 180-megawatt coal-fired steam-electric generating plant at Billings; the unit was placed in service on September 15. Early in the year, Western Energy Co., a subsidiary of Montana

^{3/} Landreth, John O. High-Calcium Limestone Deposit in the Rattler Gulch Area, Granite County, Montana. Montana Bureau of Mines and Geology, Spec. Publ. No. 44, January 1968, 10 pp.

Power Co., began mining subbituminous coal at Colstrip, Rosebud County, for the Montana Power Co. steam-electric plant. Two unit trains with specially designed gondola cars hauled 6,000 tons of coal each week about 100 miles from Colstrip to Billings. Plans were to increase coal consumption at the coal-fired steam plant in steady annual increments; by 1980, over 1 million tons annually of Colstrip coal will be consumed at the Billings plant.

Western Energy also crushed and loaded coal for Peabody Coal Co., which late in the year started mining about a mile from the Montana Power Co. Colstrip operations. Peabody Coal Co., under contract to provide Minnesota Power & Light Co. 2 million tons of coal annually from the Colstrip operation by 1973, shipped the coal 850 miles to Cohasset, Minn., for furnace tests in preparation for full-scale mining operations in 1969.

Three unit trains of 92 specially designed gondola cars each will make four 1,700-mile round trips from the Colstrip mines to Cohasset, Minn., weekly, delivering 10,000 tons of coal each trip.

Results of Montana coal analysis were published. 4/

Petroleum and Natural Gas.- Estimated recovery of crude oil reached an alltime high of 50 million barrels valued at \$125.4 million, compared with 35 million barrels valued at \$87.5 million in 1967. The Bell Creek field, discovered in the Powder River Basin in 1967, accounted for most of the production increase with an alltime annual field record output in Montana of over 16 million barrels.

Area of the Bell Creek field has expanded to over 100 square miles; crude oil reserves are estimated at over 200 million barrels. Crude oil was pumped from the Muddy formation at shallow depths ranging from 4,300 to 4,700 feet. Some wells in the field were drilled in less than 26 hours. A \$2.5 million natural-gas processing plant was constructed at the Bell Creek field to process 15 million cubic feet per day of gas previously being flared. The Bell Creek field was described as the biggest oil production area in the Rocky Mountains. 5/ 6/

Marketed production of natural gas declined to 21.5 billion cubic feet valued at \$1.9 million, compared with 25.9 billion cubic feet valued at \$2.2 million in 1967.

High Crest Oil Co., Inc., and Montana Power Co. negotiated a contract for removing natural gas from Tiger Ridge field, discovered by High Crest in 1967. Montana Power Co. announced plans for constructing a \$6 million pipeline from Tiger Ridge to Montana Power Co. facilities.

This report summarizes mineral industry activity in Montana in 1968 and contains preliminary production data for the year as estimated from company monthly and quarterly production canvasses, smelter receipt reports, and information contained in industry publications.

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- 4/ Gilmour, Ernest H., and Garda G. Dahl, Jr. Montana Coal Analysis. Montana Bureau of Mines and Geology, Spec. Publ. 43, November 1967, 21 pp.
-
- 5/ Mitchell, Young O. Bell Creek Nears First Place in Rockies. The Oil and Gas Journal, v. 66, No. 16, April 15, 1968, pp. 34-36.
-
- 6/ Bleakley, Bruce. Bell Creek: Newest U.S. Oil Giant. The Oil and Gas Journal, v. 66, No. 19, May 6, 1968, pp. 80-82.
-

SUPPLEMENTAL LIST OF MINING ENTERPRISES

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

BEAVERHEAD COUNTY						
Bozoc (Lobo)	I	1966		Dictator & Union Belle	I	1966
Charter Oak	I	1966	U	Golconda	I	1967
Coolidge	I	1967	U	Hill Crest	I	1966
Gladstone-Argenta	I	1966	I	Jack Rabbit	U	1967
Graybird No. 1	U	1966	U	Lost Lode	I	1966
Grey Jockey	I	1967	U	Mary Williams quarry	I	1966
Midnight dump	U	1966	I	McMurtrey placer	U	1967
Storm King	I	1966	U	Midnight	U	1967
			U	St. Lawrence	I	1967
				Silver Bar	I	1966
				Silver Bullion	I	1966
				South Fork	I	1966
				Surprise	U	1967
BLAINE COUNTY						
Reed and Parks pit	I	1966				
Rocky Boy coal mine	I	1966				
BROADWATER COUNTY						
Bonanza	U	1967		Amazon--Dixie	I	1967
Gold Bug & Mary Rose	I	1967		Tarbox & Mountain	I	1966
Kleinschmidt	U	1967		Meadow		
Silver King & Queen	I	1966				
CASCADE COUNTY						
Leonard	I	1966				
Loveland coal mine	I	1966		Bonner quarry	I	1966
Kings Hill quarry	I	1966		Elk Creek	I	1966
				Susan	I	1966
				Twin Creeks placer	U	1967
GRANITE COUNTY						
Blacktail No. 1 and						
Minnie Lee			U			
Homestead			U			
Hornet and Peacock			I			
Men Five			U			
Potosi			U			
Sam Gaty			I			
Scratch All			U			
Spring Gulch quarry			U			
JEFFERSON COUNTY						
Ajax			I			
Bertha tailings			I			
Bluebird No. 1 & 2			U			
Jib			I			
Lahey silica quarry			I			
Mammoth			I			
Morning Glory			I			
Moscow			I			
Mt. Thompson			I			
JUDITH BASIN COUNTY						
Kibbey gypsum deposits			I			
Yogo sapphire mine			I			
MADISON COUNTY--Continued						
MINERAL COUNTY						
MISSOULA COUNTY						
MUSSELSHELL COUNTY						
Gildroy coal mine			I			

DEER LODGE COUNTY		LEWIS AND CLARK COUNTY		POWELL COUNTY	
Cameron quartz lode	U 1966	Emma Miller	U 1967	Champion tailings	I 1967
Lucky Sunday	U 1967	Nick and Dick	U 1967	Elliston quarry	I 1966
Silver Reef	U 1967	Sambo	U 1967	Jack Pine (Trout Creek) phosphate	I 1967
Snow White silica quarry	U 1967	Wolf Creek Picture	I 1966	Kirbey	U 1967
		Stone No. 1 quarry	I 1966	Nancy Ellen	I 1966
		Wolf Creek Picture	I 1966	Silver Reef	U 1967
		Stone No. 3 Sieben	I 1966		
FERGUS COUNTY		LINCOLN COUNTY		SANDERS COUNTY	
Beaver Creek and Lewistown pit	U 1966	Black Diamond	U 1967	Jack Waite	U 1967
Hanover gypsum mine	I 1967	Memory (Bi-Metallic)	I 1967		
Paradise Ranch quarry	I 1966	Montana Morning	I 1966	SILVER BOW COUNTY	
Swanson coal	I 1967			Jane claim (placer)	U 1967
Silver Dyke	I 1966			Tuxedo	I 1966
Tuss coal mine	I 1967			Van Butte Exploration	D 1966
War Eagle	U 1967				
FLATHEAD COUNTY		MADISON COUNTY		YELLOWSTONE COUNTY	
Ole	U 1967	Antelope	U 1967	Bent clay pit	U 1966
		Bedford	U 1967	Buff clay pit	U 1966
		Big Bertha	I 1966		
		Castle Blue dump	I 1967		
		Cornucopia and Cabin lodes	I 1967		

LIST OF NEW MINING COMPANIES INCORPORATED IN MONTANA IN 1968

- ARGENTA SILVER DEVELOPMENT CO.
Dillon (February 27, 1968)
Incorporators:
Howard T. Kruse, Spokane WA,
Merle H. Krause, Dillon, MT and
C. F. Wroble, Victor MT
- BASIN COMSTOCK MINING CORP.
Whitehall (October 11, 1968)
Incorporators:
Eugene Dolan, Grady Snaders, and Paul Robinson
Spokane WA
- BLUE MOUNTAIN MINES, INC.
Hardin (August 8, 1968)
Incorporators:
Norman C. Smith, Twin Bridges MT,
A. A. Moser, J. E. Roberts, J. R. McCoy, and B. W. Kronmiller,
Hardin MT
- BLUE SKY MINING CORP.
Dillon (August 7, 1968)
Incorporators:
Roger C. and Hazel Pierce, Dillon MT,
W. A. Cook and M. F. Kanne, Bloomington IN,
and D. G. Sterner, Indianapolis IN
- BRIMONT MINING, INC.
Kalispell (May 14, 1968)
Incorporators:
A. H. Ditton, Slocan, B.C., Canada
D. B. Rovig and M. N. Warden, Kalispell MT
- GUMBO MINING CORPORATION
Virginia City (October 24, 1968)
Incorporators:
W. G. Krynski, F. E. Evans, and W. J. Wise,
Chicago IL
- L. M. SHERIDAN EXPLORATION CO.
Butte (September 24, 1968)
Incorporators:
L. M. Sheridan and J. J. McCaffery, Jr., Butte MT, and
J. B. Bonny, Boise ID
- LUCKY IRISH SILVER, INC.
Plains (November 24, 1968)
Incorporators:
Herman Meier, G. Fletcher Luger, and Bruce Parsons,
Spokane WA
- MAHONEY FARMS INCORPORATED
Hamilton (July 18, 1968)
Incorporators:
J. L. Mahoney, Monterey CA, and
L. D. LeDuc and Margaret A. LeDuc, Hamilton MT
- MONTANA TALC & MINERAL, INC.
Helena (October 2, 1968)
Incorporators:
W. M. Cocanougher, Twin Bridges MT,
M. W. Buchanan, San Antonio, TX, and
Paul Scheibe, San Francisco CA

CURLEW MINES, INC.
 Victor (October 29, 1968)
 Incorporators:
 Roy Davidson and W. N. Elsasser, Victor MT, and
 H. W. Ebbett, Sandpoint ID

EASTERN SLOPES DISTRIBUTING CO., INC.
 Billings (May 2, 1968)
 Incorporators:
 K. M. and Virginia H. Doze and R. P. Ryan,
 Billings MT

EDWIN W. CASTLE, INC.
 Helena (July 8, 1968)
 Incorporators:
 E. W. Castle, E. L. Diehl, and S. J. Burgess,
 Helena MT

GAR MINES AND METALS, INC.
 Billings (April 16, 1968)
 Incorporators:
 Stanley and Jerry Gar, Roy MT, and
 Lloyd Lafond, Billings MT

GOLD CROWN MINING, INC.
 Helena (March 11, 1968)
 Incorporators:
 W. A. Hall, Helena MT, and
 Harry Kwenski and Vannio Salerno, Racine WI

NATIONAL RESOURCES, INC.
 Helena (August 8, 1968)
 Incorporators:
 J. H. Dillon, Ann Logsdon, and Orville Moe,
 Spokane WA

THE PLATINUM CORPORATION
 Butte (November 25, 1968)
 Incorporators:
 P. M. Keith and Tana M. Keith, and Darlene Huntington,
 Butte MT

RODMAN, INC.
 Butte (January 24, 1968)
 Incorporators:
 G. R. Cooney, J. P. Cooney, and W. P. Cooney,
 Butte MT

SILVER TREND MINING COMPANY
 St. Regis (September 27, 1968)
 Incorporators:
 Dean Lewis and Carl Westfall, St. Regis MT, and
 Martin Thompson, Kellogg ID

STATON COAL MINING COMPANY
 Havre (May 22, 1968)
 Incorporators:
 E. J. Waterman and J. Chan Ettien, Havre MT, and
 Carl Pfeifer, Columbia Falls MT

LIST OF NEW MINING COMPANIES INCORPORATED IN MONTANA IN 1968--Continued

WALKERVILLE GOLD & SILVER MINING COMPANY, INC.

Butte (April 2, 1968)

Incorporators:

Frank Benich, R. E. Endresse, and G. W. Richardson,
Butte MT

WESTERN MILLING COMPANY

Helena (August 28, 1968)

Incorporators:

R. K. Magney and W. E. Cullen, Spokane WA, and
H.F. Stone, Helena MT

WILLISTON EXPLORATION COMPANY

Billings (March 14, 1968)

Incorporators:

S. E. Haddon, B. N. Forbes, D. Farmer, J. Misfeldt,
and J. Clayton, Billings MT

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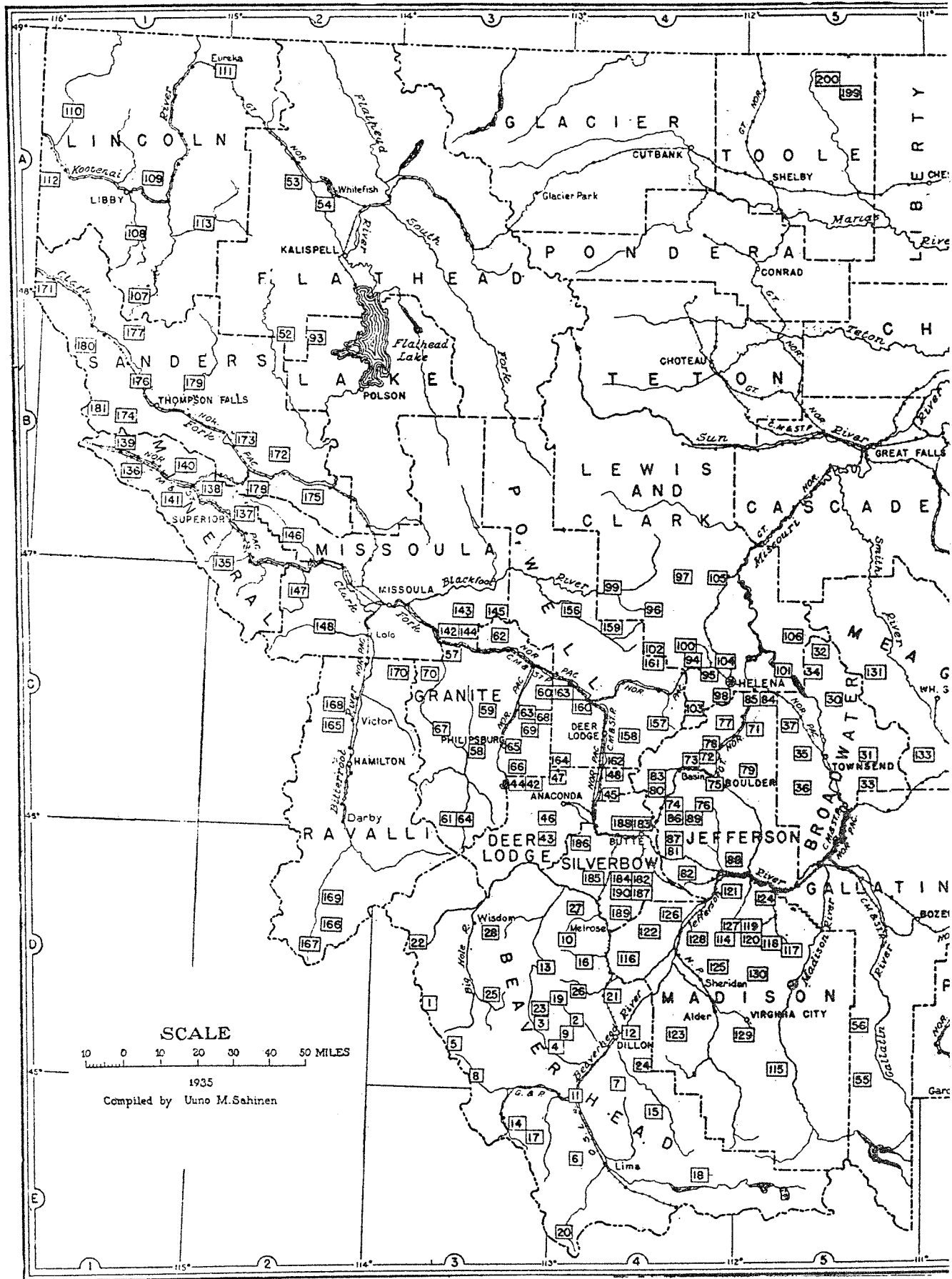
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 17. Medicine Lodge
 18. Monida
 19. Mount Torrey
 20. Niccolia
 21. Nogo (Apex)
 22. Pioneer
 23. Polaris (Lost Cloud)
 24. Ruby
 25. Saginaw (Jackson)
 26. Utopia (Birch Creek)
 27. Vipond
 28. Wisdom (Big Hole)
- Blaine County, A-8**
29. Bearpaw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



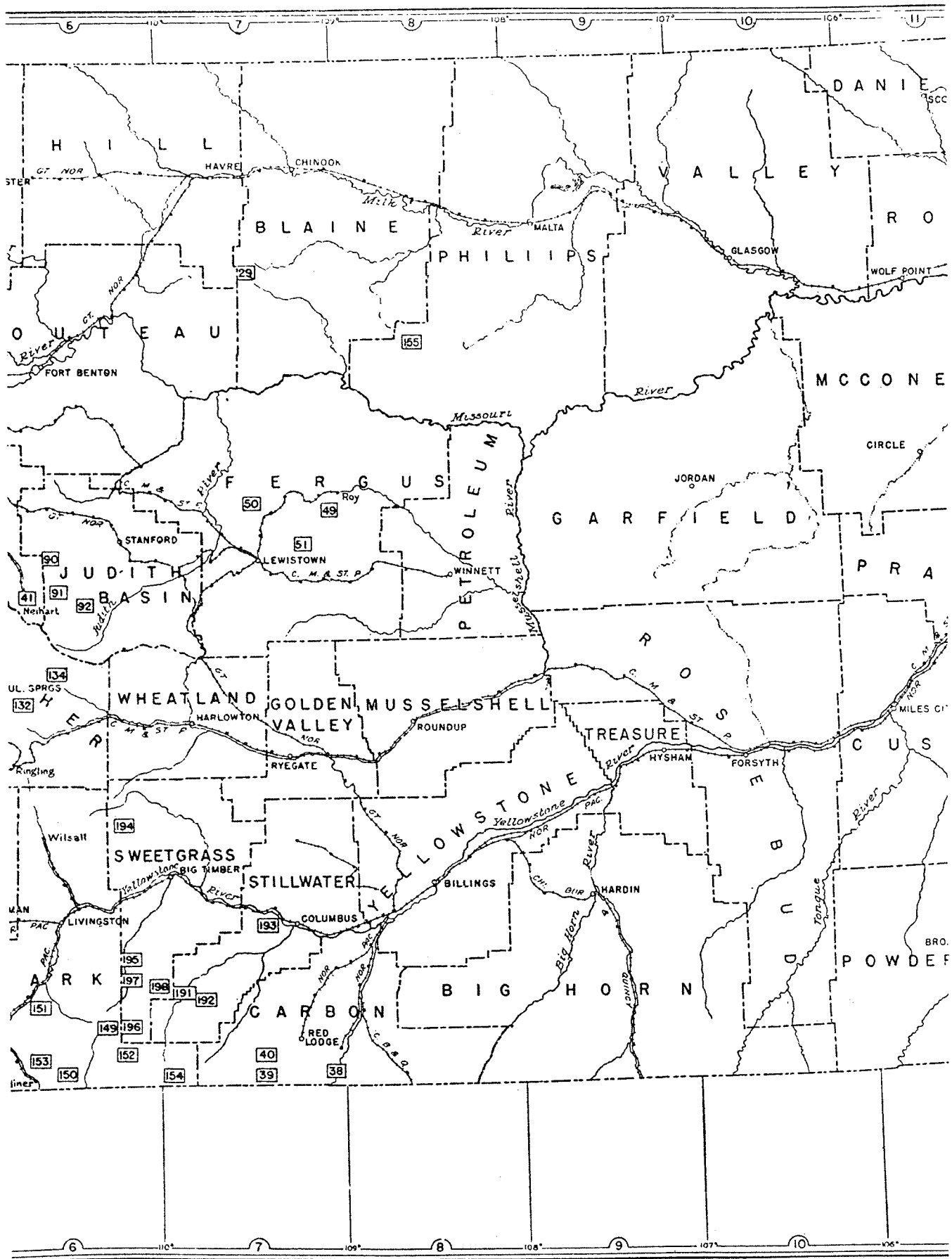
SCALE

10 0 10 20 30 40 50 MILES

1935

Compiled by Uno M. Sahinen

MAP SHOWING DISTRIBUTION OF



MINING DISTRICTS IN MONTANA

