

STATE OF MONTANA  
J. Hugo Aronson, Governor

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

DIRECTORY OF KNOWN MINING ENTERPRISES, 1959

By Frank A. Crowley  
Montana Bureau of Mines and Geology

with  
LIST OF ACTIVE COAL MINES, 1959  
By Thomas Morgan  
State Coal Mine Inspector

And Section on  
THE MINERAL INDUSTRY OF MONTANA IN 1959  
By F. B. Fulkerson and G. A. Kingston  
U. S. Department of the Interior, Bureau of Mines



MONTANA BUREAU  
*of*  
MINES AND GEOLOGY  
*Butte, Montana*



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MONTANA SCHOOL OF MINES  
Butte, Montana  
February 1960

Free from  
Montana Bureau of Mines and Geology  
Room 203-B, Main Hall  
Montana School of Mines  
Butte, Montana

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# DIRECTORY OF KNOWN MINING ENTERPRISES, 1959

Compiled by

Frank A. Crowley

## INTRODUCTION

To keep abreast of the mining activity in Montana during 1959, the Montana Bureau of Mines and Geology has once again compiled this list of known mining enterprises active during the years 1958 and 1959. Those of you who received previous listings for the years 1953 through 1957 will note a change in the arrangement of order of listings. The mines are listed alphabetically under counties and the location by section, township, range, and mining district has been given for those mines whose exact location is known to us. A map of Montana showing the different mining districts is included which will facilitate finding the area of a mine location.

Every possible effort has been made to have the information exact and complete. The inclusion of a property in the directory, however, is in no sense an endorsement of it, and responsibility for statements made rests with the person who furnished the data, and not with the Bureau of Mines and Geology. Correspondingly, omission of a property is not to be construed as a reflection on the merits of the property itself. Such omissions as occur are traceable to the failure of the last known operator to respond to repeated requests for necessary information. Nevertheless, in almost all such cases the missing data has been supplied from the most reliable sources available.

Starting with this issue of the Directory we have added a special list of companies, which are inactive, idle, or dormant. Needless to say, it would be impossible to list all such companies in Montana. Therefore, in this bulletin the list will include only those companies that have not returned our questionnaires. Hereafter, all companies inactive for three or more years will be placed on this special list.

If any of you can provide us with the necessary additional information, or note a change in status of a mine, please forward such information. We strive to keep this yearly publication as up to date as possible, but we need your help.

The abbreviations used throughout this directory are as follows:

sec. - section  
T. - township  
R. - range  
t/d - tons per day



BEAVERHEAD  
County Seat: Dillon

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p><b>BANNACK MINE</b> Operator: Spokane National Mines Inc., Field Office, Bannack, Mont. Owner: Spokane National Mines, Inc., 414 Fernwell Bldg., Spokane, Wash. Mill capacity: 100 t/d Employees: 16 Status: Producing</p>	Gold	Bannack district, NW $\frac{1}{4}$ sec. 8, T. 8 S., R. 11 W.
<p><b>BLACKSTONE MINE</b> Operator: W. H. Olson, Box 87, Melrose, Mont. Owner: Same as operator Status: Unknown</p>	Manganese oxide	Bryant district, sec. 29; T. 2 S., R. 9 W.
<p><b>BLUE ORE MINE</b> Operator: Angus A. McDonald, Philipsburg, Mont. Owner: Same as operator Status: Inactive</p>	Manganese oxide	Axes Canyon district, SW $\frac{1}{4}$ sec. 7, T. 8 S., R. 7 W.
<p><b>CALVERT (RED BUTTONS) MINE</b> Operator: Minerals Engineering Co., Blair Burwell, Pres., 30 S. Montana, Dillon, Mont. Owner: Same as operator Mill capacity: 800 t/d Employees: 25 Status: Developing</p>	Tungsten	Dickey Bridge district, sec. 12; T. 1 N., R. 12 W.
<p><b>CALVIN MINE</b> Operator: Commonwealth Lead Mining Co., 444 West Center, Provo, Utah Owner: Same as operator Status: Inactive</p>	Gold, silver, lead	Rochester district, W $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 28, T. 2 S., R. 7 W.
<p><b>CANYON CREEK PHOSPHATE MINE</b> Operator: Victor Chemical Co., Henry F. Johnson, Supt., Box 1966, Butte, Mont. Owner: Victor Chemical Co., Rothe Weigel, Pres., 155 N. Wacker Drive, Chicago, Ill. Status: Producing and developing</p>	Phosphate rock	Canyon Creek district, sec. 6, T. 2 S., R. 9 W.

BEAVERHEAD, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>CARTER CREEK MINE                      Operator: North American Util-                      ities Corp., 505 Eighth Ave.,                      SW., Calgary, Alberta, Canada                      Owner: Same as operator                      Status: Developing</p>	<p>Iron ore</p>	<p>Carter Creek unorgan-                      ized district,                      secs. 3; 9, 10,                      T. 8 S., R. 7 W.</p>
<p>CHARTER OAK MINE                      Operator: Kelly Herr                      Box 368, Dillon, Mont                      Owner: F. E. Herr,                      Box 368, Dillon, Mont                      Status: Developing</p>	<p>Gold,                      silver,                      copper,                      lead</p>	<p>Blue Wing district,                      SW<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math> sec. 4,                      T. 8 S., R. 11 W.</p>
<p>CLEVE DUMP                      Operator: L. B. Lively,                      Box 96, Melrose, Mont                      Owner: Conway Estate, c/o                      Mrs. A. French, 114 Reeder St.,                      Dillon, Mont                      Employees: 2                      Status: Producing</p>	<p>Gold,                      silver,                      silica</p>	<p>Bryant (Hecla)                      district,                      sec. 1,                      T. 3 S., R. 11 W.</p>
<p>CROWN-SMITH-DILLON MINE                      Operator: Tri-State Minerals                      Co., P. O. Box 227, Dillon, Mont.                      Owner: Clyde Smith                      Dillon, Mont.                      Status: Active</p>	<p>Talc</p>	<p>Axes Creek unorgan-                      ized district,                      sec. 23;                      T. 8 S., R. 8 W.</p>
<p>DEXTER MINE                      Operators: Henry Meine and                      Carl Lindici, Dillon, Mont.                      Owners: Same as operators                      Status: Inactive</p>	<p>Gold,                      silver,                      lead</p>	<p>Argenta district,                      sec. 15;                      T. 6 S., R. 10 W.</p>
<p>DILLON AND RAMSHORN MINE                      Operator: West Canadian Mag-                      netic ores, Ltd., 505 Eighth                      Ave., SW., Calgary, Alberta,                      Canada                      Owner: Same as operator                      Status: Developing</p>	<p>Iron ore</p>	
<p>FERDINAND MINE                      Operator: Rudy Nygren, 207 W.                      Center St., Dillon, Mont.                      Owner: Same as operator                      Status: Inactive</p>	<p>Gold, lead,                      silver,                      copper,                      zinc,</p>	<p>Argenta district,                      NW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 29,                      T. 6 S., R. 10 W.</p>

BEAVERHEAD, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<b>FISHER MINE</b>		
Operators: Gaylord Thompson and Milton Bourassa, 907 E. Bannack, Dillon, Mont. Owner: John Hand, Dillon, Mont. Status: Inactive	Gold, silver, lead	Argenta district, NW $\frac{1}{4}$ sec. 17, T. 6 S., R. 10 W.
<b>GOB MINE</b>		
Operator: Sodak Uranium and Mining Co., c/o Clyde Boyle, 60 St. Charles, Rapid City, S. Dak. Owner: State of Montana Status: Inactive	Manganese oxide	Apex unorganized district, N $\frac{1}{2}$ sec. 16, T. 5 S., R. 10 W.
<b>GOLDSMITH MINE</b>		
Operators: Edward Ledebur and Glen Shafer, 639 Kentucky, Dillon, Mont. Owner: Anaconda Mining Co., Jack Cohen, Butte, Montana Status: Inactive	Gold, lead, silver, copper, zinc	Argenta district, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 6 S., R. 10 W.
<b>GOVERNOR TILDEN MINE</b>		
Operator: Rudy Nygren, Argenta Star Route, Dillon, Mont. Owner: Anaconda Mining Co., & B. White, Estate, Santa Anita, California Status: Inactive	Gold, silver, copper, lead, zinc	Argenta district, SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 6 S., R. 10 W.
<b>IVANHOE MINE</b>		
Operator: Minerals Engineering Co., 30 South Montana St., Dillon, Mont. Owner: Carl Kennedy, Seattle, Washington Status: Inactive	Tungsten	Browns Lake district, E $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 3, T. 4 S., R. 10 W.
<b>JACKSON MINE</b>		
Operator: Noel Jackson, Jackson, Montana Owner: Same as operator Status: Developing	Silver, lead	Ajax (Miner Creek) district
<b>KEYSTONE MINE</b>		
Operator: Edward S. Lockett and son, 3002 Dixon St., Butte, Montana Owner: Same as operator Status: Inactive	Gold, silver	Dewey district, T. 1 S., R. 11 W.

BEAVERHEAD, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>LAST CHANCE MINE                      Operator: Sawyer Petroleum Co.,                      650 S. Grand Ave., Los Angeles,                      California                      Status: Developing</p>	<p>Thorium</p>	<p>Frying Pan Creek                      district,                      secs. 20, 28, 29,                      T. 10 S., R. 15 W.</p>
<p>LOG CABIN MINE                      Operator: Arthur Semsak, 221                      Leatherwood, Meaderville, Mont.                      Owner: Same as operator                      Status: Inactive</p>	<p>Gold,                      lead,                      zinc</p>	<p>Vipond district,                      sec. 3,                      T. 2 S., R. 11 W.</p>
<p>MAULDEN MINE                      Operator: Hand Mines,                      Dillon, Mont.                      Owner: Ida B. Hand, Dillon, Mont.                      Employees: 6                      Status: Producing</p>	<p>Gold,                      silver,                      copper,                      lead,                      zinc</p>	<p>Argenta district,                      NW<math>\frac{1}{4}</math>NW<math>\frac{1}{4}</math> sec. 29,                      T. 6 S., R. 10 W.</p>
<p>MOOSE HORN MINE                      Operator: Moose Horn Mining                      Co., c/o Arden Griffith,                      Franklin, Idaho                      Owner: Same as operator                      Status: Developing</p>	<p>Iron ore</p>	<p>Wisdom district,                      secs. 19, 20,                      T. 3 S., R. 17 W.</p>
<p>NEW DEPARTURE MINE                      Operator: Spokane National                      Mines, Inc. &amp; Sunset Mines,                      Inc., 414 Fernwell Building,                      Spokane 1, Washington                      Owner: Spokane National Mines                      Inc., 414 Fernwell Building,                      Spokane 1, Washington                      Employees: 30 by June 1960                      Mill Capacity: 150 t/d                      Status: Developing</p>	<p>Gold,                      silver,                      copper,                      lead,                      zinc</p>	<p>Blue Wing district,                      NW<math>\frac{1}{4}</math>NW<math>\frac{1}{4}</math> sec. 26,                      T. 7 S., R. 11 W.</p>
<p>OLD FAITHFUL DUMP                      Operators: Lloyd Wilhelm and                      Harold Braham, 939 Waukesha,                      Butte, Mont.                      Status: Developing</p>	<p>Gold,                      silver,                      lead,                      silica</p>	<p>Vipond district,                      sec. 3,                      T. 2 S., R. 11 W.</p>
<p>RUBY (CENTENNIAL) MINE                      Operator: J. R. Simplot,                      Minerals &amp; Chemical Division,                      Box 912, Pocatello, Idaho                      Owner: U. S. Government, Dept.                      of the Interior, Bureau of                      Land Management, Billings, Mont.                      Status: Inactive</p>	<p>Phosphate                      rock</p>	<p>Sec. 1,                      T. 15 S., R. 1 W.</p>

BEAVERHEAD, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
S. S. & R. MINE Operator: Peter H. Sweeney, Armstead, Mont. Owner: Same as operator Status: Inactive	Silver lead, zinc	Medicine Lodge district, secs. 1, 2, T. 13, S., R. 12 W.
YELLOW BAND MINE (SHAFFER GROUP) Operator: French Creek Mining Co., Dillon, Mont. Owners: Shaffer Brothers, Dillon, Mont. Status: Active	Gold, silver	Argenta district, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 6 S., R. 11 W.

BROADWATER COUNTY  
County Seat: Townsend

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
COPPER QUEEN MINE Operator: J. J. Rothfus, 2100 Oregon Ave., Butte, Mont. Owners: John J., Elmer, and Louisa Rothfus, Butte, Mont. Status: Developing	Gold, silver, copper	Cedar Plains (Radersburg) dist., sec. 9, T. 5 N., R. 1 W.
EAGLE DUMP MINE Operator: William Zimmerman, Townsend, Mont. Owner: Satalite Mining Co., c/o William Zimmerman, Townsend, Mont. Status: Inactive	Gold, silver, copper, lead, zinc	Backer, (Confed- erate Gulch) dist., T. 10 N., R. 2 E.
EAST PACIFIC MINE Operator: Austin Minerals, Inc. of Nevada, c/o Eugene Posner, 1044 S. Palm Ave., San Gabreil, California Owner: Montana Colsolidated Mines Status: Developing	Gold, silver, lead, zinc	Winston (Beaver Creek) district, secs. 26, 27, T. 8 N., R. 1 W.
EDNA #2 MINE Operators: Robert C. Berndt and Ray W. Reynolds, Winston, Mont. Owner: Emily Muffly Status: Inactive	Gold, copper	Beaver Creek unor- ganized district, sec. 13, T. 8 N., R. 1 W.

BROADWATER, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
ERICKSON #1, 2, 3, MINE Operator: William Zimmerman, Townsend, Mont. Owner: Same as operator Status: Producing & developing	Lead, silver, gold	Hassel district
GOLD BUG & MARY ROSE MINE Operator: Multiform Mining and Exploration Co., 1847 Prince- ton Ave., St. Paul, Minnesota Owner: Same as operator, J. E. Carpentier, Pres. Status: Developing	Gold, silver, copper, lead, zinc	Cedar Plains district, sec. 18; T. 6 N., R. 1 E.
GREEN & WADDEL PLACER Operator: Indian Creek Mining Co., Pudget Sound Bank Building, Tacoma, Wash. Owners: Green and Waddel, Townsend, Mont. Status: Producing	Gold	Indian Creek district
HYANTHA TUNNEL MINE Operators: McInnis and Ditmer, Winston, Montana Owner: Emily Muffly Status: Inactive	Gold, silver, lead, zinc	Beaver Creek, (Winston) district, NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 8 N., R. 1 W.
IRON CROSS MINE Operators: Ralls and Harris Bros., Box 144, Radersburg, Mont. Owners: Same as operators Status: Producing	Iron ore	Cedar Plains (Raders- burg) district, sec. 12; T. 5 N., R. 1 W.
KEATING DUMP MINE Operator: William Zimmerman, Winston, Montana Owner: J. E. Murray Status: Inactive	Gold, silver, zinc	Cedar Plains (Raders- burg) district, E $\frac{1}{2}$ sec. 13, T. 5 N., R. 1 W. W $\frac{1}{2}$ sec. 18, T. 5 N., R. 1 E.
MARIETTA MINE Operator: Northern Milling Co., Townsend, Montana Owners: Harry Anders, Al Dance, and Northern Milling Co., Townsend, Montana Employees: 25 Mill capacity: 200 t/d Status: Producing	Gold, silver, copper, lead, zinc	Park (Indian Creek) district, sec. 15; T. 7 N., R. 1 W.

BROADWATER, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>PALMER ENGH PLACER                      Operator: A. J. Cheff,                      10054 W. Marginal Way,                      Seattle, Washington                      Owner: Palmer Engh,                      Townsend, Montana                      Employees: 7                      Status: Producing</p>	Gold	Indian Creek district, sec. 1, T. 6 N., R. 1 W., sec. 36, T. 7 N., R. 1 W.
<p>PIONEER MINE                      Operator: Bill Lowery,                      Townsend, Montana                      Status: Inactive</p>	Gold	Hassel district, sec. 35; T. 7 N., R. 1 W.
<p>SANTA ANITA MINE                      Operator: Oscar Hoveland,                      Townsend, Mont.                      Owners: Underseth and Hoveland,                      Townsend, Mont.                      Status: Inactive</p>	Gold, silver, lead, zinc	Cedar Plains district; secs. 28, 35, T. 5 N., R. 1 W.

CARBON COUNTY  
 County Seat: Red Lodge

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>BICE MINE                      Operator: Hidden Splendor Min-                      ing Co., Box 487, Lovell, Wyo.                      Owner: Bice Mining Co., Loren                      Bice, Pres., Billings, Mont.                      Employees: 6                      Status: Developing</p>	Uranium	Pryor Mountains district, secs. 4, 7, 8, 9, T. 8 S., R. 27 E.
<p>PRYOR MOUNTAIN (DANDY) MINE                      Operator: Hidden Splendor Min-                      ing Co., A. P. Kibbe, Pres.,                      304 First Security Bldg.,                      Salt Lake City, Utah                      Owner: Same as operator                      Status: Inactive</p>	Uranium	Pryor Mountains district, sec. 7, T. 9 S., R. 27 E.
<p>SANDRA MINE                      Operator: Midland Mining Co.,                      C. M. Hauptman, Pres., 207                      Hedden Bldg., Billings, Mont.                      Owner: Same as operator                      Employees: 1 to 5                      Status: Developing</p>	Uranium	Pryor Mountains district, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 9 S., R. 27 E.

CARBON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>SWAMP FROG MINE                      Operator: Prytana Mining Co.,                      Walter Dean, Manager,                      Forsyth, Mont. or Box 861,                      Grand Junction, Colorado                      Owners: Dean, Stoick, and                      Balboa, Forsyth, Mont.                      Status: Inactive</p>	<p>Uranium</p>	<p>Pryor Mountains                      district,                      sec. 21;                      T. 9 S., R. 27 E.</p>

CASCADE COUNTY  
 County Seat: Great Falls

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>BIG BEN MINE                      Operator: American Metal                      Climax Inc., Neihart, Mont.                      Employees: 10                      Status: Developing</p>	<p>Molybdenum</p>	<p>Neihart district,                      T. 14 N., R. 8 E.</p>
<p>BOSS (ROCHESTER &amp; ALLANTUS) MINE                      Operator: Boss Mines, Inc.,                      C. Hewitt, Pres., Box 904,                      Helena, Mont.                      Owner: Neihart Cons. Silver                      Mining Co., Great Falls,                      Montana                      Status: Inactive</p>	<p>Gold,                      lead,                      zinc</p>	<p>Montana (Neihart)                      district,                      sec. 28,                      T. 14 N., R. 8 E.</p>
<p>LEXINGTON MINE                      Operator: Lexington Silver                      Lead Mining Co., 621 Columbia                      Bldg., Spokane, Wash.                      Owner: Same as operator                      Employees: 5                      Mill capacity: 125 t/d                      Status: Developing</p>	<p>Gold,                      silver,                      lead,                      zinc</p>	<p>Montana (Neihart)                      district,                      sec. 28,                      T. 14 N., R. 8 E.</p>
<p>STAR FRACTION MINE                      Operator: Lewis B. Stark,                      Neihart, Mont.                      Owner: Same as operator                      Mill capacity: 50-75 t/d                      Status: Inactive</p>	<p>Silver,                      lead,                      zinc</p>	<p>Montana (Neihart)                      district,                      secs. 29, 30,                      T. 14 N., R. 8 E.</p>



DEER LODGE COUNTY  
County Seat: Anaconda

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>BLUE EYED NELLIE MINE Operator: John Cloeter, 2000 S. Freeway, Tucson, Arizona Owner: Charles Brown, 924 Burnside, Portland, Oregon Status: Inactive</p>	<p>Silver, lead, zinc</p>	<p>Blue Eyed Nellie district, SE<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 14, T. 5 N., R. 12 W.</p>
<p>BROWNS QUARRY MINE Operator: The Anaconda Co. Butte, Mont. Status: Producing</p>	<p>Limestone</p>	<p>Sec. 23, T. 5 N., R. 12 W.</p>
<p>4-SOME MINE Operator: 4-Some Mining Co., William J. Fenner, 1613 Ogden Ave., Anaconda, Mont. Owner: Same as operator Status: Inactive</p>	<p>Tungsten</p>	<p>Olson Gulch district, sec. 15; T. 5 N., R. 12 W.</p>
<p>GOLD COIN MINE Operator: Gold Coin Mining and Milling Co., Box D, Philipsburg, Mont. Owner: Same as operator Status: Inactive</p>	<p>Gold</p>	<p>Silver Lake district, NE<math>\frac{1}{4}</math> sec. 20, T. 5 N., R. 13 W.</p>
<p>McCABE MINE Owner: Joseph McCabe Anaconda, Mont. Status: Inactive</p>	<p>Tungsten</p>	<p>Silver Lake district, sec. 2, T. 5 N., R. 13 W.</p>
<p>SILVER REEF MINE Operator: Wm. C. Montgomery, 1818 W. Park St., Anaconda, Mont., Chet Winchell, Ogden Ave., Anaconda, Mont. Raymond M. Reis, 528 W. Quartz St., Butte, Mont. Owner: Robert H. Montgomery, P. O. Box 432, Anaconda, Mont. Status: Developing</p>	<p>Gold, silver,</p>	<p>Silver Lake district, T. 5 N., R. 13 W.</p>
<p>TIP TOP MINE Operator: Tip Top Mining Co., 700 Griffith St., Las Vegas, Nevada Owner: Union Bank &amp; Trust Co., Helena, Mont. Status: Inactive</p>	<p>Gold</p>	<p>Secs. 6, 7, T. 5 N., R. 12 W.</p>

FERGUS COUNTY  
County Seat: Lewistown

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<b>BLACK BULL MINE</b> Operator: Granville S. Abbott, Giltedge, Mont. Owner: Same as operator Status: Producing and developing	Gold, silver, lead, copper, zinc	Warms Springs (Virgin Gulch) district, sec. 7, T. 16 N., R. 20 E.
<b>HANOVER MINE</b> Operator: Ideal Cement Co., 601 Denver National Bldg., Denver 2, Colorado Owner: Same as operator Status: Producing	Gypsum	Secs. 22, 27, T. 16 N., R. 17 E.
<b>IRON CHANCELLOR MINE</b> Owner: Rob Roy Mining Co., Spokane, Wash. Status: Inactive	Silver, lead, zinc	Giltedge district, T. 16 N., R. 20 E.
<b>SHOEMAKER (HEATH) MINE</b> Operator: U. S. Gypsum Co., W. E. Seeburger, Manager Heath, Montana Owner: U. S. Gypsum Co., 300 W. Adams St., Chicago, Ill. Employees: 10 Mill capacity: 400 t/d Status: Producing	Gypsum	Secs. 1, 2, T. 14 N., R. 19 E.

FLATHEAD COUNTY  
County Seat: Kalispell

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<b>FLATHEAD MINE</b> Operator: Waino Lindbom, Kalispell, Mont. Owner: The Anaconda Co., Hennessy Bldg, Butte, Mont. Employees: 4 Status: Producing & developing	Silver, lead	Hog Heaven district, sec. 17, T. 25 N., R. 23 W.
<b>O. F. MARTIN MINE</b> Operator: O. F. Martin, Box 514, Hot Springs, Mont. Owner: Northern Pacific Rail- way Co., St. Paul, Minn. Status: Developing	Gold, silver, lead, zinc	Hog Heaven district, SE $\frac{1}{4}$ sec. 20, T. 25 N., R. 23 W.

GALLATIN COUNTY  
County Seat: Bozeman

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>THUMPER LODE AND THUMPER LODE #2            Owner: Planet Exploration Corp., 12318 Metropolitan, Kew Gardens, Queens, N. Y.            Status: Unknown</p>	Mica	Sec. 30, T. 4 S., R. 5 E.
<p>TRIDENT MINE            Operator: Ideal Cement Co., Three Forks Portland Cement Division, V. T. Williams, 620 Denver National Bank Bldg., Denver, Colorado            Owner: Same as operator            Status: Producing</p>	Limestone	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 3 N., R. 2 E.

GRANITE COUNTY  
County Seat: Philipsburg

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>BI-METALLIC MINE            Operator: Trout Mining Co., Philipsburg, Montana            Owner: Contact Mining Co., 524 S. Washington St., Butte, Mont.            Status: Developing</p>	Manganese carbonate, silver, lead, zinc	Flint Creek district, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T. 7 N., R. 13 W.
<p>CHICAGO MINE            Operator: Earl Bellm, Philipsburg, Mont.            Owner: Same as operator            Status: Inactive</p>	Manganese oxide	Flint Creek district, SE $\frac{1}{4}$ sec. 18, SW $\frac{1}{4}$ sec. 19, T. 7 N., R. 13 W.
<p>CLIMAX (MARONEY) MINE            Operator: Montana Climax Corp., James R. Hunter, Pres., Box 421, Philipsburg, Mont.            Owner: James A. Poore, Jr., 1200 W. Platinum St., Butte, Montana            Employees: 5            Status: Developing</p>	Manganese oxide	Flint Creek district, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 7 N., R. 13 W.

GRANITE, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>COMBINATION MINE                      Operator: Montana Climax Corp.,                      c/o James R. Hunter, Pres.,                      Box 421, Philipsburg, Mont.                      Owner: Same as operator                      Employees: 5                      Status: Developing</p>	<p>Silver, copper</p>	<p>Flint Creek (Philips- burg) district, T. 7 N., R. 13 W.</p>
<p>DANDY MINE                      Operator: J. D. Hollowell,                      Drummond, Mont.                      Owner: Louis H. Imhof, 785 Park                      Ave., New York 21, N. Y.                      Status: Developing</p>	<p>Gold, silver, zinc</p>	<p>Garnet-Elk Creek district, secs. 1, 12, T. 12 N., R. 14. W.</p>
<p>GARRETT (MICKY) MINE                      Operator: Garrett Mining and                      Milling Co., c/o Eugene Garrett,                      Box 324, Anaconda, Mont.                      Owner: Same as operator                      Mill capacity: 15 t/d                      Status: Developing</p>	<p>Gold, bismuth, manganese</p>	<p>Red Lion district, secs. 22, 27, 28, T. 6 N., R. 13 W.</p>
<p>GYPSY QUEEN MINE                      Operator: Gypsy Queen Mining                      Co., c/o Harley L. Pitman,                      Deer Lodge, Montana                      Owner: Same as operator                      Status: Developing</p>	<p>Tungsten</p>	<p>Secs. 1, 2, 11, 12, T. 7 N., R. 13 W.</p>
<p>LITTLE EMMA MINE                      Operator: Contact Mining Co.,                      524 S. Washington, Butte, Mont.                      Owner: Same as operator                      Status: Inactive</p>	<p>Manganese oxide</p>	<p>Flint Creek district, SW<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math> sec. 19, T. 7 N., R. 13 W.</p>
<p>M &amp; T MINE                      Operator: Lindquist and Lahood,                      Box 373, Whitehall, Mont.                      Owner: Same as operator                      Status: Developing</p>		<p>Moose Lake district</p>
<p>MOUNTAIN VIEW MINE                      Operators: L. H. Page and                      R. H. Hartley, Box 273,                      Philipsburg, Mont.                      Owner: Walter Kelly,                      Philipsburg, Mont.                      Status: Inactive</p>	<p>Manganese oxide</p>	<p>T. 6 N., R. 13 W.</p>

GRANITE, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<b>MYSTERY MINE</b>		
Operator: Phil Solois, Box 523, Philipsburg, Mont. Owner: Mrs. Jennie Moore Status: Inactive	Manganese oxide	Flint Creek district, NW $\frac{1}{4}$ sec. 30. T. 7 N., R. 13 W.
<b>NON-PAREIL MINE</b>		
Operator: R. J. MacCalman, c/o Claude H. Bielenberg, Deer Lodge, Mont. Status: Inactive	Silver, lead	Boulder (South Boulder) district, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 8 N., R. 12 W.
<b>SCRATCH AWL AND SILVER PRINCE MINES</b>		
Operator: Contact Mining Co., Frank Antonioli, 524 S. Washington St., Butte, Mont. Owner: Same as operator Status: Inactive	Manganese oxide, gold, manganese carbonate, silver, lead, copper, zinc	Flint Creek district, NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 7 N., R. 13 W.
<b>SUNDAY MINE</b>		
Operator: Ronald J. MacCalman, 1010-5th St., Deer Lodge, Mont. Owners: R. W. Marshall, New York and A. V. Corry, Butte, Mont. Status: Developing	Gold	Boulder district, SW $\frac{1}{4}$ sec. 27, T. 8 N., R. 12 W.
<b>SUNSET (PLACER) MINE</b>		
Operator: Ben Walkup, Box 644, Philipsburg, Mont. Owner: Same as operator Status: Developing	Gold	Maxville district, T. 8 N., R. 12 W.
<b>TROUT ALGONQUIN MINE</b>		
Operator: Trout Mining Co., Roy McLeod, Vice-Pres. & Supt., Philipsburg, Mont Owner: Trout Mining Co., C. W. Anderson, Pres., 233 Broadway, New York 7, N. Y. Status: Producing & developing	Manganese oxide, gold, manganese carbonate silver; copper, lead, zinc	Flint Creek (Philipsburg) dist. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 7 N., R. 13 W.
<b>TRUE FISSURE, DURANGO, AND MOORLIGHT GROUP</b>		
Operator: Taylor-Knapp Co., c/o Don Johnson, Box FF, Philips- burg, Mont. Owner: Taylor-Knapp Co., Philipsburg, Mont. Employees: 33 Mill capacity: 120 t/d Status: Producing	Gold, silver, lead, zinc, manganese oxide, manganese carbonate	Flint Creek (Philipsburg) district, W $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 29, T. 7 N., R. 13 W.

JEFFERSON COUNTY  
County Seat: Boulder

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<b>AJAX PLACER MINE</b> Operator: Delmas J. Brown, 1830 Banks Ave., Butte, Mont. Owner: Same as operator Employees: 5 Mill capacity: 50 t/d Status: Producing & developing	Gold, silver, lead, copper silica	Homestake district, sec. 6, T. 3 N., R. 7 W.
<b>ALTA MINE</b> Operator: Lahey Leasing Co., 506 W. Aluminum, Butte, Mont. Owner: Alta Mines Corp., c/o Floyd Small, Helena, Mont. Status: Producing	Gold, silver, copper, lead, zinc, silica	Colorado (Corbin- Wickes) district, sec. 10, T. 7 N., R. 4 W.
<b>ARIADNE MINE</b> Owner: Joseph Gable, 556 Fifth St., Helena, Mont. Status: Inactive	Gold	Colorado (Corbin Wickes) district, sec. 4, 5, T. 7 N., R. 4 W.
<b>BALTIMORE MINE</b> Operator: Baltimore Syndicate, Ltd., c/o C. M. Wagner, Heppner, Oregon Owners: David Loughran, Port- land, Oregon, Louis Peura, Helena, Mont.; C. M. Wagner, M.D., Heppner, Oregon Status: Developing	Lead, zinc, copper	Sec. 7, T. 6 N., R. 4 W.
<b>BASIN JIB MINE</b> Operator: Basin Jib Gold Mines, Inc., 100 Adelaide St., West Toronto, Ontario, Canada Owner: Sylvanite Inc. Status: Inactive	Gold, silver, copper, lead, zinc	Basin district, sec. 18, T. 6 N., R. 5 W.
<b>BLUE BELL (MARSH) MINE</b> Operator: Ed Scheitlin, 1821 Lowell Ave., Butte, Mont. Owner: Same as operator Status: Developing	lead, copper, zinc	Pipestone district, sec. 35, T. 3 N., R. 6 W.
<b>BOULDER MINE</b> Operators: W. R. Fallis and L. F. Liske, Basin, Mont. Owner: James P. Bragg, 2327 Harrison Ave., Butte, Mont. Status: Producing	Gold, silver, zinc	Cataract district, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 6 N., R. 6 W.

JEFFERSON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>CRESCENT MINE                      Operator: Montana Gold and Silver Co., c/o Arnold Olsen, 62 W. Broadway, Butte, Mont.                      Owner: Holter Estate, Helena, Mont.                      Employees: 6                      Mill capacity: 100 t/d                      Status: Developing</p>	<p>Gold,                      silver,                      copper,                      lead,                      zinc</p>	<p>Rimini district,                      NE<math>\frac{1}{4}</math> sec. 29,                      T. 8 N., R. 5 W.</p>
<p>DAILEY (ATLAS) MINE                      Operator: Uranium Corp. of America, 525 Failin Bldg., Portland, Oregon (or Steve Giulio, Wickes, Montana)                      Owner: Daily Mines, Wickes, Mont.                      Status: Developing</p>	<p>Gold,                      silver,                      copper,                      lead,                      zinc</p>	<p>Wickes district,                      secs. 15, 16,                      T. 7 N., R. 4 W.</p>
<p>ELKHORN QUEEN MINE                      Operator: Elkhorn Queen Lead Corp., 2922 Tenth Ave. South, Great Falls, Mont.                      Owner: Same as operator                      Status: Inactive</p>	<p>Gold,                      silver,                      copper,                      lead,                      zinc</p>	<p>Elkhorn district,                      sec. 26,                      T. 6 N., R. 3 W.</p>
<p>GLOWING STAR PLACER                      Operator: John A. Galasso, Nine Mile Road, Butte, Mont.                      Owner: Delmas J. Brown, 1830 Banks Ave., Butte, Mont.                      Employees: 2                      Status: Developing</p>	<p>Gold</p>	<p>Homestake district</p>
<p>GOLDEN SUNLIGHT MINE                      Operator: American Explor. &amp; Mining Co., c/o E. A. Scholz, Russ Bldg., San Francisco, California                      Owner: A. O. Smith Corp., Milwaukee, Wisconsin                      Employees: 3                      Mill capacity: 150 t/d                      Status: Developing</p>	<p>Gold                      silver</p>	<p>Whitehall district,                      sec. 19,                      T. 2 N., R. 3 W.</p>
<p>GOLDEN THREAD MINE                      Operator: Gordon Giulio, Box 138, Boulder, Mont.                      Status: Inactive</p>	<p>Gold,                      silver,                      lead,                      zinc</p>	<p>Cataract district,                      sec. 36,                      T. 7 N., R. 5 W.</p>

JEFFERSON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
HOPE MINE Operator: Hope Mining Assn., Toivo Koivisto & James Marjama, 406 E. Broadway, Butte, Mont. Status: Inactive	Copper, silver	Cardwell (White- hall) district, secs. 1, 2, T. 1 N., R. 3 W.
KLONDYKE MINE Operator: Klondyke Gold Mining, Wade V. Lewis, Boulder, Mont. Owners: Charles & Lilah H. Schreiner, Butte, Mont. and Henry B. Sanford, Helena, Mont. Employees: 2 Status: Developing	Gold, copper	Elkhorn district, sec. 11, T. 6 N., R. 3 W.
LOEBER MINE Operator: W. Beaver, 589 N. Main St., Helena, Mont. Owner: C. E. Pew, Helena, Mont. Status: Developing	Gold, silver, copper lead, zinc	Clancy (Lump Gulch) district, sec. 15; T. 8 N., R. 5 W.
LUCKY HIT MINE Operator: G. W. Wolfe, Whitehall, Mont. Owner: Same as operator Status: Inactive	Gold, silver, lead, zinc,	Whitehall district, NW $\frac{1}{4}$ sec. 19, T. 2 N., R. 3 W.
M. & T. MINE (LINDQUIST & LAHOOD) Operator: Lester Linquist, Box 373, Whitehall, Mont. Status: Unknown	Gold, lead, copper, zinc	Whitehall district
McCLELLAN QUARRY Operator: Maronick Construction Co., East Helena, Mont. Owner: E. P. Maronick, East Helena, Mont. Employees: 5 Status: Producing	Limestone	McClellan district, sec. 7, T. 9 N., R. 3 W.
MONTANA METALS, INC. Operator: Montana Metals, Inc., c/o David E. Loughran, Vice Pres., 4044 SE Woodward Portland, Oregon Owner: Same as operator Status: Developing	Garnet, sericite	Montana City district, SW $\frac{1}{4}$ SE $\frac{1}{4}$ & SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 9 N., R. 3 W.
MONTREAL STAR MINE Operators: Lee, William, and Jack Hicks, 1034 California Ave., Butte, Mont. Owner: Godfrey Gagnier, 515 E. Third, Anaconda, Mont. Status: Developing	Gold, silver copper	Lowland district, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 4 N., R. 7 W.



JEFFERSON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
MORNING GLORY MINE Operator: J. K. Curtiss, Box 102, Basin, Mont. Owners: P. O. Dorweiller, Algona, Iowa, and J. K. Curtiss, Basin, Mont. Status: Developing	Gold, silver, lead, zinc	Cataract district, sec. 33; T. 7 N., R. 5 W.
MORNING GLORY PLACER MINE Operator: John A. Galasso, Nine Mile Road, Butte, Mont. Owner: Delmas J. Brown, 1830 Banks Ave., Butte, Mont. Employees: 2 Status: Developing	Gold	Homestake district
NELLIE GRANT MINE Operator: Central Mines Inc., c/o R. E. Doepfer, Boulder, Mont. Owner: C. E. Pew, Helena, Mont. Status: Producing	Gold, silver, copper, lead, zinc	Clancy (Lump Gulch) district, sec. 14; T. 8 N., R. 5 W.
NEW BALD EAGLE MINE Operator: William Mulcahy, Box 21, Butte, Mont. Owner: Same as operator Status: Developing	Gold, silver, copper	Big Foot district, sec. 16; T. 4 N., R. 5 W.
OBELISK MINE Operators: Joseph La Comb and James Goodrich, Boulder, Mont. Owner: E. F. Perkins, c/o John McGoff, Boulder, Mont. Status: Developing	Silver, lead, zinc	Cataract district, secs. 15, 16, T. 6 N., R. 5 W.
PRESIDENT GROUP MINE Operator: Bill Chebul, c/o Vance & Leaphart, Security Bldg., Helena, Mont. Status: Inactive	Uranium	Secs. 4, 5, T. 8 N., R. 3 W.
PRICKLY PEAR PLACER Operator: Lee and Wood, Jefferson City, Mont. Status: Producing	Gold	Sec. 7, T. 7 N., R. 3 W.

JEFFERSON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
SILVER HILL MINE Operator: Gordon Guilio, Box 356, Boulder, Mont. Status: Inactive	Gold, silver, lead, zinc	Cataract district, sec. 36, T. 7 N., R. 5 W.
SKOOKUM PLACER MINE Operator: Theodore Nyquest, Box 133, Boulder, Mont. Owner: Same as operator Status: Producing	Gold	Comet district, sec. 12, T. 5 N., R. 6 W.
SUNNYSIDE MINE Operator: Lester Lindquist, Box 373, Whitehall, Mont. Owner: Same as operator Status: Developing	Gold silver,	Cardwell district, SE $\frac{1}{4}$ sec. 13, T. 2 N., R. 4 W.
WHITE PINE MINE Operator: George Hoffman, 917 Eighth Ave., Helena, Mont. Status: Inactive	Gold, lead, silver, copper, zinc, uranium	Warm Springs district, secs. 29, 32, T. 8 N., R. 2 W.

JUDITH BASIN COUNTY  
County Seat: Stanford

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
GOLD BUG (WEATHERWAX) MINE Operator: W. Lehman, Box 780, Lewistown, Mont. Owner: Same as operator Status: Developing	Gold, silver,	Yogo district, sec. 29, T. 14 N., R. 10 E.
WILLOW CREEK MINE Operator: Young-Montana Corp., Ernest Young, Pres., 2223 First Ave., Hibbing, Minn. Owner: Same as operator Status: Producing	Iron ore	Running Wolf district, secs. 2, 4, T. 14 N., R. 10 E.
YOGO SAPPHIRE MINES Operator: Siskon Corp., H. B. Chessher, Pres., 889 Gazette Bldg., Reno, Nevada Owner: New Mine Sapphire Syndicate, Billings, Mont. Employees: 5 Mill capacity: 10 yds/d Status: Producing	Sapphires	Yogo district, secs. 19, 20, 21, 22, 23, 24, T. 13 N., R. 11 E.

LEWIS & CLARK COUNTY  
County Seat: Helena

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
AJAX MINE Operator: H. T. O'Reilly, 933 Tenth Ave., Helena, Mont. Status: Inactive	Gold, silver	Scratch Gravel district, W $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 1, T. 10 N., R. 4 W.
CROSS FIRE MINE Operators: Albert Nyland and Neil Livingston, Jr., 204 Power Bldg., Helena, Mont. Status: Inactive	Gold, silver, zinc	Scratch Gravel district
DISCOVERY & MARGURETE MINE Operators: Cyrus M. and Vance Clinger, 1510 S. Fifth St., Missoula, Mont. Owner: Missoula Lincoln Mining Co., 1510 S. Fifth St., Missoula, Mont. Status: Developing	Gold, copper, lead, zinc	Lincoln district, sec. 8, T. 14 N., R. 9 W.
DRUMLUMMON MINE Operator: Montana Rainbow Mining Co., Marysville, Mont. Owner: Drumlummon Mines, Inc. Status: Inactive	Gold, silver	Marysville district, S $\frac{1}{2}$ sec. 36, T. 12 N., R. 6 W.
EMPIRE MINE Operator: Montana Mining and Milling Co., Jack Vandenberg, Gen. Mgr., P. O. Box 601, Helena, Mont. Mill capacity: 200 t/d Status: Inactive	Gold, silver, copper, lead, zinc	Marysville district, secs. 33, 34, T. 12 N., R. 6 W.
GOLD DOLLAR MINE Operator: Jack Parks, Box 59, Lincoln, Mont. Owner: Same as operator Status: Producing & developing	Gold, silver	Poorman district, sec. 5, T. 13 N., R. 8 W.
HAPPY JACK MINE Operators: H. E. Charles and John Fletcher, 5 E. Woolman, Butte, Mont. Owner: John Fletcher, 5 E. Woolman, Butte, Mont. Status: Inactive	Gold, silver, barite	York district

LEWIS & CLARK, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>HELENA MINE                      Operator: E. J. Stevens,                      1459 Cannon St., Helena, Mont.                      Owner: Paul Smith, 26 W.                      Sixth Ave., Helena, Mont.                      Status: Inactive</p>	<p>Gold,                      silver,                      lead</p>	<p>Grass Valley                      district,                      NW<math>\frac{1}{4}</math>NW<math>\frac{1}{4}</math> sec. 16,                      T. 10 N., R. 4 W.</p>
<p>HUMDINGER MINE                      Operator: Ray W. Crumb,                      Avon, Montana                      Owner: Same as operator                      Status: Producing</p>	<p>Gold,                      silver,                      copper</p>	<p>Madison Gulch                      district, sec. 35,                      T. 13 N., R. 9 W.</p>
<p>MIKE HORSE MINE                      Operator: Norman Rogers Mining                      Co., Box 1719, Helena, Mont.                      Owner: American Smelting &amp; Re-                      fining Co., 120 Broadway,                      New York City 5, N. Y.                      Status: Developing</p>	<p>Gold,                      silver,                      copper,                      lead,                      zinc</p>	<p>Heddleston district,                      SE<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 28,                      T. 15 N., R. 6 W.</p>
<p>SILVER CRESCENT MINE                      Operator: Montana Gold and                      Silver Mining Co., William                      Hall, Pres., Box 295,                      Helena, Mont.                      Owner: Holter Estate,                      Helena, Mont.                      Employees: 5                      Mill capacity: 100 t/d                      Status: Developing</p>	<p>Gold,                      silver,                      lead,                      zinc,                      copper</p>	<p>Rimini district,                      NE<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math> sec. 29,                      SE<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 20,                      T. 8 N., R. 5 W.</p>
<p>TRANSIT MINE                      Operator: Ray Jensen,                      Box 246, Fairfield, Mont.                      Owner: H. G. Kleinschmidt,                      Box 145, Helena, Mont.                      Status: Inactive</p>	<p>Gold,                      silver,                      lead,                      zinc</p>	<p>Rimini district,                      NW<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math> sec. 8,                      T. 8 N., R. 5 W.</p>

LIBERTY COUNTY  
 County Seat: Chester

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>SWEETGRASS MINE                      Owners: V. Moulton and L. R.                      Hannah, Shelby, Mont.                      Status: Inactive</p>	<p>Copper,                      silver</p>	<p>East Butte district,                      sec. 25,                      T. 36 N., R. 4 E.</p>

LINCOLN COUNTY  
County Seat: Libby

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p><b>BIG SKY MINE</b> Operator: Blaze Echo, Box 283, Libby, Mont. Owners: Blaze Echo, Clive Roark, and Iniz Herrig, Libby, Mont. Status: Inactive</p>	<p>Tungsten lead, copper, zinc</p>	<p>Libby district, sec. 36, T. 29 N., R. 32 W.</p>
<p><b>HIGHLAND SILVER GROUP MINE</b> Operators: Wm. G. Daily and R. L. Rittenhouse, Route 3, Troy, Mont. Owners: Same as operators Employees: 3 Status: Developing</p>	<p>Gold, silver, lead</p>	<p>Sec. 36, T. 32 N., R. 35 W.</p>
<p><b>NEW MORNING GLORY MINE</b> Operator: New Morning Glory Mines, Inc., 418 Maritime Bldg., Seattle 4, Wash. Owner: Same as operator Employees: 2 Mill capacity: 40 t/d Status: Developing</p>	<p>Gold, silver, lead, zinc</p>	<p>Sylvanite district, sec. 34, T. 34 N., R. 33 W.</p>
<p><b>SNOWSHOE MINE</b> Operator: St. Paul Lead Co. &amp; Merger Mines Corp., A. I. Osburn, Pres., Kellogg, Idaho Mill capacity: 100 t/d Status: Developing</p>	<p>Gold, silver, lead, zinc</p>	<p>Libby district, SE<math>\frac{1}{4}</math>SW<math>\frac{1}{4}</math> sec. 7, T. 28 N., R. 31 W.</p>
<p><b>ST. PAUL MINE</b> Operator: St. Paul Lead Co., Kellogg, Idaho Owner: Walter Zollers, 217 W. Lincoln, Libby, Mont. Status: Developing</p>	<p>Silver, lead, zinc</p>	<p>Libby district, NE<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math> sec. 9, T. 28 N., R. 31 W.</p>
<p><b>VERMICULITE MOUNTAIN MINE</b> Operator: Zonolite Co., 135 South LaSalle St., Chicago 3, Illinois Owner: Same as operator Status: Producing</p>	<p>Vermiculite</p>	<p>Rainy Creek district, secs. 14, 15, 22, 23, T. 31 N., R. 30 W.</p>

LINCOLN, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
WEST FISHER & MILLER PLACER Operator: Oscar V. Miller, Star Route, Libby, Mont. Owner: Same as operator Employees: 2 Status: Developing	Gold	Libby district, sec. 4, T. 27 N., R. 30 W.

MADISON COUNTY  
County Seat: Virginia City

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
AMAZON MINE Operator: William Cocanauger, Twin Bridges, Mont. Owner: Scott Mallich, Dillon, Mont. Employees: 4 Status: Producing & developing	Siliceous copper	Stone Creek district, sec. 20; T. 7 S., R. 6 W.
APEX MINE Operator: American Chemet Corp., S. W. Stockdale, Secretary, East Helena, Mont. Owner: Same as operator Status: Inactive	Talc	Sweetwater district, SE $\frac{1}{4}$ sec. 1, NE $\frac{1}{4}$ sec. 12, T. 8 S., R. 7 W.
BIG BERTHA MINE Operator: Fred R. Starner, 1310 Shellings, Missoula, Mont. Owner: Same as operator Status: Developing	Gold, silver	Tidal Wave district
CLANCY MINE Operator: B. J. Rybin, Silver Star, Mont. Owner: Same as operator Employees: 3 Status: Producing & developing	Copper, gold, silver	Silver Star district, sec. 33; T. 1 S., R. 6 W.
CHEMET #1 MINE Operator: American Chemet Corp., East Helena, Mont. Owner: Same as operator Status: Inactive	Talc	Sweetwater district, NE $\frac{1}{4}$ sec. 12; NW $\frac{1}{4}$ sec. 7, T. 8 S., R. 6-7 W.

## MADISON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>COLORADO MINE  Operator: Bill Pruett,  Box 442, Whitehall, Mont.  Owners: Lloyd Thompson and  Myrtle Pruett, Whitehall, Mont.  Status: Developing</p>	<p>Gold,  silver</p>	<p>Bone Basin district,  NW<math>\frac{1}{4}</math> sec. 3,  T. 1 S., R. 4 W.</p>
<p>CORN CRACKER MINE  Operator: Ed Reindl, 1246  W. Silver St., Butte, Mont.  Status: Developing</p>	<p>Gold</p>	<p>Tidal Wave district,  sec. 34;  T. 3 S., R. 5 W.</p>
<p>EASTON PACIFIC MINE  Operator: Easton Pacific &amp;  Riverside Mining Corp.,  Virginia City, Mont.  Status: Developing</p>	<p>Gold</p>	<p>Virginia City  district  T. 7 S., R. 3 W.</p>
<p>EL FLEEDA MINE  Operators: R. B. Farnsworth &amp;  Lloyd Brooks, 14 N. Tracy St.,  Bozeman, Mont.  Owner: Union Bank &amp; Trust Co.,  c/o Howard Schuyler, No. 4  Washington Place, Helena, Mont.  Status: Developing</p>	<p>Gold,  silver,  copper</p>	<p>Fairweather  (Virginia City)  district,  sec. 26,  T. 6 S., R. 3 W.</p>
<p>FAIRVIEW MINE  Operator: Harry E. Stine,  Sheridan, Mont.  Owner: Mrs. Hall,  Whitehall, Mont.  Status: Inactive</p>	<p>Gold,  silver,  zinc</p>	<p>Sheridan district,  secs. 31, 32,  T. 3 S., R. 4 W.</p>
<p>FLORENCE (COOK) MINE  Operator: Mike Dilulo,  Whitehall, Mont.  Owner: N. P. Railway Co.,  St. Paul, Minnesota  Status: Developing</p>	<p>Copper,  lead,  silver,  zinc, gold,  chromium,  iron ore</p>	<p>Bone Basin district,  sec. 9,  T. 1 S., R. 4 W.</p>
<p>GOLD PLATE MINE  Owner: L. L. Locke,  Norris, Mont.  Status: Inactive</p>	<p>Gold,  silver</p>	<p>Cherry Creek,  district,  secs. 25, 30, 31,  T. 2 S., R. 2 E.</p>

## MADISON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
GREEN CAMPBELL MINE Operators: W. C. Geibel & J. H. Patterson, Silver Star, Mont. Owners: Same as operators Status: Inactive	Custom milling at mill	Silver Star district, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 1 S., R. 6 W.
HIGH RIDGE MINE Operator: Fred R. Starner, 1310 Shillings, Missoula, Mont. Owner: Lester Taylor, Twin Bridges, Mont. Status: Developing	Gold, silver, copper, lead	Tidal Wave district, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, T. 3 S., R. 5 W.
HIGH UP (OXIDENTAL) MINE Operator: Hi Up Mining Co., Sheridan, Mont. and Los Angeles, California Owner: Elling Estate, 1612 Alameda Ave., Alameda, California Status: Developing	Gold, copper, silver, lead, zinc	Sheridan district, sec. 35; 36, T. 3 S., R. 4 W.
KEYSTONE MINE Operator: Tri-State Mineral Co., 2001 Lincoln St., Ogden, Utah Status: Producing	Talc	Blacktail district, N $\frac{1}{2}$ sec. 2, T. 8 S., R. 7 W.
LEODORA MINE Operator: Carl T. Carlson, Twin Bridges, Mont. Owner: Same as operator Status: Inactive	Gold, silver, lead	Rochester district, sec. 4, T. 3 S., R. 5 W.
LOST LODE MINES Operator: John T. Macale, General Delivery, Virginia City, Mont. Owner: Joseph Lopez, Alder, Mont. Status: Developing	Manganese oxide	Davey Gulch district, SE $\frac{1}{4}$ sec. 3, T. 7 S., R. 4 W.
MISSOURI - McKEE MINE Operator: H. Denny, Sheridan, Montana Owner: Same as operator Employees: 3 Status: Developing	Gold, silver	Washington (Meadow Creek) district, N $\frac{1}{2}$ sec. 30, T. 4 S., R. 2 W.



MADISON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
NICHOLSON MINE Operator: Lyle Nichols, Cardwell, Mont. Owner: Same as operator Employees: 2 Status: Producing	Gold, silver	East Fork of South Boulder
OLD JOE MINE Operator: Fred D. Box, Pony, Mont. Owner: Same as operator Status: Inactive	Gold, silver, lead	Pony (South Boulder) district, T. 2 S., R. 2 W.
PAULINE MINE Operator: E. W. Greenwood, Billings, Mont. Status: Inactive	Gold, silver	Virginia City district
RAMSHORN MINE Operator: F & S Mining Co., Butte, Mont. Owners: W. K. Bray, Chester Stine, and Lloyd H. Miller, Sheridan, Mont. Status: Developing	Iron ore	Sheridan district, sec. 1, T. 5 S., R. 4 W.
RED PINE MINE Operator: Ruby Valley Develop- ment Co., 14503 Washington Ave., Tacoma, Wash. Owner: Same as operator Employees: 3 Status: Developing	Gold, silver	Sheridan district, sec. 5, T. 4 S., R. 4 W.
RUBY MINE Operator: American Chemet Corp., East Helena, Mont. Owner: Same as operator Status: Producing & developing	Talc	Willow Creek district, secs. 20, 29, T. 8 S., R. 3 W.
SAMPSON MINE Operator: Alder Gulch Mining Co., Virginia City, Mont. Status: Developing	Gold, silver, lead	Sec. 29, T. 6 S., R. 3 W.
SHAMROCK MINE Operator: Yellowstone Uranium Co., Hardin, Mont. Owner: A. A. Moser, Box 516, Hardin, Mont. Status: Inactive	Copper, silver, gold	Silver Star district, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 1 S., R. 6 W.

## MADISON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<b>SHORT SHIFT MINE</b> Operator: W. O. Larsen, Twin Bridges, Mont. Owner: Same as operator Mill capacity: 30 t/d Status: Producing	Gold, silver	Jack Rabbit district
<b>SILVER BULLION MINE</b> Operator: Horse Creek Develop- ment Group, 1327 W. Granite St., Butte, Mont. Owner: Mrs. Reba Storer, 1611 Sixth St., Walkerville, Mont. Status: Developing	Gold	Horse Creek district, secs. 27, 28, T. 4 S., R. 4 W.
<b>STRAWBERRY MINE</b> Operator: Pony Tungsten Enter- prises, c/o Fred Box, Pony, Mont. Owner: Elling Estate, Alameda, California Status: Developing	Tungsten, gold, silver	Mineral Hill district, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 2 S., R. 3 W.
<b>STRAWN MINE</b> Operator: William Cocanaugher, Twin Bridges, Mont. Owner: Julian Strawn, Twin Bridges, Mont. Status: Inactive	Gold, silver, antimony	Beal Canyon district
<b>TREASURE STATE MINE</b> Operator: Tri-State Mineral Co., Dillon, Mont. Owner: Same as operator Status: Unknown	Talc	Unorganized, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 7 S., R. 6 W.
<b>WEST MAYFLOWER MINE</b> Operator: Frank Antonioli, 505 S. Clark St., Butte, Mont. Owner: The Anaconda Co., Butte, Mont. Status: Producing	Gold, silver	Cedar Hollow district, center sec. 32, T. 1 N., R. 3 W.
<b>WETMORE MINE</b> Operator: LaRue-Axtell, Calway, Nebraska Owners: John Stephenson, Lima, Mont. and Wetmore Brothers, Monida, Mont. Status: Inactive	Pumice	Secs. 7, 18, T. 15 S., R. 4 W.

MADISON, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>YELLOWSTONE MINE                      Operator: Sierra Talc Co.,                      E. W. Stevens, Supt., 1608                      Huntington Drive, South                      Pasadena, California                      Owner: Same as operator                      Employees: Summer, 12                      Winter, 3                      Status: Producing</p>	Talc	Johnny Gulch district, sec. 4, T. 9 S., R. 1 W.

MEAGHER COUNTY  
 County Seat: White Sulphur Springs

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>COPPER DUKE MINE                      Operator: Ben Rux,                      Martinsdale, Mont.                      Owner: N. Hardman,                      Glendale, California                      Status: Inactive</p>	Gold, copper	Copperopolis district, SW $\frac{1}{4}$ sec. 29, T. 10 N., R. 9 E.
<p>CUMBERLAND MINE                      Operator: H. O. Co. &amp; HOCO Inc.,                      Lennep, Mont.                      Owner: Russell and Clara Manger,                      White Sulphur Springs, Mont.                      Employees: 3 to 10                      Status: Producing &amp; developing</p>	Gold, copper	Castle Mountain district
<p>EXCHANGE PLACER MINE                      Operator: W. G. Walsh,                      White Sulphur Springs, Mont.                      Owner: Same as operator                      Status: Inactive</p>	Gold	Thomas Creek district, sec. 36, T. 11 N., R. 3 E.
<p>LAST CHANCE PLACER MINE                      Operator: Mrs. Valentine Wood,                      White Sulphur Springs, Mont.                      Owner: Same as operator                      Status: Developing</p>	Gold	Beaver district
<p>MAXINE MINE                      Operator: John R. Knight, Box                      236, White Sulphur Springs, Mont.                      Owner: Same as operator                      Status: Developing</p>	Manganese oxide	Maxine district, sec. 21, T. 12 N., R. 4 E.

MEAGHER, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
YELLOWSTONE MINE Operator: Hamilton Mines, Inc. Lennep, Mont. Owner: Same as operator Status: Developing	Lead, silver	Castle Mountain district, sec. 11; T. 8 N., R. 9 E.

MINERAL COUNTY  
County Seat: Superior

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
BOULDER GOLD PLACER MINE Operators: J. D. and Theresia Kiesling, Rivulet Star Route, Alberton, Mont. Owners: Same as operators Employees: 1 Status: Developing	Gold	Quartz Creek district; T. 19 N., R. 30 W.
GILDERSLEEVE (BONANZA GROUP) MINE Operator: George Gildersleeve, Box 565, Superior, Mont. Owner: Same as operator Status: Developing	Gold, silver, copper, lead, barite	Cedar Creek district, sec. 17, T. 15 N., R. 26 W.
HIGHBAR PLACER MINE Operator: Carl Westfall, Box 434, Superior, Mont. Owner: Same as operator Status: Inactive	Gold	Meadow Creek district
NANCY LEE MINE Operator: Nancy Lee Mines, Inc., 410 Main St., Kellogg, Idaho Mill Capacity: 100 t/d Status: Developing	Silver, copper, lead, zinc	Keystone district, T. 17 N., R. 27 W.
STEMWINDER PLACER MINE Operator: George M. Gildersleeve, Box 565, Superior, Mont. Owner: Same as operator Status: Developing	Gold	Cedar Creek (Trout Creek) district, sec. 17, T. 15 N., R. 26 W.
TARBOX & MEADOW MOUNTAIN MINES Operator: Mineral King Mining Co., c/o C. F. Buls, 110 Van Buren St., Missoula, Mont. Owner: Same as operator Status: Developing	Gold, copper, silver	Saltese-St. Regis district, sec. 36, T. 20 N., R. 31 W.

MISSOULA COUNTY  
County Seat: Missoula

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>BLACKTAIL MINE Operators: E. D. Lucier and Pioneer Torpin, Box 66, Clinton, Mont. Status: Inactive</p>	Silver, lead	Cramer Creek (Copper Cliff) district, sec. 30, T. 12 N., R. 15 W.
<p>COLOMA MINE Operator: National Lead Co., Bariod Div.; H. H. Heath, Comptroller, 2404 Danville, Houston, Texas Status: Inactive</p>	Barite	Coloma district, sec. 32, T. 13 N., R. 14 W.
<p>CRYSTAL SPRINGS MINE Operator: A. W. Pflug, Bonner, Mont. Owner: S. P. Wilson, Deer Lodge, Mont. Status: Developing</p>	Gold, silver	Coloma district, sec. 32, T. 13 N., R. 14 W.
<p>EILEEN MARCIA PLACER MINE Operators: Mickey E. and Earl A. Dotson, 2837 Hermosa Ave., Hermosa Beach, Calif. Owners: Same as operators Status: Developing</p>	Gold	Nine Mile district, sec. 2, T. 16 N., R. 23 W.
<p>ELK CREEK BARITE MINE Operator: Bariod Division National Lead Co., Box 392, Missoula, Mont. Owner: Same as operator Box 1675, Houston, Texas Employees: 7 Mill capacity: 8 t/hr. Status: Producing</p>	Barite	Elk Creek district, sec. 15, T. 13 N., R. 14 W.
<p>HIDDEN TREASURE MINE Operators: Hera Exploration Co., &amp; Clinton Mining &amp; Milling Co., Box 40, Missoula, Mont. Owners: Same as operators Employees: 6 Mill capacity: 50 t/d Status: Developing</p>	Copper, lead, silver, gold	Clinton (Wallace Creek) district, S $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 19, T. 12 N., R. 16 W.
<p>LA CHAMBRE PLACER MINE Operator: J. T. LaChambre, Huson, Mont. Owner: Same as operator Status: Developing</p>	Gold, silver,	Nine Mile district, sec. 22, T. 17 N., R. 24 W.

MISSOULA, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
MONGAR MINE Operator: George Mongar, Box 31, Drummond, Mont. Owner: Same as operator Status: Inactive	Silver, copper, lead	Clinton district, sec. 11, T. 12 N., R. 16 W.
NINE MILE MINE Operators: William Lamon, Metaline, Wash., and Bud Allen, Huson, Mont. Owners: Same as operators Status: Developing	Gold	Nine Mile district, sec. 18, T. 17 N., R. 24 W.
TWIN CREEKS PLACER MINE Operator: Victor Demin, Route 4, Missoula, Mont. Status: Inactive	Gold	Nine Mile district, sec. 26, T. 17 N., R. 24 W.

PARK COUNTY

County Seat: Livingston

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
MOONLIGHT MINE Operator: Alder Gulch Mining & Development Co., Virginia City, Mont. Status: Developing	Gold, copper, silver	Gardiner district
SIN NOMBRE MINE Operators: T. J. Hallin and Donald Cameron, Jr., Box 314, Gardiner, Mont. Owners: Same as operators Status: Developing	Gold, tungsten	Crevasse district, sec. 22; T. 9 S., R. 9 E.

PHILLIPS COUNTY  
County Seat: Malta

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
HAWKEYE MINE Operator: Northern Mining & Milling Co., Paul I. Raber, Pres., Zortman, Mont. Owner: Same as operator Mill capacity: 100 t/d Status: Developing	Gold, silver	Little Rockies district, sec. 7, T. 25 N., R. 25 E.

PHILLIPS, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
LITTLE BEN MINE (GOLD BUG) Operator: Little Rockies Mining Co., Cecil Flinders, Pres., Lewistown, Mont. Owner: Same as operator Mill capacity: 50 t/d Status: Inactive	Gold, silver	Little Rockies district, sec. 15, T. 25 N., R. 24 E.
RUBY GULCH MINE Owner: Gold Reserve Mining Co., Don R. Bennett, Treasurer, Box 541, Bozeman, Mont. Status: Unknown	Gold, silver, lead, copper	Little Rockies district, sec. 17, T. 25 N., R. 25 E.

POWELL COUNTY  
County Seat: Deer Lodge

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
ANDERSON MINE Operator: Montana Phosphate Products Co., Garrison, Mont. Owner: Same as operator Employees: 160 Status: Producing	Phosphate rock	Garrison district, sec. 3, T. 10 N., R. 10 W.
BROCK MINE Operator: Montana Phosphate Products Co., Garrison, Mont. Owner: Same as operator Employees: 30 Status: Developing	Phosphate rock	Garrison district, sec. 21, T. 10 N., R. 10 W.
CHARTER OAK MINE Operator: Charter Oak Mining Co., c/o J. T. Bonner, Box 566, Elliston, Mont. Owner: John F. Hopkins, 401 N. Montana Ave., Helena, Mont. Mill capacity: 50 t/d Status: Developing	Gold, silver, lead, zinc	Nigger Hill district, NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36, T. 9 N., R. 7 W.
ELLISTON QUARRY Operator: Elliston Lime Co., 303 N. Ewing St., Helena, Mont. Owner: Same as operator Employees: 16 Mill capacity: 240 t/d Status: Producing	Limestone	Nigger Hill district, sec. 5, 6, T. 9 N., R. 6 W.

POWELL, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<b>GOLDEN ANCHOR MINE (BIG DICK-BLACKJACK)</b>		
Operator: Golden Anchor Mining & Milling Co., Elliston, Mont. Owner: Same as operator Employees: 2 Status: Inactive	Gold, silver, lead	Nigger Hill district, sec. 6, T. 8 N., R. 6 W.
<b>GRAVELEY MINE</b>		
Operator: Montana Phosphate Products Co., Garrison, Mont. Owner: Same as operator Status: Inactive	Phosphate rock	Garrison district, SW $\frac{1}{4}$ sec. 2, T. 10 N., R. 9 W.
<b>HARD ROCK MINE AND PLACER MINE</b>		
Operators: Hopkins Mines, Inc. and Western Mines Co., Pat T. Whalen, Pres. & Mgr., Helmsville, Mont. Owners: Same as operators Status: Developing	Placer gold	Ogden Mountain district, secs. 15, 16, 21, 22, T. 13 N., R. 10 W.
<b>HIDDEN HAND MINE</b>		
Operator: Howard C. Banks, Box 514, Deer Lodge, Mont. Owner: Same as operator Status: Developing	Gold, silver, lead, zinc	Zosell (Emery) district, NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 7 N., R. 8 W.
<b>INDEPENDENCE MINE</b>		
Operator: A. L. Rankin, 214 Hedden Bldg., Billings, Mont. Owner: Same as operator Status: Inactive	Gold, silver	Upper Pikes Peak (Gold Creek) district, secs. 17, 18, T. 8 N., R. 11 W.
<b>JACK PINE (TROUT CREEK) MINE</b>		
Operator: The Bunker Hill Mining Co., Kellogg, Idaho Owner: Russell Luke Butte, Mont. Status: Developing	Phosphate rock	Elliston district, SW $\frac{1}{4}$ sec. 35, T. 11 N., R. 7 W.
<b>JULIA (COPPER KING OR SURE THING) MINE</b>		
Operator: Elliston Consolidated Mining Co., Elliston, Mont. Owner: Same as operator Status: Inactive	Gold, silver, lead, zinc, copper	Elliston district, SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 8 N., R. 6 W.
<b>LUKE MINE</b>		
Operator: Montana Phosphate Products Co., F. E. Burnet, Gen. Mgr., Garrison, Mont. Owner: Same as operator Employees: 50 Status: Producing	Phosphate rock	Garrison district, sec. 15, T. 10 N., R. 9 W.



POWELL, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>MONARCH MINE                      Operator: Monarch Minerals                      Inc., Helena, Mont.                      Owner: Monarch Minerals Inc.,                      D. L. Casey Jones, Box 33,                      Helena, Mont.                      Employees: 3 - 5                      Status: Developing</p>	<p>Gold,                      silver,                      copper,                      lead</p>	<p>Ontario district,                      secs. 30, 31,                      T. 8 N., R. 6 W.</p>
<p>NEGROS MINE                      Operator: John F. Hopkins,                      401 N. Montana Ave.,                      Helena, Mont.                      Owner: Fred W. Hopkins,                      Box 375, Helena, Mont.                      Status: Developing</p>	<p>Gold,                      silver,                      lead</p>	<p>Nigger Hill                      district,                      SE<math>\frac{1}{4}</math>SW<math>\frac{1}{4}</math> sec. 36,                      T. 9 N., R. 7 W.</p>
<p>NORA MINE                      Operator: Henry Lauri,                      Elliston, Mont.                      Owner: Same as operator                      Status: Inactive</p>	<p>Gold,                      silver,                      lead</p>	<p>Nigger Hill                      district</p>
<p>OLD SHOE #1 PLACER MINE                      Operator: Arthur H. Roat,                      Polson, Montana                      Owner: Same as operator                      Status: Developing</p>	<p>Gold</p>	<p>Finn district, 1                      mile north on North                      Fork of Washington                      Gulch</p>
<p>RELYEA MINE                      Operator: George Relyea,                      Box 85, Garrison, Mont.                      Owner: Same as operator                      Employees: 40                      Mill capacity: 300 t/d                      Status: Producing &amp; developing</p>	<p>Phosphate                      rock</p>	<p>Garrison (Brock                      Creek) district,                      S<math>\frac{1}{2}</math> sec. 12,                      T. 10 N., R. 10 W.</p>
<p>RESERVOIR AND OPHIR PATENTS                      Operator: Francis Slaughtner,                      Deer Lodge, Mont.                      Owner: Cliff Gravely,                      Avon, Mont.                      Status: Producing</p>	<p>Gold</p>	<p>Ophir district,                      sec. 25,                      T. 11 N., R. 8 W.</p>
<p>ROGERS HOMESTEAD PLACER MINE                      Operator: Montana Gold &amp;                      Chemical Co., 325 Second Ave.,                      Edgemont, South Dakota                      Owner: Same as operator                      Status: Inactive</p>	<p>Gold,                      silver</p>	<p>Pioneer district</p>

POWELL, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>ROYAL MINE                      Operator: R. M. Bielenberg,                      801 Milwaukee Ave.,                      Deer Lodge, Mont.                      Status: Inactive</p>	<p>Gold,                      silver</p>	<p>Big Blackfoot                      district</p>
<p>THIRD TERM MINE                      Operator: Northwestern Mining                      &amp; Exploration Co., 5 - 136th                      St., SW., Seattle 66, Wash.                      Owner: Elmer Lince,                      Elliston, Mont.                      Status: Developing</p>	<p>Gold,                      silver,                      copper,                      lead,</p>	<p>Nigger Hill district,                      NE<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 28,                      T. 9 N., R. 6 W.</p>
<p>TREASURE MOUNTAIN MINE                      Operator: Golden Anchor Mining                      &amp; Milling Co., Box 535,                      Elliston, Mont.                      Owner: Same as operator                      Employees: 2                      Status: Inactive</p>	<p>Gold,                      silver,                      copper,                      lead,                      zinc,                      manganese</p>	<p>Nigger Hill district,                      T. 8 N., R. 6-7 W.</p>

RAVALLI COUNTY  
 County Seat: Hamilton

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>CRYSTAL MOUNTAIN MINE                      Operators. Cummings and Roberts,                      739 North Highland Ave., Los                      Angeles, California,                      John Tabor, General Manager                      Owners: A. E. Cumley, L. I.                      Thompson, R. D. Flightner,                      Darby, Mont.                      Status: Producing</p>	<p>Fluorite</p>	<p>Crystal Mountain                      district,                      SW<math>\frac{1}{4}</math> sec. 18,                      T. 3 N., R. 18 W.</p>
<p>CURLEW MINE                      Operator: Curlew Mining &amp;                      Development Co., c/o Harlan                      McFadgen, Box 248,                      Stevensville, Mont.                      Owner: Norman Holter,                      Curlew, Mont.                      Status: Producing &amp; developing</p>	<p>Gold,                      lead,                      copper,                      zinc</p>	<p>Curlew district,                      sec. 13,                      T. 8 N., R. 21 W.</p>

RAVALLI, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>DARKSTAR MINE                      Operator: Continental Rare Metals Co., Darby, Mont.                      Owner: William Van Metre and others, Butte, Mont.                      Status: Unknown</p>	<p>Columbite,                      rare earth</p>	<p>Mineral Point district,                      secs. 1, 3, 4,                      T. 4 S., R. 22 W.</p>
<p>LARRIGON MINE                      Operator: G. W. Berggeren,                      404 North Second St.,                      Hamilton, Mont.                      Owner: Same as operator                      Status: Developing</p>	<p>Gold</p>	<p>Hughes Creek district,                      sec. 34,                      T. 2 S., R. 21 W.</p>
<p>SMITH MINE                      Operator: Curlew Mining &amp; Development Co., c/o Harlan McFadgen, Box 248, Stevensville, Mont.                      Owner: John Smith,                      Helena, Mont.                      Status: Inactive</p>	<p>Gold,                      lead,                      copper,                      zinc</p>	<p>Curlew district,                      T. 8 N., R. 21 W.</p>
<p>WOODS CREEK IRON MINE                      Operator: Shoshone Ore Co.                      Owners: Lee and Ernest Shook,                      Alta Route, Darby, Mont.                      Employees: 12                      Status: Developing</p>	<p>Iron ore</p>	<p>Mineral Point district,                      secs. 19, 20,                      T. 3 S., R. 22 W.</p>

SANDERS COUNTY

County Seat: Thompson Falls

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>COEUR D' ALENE STAR MINE                      Operator: Nevada Rawhide Mining Co., c/o Clarence Davis, Pres., Cheney, Washington                      Owner: Same as operator                      Status: Developing</p>	<p>Lead,                      silver</p>	<p>12 miles east of Mullen, Idaho</p>
<p>JACK WAITE MINE                      Operator: American Smelting &amp; Refining Co., C. H. Blackwell, Supt., Wallace, Idaho                      Owner: Jack Waite Mining Co.,                      170 Broadway, New York 38, N. Y.                      Employees: 23                      Mill capacity: 300 t/d                      Status: Producing</p>	<p>Gold,                      silver,                      copper,                      lead,                      zinc.</p>	<p>Eagle (White Plains) district,                      W<math>\frac{1}{2}</math> sec. 17,                      T. 22 N., R. 32 W.</p>

SANDERS, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
MONTANA STANDARD MINE		
Operator: Montana Standard Mining Co., Ltd., Loy L. Vose, Pres., 406 First St., Wallace, Idaho Owner: Same as operator Status: Developing	Gold, silver, copper, lead	Prospect Creek (Burns) district, NE $\frac{1}{4}$ sec. 35, T. 21 N., R. 31 W.
SILVER BOW COUNTY County Seat: Butte		
<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
ALICE PIT		
Operator: The Anaconda Co., Hennessy Bldg., Butte, Mont. Owner: Same as operator Status: Producing	Gold, silver, copper	Summit Valley (Butte) district, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 3 N., R. 8 W.
ANSELMO MINE		
Operator: The Anaconda Co., Hennessy Bldg., Butte, Mont. Owner: Same as operator Status: Producing	Silver, lead, zinc, copper	Summit Valley (Butte) district, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 3 N., R. 8 W.
BADGER MINE		
Operator: The Anaconda Co., Hennessy Bldg., Butte, Mont. Owner: Same as operator Status: Developing	copper, zinc, gold	Summit Valley (Butte) district, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 3 N., R. 7 W.
BERKELEY PIT		
Operator: The Anaconda Co., Hennessy Bldg., Butte, Mont. Owner: Same as operator Status: Producing	Gold, silver, copper	Summit Valley (Butte) district, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 3 N., R. 7 W.
BLUE BIRD MINE		
Operator: William Mulcahy, P. O. Box 21, Butte, Mont. Owner: Bluebird Mining Co., P. L. MacDonald, Hennessy Bldg., Butte, Mont. Status: Inactive	Manganese carbonate	Summit Valley (Butte) district, NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 3 N., R. 8 W.
BRILLIANT MINE		
Operator: Irene Thomas, 2600 Elizabeth Warren Ave., Butte Owner: The Anaconda Co., Hennessy Bldg., Butte, Mont. Status: Inactive	Manganese oxide	Summit Valley (Butte) district, S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 10, T. 3 N., R. 8 W.

SILVER BOW, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>BURLINGTON MINE                      Operator: Peter Antonioli, Jr.,                      1001 W. Gold St., Butte, Mont.                      Owner: The Anaconda Co.,                      Hennessy Bldg., Butte, Mont.                      Status: Inactive</p>	<p>Manganese                      carbonate</p>	<p>Summit Valley                      (Butte) district,                      SW<math>\frac{1}{4}</math>NW<math>\frac{1}{4}</math> sec. 15,                      T. 3 N., R. 8 W.</p>
<p>EMMA MINE                      Operator: The Anaconda Co.,                      Hennessy Bldg., Butte, Mont.                      Owner: Same as operator                      Status: Inactive</p>	<p>Manganese                      carbonate,                      manganese                      oxide,                      zinc</p>	<p>Summit Valley                      (Butte) district,                      NW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 13,                      T. 3 N., R. 8 W.</p>
<p>FREDONIA MINE                      Operator: Glen Thomas, Box 272,                      2600 Elizabeth Warren Ave.,                      Butte, Mont.                      Owner: The Anaconda Co.,                      Hennessy Bldg., Butte, Mont.                      Status: Inactive</p>	<p>Manganese                      oxide</p>	<p>Summit Valley                      (Butte) district,                      S<math>\frac{1}{2}</math>NW<math>\frac{1}{4}</math> sec. 15,                      T. 3 N., R. 8 W.</p>
<p>GARIBALDI MINE                      Operator: Sam Varelia, 521                      Shields Ave., Butte, Mont.                      Owners: John Curtiss, Butte,                      Mont. and The Anaconda Co.,                      Hennessy Bldg., Butte, Mont.                      Status: Inactive</p>	<p>Manganese                      oxide</p>	<p>Summit Valley                      (Butte) district,                      NW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 15,                      T. 3 N., R. 8 W.</p>
<p>GOOD LUCK MINE                      Operator: George Mongar,                      Butte, Mont.                      Owner: David Knoyle, 800                      Edith St., Missoula, Mont.                      Status: Inactive</p>	<p>Gold,                      silver</p>	<p>Summit Valley                      (Butte) district,                      sec. 25,                      T. 2 N., R. 8 W.</p>
<p>INDEPENDENCE MINE                      Owner: The Anaconda Co.,                      Hennessy Bldg., Butte, Mont.                      Status: Inactive</p>	<p>Manganese                      oxide</p>	<p>Summit Valley                      (Butte) district,                      NW<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math> sec. 16,                      T. 3 N., R. 7 W.</p>
<p>JANE MINING PLACER                      Operator: David O. Taggart,                      Box 1017, Butte, Mont.                      Owners: Bill Franks, George                      Richardson, and Jed Hoopes,                      Box 1017, Butte, Mont.                      Status: Inactive</p>	<p>Gold</p>	<p>Highland district,                      sec. 32;                      T. 1 N., R. 7 W.</p>

## SILVER BOW, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>JEWEL MINE  Operator: A. C. Fisher, 1520  Phillips Ave., Butte, Mont.  Owners: Dale F. Galles and  Ben Harwood, Billings, Mont.  Mill capacity: 20 t/d  Status: Inactive</p>	<p>Gold,  silver</p>	<p>Grove Creek district,  sec. 22;  T. 3 N., R. 8 W.</p>
<p>KELLEY MINE  Operator: The Anaconda Co.,  Hennessy Bldg., Butte, Mont.  Owner: Same as operator  Status: Producing</p>	<p>Gold,  silver,  copper</p>	<p>Summit Valley  (Butte) district,  SW<math>\frac{1}{4}</math>SW<math>\frac{1}{4}</math> sec. 7,  T. 3 N., R. 7 W.</p>
<p>LEONARD MINE  Operator: The Anaconda Co.,  Hennessy Bldg., Butte, Mont.  Owner: Same as operator  Status: Inactive</p>	<p>Gold,  silver,  copper</p>	<p>Summit Valley  (Butte) district,  Center SW<math>\frac{1}{4}</math> sec. 8,  T. 3 N., R. 7 W.</p>
<p>LEXINGTON MINE  Operator: The Anaconda Co.,  Hennessy Bldg., Butte, Mont.  Owner: Same as operator  Status: Inactive</p>	<p>Silver,  copper,  lead,  zinc</p>	<p>Summit Valley  (Butte) district,  Center NE<math>\frac{1}{4}</math> sec. 12,  T. 3 N., R. 8 W.</p>
<p>LITTLE ANNIE MINE  Operator: William J. Tamietti,  303 W. Daly, Walkerville, Mont.  Owner: The Anaconda Co.,  Hennessy Bldg., Butte, Mont.  Status: Inactive</p>	<p>Manganese  oxide</p>	<p>Summit Valley  (Butte) district,  NW<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math> sec. 11,  T. 3 N., R. 8 W.</p>
<p>LITTLE SARAH MINE  Operator: Umont Mining, Inc.  506 Silver Bow Bldg.,  Butte, Mont.  Owners: Irving and Nelson,  Silver Bow Bldg., Butte, Mont.  Status: Inactive</p>	<p>Manganese  oxide</p>	<p>Summit Valley  (Butte) district,  NE<math>\frac{1}{4}</math>NW<math>\frac{1}{4}</math> sec. 15,  T. 3 N., R. 8 W.</p>
<p>MAIDEN ROCK MINE  Operator: Victor Chemical Co.,  Butte, Mont.  Owner: Victor Chemical Co.,  155 N. Wacker Drive, Chicago  6, Illinois  Status: Producing</p>	<p>Phosphate  rock</p>	<p>Maiden Rock district,  NE<math>\frac{1}{4}</math> sec. 5,  T. 2 S., R. 9 W.</p>

SILVER BOW, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
<p>MAJOR BUDD (RAMPART) MINE                      Operator: United Idaho Mining Co., c/o Roger Pierce, 808 Newhouse Bldg., Salt Lake City, Utah                      Owner: Rampart Mountain Mining Co., St. Louis, Missouri                      Status: Inactive</p>	<p>Gold,                      silver,                      copper,                      lead</p>	<p>East Ridge (Summit Valley) district,                      SE<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 3,                      T. 3 N., R. 7 W.</p>
<p>MAPLETON MINE                      Owner: The Anaconda Co., Hennessy Bldg., Butte, Mont.                      Status: Inactive</p>	<p>Manganese carbonate</p>	<p>Summit Valley (Butte) district,                      N<math>\frac{1}{2}</math>NW<math>\frac{1}{4}</math> sec. 15,                      T. 3 N., R. 8 W.</p>
<p>MC PHAIL PROSPECT                      Operator: David O. Taggert, Box 1017, Butte, Mont.                      Owners: Bill Franks, George Richardson, and Jed Hoopes, P.O. Box 1017, Butte, Mont.                      Status: Inactive</p>	<p>Gold</p>	<p>Highland district,                      sec. 32,                      T. 1 N., R. 7 W.</p>
<p>MOUNTAIN CON MINE                      Operator: The Anaconda Co., Hennessy Bldg., Butte, Mont.                      Owner: Same as operator                      Status: Producing</p>	<p>Copper,                      silver</p>	<p>Summit Valley (Butte) district,                      NE<math>\frac{1}{4}</math>SW<math>\frac{1}{4}</math> sec. 12,                      T. 3 N., R. 8 W.</p>
<p>NETTIE HUBERNIC MINE                      Operator: Lloyd Brynie, 2222 Walnut St., Butte, Mont.                      Owner: The Anaconda Co., Hennessy Bldg., Butte, Mont.                      Status: Inactive</p>	<p>Manganese oxide</p>	<p>Summit Valley (Butte) district,                      N<math>\frac{1}{2}</math> sec. 15,                      T. 3 N., R. 8 W.</p>
<p>NORWICH - PLUTUS MINE                      Operator: Umont Mining Inc., King St. Dock, Burlington, Vermont, or 506 Silver Bow Bldg., Butte, Mont.                      Owners: Irving and Nelson, Silver Bow Bldg., Butte, Mont.                      Status: Inactive</p>	<p>Manganese carbonate</p>	<p>Summit Valley (Butte) district,                      SW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 10,                      T. 3 N., R. 8 W.</p>
<p>SELF RISING MINE                      Operator: Joseph Mason, 1126 S. Arizona St., Butte, Mont.                      Owner: The Anaconda Co., Hennessy Bldg., Butte, Mont.                      Status: Inactive</p>	<p>Manganese oxide</p>	<p>Summit Valley (Butte) district,                      NW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math> sec. 9,                      T. 3 N., R. 8 W.</p>

SILVER BOW, Cont'd.

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
TUXEDO MINE Operator: David Anderson, 32 Central Drive, Columbia Gardens, Butte, Mont. Status: Producing & developing	Silver, gold	Summit Valley (Butte) district, sec. 28, T. 4 N., R. 8 W.
TZARENA MINE Owner: The Anaconda Co., Hennessy Bldg., Butte, Mont. Status: Inactive	Manganese oxide	Summit Valley (Butte) district, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 3 N., R. 8 W.
WEST MAPLETON MINE Operator: Peter Antonioli, Jr., 1001 W. Gold St., Butte, Mont. Status: Inactive	Manganese oxide	Summit Valley (Butte) district, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 3 N., R. 8 W.
WEST NETTIE MINE Operator: James Arnoldi, 1509 First St., Walkerville, Mont. Owner: The Anaconda Co., Hennessy Bldg., Butte, Mont. Status: Inactive	Gold, silver	Summit Valley (Butte) district

STILLWATER COUNTY  
County Seat: Columbus

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
MOUAT - SAMPSON MINE Operator: American Chrome Co., 1 Montgomery St., Room 1201, San Francisco, California Owner: M. W. Mouat, Nye, Mont. Employees: 206 Mill capacity: 1,000 t/d Status: Producing	Chromite	Nye district, secs. 20, 21, 28, 29, 30 T. 5 S., R. 15 E.

SWEET GRASS COUNTY  
County Seat: Big Timber

<u>Name of Operation</u>	<u>Product</u>	<u>Property Location</u>
HALF MOON MINE Operator: Half Moon Mining Co., George Guay, Pres., Hedden Bldg., Billings, Mont. Owner: Same as operator Status: Developing	Gold, silver, lead	Independence district



LIST OF MONTANA COAL MINES ACTIVE IN 1959

By Thomas Morgan  
State Coal Mine Inspector

BIG HORN COUNTY  
County Seat: Hardin

<u>Company</u>	<u>Operator</u>
Sarpy Coal Mine	Roy A. Lilley, McRae
Spring Creek Coal Mine	O. P. Morton Mock, Decker

BLAINE COUNTY  
County Seat: Chinook

<u>Company</u>	<u>Operator</u>
Milk River Coal Company	Lauren Sargent, Chinook
Radar Coal Company	John Redekop, Chinook

CARBON COUNTY  
County Seat: Red Lodge

<u>Company</u>	<u>Operator</u>
Brophy Coal Company	James Brophy, Red Lodge
Burns Coal Company	Pat Barrett, Red Lodge
Roadside Coal Company	Frank Janskovich, Bearcreek
Smith Coal Docks (Foster Mine)	Samuel Carpenter, Washoe, Box 322, Red Lodge

CASCADE COUNTY  
County Seat: Great Falls

<u>Company</u>	<u>Operator</u>
Canyon Coal Company	William Surmi, Sand Coulee
East Belt Coal Company	Samuel E. Williamson, Belt
Latham Coal Company	Andrew Yatsko, Stockett
Loveland Coal Company	Earl Loveland, Millegan Route, Great Falls

CUSTER COUNTY  
County Seat: Miles City

<u>Company</u>	<u>Operator</u>
Storm King Coal Company	T. J. Fleming, Miles City

DAWSON COUNTY  
County Seat: Glendive

<u>Company</u>	<u>Operator</u>
Albrecht Coal Company	Jacob Albrecht, Bloomfield
Clapp Coal Company	Clyde Clapp, Jr., Glendive
Peuse Coal Company	Gordon Peuse, Lindsay

FERGUS COUNTY  
County Seat: Lewistown

<u>Company</u>	<u>Operator</u>
Swanson Coal Company	William S. Swanson, Gilt Edge Route, Lewistown
Tuss Coal Company	C. M. Tuss, 512 East Evelyn Street, Lewistown

GARFIELD COUNTY  
County Seat: Jordan

<u>Company</u>	<u>Operator</u>
Kountz Coal Mining Company	Ted Kountz, Jordan
Magnuson Mine	Norman E. Olson, Box 47, Jordan, and John Magnuson, Box 715, Jordan

HILL COUNTY  
County Seat: Havre

<u>Company</u>	<u>Operator</u>
Black Diamond Coal Company	E. A. Adams, Havre
Rocky Boy Coal Company	Alfred Laursen, Box Elder

MC CONE COUNTY  
County Seat: Circle

<u>Company</u>	<u>Operator</u>
Lahay Mine	D. H. Lemieux, Vida
SR6 #1 Coal Mine	R. S. Stephenson, Circle
Willoughby Coal Mine	Dayton Willoughby, Circle
Yarger Coal Company	Wayne Yarger, Brockway

MUSSELSHELL COUNTY  
County Seat: Roundup

<u>Company</u>	<u>Operator</u>
Beacon Coal Company	Joseph Birrer, Billings
Divide Coal Mining Company	Victor C. and Jack H. Carlson, P. O. Box 342, Roundup
Gildroy Coal Company	Ralph J. Gildroy, Roundup
Johnies Coal Mine	Johnie Keosky, 1011 First Street, East, Roundup
Johnson Coal Company	Victor Forstrom, Roundup
Nies Brothers Coal Company	Gus Nies, Roundup
P. M. Coal Company	Paul Meged, Roundup
Roundup Mining Company	Roundup Mining Co., Roundup
Square Deal Coal Company	Virgil Cross, Clyde Cross, and Buster Ray, Roundup
Berkeley Mine	George Badovinus, 1002 First Street, West, Roundup
Western Coal Company	

PHILLIPS COUNTY  
County Seat: Malta

<u>Company</u>	<u>Operator</u>
Power Plant Mine	F. C. Ekegren, Harlem

POWDER RIVER COUNTY  
County Seat: Broadus

<u>Company</u>	<u>Operator</u>
Coal Creek Coal Company	John Schoonover, Volborg
Erickson Mine	Theodore Wilson, Ashland
Gentry Coal Company	O. B. Gentry, Ashland
Hanic Coal Company	Anthony Hanic, Ashland
Hanson Coal Mine	Perry Hanson, Ashland
North Star Coal Company	D. H. Bartholomay, Coalwood
Schonenbach Coal Mine	F. L. Schonenbach, Ashland
Sterling Coal Mine	U. B. Sterling, Sonnette
Superior Coal Company	Ernest Boicourt, Broadus
Toman Coal Mine	J. F. Toman, Bowers
Two Tree Coal Mine	Anton W. Gali, Jr., Epsie
Wilson Mine	J. L. Wilson, Broadus

RICHLAND COUNTY  
County Seat: Sidney

<u>Company</u>	<u>Operator</u>
Bemer Coal Company	William Tlustosch, Culbertson

RICHLAND COUNTY, Cont'd.

<u>Company</u>	<u>Operator</u>
Chimney Rock Coal Company	John Mitchell, Savage
Coal Bank Canyon	Cyrus Lowry, Sidney
Diamond Lignite Coal Company	Nels Nelson, Culbertson
Jennison Coal Company	Wesley Jennison, Culbertson
Knife River Coal Company	Dave Easton, Sidney
Pickering Coal Company	Freeman Pickering, Crane
Sidney Coal Company	Merrill Dunbar, Sidney
Thiell Brothers Coal Company	Charles Thiell, Sidney

ROSEBUD COUNTY  
County Seat: Forsyth

<u>Company</u>	<u>Operator</u>
Foley Brothers	O. E. Rye, Coalstrip
Knoblock Coal Mine	Albert Knoblock, Birney
Miller Coulee Coal Mine	A. W. Lonabough, Sheridan
Soldier Gulch Coal Mine	Lester Scott, Lame Deer

SHERIDAN COUNTY  
County Seat: Plentywood

<u>Company</u>	<u>Operator</u>
Acme Coal Company	M. F. Brenteson, Coalridge
Lagerquist Mine	E. C. Lagerquist, Westby
Redstone Coal Company	S. Detray, Daleview
Wold Creek Mine	H. V. Truax, Medicine Lake

SUPPLEMENTAL LIST OF MINING ENTERPRISES

This list includes mining enterprises that appeared in the 1958 Directory, but which have failed to return our questionnaires.

BEAVERHEAD COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Argenta Mine	Active 1958
Brenner Placer	Active 1958
Franklin Dump	---
French Creek Mine	Inactive 1958
Gladstone Mine	Active 1958
Glendale Smelter Dump	Active 1958
Hecla Dump	Producing 1958
Jack Mine	Developing 1958
Lucky Strike (Storm King) Mine	Inactive 1958
M. D. Mine	---
Polaris Mine	Inactive 1958
Starlight Mine	Active 1958
Sylvia Mine	Inactive 1958
Templeton Mine	Active 1958

BROADWATER COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Acme Mine	Inactive 1958
Ace in Hole Mine	Active 1958
Blackhawk (North Star) Mine	Active 1958
Copper City Mine	Active 1958
Diamond Hill Mine	Active 1958
Endevour Mine	Inactive 1958
Hummingbird Mine	Active 1958
Iron Mask	Active 1958
Iron Mask #3	Active 1958
January Group	Active 1958
Josephine & Baby Doe Mine	Active 1958
Kelly No. 1	Active 1958
Kleinschmidt Mine	Active 1958
Lakeview Mine	Active 1958
Liberator Mine	Inactive 1958
Lonesome Pine Mine	Inactive 1958
Midas (Iron Age) Mine	Inactive 1958
Miles Lease Mine	Active 1958
Miller Slim Jim Mine	Inactive 1958
Patent 2880 Mine	Active 1958
Silver Saddle Mine	Active 1958
Stray Horse Mine	Inactive 1958
Sullivan Group	Inactive 1958

CARBON COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
East Pryor (Fran #3) Mine	Developing 1958
Key Mine	Inactive 1958
Old Glory Mine	Developing 1958
Warren Quarry	Active 1958

CASCADE COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Silver Belle Mine	Inactive 1958
Sunshine Mine	Inactive 1958

DEER LODGE COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Alturas Mine	Active 1958
Brightstar Mine	Active 1958
Cable Mine	Inactive 1958
Log Cabin Mine	Active 1958
Lucky Arrowhead	---
Olson Mountain Mine	---
Ophir Mine	Active 1958
Storm Lake Mine	Inactive 1958
Tarlach Mine	Inactive 1958
Trigger Mine	Inactive 1958

FERGUS COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
America Mine	Active 1958

FLATHEAD COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Blow Out Mine #1	Active 1958
Cedar Hills Mine	Active 1958
Golden Queen Mine	Active 1958

GALLATIN COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Karst Mine	Active 1958
Nellie H. Mine	Active 1958

GRANITE COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Bagdad Mine	Inactive 1958
Bearmouth and Deep Gulch Mine	Active 1958
Blue Bell Mine	Active 1958
Bohrer Mine	Active 1958
Brooklyn Mine	Active 1958
Cadgie Taylor Mine	Active 1958
Comanche Mine	Active 1958
Copper Queen Mine	Active 1958
Forest Rose Mine	Inactive 1958
Grubstake Mine	Inactive 1958
Guy Kneal Mine	Inactive 1958
Henderson Creek Placer Mine	Inactive 1958
Hope Mine	---
Iron Age and Redemption Mine	Inactive 1958
Marie Mine	Inactive 1958
Queen Mine	Active 1958
Ross Hayworth Mine	Active 1958
Sand Basin Placer Mine	Active 1958
Sunlight Mine	Inactive 1957
Tarlach Mine	---
Tibbets Fowler Mine	---
Wegner Mine	Inactive 1958
White Horse Mine	Inactive 1958

JEFFERSON COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Aurora Mine	Inactive 1957
Badger Group	Inactive 1958
Bernice Mine	Active 1958
Big Chief Mine	Active 1958
Bluebird Mine	Inactive 1958
Blue Boy Mine	Inactive 1958
Carbonate Mine	Active 1958
Comet Grey Eagle Mine	---
Daily West Mine	Active 1958
Elkador and Little Nancy Mine	Active 1958
Fourth of July and Fifth of July Mines	---
Good Friday	Active 1958
Gregory Dump	Inactive 1958
Harriet Mine	Inactive 1958
Helen's Pride Mine	Inactive 1958
Lena Mine	Active 1958
Little Nell Mine	Active 1958
Lotta Mine	Active 1958
Mammoth Cleanup Mine	Active 1958
Midway Mine	Inactive 1958
Minah Mine	Inactive 1958

JEFFERSON COUNTY, Cont'd.

<u>Name of Operation</u>	<u>Last Reported</u>
Montana Mine (Colorado district)	Active 1958
Montana Mine (Homestake district)	Active 1958
Morning Mine	Active 1958
Mountain Queen Mine	Inactive 1958
Niki Mine	Active 1958
Silver Claim Mine	Active 1956
Uranium (Great Shield) Mine	Inactive 1958

JUDITH BASIN COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Dewey (Iron King-Iron Clad) Mine	Developing 1958
Doctor Kalloch Mine	Active 1958
Tiger Mine (Information received late)	Developing 1959

LEWIS & CLARK COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Aurora Mine	Inactive 1958
Bald Butte Mine	Inactive 1958
Black Jack (Jack Pot) Mine	---
Eagles Nest Mine	Active 1958
Frontier Mine	Inactive 1958
Gregory Mine	Active 1958
Lincoln Gulch Mine	---
Lincoln Placer Mine	---
Little Ox Mine	Inactive 1958
Little Sampson Mine	Active 1958
Lucky Joe Mine	Inactive 1958
Midnight Mine	Inactive 1958
Monte Christo Mine	Active 1958
Nick and Dick Mine	Active 1958
Pass Creek Mine	Active 1958
Pearl Mine	Active 1958
Rock Rose (Dandy) Mine	Active 1958
Sally Belle Mine	---
Silver Coin Mine	Active 1958
Umatilla Mine	---

LINCOLN COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Black Diamond Mine	Active 1958
Christmas Tree Mine	Active 1958



LINCOLN COUNTY, Cont'd.

<u>Name of Operation</u>	<u>Last Reported</u>
Copper Mountain Mine	Developing 1958
Daniel Lee Prospect Mine	Developing 1958
Esther May Mine	Developing 1958
Larue and Cripe Prospect	Developing 1958
Waylett Group	Developing 1958

MADISON COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Alder Mine	---
Anthony Mine	Active 1958
Betty May Mine	---
Billy Bennit Mine	Active 1958
Birdia Mine	Inactive 1958
Bismarck Mine	Active 1958
Black Age Mine	Active 1958
Brown Mine	Inactive 1958
Calvin Mine	Inactive 1958
Cliff Lake Mine	Developing 1958
Copper Flat Mine	Active 1958
Daizy No. 1 Mine	Inactive 1958
Diamond Hitch Mine	Active 1958
Hawkeye Mine	Active 1958
Kent and Miller Mine	---
Mapleton Mine	Active 1958
Marietta Mill	Inactive 1958
Moonlight Mine	Active 1958
Mountain Flower Mine	Active 1958
Pioneer Mine	Inactive 1958
Ridgeway Mine	Active 1958
Riverside Mine	Active 1958
Silver Bell Mine	Active 1958
Sky Chief Mine	---
West Shore Mine	Active 1958

MEAGHER COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Jack Black Mine	Active 1958
Jim Beam #1 Mine	Active 1958
Little Belt Mine	Inactive 1958
Rachel Pit (P.R.K. Mine)	Active 1958
Russi #1 and #2 Mines	Active 1958

MINERAL COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Christian's Calumet, Daly Placer	Active 1958
Cron's C. B. & Q. Placer Mine	Active 1958
Iron Mountain Mine	Active 1956
Meadow Creek Placer Mine	Inactive 1958
Night Owl Mine	Active 1956
Snowbird Mine (Information received late)	Developing 1959

MISSOULA COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Arrowhead Mine	Inactive 1958
Belleview Mine	Inactive 1958
Blue Bell (Leonard) Mine	Inactive 1958
Charcoal Mine	Inactive 1958
Josephine Creek Mine	Active 1958
Pearl Mine	Active 1958

PARK COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Ed and Ann Mine	Inactive 1958
Great Rift (Big Blue, St. Jude) Mine	Active 1958
Irma Mine	Inactive 1958
Hudson Mine	Developing 1958

PHILLIPS COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Independent Mine	Inactive 1958

POWELL COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Alice Marie Placer Mine	Inactive 1958
Bluebell Mine	Active 1958
Bonanza Mine	Active 1958
Emery Mine	Active 1958
Flora Mine	Inactive 1958
Humdinger Mine	Active 1957
Key Mine	Active 1958
Kilburn Placer Mine	Active 1958

POWELL COUNTY, Cont'd.

<u>Name of Operation</u>	<u>Last Reported</u>
Lazy L Mine	Active 1958
Lucky Andy Placer Mine	Inactive 1958
Marjorie (Amended Drift Placer) Mine	Active 1958
New Majestic Mine	Inactive 1958
Peacock Mine	Active 1958
Pineau Placer Mine	Prospecting 1958
Plutarc Mine (Snowflake)	Inactive 1958
Ruby Gold Mine	Inactive 1958

RAVALLI COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Ace Mine	Prospecting 1958
Hughes Creek Placer Mine	Inactive 1958
Lucky Joe Mine	Developing 1958
Woodtick #1 Placer Mine	Active 1958

SILVER BOW COUNTY

<u>Name of Operation</u>	<u>Last Reported</u>
Agnostic Mine	Active 1958
Bay Horse Mine	Active 1958
Beal Dike Placer Mine	Inactive 1958
Belmont Mine	Inactive 1958
Creole Mine	Inactive 1958
Cumberland Mine	Active 1958
Diamond Mine	Active 1958
Eagle Bird Mine	Active 1958
East Colusa Pit	Inactive 1958
Easter Mine	Active 1958
Fairview Mine	Active 1958
Fruition Mine	Inactive 1958
Gagnon Pit	Inactive 1958
Grey Eagle Mine	Active 1958
Gregory Mine	Active 1958
Great Republic Mine	Prospecting 1958
Lavena Mine	Inactive 1958
Magna Charta Mine	Inactive 1958
Marget Ann Mine	Active 1958
Minnie Jane Mine	Active 1958
Montana Claim	Inactive 1958
Narrow Gauge Mine	Active 1958
Olsen Fraction Mine	Inactive 1958
Original Mine	Inactive 1958
Orphan Girl Mine	Inactive 1958
Poorman Mine	Active 1958
Poser Mine	Active 1958

SILVER BOW COUNTY, Cont'd.

<u>Name of Operation</u>	<u>Last Reported</u>
Sankey Mine Group	Active 1958
Scotia Mine	Active 1958
Silver Cleft Mine	Active 1958
Snowdrift Mine	Inactive 1958
Steward Mine	Inactive 1958
Travona Mine	Inactive 1958
Unita Mine	Active 1958
Valdemere Mine	Active 1958



**MINERAL INDUSTRY SURVEYS**  
**UNITED STATES DEPARTMENT OF THE INTERIOR**  
**BUREAU OF MINES**

Fred A. Seaton - Secretary

Marling J. Ankeny - Director

Region I - Mark L. Wright, Regional Director

Area Report B-75

THE MINERAL INDUSTRY OF MONTANA IN 1959\*

Preliminary Annual Report

The 1959 value of Montana mineral production declined to \$168 million, a drop of 5 percent (\$8.7 million) from the previous year, according to estimates by the Bureau of Mines, U. S. Department of the Interior. The loss was attributed principally to closure of The Anaconda Company metal mines and metallurgical plants from mid August through December because of a strike. Copper and manganese showed the greatest declines; in addition to the strike, some market losses for manganese lowered production of this commodity. In non-metals, fluorspar shipments declined significantly as a result of completion of the Federal stockpiling program. The value of petroleum production continued to increase, advancing over \$3 million in 1959.

REVIEW BY MINERAL COMMODITIES

METALS

Aluminum.--Primary aluminum production increased slightly over 1958 as a result of increased output by Anaconda Aluminum Company, Columbia Falls. The reduction plant was operated at 75 percent of capacity until 30 pots were reactivated in August, raising production to 88 percent of capacity. This increase, which brought annual primary ingot capacity to 53,000 tons, was said to have been warranted by improved sales outlook and industrial conditions. The company agreed to a new labor contract in May extending through October 31, 1960. The contract, negotiated with the Aluminum Workers Trade Council, provided an 8.23-cent-per-hour wage increase, plus fringe benefits that brought the increase to approximately 23-cents per hour. Alumina continued to be supplied under contract from outside sources; however, research continued on the economic and technologic feasibility for utilization of Idaho clay deposits as an alumina source. Should this be accomplished, Anaconda Aluminum Company would be a completely integrated operation from raw material through aluminum products.

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\*Prepared by F. B. Fulkerson and G. A. Kingston, Commodity Specialists, under the supervision of A. J. Kauffman, Jr., Chief, Albany Office of Mineral Resources, Region I, Bureau of Mines, Albany, Oregon, December 23, 1959. P. O. Box 492, Albany, Oregon.

The Columbia Falls reduction works continued to supply aluminum bar to Anaconda Wire & Cable Company, Great Falls, where aluminum rod and wire were drawn in a completely automated Swedish-built mill. Sales of these products were good, but the market was highly competitive.

Chromium.--Production was delivered almost entirely to a Federal stockpile; a small tonnage was used in producing ferrochrome.

Chromite was mined and milled at the American Chrome Company Mouat mine, Stillwater County, for delivery to a Federal stockpile at Nye. Shipments of concentrate totaled 105,289 short tons, a decline of 12 percent compared with 1958 deliveries. The purchase contract with General Services Administration (GSA) was scheduled to expire December 31, 1961, or when the maximum tonnage of 900,000 short tons was reached; approximately 200,000 tons remained to be mined and concentrated before the tonnage quota would be met. Mining operations were reduced from 6 days per week to 5 during the year. Ferrochromium was produced in a pilot electric smelter by the company at Nye, using ore concentrate from the Mouat mine. An initial car-load shipment of ferrochrome was made to eastern steel mills.

A pilot plant producing sodium bichromate for the Atomic Energy Commission (AEC) at Hanford, Washington, was operated by Mouat Industry, Inc., Columbus, Montana. Chromium ore for the operation was obtained from a stockpile previously mined at the Benbow mine, Stillwater County.

Copper.--An industry-wide strike reduced the State total to 65,490 tons, a decline of 28 percent.

Mines and metallurgical works of The Anaconda Company, one of the leading domestic copper producers, were closed from mid August through the end of the year as a result of a strike called by the International Union of Mine, Mill, & Smelter Workers. The length of the walkout prompted the company to indicate that some marginal mines of the company (in terms of operational costs versus profit) would not be reopened when work resumed, and that major projects such as the Berkeley pit would be emphasized further. It was indicated that automation would play a significant role in keeping this operation on an economically competitive basis. The economical operation of the Butte area mines was an issue in the management-union negotiations for a new labor contract. Maintenance work was in progress at the Anaconda and Great Falls smelting and refining facilities during the closure. Included in this work was a \$150,000 repairs expenditure at Great Falls on the massive smelter stack.

Gold.--Preliminary figures indicated little change in gold output; production increased 3 percent, reaching 26,790 ounces. Miscellaneous shippers to The Anaconda Company accounted for the rise. Total gold recovered by Anaconda dropped owing to the strike.

Iron Ore.--Shipments climbed sharply to 50,000 long tons according to preliminary estimates; this was a 268-percent increase over the 13,583 long tons shipped the previous year.

TABLE 1.- Mineral production in Montana, 1958-59 1/

Mineral	1958		1959 <u>2/</u>	
	Short tons (unless otherwise stated)	Value (thousands)	Short tons (unless otherwise stated)	Value (thousands)
Chromium ore and concentrate.....	119,057	3/	105,289	\$3,762
Clays.....	4/ 23	\$19	4/ 23	19
Coal (bituminous and lignite).....	305	1,475	318	3/
Goal (bituminous and lignite).....	90,683	47,699	65,490	40,604
Copper (recoverable content of ores, etc.).....	53,654	3/	3/	3/
Fluorspar.....	26,003	910	26,790	938
Gold (recoverable content of ores, etc.).....	14	3/	50	261
Iron ore (usable).....	8,434	1,974	7,520	1,790
Lead (recoverable content of ores, etc.).....	53,123	4,036	20,665	3/
Manganese ore and concentrate (35 percent or more Mn) gross weight	3/	3/	2,444	3/
Manganiferous ore and concentrate (5 to 35 percent Mn) gross weight	27,989	1,903	33,000	2,300
Natural gas.....	27,957	74,086	29,883	77,397
Petroleum (crude).....	13,432	12,593	13,500	13,000
Sand and gravel.....	3,631	3,286	3,217	2,912
Silver (recoverable content of ores, etc.).....	5/ 1,786	2,468	1,500	2,000
Stone.....	4,652	20	3/	3/
Uranium ore and concentrate (oxide content).....	33,238	6,781	27,560	6,284
Zinc (recoverable content of ores, etc.).....				
Value of items that cannot be disclosed: Barite, cement, clays (fire clay and bentonite), gem stones, gypsum, lime, mica, natural- gas liquids, phosphate rock, pyrites, talc, thorite concentrate (1959), vermiculite, and values indicated by footnote 3.....				
Total <u>6/</u> .....		176,728		167,974

1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).  
 2/ Preliminary figures.  
 3/ Figure withheld to avoid disclosing individual company confidential data.  
 4/ Excludes fire clay and bentonite.  
 5/ Revised figure.  
 6/ Total has been adjusted to eliminate duplicating the value of stone; 1958 total revised.

The principal shipper was Young-Montana Corporation near Stan-  
ford. An estimated 38,000 long tons of magnetite was shipped by rail  
to Duluth, Minnesota, where it was transloaded to a ship for delivery  
to eastern steel plants.

Minerals Engineering Company shipped 2,000 tons of magnetite  
(30 percent Fe) from the Carter Creek properties near Dillon to Bir-  
mington, Alabama, for testing its suitability for reduction by the  
R-N direct reduction process. The deposit was sold during the year  
to North American Utilites Corporation, Calgary, Canada. Total poss-  
ible tonnage available by open-pit methods was estimated by examining  
engineers to be in the order of 200 million tons. The comparatively  
low iron percentage of the ore would require that it be concentrated.  
Definite plans were not announced, but it was thought that milling  
would be conducted at Dillon and the concentrate shipped to Burmis,  
Alberta, where it would be reduced with Alberta coal for the produc-  
tion of steel in an integrated plant.

Lead.--Lead output totaled 7,520 tons, an 11-percent drop com-  
pared with 8,434 tons of the previous year. Production was lowered  
due to closure of The Anaconda Company reduction works, where lead  
was recovered as a byproduct of zinc operations, and closure of the  
American Smelting and Refining Company East Helena lead smelter, both  
owing to strikes.

Manganese.--Manganese suffered a 61-percent decrease; output fell  
to 20,665 short tons compared with 53,123 tons in 1958. Three com-  
panies were principal producers.

The decline was attributable to reduced output of manganese  
nodules at The Anaconda Company nodulizing plant at Anaconda. Rhodo-  
chrosite ore from the Emma mine at Butte was put through a series of  
concentrating and leaching steps and nodulized at the Anaconda reduc-  
tion works. The mine and nodulizing facilities were closed from  
August until the end of the year due to a strike. It was indicated  
that when operations were resumed, mining would not be continued at  
the Emma mine, which was flooded after closing; instead manganese ore  
would be obtained from other company mines at Butte.

Trout Mining Company mined 68 percent more battery-grade ore than  
in the previous year and 33 percent less metallurgical-grade ore; pro-  
duction came from the Algonquin group properties near Phillipsburg.

Taylor-Knapp Company increased mine output over 1958 from mines  
(Moorlight group) near Phillipsburg, but operations were affected ad-  
versely during the year by the completion of the Federal "Carlot"  
stockpiling program for metallurgical-grade ores. Termination of the  
purchase program resulted in a sizeable work-force reduction by the  
company; however, a market reorientation improved the outlook in the  
last quarter, enabling the return of some workers.

The greater percentage of manganese nodules produced by The  
Anaconda Company had been consumed for the production of ferroman-  
ganese by the company at Anaconda. Poor markets during the year,



TABLE 2.- Mine production of gold, silver, copper, lead, and zinc, in terms of recoverable metals <sup>1/</sup>

Year	Mines producing		Material sold or treated <sup>2/</sup> (thousand short tons)	Gold (lode and placer)		Silver (lode and placer)		Total value (thousands)
	Lode	Placer		Troy ounces	Value (thousands)	Troy ounces	Value (thousands)	
1950-54 (average) ..	172	16	4,681	30,971	\$1,084	6,198	\$5,610	
1955.....	100	12	7,260	28,123	984	6,080	5,503	
1956.....	152	7	9,536	38,121	1,334	7,386	6,685	
1957.....	125	13	10,790	32,766	1,147	5,558	5,030	
1958.....	125	11	10,861	26,003	910	3,631	3,286	
1959 <sup>3/</sup> .....	90	10	8,793	26,790	938	3,217	2,912	
Year	Copper		Lead		Zinc		Total value (thousands)	
	Short tons	Value (thousands)	Short tons	Value (thousands)	Short tons	Value (thousands)		
1950-54 (average) ..	62,160	\$32,000	19,393	\$5,761	75,327	\$21,855	\$66,309	
1955.....	81,542	60,830	17,028	5,074	68,588	16,873	89,265	
1956.....	96,426	81,962	18,642	5,854	70,520	19,322	115,157	
1957.....	91,512	55,090	13,300	3,804	50,520	11,721	76,792	
1958.....	90,683	47,699	8,434	1,974	33,238	6,781	60,649	
1959 <sup>3/</sup> .....	65,490	40,604	7,520	1,790	27,560	6,284	52,527	

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

<sup>2/</sup> Does not include gravel washed.

<sup>3/</sup> Preliminary figures. Gold and silver values calculated at U. S. Treasury buying price of \$35 a troy ounce and \$0.9050505 a troy ounce, respectively. In calculating production values for copper, lead, and zinc, preliminary average prices in 1959 per pound of refined metal were used, as follows: Copper, \$0.31; Lead, \$0.119; and Zinc, \$0.114.

partly attributable to the geographic isolation of the plant in relation to consumers, kept the ferromanganese facility closed during the first half of the year and nodules were stockpiled. Production was resumed at midyear, but again stopped in August owing to the strike.

Minor Metals.--Cadmium, indium, and gallium were recovered by the Anaconda Company as byproducts of zinc refining operations. Output of these metals was reduced in proportion to the decline in zinc production.

Silver.--The mine and smelter strike was responsible for an 11-percent drop in the State total to 3,217,130 ounces, compared with 3,630,530 ounces recovered the previous year. Production at the Jack Wate mine, Sanders County, operated by American Smelting and Refining Company, was uninterrupted by the strike; output of silver from this property increased.

Steel.--Plans were announced in September for processing iron-bearing slag from copper smelting at the Anaconda reduction works to produce steel and also recover copper and zinc; slag residue would be used in manufacturing insulation and as a lightweight aggregate. The announcement was made after negotiations were completed between Webb & Knapp, Inc., and The Anaconda Company for the 40-million-ton slag pile, which averaged approximately 33-percent iron, 0.5-percent copper, and 2-percent zinc. Strategic Materials Corporation was to build and operate the plant, using the Strategic-Udy process, on land obtained from The Anaconda Company facing the slag pile. The plant was scheduled for completion by 1962.

Thorium.--Sawyer Petroleum Company shipped thorite concentrate from a property in Beaverhead County near Lemhi Pass.

Uranium.--Output, principally from mines in Carbon County, rose substantially compared with 1958, according to a report from the Atomic Energy Commission.

Zinc.--Preliminary figures indicated a 17-percent decline to 27,560 tons--5,678 tons lower than the previous year. As was the case with many of the other commodities, the mine and smelter strike influenced the drop.

The Anaconda Company zinc plant at the Anaconda reduction works was closed in early August; materials formerly treated at Anaconda were diverted to company facilities at Great Falls until the plant was closed by strike several weeks later.

NONMETALS

Barite.--Production of barite by Bariod Sales Division, National Lead Company, the only producer in the State, declined sharply compared with 1958. Mine output was ground at the company Greenough, Missouri County, plant.

TABLE 3.- Mine production of gold, silver, copper, lead, and zinc in 1959, by months, in terms of recoverable metals

Month	Gold (troy ounces)	Silver (troy ounces)	Copper (short tons)	Lead (short tons)	Zinc (short tons)
January.....	3,960	323,080	8,270	690	3,100
February.....	2,960	408,350	7,830	810	3,560
March.....	3,630	330,110	8,840	740	2,860
April.....	3,460	329,000	9,390	610	2,850
May.....	3,320	468,770	8,280	1,020	4,080
June.....	3,450	504,360	8,430	990	4,060
July.....	3,520	579,840	9,150	1,420	4,900
August.....	2,200	254,890	5,280	670	1,950
September.....	20	5,070	5	210	50
October.....	160	6,680	5	150	70
November.....	60	3,490	5	110	40
December.....	50	3,490	5	100	40
Total.....	26,790	3,217,130	65,490	7,520	27,560

TABLE 4.- 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 (thousand short tons)	Gold, Silver, and placer lode (troy ounces)	1950-54 (average).....			1959 $\bar{x}$ /.....		
				Copper (short tons)	Lead (short tons)	Zinc (short tons)	Copper (short tons)	Lead (short tons)	Zinc (short tons)
1950-54 (average).....	20	4,516	18,607	5,709	61,808	15,351	69,735	22,455	
1955.....	22	7,160	22,262	5,578	81,428	14,331	62,588	26,580	
1956.....	21	9,395	31,132	6,772	96,292	14,989	63,375	43,169	
1957.....	19	10,673	27,312	5,069	91,393	9,617	43,169	73,328	
1958.....	22	10,745	17,374	3,308	90,557	5,492	26,580	57,942	
1959 $\bar{x}$ /.....	19	8,719	25,225	3,109	65,422	4,532	22,455	50,457	
Year				Total value (thousands)					
1950-54 (average).....	61,808	15,351	69,735	62,482	1950-54 (average).....	61,808	15,351	69,735	
1955.....	81,428	14,331	62,588	86,240	1955.....	81,428	14,331	62,588	
1956.....	96,292	14,989	63,375	111,138	1956.....	96,292	14,989	63,375	
1957.....	91,393	9,617	43,169	73,328	1957.....	91,393	9,617	43,169	
1958.....	90,557	5,492	26,580	57,942	1958.....	90,557	5,492	26,580	
1959 $\bar{x}$ /.....	65,422	4,532	22,455	50,457	1959 $\bar{x}$ /.....	65,422	4,532	22,455	

$\bar{x}$ / Preliminary figures.

Cement.--Shipments and value of cement increased 16 percent and 18 percent, respectively, compared with 1958. Ideal Cement Company, Montana Division, Trident, Gallatin County, was the only producer.

Clays.--There was a decline in output of both fire clay and bentonite; production of miscellaneous clay was at about the 1958 level. Bentonite was mined at the Alzada pit, Carter County, by Baroid Sales Division, National Lead Company.

Treasure State Industries announced plans to construct a plant near Great Falls to expand shale for use as lightweight aggregate in prestressed and precast concrete.

Fluorspar.--There was no fluorspar mined in 1959. Cummings-Roberts (Darby, Ravalli County), usually the important producer, shipped from stocks for use by the steel industry and at metallurgical and cement plants.

Gypsum.--Substantial increases were recorded in the quantity and value of gypsum mined compared with 1958. Operations of Ideal Cement Company (Hanover mine) and United States Gypsum Company (Shoemaker mine) in Fergus County supplied the output.

Lime.--Production of lime in the State decreased for the first time since 1955. Limestone was burned to quicklime by The Anaconda Company (Deer Lodge County) and Elliston Lime Company (Powell County). The latter company also prepared hydrated lime. Output was consumed mainly at metallurgical plants and ore concentrators.

Mica.--Only a small amount of mica was recovered. Output was shipped to the GSA purchase depot at Custer, South Dakota, from the Thumper Lode, Gallatin Gateway (Gallatin County).

Phosphate Rock.--A small increase in the output of marketable phosphate rock was accompanied by a slight drop in value compared with 1958. Production came from Beaverhead, Powell, and Silver Bow Counties. J. R. Simplot Company was not active at its Centennial Mountain open pit, Beaverhead County.

The Bunker Hill Company, which was constructing a fertilizer plant at Kelllogg, Idaho, began evaluating the Jack Pine (Trout-Creek) phosphate-rock lease near Elliston to determine the extent and quality of the deposit.

Pyrites.--A smaller quantity of pyrites was converted to sulfuric acid than in 1958 by The Anaconda Company. Acid made at the Deer Lodge County facility was used at the company chemical fertilizer plant and metallurgical works.

Sand and Gravel and Stone.--Combined output of these commodities remained at a high rate in 1959; output was estimated at 15.0 million tons compared with 15.2 million tons in 1958. Despite completion of major construction work at the Noxon Rapids Dam, the general high level of construction activity (including the highway-building program)

In the State was expected to keep production of aggregate near the rate of the previous year.

Sulfur--Recovery of high-purity sulfur from refinery residual gases increased slightly in 1959 and shipments were substantially greater. The Montana Sulphur & Chemical Company plant at Billings, Yellowstone County, processed these gases.

Talc--A substantial increase was indicated in the quantity and value of talc mined during 1959. Tri-State Minerals Company and Sierra Talc Company continued as the principal producers. Mined output was ground at plants in Montana, Utah, Nebraska, and California.

Vermiculite--Production was about the same as in 1958. Zonolite Company, Libby, Lincoln County, again was the principal source of the mineral in the country.

#### MINERAL FUELS

Coal--Production of coal (bituminous and lignite) was established at 318,000 tons in 1959, an increase of 4 percent over the previous year. Greater output of lignite to supply requirements of the steam-electric generation plant of Montana-Dakota Utilities Company at Sidney was the principal reason for the increase. The tonnage of bituminous coal mined in 1959 decreased substantially from the previous year.

Montana Power Company obtained a 30-year lease on coal deposits near Colstrip (Rosebud County) from the Northern Pacific Railway Company. The power company indicated that its future power supply was expected to come largely from coal-fired steam-electric generating plants. The Northern Pacific Company stated that reserves of 50-60 million tons of coal could be recovered by large-scale, low-cost stripping methods.

Petroleum and Natural Gas--Indicated recovery of crude oil advanced from 28.0 million barrels (\$74.1 million) in 1958 to 29.9 million barrels (\$77.4 million) in 1959. Withdrawals of natural gas also increased. Marketed production was 33.0 billion cubic feet (\$2.3 million) compared with 28.0 billion cubic feet (\$1.9 million) in 1958.

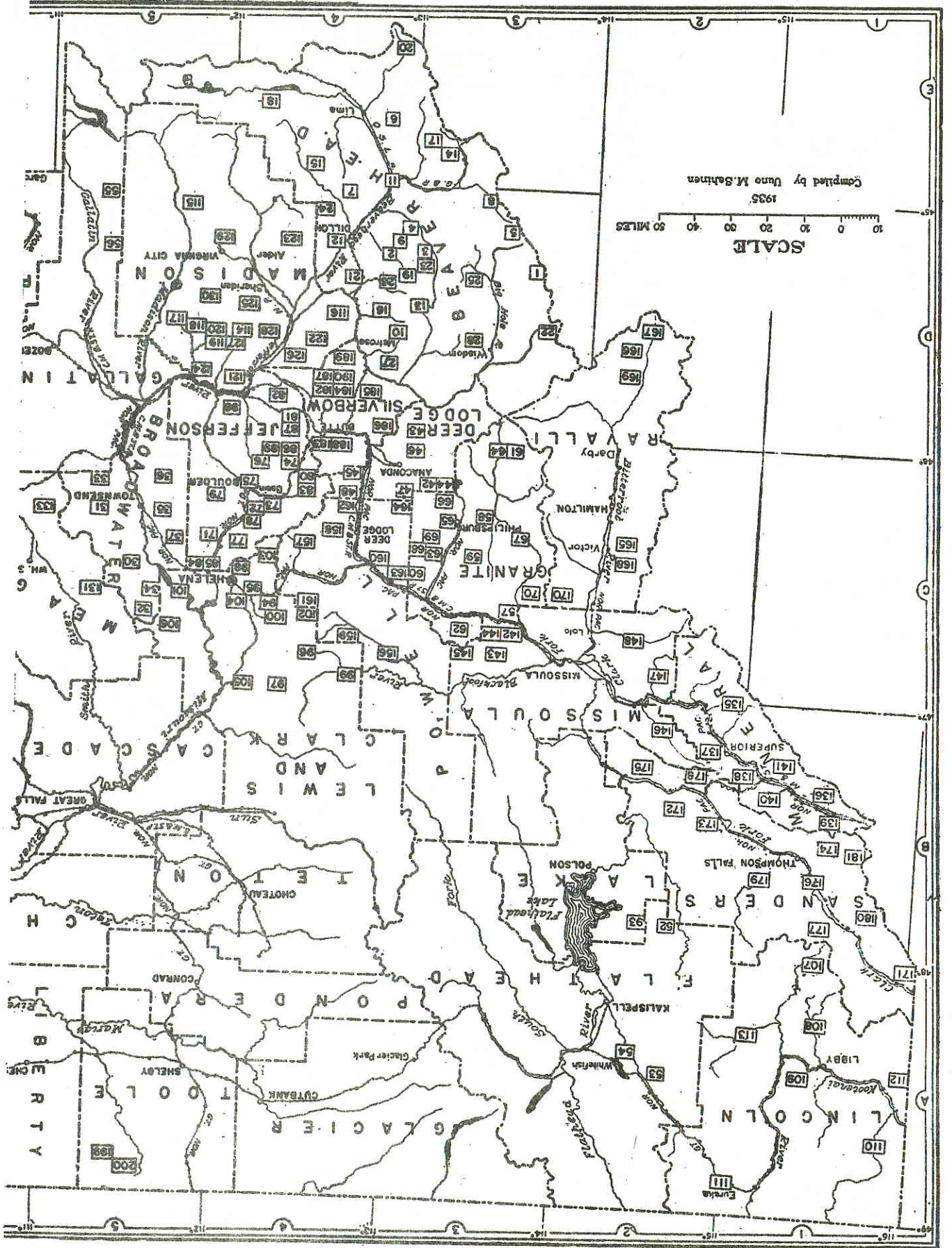
In November the Montana Oil & Gas Conservation Commission issued an order that required 40-acre spacing of drill holes on a Statewide basis. Formerly nine wells could be drilled per 160 acres. Water injection was begun to increase crude oil recovery at the Cat Creek field, Petroleum County; the Cabin Creek field, Fallon; and Pine field extending into Fallon, Prairie, and Wibaux Counties. Carter Oil Company began building an asphalt emulsification unit and revamping its road-oil plant at Billings.

This report summarizes mineral industry activity in Montana in 1959 and contains preliminary production data for the year as estimated from company monthly and quarterly production canvasses, smelter and Government purchase depot receipt reports, and information contained in industry publications. Final production totals for the State's mineral commodities will be published in mid 1960 after completion of canvasses of all mineral industry establishments.

LIST OF MINING DISTRICTS

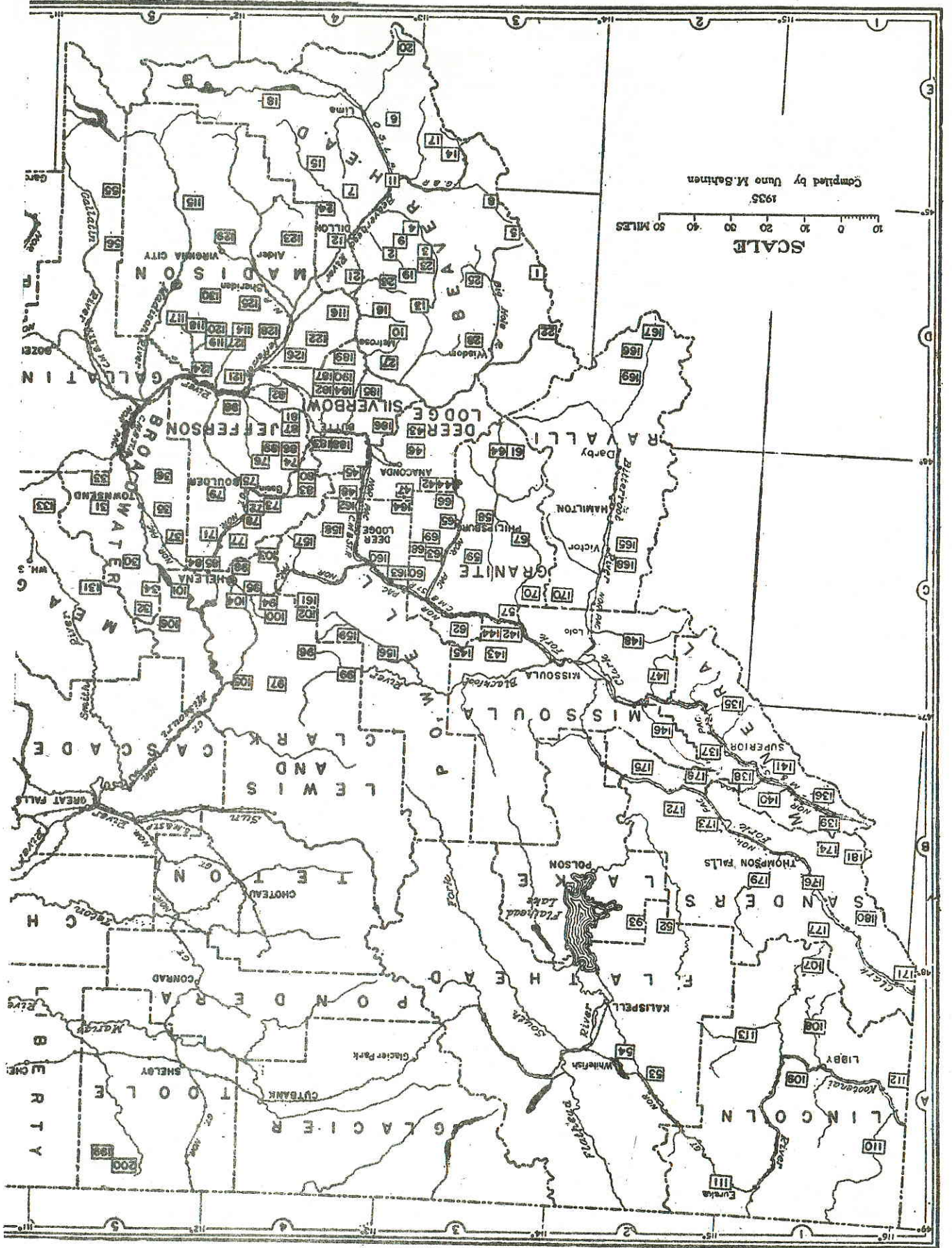
County	District	Number	County	District	Number
Beaverhead County, D-4	1 Ajax	1	Madison County, A-2	Hoar Heaven	52
	2 Argenta	2		(Flathead)	53
	3 Bald Mountain	3		(Kila)	54
	4 Bank	4		Star Meadow	55
	5 Dark Horse	5		(Lupfer)	56
	6 Muddy Creek	6		Whitens	57
	7 Blacktail	7			58
	8 Bloody Dick	8			59
	9 Blue Wing	9			60
	10 Bryant	10			61
	11 (Hecia)	11			62
	12 (Armstead)	12			63
	13 (Fryer Pan Basin)	13			64
	14 (Wise River)	14			65
	15 Horse Prairie	15			66
	16 Jake Creek	16			67
	17 Lost Creek	17			68
	18 (Brown's Lake)	18			69
	19 (Brown's Lake)	19			70
	20 (Rock Creek)	20			71
	21 (Medicine Lodge)	21			72
	22 (Rock Creek)	22			73
	23 (Cable Mountain)	23			74
	24 (Red Lion)	24			75
	25 (Cable Mountain)	25			76
	26 (Red Lion)	26			77
	27 (Cable Mountain)	27			78
	28 (Red Lion)	28			79
	29 (Cable Mountain)	29			80
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	147 (Cable Mountain)	147			198
	148 (Red Lion)	148			199
	149 (Cable Mountain)	149			200
	150 (Red Lion)	150			

MAP SHOWING DISTRIBUTION OF



Compiled by Uno M. Salmsten  
1935

SCALE  
0 10 20 30 40 50 MILES





MINING DISTRICTS IN MONTANA

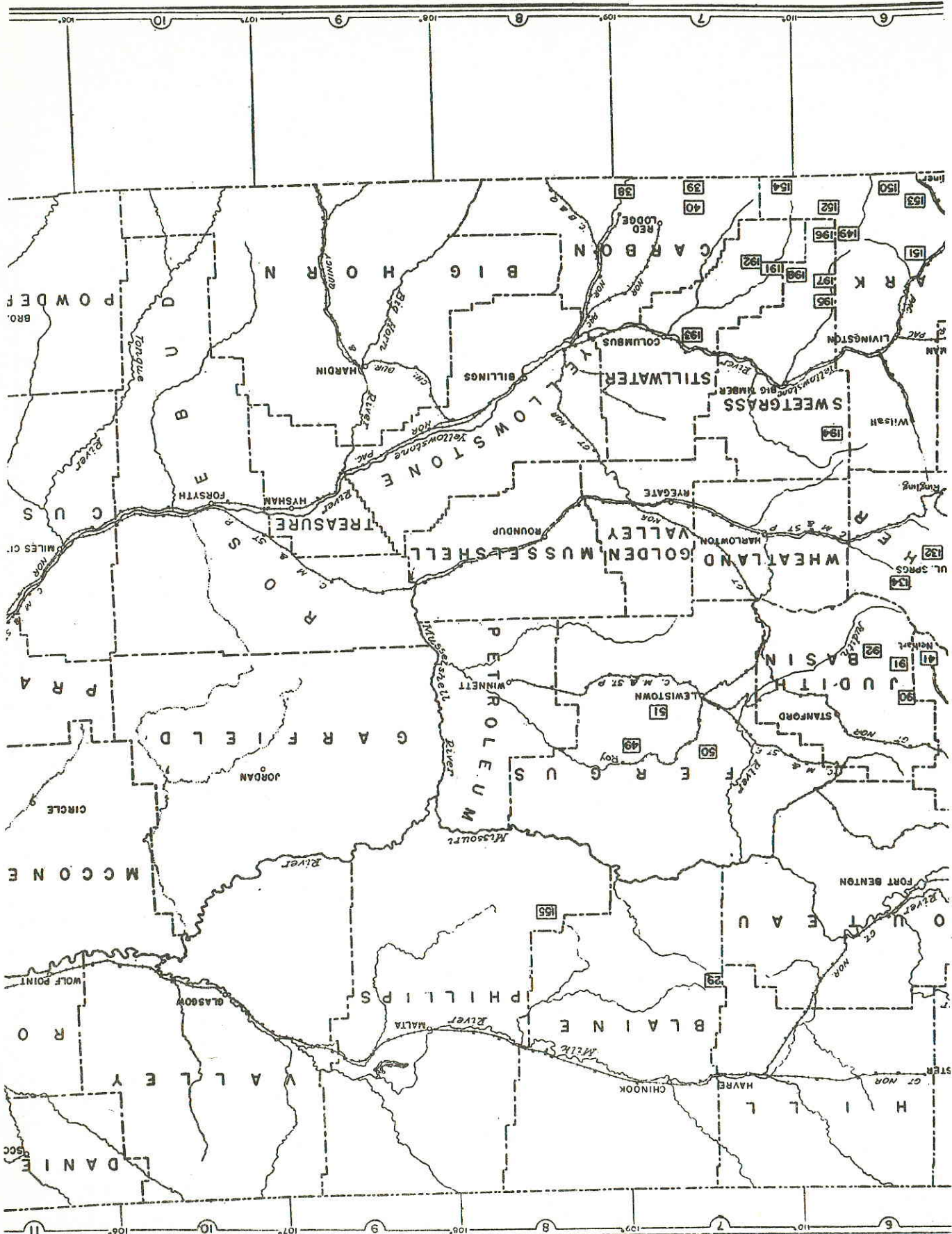
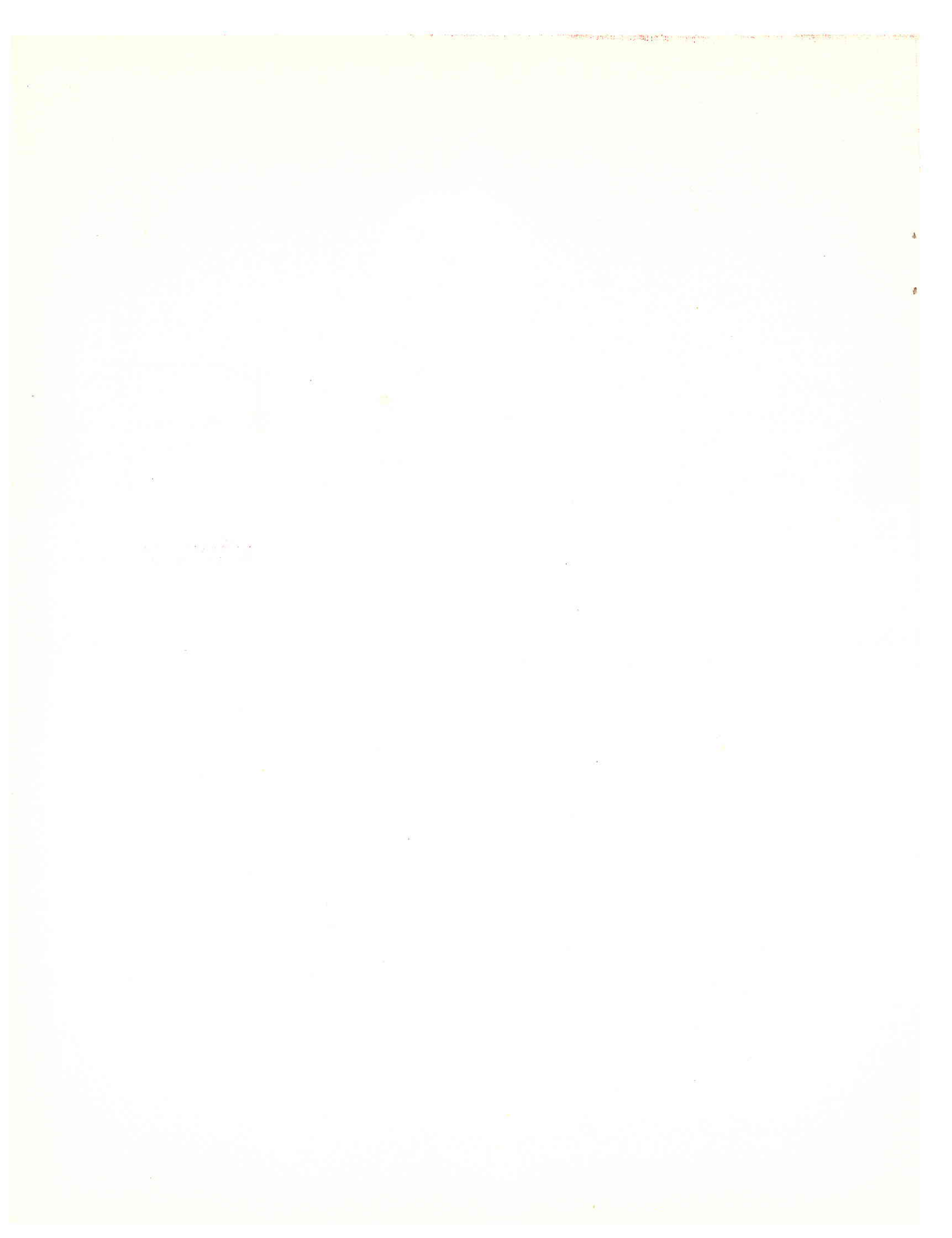
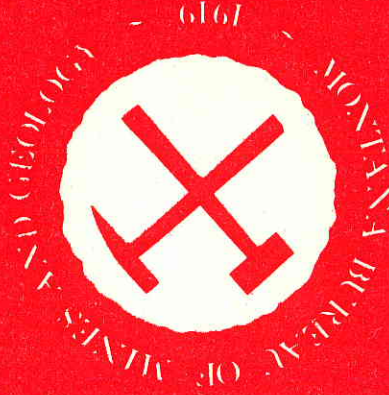


PLATE I







THE MONTANA BUREAU OF MINES AND GEOLOGY IS A PUBLIC SERVICE AGENCY FOR THE STATE OF MONTANA. ITS PURPOSE IS TO ASSIST IN DEVELOPING THE STATES OF MINERAL RESOURCES. IT CONDUCTS FIELD STUDIES OF MONTANA GEOLOGY AND MINERAL DEPOSITS, INCLUDING METALS, OIL AND GAS, COAL, OTHER NONMETALLIC MINERALS, AND GROUND-WATER. IT ALSO CARRIES OUT RESEARCH IN MINERAL BENEFICIATION, EXTRACTIVE METALLURGY, AND ECONOMIC PROBLEMS CONNECTED WITH THE MINERAL INDUSTRY IN MONTANA. THE RESULTS OF THESE STUDIES ARE PUBLISHED IN REPORTS SUCH AS THIS.

FOR FURTHER INFORMATION, ADDRESS THE DIRECTOR, MONTANA BUREAU OF MINES AND GEOLOGY, MONTANA SCHOOL OF MINES, BUTTE.