

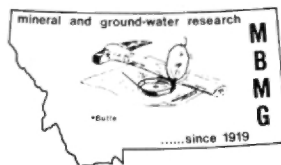
Bulletin 131

MONTANA MINING DIRECTORY

1992



**Compiled by
Robin McCulloch**



1993

Contents

Preface	iii
Mines, quarries, and developing properties	1
Metal mines	1
Placer mines	11
Barite mines	21
Chlorite mines	21
Limestone quarries	22
Phosphate mine	25
Gem and semiprecious minerals	25
Silica mine	29
Peat mine	30
Stone quarries	30
Talc mines	32
Coal mines	34
Bentonite mine	38
Iron mine	38
New mining companies incorporated in Montana, 1992	39
Exploration projects in Montana, 1992	41
Agencies affecting mining in Montana	51
State agencies affecting mining in Montana	56
Permits and contracts	58
Mines and mineral development maps	59
Index of mines, mine owners, and operators	71
Index of new mines and exploration projects	74

Table 1—Nonfuel mineral production in Montana 1990-1992	iv
--	-----------

Front Cover

*Gold Coin mine west of
Anaconda, MT
by
Diane Nugent*

Preface

Continual interest in the mining industry of Montana has shown a need for more detailed data on each project. The directory is published annually to accommodate those needs. Properties that are actually producing or developing, with production anticipated in the foreseeable future are listed with available data. Newly incorporated mining companies and exploration projects are listed in separate sections. To further assist the user, the *Directory* also includes a listing of agencies that affect mining in Montana, a section on permits and contracts, and area maps showing the location of various operations.

The data presented are gathered by the compiler through property visits and telephone interviews of both regulatory agency and company professionals. The mining properties are listed by mines, quarries and developing properties. Entries are listed alphabetically by county. Data include location, geology, commodity information, costs, ownership, activities, history, and property status. An index of all mines, operators and owners is available in the back of the volume, followed by an index of new mines and exploration projects.

Table 1 (following page) represents the most recent available data from the U.S. Bureau of Mines on mineral production in Montana for the years 1990 and 1991, with estimated production for 1992. Commodity values are from average annual prices featured in *Commodity Profiles*, also available from the U.S. Bureau of Mines.

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

If any additional facts or corrections are known, please submit such information to Robin McCulloch, Montana Bureau of Mines and Geology, 1300 West Park Street, Butte, MT 59701-8997, phone 406/496-4171.

The compiler wishes to thank the many Montana property owners who have provided data for this publication, as well as assistance from the Bureau of Land Management and the U.S. Forest Service.

The abbreviations and symbols used in the *Directory* are: (sec.), section; (T), township; (R), range; (ST), short ton; (TPY), tons per year; (TPM), tons per month; (TPD), tons per day; (TPH), tons per hour; (g/d), gallons per day; (yd³/hr), cubic yards per hour; (yd³/d), cubic yards per day.

Robin McCulloch
Mining Engineer
Montana Bureau of Mines and Geology

Butte
June 25, 1993

Table 1—Nonfuel mineral production in Montana* (from U.S. Bureau of Mines).

Mineral	Measure	1990		1991		1992 ϵ	
		Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Clays	metric tons	⊙29,741	⊙\$193	362,635	\$11,332	346,694	\$13,934
Gemstones	carats	n/a	3,692	n/a	2,796	n/a	1,081
★Gold	kilograms	13,012	161,861	18,511	216,211	18,410	207,163
Palladium metal	kilograms	5,930	21,735	6,050	16,923	6,050	16,445
Platinum metal	kilograms	1,810	27,176	1,730	20,635	1,730	19,801
Sand and gravel (construction)	thousand short tons	5,114	14,319	ϵ 4,800	ϵ 13,700	6,500	18,900
★Silver	metric tons	220	34,114	222	28,893	198	25,463
Stone (crushed)	thousand short tons	ϵ 4,000	ϵ 15,300	2,107	5,725	2,100	5,900
Talc and pyrophyllite . . .	metric tons	430,125	18,883	w	w	390,765	18,498
Combined value of barite, cement, clays (bentonite [1990]), copper iron ore (useable), lead, lime, molybdenum, peat, phosphate rock, sand and gravel (industrial), stone (dimension), vermiculite, zinc, and value indicated by symbol W		xx	275,944	xx	274,082	xx	276,088
TOTAL		xx	573,024	xx	590,297	xx	603,273

- * Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
- ⊙ Excludes certain clays; kind and value included with "combined value" figure.
- ★ Recoverable content of ores.
- ϵ Estimated
- n/a Not available
- w Withheld to avoid disclosing company proprietary data; value included with "combined value" data.
- xx Not applicable

Mines, quarries and developing properties

Metal mines

Baldy Mountain claims

Mining district—Gould-Stemple
General location—South of Lincoln
Tract—NE ¼ Sec. 8, T.13N., R.8W.
County—Lewis and Clark
Commodities produced—Gold, lead
Status—Intermittent production
Mining method—Open stope
Ore production—1-5 TPD
Waste production—None
Acres disturbed—< 1
Acres reclaimed—0
Mineral ownership—100% federal
Ore processing method—Gravity mill
Processing capacity—5
Mine life at startup—Unknown
Starting date—Unknown
Discovery date—1800s
Initial investment—Unknown
Employees—Family operation

Annual payroll—None
Production cost—Unknown
Commodity production—Confidential
Ore type—Quartz-calcite breccia containing free gold.
Geologic deposit model—Ore occurs in flat-lying quartz-calcite breccia containing clay-filled karst features; includes native lead and gold-encrusted quartz crystals.
Published reserves—None
Owner—Elwood Hiatt
Operator—Elwood Hiatt
Address—Box 516, Lincoln, MT 59639
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Basin Creek mine (Paupers Dream project)

Mining district—Rimini
General location—Southwest of Helena
Tract—Sec. 24, 25, T.8N., R.6W.; Sec. 19, 30, T.8N., R.5W.
County—Lewis and Clark
Commodities produced—Gold, silver
Status—Testing
Mining method—Open pit
Ore production—25,000 TPD
Waste production—None
Acres disturbed—330
Acres reclaimed—55
Mineral ownership—100% private
Ore processing method—Mine-run ore; cyanide heap leach; carbon in-pulp recovery
Processing capacity—750 gal/min
Mine life at startup—Unknown
Starting date—1988
Discovery date—1892
Initial investment—\$34 million
Employees—18
Annual payroll—\$540,000
Production cost—Unknown

Commodity production—3,000 oz. Au/yr
Ore type—Structurally controlled disseminated gold in rhyolitic tuff.
Geologic deposit model—280 to 300-foot-thick rhyolitic tuff which caps the tops of ridges. The tuff is composed of a lithic-tuff sequence on top of pumice fragments. The lower levels are composed of a tuffaceous unit which extends to a quartz monzonite.
Published reserves—5 million tons @ 0.040 oz. Au/ST, 7.5 million tons @ 0.042 oz. Au/ST
Owner—Pegasus Gold Corporation
Address—Executive Office, Suite 400, North 9 Post Street, Spokane, Wa 99201
Operator—Basin Creek Mining
Address—Basin, MT 59631
Telephone—(406) 494-5904
Mine manager—Tad Dale
Mine superintendent—
Mill superintendent—Dave Swanson
Plant manager—
General manager—

Beal Mountain mine (German Gulch)

Mining district—Siberia
General location—West of Butte
Tract—Sec. 6, T.2N., R.10W.
County—Silver Bow
Commodities produced—Gold, silver (1:1 ratio)
Status—Producing
Mining method—Open pit
Ore production—10,000 TPD, 1.8 million TPY
Waste production—6,300 TPD (.63:1 ratio),
 1.5 million TPY
Acres disturbed—205
Acres reclaimed—30
Mineral ownership—100% private
Ore processing method—Crush, agglomerated,
 and leach pad (carbon-in-pulp); new
 crushing plant
Processing capacity—1.9 million TPY
Mine life at startup—11 years
Starting date—March 1, 1989
Discovery date—1800s
Initial investment—\$16 million (mine); \$5 mil-
 lion (exploration); \$1.9 million new crushing
 plant
Employees—120 (contractors and company)
Annual payroll—\$3.5 million
Production cost—\$209/oz. gold—\$6.75/ton
 (1991)

Commodity production—47,300 oz. gold
 (1991); 7,800 oz. silver (1991); 50,004 oz.
 gold (est. 1992)
Ore type—Disseminated gold and silver in a
 skarn; prograde disseminated gold;
 retrograde and adularia gold vein system.
Geologic deposit model—Ore hosted by Late
 Cretaceous continental clastic rocks
 thermally metamorphosed to pyroxene
 hornfels facies quartzites, hornfelses, and
 metaconglomerates by granodiorite and
 diorite intrusions.
Published reserves—9.8 million tons at .047
 oz. Au/ST
Owner—Pegasus Gold Corporation
Address—Executive Office, Suite 400, North 9
 Post Street, Spokane, WA 99201
Operator—Beal Mountain
Address—1806 Fairmont Road, Anaconda, MT
 59711
Telephone—(406) 797-3215
Mine manager—C. Rife
Mine superintendent—Tad Dale
Mill superintendent—
Plant manager—
General manager—

Bigler-Snowbank mine (Bigler Group)

Mining district—Thompson Creek
General location—West of White Sulphur
 Springs
Tract—Sec. 28, T.9N., R.4E.
County—Meagher
Commodities produced—Gold
Status—Inactive
Mining method—Open and stull stoping
Ore production—0
Waste production—0
Acres disturbed—2
Acres reclaimed—0
Mineral ownership—100% federal
Ore processing method—Gravity
Processing capacity—Approximately 10 TPD
Mine life at startup—Unknown
Starting date—1987
Discovery date—1880s
Initial investment—\$75,000
Employees—0
Annual payroll—0

Production cost—Unknown
Commodity production—Confidential
Ore type—Free gold in a weathered vein
Geologic deposit model—Ore occurs in flat-
 lying, highly oxidized vein within a thrust
 fault (?). It is associated with a three-way
 contact of an igneous intrusive, limestone,
 and tan shales of the Newland Formation
 (Belt Supergroup). Vein width is a function
 of the wall rock.
Published reserves—None
Owner—A.J. Burchak, Travis Belvue (Bigler)
Address—213 Collins, Lavina MT 59046
Operator—American Independent Mining
Address—P.O. Box 84, Townsend, MT 59644
Telephone—Unknown
Mine manager—Doug Baker
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Black Pine mine

Mining district—Black Pine
General location—Northwest of Philipsburg
Tract—Sec. 7, 8, 16, 17, 18, T.8N., R.14 W.
County—Granite
Commodities produced—Silica, silver, copper, gold and lead (silica flux for East Helena smelter)
Status—Intermittent operations dependent of smelter need for flux.
Mining method—Room and pillar stoping (underground)
Ore production—1,000 TPM
Waste production—Unknown
Acres disturbed—20
Acres reclaimed—0
Mineral ownership—5% federal, 95% private
Ore processing method—Crushing & shipping
Processing capacity—1,000 TPM
Mine life at startup—Unknown
Starting date—1885
Discovery date—1882
Initial investment—Unknown

Employees—7
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Mixed oxide and sulfide copper minerals containing silver credits.
Geologic deposit model—Stratabound ore in quartz-filled fissure between bedding planes in quartzite of the Spokane Formation (Belt Supergroup).
Published reserves—2 million tons @ 5.2 oz. Au/ST
Owner—ASARCO, Inc.
Address—
Operator—ASARCO, Inc.
Address—Box 440, Wallace, ID 83873
Telephone—(208) 752-1116
Mine manager—Wade Bristol
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Contact Mining Custom mill

Mining district—Flint Creek
General location—South of Philipsburg
Tract—Sec. 36, T.7S., R.14W.
County—Granite
Commodities produced—Sulfide concentrates (ores); free gold (oxide ores)
Status—Intermittent production
Mining method—N/A
Ore production—N/A
Waste production—N/A
Acres disturbed—<40
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Flotation circuit-crush/grind, ball mills, two parallel closed circuits flotation; gravity circuit-crush/grind, ball mills, cyclone jig table
Processing capacity—1,000 TPD flotation circuit; 500 TPD gravity circuit
Mine life at startup—N/A

Starting date—1981
Discovery date—N/A
Initial investment—Unknown
Employees—12
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—N/A
Geologic deposit model—N/A
Published reserves—N/A
Owner—Contact Mining Company
Address—P.O. Box 337, Philipsburg, MT 59858
Operator—Contact Mining Company
Address—P.O. Box 337, Philipsburg, MT 59858
Telephone—(406) 859-3827
Mine manager—
Mine superintendent—
Mill superintendent—Bill Antonioli
Plant manager—
General manager—

Continental Pit

Mining district—Summit Valley
General location—Butte
Tract—Sec. 5-8, 18, T.3N., R.7W.
County—Silver Bow
Commodities produced—Molybdenum, copper, silver; occasional gold credits
Status—Producing
Mining method—Open pit
Ore production—48,000 TPD
Waste production—42,000 TPD
Acres disturbed—701
Acres reclaimed—28
Mineral ownership—100% private
Ore processing method—Leach pads with sulfuric acid (oxide ores); flotation (sulfide ores)
Processing capacity—48,000 TPD (flotation mill)
Mine life at startup—25 years (present reserves will extend mine life to 2027)
Starting date—1981
Discovery date—1800s
Initial investment—Unknown
Employees—327
Annual payroll—\$10.8 million

Production cost—Unknown
Commodity production—104.9 million lbs. copper; 9.8 million lbs. molybdenum; 892,000 oz. silver
Ore type—Sulfide ores consisting of chalcocite, chalcopyrite, pyrite and molybdenite; copper oxide ores near surface.
Geologic deposit model—Copper/molybdenite porphyry; occurs in Cretaceous-age Butte Quartz Monzonite.
Published reserves—356 million short tons at 0.30% copper, 0.042% molybdenum; 0.065 oz. Ag/ST
Owner—Montana Resources, Inc.
Address—600 Shields, Butte, MT 59701
Operator—Montana Resources, Inc.
Address—600 Shields, Butte, MT 59701
Telephone—(406) 723-4081
Mine manager—
Mine superintendent—Steve Walsh
Mill superintendent—Charlie Palagi
Plant manager—
General manager—J.F. Gardiner

Golden Sunlight mine

Mining district—Cardwell
General location—Northeast of Whitehall
Tract—Sec. 17-20, T.2N., R.3W.
County—Jefferson
Commodities produced—Gold, silver
Status—Producing
Mining method—Open pit
Ore production—6,685 TPD, 2.44 million TPY
Waste production—84,668 TPD, 30 million TPY (strip ratio 13.38:1)
Acres disturbed—1,609 (no change)
Acres reclaimed—9 (test plots); 40 acres (no change)
Mineral ownership—100% private
Ore processing method—Agitated vat leach (cyanide); carbon in pulp recovery; spiral section for pyrite recovery and regrind.
Processing capacity—6,750 TPD
Mine life at startup—22 years
Starting date—1983
Discovery date—1890
Initial investment—\$60 million
Employees—260
Annual payroll—\$9.5 million
Production cost—\$186/oz. Au. cash costs
Commodity production—104,000 oz. Au/yr.
Ore type—Shallow epigenetic epithermal

system associated with late porphyry magmatism.

Geologic deposit model—Free gold in pyrite; gold mineralization occurs in pipe-shaped breccia approximately 700 feet in diameter and over 1,200 feet deep. Breccia plunges at 35° W-SW and is open at depth. Both disseminated and structurally controlled mineralization exist within the deposit. Free gold occurs between pyrite grains. Other minerals are auriferous tellurides, chalcopyrite, galena, sphalerite, marcasite, and tennantite.
Published reserves—42 million tons of 0.048 oz. Au/ST (demonstrated) 1992
Owner—Placer Dome, Inc.
Address—
Operator—Golden Sunlight Mines, Inc.
Address—453 Montana Highway 2E, Whitehall, MT 59759
Telephone—(406) 287-3257
Mine manager—Don Wilson
Mine superintendent—John Freeman
Mill superintendent—Paul Dale
Plant manager—
General manager—

Groundhog mine

Mining district—Argenta
General location—West of Dillon
Tract—Sec. 18, T.6S., R.10W.
County—Beaverhead
Commodities produced—Gold, silver, lead
Status—Operating leach plant
Mining method—Open pit
Ore production—None
Waste production—None
Acres disturbed—<3
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Cyanide heap leach
 (agglomerated ore)
Processing capacity—Unknown
Mine life at startup—Unknown
Starting date—1987
Discovery date—1800s

Initial investment—Unknown
Employees—Family operation
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Confidential
Ore type—Unknown
Geologic deposit model—Unknown
Published reserves—None
Owner—William M. Hand
Address—70 South Arizona, Dillon, MT 59725
Operator—William M. Hand
Address—70 South Arizona, Dillon, MT 59725
Telephone—(406) 683-4420
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Kendall mine

Mining district—North Moccasin
General location—North of Lewistown
Tract—Sec. 31, T.18N., R.18E.
County—Fergus
Commodities produced—Gold, silver
Status—Producing
Mining method—Open pit
Ore production—6,000 TPD, 1.5 million TPY
Waste production—24,000 TPD (1.6:1 strip
 ratio in Kendall pit; Horseshoe pit 1:1)
Acres disturbed—375
Acres reclaimed—50
Mineral ownership—3.6% federal (40 acres);
 96.4% private
Ore processing method—Agglomeration,
 cyanide heap leach, (Merrill Crowe recovery
 plant)
Processing capacity—10,000 TPD, 1.3 million
 ST ore/year
Mine life at startup—Ore reserves proven until
 1993 (additional reserves to 1995)
Starting date—1988
Discovery date—1898
Initial investment—\$21,162,000 (to date)
Employees—75 (80% local employees)

Annual payroll—\$2.5 million
Production cost—\$217/oz. gold; \$7.89/ton
 operating cost & burden (1991)
Commodity production—57,070 oz./yr. gold,
 10,700 oz./yr silver.
Ore type—Disseminated gold
Geologic deposit model—Production from
 Muleshoe deposit; ore controlled by
 fracture-induced porosity; hydrothermal
 solutions trapped by impermeable layers
 (Kibbey Formation) below Madison Group
 limestone (Mississippian age).
Published reserves—3.7 million tons at 0.055
 oz. Au/ST (indicated)
Owner—Canyon Resources
Address—
Operator—C.R. Kendall
Address—P.O. Box 799, Hilger, MT 59451
Telephone—(406) 538-2501
Mine manager—Bob Benbow
Mine superintendent—Kevin Ryan
Mill superintendent—Larry Jennings
Plant manager—
General manager—

Kolberg mill

Mining district—Toston Flat
General location—South of Toston
Tract—Sec. 5, T.4N., R.2E.
County—Broadwater
Commodities produced—N/A
Status—Producing
Mining method—N/A
Ore production—N/A
Waste production—N/A
Acres disturbed—N/A
Acres reclaimed—N/A
Mineral ownership—N/A
Ore processing method—Gravity and flotation
Processing capacity—40 TPD
Mine life at startup—N/A
Starting date—N/A
Discovery date—N/A
Initial investment—N/A

Employees—Family operation
Annual payroll—None
Production cost—Confidential
Commodity production—N/A
Ore type—N/A
Geologic deposit model—N/A
Published reserves—N/A
Owner—Arnold J. Kolberg
Address—
Operator—Kevin Pierce
Address—66 Lone Mountain Road, Toston, MT
 59643
Telephone—Unknown
Mine manager—None
Mine superintendent—None
Mill superintendent—Kevin Pierce
Plant manager—
General manager—

Mineral Hill mine

Mining district—Sheepeater
General location—Northeast of Gardiner
Tract—Sec. 9, T.9S., R.9E.
County—Park
Commodities produced—Gold, silver, tungsten
 (not recovered)
Status—Producing
Mining method—Cut and fill (using borrow
 material); shrinkage
Ore production—850 TPD, 180,000 TPY
Waste production—190 TPD, 40,000 TPY
Acres disturbed—16
Acres reclaimed—12
Mineral ownership—100% private
Ore processing method—Agitated vat leach
 (cyanide); Merrill Crowe recovery plant
Processing capacity—500 TPD, 16,000 TPM,
 180,000 TPY
Mine life at startup—7 years
Starting date—1989
Discovery date—1880
Initial investment—\$29 million
Employees—87 (36 underground, 10 staff, 6
 mechanics, 25 mill and office)

Annual payroll—\$3.5 million
Production cost—\$262/oz. gold (cash
 operating costs)
Commodity production—Annual: 45,451 oz.
 gold (1991)
Ore type—Arsenopyrite, pyrite, pyrrhotite,
 loellingite, chalcopyrite, galena, scheelite,
 gersdorffite, and electrum in a silica matrix.
Geologic deposit model—Archean-age
 metamorphic rocks (Jardine Formation).
Published reserves—650,000 tons @ .27 oz.
 Au/ST (gold to silver ratio approximately 8:1)
Owner—50% TVX Gold; 50% Homestake
 Mining Company
Address—
Operator—TVX Gold/Mineral Hill Mine, Inc.
Address—P.O. Box 92, Gardiner, MT 59030
Telephone—(406) 848-7421
Mine manager—M. McLean
Mine superintendent—
Mill superintendent—Jeff Butwell
Plant manager—
General manager—

Montana Tunnels mine

Mining district—Wickes
General location—South of Helena
Tract—Sec. 8, T.7N., R.4W.
County—Jefferson
Commodities produced—Lead, zinc, gold, silver
Status—Producing
Mining method—Open pit
Ore production—12,510 TPD, 4.6 million TPY
Waste production—25,000 TPD, 8.4 million TPY, (1.7:1 strip ratio)
Acres disturbed—862
Acres reclaimed—87
Mineral ownership—99% private; 5 acres of BLM in pit
Ore processing method—Flotation
Processing capacity—12,500 TPD
Mine life at startup—11 years
Starting date—1987
Discovery date—1864
Initial investment—\$52 million
Employees—232
Annual payroll—\$8.0 million
Production cost—\$115/oz. gold

Commodity production—74,325 oz. gold; 1,324,714 oz. silver; 19,407 tons zinc; 7,177 tons lead
Ore type—Galena, sphalerite, pyrite, chalcopryrite, argentite, and gold electrum
Geologic deposit model—Eocene-age breccia pipe in volcanics.
Published reserves—Indicated - 34.3 million ST @ .019 oz. Au/ST; 0.34 oz. Ag/ST; 0.24% lead; 0.62% zinc
Owner—Pegasus Gold Corporation
Address—Executive Office, Suite 400, North 9 Post Street, Spokane, WA 99201
Operator—Montana Tunnels Mining
Address—P.O. Box 176, Jefferson City, MT 59638
Telephone—(406) 933-8314
Mine manager—Doug Stewart
Mine superintendent—
Mill superintendent—Gordon Nixon
Plant manager—
General manager—Tom Weitz

Montanore mine

(Rock Lake deposit, Noxon project)

Mining district—Noxon (unorganized)
General location—East of Noxon
Tract—Sec. 17, 29, 30, T.27N., R.31W.
County—Sanders
Commodities produced—Copper, silver
Status—Permitting stage (inactive until permits are obtained)
Mining method—Room and pillar (proposed)
Ore production—20,000 TPD
Waste production—Minimal after development
Acres disturbed—20
Acres reclaimed—0
Mineral ownership—20 acres private; remainder federal land
Ore processing method—Flotation
Processing capacity—20,000 TPD
Mine life at startup—16 years (proposed)
Starting date—1994
Discovery date—1983
Initial investment—\$250 million (proposed)
Employees—450 (proposed)
Annual payroll—\$12.5 million (proposed)

Production cost—Unknown
Commodity production—None
Ore type—Bornite, chalcocite and native silver occurring in quartzite.
Geologic deposit model—Stratabound mineralization in quartzite of the Ravalli Formation (Belt Supergroup).
Published reserves—142 million tons @ 1.9 oz. silver; 0.9% copper
Owner—Noranda, Inc.; Montana Reserves Company
Address—
Operator—Noranda Montanore
Address—101 Woodland Road., P.O. Box 1486, Libby, MT 59923
Telephone—(406) 293-8795
Mine manager—
Mine superintendent—John Stroiazzo
Mill superintendent—
Plant manager—
General manager—Mark Petersmeyer

Mining district—West Fisher River
General location—Standard Creek
Tract—Sec. 1, T.27N., R.31W.
County—Lincoln
Commodities produced—Gold
Status—Inactive
Mining method—Open stope
Ore production—3 TPD
Waste production—9 TPD
Acres disturbed—2
Acres reclaimed—0
Mineral ownership—100% public
Ore processing method—Screening to 5/8" after
 blasting and shipping
Processing capacity—3 TPD
Mine life at startup—Unknown
Starting date—1987
Discovery date—1970s
Initial investment—Unknown
Employees—None

Mustang mine

Annual payroll—None
Production cost—Unknown
Commodity production—Unknown
Ore type—Free gold in quartz
Geologic deposit model—Quartz veins (con-
 taining pod-like structures) occurring be-
 tween bedding planes of argillites/siltites of
 the Prichard Formation (Belt Supergroup);
 minor galena and pyromorphite observed.
Published reserves—None
Owner—Standard Creek Mining
Address—P.O. Box 302, Libby, MT 59923
Operator—Standard Creek Mining
Address—P.O. Box 302, Libby, MT 59923
Telephone—No business phone
Mine manager—Rocky Nethercott
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

New Departure Custom Vat Leach

Mining district—Bannack
General location—Southwest of Dillon
Tract—NW¼, NW¼, Sec. 26, T.7S., R.11W.
County—Beaverhead
Commodities produced—Gold, silver
Status—Producing
Mining method—N/A
Ore production—N/A
Waste production—N/A
Acres disturbed—< 5
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Custom vat leach
 (cyanide) mill
Processing capacity—700 TPM
Mine life at startup—N/A
Starting date—Unknown
Discovery date—N/A

Initial investment—Unknown
Employees—None
Annual payroll—Unknown
Production cost—Confidential
Commodity production—Confidential
Ore type—Gold and byproduct silver
Geologic deposit model—N/A
Published reserves—N/A
Owner—Carl Brown
Address—307 Janney Road, Dillon, MT 59725
Operator—Carl Brown
Address—307 Janney Road, Dillon, MT 59725
Telephone—(406) 683-4046
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Rock Creek mine

Mining district—Noxon (unconsolidated)
General location—Cabinet Mountains
 Wilderness
Tract—Sec. 33, 34, T.27N., R.32W.
County—Sanders
Commodities produced—Copper, silver
Status—Permitting stage (pre-EIS)
Mining method—Room and pillar (proposed)
Ore production—10,000 TPD (proposed)
Waste production—Minimal after development
Acres disturbed—N/A
Acres reclaimed—N/A
Mineral ownership—100% private
Ore processing method—Flotation
Processing capacity—10,000 TPD
Mine life at startup—30 years (proposed)
Starting date—2000
Discovery date—1963
Initial investment—\$130 million (proposed)
Employees—355 (proposed)
Annual payroll—\$10.5 million (proposed)

Production cost—N/A
Commodity production—None
Ore type—Bornite, chalcocite and native silver.
Geologic deposit model—Ore zone is a flat-lying
 deposit approximately 12,000 feet long,
 6,000 feet wide, and averages 27 feet in
 thickness. Stratabound mineralization occurs
 in the Revett Formation (Belt Supergroup).
Published reserves—143,760,000 tons @ 2.2
 ounces Ag/ST; 0.8% copper
Owner—ASARCO, Inc.
Address—
Operator—ASARCO, Inc.
Address—P.O. Box 868, Troy, MT 59935
Telephone—(406) 295-5882
Mine manager—D. Miller
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Stillwater mine

Mining district—Nye
General location—South of Nye
Tract—Sec. 21, 22, T.5S., R.15E.
County—Stillwater
Commodities produced—Platinum, palladium,
 rhodium, gold
Status—Producing
Mining method—Coeur d'Alene-style cut and
 fill
Ore production—1,000 TPD, 325,000 TPY
Waste production—300,000 TPY
Acres disturbed—65
Acres reclaimed—20
Mineral ownership—1,206 acres permitted;
 percentage public (unknown)
Ore processing method—Flotation
Processing capacity—1,000 TPD
Mine life at startup—Unknown
Starting date—1987
Discovery date—1974
Initial investment—\$89 million
Employees—320
Annual payroll—\$17.0 million

Production cost—Unknown
Commodity production—215,000 oz. platinum
 and palladium; gold and rhodium credits
Ore type—Sulfide zones containing chalcop-
 pyrite, pyrrhotite, pentlandite
Geologic deposit model—Magmatic differentia-
 tion of an ultramafic intrusive.
Published reserves—900,000 tons @ .8 oz./
 ton combined platinum - palladium; ratio
 = 1 platinum:3.4 palladium
Owner—Stillwater Mining Company
Address—County Route 2, Box 365, Nye, MT
 59061
Operator—Stillwater Mining Company
Address—County Route 2, Box 365, Nye, MT
 59601
Telephone—(406) 328-6400;
 Big Timber—(406)932-4646
Mine manager—Mel Lawson
Mine superintendent—
Mill superintendent—G. Hodges
Plant manager—Jack Burgess
General manager—

Troy unit

Mining district—Troy (unconsolidated)
General location—East of Heron
Tract—Sec. 12-14, 23-26, 35, 36, T.29N., R.34W.; Sec. 6, T.28N., R.33W.
County—Lincoln
Commodities produced—Copper, silver
Status—Producing (Inactive April 1993)
Mining method—Room and pillar
Ore production—8,500 TPD
Waste production—Minimal
Acres disturbed—600
Acres reclaimed—10
Mineral ownership—100% private
Ore processing method—Flotation
Processing capacity—9,500 TPD
Mine life at startup—16 years
Starting date—1981
Discovery date—1940s
Initial investment—\$90 million
Employees—310
Annual payroll—\$10 million
Production cost—Unknown

Commodity production—3,044,000 oz. silver; 20,000 tons copper
Ore type—Quartzites and siltites provide silica-rich hosts for native silver, bornite, chalcopyrite, covellite, mala-chite, with minor amounts of pyrite and galena.
Geologic deposit model—Stratbound deposit in Revett Formation (Belt Supergroup); slab-like ore zone 7,400' x 1,800' x 60'.
Published reserves—12 million tons; 1.42 oz/ST silver; 0.75% copper (1976)
Owner—ASARCO, Inc.
Address—
Operator—ASARCO, Inc. (Troy unit)
Address—Box 868, Troy, MT 59935
Telephone—(406) 295-5882
Mine manager—Doug Miller
Mine superintendent—Dave Young
Mill superintendent—L.R. McKinney
Plant manager—
General manager—

U.S. Antimony Smelter and Refinery

Mining district—Prospect Creek
General location—Southwest of Thompson Falls
Tract—Sec. 17, T.21N., R.31W.
County—Sanders
Commodities produced—Antimony
Status—Producing, processing purchased ore concentrates
Mining method—Not producing
Ore production—N/A
Waste production—N/A
Acres disturbed—10
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Smelter and refinery
Processing capacity—250 TPD
Mine life at startup—Unknown
Starting date—1967
Discovery date—1800s
Initial investment—Unknown
Employees—12

Annual payroll—Unknown
Production cost—Unknown
Commodity production—Confidential
Ore type—Purchases concentrates from China and various other foreign producers.
Geologic deposit model—None
Published reserves—Concentrates purchased from China & Sunshine Mining Company.
Owner—U.S. Antimony Corporation
Address—
Operator—U.S. Antimony Corporation
Address—Box 643, Thompson Falls, MT 59873
Telephone—(406) 827-3523
Mine manager—John C. Lawrence
Mine superintendent—
Mill superintendent—T. Campbell
Plant manager—
General manager—John C. Lawrence

Zortman-Landusky mine

Mining district—Little Rockies
General location—Southwest of Malta
Tract—Sec. 14, 15, 22, T.25N., R.24E.; Sec. 7, T.25N., R.25E.
County—Phillips
Commodities produced—Gold, silver
Status—Producing at full capacity; expansion in Zortman area planned for 1993/1994.
Mining method—Open pit
Ore production—50,000 TPD, 12 million TPY
Waste production—15,000 TPD (.5:1 strip ratio)
Acres disturbed—Zortman 401, Landusky 747 = Total 1148.6
Acres reclaimed—63
Mineral ownership—90% private, 10% federal
Ore processing method—Mine run ore heap leach; activated carbon and Merrill Crowe recovery methods
Processing capacity—50,000 to 120,000 TPD
Mine life at startup—4 years (5-year planning periods)
Starting date—1979
Discovery date—1884
Initial investment—\$2-5 million (\$35 million proposed cost for Zortman expansion).
Employees—185
Annual payroll—\$9.8 million
Production cost—\$214/oz. gold

Commodity production—116,300 oz. gold; 954,400 oz. silver
Ore type—Structurally controlled epithermal systems (stockworks, breccia, fractured "sheeted" zones).
Geologic deposit model—Free gold (with silver) occurring in oxide ores. Little Rocky Mountains were formed when calc-alkalic to alkalic magma penetrated Precambrian basement into overlying Paleozoic and Mesozoic sedimentary rocks. This intrusive center is part of the central Montana alkalic province.
Published reserves—Landusky (oxide) 47.2 million tons @ 0.015 oz. Au/ST; Zortman (sulfide) 61.3 million tons @ 0.020 oz. Au/ST
Owner—Pegasus Gold Corporation
Address—Executive Office, Suite 400, North 5 Post Street, Spokane, WA 99201
Operator—Zortman/Landusky
Address—P.O. Box 313, Zortman, MT 59546
Telephone—(406) 673-3252
Mine manager—Jim Geyer
Mine superintendent—Roland Erickson
Mill superintendent—Francis Kolezak
Plant manager—
General manager—

Placer mines

Arcadia placer

Mining district—Ruby Creek
General location—Southwest of Wisdom
Tract—Sec. 23, 26, T.3S., R.18W.
County—Beaverhead
Commodities produced—Gold
Status—Seasonal operation
Mining method—D9G pushing to stationary wash plant
Ore production—600 yd³/day
Waste production—3,600 yd³/day
Acres disturbed—3.5
Acres reclaimed—2
Mineral ownership—100% private
Ore processing method—Shaker screen (-¾"), sluices, gravel pump
Processing capacity—1,200 yd³/day
Mine life at startup—Unknown
Starting date—1991
Discovery date—1870s
Initial investment—Unknown

Employees—3
Annual payroll—Unknown
Production cost—Confidential
Commodity production—Confidential
Ore type—Gold
Geologic deposit model—Residual placer along structure
Published reserves—None
Owner—Hirschy Ranch
Address—
Operator—Rob Towner
Address—601 N. 6th Street, Hamilton, MT 59840
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Avalanche Creek placer

Mining district—Missouri River
General location—Upper Avalanche Creek
Tract—Sec. 8, T.11N., R.2E.
County—Broadwater
Commodities produced—Gold
Status—Producing
Mining method—Open cut
Ore production—50-60 yd³/day
Waste production—8'-10' overburden, 4' pay,
 (2.5:1 strip ratio)
Acres disturbed—1½
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Trommel and sluice
Processing capacity—80 yd³/day
Mine life at startup—Unknown
Starting date—1990
Discovery date—1800s
Initial investment—Unknown

Employees—None
Annual payroll—None
Production cost—Unknown
Commodity production—Unknown
Ore type—Gold
Geologic deposit model—Paleoplacer gravels
 situated on elevated benches.
Published reserves—Unknown
Owner—Steve Adams
Address—
Operator—Steve Adams
Address—P.O. Box 742, Townsend, MT
 59644
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

B & S placer

Mining district—Ninemile
General location—Mouth of Favorite Gulch
Tract—Sec. 15, T.16N., R.23W.
County—Missoula
Commodities produced—Gold
Status—Producing
Mining method—Open cut
Ore production—75-80 yd³/day
Waste production—240 yd³/day
Acres disturbed—1
Acres reclaimed—4
Mineral ownership—100% public
Ore processing method—Portable wash plant
 (trommel and sluice)
Processing capacity—75-80 yd³/day
Mine life at startup—Unknown
Starting date—Unknown
Discovery date—1800s
Initial investment—Unknown
Employees—None
Annual payroll—None

Production cost—Unknown
Commodity production—Confidential
Ore type—Gold
Geologic deposit model—Alluvial placer gold
 deposit; source may be near a range-front
 fault; placer concentrates contain galena,
 gold and quartz; false bedrock presumed to
 be red and gray fault gouge.
Published reserves—None
Owner—Buddy Ellis
Address—
Operator—Buddy Ellis
Address—1810 Ninemile Creek, Huson, MT
 59846
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Bonnecord placer

Mining district—Bannack
General location—Southwest of Dillon
Tract—Sec. 16, T.8S., R.11W.
County—Beaverhead
Commodities produced—Gold
Status—Seasonal production
Mining method—Open cut
Ore production—50-100 yd³/hr.
Waste production—None
Acres disturbed—<5
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Trommel and sluice
Processing capacity—100 yd³/hr.
Mine life at startup—Unknown
Starting date—1988
Discovery date—1860s
Initial investment—Unknown

Employees—3-4
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Gold
Geologic deposit model—Bench gravels in Quaternary alluvium.
Published reserves—None
Owner—RLT Company
Address—
Operator—Del Rio Corporation
Address—P.O. Box 5527, Helena, MT 59604
Telephone—(406) 227-7334
Mine manager—Roger Goddard
Mine superintendent—Garland Ashe
Mill superintendent—
Plant manager—
General manager—

Cedar Creek placer

Mining district—Cedar Creek
General location—South of Superior
Tract—Sec. 17, T.15N., R.27W.
County—Mineral
Commodities produced—Gold
Status—Inactive; reclaiming disturbed acres.
Mining method—Stripping with 2.5-yard dragline
Ore production—Unknown
Waste production—Unknown
Acres disturbed—4-5
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Trommel and sluice
Processing capacity—45 yd³/hr.
Mine life at startup—Unknown
Starting date—Unknown
Discovery date—1880s
Initial investment—Unknown

Employees—None
Annual payroll—None
Production cost—Unknown
Commodity production—Confidential
Ore type—Gold
Geologic deposit model—Quaternary placer consists of both valley and bench deposits.
Published reserves—None
Owner—Vaughn Brockbank
Address—
Operator—Vaughn Brockbank
Address—Route 1, Box 310A, Provo, UT 84160
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Day Gulch placer

Mining district—Elk Creek
General location—East of Missoula
Tract—Sec. 1, T.12N., R.14W.
County—Granite
Commodities produced—Gold
Status—Seasonal operation
Mining method—Excavator; 35 ton trucks
Ore production—60 yd³/hr.
Waste production—Minimal
Acres disturbed—9.5
Acres reclaimed—1
Mineral ownership—100% public
Ore processing method—Counter rotating
trommels with sluices
Processing capacity—60 yd³/hr.
Mine life at startup—Unknown
Starting date—1991
Discovery date—1880s
Initial investment—Unknown

Employees—3
Annual payroll—Unknown
Production cost—\$5/yd³
Commodity production—Unknown
Ore type—Gold
Geologic deposit model—Residual placer
deposit; includes weathered vein material
along intrusive and limestone contact.
Published reserves—None
Owner—Day Creek Resources
Address—
Operator—Wayne Clutis
Address—Box 27, Greenough, MT 59836
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Douglas Creek placer

Mining district—Unorganized
General location—Douglas Creek
Tract—Sec.3, T.12N., R.13W.
County—Powell
Commodities produced—Gold
Status—Inactive
Mining method—Open cut
Ore production—50-75 yd³/day
Waste production—400-500 yd³/day
Acres disturbed—4
Acres reclaimed—0.5
Mineral ownership—100% public
Ore processing method—Trommel and sluices
Processing capacity—150 yd³/day
Mine life at startup—Unknown
Starting date—1989
Discovery date—1870s
Initial investment—Unknown

Employees—None
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Gold
Geologic deposit model—Quaternary alluvium
Published reserves—None
Owner—Bill Wheeler
Address—4606 Graham St., Missoula, MT 59802
Operator—Tykie Kriticos
Address—
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Eldorado Bar placer

Mining district—Missouri River
General location—Northeast of Helena
Tract—Sec. 17, T.11N., R.2W.
County—Lewis and Clark
Commodities produced—Sapphires, gold
Status—Producing (recreational and commercial)
Mining method—Open pit
Ore production—Unknown
Waste production—None
Acres disturbed—< 5
Acres reclaimed—Unknown
Mineral ownership—100% private
Ore processing method—Commercial (wash plant, trommel and jigs); recreation (dry screening with jig concentrate)
Processing capacity—Unknown
Mine life at startup—Unknown
Starting date—1989
Discovery date—1880s
Initial investment—Unknown
Employees—Unknown
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Sapphires; gold
Geologic deposit model—Elevated ancient river terrace
Published reserves—None
Owner—Unknown
Address—Unknown
Operator—Sam Speerstra
Address—Box 4308, Helena, MT 59604
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Hughes Creek placer

Mining district—Hughes Creek
General location—Southwest of Darby
Tract—Sec. 33, 34, T.2S., R.21W.; Sec. 3,4, T.3S., R.21W.
County—Ravalli
Commodities produced—Gold, tin
Status—Seasonal production
Mining method—Open cut
Ore production—75 yd³/day
Waste production—350-400 yd³/day
Acres disturbed—2.5
Acres reclaimed—4
Mineral ownership—100% private
Ore processing method—Floating plant consisting of vibrating screen and sluices.
Processing capacity—50-100 yd³/day
Mine life at startup—Unknown
Starting date—1970s
Discovery date—1860s
Initial investment—Unknown
Employees—Partnership
Annual payroll—None
Production cost—Unknown
Commodity production—Confidential
Ore type—Gold
Geologic deposit model—Quaternary-age gravel. Gold occurs in thin flakes in pay streaks 1-2 feet thick on a clay layer above bedrock; cassiterite is also recovered. Source of gold is paleoplacer deposit on ridge between Hughes Creek and Overwichee Creek.
Published reserves—None
Owner—E.A. Cox, Wade Cox
Address—
Operator—E.A. Cox, Wade Cox
Address—Star Route West, Darby, MT 59829
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Hughes Creek placer (underground) (Larrigon)

Mining district—Hughes Creek
General location—Southwest of Darby
Tract—SW ¼ sec. 34, T.2S., R.21W.
County—Ravalli
Commodities produced—Gold, tin
Status—Seasonal production
Mining method—Open stope; cut and fill
Ore production—20 TPD
Waste production—Minimal
Acres disturbed—1
Acres reclaimed—0
Mineral ownership—100% federal
Ore processing method—Stationary trommel
 and sluice box
Processing capacity—20 TPD
Mine life at startup—Unknown
Starting date—Unknown
Discovery date—1860s
Initial investment—Unknown

Employees—Partnership
Annual payroll—None
Production cost—Unknown
Commodity production—Unknown
Ore type—Gold
Geologic deposit model—Indurated paleoplacer
 containing thin flakes of gold and reniform
 stream tin.
Published reserves—None
Owner—Unknown
Address—
Operator—Tom Watts
Address—21 W. Mullan, Kellogg, ID 83831
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Lincoln Gulch placer

Mining district—Lincoln
General location—Northwest of Lincoln
Tract—Sec. 8, T.14N., R.9W.
County—Lewis and Clark
Commodities produced—Gold
Status—Seasonal production (July–October)
Mining method—Open cut
Ore production—70 YPD
Waste production—100 YPD
Acres disturbed—2.5
Acres reclaimed—3
Mineral ownership—100% public
Ore processing method—Trommel and sluice
 wash plant
Processing capacity—150-200 YPD
Mine life at startup—Unknown
Starting date—1988
Discovery date—1870s
Initial investment—Unknown

Employees—None
Annual payroll—None
Production cost—Unknown
Commodity production—Confidential
Ore type—Gold
Geologic deposit model—Quaternary alluvium
Published reserves—None
Owner—Bill Lewis
Address—
Operator—Bill Lewis
Address—3867 Wolverine Street NE, Suite 12,
 Building F., Salem, OR 97305
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Mattie V placer

Mining district—Ninemile
General location—Northwest of Missoula
Tract—Sec. 27, T.17N., R.24W.
County—Missoula
Commodities produced—Gold
Status—Seasonal operation
Mining method—Dragline and excavator (open cut)
Ore production—100 yd³/day (5' pay gravel)
Waste production—1,100 yd³/day (57' overburden)
Acres disturbed—4
Acres reclaimed—0
Mineral ownership—100% public
Ore processing method—Trommel and sluice
Processing capacity—100 yd³/day
Mine life at startup—4 years
Starting date—1991
Discovery date—1880s

Initial investment—Unknown
Employees—1
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Gold
Geologic deposit model—Quaternary alluvium
Published reserves—None
Owner—Don Peterson
Address—
Operator—Don Peterson
Address—P.O. Box 571, Frenchtown, MT 59834
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Quartzite placer

Mining district—Elk Creek
General location—East of Missoula
Tract—Sec. 1, T.12N., R.14W.
County—Granite
Commodities produced—Gold
Status—Inactive and reclaiming
Mining method—Open cut
Ore production—0
Waste production—0
Acres disturbed—1
Acres reclaimed—4
Mineral ownership—10% public
Ore processing method—Trommel and sluice
Processing capacity—0
Mine life at startup—Unknown
Starting date—1987
Discovery date—1870s
Initial investment—Unknown

Employees—None
Annual payroll—None
Production cost—Unknown
Commodity production—Unknown
Ore type—Gold
Geologic deposit model—Quaternary alluvium
Published reserves—None
Owner—Breed Leikem
Address—
Operator—Breed Leikem
Address—Star Drive, East Missoula, MT 59802
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Sauerkraut Creek placer

Mining district—Lincoln
General location—Southwest of Lincoln
Tract—Sec. 5, T.13N., R.9W.
County—Lewis and Clark
Commodities produced—Gold
Status—Seasonal production
Mining method—Open cut
Ore production—120-180 yd³/day
Waste production—120-200 yd³/day
Acres disturbed—2
Acres reclaimed—80
Mineral ownership—100% private
Ore processing method—Wash plant (grizzly, trommel, sluice)
Processing capacity—50 yd³/hr.; 100-150 yd³/day
Mine life at startup—3-5 years
Starting date—1987
Discovery date—1800s
Initial investment—Unknown
Employees—Partnership

Annual payroll—None
Production cost—Unknown
Commodity production—Confidential
Ore type—Gold
Geologic deposit model—Quaternary alluvial deposit overlying older placer deposit containing magnetite, hematite, pyrite, and eluvial placer from veins that crosscut the valley. Placer deposit is 2 feet above weathered bedrock.
Published reserves—None
Owner—Unknown
Address—
Operator—Clay Lewis, Bob Lewis
Address—Box 593, Lincoln, MT 59636
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Seahawk placer (B and B mine)

Mining district—Indian Creek
General location—Northwest of Townsend
Tract—Sec. 22, 23, 28, T.7N., R.1E.
County—Broadwater
Commodities produced—Gold
Status—Intermittent production
Mining method—Open cut
Ore production—120-130 yd³/day
Waste production—50-100 yd³/day (25' pay gravel, 8' overburden)
Acres disturbed—5
Acres reclaimed—55
Mineral ownership—100% private
Ore processing method—Trommel and sluice
Processing capacity—200 yd³/day
Mine life at startup—Unknown
Starting date—Unknown
Discovery date—1880s
Initial investment—Unknown

Employees—6-10
Annual payroll—Unknown
Production cost—Confidential
Commodity production—Confidential
Ore type—Gold
Geologic deposit model—Alluvial placer deposit in Quaternary gravels (alluvial fan).
Published reserves—None
Owner—B and B Mining, Ltd.
Address—
Operator—Larry Lunan
Address—Box 1138, Townsend, MT 59644
Telephone—No business number
Mine manager—Butch Harper
Mine superintendent—Don McLavey
Mill superintendent—
Plant manager—
General manager—

The Rat placer

Mining district—Elk Creek
General location—East of Missoula
Tract—Sec. 1, T.12N., R.14W.
County—Missoula
Commodities produced—Gold
Status—Operating (seasonal)
Mining method—Backhoe and dozer (open cut)
Ore production—30 yd³/day
Waste production—40 yd³/day
Acres disturbed—4.5
Acres reclaimed—.5
Mineral ownership—100% public
Ore processing method—Trommel and sluice
Processing capacity—30 yd³/day
Mine life at startup—Unknown
Starting date—1992
Discovery date—1880s
Initial investment—Unknown

Employees—None
Annual payroll—None
Production cost—Confidential
Commodity production—Confidential
Ore type—Gold
Geologic deposit model—Alluvial and residual
 placer deposits
Published reserves—None
Owner—John D'orazi
Address—
Operator—John D'orazi
Address—716 Harrison Ave., Missoula, MT
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Vermont Gulch placer

Mining district—Unknown
General location—Vermont Gulch
Tract—Sec. 31, T.11N., R.3E.
County—Meagher
Commodities produced—Gold
Status—Producing
Mining method—Open cut
Ore production—70 yd³/day
Waste production—None
Acres disturbed—1
Acres reclaimed—5
Mineral ownership—100% public
Ore processing method—Trommel to jig to
 sluice
Processing capacity—200 yd³/day
Mine life at startup—Unknown
Starting date—1985
Discovery date—1979
Initial investment—Unknown
Employees—None
Annual payroll—None

Production cost—Unknown
Commodity production—Confidential
Ore type—Gold
Geologic deposit model—Pay streak is 80 feet
 across; values are spotty. Black sands
 contain magnetite and cinnabar. Deposit
 may be colluvial and is weathering out of
 west-trending, small to medium-size quartz
 veins.
Published reserves—None
Owner—Harvey McConnel
Address—
Operator—Randy Sealey
Address—2220 Rosewyn, Billings, MT 59102
Telephone—(406) 652-6096
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Walnut placer

Mining district—Silver Butte
General location—East of Trout Creek
Tract—Sec. 4, 9, T.24N., R.30W.
County—Sanders
Commodities produced—Gold
Status—Seasonal production
Mining method—Open cut
Ore production—10 yd³/hr.
Waste production—Minimal
Acres disturbed—2
Acres reclaimed—0
Mineral ownership—100% public
Ore processing method—trommel, sluices and
 jigs
Processing capacity—20 yd³/hr.
Mine life at startup—Unknown
Starting date—Unknown
Discovery date—1800s
Initial investment—Unknown
Employees—None (partnership)

Annual payroll—None
Production cost—Unknown
Commodity production—Unknown
Ore type—Gold
Geologic deposit model—Quaternary placer
 deposit on gravel bar in Vermillion River
 flood plain.
Published reserves—None
Owner—Marvin and Doris Eichert, Jim and
 Debra Williams
Address—
Operator—Jim Williams
Address—1457 Bluestide Road, Thompson
 Falls, MT 59873
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Washington Gulch placer

Mining district—Finn
General location—North of Avon
Tract—Sec. 7, 8, T.12N., R.8W.
County—Powell
Commodities produced—Gold
Status—Developing
Mining method—Excavator and truck (25-ton
 articulating)
Ore production—200 yd³/hr
Waste production—Minimal
Acres disturbed—None
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Trommel and shaking
 tables
Processing capacity—Unknown
Mine life at startup—4 years
Starting date—1992
Discovery date—1880s

Initial investment—1.5 million
Employees—Unknown
Annual payroll—1.0 million
Production cost—Unknown
Commodity production—Unknown
Ore type—Gold
Geologic deposit model—Quaternary gravels
Published reserves—10 million yards @ \$10/yd³
Owner—
Address—
Operator—Montana Pacific Mining, Inc.
Address—P.O. Box 367, Avon, MT 59713
Telephone—(406) 492-6092
Mine manager—Wade Blomquist
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Barite mine

Elk Creek mine

Mining district—Elk Creek
General location—East of Missoula
Tract—Sec. 16, T.13N., R.14W.
County—Missoula
Commodities produced—Barite
Status—Intermittent operations
Mining method—Underground
Ore production—3,000 TPY
Waste production—Minimal
Acres disturbed—< 1
Acres reclaimed—0
Mineral ownership—100% State land
Ore processing method—Gravity (jigs)
Processing capacity—40 TPH
Mine life at startup—Unknown
Starting date—1951
Discovery date—1940s
Initial investment—Unknown
Employees—Contract

Annual payroll—Unknown
Production cost—Confidential
Commodity production—3,000 tons
Ore type—Vein barite
Geologic deposit model—Fissure filling along faults
Published reserves—None
Owner—State of Montana (lease)
Address—
Operator—Rocky Mountain Minerals
Address—P.O. Box 700, Lethbridge, Alberta, Canada T1J 3Z6
Telephone—(403) 329-0443
Mine manager—Steven Butrenchuk
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Chlorite mine

Antler mine

Mining district—Silver Star
General location—South of Silver Star
Tract—Sec. 14, R.2S., R.6W.
County—Madison
Commodities produced—Chlorite
Status—Intermittent production
Mining method—Open pit
Ore production—12,000 TPY
Waste production—210,000 TPY
Acres disturbed—< 10
Acres reclaimed—Unknown
Mineral ownership—100% private
Ore processing method—Hand sort
Processing capacity—4,000 TPM; 1 shift, 5 days/week
Mine life at startup—25 years (proven reserves)
Starting date—1980
Discovery date—Unknown

Initial investment—\$1 million
Employees—8
Annual payroll—\$265,000
Production cost—Unknown
Commodity production—12,000 TPY
Ore type—Chlorite
Geologic deposit model—Solution replacement
Published reserves—160,000 tons (processed product)
Owner—Luzenac America, Inc.
Address—
Operator—Luzenac America, Inc.
Address—P.O. Box 99, Alder, MT 59103
Telephone—(406) 684-5836
Mine manager—Mike Toelle
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Limestone quarries

Indian Creek mine

Mining district—Indian Creek
General location—Northwest of Townsend
Tract—Sec. 28, 33, T.7N., R.1E.
County—Broadwater
Commodities produced—Limestone (burnt lime)
Status—Producing
Mining method—Open pit
Ore production—1 million TPY
Waste production—Minimal (no stripping)
Acres disturbed—50
Acres reclaimed—10
Mineral ownership—100% public (patent process)
Ore processing method—Crushing, screening and kilns
Processing capacity—1,000 TPD
Mine life at startup—30+ years
Starting date—1982
Discovery date—1800s
Initial investment—\$10-\$12 million (subsequent investment)

Employees—50 mine, 15 contract (Grayrock Construction)
Annual payroll—\$2.2 million
Production cost—Unknown
Commodity production—300,000 tons
Ore type—Limestone
Geologic deposit model—Mission Canyon limestone (Mississippian age)
Published reserves—13 million tons
Owner—Continental Lime, Inc.
Address—
Operator—Continental Lime, Inc.
Address—P.O. Box 550, Townsend, MT 59644
Telephone—(406) 266-5221
Mine manager—Elton Chorney
Mine superintendent—Elton Chorney
Mill superintendent—
Plant manager—
General manager—

McClellan quarry

Mining district—McClellan
General location—South of East Helena
Tract—Sec. 7, T.9N., R.2W.
County—Jefferson
Commodities produced—Limestone
Status—Producing
Mining method—Open pit
Ore production—30,000 TPY
Waste production—None
Acres disturbed—10
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Crushing -¼"
Processing capacity—100 TPD
Mine life at startup—Unknown
Starting date—1932
Discovery date—1890s
Initial investment—\$50,000

Employees—4-5
Annual payroll—\$30,000
Production cost—Unknown
Commodity production—30,000 TPY
Ore type—Limestone
Geologic deposit model—Meagher Formation (Cambrian age)
Published reserves—Unknown
Owner—ASARCO, Inc.
Address—Box 1230, East Helena, MT 59635
Operator—Maronick Construction Company, Inc.
Address—Box 1100, East Helena, MT 59635
Telephone—(406) 442-1185
Mine manager—E.P. Maronick
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Montana City quarry

Mining district—Montana City
General location—South of Helena
Tract—Sec. 12, 13, T.9N., R.2W.
County—Jefferson
Commodities produced—Limestone
Status—Producing
Mining method—Open pit (mined on 20-foot benches)
Ore production—2,500 TPD
Waste production—Minimal
Acres disturbed—77
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Jaw crusher/rock house-hammer mill/ball mills/slurry tanks/kilns
Processing capacity—1,000 TPD
Mine life at startup—Unknown
Starting date—1962

Discovery date—1880s
Initial investment—Unknown
Employees—83
Annual payroll—\$2.8 million
Production cost—Unknown
Commodity production—Confidential
Ore type—Limestone
Geologic deposit model—Altered limestone
Published reserves—Unknown
Owner—Ash Grove Cement West, Inc.
Address—
Operator—Ash Grove Cement West, Inc.
Address—Montana City, MT 59602
Telephone—(406) 442-8855
Mine manager—Dan Peterson
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Trident quarry

Mining district—Unorganized
General location—Northeast of Three Forks
Tract—Sec. 9, 10, T.2N., R.2E.
County—Gallatin
Commodities produced—Cement
Status—Producing
Mining method—Open pit
Ore production—534,538 TPY
Waste production—Minimal
Acres disturbed—256
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Crush/raw grind/burn (kilns)/finish grind
Processing capacity—300,000 TPY
Mine life at startup—150+ years
Starting date—1902
Discovery date—1890s
Initial investment—Unknown

Employees—100
Annual payroll—\$3.0 million
Production cost—Unknown
Commodity production—534,538 TPY
Ore type—Limestone
Geologic deposit model—Madison Group limestone (Mississippian age)
Published reserves—None
Owner—Cement Division—Ideal Basic Industries
Address—
Operator—Cement Division—Ideal Basic Industries
Address—4070 Trident Road, Three Forks, MT 59752
Telephone—(406) 285-3241
Mine manager—Bill Springlan
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Pipestone mine

Mining district—Little Pipestone
General location—East of Butte
Tract—Sec. 35, T.2N., R.6W.
County—Jefferson
Commodities produced—Chemical-grade calcium carbonate (92-98% pure)
Status—Producing
Mining method—Open pit
Ore production—3,000 TPY
Waste production—Minimal
Acres disturbed—3.5
Acres reclaimed—0
Mineral ownership—100% federal
Ore processing method—Crushing (cone 3-deck screen); feed 6", 4 products -3" to ¾, -¾ to +4 mesh, -4 mesh to +400 mesh, -400 mesh
Processing capacity—50 TPH
Mine life at startup—Unknown
Starting date—1990
Discovery date—Unknown

Initial investment—Unknown
Employees—6
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Crystalline calcite
Geologic deposit model—Derived from contact metamorphism
Published reserves—50 million tons proven; 200 million tons probable
Owner—Natures Calcium Products Company
Address—
Operator—Natures Calcium Products Company
Address—P.O. Box 512, Whitehall, MT 59759
Telephone—(406) 723-4569
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Warren quarry

Mining district—Unorganized
General location—South of Billings
Tract—Sec. 24, 25, T.8S., R.25E.; Sec. 19, 30, T.8S., R.26E.
County—Carbon
Commodities produced—Limestone
Status—Producing (seasonal)
Mining method—Open pit
Ore production—600,000 TPY
Waste production—100,000 TPY
Acres disturbed—35 (1 acre/yr addition)
Acres reclaimed—In progress
Mineral ownership—100% private
Ore processing method—Crushing and screening; various products (6" to 2"); hammermill (¾" to 200 mesh)
Processing capacity—450 TPH (16-hr/d), 1 million TPY
Mine life at startup—Unknown
Starting date—1940s
Discovery date—1800s
Initial investment—\$2.1 million

Employees—21
Annual payroll—\$740,000
Production cost—Unknown
Commodity production—600,000 tons (various limestone products)
Ore type—High-purity limestone
Geologic deposit model—Madison Group limestone (Mississippian age)
Published reserves—1 billion tons (6 x 40 miles)
Owner—Big Horn Limestone Company (Western Sugar Company/Holly Sugar Company)
Address—Colorado Springs, CO
Operator—Montana Limestone Company
Address—P.O. Box 463, Bridger, MT 59041
Telephone—Quarry—(406) 764-2511;
 Office—(406) 764-2513
Mine manager—Ken Pike
Mine superintendent—
Mill superintendent—Mark Chrisman
Plant manager—
General manager—

Phosphate mine

Warm Springs mine

Mining district—Garrison
General location—Northwest of Garrison
Tract—Sec. 11, 13, 24, T.10N., R.10W.,
 Sec. 19, T.10N., R.9W.
County—Powell
Commodities produced—Phosphate
Status—Producing
Mining method—Open stope
Ore production—800 TPD
Waste production—Minimal
Acres disturbed—38
Acres reclaimed—5
Mineral ownership—100% public
Ore processing method—Dry grinding
Processing capacity—1,000 TPD
Mine life at startup—Unknown
Starting date—1929
Discovery date—1928
Initial investment—\$12 million

Employees—133
Annual payroll—\$3 million
Production cost—Unknown
Commodity production—Confidential
Ore type—Bedded phosphate rock
Geologic deposit model—Phosphoria Formation
 (Permian age)
Published reserves—15 years (minimum)
Owner—Cominco American, Inc.
Address—
Operator—Cominco American, Inc.
Address—Garrison, MT 59731
Telephone—(406) 846-2084
Mine manager—Martin Dodd
Mine superintendent—Hugh Moore
Mill superintendent—
Plant manager—
General manager—

Gem and Semiprecious Minerals

Eldorado Bar placer

Mining district—Missouri River
General location—Northeast of Helena
Tract—Sec. 17, T.11N., R.2W.
County—Lewis and Clark
Commodities produced—Gold, sapphires
Status—Producing (recreational and
 commercial)
Mining method—Open pit
Ore production—Unknown
Waste production—None
Acres disturbed—5
Acres reclaimed—Unknown
Mineral ownership—100% private
Ore processing method—Commercial (wash
 plant, trommel and jigs); recreational (dry
 screening with jig concentrate)
Processing capacity—Unknown
Mine life at startup—Unknown
Starting date—1989

Discovery date—1880s
Initial investment—Unknown
Employees—Unknown
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Gold, sapphires
Geologic deposit model—Elevated river terrace
Published reserves—None
Owner—Unknown
Address—Unknown
Operator—Sam Speerstra
Address—Box 4308, Helena, MT 59604
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Four V's claims

Mining district—Unorganized
General location—North of Lolo Pass
Tract—Sec. 22, T.11N., R.24W.
County—Missoula
Commodities produced—Smoky quartz crystals
Status—Producing
Mining method—Hand work
Ore production—Unknown
Waste production—Unknown
Acres disturbed—< 1
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Hand sorting
Processing capacity—Unknown
Mine life at startup—Unknown
Starting date—1970s
Discovery date—Unknown
Initial investment—Unknown

Employees—None
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Quartz
Geologic deposit model—Unknown
Published reserves—None
Owner—Albert E. Volker
Address—
Operator—Albert E. Volker
Address—1806 S. 10th West, Missoula, MT
 59801
Telephone—(406) 543-3992
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

French Bar placer

Mining district—Missouri River
General location—East of Helena
Tract—Sec. 4, 5, T.10N., R.1W.
County—Lewis and Clark
Commodities produced—Sapphires, gold
Status—Producing (recreational)
Mining method—Open cut
Ore production—Unknown
Waste production—None
Acres disturbed—< 5
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Wash plant (vibrating
 screens and jigs)
Processing capacity—Unknown
Mine life at startup—Unknown
Starting date—Unknown
Discovery date—Unknown
Initial investment—Unknown

Employees—Unknown
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Sapphires; gold
Geologic deposit model—River terrace
Published reserves—None
Owner—Ron McLean
Address—
Operator—Ron McLean
Address—7032 Canyon Ferry Road, Helena,
 MT 59601
Telephone—
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Lovestone placer

Mining district—Missouri River
General location—East of Helena
Tract—Sec. 5, T.10N., R.1W.
County—Lewis and Clark
Commodities produced—Sapphires, gold
Status—Intermittent contract runs (property for sale)
Mining method—Open cut
Ore production—Intermittent contract runs
Waste production—Unknown
Acres disturbed—< 5
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Screening plant with jigs; fines processed on table and spirals.
Processing capacity—Unknown
Mine life at startup—Unknown
Starting date—Unknown
Discovery date—1800s

Initial investment—Unknown
Employees—None
Annual payroll—None
Production cost—Unknown
Commodity production—Unknown
Ore type—Sapphires, gold
Geologic deposit model—Ancient alluvial terrace
Published reserves—None
Owner—Lovestone Mining
Address—
Operator—Jerry Lorbeck
Address—4448 Jim Town Road, Helena, MT 59601
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Gem Mountain mine

Mining district—Rock Creek
General location—Near Skalkaho Pass
Tract—Sec. 16, T.6N., R.16W.
County—Granite
Commodities produced—Sapphires
Status—Producing
Mining method—Open cut
Ore production—124 yd³/day
Waste production—100 yd³/day (average)
Acres disturbed—< 5
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Sluice and trommel
Processing capacity—124 yd³/day
Mine life at startup—Unknown
Starting date—1800s
Discovery date—1800s
Initial investment—Unknown
Employees—13

Annual payroll—Unknown
Production cost—Unknown
Commodity production—400 lbs.
Ore type—Sapphire
Geologic deposit model—Quaternary-age placer deposits in drainages; elevated paleoplacer bench deposits on ridges.
Published reserves—Unknown
Owner—Theo T. Smith
Address—27207 N. 39th Drive, Glendale AZ 85308
Operator—Gem Mountain Sapphire Company
Address—P.O. Box 701, Philipsburg, MT 59856
Telephone—(406) 859-3530
Mine manager—T.R. Hess
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—T.R. Hess

P.C. Crystal mine

Mining district—Basin Creek
General location—North of Basin
Tract—Sec. 22-24, T.7N., R.6W.
County—Jefferson
Commodities produced—Quartz crystals
 (Japanese twin law)
Status—Producing
Mining method—Open cut
Ore production—Unknown
Waste production—Minimal
Acres disturbed—1
Acres reclaimed—0
Mineral ownership—100% public
Ore processing method—Crystal collecting
 (hand processing)
Processing capacity—Unknown
Mine life at startup—Unknown
Starting date—Unknown
Discovery date—Unknown

Initial investment—Unknown
Employees—None
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Quartz
Geologic deposit model—Breccia pipe (Elkhorn
 Mountains Volcanics)
Published reserves—None
Owner—Forrest L. Klies
Address—
Operator—Peter Knudsen
Address—W. Park Street, Butte, MT 59701
Telephone—No business phone
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Vortex Group

Mining district—Yogo
General location—Southwest of Utica
Tract—Sec. 19, 20, T.13N., R.11E.
County—Judith Basin
Commodities produced—Sapphires
Status—Exploring
Mining method—Open stope and stull
Ore production—0
Waste production—0
Acres disturbed—< 2
Acres reclaimed—0
Mineral ownership—100% public
Ore processing method—Trommel and sluice
Processing capacity—100 YPD
Mine life at startup—Unknown
Starting date—1984
Discovery date—1920
Initial investment—\$200,000
Employees—Partnership

Annual payroll—None
Production cost—Confidential
Commodity production—Sapphires
Ore type—Sapphire
Geologic deposit Model—Nearly vertical sapphire-
 bearing lamprophyre dike cutting through
 gently dipping limestone (Madison Group).
Published reserves—Unknown
Owner—Lanny and Joy Perry, Charles and
 Marie Ridgeway, Pete Ecker
Address—Utica, MT 59452
Operator—Vortex Mining
Address—Utica, MT 59452
Telephone—(406) 423-5390
Mine manager—Charles Ridgeway
Mine superintendent—Peter Ecker
Mill superintendent—
Plant manager—
General manager—

Yogo mine

Mining district—Yogo
General location—Southwest of Utica
Tract—Sec. 19-22, T.13N., R.11E.
County—Judith Basin
Commodities produced—Sapphires
Status—Seasonal production
Mining method—Systematic cleanup of remnant surface reserves from previous operations.
Ore production—Unknown
Waste production—Unknown
Acres disturbed—< 5 acres
Acres reclaimed—Unknown
Mineral ownership—100% private
Ore processing method—Stationary wash plant, trommel, and sluices
Processing capacity—500 YPD
Mine life at startup—Unknown
Starting date—1896
Discovery date—1896
Initial investment—Unknown

Employees—Partnership
Annual payroll—None
Production cost—Unknown
Commodity production—Unknown
Ore type—Sapphire
Geologic deposit model—Nearly vertical sapphire-bearing lamprophyre dike cutting through gently dipping limestone (Madison Group).
Published reserves—Unknown
Owner—Roncor, Inc.
Address—
Operator—Roncor, Inc.
Address—2056 South Barrington Avenue, Los Angeles, CA 90025
Telephone—
Mine manager—Ronald H. Kunisaki
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Silica mine

Canyon Creek quarry

Mining district—Melrose
General location—Southwest of Butte
Tract—Sec. 32, T.1S., R.9W.
County—Beaverhead
Commodities produced—Metallurgical silica
Status—Producing
Mining method—Open pit
Ore production—45,000 TPY
Waste production—None
Acres disturbed—3
Acres reclaimed—Unknown
Mineral ownership—100% private
Ore processing method—Crush and screen (-3" to + ½")
Processing capacity—100 TPH
Mine life at startup—Unknown
Starting date—1968
Discovery date—1952
Initial investment—Unknown
Employees—2

Annual payroll—\$60,000
Production cost—Unknown
Commodity production—45,000 TPY
Ore type—Silica
Geologic deposit model—Pennsylvanian-age Quadrant Formation
Published reserves—1 million tons @ 98% SiO₂
Owner—Rhone-Poulenc Basic Chemicals Company
Address—
Operator—Rhone-Poulenc Basic Chemicals Company
Address—Box 3146, Butte, MT 59701
Telephone—(406) 782-7300
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—Greg Gorton

Peat mine

Martin's Peat, Inc.

Mining district—Unorganized
General location—Northeast of Whitefish
Tract—Sec. 16, T.24N., R.17W.
County—Lake
Commodities produced—Peat
Status—Producing
Mining method—Open pit
Ore production—5,000 yd³/yr.
Waste production—None
Acres disturbed—< 1
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Screen plant
Processing capacity—30 yd³/hr.
Mine life at startup—25 years
Starting date—1975
Discovery date—1974
Initial investment—\$320,000

Employees—3
Annual payroll—\$3,000
Production cost—Unknown
Commodity production—2,000 TPY
Ore type—Peat
Geologic deposit model—Peat bog
Published reserves—None
Owner—Martin's Peat, Inc.
Address—
Operator—Martin's Peat, Inc.
Address—Swan Route, Bigfork, MT 59911
Telephone—(406) 837-5086
Mine manager—Ronald I. Martin
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Stone quarries

Essex quarry

Mining district—Unorganized
General location—East of Kalispell
Tract—Sec. 33, T.30N., R.16W.
County—Flathead
Commodities produced—Rail ballast and highway products
Status—Seasonal production
Mining method—Open pit
Ore production—250,000 TPY
Waste production—70,000 TPY
Acres disturbed—70
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Crushing and screen
Processing capacity—600 TPH (2 10-hr shifts/d)
Mine life at startup—80 years
Starting date—1940s
Discovery date—1930s

Initial investment—2.5 million (portable plant located 25% of year at site)
Employees—34 temporary, 2 permanent
Annual payroll—\$220,000
Production cost—Unknown
Commodity production—250,000 TPY
Ore type—Quartzite
Geologic deposit model—Precambrian quartzite
Published reserves—None
Owner—Meridian Aggregates Company
Address—Englewood, CO
Operator—Meridian Aggregates Company
Address—P.O. Box 839, Granite Falls, WA 98252
Telephone—(206) 691-7735
Mine manager—Dave Piper
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Livingston Marble and Granite quarry

Mining district—Unorganized
General location—East of Gardiner
Tract—Sec. 14, 24, T.9S., R.8E.
County—Park
Commodities produced—Ashlar, cut stone,
Status—Producing
Mining method—Open pit
Ore production—2,000 TPY
Waste production—3,000 TPY
Acres disturbed—10
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Sawed into slabs/tiles
Processing capacity—N/A
Mine life at startup—135 +
Starting date—1955
Discovery date—1910
Initial investment—Unknown

Employees—7
Annual payroll—Unknown
Production cost—Unknown
Commodity production—N/A
Ore type—Travertine
Geologic deposit model—Travertine and marble associated with hot springs deposits.
Published reserves—None
Owner—Greg Strong
Address—711 E. Park, Livingston, MT 59047
Operator—Livingston Marble and Granite Works
Address—Livingston, MT 59047
Telephone—(406) 222-1342
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

McQuarrie quarry

Mining district—Clinton (Wallace)
General location—North of Clinton
Tract—Sec. 17, T.12N., R.17W.
County—Missoula
Commodities produced—Ballast and road-bed material
Status—Producing
Mining method—Open pit
Ore production—200,000 TPY
Waste production—80,000 TPY (road metal for highway projects)
Acres disturbed—60
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Drill-blast crush — 2½" to +¾, -¾"
Processing capacity—600 TPH (two 10-hr shifts/d)
Mine life at startup—80 years
Starting date—1940s

Discovery date—1940s
Initial investment—\$2.5 million (portable plant located 25% of year at site)
Employees—34 temporary, 2 permanent
Annual payroll—\$220,000 TPY
Production cost—Unknown
Commodity production—200,000 TPY
Ore type—Quartzite
Geologic deposit model—Precambrian quartzite
Published reserves—None
Owner—Meridian Aggregates Company
Address—Englewood, CO
Operator—Meridian Aggregates Company
Address—Box 839, Granite Falls, WA 98252
Telephone—(206) 691-7735
Mine manager—Dave Piper
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Red Bluff quarry

Mining district—Unorganized
General location—Between Paradise and St. Regis
Tract—NE ¼, SE ¼ of Sec. 14, T.18N., R.26W.
County—Sanders
Commodities produced—Decorative stone, flagstone, trap rock
Status—Producing
Mining method—Open pit
Ore production—Unknown
Waste production—Unknown
Acres disturbed—<3
Acres reclaimed—0
Mineral ownership—100% public
Ore processing method—Hand stacking
Processing capacity—N/A
Mine life at startup—Unknown
Starting date—1970s
Discovery date—Late 1960s
Initial investment—Unknown

Employees—4
Annual payroll—Unknown
Production cost—Unknown
Commodity production—Unknown
Ore type—Blue-gray slate, metamorphosed sandstone
Geologic deposit model—Prichard Formation (Belt Supergroup); separated into thin slabs along bedding planes.
Published reserves—Unknown
Owner—Red Bluff Quarry, Inc.
Address—
Operator—Red Bluff Quarry, Inc.
Address—Box 237, St. Regis, MT 59866
Telephone—Unknown
Mine manager—James Morgan
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Talc mines

Beaverhead mine

Mining district—Unorganized
General location—South of Alder
Tract—Sec. 11, 14, T.7S., R.6W.
County—Madison
Commodities produced—Talc
Status—Producing
Mining method—Underhand (cemented backfill using borrow material)
Ore production—9,000 TPY
Waste production—500 TPY
Acres disturbed—<1
Acres reclaimed—0
Mineral ownership—100% federal
Ore processing method—Hand sorting
Processing capacity—200 tons per shift; 10 shifts/mo
Mine life at startup—15 years
Starting date—1987
Discovery date—Unknown

Initial investment—\$3 million
Employees—7
Annual payroll—\$268,000
Production cost—Unknown
Commodity production—9,000 TPY
Ore type—Talc
Geologic deposit model—Solution replacement of dolomitic marble
Published reserves—150,000 tons (proven)
Owner—Luzenac America, Inc.
Address—
Operator—Luzenac America, Inc.
Address—P.O. Box 99, Alder, MT 59103
Telephone—(406) 683-4611
Mine manager—Mike Toelle
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Johnny Gulch mine

Mining district—Unorganized
General location—South of Ennis
Tract—Sec. 9, T.9S., R.1W.
County—Madison
Commodities produced—Talc
Status—Producing
Mining method—Open pit
Ore production—500 TPD (four 10-hour shifts/wk), 100,000 TPY
Waste production—7,820 TPD, 1,600,000 TPY (16:1 strip ratio)
Acres disturbed—170
Acres reclaimed—14
Mineral ownership—100% private
Ore processing method—Hand Sorting
Processing capacity—75,000 TPY
Mine life at startup—12 years
Starting date—1984
Discovery date—1940s
Initial investment—\$12 million

Employees—92
Annual payroll—\$2.8 million
Production cost—Unknown
Commodity production—75,000 TPY
Ore type—Talc
Geologic deposit model—Solution replacement of dolomitic marble.
Published reserves—Unknown
Owner—Costain Minerals, Inc.
Address—
Operator—Montana Talc Company
Address—28769 Sappington Road, Three Forks, MT 59752
Telephone—Main office—(406) 285-3286;
 Mine—(406) 682-4100
Mine manager—Fred Earnest
Mine superintendent—
Mill superintendent—Mike Cerino
Plant manager—
General manager—Ron Shelton

Treasure Chest mine

Mining district—Unorganized
General location—South of Dillon
Tract—NE $\frac{1}{4}$, NE $\frac{1}{4}$ of sec. 14, T.7S., R.6W.
County—Beaverhead
Commodities produced—Talc
Status—Producing
Mining method—Open pit
Ore production—180,000 TPY
Waste production—2.7 million TPY
Acres disturbed—600
Acres reclaimed—100
Mineral ownership—90% private, 10% State (dumps)
Ore processing method—Mechanical sorting and flotation
Processing capacity—150,000 TPY
Mine life at startup—40 years
Starting date—1966
Discovery date—1950s
Initial investment—\$8.5 million

Employees—105
Annual payroll—\$3.5 million
Production cost—Unknown
Commodity production—140,000 TPY
Ore type—Talc
Geologic deposit model—Solution replacement of dolomitic marble.
Published reserves—4 million tons (proven)
Owner—Barretts Minerals, Inc.
Address—
Operator—Barretts Minerals, Inc.
Address—Box 1147, Dillon, MT 59725
Telephone—Plant—(406) 683-4231;
 Mine—(406) 683-6791
Mine manager—Darren Lindsey
Mine superintendent—
Mill superintendent—Nick Hoyrup
Plant manager—
General manager—Jerry Haack

Yellowstone mine

Mining district—Unorganized
General location—South of Ennis
Tract—Sec. 4, T.9S., R.1W.
County—Madison
Commodities produced—Talc
Status—Producing
Mining method—Open pit
Ore production—200,000 TPY
Waste production—4,000,000 TPY (20:1 strip ratio)
Acres disturbed—408
Acres reclaimed—10
Mineral ownership—50% federal, 50% private
Ore processing method—Mechanical and hand sorting
Processing capacity—300,000 TPY
Mine life at startup—5 years
Starting date—1947
Discovery date—1940s
Initial investment—\$15 million

Employees—101
Annual payroll—\$4 million
Production cost—Unknown
Commodity production—200,000 TPY
Ore type—Talc
Geologic deposit model—Solution replacement of dolomitic marble.
Published reserves—3 million tons (recoverable product)
Owner—Luzenac America, Inc.
Address—
Operator—Luzenac America, Inc.
Address—P.O. Box 572, Cameron, MT 59720
Telephone—Mine—(406) 682-4882;
Mine manager—R.J. Piniakiewicz
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Coal mines

Absaloka mine

Mining district—Unorganized
General location—East of Hardin
Tract—Sec. 25, T.1N., R.37E.
County—Big Horn
Commodities produced—Coal
Status—Producing
Mining method—Strip mine
Ore production—3,490,797 TPY
Waste production—8,866,624 TPY (2.54:1 strip ratio)
Acres disturbed—82
Acres reclaimed—844.5 (157 backfilled, 105 topsoiled, 136 seeded)
Mineral ownership—60-70% Crow Indian Reservation; 30% State
Ore processing method—Crush (-6"), Crush (-2")
Processing capacity—2,400 TPD
Mine life at startup—20 years
Starting date—1973
Discovery date—1800s

Initial investment—Unknown
Employees—64
Annual payroll—\$3.2 million
Production cost—Confidential
Commodity production—3,490,797 TPY
Ore type—Subbituminous coal (class C)
Geologic deposit model—Rosebud-McKay coal beds
Published reserves—100 million tons
Owner—Westmoreland Resources
Address—Box 430, Hardin, MT 59034
Operator—Morrison-Knudsen Company, Inc.
Address—Box 529, Hardin, MT 59034
Telephone—Mine—(406) 342-5241;
 Office—(406) 342-5201
Mine manager—J.V. O'Laughlin
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Big Sky mine

Mining district—Unorganized
General location—South of Colstrip
Tract—Sec. 27, T.1N., R.41E.
County—Rosebud
Commodities produced—Coal
Status—Producing
Mining method—Strip mine
Ore production—2,212,071 TPY
Waste production—5,308,970 TPY (2.4:1 strip ratio)
Acres disturbed—78
Acres reclaimed—72 (graded)
Mineral ownership—50% private, 50% federal
Ore processing method—Crush (-2")
Processing capacity—2,000 TPH
Mine life at startup—36 years
Starting date—1969
Discovery date—1900s
Initial investment—Unknown

Employees—50
Annual payroll—\$2.1 million
Production cost—Unknown
Commodity production—5,308,970 TPY
Ore type—Subbituminous coal
Geologic deposit model—Rosebud coal bed
Published reserves—57 million tons
Owner—Peabody Coal Company
Address—301 North Memorial Drive, St. Louis, MO 63102
Operator—Peabody Coal Company
Address—Box 97, Colstrip, MT 59323
Telephone—Mine—(406) 748-2321;
 Home office—(602) 774-5253
Mine manager—Tracy Hendricks
Mine superintendent—Gary Rader
Mill superintendent—
Plant manager—
General manager—Kurt Beldon

Decker Coal Company (East & West pits)

Mining district—Unorganized
General location—Southeast of Hardin
Tract—Sec. 11, 12, 14, T.9S., R.40E.
County—Big Horn
Commodities produced—Coal
Status—Producing
Mining method—Strip mine
Ore production—11,944,887 TPY
Waste production—41.8 million TPY (3.5:1 strip ratio)
Acres disturbed—4,756
Acres reclaimed—444
Mineral ownership—30% State, 70% federal
Ore processing method—Crush (-2")
Processing capacity—2 plants (3,000 TPH; 3,600 TPH)
Mine life at startup—20 years (45 to date)
Starting date—1971
Discovery date—1950s (by present company)
Initial investment—\$340 million

Employees—341
Annual payroll—\$11 million
Production cost—Unknown
Commodity production—11,944,887 TPY
Ore type—Subbituminous coal (class B)
Geologic deposit model—Anderson-Dietz coal bed
Published reserves—250 million tons
Owner—Joint venture of NERCO and Kiewit Mining Group, Inc.
Address—1000 Kiewit Plaza, Omaha, NE 68131
Operator—Decker Coal Company
Address—Box 12, Decker, MT 59025
Telephone—(406) 757-2561
Mine manager—Frank Kawalok
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

P.M. mine

Mining district—Unorganized
General location—Southwest of Roundup
Tract—Sec. 13, T.6N., R.26E.
County—Musselshell
Commodities produced—Coal
Status—Producing
Mining method—Underground mine (room and pillar)
Ore production—9,235 TPY
Waste production—Minimal
Acres disturbed—4
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Crush (1 ½"); wash (heavy media separation)
Processing capacity—100 TPH
Mine life at startup—Unknown
Starting date—1932
Discovery date—1800s
Initial investment—Unknown

Employees—7
Annual payroll—\$160,000
Production cost—Unknown
Commodity production—9,235 TPY
Ore type—Subbituminous coal (12,500-13,000 BTU)
Geologic deposit model—Mammoth coal bed
Published reserves—Unknown
Owner—Meridian Minerals
Address—Unknown
Operator—RBM Mining, Inc.
Address—127 P.M. Coal Road, Roundup, MT 59072
Telephone—(406) 323-1131
Mine manager—Bob Morehead
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Rosebud mine

Mining district—Unorganized
General location—Colstrip
Tract—Sec. 1-5, 12, T.1N., R.40E.; Sec. 1-10, 12, 18, T.1N., R.41E.; Sec. 29, 32, 33, 35, T.2N., R.41E.
County—Rosebud
Commodities produced—Coal
Status—Producing
Mining method—Strip mine
Ore production—14,347,159 TPY
Waste production—47,919,511 TPY (3.34:1 strip ratio)
Acres disturbed—524
Acres reclaimed—950 (281 seeded, 343 topsoiled, 326 regraded)
Mineral ownership—50% private, 50% federal
Ore processing method—Crush (-3")
Processing capacity—4,800 TPH, 20 million TPY
Mine life at startup—52 years

Starting date—1968
Discovery date—Early 1900s
Initial investment—\$61 million
Employees—425
Annual payroll—19.7 million
Production cost—Unknown
Commodity production—47,919,511 TPY
Ore type—Subbituminous coal (class C)
Geologic deposit model—Rosebud coal bed
Published reserves—400+ million tons
Owner—Western Energy Company
Address—
Operator—Western Energy Company
Address—Box 99, Colstrip, MT 59323
Telephone—(406) 748-2366
Mine manager—R.W. Cope
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Savage mine

Mining district—Unorganized
General location—West of Savage
Tract—Sec. 27, T.20N., R.57E.
County—Richland
Commodities produced—Lignite
Status—Producing
Mining method—Strip mine
Ore production—247,155 TPY
Waste production—1,112,198 TPY (strip ratio 6:1)
Acres disturbed—10
Acres reclaimed—10
Mineral ownership—50% private, 50% federal (royalty @ 2%)
Ore processing method—Crush (-3")
Processing capacity—900-1,200 TPD
Mine life at startup—Unknown
Starting date—1958
Discovery date—Early 1900s

Initial investment—Unknown
Employees—13
Annual payroll—\$630,000
Production cost—Unknown
Commodity production—247,155 TPY
Ore type—Lignite
Geologic deposit model—Pust lignite bed
Published reserves—35-40 million tons
Owner—Knife River Coal Mining Company
Address—1914 Kavaney Drive, Bismarck, ND 58501
Operator—Knife River Coal Mining Company
Address—Box 37, Savage, MTM 59262
Telephone—(406) 798-3651
Mine manager—
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—Rod Nibbe

Spring Creek mine

Mining district—Unorganized
General location—North of Decker
Tract—Sec. 16, T.8S., R.40E.
County—Big Horn
Commodities produced—Coal
Status—Producing
Mining method—Strip mine
Ore production—6,641,332 TPY
Waste production—7,305,465 TPY (1:1 strip ratio)
Acres disturbed—138
Acres reclaimed—8.21
Mineral ownership—100% federal
Ore processing method—Crush (-2")
Processing capacity—3,200 TPH
Mine life at startup—Unknown
Starting date—1979
Discovery date—1950s
Initial investment—Unknown

Employees—156
Annual payroll—\$9 million
Production cost—Confidential
Commodity production—6,641,332 TPY
Ore type—Subbituminous coal (class C)
Geologic deposit model—Anderson-Dietz coal bed
Published reserves—254,793,000 tons
Owner—NERCO, Inc.
Address—111 SW Columbia, Portland, OR 97201
Operator—Spring Creek Coal Company
Address—Box 67, Decker, MT 59025
Telephone—(406) 757-2581
Mine manager—David E. Dearcorn
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Bentonite mine

(Unnamed)

Mining district—Unorganized
General location—Northwest of Alzada
Tract—T.8S., R.58E; T.9S., R.58E.
County—Carter
Commodities produced—Bentonite
Status—Producing
Mining method—Open cut
Ore production—Confidential
Waste production—3-4 million yd³
Acres disturbed—170
Acres reclaimed—150
Mineral ownership—100% private
Ore processing method—Dry and crush
Processing capacity—Confidential
Mine life at startup—Unknown
Starting date—1976
Discovery date—1976
Initial investment—Unknown

Employees—31
Annual payroll—Confidential
Production cost—Confidential
Commodity production—Unknown
Ore type—Clay (montmorillonite)
Geologic deposit model—Volcanic ash (tuff)
Published reserves—Unknown
Owner—American Colloid
Address—
Operator—American Colloid
Address—Box 2010, Belle Fourche, SD
Telephone—(605) 892-3237
Mine manager—Denise Zimmerman
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

Iron mine

Black Butte mine

Mining district—Unorganized
General location—North of White Sulphur Springs
Tract—Sec. 34, T.12N., R.6E.
County—Meagher
Commodities produced—Iron
Status—Producing
Mining method—Open pit
Ore production—15,000 TPY
Waste production—2,000 TPY
Acres disturbed—12
Acres reclaimed—0
Mineral ownership—100% private
Ore processing method—Unknown
Processing capacity—None
Mine life at startup—Unknown
Starting date—1980
Discovery date—1917
Initial investment—\$300,000

Employees—3
Annual payroll—\$90,000
Production cost—Unknown
Commodity production—15,000 TPY
Ore type—Hematite
Geologic deposit model—Gossan Cap
Published reserves—1 millions tons proven; 2 million tons (hypothetical @ 60% iron)
Owner—R. Borland; J. Potter
Address—White Sulphur Springs, MT 59645
Operator—Hallet Minerals Company
Address—Box 169, Livingston, MT 59047
Telephone—(406) 222-1446
Mine manager—Irving Sewell
Mine superintendent—
Mill superintendent—
Plant manager—
General manager—

New Mining Companies Incorporated in Montana—1992

A & A Mining and Trucking, Inc.
Registered Agent: Frank M. Antonioli
724 Western Ave.
Butte, MT 59701

Alta Gold Company
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Amy X Resources, Inc.
Registered Agent: Frank M. Antonioli
724 Western Ave.
Butte, MT 59701

Arbor Minerals, Inc.
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Barretts Minerals, Inc.
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Basin Exploration, Inc.
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Bossard/Caboose Mining Enterprises, Inc.
Registered Agent: Floyd Bossard
3525 Whiteway Blvd.
Butte, MT 59701

Bull Mountains Coal Company
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

CONOCO Carbon & Minerals, Inc.
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Cox Exploration, Inc.
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Cyprus Talc Corporation
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Dechalte Mining, Inc.
Registered Agent: Gregory A. Jackson
833 N. Last Chance Gulch
Helena, MT 59601

Hanover Gold Company, Inc.
Registered Agent: Leanne M. Schraudner
1008 S. Church
Bozeman, MT 59715

Hansard Mining, Inc.
Registered Agent: Stuart R. Whitehair
403 W. Mendenhall
Bozeman, MT 59715

Hard Rock Mining Company, Inc.
Registered Agent: Warren Stiltner
39704 Highway 2 South
Libby, MT 59923

Jack Waite Mining Company
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Kiewit Mining Group, Inc.
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Lac Minerals (USA), Inc.
Registered Agent: C.T. Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

Madison Mines, Inc.
Registered Agent: Larry
Young
Box 262
Pony, MT 59747

Metallic Ventures, Inc.
Registered Agent: Marilyn
Hawkins
Saddle Mountain Dr.
P.O. Box 922
Clancy, MT 59634

**Montana Mining & Explora-
tion, Inc.**
Registered Agent: T. Giles
HC 30
Lincoln, MT 59639

North Mining, Inc.
Registered Agent: C.T.
Corporation
406 Fuller Ave.
Box 1166
Helena, MT 59624

Silver Bo, Inc.
Registered Agent: Bo F.
Wickstrom
22 W. Park St.
Butte, MT 59701

**Terra Exploration & Produc-
tion, Inc.**
Registered Agent: Robert T.
Hanley
550 N. 31st St., STE 250
Billings, MT 59101

**Virginia City Mining Com-
pany, Inc.**
Registered Agent: Kirk
Hansen
326 W. Wallace
Virginia City, MT 59755

Manhattan Minerals U.S., Ltd.
Registered Agent: Andrew
Carstensen
741 Taylor
Missoula, MT 59802

**Montana Gold Properties
Corporation**
Registered Agent: Michael
McCarter
406 Fuller Ave.
Helena, MT 59601

**Montana Refining Research
Corporation**
Registered Agent: Marty
Puryer
77 3rd Ave. NW
Kalispell, MT 59901

PC Exploration, Inc.
Registered Agent: Edwin C.
Fleming
28689 Norris Road
Bozeman, MT 59715

Siskon Gold Corporation
Registered Agent: C.T.
Corporation System
406 Fuller Ave.
Box 1166
Helena, MT 59624

**Trans-Global Resources/N.L.
Corporation**
Registered Agent: David Rodli
6180 St. Thomas Dr.
Missoula, MT 59803

**Metal Recovery Technologies,
Inc.**
Registered Agent: John R. Kline
Suite 3,
111 N. Last Chance Gulch
Helena, MT 59601

**Montana Mining & Manufac-
turing, Inc.**
Registered Agent: Frustin
Krause
2030 Watts Lane
Bozeman, MT 59715

Nine Mile Mines, Inc.
Registered Agent: Nolan
Smith
%North Lily Mining, Inc.
P.O. Box 2005
Philipsburg, MT 59858

Questa Resources, Inc.
Registered Agent: Gregory L.
Nemoff
155 Burlington
Missoula, MT 59801

Spokane Minerals, Ltd.
Registered Agent: A.C.
Ellingson
101 Highway 12
Box 148
Winston, MT 59647

U.S. Talc Company
Registered Agent: Prentice
Hall Corporate Services
26 W. 6th Ave.
Box 604
Helena, MT 59624

Exploration Projects in Montana 1992

Broadwater County

Project name: **Continental Lime**
 Location: Sec. 28, T.7N., R.1E.
 Drainage: Indian Creek
 Company: Continental Lime
 Activities: 2 RVC holes
 Commodity: Limestone
 Activity status: Completed
 Property status: Unavailable

Project name: **Diamond Hill**
 Location: Sec. 6, T.6N., R.1W.
 Drainage: Indian Creek
 Company: Pegasus Gold Corporation
 Activities: Underground sampling, drilling
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Graphite**
 Location: Sec. 8, T.6N., R.1E.; Sec. 29, T.7N., R.1E.
 Drainage: Indian Creek
 Company: United Minerals
 Activities: 13 DD holes
 Commodity: Graphite
 Activity status: Completed
 Property status: Unknown

Project name: **Unknown**
 Location: Sec. 5, T.6N., R.1W.
 Drainage: Indian Creek
 Company: Virgil Sells
 Activities: Opened adit
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Cascade County

Project name: **Many Pines**
 Location: Sec. 10, T.13N., R.8E.
 Drainage: Belt Creek
 Company: David Baker
 Activities: Bulk sampling
 Commodity: Sapphire
 Activity status: Completed
 Property status: Unknown

Deer Lodge County

Project name: **Dry Cottonwood (1)**
 Location: T.5N., R.8W.
 Drainage: Dry Cottonwood Creek
 Company: Mark Bielenberg
 Activities: 3 trenches
 Commodity: Gold/silver
 Activity status: Completed
 Property status: Unknown

Project name: **Dry Cottonwood (2)**
 Location: Sec. 4,5, T.6N., R.8W.
 Drainage: Dry Cottonwood Creek
 Company: Randy Eaton, Jess Smith
 Activities: 4 backhoe holes
 Commodity: Platinum
 Activity status: Completed
 Property status: Unknown

Fergus County

Project name: **Abby**
 Location: Sec. 24, T.18N., R.17E.
 Drainage: Iron Gulch
 Company: C.R. Kendall
 Activities: RVC drilling
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Iron Creek**
 Location: Sec. 25, T.18N., R.17E.
 Drainage: Iron Creek
 Company: Robert Snook
 Activities: Placer testing
 Commodity: Placer Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Linster Peak**
 Location: Sec. 17, T.17N., R.21E.
 Drainage: Unknown
 Company: Independence
 Activities: Planned drill holes, roads, trenches
 Commodity: Gold
 Activity status: Planned
 Property status: Unknown

Project name: **New Year**
 Location: Sec. (various), T.16N., R.19E.,
 T.16N., R.20E.
 Drainage: Jackson Coulee
 Company: C.R. Kendall
 Activities: RVC drilling
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unavailable

Granite County

Project name: **Basin Gulch**
 Location: Sec 4, T.6N., R.16W.
 Drainage: Basin Gulch
 Company: Cyprus Metals
 Activities: Trenching, drilling (2-3 years); (4
 trenches, 6 drill holes)
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Big Spring Creek**
 Location: Sec. 5,6, T.7N., R.17W.
 Drainage: Big Spring Creek
 Company: Kukulinski-Moore
 Activities: Pit excavation
 Commodity: Sapphires, gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Carpenter Creek**
 Location: Sec. 29, T.11N., R.7W.
 Drainage: Carpenter Creek
 Company: Skip Neader
 Activities: Placer testing
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Project name: **Coloma**
 Location: Sec. 32, T.13N., R.14W.
 Drainage: Washoe Creek
 Company: Mountain Minerals
 Activities: 1 DD hole
 Commodity: Barite
 Activity status: Unavailable
 Property status: Unknown

Project name: **Cornish Gulch**
 Location: Sec.10, T.6N., R.16W.
 Drainage: Cornish Gulch
 Company: Don Patton
 Activities: Placer gold
 Commodity: Gold

Activity status: Planned small-scale placer
 Property status: Unknown

Project name: **Cornish Gulch**
 Location: Sec. 35, T.7N., R.16W.
 Drainage: Cornish Gulch
 Company: Buss Wrobel
 Activities: Placer gold
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Debbie Joe**
 Location: Sec 15, T.8N., R.12W.
 Drainage: Gold Creek
 Company: Ken Graybill
 Activities: Placer testing
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Deep Creek**
 Location: Sec. 8, T.12N., R.13W.
 Drainage: Deep Creek
 Company: Ralph Smith
 Activities: Placer testing
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unavailable

Project name: **Garnet**
 Location: T.12N., R.14W.
 Drainage: Bear Creek
 Company: Pegasus Gold Corporation
 Activities: 23-40 RVC holes
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unavailable

Project name: **Gem Mountain**
 Location: Sec. 21, T.6N., R.16W.
 County: Granite
 Drainage: Anaconda Gulch
 Company: Gem Mountain
 Activities: Placer development
 Commodity: Sapphires
 Activity status: Ongoing
 Property status: Unavailable

Project name: **Golden Eagle**
 Location: Sec. 27, T.6N., R.13W.
 Drainage: North Fork Flint Creek
 Company: Magellan
 Activities: Drilling
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Project name: **Harvey Creek**
 Location: Sec. 23, T.10N., R.15W.
 Drainage: Harvey Creek
 Company: Ken Logerquist
 Activities: 3 Placer trenches
 Commodity: Placer gold
 Activity status: Completed
 Property status: Unknown

Project name: **Holiday Claims**
 Location: Sec. 33, T.6N., R.13W.
 Drainage: North Fork Flint Creek
 Company: Cable Mountain Mines
 Activities: 1 drill hole
 Commodity: Gold
 Activity status: Planned
 Property status: Unknown

Project name: **Londondarry**
 Location: Sec. 4,8,9, T.8N., R.13W.
 Drainage: Ham Gulch (Flint Creek)
 Company: Cameco
 Activities: Constructed 2,000 feet of road;
 13 drill sites
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unavailable

Project name: **Northern Cross**
 Location: Sec. 34, T.6N., R.13W.
 Drainage: Warm Springs
 Company: Pegasus Gold Corporation
 Activities: 4 Holes; 200 feet of road
 Commodity: Gold
 Activity status: Planned
 Property status: Unknown

Project name: **Placer Exploration**
 Location: Sec. 28, T.6N., R.16W.
 Drainage: West Fork Rock Creek
 Company: Don Tibbs
 Activities: 10 test pits
 Commodity: Sapphires
 Activity status: Completed
 Property status: Unknown

Project name: **Quartz Gulch**
 Location: Sec. 33, T.7N., R.16W.
 Drainage: Quartz Gulch
 Company: Dale Fayram
 Activities: Placer testing
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Robinson**
 Location: Sec. 34, T.6N., R.13W.
 Drainage: Warm Springs Creek
 Company: Pegasus Gold Corporation
 Activities: 4 RVC holes
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Schively Ridge**
 Location: Sec. 18, T.7N., R.16W.
 Drainage: Juneau Gulch
 Company: FMC Gold
 Activities: Helicopter support; 10 drill holes
 Commodity: Gold
 Activity status: Planned
 Property status: Unknown

Project name: **Sliderock**
 Location: Sec. 26, 27; T.10N., R.16W.
 County: Granite
 Drainage: Brewster Creek
 Company: FMC Gold
 Activities: Drill holes
 Commodity: Gold
 Activity status: Reclamation
 Property status: Unknown

Project name: **Southern Cross**
 Location: Sec. 8, T.5N., R.13W.
 Drainage: North Fork Flint Creek
 Company: ASARCO, Inc.
 Activities: Drilled 36 holes
 Commodity: Gold
 Activity status: Planned
 Property status: Unavailable

Project name: **Stony Creek**
 Location: Sec. 6, T.6N., R.16W.
 Drainage: Stony Creek
 Company: FMC Gold
 Activities: Drilled on 10 pads
 Commodity: Gold
 Activity status: Completed
 Property status: Available

Project name: **Unknown**
 Location: Sec. 13, T.6N., R.13W.
 Drainage: Warm Springs Creek
 Company: Cecil Woodgate
 Activities: 4 DD holes
 Commodity: Copper
 Activity status: Planned (but not permitted)
 Property status: Unknown

Project name: **Unknown**
 Location: Sec. 24, T.6N., R.13W.
 Drainage: Showers Lake (Warm Springs
 Creek)
 Company: Echo Bay
 Activities: Opened 2 adits
 Commodity: Gold
 Activity status: Planned
 Property status: Unknown

Project name: **Unknown**
 Location: Sec. 20, T.8N., R.12W.
 Drainage: Princeton Gulch
 Company: John Welch
 Activities: Placer bulk test
 Commodity: Gold
 Activity status: Ongoing (200 yd. 3/yr)
 Property status: Unknown

Project name: **Willow Creek**
 Location: Sec.1, T.8N., R.11W.
 Drainage: Willow Creek
 Company: T & B Mining
 Activities: Placer tests
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Jefferson County

Project name: **Black Butte**
 Location: Sec. 35, T.3N., R.3W.
 Drainage: Little Whitetail Creek
 Company: Freeman
 Activities: 2 RVC holes
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Project name: **Elkhorn**
 Location: Sec 11, T.5N., R.3W.
 Drainage: Elkhorn Creek
 Company: Goldfields
 Activities: 4 RVC Holes
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Project name: **Elkhorn**
 Location: Sec. 10, 11; T.6N., R.3W.
 Drainage: East Fork Sourdough Creek
 Company: Goldfields

Activities: 82 drill sites constructed; 18,000
 feet of road
 Commodity: Gold
 Activity status: Planned for November 1992
 Property status: Unknown

Project name: **Golden Sunlight Exploration**
 Location: Sec. 18, T.2N., R.3W.
 Drainage: Boulder River
 Company: Golden Sunlight
 Activities: 22 RVC holes
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Project name: **Jack Creek Ridge**
 Location: Sec. 35, 36, T.8N., R.6W.; Sec. 1,
 2, T.7N., R.6W.
 Drainage: Basin Creek
 Company: Pegasus Gold Corporation
 Activities: 1,800 feet of trenches; 8 drill pads
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Project name: **Plymouth**
 Location: Sec 10, T.7N., R.5W.
 Drainage: Snowdrift Creek
 Company: Don Self, John Hilderman
 Activities: Reopened portal
 Commodity: Polymetallic
 Activity status: Completed
 Property status: Unknown

Project name: **Silver Star**
 Location: Sec 26, T.7N., R.5W.
 Drainage: Cataract Creek
 Company: Earthworks/Pegasus Gold
 Corporation
 Activities: Drilling
 Commodity: Precious and base metals
 Activity status: Completed
 Property status: Unknown

Project name: **7-Up Pete**
 Location: Sec. 20, T.14N., R.7W.
 County: Lewis and Clark
 Drainage: Hogan Creek
 Company: Phelps Dodge
 Activities: Drilling
 Commodity: Gold
 Activity status: Active exploration
 Property status: Unavailable

Lewis and Clark County

Project name: **Butcherknife**
 Location: T.11N., R.4W.
 Drainage: Butcherknife
 Company: Richard Shreeves
 Activities: Placer trenches
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Project name: **Foolhen**
 Location: Sec. 14, T.13N., R.7W.
 Drainage: Virginia Creek
 Company: Skekinah Gold Miner, Inc.
 Activities: Drilling
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unavailable

Project name: **Greenhorn Creek**
 Location: Sec. 36, T.11N., R.5W.
 Drainage: Greenhorn Creek
 Company: Sana Minerals (Tony Carberry)
 Activities: Placer trenching
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Project name: **Heddleston**
 Location: Sec. 28, T.15N., R.6W.
 County: Lewis and Clark
 Drainage: Blackfoot River
 Company: ASARCO, Inc.
 Activities: Drilling
 Commodity: Copper, silver
 Activity status: Ongoing
 Property status: Unavailable

Project name: **Iowa Placer**
 Location: Sec. 21, 27, 28, T.11N., R.4W.
 Drainage: Iowa Gulch
 Company: Bud Guthrie
 Activities: Placer tests
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Johnny-Be-Good**
 Location: Sec. 14, T.9N., R.6W.
 Drainage: Unknown
 Company: John Fee, Don Carlson

Activities: Placer exploration
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Spring Fever**
 Location: Sec. 13, T.11N., R.7W.
 Drainage: Hope Creek
 Company: Gary Murdock
 Activities: Placer sampling, exploration
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unpatented

Project name: **Uncle Ben**
 Location: Sec. 13, T.11N., R.7W.
 Drainage: Uncle Ben
 Company: Marvin Ratcliff
 Activities: Placer exploration
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unavailable

Lincoln County

Project name: **Alpine**
 Location: Sec. 17, T.28N., R.30W.
 Drainage: Libby Creek
 Company: Bill Ericksmoen
 Activities: Placer Testing
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Blacktail**
 Location: Sec. 1, T.26N., R.31W.
 Drainage: Bramlet Creek
 Company: Bell Ericksmoen
 Activities: Bulk samples
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Flower Creek**
 Location: Sec. 19, T.30N., R.31W.
 Drainage: Flower Creek
 Company: Bruce Switzer
 Activities: Shaft sinking
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Libby**
 Location: Sec. 29,32, T.30N., R.31W.
 Drainage: Flower Creek and Prospect Creek
 Company: Pegasus Gold Corporation/Orvana Resources
 Activities: Drilled 15-20 RVC holes on 13 sites
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Lost Grouse**
 Location: Sec 11, T.27N., R.31W.
 Drainage: Libby Creek
 Company: Henry Skranek
 Activities: 10 DD holes
 Commodity: Gold
 Activity status: Ongoing
 Property status: Available

Project name: **Lost Mine**
 Location: Sec. 14, T.26N., R.29W.
 Drainage: Houghton Creek
 Company: Warren Stiltner
 Activities: Developed adit (15'), 6'x8'
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Merril**
 Location: Sec. 36, T.27N., R.31W.
 Drainage: West Fisher
 Company: Gwen Bakie
 Activities: Bulk sampling
 Commodity: Gold
 Activity status: Planned
 Property status: Unknown

Project name: **Raven**
 Location: Sec. 6, T.28N., R.31W.
 Drainage: Snowshoe Creek
 Company: George Shaw
 Activities: Bulk sampling
 Commodity: Gold, lead, zinc
 Activity status: Ongoing
 Property status: Unknown

Project name: **Ruby Star**
 Location: Sec. 12, 13, T.32N., R.34W.
 Drainage: Ruby Creek/Star Creek
 Company: Charles Doten
 Activities: Trenches (200')
 Commodity: Lead

Activity status: Completed
 Property status: Available

Project name: **Snowshoe**
 Location: Sec. 6, T.28N., R.31W.
 Drainage: Snowshoe Creek
 Company: Kennicott
 Activities: 1 DD hole
 Commodity: Gold, lead, zinc, silver
 Activity status: Ongoing
 Property status: Unknown

Madison County

Project name: **Boss Tweed/Clipper/Mammoth**
 Location: Sec. 15, T.2N., R.3W.
 Drainage: South Boulder River/Pony Creek
 Company: Pathfinder Gold/Teck Resources
 Activities: Underground sampling and mapping
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Jumper #1 Adit**
 Location: Sec. 27, T.2S., R.3W.
 Drainage: Cataract Creek
 Company: Mike Kent
 Activities: Reopened adit
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Nicholson**
 Location: Sec. 7, T.3S., R.3W.
 Drainage: South Boulder River
 Company: Tobacco Mountain Gold
 Activities: Underground drifting and exploration
 Commodity: Gold
 Activity status: Approved (but not completed)
 Property status: Unknown

Project name: **Pika Gypsum**
 Location: Sec. 19, T.10S., R.2W.
 Drainage: Cottonwood Creek
 Company: Banff Minerals, Inc.
 Activities: Bulk sampling
 Commodity: Gypsum
 Activity status: Completed
 Property status: Unknown

Project name: **Checkerboard**
 Location: T.11, 12N., R.6,7,8 E.
 County: Meagher
 Drainage: Unknown
 Company: Kennicott
 Activities: 5 trenches, geophysical lines (16 miles)
 Commodity: Gold, copper
 Activity status: Ongoing
 Property status: Unknown

Meagher County

Project name: **Sheep Creek**
 Location: T.12N., R.5,6,7,8,E.
 Drainage: Sheep Creek
 Company: Cominco-American Resources
 Activities: 13 DD holes
 Commodity: Copper, Cobalt
 Activity status: Ongoing
 Property status: Unavailable

Mineral County

Project name: **Unknown**
 Location: Sec. 24, T.15N., R.26W.
 Drainage: Meadow Creek
 Company: Roy Seymour
 Activities: Placer testing
 Commodity: Placer gold
 Activity status: Completed
 Property status: Unknown

Project name: **Ace Placer**
 Location: Sec. 4, T.15N. R.27W.
 Drainage: Cedar Creek
 Company: Almond
 Activities: Placer testing
 Commodity: Gold
 Activity status: Planned
 Property status: Unknown

Project name: **Bonanza (Hard Rock)**
 Location: Sec. 28, T.15N., R.27W.
 Drainage: Cedar Creek
 Company: Gildersleeve
 Activities: Placer exploration
 Commodity: Gold
 Activity status: Unknown
 Property status: Leased

Project name: **Cajun Queen**
 Location: Sec. 7, T.15N. R.27W.
 Drainage: Cedar Creek
 Company: Galloway

Activities: Ball mill, shaker table
 Commodity: Unknown
 Activity status: Ongoing
 Property status: Unknown

Project name: **Gold Bug**
 Location: Sec. 30, T.17N., R.28W.
 Drainage: South Fork Little Joe Creek
 Company: J. Cochran
 Activities: Reclamation
 Commodity: Placer gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **S & H Mining Company**
 Location: Sec. 17, T.17N., R.26W.
 Drainage: Clark Fork River
 Company: Hermiston
 Activities: Proposed exploration
 Commodity: Unknown
 Activity status: Ongoing
 Property status: Unknown

Missoula County

Project name: **4 V's**
 Location: Sec. 22, T.11N., R.24W.
 Drainage: Granite Creek
 Company: Albert Volker
 Activities: Lode production
 Commodity: Crystal
 Activity status: Ongoing
 Property status: Unknown

Project name: **Kennedy Creek**
 Location: Sec. 23, T.16N., R.23W.
 Drainage: Kennedy Creek
 Company: Ken Lutz
 Activities: Placer testing
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Park County

Project name: **Crevice**
 Location: Sec. 22, T.9S., R.9E.
 Drainage: Palmer Creek
 Company: American Copper & Nickel Company
 Activities: 8 DD holes
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Emigrant Placer**
 Location: Sec. 5, 6, T.7S., R.9E.
 Drainage: Emigrant Creek
 Company: Harrison Western Corporation
 Activities: 13 sonic drill holes
 Commodity: Placer gold
 Activity status: Completed
 Property status: Unknown

Project name: **Emigrant Creek**
 Location: Sec. 5, 6, 7, 8; T.7S., R.9E.
 Drainage: Emigrant Creek
 Company: Pegasus Gold Corporation
 Activities: 11 DD holes; 10-12 RVC holes
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Mineral**
 Location: Sec.33, T.6S., R.12E.; Sec.33,
 T.7S., R.12E.
 Drainage: Upper Boulder River
 Company: Conrad Minear
 Activities: Placer test sampling
 Commodity: Gold
 Activity status: Completed
 Property status: Unknown

Project name: **New World**
 Location: Sec. 14, T.9N., R.14E.
 Drainage: Fisher Creek, Miller Creek
 Company: Crown Butte Resources
 Activities: 8 DD holes; underground drilling in
 Gold Dust adit; geotechnical drilling
 Commodity: Gold, Copper
 Activity status: Ongoing
 Property status: Unknown

Powell County

Project name: **Blue Ribbon**
 Location: Sec. 10, 11, T.9N., R.12W.
 Drainage: Gold Creek
 Company: Blue Ribbon Resources
 Activities: 33 RVC and DD holes; permitted
 for 600 feet of trenches
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Bluestar**
 Location: Sec. 6, T.5N., R.8W.

Drainage: Dry Cottonwood
 Company: Bluestar Mining
 Activities: Placer testing
 Commodity: Sapphires
 Activity status: Planned
 Property status: Unknown

Project name: **Clemmer Gulch**
 Location: Sec. 9, T.8N., R.6W.
 Drainage: Clemmer Creek, Mary Ann Creek
 Company: Pegasus
 Activities: Road building; RC drilling
 Commodity: Gold, silver
 Activity status: Ongoing
 Property status: Unknown

Project name: **Emery**
 Location: Sec. 10, 11, T.7N., R.8W.,
 Drainage: Boggs Creek
 Company: Helca
 Activities: 12 RVC holes
 Commodity: Gold
 Activity status: Completed
 Property status: Unavailable

Project name: **Gunny Sack**
 Location: Sec 34, T.14N., R.10W.
 Drainage: Moose Creek
 Company: Earl Hooker
 Activities: Placer testing
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Hughs Placer**
 Location: Sec. 10, T.8N., R.12W.
 Drainage: Gold Creek
 Company: Melvin Sanderson
 Activities: Placer testing
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unavailable

Project name: **O'Keefe**
 Location: Sec. 22, T.8N., R.6W.
 Drainage: Telegraph Creek
 Company: Pegasus Gold
 Activities: Road building; RC drilling
 Commodity: Gold, silver
 Activity status: Completed and reclaimed
 Property status: Unknown

Project name: **Ophir Project**
 Location: Sec. 7, 20, T.11N., R.7W.
 Drainage: Ophir Creek
 Company: American Copper & Nickel Company
 Activities: Core drilling
 Commodity: Gold, silver
 Activity status: Completed
 Property status: Unknown

Project name: **Romodog**
 Location: Sec.1, T.8N., R.11W.
 Drainage: Willow Creek
 Company: Ben Gabrielson
 Activities: Placer testing
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Sunshine Lode**
 Location: Sec 24, T.13N., R.10W.
 Drainage: Sauerkraut Creek
 Company: Bruce Cox
 Activities: Underground exploration
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unavailable

Project name: **Unknown**
 Location: Sec. 6, T.5N., R.12W.
 Drainage: Clay Charlie Gulch
 Company: Paul Curtis
 Activities: Unknown
 Commodity: Gold
 Activity status: Unknown
 Property status: Unknown

Ravalli County

Project name: **Blue Joint**
 Location: Sec.18, T.2S., R.23W., Sec. 13,
 24, T.2S., R.23W.
 Drainage: Blue Joint Creek, Little Blue
 Joint Creek
 Company: Pegasus Gold Corporation
 Activities: Exploratory drilling
 Commodity: Gold
 Activity status: Drilled (August 1992)
 completion (1993)
 Property status: Unknown

Project name: **Lower Hughes Creek**
 Location: Sec. 1, 2, T.3S., R.22W., Sec. 6,
 T.3S., R.21W.
 Drainage: Hughes Creek, West Fork Bitterroot
 River

Company: Lloyd Lafon
 Activities: Exploratory placer test pits
 Commodity: Gold
 Activity status: Washing pits (1992);
 completion (1993)
 Property status: Available

Sanders County

Project name: **Chau**
 Location: Sec. 13, 24, T.20N., R.28W.
 Drainage: Cherry Creek
 Company: Jon Sonju
 Activities: Reopened adit
 Commodity: Copper, zinc, lead
 Activity status: Completed
 Property status: Unknown

Project name: **David King Project**
 Location: Sec. 14, T.24N., R.31W.
 Drainage: Vermillion River
 Company: John Entiene
 Activities: Reopened adit
 Commodity: Gold
 Activity status: Ongoing
 Property status: Unknown

Project name: **Glidden**
 Location: Sec. 28, T.21N., R.32W.
 Drainage: Glidden Creek
 Company: Jon Sonju
 Activities: Reopened adit
 Commodity: Copper, lead, zinc
 Activity status: Unknown
 Property status: Unknown

Project name: **Miners Gulch**
 Location: Sec. 1, T.24N., R.34W.
 County: Sanders
 Drainage: Vermillion River
 Company: ASARCO, Inc.
 Activities: 1 Hole
 Commodity: Copper, silver
 Activity status: Ongoing
 Property status: Unavailable

Project name: **Riverside**
 Location: Sec 35, T.21N., R.31W.
 Drainage: Prospect Creek
 Company: Leroy Haun
 Activities: Drilled 2 DD holes; reopened adit
 Commodity: Lead, zinc
 Activity status: Ongoing
 Property status: Unknown

Sweet Grass County

Project name: **Rock Creek**
Location: Sec. 26, T.27N., R.32W.
Drainage: Rock Creek
Company: ASARCO, Inc.
Activities: Ongoing
Commodity: Copper, silver
Activity status: Ongoing
Property status: Unavailable

Project name: **Trout Creek**
Location: NW Sec. 20, T.24N., R.32W.
Drainage: Trout Creek
Company: ASARCO, Inc.
Activities: Deepened 1 hole
Commodity: Copper, silver
Activity status: Ongoing
Property status: Unavailable

Project name: **C.R. Conn Exploration**
Location: Sec. 18, 20, 21, 27, 28; T.4S.,
R.13E.
Drainage: East Boulder River
Company: C.R. Conn
Activities: 15 percussion holes
Commodity: Chrome/base metals
Activity status: Completed
Property status: Unknown

Project name: **PGM Drilling**
Location: Sec. 18, 20, 21, 27, 28; T.4S.,
R.13E.
Drainage: East Boulder River
Company: Stillwater PGM Resources
Activities: 10 DD holes
Commodity: PGM
Activity status: Ongoing
Property status: Unknown

Agencies affecting mining in Montana

Department of Agriculture

Mineral and Geology Staff

Regional Office Northern Region (Montana,
northern Idaho, North Dakota, north-
western South Dakota)

Federal Building
200 E. Broadway
P.O. Box 7669
Missoula, MT 59807
Chuck Wassinger 329-3518
Mike Burnside 329-3565
Ray TeSoro 329-3523
Jim Sheldon 329-3577
FAX: (406) 329-3132

Mineral Contacts

Beaverhead National Forest

420 Barret Street
Dillon, MT 59725
Phyllis Denton
(406) 683-3934
FAX: (406) 683-3925

Wise River Ranger District

Box 100
Wise River, MT 59762
Dale McKnight
(406) 832-3178

Wisdom Ranger District

Box 238
Wise River, MT 59761
Bill Avery
(406) 689-3243

Bitterroot National Forest

1801 North 1st Street
Hamilton, MT 59840
Lynn Dickman
(406) 363-7144
FAX: (406) 363-7106

Stevensville Ranger District

88 Main Street
Stevensville, MT 59870
Dave Silvieus
(406) 777-5461

Darby Ranger District

Darby, MT 59829
Winnie Schreiber
(406) 821-3913

Sula Ranger District

Sula MT, 59871
Gino Owens
(406) 821-3913

West Fork Ranger District

Darby, MT 59829
Jim Aronson
(406) 821-3269

Custer National Forest

2602 First Avenue North
P.O. Box 25556
Billings, MT 59103
Carol McCoy-Brown
Greg Visconty
(406) 657-6361
FAX: (406) 657-6444

Beartooth Ranger District

Route 2, Box 3420
Red Lodge, MT 59068
David Hatfield
(406) 446-2344
FAX: (406) 446-3918

Ashland Ranger District

Box 168
Ashland, MT 59003
John A. Macivor
(406) 784-2344

Deerlodge National Forest

Federal Building
P.O. Box 400
Butte, MT 59703
Dan Avery
(406) 496-3452
FAX: (406) 396-3354

Deerlodge Ranger District

91 Frontage Road
Deer Lodge, MT 59722
(406) 846-1770

Jefferson Ranger District

405 East Legion
P.O. Box F
Whitehall, MT 59759
Pat Barringer
(406) 287-3223

Philipsburg Ranger District

P.O. Box H
Philipsburg, MT 59858
Kurt Kneivel
(406) 859-3211

Flathead National Forest

1935 Third Avenue East
Kalispell, MT 59901
Ed Fivas
(406) 758-5330
FAX: (406) 758-5393

Swan Lake Ranger District

P.O. Box 370
Bigfork, MT 59911
Remy Pochelon
(406) 837-5081

Spotted Bear Ranger District

P.O. Box 310
Hungry Horse, MT 59919
Dale Luhman
(406) 752-7345

Hungry Horse Ranger District

P.O. Box 340
Hungry Horse, MT 59919
Fred Flint
(406) 387-5243

Glacier View Ranger District

P.O. Box W
Columbia Falls, MT 59912
Neil Malksian
(406) 892-4372

Tally Lake Ranger District

1335 Highway 93
Whitefish, MT 59937
Neil Malksian
(406) 862-2508

Gallatin National Forest

Federal Building
10 East Babcock Street
Bozeman, MT 59771
Sherm Sollid (406) 587-6733

Mary Lennon (406) 587-6709
FAX: (406) 587-6804

Big Timber Ranger District

P.O. Box A
Big Timber, MT 59011
Jerry England
(406) 932-5155

Livingston Ranger District

Route 62, Box 3197
Livingston, MT 59047
Steve Kratuille
(406) 222-1892

Gardiner Ranger District

P.O. Box 5
Gardiner, MT 59030
Ron Gardner
(406) 848-7375

Bozeman Ranger District

601 Nikles
Bozeman, MT 59715
Patti Souceli
(406) 587-6920

Hebgen Lake Ranger District

P.O. Box 520
West Yellowstone, MT 59758
Mark Romey
(406) 646-7369

Helena National Forest

2880 Skyway Drive
Helena, MT 59601
(406) 449-5201
FAX: (406) 449-5436

Townsend Ranger District

P.O. Box 29
415 South Front
Townsend, MT 59644
Bethany Ihle
(406) 266-3425

Helena Ranger District

2001 Poplar Street
Helena, MT 59601
Dave Turner
(406) 449-5490

Lincoln Ranger District

P.O. Box 219
Lincoln, MT 59639
Rod Bullis
(406) 362-4265

Kootenai National Forest
 506 U.S. Highway 2, West
 Libby, MT 59639
 Rich Stearns
 (406) 293-6211

Rexford Ranger District
 Eureka Ranger Station
 1299 Highway 93, North
 Eureka, MT 59917
 Eric Heyn
 (406) 296-2536

Fortine Ranger District
 Murphy Lake Ranger Station
 P.O. Box 116
 Fortine, MT 59918
 Ron Williams
 Mike Lui
 (406) 882-4451

Three Rivers Ranger District
 Troy Ranger Station
 1437 North Highway 2
 Troy, MT 59935
 Jerry Berry
 Mark Mason
 (406) 295-4693

Libby Ranger District
 Libby Ranger Station
 1263 Highway 37
 Libby, MT 59923
 Mike Guthneck
 Bobbie Lacklen
 (406) 293-7741

Fisher River Ranger District
 Canoe Gulch Ranger Station
 12557 Highway 37
 Libby, MT 59923
 Dick Harlow
 (406) 293-7773

Cabinet Ranger District
 Cabinet Ranger Station
 2693 Highway 200
 Trout Creek, MT 59874
 Bruce Haflich
 (406) 827-3534

Lewis and Clark National Forest
 1101 15th Street North
 P.O. Box 869
 Great Falls, MT 59403
 Robin Strathy

(406) 791-7726
 FAX: (406) 329-3795

Rocky Mountain Ranger District
 1102 Main Avenue, Northwest
 P.O. Box 340
 Choteau, MT 59422
 Seth Diamond
 (406) 466-5341

Judith Ranger District
 109 Central Avenue
 P.O. Box 484
 Stanford, MT 59479
 Dick Schwecke
 (406) 566-2292

Musselshell Ranger District
 809 2 Northwest
 P.O. Box F
 Harlowton, MT 59036
 Dave Wanderass
 (406) 632-4391

Kings Hill Ranger District
 204 West Folsom
 P.O. Box A
 White Sulphur Springs, MT 59645
 Charles "Stu" Deschamps
 (406) 547-3361

Lolo National Forest
 Building 24, Fort Missoula
 Missoula, MT 59801
 Norm Smyers
 (406) 329-3775
 FAX: (406) 329-2795

Missoula Ranger District
 Building 24-A, Fort Missoula
 Missoula, MT 59801
 Jack Fisher
 (406) 329-3976

Ninemile Ranger District
 P.O. Box 616
 Huson, MT 59846
 Ron Hilmo
 Lisa Stoeffler
 (406) 626-5201

Plains/Thompson Falls Ranger District
 Plains, MT 59859
 Marc Childress
 Fred Haas
 (406) 826-3821

Seeley Lake Ranger District
 Drawer G
 Seeley Lake, MT 59868
 Bruce Johnson
 Karen Shaffer
 (406) 677-2233

Superior Ranger District
 Superior, MT 59872
 Roger Lindgren
 Don Stadler
 (406) 822-4233

Department of the Army

Corps of Engineers
 1520 East 6th Avenue
 Helena, MT 59801
 (406) 444-6670

Environmental Protection Agency

Montana Operations Office
 301 South Park
 Drawer 10096
 Helena, MT 59626
 Director - John F. Wardell
 (406) 449-5432

Department of the Interior

Bureau of Mines

Spokane Research Center
 East 315 Montgomery Avenue
 Spokane, WA 99207
 Research Director - D.D. Bolstad
 (509) 484-1610

Western Field Operations Center
 East 360 Third Avenue
 Spokane, WA 99202-1413
 Chief - Richard G. Grabowski
 (509) 353-2712
 State Mineral Officer - Rod Minarik (MT,
 ID, OR, WA, WY) (509) 353-2700

U. S. Geological Survey

Branch of Central Mineral Resources
 P.O. Box 25046, Stop 905
 Denver Federal Center

Denver, CO 80225-0046
 Chief - Gary R. Winkler (303) 236-5568

Menlo Park Field Office
 345 Middlefield Road, MS 919
 Menlo Park, CA 94025
 Chief - Joel Bergquist (415) 329-5448

Fish, Wildlife, and Parks

Interior Building
 Washington, DC 20240
 Assistant Secretary - Constance B. Harriman
 (202) 208-4416

Fish and Wildlife Service
 Main Interior Building, Rm. 3256
 Washington, DC 20240
 Director - John F. Turner
 (202) 208-4717

Regional Offices

Region 1
 911 Northeast 11th Avenue
 Portland, OR 97232-4181
 Regional Director - Marvin L. Plenert
 (503) 231-6118

Region 6
 P.O. Box 25486, DFC
 Denver, CO 80225
 Regional Director - Galen Buterbaugh
 (303) 236-7920

National Park Service
 P.O. Box 37127
 Washington, DC 20013-7127
 Director - James M. Ridenous
 (202) 208-4621

Regional Offices

Pacific Northwest Region
 83 South King Street, Ste. 212
 Seattle, WA 98104
 Regional Director - Charles Odegard
 (206) 553-5565

Rocky Mountain Region
 12795 West Alameda Parkway
 P.O. Box 25287
 Denver, CO 80225-0287
 Regional Director - Robert M. Baker

Bureau of Land Management

Interior Building, Rm. 5660
 1849 C Street, Northwest
 Washington, DC 20240
 Director - Cy Jamison
 (202) 208-3801

State Director - Montana

Granite Tower
 222 North 32nd Street
 P.O. Box 36800
 Billings, MT 59107-6800
 Acting State Director - Thomas P. Lornie
 (406) 255-2904
 Acting Deputy State Director for Mineral
 Resources - Donald L. Gilchrist
 (406) 255-2805
 Geologist - Don Wirth (406) 255-2820

District Offices

Butte - (406) 494-5059
 Geologist - Dave Williams
 Mining Engineer - Bill Weatherly
 Dillon - (406) 683-2337
 Geologist - John McKay
 Missoula - (406) 329-3914
 Geologist - Mindy Mason
 Lewistown - (406) 538-7461
 Geologist - Scott Haight

Department of Labor**Mine Safety & Health Administration
(MSHA)**

Rocky Mountain District
 P.O. Box 25367
 Denver Federal Center
 Denver, CO 80225-0367

District Manager - Rodric Breland

(303) 231-5465

Supervisory Mine Inspector - Arle Brown

(406) 449-5357 (Montana)

**Occupation Safety and Health
Administration****Montana Area Office**

19 North 25th Street
 Billings, MT 59101
 Area Director - David J. DiTommaso
 (406) 657-6649

Montana Congressional Delegation**Senators****Max S. Baucus (D)**

SH-706 Hart Senate Office Building
 Washington, DC 20510-2602
 (202) 224-2651

Conrad Burns (R)

SD-183 Dirksen Senate Office Building
 Washington, DC 20510-2603
 (202) 224-2644

Representative**Pat Williams (D-1)**

2457 Rayburn House Office Building
 Washington, DC 20515-2601
 (202) 225-3211

State agencies affecting mining in Montana

Office of Governor

Capitol Station
1625 11th Avenue
Helena, MT 59620
Governor - Marc Racicot
(406) 444-3111
Senior Administrative Assistant for Natural Resources - Wayne Phillips

Hard Rock Mining Impact Board/DOC

Cogswell Building, Rm. C-211
Helena, MT 59620
Contact - Carol Ferguson
(406) 444-4478
Function: Assistance with hard rock mining impacts to local governments and communities.

Department of Fish, Wildlife and Parks

1420 East 6th Avenue
Helena, MT 59620
(406) 444-3186

Resource Assessment Unit
1420 East 6th Avenue
Helena, MT 59620
Administrator - James Posewitz
Function: Mining and milling operations pertaining to fish and wildlife.
No permits.

Department of Health and Environmental Sciences

Cogswell Building
Helena, MT 59620
(406) 444-2544
Director - Bob Robinson

Division of Environmental Sciences

Cogswell Building
Helena, MT 59620
(406) 444-3948
Administrator - Steven L. Pilcher

Air Quality Bureau

Cogswell Building
Helena, MT 59620
(406) 444-3454
Chief - Jeff Chaffee
Function: Air-quality emission permits and air-quality standards.

Solid and Hazardous Waste Bureau

Cogswell Building
Helena, MT 59620
(406) 444-1430
Chief - Duane Robertson
Function: Permits relating to hazardous waste.

Water Quality Bureau

Cogswell Building, Rm. A206
Helena, MT 59620
(406) 444-2406
Chief - Dan L. Fraser
Function: Waste-water discharge permits and water-quality standards.

Department of Labor and Industry

Labor and Industry Building, Rm. 412
P.O. Box 1728
Helena, MT 59624
(406) 444-3555
Commissioner - Laurie Ekanger
Function: Administers employment, training, labor-management relations; conditions for workers and employee/employers rights.

Division of Workers Compensation

Margaret "Peg" Condon Building
5 South Last Chance Gulch
Helena, MT 59601
(406) 444-6500
Administration - Patrick Sweeney

Safety Bureau

Mining Section
P.O. Box 1728
Helena, MT 59624
(406) 444-6401
Chief - Ed Gatzemeier
Function: Mine safety and training; accident investigation.

Department of State Lands

Capitol Station
1625 11th Avenue
Helena, MT 59620
(406) 444-2074
Commissioner - Bud Clinch

Division of Lands Administration

Capitol Station
 Helena, MT 59620
 (406) 444-2074
 Administrator - Jeff Hagener
 Function: Mineral leases.

Reclamation Division

Capitol Station
 Helena, MT 59620
 (406) 444-2074
 Administrator - Gary Amestoy
 Function: Mine and mill reclamation and exploration permits, environmental assessments, environmental impact statements, bonding requirements. Small metal mine operations, excavating, stripping; moving less than 35,500 tons per year and disturbing 5 acres or less. Exempted from all permits except by letter of agreement to conform to certain conditions.

Hard Rock Bureau

Capitol Station
 1625 11th Avenue
 Helena, MT 59620
 (406) 444-2074
 Chief - Sandy Olson

Open Cut Bureau

Capitol Station
 1625 11th Avenue
 Helena, MT 59620
 (406) 444- 2704
 Chief - Steve Walsh

Coal and Uranium Bureau

Capitol Station
 1625 11th Avenue
 Helena, MT 59620
 (406) 444-2074
 Chief - Bonnie Lovelace

Montana Bureau of Mines and Geology

Montana College of Mineral Science and Technology
 1300 West Park Street
 Butte, MT 59701-8997
 (406) 496-4181

State Geologist and Director - Edward T. Ruppel
 Function: Mineral and ground-water resources research and information. No regulatory function.

Department of Natural Resources and Conservation

1529 East 6th Avenue
 Helena, MT 59620-2301
 (406) 444-6699
 Director - Mark Simonich

Division of Energy

1520 East 6th Avenue
 Helena, MT 59620
 (406) 444-6697
 Administrator - Van Jamison
 Function: Analyzes the need for, and alternatives to proposed major facilities as part of environmental impact statements called for by the Major Facility Siting Act and the Montana Environmental Policy Act. Has a broad range of responsibilities in energy planning and analysis, renewable energy and conservation.

Division of Water Resources

1520 East 6th Avenue
 Helena, MT 59620-2301
 (406) 444-6601
 Administrator - Gary Fritz
 Function: Coordinates the development, utilization, conservation, and protection of water resources.

Department of Revenue

Sam Mitchell Building
 Helena, MT 59620
 (406) 444-2460
 Director - Mick Robinson
 Function: Tax information

Office of Secretary of State

Capitol Station
 1625 11th Avenue
 Helena, MT 59620
 (406) 444-2034
 Secretary of State - Mike Cooney
 Function: Corporate and assumed business information.

Permits and contracts

Department of Health and Environmental Sciences Cogswell Building Helena, MT 59620

MPDES Discharge Permit 75-5402, MCA
MGWPCS Ground-Water Pollution Control Permit 75-5-402, MCA
 Contact: Water Quality Bureau (406) 444-2406

MONTANA CLEAR AIR ACT 75-2-211, 75-2-204, MCA, 75-20203, MCA
 Air Pollution Permit, Open Burning Permit
 Contact: Air Quality Bureau (406) 444-3454

PERMIT FOR HAZARDOUS WASTE OR STOCKPILES 75-10-406, MCA
 Contact: Solid Waste Management Bureau (405) 444-2821

Department of State Lands Capitol Station Helena, MT 59620 (406) 444-2074

HARD ROCK MINING ACT Title 82, Chapter 4, Part 3, MCA
 Exploration License, Metalliferous Rock, Operating Permit, Small Miner
 Exclusion, Placer-Dredge Bonds, Small Miner Cyanide Permits
 Contact: Hard Rock Bureau

OPEN CUT MINING ACT Title 82, Chapter 4, Part 4 Montana Codes, MCA
 Sand Gravel, Bentonite, Clay, Scoria, Phosphate Reclamation Contract
 Contact: Hard Rock Bureau

STRIP AND UNDERGROUND MINE SITING ACT Title 2, Chapter 4, Part 2 MCA

MONTANA STRIP AND UNDERGROUND MINE RECLAMATION ACT Title 2, Chapter 4, Part 1 MCA
 Coal and Uranium Prospecting Permit, Surface Mining Permit
 Contact: Open Cut Bureau

MONTANA ENVIRONMENTAL POLICY ACT Title 75, Chapter 1, Parts 1, 2, 3 MCA
 Environmental Assessment (EA)
 Environmental Impact Statement (EIS)
 Contact: Hard Rock Bureau

Department of Natural Resources and Conservation 1520 East 6th Avenue Helena, MT 59620-2301

PERMIT FOR APPROPRIATION OF GROUND WATER 85-2-301, 85-2-301, 85-2-306, MCA (1983)
 Contact: Water Resources Division, Water Rights Bureau (406) 444-6610

PERMIT FOR LARGE MINES RELATED TO MINERAL FUELS Major Facility Siting Act
 Contact: Energy Division (406) 444-6676

Local Governing Bodies

Building Codes 69-2105 et. seq. RCM 1947
 Burning Permits 28-114, RCM 1947; 28-601 et. seq. RCM 1947
 Floodway Regulation-Floodway Management Act 89-3501 et. seq. RCM 1947
 Stream Bed Preservation-Stream Bed Preservation Act 26-1501 et. seq. RCM 1947
 Timber Removal-Fire Hazard Reduction Agreement 28-403.1 et. seq. RCM 1947
 Utility Extensions-Permission to Extend Utility Facilities 11-3316, RCM 1947

Mines and Mineral Development Maps

Figure 1—Mines and mineral development in the western region.	60
Figure 2—Exploration projects in the western region.	61
Figure 3—Mines and mineral development in the Butte–Anaconda region. . .	62
Figure 4—Exploration projects in the Butte–Anaconda area.	63
Figure 5—Mines and mineral development in the Helena region.	64
Figure 6—Exploration projects in the Helena region.	65
Figure 7—Mines and mineral development in the north-central region.	66
Figure 8—Exploration projects in the north-central region.	67
Figure 9—Mines and mineral developments in the south-central region.	68
Figure 10—Exploration projects in the south-central region.	69
Figure 11—Mines in the southeastern region.	70

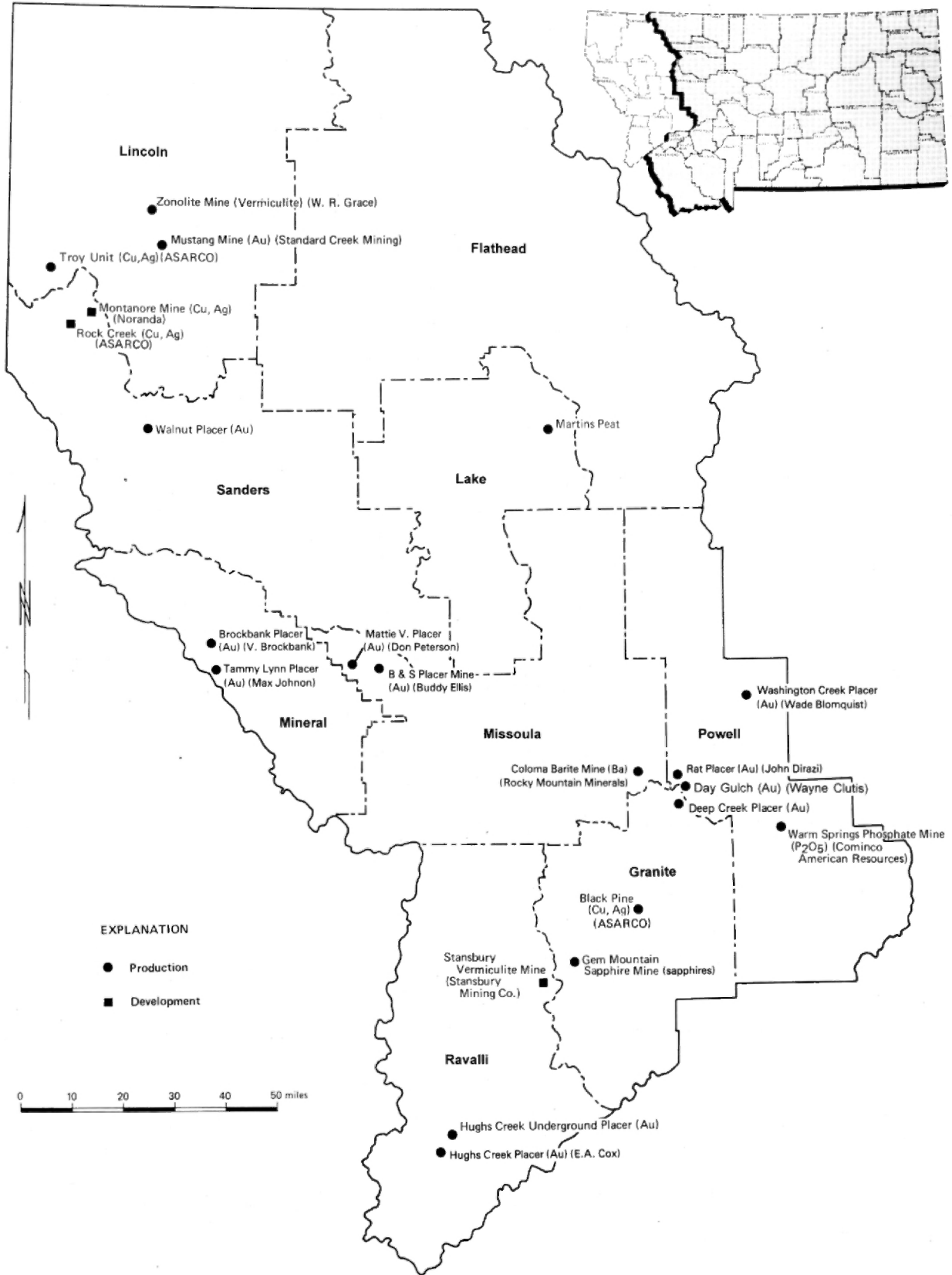


Figure 1—Mines and mineral development in the western region.

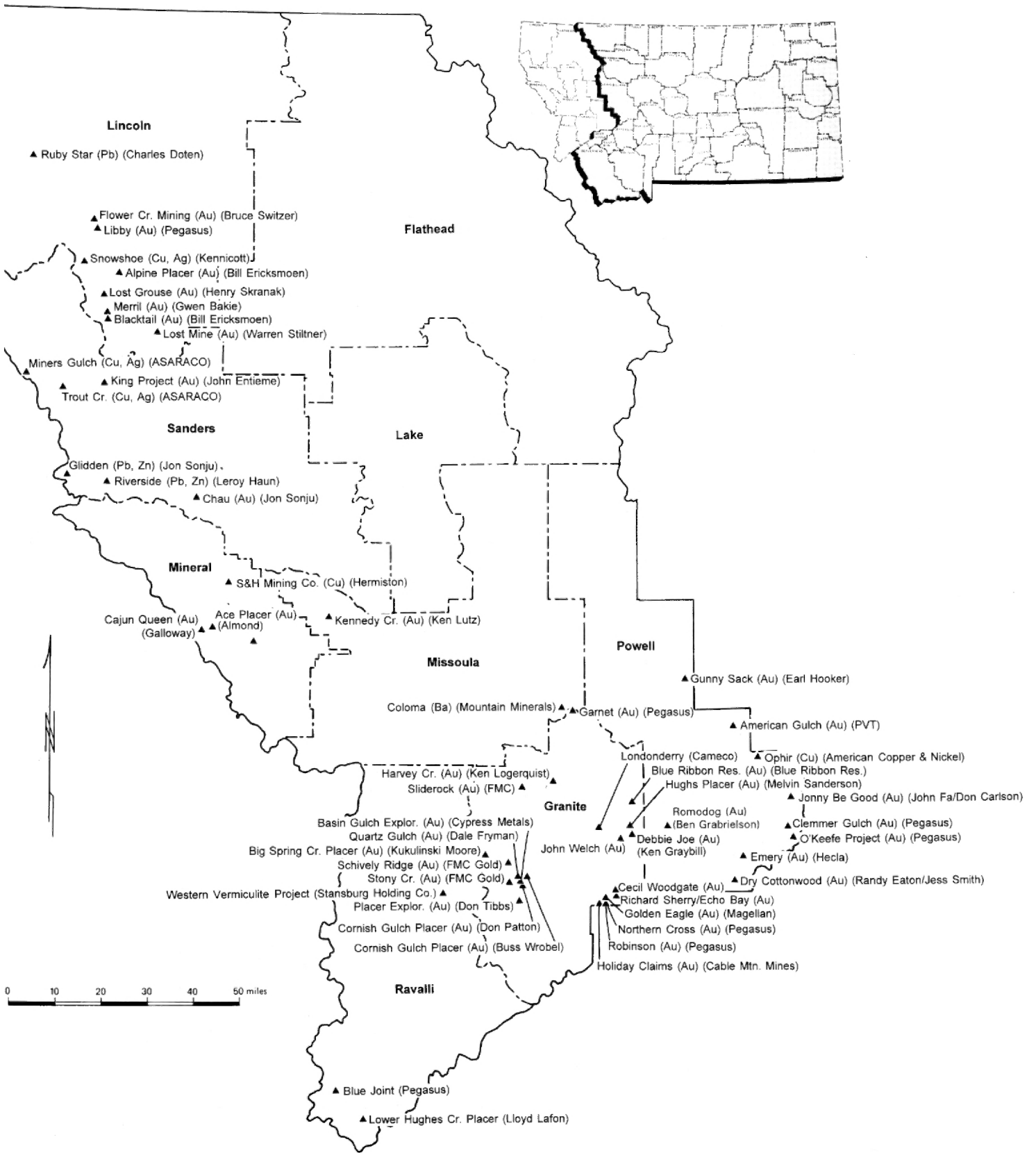


Figure 2—Exploration projects in the western region.

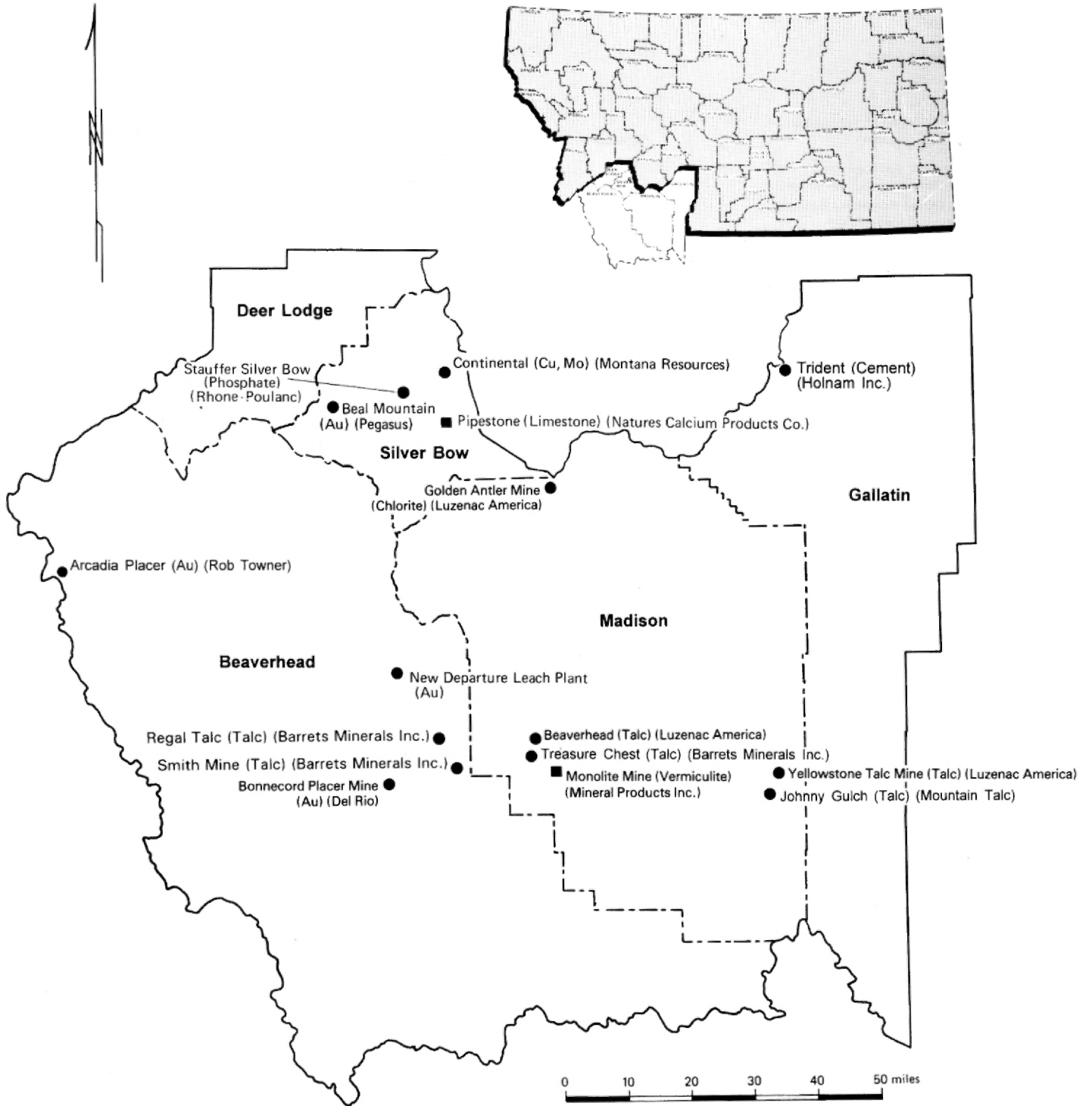


Figure 3—Mines and mineral development in the Butte-Anaconda region.

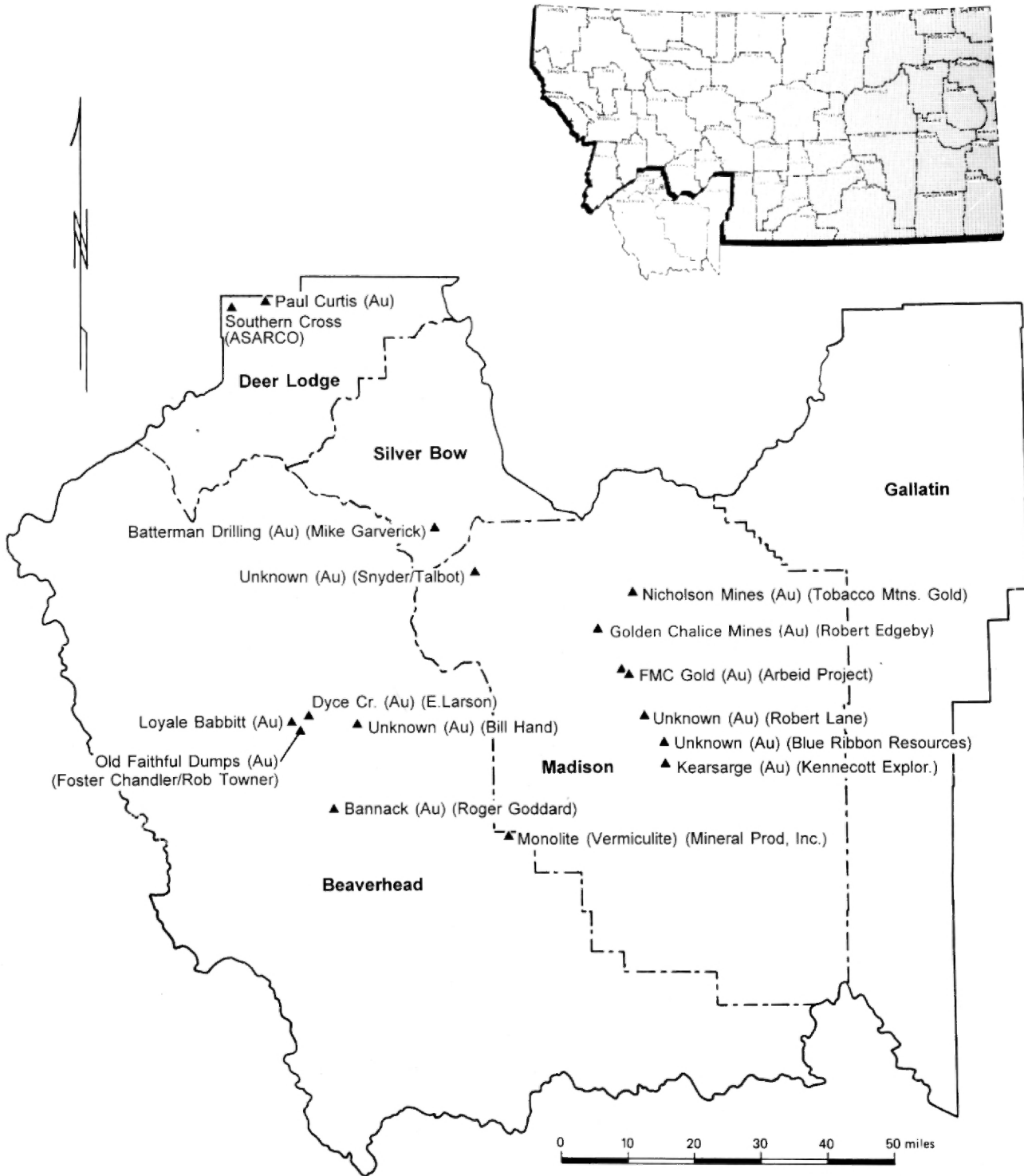


Figure 4—Exploration projects in the Butte-Anaconda area.

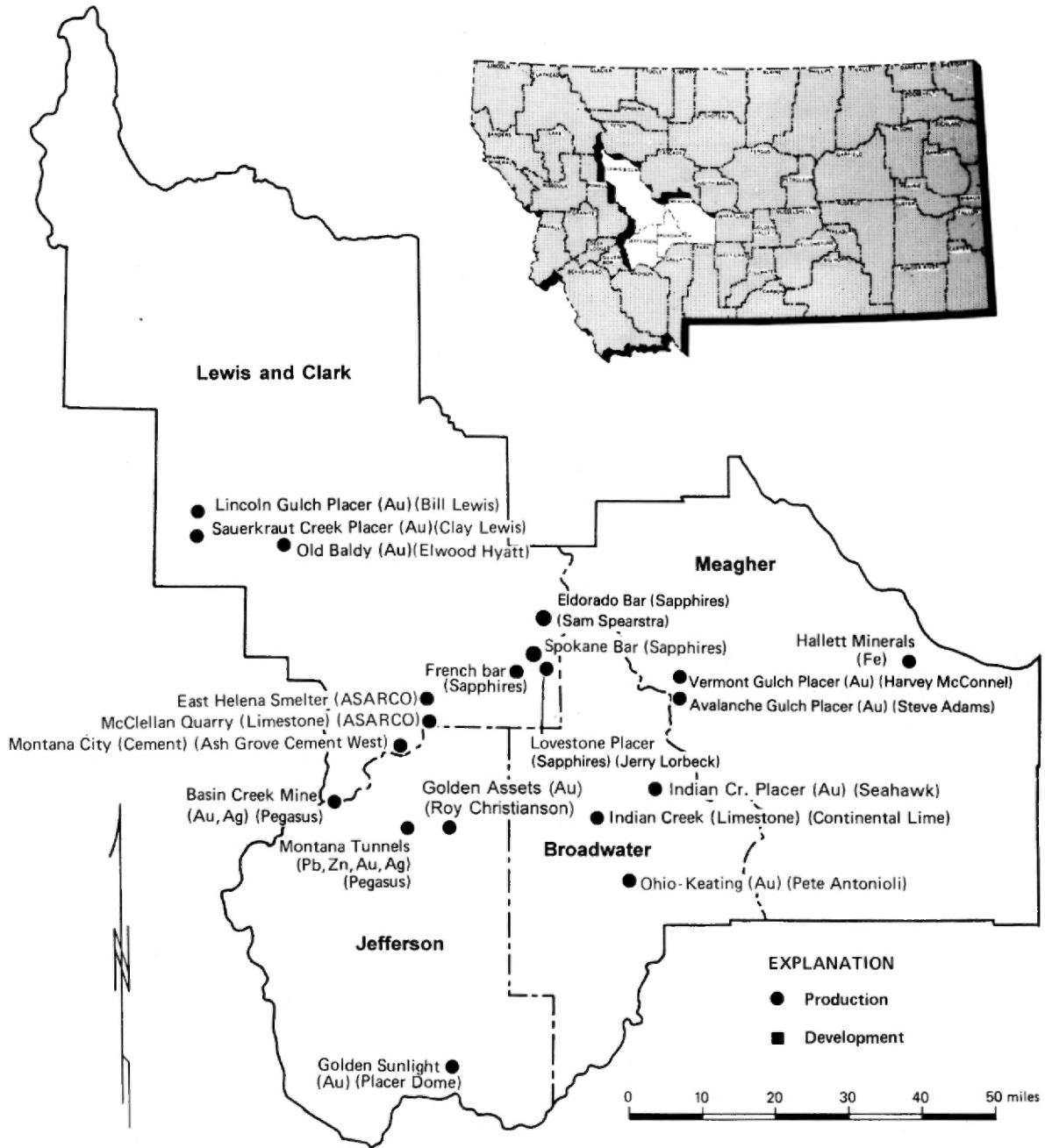


Figure 5—Mines and mineral development in the Helena region.

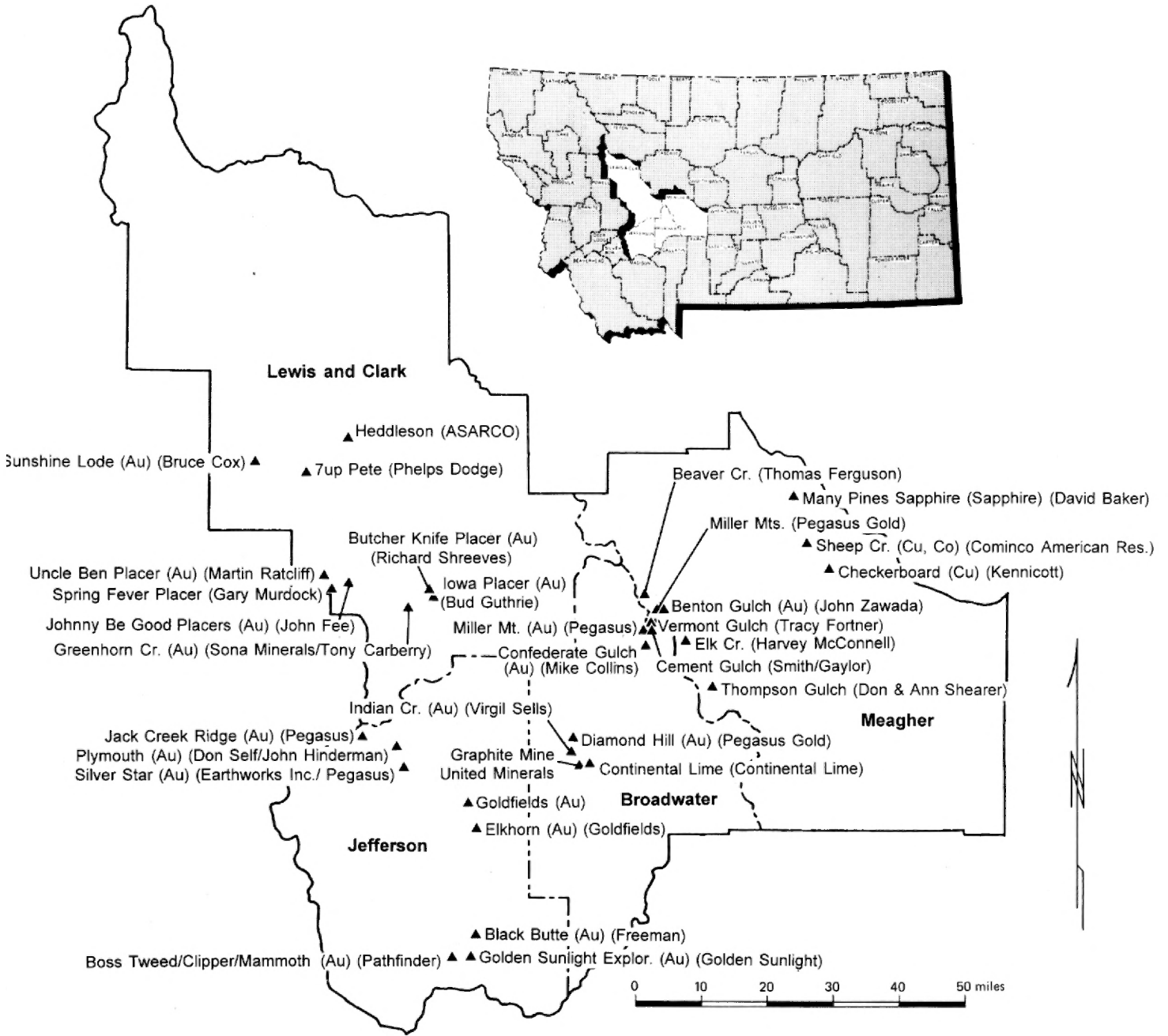


Figure 6—Exploration projects in the Helena region.

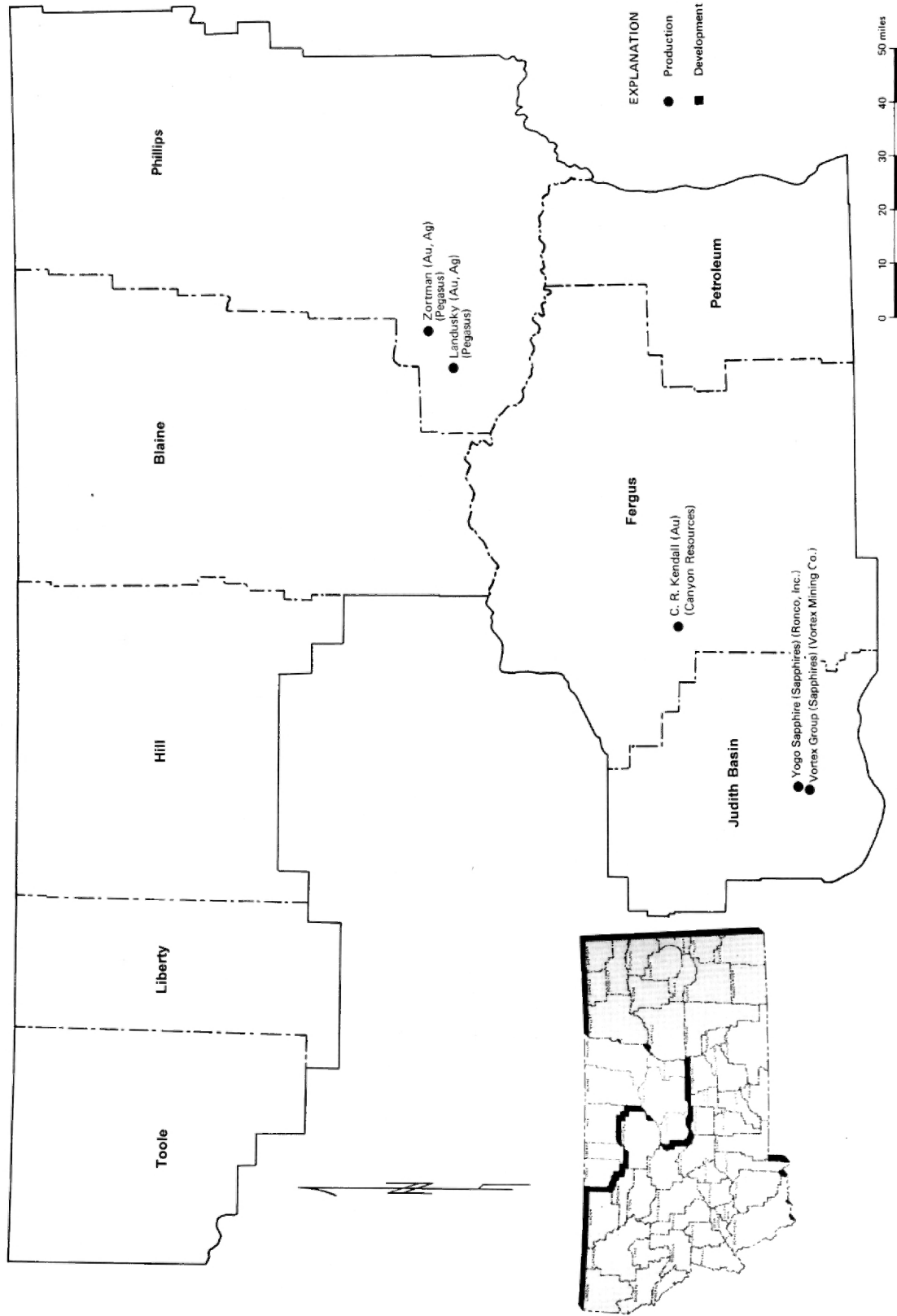


Figure 7 — Mines and mineral development in the north-central region.

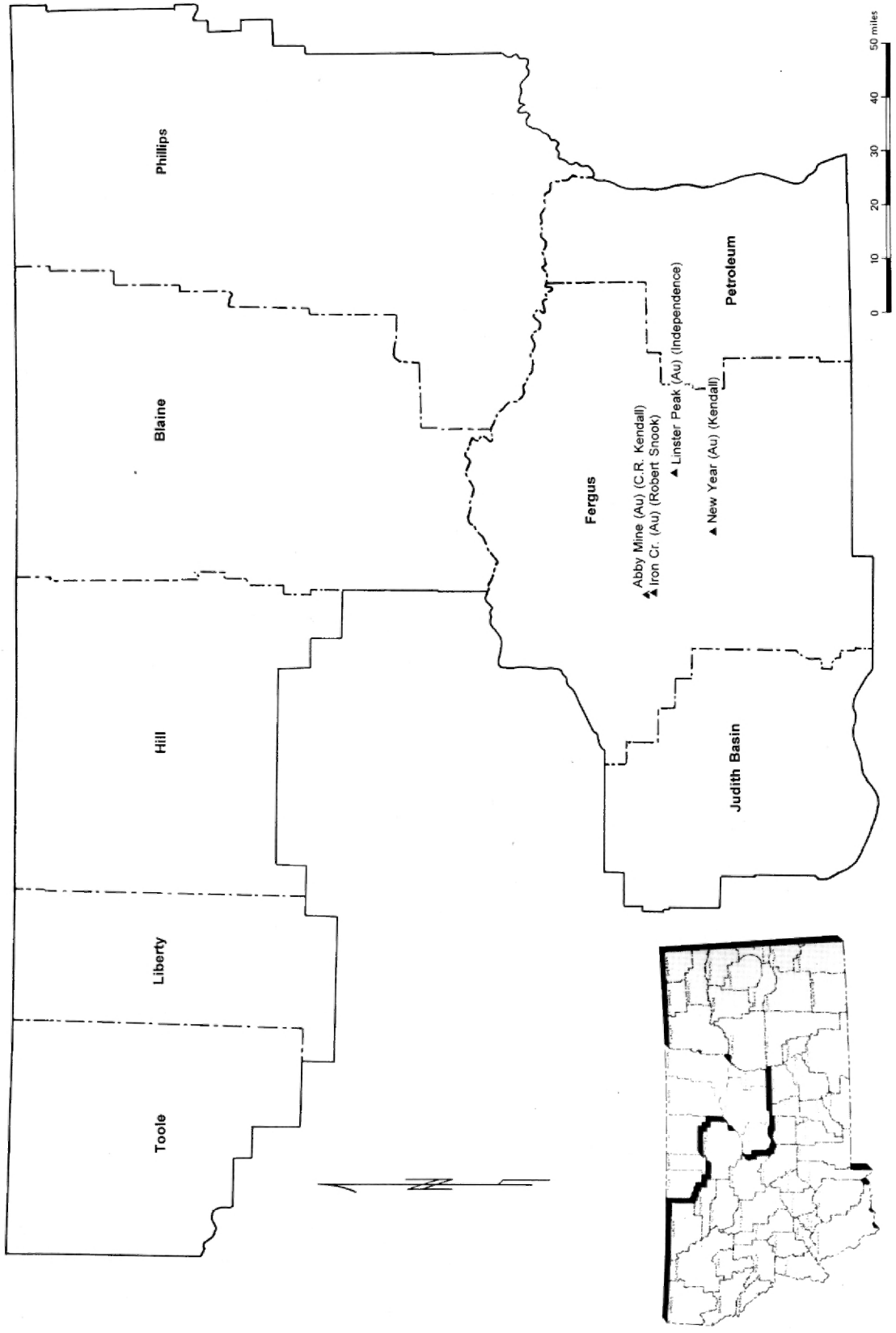


Figure 8 — Exploration projects in the north-central region.

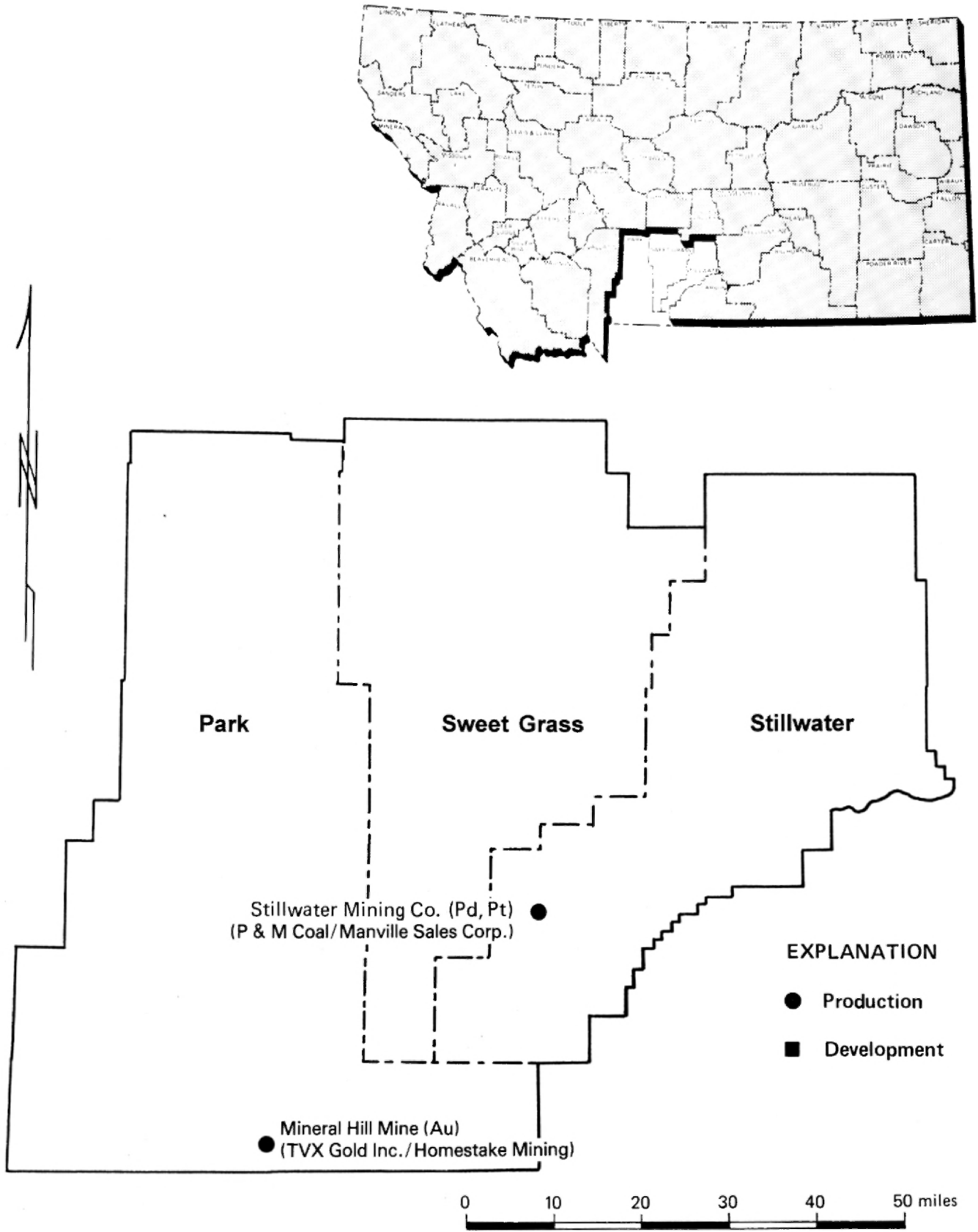


Figure 9—Mines and mineral developments in the south-central region.

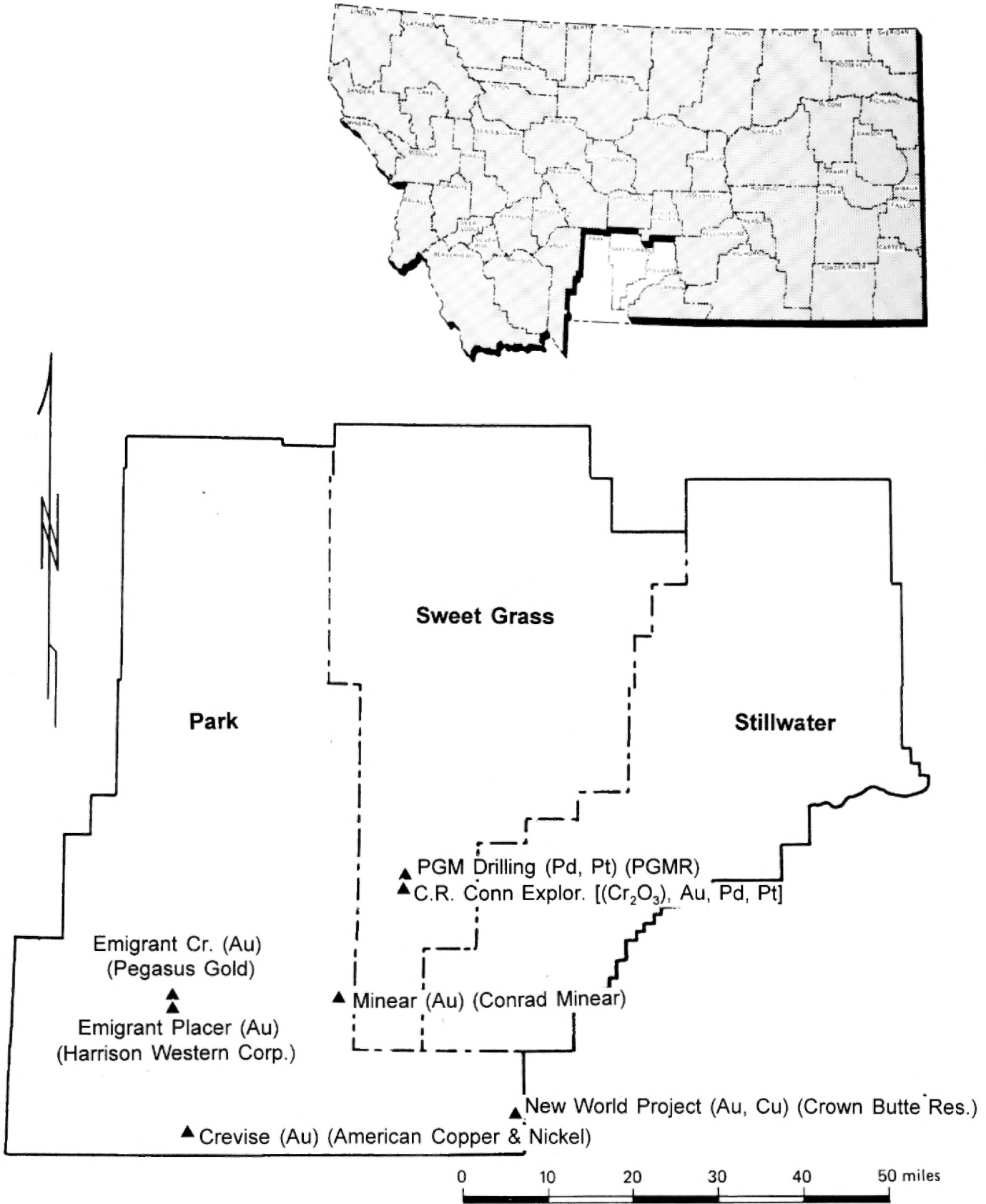


Figure 10—Exploration projects in the south-central region.

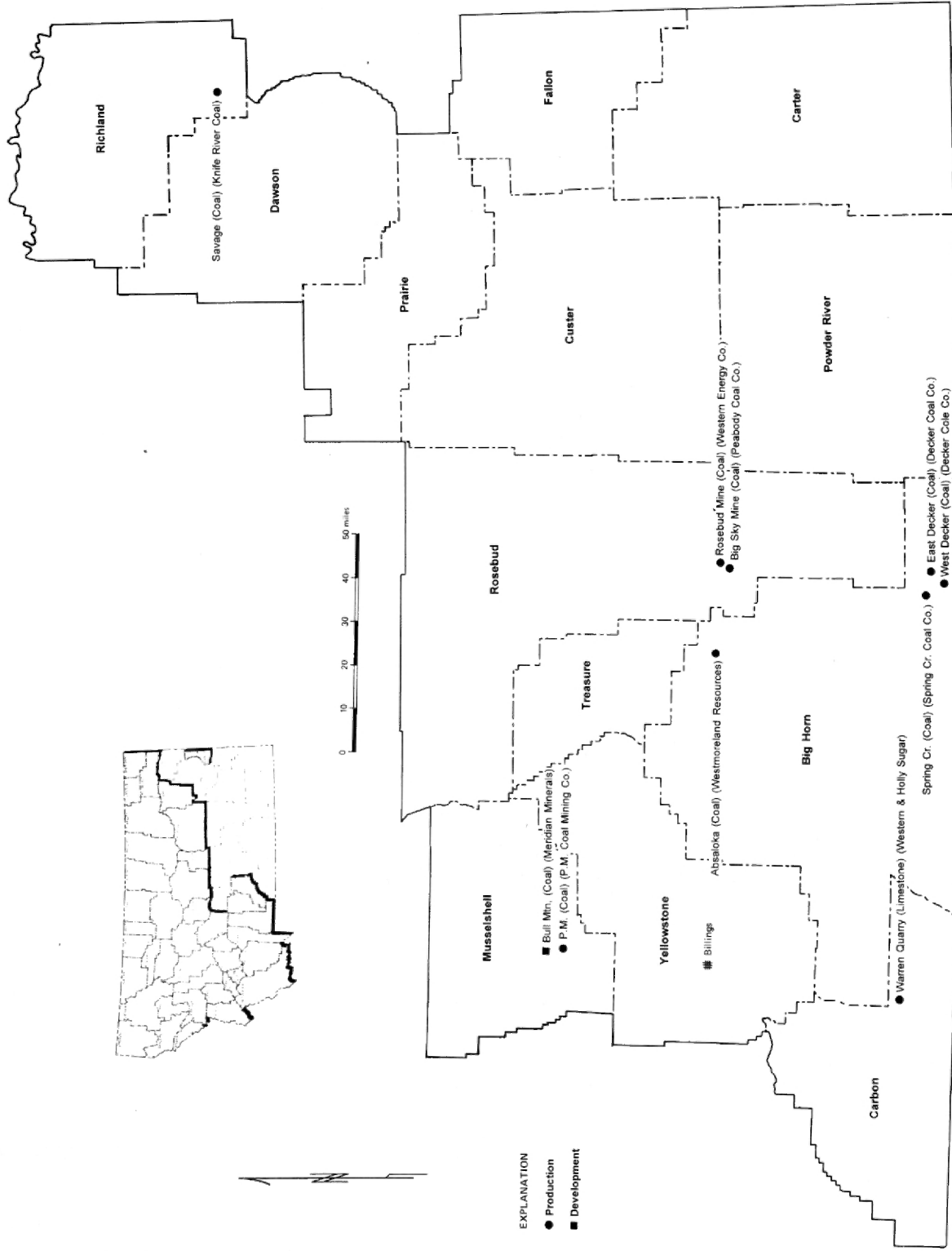


Figure 11 – Mines in the southeastern region.

Index of mines, mine owners and operators

A		Continental Lime, Inc.	22
Absaloka mine	34	Continental Pit	4
Adams, Steve	12	Cope, R.W.	36
American Colloid	38	Costain Minerals, Inc.	33
American Independent Mining	2	Cox, E.A.	15
Antonioli, Bill	3	Cox, Wade	15
Antler mine	21	D	
Arcadia placer	11	Dale, Tad	1, 2
ASARCO, Inc.	3, 9, 10, 22	Dale, Paul	4
Ash Grove Cement West, Inc.	23	Day Creek Resources	14
Ashe, Garland	13	Day Gulch placer	14
Avalanche Creek placer	12	Dearcorn, David E.	37
B		Decker Coal Company	35
B & S placer	12	Del Rio Corporation	13
B and B Mining, Ltd.	18	Dodd, Martin	25
Baldy Mountain claims	1	D'orazi, John	19
Baker, Doug	2	Douglas Creek placer	14
Barretts Minerals, Inc.	33	E	
Basin Creek Mining	1	Earnest, Fred	33
Beal Mountain mine	2	Ecker, Pete	28
Beaverhead mine	32	Eichert, Marvin and Doris	20
Beldon, Kurt	35	Eldorado Bar placer	15, 25
Belvue, Travis	2	Elk Creek mine	21
Benbow, Bob	5	Ellis, Buddy	12
Big Horn Limestone Company	24	Erickson, Roland	11
Big Sky mine	35	Essex quarry	30
Bigler-Snowbank mine	2	F	
Black Butte mine	38	Four V's claims	26
Black Pine mine	3	Freeman, John	4
Blomquist, Wade	20	French Bar placer	26
Bonnecord placer	13	G	
Borland, R.	38	Gardiner, J.F.	
Bristol, Wade	3	Gem Mountain mine	27
Brockbank, Vaughn	13	Gem Mountain Sapphire Company	27
Brown, Carl	8	German Gulch mine.	2
Burchak, A.J.	2	Geyer, Jim	11
Burgess, Jack	9	Goddard, Roger	13
Butrenchuk, Steven	21	Golden Sunlight Mines, Inc.	4
Butwell, Jeff	6	Gorton, Greg	29
C		Groundhog mine	5
Campbell, T.	10	H	
Canyon Creek quarry	29	Haack, Jerry	33
Canyon Resources	5	Hallet Minerals Company	38
Cedar Creek placer	13	Hand, William M.	5
Cerino, Mike	33		
Chorney, Elton	22		
Chrisman, Mark	24		
Clutis, Wayne	14		
Cominco American, Inc.	25		
Contact Mining Company	3		

Harper, Butch	18
Hendricks, Tracy	35
Hess, T.R.	27
Hiatt, Elwood	1
Hirschy Ranch	11
Hodges, G.	9
Holly Sugar Company	24
Homestake Mining Company	6
Hoyrup, Nick	33
Hughes Creek placer	15, 16

I

Ideal Basic Industries	23
Indian Creek mine	22

J

Jennings, Larry	5
Johnny Gulch mine	33

K

Kawalok, Frank	35
Kendall, C.R.	5
Kiewit Mining Group, Inc.	35
Klies, Forrest L.	28
Knife River Coal Mining Company	37
Knudsen, Peter	28
Kolberg, Arnold J.	6
Kolberg mill	6
Kolezak, Francis	11
Kriticos, Tykie	14
Kunisaki, Ronald H.	29

L

Lawrence, John, C.	10
Lawson, Mel	9
Leikem, Breed	17
Lewis, Bill	16
Lewis, Bob	18
Lewis, Clay	18
Lincoln Gulch placer	16
Lindsey, Darren	33
Livingston Marble and Granite Works	31
Lorbeck, Jerry	27
Lovestone Mining	27
Lovestone Placer	27
Lunan, Larry	18
Luzenac America, Inc.	21, 32, 34

M

Maronick Construction Company, Inc.	22
Maronick, E.P.	22
Martin, Ronald I.	30

Martin's Peat, Inc.	30
Mattie V placer	17
McClellan quarry	22
McConnel, Harvey	19
McKinner, L.R.	10
McLavey, Don	18
McLean, M.	6
McLean, Ron	26
McQuarrie quarry	31
Meridian Aggregates Company	30, 31
Meridian minerals	36
Miller, Doug	9, 10
Mineral Hill mine	6
Mineral Hill Mine, Inc	6
Montana City quarry	23
Montana Limestone Company	24
Montana Pacific Mining, Inc.	20
Montana Reserves Company	7
Montana Resources, Inc.	4
Montana Talc Company	33
Montana Tunnels Mining	7
Montanore mine	7
Moore, Hugh	25
Morehead, Bob	36
Morgan, James	32
Morrison-Knudsen Company, Inc.	34
Mustang mine	8

N

Natures Calcium Products Company	24
NERCO, Inc.	35, 37
Nethercroft, Rocky	8
New Departure Custom Vat Leach	8
Nibbe, Rod	37
Nixon, Gordon	7
Noranda, Inc.	7
Noranda Montanore	7

O

O'Laughlin, J.V.	34
------------------	----

P

Palagi, Charlie	4
Paupers Dream project	1
P.C. Crystal mine	28
P.M. mine	36
Peabody Coal Company	35
Pegasus Gold Corporation	1, 2, 7, 11
Perry, Lanny and Joy	28
Petersmeyer, Mark	7
Peterson, Dan	23
Peterson, Don	17
Pierce, Kevin	6

Pike, Ken	24
Piniakiewicz, R.J.	34
Piper, Dave	30, 31
Pipestone mine	24
Placer Dome, Inc.	4
Potter, J.	38

Q

Quartzite placer	17
----------------------------	----

R

RBM Mining, Inc.	36
Rader, Gary	35
Red Bluff quarry	32
Red Bluff Quarry, Inc.	32
Rhone-Poulenc Basic Chemicals Company	29
Ridgeway, Charles and Marie	28
Rife, C.	2
RLT Company	13
Rock Creek mine.. . . .	9
Rocky Mountain Minerals	21
Roncor, Inc.	29
Rosebud mine	36
Ryan, Kevin	5

S

Sauerkraut Creek placer	18
Savage mine	37
Swanson, Dave	1
Seahawk placer	18
Sealey, Randy	19
Sewell, Irving	38
Shelton, Ron	33
Smith, Theo T.	27
Speerstra, Sam	15, 25
Spring Creek Coal Company	37
Spring Creek mine	37
Springlan, Bill	23
Standard Creek Mining	8
State of Montana	21
Stewart, Doug	7
Stillwater Mining Company	9
Stroiazzo, John	7
Strong, Greg	31

T

The Rat placer	19
Toelle, Mike	21, 32
Towner, Rob	11
Treasure Chest mine	33
Trident quarry	23
Troy unit	10
TVX Gold	6

U

U.S. Antimony Corporation	10
U.S. Antimony Smelter and Refinery	10

V

Vermont Gulch placer	19
Volker, Albert E.	26
Vortex Group	28
Vortex Mining	28

W

Walnut placer	20
Walsh, Steve	4
Warm Springs mine	25
Warren quarry	24
Washington Gulch	20
Watts, Tom	16
Western Energy Company	36
Western Sugar Company	24
Westmoreland Resources	34
Weitz, Tom	7
Wheeler, Bill	14
Wilson, Don	4
Williams, Jim and Debra	21

Y

Yellowstone mine	34
Yogo Sapphire mine	29
Young, Dave	10

Z

Zimmerman, Denise	38
Zortman/Landusky	11
Zortman-Landusky mine	11

Index of new mines and exploration projects

A			
A & A Mining and Trucking, Inc.	39	Cox Exploration, Inc.	39
Abby project	41	Crevice project	47
Ace Placer project	47	Crown Butte Resources	48
Almond project	47	Curtis, Paul	49
Alpine project	45	Cyprus Metals	42
Alta Gold Company	39	Cyprus Talc Corporation	39
American Copper & Nickel Company	47, 48	D	
Amy X Resources, Inc.	39	David King Project	49
Antonioli, Frank M.	39	Debbie Joe project	42
Arbor Minerals, Inc.	39	Dechalte Mining, Inc.	39
ASARCO, Inc.	43, 45, 49, 50	Deep Creek project	42
B		Diamond Hill project	41
Baker, David	41	Doten, Charles	46
Bakie, Gwen	46	Dry Cottonwood project (1)	41
Banff Minerals, Inc.	46	Dry Cottonwood project (2)	41
Barretts Minerals, Inc.	39	E	
Basin Exploration, Inc.	39	Earthworks project	44
Basin Gulch project	42	Eaton, Randy	41
Bielenberg, Mark	41	Echo Bay Company	44
Big Spring Creek project	42	Elkhorn project	44
Black Butte project	44	Ellingson, A.C.	40
Blacktail project	45	Emery project	48
Blue Joint project	49	Emigrant Creek project	48
Blue Ribbon project	48	Emigrant Placer project	47
Blue Ribbon Resources	48	Entiene, John	49
Bluestar project	48	Ericksmoen, Bill	45
Bluestar Mining Company	48	F	
Bonanza (Hard Rock) project	47	Fayram, Dale	43
Boss Tweed/Clipper/Mammoth	46	Fee, John	45
Bossard/Caboose Mining Enterprises, Inc.	39	Fleming, Edwin C.	40
Bossard, Floyd	39	Flower Creek project	45
Bull Mountains Coal Company	39	FMC Gold	43
Butcherknife project	45	Foolhen project	45
C		4 V's	47
C.R. Conn Exploration	50	Freeman project	44
C.T. Corporation System	39, 40	G	
Cable Mountain Mines Company	43	Gabrielson, Ben	49
Cajun Queen project	47	Galloway project	47
Cameco project	43	Garnet project	42
Carlson, Don	45	Gem Mountain project	42
Carpenter Creek project	42	Gildersleeve project	47
Carstensen, Andrew	40	Giles, T.	40
Chau project	49	Glidden project	49
Checkerboard project	46	Gold Bug project	47
Clemmer Gulch project	48	Golden Eagle project	42
Cochran, J.	47	Golden Sunlight Exploration	44
Coloma project	42	Goldfields project	44
Cominco-American Resources	47	Graphite project	41
Conn, C.R.	50	Graybill, Ken	40
CONOCO Carbon & Minerals, Inc.	39	Greenhorn Creek project	45
Continental Lime project	41	Gunny Sack project	48
Cornish Gulch project	42		
Cox, Bruce	49		

Guthrie, Bud 45

H

Hanley, Robert T. 40
 Hanover Gold Company, Inc. 39
 Hansard Mining, Inc. 39
 Hansen, Kirk 40
 Hard Rock Mining Company, Inc. 39
 Harrison Western Corporation 47
 Harvey Creek project 43
 Haun, Leroy 49
 Hawkins, Marilyn 40
 Heddleston project 45
 Helca Company 48
 Hermiston 47
 Hilderman, John 44
 Holiday Claims project 43
 Hooker, Earl 48
 Hughs Placer project 48

I

Independence project 41
 Individual project 45
 Iowa Placer project 45
 Iron Creek project 41

J

Jack Creek Ridge project 44
 Jack Waite Mining Company 39
 Jackson, Gregory A. 39
 Johnny-Be-Good project 45
 Jumper #1 Adit project 46

K

Kendall, C.R. 41, 42
 Kennedy Creek project 47
 Kennicott project 46
 Kent, Mike 46
 Kiewit Mining Group, Inc. 39
 Kline, John R. 40
 Krause, Fristin 40
 Kukulinski-Moore project 42

L

Lac Minerals (USA), Inc. 39
 Lafon, Lloyd 49
 Libby project 46
 Linster Peak project 41
 Logerquist, Ken 43
 Londondarry project 43
 Lost Grouse project 46
 Lost Mine project 46
 Lower Hughes Creek placer 49
 Lutz, Ken 47

M

Madison Mines, Inc. 40

Magellan project 42
 Manhattan Minerals U.S., Ltd. 40
 Many Pines project 41
 McCarter, Michael 40
 Merrill project 46
 Metal Recovery Technologies, Inc. 40
 Metallic Ventures, Inc. 40
 Minear, Conrad 48
 Mineral project 48
 Miners Gulch project 49
 Montana Gold Properties Corporation 40
 Montana Mining & Exploration, Inc. 40
 Montana Mining & Manufacturing, Inc. 40
 Montana Refining Research Corporation 40
 Mountain Minerals 42
 Murdock, Gary 45

N

Neadler, Skip 42
 Nemoff, Gregory L. 40
 New World project 48
 New Year project 42
 Nicholson project 46
 Nine Mile Mines, Inc. 40
 North Mining, Inc. 40
 Northern Cross project 43

O

O'Keefe project 48
 Ophir project 48
 Orvana Resources 46

P

Pathfinder Gold 46
 Patton, Don 42
 PC Exploration, Inc. 40
 Pegasus Gold Corporation 41-44, 46, 48-50
 PGM Drilling 44
 Phelps Dodge 44
 Pika Gypsum 46
 Placer Exploration 43
 Plymouth project 44
 Prentice Hall Corporate Services 40
 Puryer, Marty 40

Q

Quartz Gulch project 43
 Questa Resources, Inc. 40

R

Ratcliff, Marvin 45
 Raven project 46
 Riverside project 49
 Robinson project 43
 Rock Creek project 49
 Rodli, David 40
 Romodog project 49
 Ruby Star project 46

S

S & H Mining Company	47
Sana Minerals	45
Sanderson, Melvin	48
Schively Ridge project	43
Schraudner, Leanne M.	39
Self, Don	44
Sells, Virgil	41
7-Up Pete project	44
Seymour, Roy	47
Shaw, George	46
Sheep Creek project	47
Shreeves, Richard	45
Silver Bo, Inc.	40
Silver Star project	44
Siskon Gold Corporation	40
Skekinah Gold Miner, Inc.	45
Skranek, Henry	46
Sliderock project	43
Smith, Jess	41
Smith, Nolan	40
Smith, Ralph	42
Snook, Robert	41
Snowshoe project	46
Sonju, Jon	49
Southern Cross project	43
Spokane Minerals, Ltd.	40
Spring Fever project	45
Stillwater PGM Resources	50
Stiltner, Warren	39, 46
Stony Creek project	43
Sunshine Lode project	49
Switzer, Bruce	45

T

T & B Mining	44
Teck Resources	46
Terra Exploration & Production, Inc.	40
Tibbs, Don	43
Tobacco Mountain Gold	46
Trans-Global Resources\N.L. Corporation	40
Trout Creek project	50

U

U.S. Talc Company	40
Uncle Ben Placer	45
United Minerals	41

V

Virginia City Mining Company, Inc.	40
Volker, Albert	47

W


Welch, John	44
Whitehair, Stuart R.	39
Wickstrom, Bo F.	40
Willow Creek project	44
Woodgate, Cecil	43
Wrobel, Buss	42

Y

Young, Larry	40
--------------	----

Production Information

Copy composed in Word Perfect 5.0; printed on Laser Jet 4.

Stock: Cover — 65 lb. Hopper Feltweave
 Text — 60 lb. Incentive Offset 
Composition: *Univers* typeface
 Heads — 1st order—18 pt. Bold, leaded 2 pt.
 2nd order—14 pt. Bold, leaded 2 pt.
 Mine entries — 10 pt. Medium, leaded 2 pt.
Presswork: Heidelberg GTO 52
Binding: Perfect Bind
Press run: 500 copies

Typesetting\Composition: *Tracy Holmes*
Cartography: *Pat Tamarin*



Printed on recycled paper.
