44°07′30″

Base modified from U.S. Geological Survey, 1956

Sec. 16 T3N R4E

Sec. 16 T3N R4E

Sec. 15 T3N R4E

Sec. 15 T3N R4E

Sec. 15 T3N R4E

Sec. 22 T3N R3E

Sec. 12 T2N R3E

Sec. 7 T2N R4E

Sec. 6 T2N R4E

Sec. 7 T2N R4E

Sec. 7 T2N R4E

Sec. 11 T2N R3E

Sec. 11 T2N R3E

Sec. 14 T2N R3E

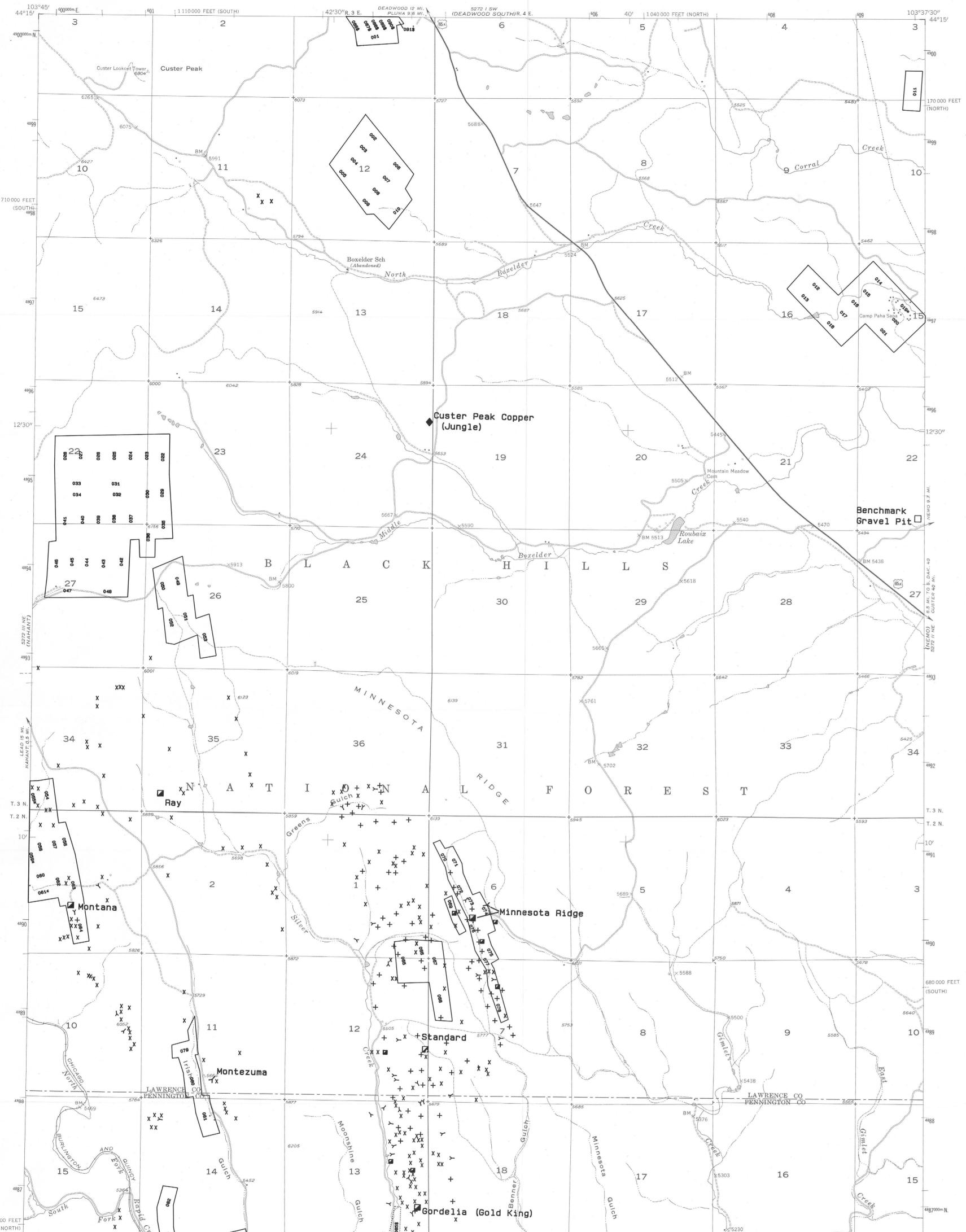
Sec. 14 T2N R3E

Sec. 14 T2N R3E

Sec. 24 T2N R3E

Sec. 13 T2N R3E

Sec. 1 T3N R3E



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NATIONAL GEODETIC VERTICAL DATUM OF 1929

SOUTH DAKOTA

MF-Series Maps Open-File Reports Tinton 87-261-A HF-1978-C 87-261-B MF-1978-D MF-1978-E L880 Savoy Lead Deadwood Deadman South Mountair 87-261-C MF-1978-6 87-261-D Nahant Ridge Nemo Piedmont 87-261-E MF-1978-H MF-1978-I 87-261-F Silver Pactola 87-261-6 MF-1978-J MF-1978-K 87-261-H Medicine / Hill Mount Rocker-Mountain City Rushmore Vills MF-1978-L MF-1978-M MF-1978-N Newcastle Hot Springs 87-261-I 87-261-J

## EXPLANATION

INDEX MAP SHOWING MINES AND PROSPECTS MAPS (MF-SERIES MAPS AND OPEN-FILE

REPORTS) IN THE BLACK HILLS REGION

Mine--Location known. Distinguished from prospect by name of mine next to symbol. Alternate names or synonym(s) in parentheses. If there is enough space on the map, the entire mine name and synonym(s) are shown; otherwise, mine name may be abbreviated and synonym(s) deleted from map. Full mine names and all synonyms are shown in the "Alphabetic list of mines" Adit

Open pit or other type of opening

long axis of claim

Multiple pits Patented claim -- See alphabetic and numeric lists of patented claims. Asterisk (\*) indicates part of claim extends into adjacent quadrangle. Dollar sign (\$) indicates most of claim in adjacent quadrangle. Boundaries between claims not shown Lode claim--Orientation of number parallel to

Placer claim -- Number approximately in center of

# INTRODUCTION

This map is one in a set of 26 maps (see index map) at 1:24,000 scale of the Black Hills region of South Dakota and Wyoming on which are shown a geologic classification of mines, a bibliography of mineral deposits, and locations of active and inactive mines, prospects, and patented mining claims. Some of these maps are published as U.S. Geological Survey Miscellaneous Field Studies Maps (MF series) and some as U.S. Geological Survey Open-File Reports (OF series); see index map. An earlier unpublished version of this set of maps was the data base from which plate 4 (scale 1:250,000) of DeWitt and others (1986) was compiled. Subsequent to that publication, the set has been revised and updated, and prospects and patented claims have been added. These revised and more detailed 1:24,000-scale maps should be used for the equivalent areas of plate 4 of DeWitt and others

# SOURCES OF INFORMATION

Outlines of patented mining claims were obtained from 1:24.000-scale Forest Service Status Plats, available for inspection at the U.S. Forest Service, Rocky Mountains Region, 11,117 West 8th Avenue, Denver, CO 80225. Names of most patented claims were obtained from Wilhelm and others (1978). Other names were obtained from the Lawrence County Courthouse, Deadwood, South Dakota, and the Pennington County Courthouse, Rapid City, South Dakota. Claims have been located as accurately as possible, but this map is not intended to be used for legal nor precise locations of mining claims.

Locations of mines and prospects were compiled from all available published and unpublished data. The locations of active and inactive mines in this quadrangle were taken from Allsman, (1940), Bayley (1972a, 1972b), Connolly (1933), Connolly and O'Harra (1929), Hill and Lindgren (1912), O'Hara (1902), U.S. Bureau of Mines (1954, 1986), and U.S. Geological Survey (1986). Also, in some instances, different sources of information gave conflicting location information for mines with the same name. Where possible, this conflict was resolved by comparing the name of the mine to adjacent patented claims, by comparing the description of the deposit to the known geology and topography of the area, or by communication with past owners of the property. In some instances, a unique location could not be determined using existing information; in that event the most logical location was chosen. The location of some or many mines on this map may differ from those in present data bases such as the U.S. Bureau of Mines Mineral Inventory Location System (MILS) or the U.S. Geological Survey Mineral Resources Data System (MRDS), formerly the Computerized Resources Information Bank (CRIB).

Locations of prospects in this quadrangle were taken from Bayley (1972a, 1972b) and Richard Cleath (unpub. data, 1986). Because many quadrangles, or parts of quadrangles, have not been mapped in as much detail as other quadrangles, comparison of the density of prospects from one quadrangle to another, or even within one quadrangle, should not be attempted. As an example, part of a quadrangle may be shown on the map as having more prospects than another part, but the first part may have been mapped in greater detail than the second part. Similarly, a part of a quadrangle may have many prospects that are not shown on this map because the original source of information did not map prospect pits. Geologic data for the map are from Bayley (1972a, 1972b), Richard Cleath (unpub. data, 1986), Darton and Paige (1925), DeWitt and others (1986), Harder (1934), Harrer (1964), Kleinkopf and Redden (1975), Munson (1941), O'Harra (1916), Redden (unpub. data, 1986), Redden and Norton

#### PRECISION OF LOCATION INFORMATION

(1975), Wayland (1936), and Wilson (1951).

All mine symbols except the unfilled diamond  $(\diamondsuit)$ indicate that the location of the deposit is known within a 200-foot radius. The type of opening at a mine (adit, shaft, open pit, trench, and others) is designated by one of ten different symbols. The unfilled diamond symbol indicates that the location is known only to within a 1/4 mile radius and that the type of mine opening is unknown. Mines and prospects whose locations could not be verified to within closer than a 1/4 mile radius were not plotted on the map.

#### PATENTED CLAIM AND MINE LISTS

Patented mining claims are listed both numerically and alphabetically. Mines are listed alphabetically. For ease in locating the claim or mine on the map, the legal description (section, township, range) is given. Each patented claim on the map is represented by a number keyed to the numeric and alphabetic listings. Where possible, the claim numbers are plotted approximately in the center of the claim and parallel to its long axis. Boundaries between adjacent claims are not shown. An asterisk (\*) following a claim number indicates that most of the claim is in this quadrangle, but it extends into the adjacent quadrangle. A dollar sign (\$) following a claim number indicates that most of the claim is in the adjacent quadrangle, but part of it is in this quadrangle. Claims outlined with a solid line are patented lode claims; claims outlined with a dotted line are patented placer claims. Many placer workings on unpatented claims have not been plotted on the maps, principally because the workings lacked a name. On the map, the most common or most used name of a mine is normally next to its mine symbol. If there is space, any alternate names or synonyms are in parentheses following the most common name. On some maps, where space does not permit showing the first name or any alternate names, the names are shown by a single letter, two letters, or an abbreviation of the name; the mines are keyed to that letter or abbreviation in the alphabetic and numeric lists. Mines with more than one name have the alternate name(s) or synonym(s) shown in parentheses in the alphabetic lists. The first alternate name or synonym is also alphabetized in the alphabetic list of mines; second or third alternate names may not be alphabetized. Uncertain alternate names are not

#### CLASSIFICATION OF MINES AND DEPOSITS

Mines and deposits are categorized according to geologic criteria of age, environment of formation, and contained metals, as in DeWitt and others (1986, p. 52-53). Deposit-type letter designation (C) corresponding to that in DeWitt and others (1986), is used in the alphabetic list of mines. The criteria used for this deposit type is briefly summarized below and is explained more fully in DeWitt and others (1986).

alphabetized and are followed by a query (?).

#### PRINCIPAL TYPES OF DEPOSITS

C--Early Proterozoic carbonate-, silicate-, and sulfidefacies iron-formations are syngenetic stratiform deposits of gold, silver, and arsenic formed in a submarine environment about 1.8-2.2 Ga. The metals were concentrated in sedimentary and volcaniclastic rocks by biologic, sedimentologic, or hydrothermal processes.

## ACKNOWLEDGMENTS

J. J. Norton, J. A. Redden, J. P. Gries, and W. L. Roberts reviewed the set of maps. Rob Yambrick helped digitize much of the information.

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## Alphabetic list of mines

Name Deposit of		Lo				
Type	Mine					
	Benchmark Gravel Pit	Sec.	22	T3N	R4E	
C	Gold King (Gordelia)	Sec.	13	T3N	R3E	
C	Gordelia (Gold King)	Sec.	13	T2N	R3E	
C	Jungle [Custer Peak Copper]	Sec.	24	T3N	R3E	
С	Minnesota Ridge	Sec.	6	T2N	R4E	
C	Montana	Sec.	3	T2N	R3E	
C	Montezuma	Sec.	11	T2N	R3E	
C	Ray	Sec.	35	T3N	R3E	
C	Standard	Sec.	12	T2N	R3E	

# Alphabetic list of patented claims

[Asterisk (\*) indicates that part of claim extends into adjacent quadrangle; dollar sign (\$) indicates that most of claim is in the adjacent quadrangle]

Claim number	Name of	Lo	cat	ion		
	Claim					
062	Alpha	Sec.	3	T2N	R3E	
076	Austin	Sec.	_	T2N		
011	Badger	Sec.		T3N		
083*	Bangor	Sec. Sec.		T2N T2N		
061*	Beta Black Bird	Sec.	6	T2N		
051	Copper King			T3N		
053	Copper King No.2	Sec.	26			
049	Copper King No.3		26	T3N		
050	Copper King No. 4	Sec.	26	T3N T3N		
052	Copper King No.5 Corraella	Sec.		T2N		
042	Curan	Sec.	27	T3N		
043	Curan No.1	Sec.	27	T3N		
044	Curan No.2	Sec.	27	T3N		
045	Curan No.3	Sec.	27 27	T3N T3N		
046	Curan No.5	Sec.	27	T3N		
048	Curan No.6	Sec.	27	T3N	R3E	
084*	Dakota	Sec.	14			
035	Dewey	Sec.	26	T3N		
036	Dewey No.1 Dewey No.2	Sec.	22	T3N T3N		
037	Dewey No.3	Sec.	22	T3N		
039	Dewey No.4	Sec.	22			
040	Dewey No.5	Sec.	22	T3N		
041	Dewey No.6	Sec.	22	T3N		
034	Dewey No.7	Sec.	22	T3N T3N		
033	Dewey No.8 Dewey No.9	Sec.	22	T3N		
032	Dewey No.10	Sec.	22	T3N		
030	Dewey No.11	Sec.	22	T3N	R3E	
029	Dewey No.12	Sec.	23	T3N		
058	Epsilon	Sec.	34	T2N T3N		
054 059*	Etna No.2	Sec.		T2N		
055*	Etna No.4	Sec.	34	T3N		
001	Fennia No.1	Sec.	1		R3E	
077	Florence	Sec.	7		R4E	
057 027	Gamma Gen. Custer	Sec.		T2N T3N		
026	Gen. Custer No.1	Sec.				
025	Gen. Custer No.3	Sec.	22	T3N		
024	Gen. Custer No.5	Sec.	22		R3E	
023	Gen. Custer No.7	Sec.	22		R3E	
022	Gen. Custer No.8 Gen. Miles	Sec.	23 22	T3N T3N		
068	Grey Eagle	Sec.	7		R4E	
007	Idle Wind No.1	Sec.	12		R3E	
003	Idle Wind No.2	Sec.	12		R3E	
800	Idle Wind No.3	Sec.	12 12	T3N	R3E R3E	
004	Idle Wind No.4 Idle Wind No.5	Sec.	12		R3E	
005	Idle Wind No.6	Sec.	12		R3E	
064	Labrie	Sec.	3		R3E	
010	MacRight	Sec.	12		R3E	
082	Minneapolis	Sec.	14	T2N	R3E R4E	
072 071	Minnesota Monitor	Sec.	6		R4E	
063	Montana	Sec.	3		R3E	
060	Montana Fr.	Sec.	3	T2N	R3E	
015	Myrtle No.1	Sec.	15		R4E	
016	Myrtle No.3	Sec.	16		R4E	
014	Myrtle No.4	Sec. Sec.	15	T3N	R4E R4E	
019 <b>*</b> 020	Myrtle No.5 Myrtle No.6	Sec.		T3N		
021	Myrtle No.7	Sec.	15		R4E	
017	Myrtle No.11	Sec.			R4E	
018	Myrtle No.12	Sec.			R4E	
013	Myrtle No.13 Myrtle No.14	Sec. Sec.			R4E R4E	
012	Nobreeke Placer	Sec.			R3E	

County Courthouse, Deadwood, SD 57732, map nos. 1-4,

Myrtle No.6 Myrtle No.7 Gen. Custer No.8 023 Gen. Custer No.7 Gen. Custer No.5 Gen. Custer No.3 026 Gen. Custer No.1 Gen. Custer Gen. Miles Dewey No.12 Dewey No.11 Dewey No.9 Dewey No.10 Dewey No.7 Dewey 036 Dewey No. 1 037 Dewey No.2

017 Myrtle No.11

018 Myrtle No.12

019\* Myrtle No.5

039

054

062

065

068

072

Vanderoist

Telephone

Grey Eagle

Corraella

Summit

Monitor

Minnesota

Red Squirrel

Black Bird

Westminister

Schiller Fr.

Schiller No.1

Rosana

Austin

Florence

Schiller

084\$ Northern Pacific

0858 Nebraska Placer

086\$ St. Johns No.2

087\$ St. Johns No.1

088\$ St. Johns No.3

089\$ St. Johns No.4

090\$ St. Johns No.5

091\$ St. Johns No.6

082 Minneapolis

083\* Bangor

084\* Dakota

Sec. 23 T3N R3E Sec. 22 T3N R3E Sec. 26 T3N R3E Sec. 26 T3N R3E Sec. 22 T3N R3E Sec. 22 T3N R3E Dewey No.3 Sec. 22 T3N R3E Dewey No.4 Dewey No.5 Sec. 22 T3N R3E Sec. 22 T3N R3E Dewey No.6 Sec. 27 T3N R3E Curan Sec. 27 T3N R3E Curan No. Sec. 27 T3N R3E Curan No. 2 Sec. 27 T3N R3E Curan No. Sec. 27 T3N R3E Curan No. 4 Sec. 27 T3N R3E Curan No.5 Sec. 27 T3N R3E Curan No.6 Sec. 26 T3N R3E Copper King No.3 Sec. 26 T3N R3E Copper King No.4 Sec. 26 T3N R3E Copper King Copper King No.5 Sec. 26 T3N R3E Sec. 26 T3N R3E Copper King No. 2 Sec. 34 T3N R3E Etna Sec. 34 T3N R3E 055\* Etna No.4 Sec. 3 T2N R3E Omega Gamma Sec. 3 T2N R3E Sec. 3 T2N R3E Epsilon 059\* Etna No. 2 Sec. 3 T2N R3E Sec. 3 T2N R3E 060 Montana Fr Beta Sec. 3 T2N R3E Sec. 3 T2N R3E Alpha Sec. 3 T2N R3E Montana Sec. 3 T2N R3E Labrie Sec. 12 T2N R3E Saratoga

AUG 0 4 1988

Numerical list of patented claims

074 Red Squirrel

079 Schiller Fr.

080 Schiller No. 1

087\$ St. Johns No.1

086\$ St. Johns No.2

088\$ St. Johns No.3

089\$ St. Johns No.4

090\$ St. Johns No.5

070 Summit

091\$ St. Johns No.6

Telephone

Translate No.2

Vanderoist

006 Translate No.

078 Westminister

056 Omega

073 Rosana

085\$ Nebraska Placer

084\$ Northern Pacific

Saratoga

Schiller

[Asterisk (\*) indicates that part of claim extends into adjacent quadrangle; dollar sign (\$) indicates that most of claim is in the adjacent quadrangle]

Sec. 13 T2N R3E

Sec. 24 T2N R3E

Sec. 3 T2N R3E

Sec. 6 T2N R4E

Sec. 6 T2N R4E

Sec. 12 T2N R3E

Sec. 14 T2N R3E

Sec. 11 T2N R3E

Sec. 11 T2N R3E

Sec. 1 T3N R3E

Sec. 6 T2N R4E

Sec. 7 T2N R4E

Sec. 12 T3N R3E

Sec. 12 T3N R3E

Sec. 12 T2N R3E

Sec. 7 T2N R4E

laim umber	Name of Claim	Location					
01	Fennia No.1	Sec.	1	T3N	R3E		
02	Translate No.2	Sec.	12	T3N	R3F		
03	Idle Wind No.2	Sec.	12	T3N	R3E		
04	Idle Wind No.4	Sec.	12	T3N	R3I		
05	Idle Wind No.6	Sec.	12	T3N	R3E		
06	Translate No.1	Sec.	12	T3N	R3I		
07	Idle Wind No.1	Sec.	12	T3N	R3I		
08	Idle Wind No.3	Sec.	12	T3N	R3I		
09	Idle Wind No.5	Sec.	12	T3N	<b>R3</b> I		
10	MacRight	Sec.	12	T3N	R31		
11	Badger	Sec.	3	T3N	R41		
12	Myrtle No.14	Sec.	16	T3N	R41		
13	Myrtle No.13	Sec.	16	T3N	R41		
14	Myrtle No.4	Sec.	15	T3N	R41		
15	Myrtle No.1	Sec.	15	T3N	R4		
16	Myrtle No.3	Sec.	16	T3N	R41		

MAP SHOWING LOCATIONS OF MINES, PROSPECTS, AND PATENTED MINING CLAIMS, AND CLASSIFICATION OF MINERAL DEPOSITS IN THE MINNESOTA RIDGE 7½-MINUTE QUADRANGLE, BLACK HILLS, SOUTH DAKOTA

103°37′30″

Compiled in 1986