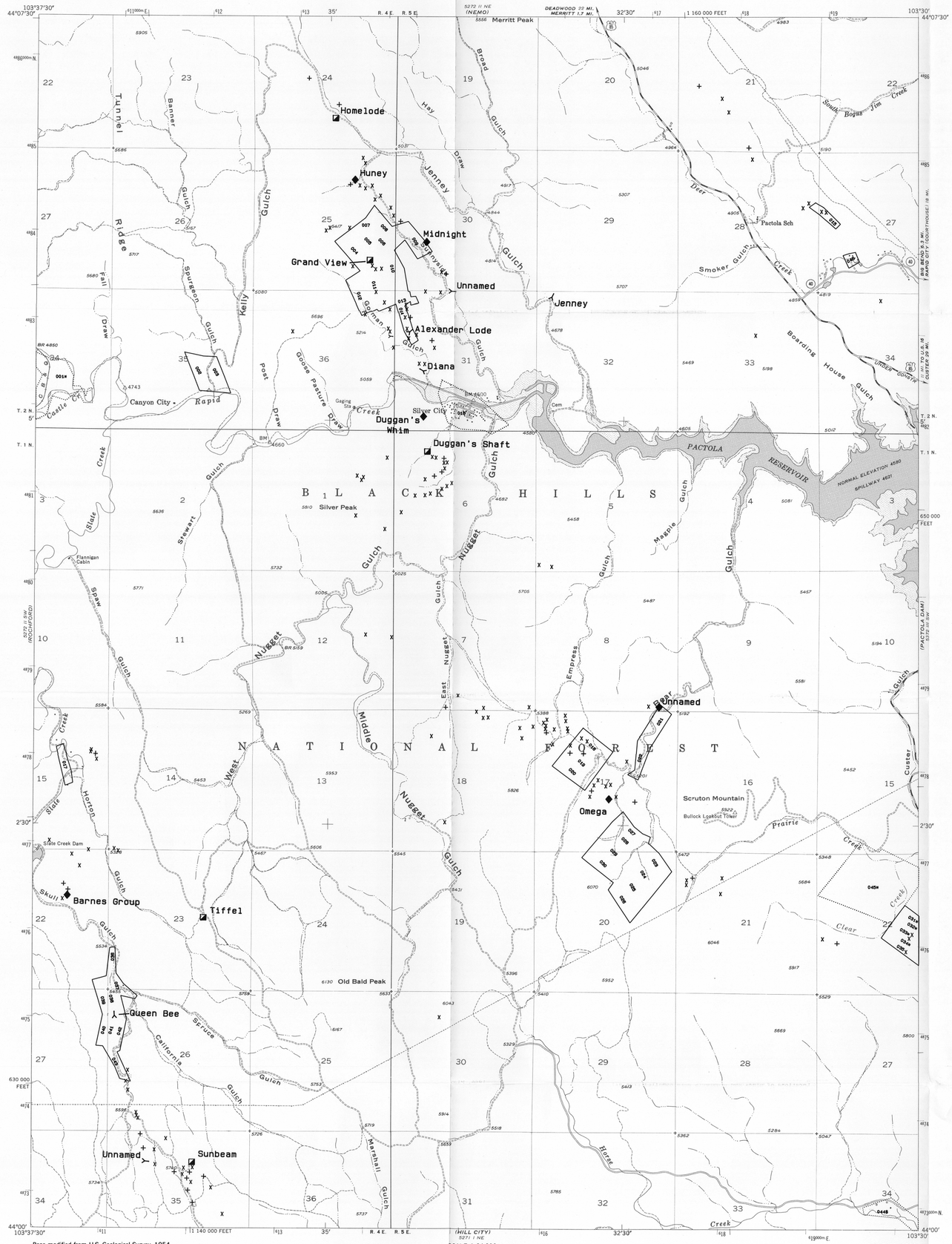


Base modified from U.S. Geological Survey, 1954

SCALE 1:24 000

Compiled in 1986

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

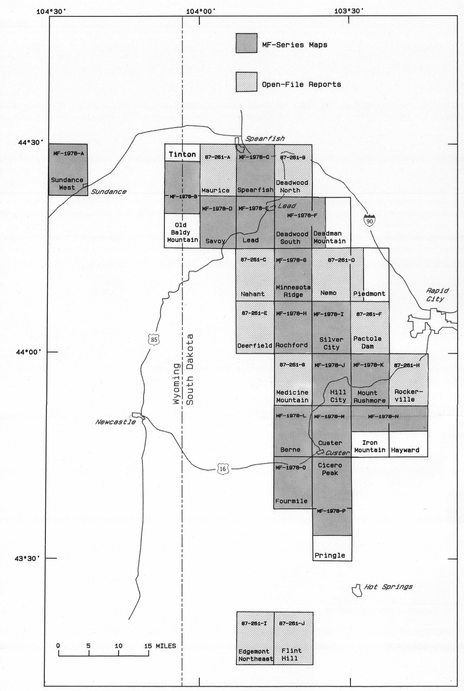
NATIONAL GEODETIC VERTICAL DATUM OF 1929

GN MN 1°00' 18 MILS 14½° 258 MILS

UTM GRID AND 1954 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SOUTH DAKOTA

QUADRANGLE LOCATION



INDEX MAP SHOWING MINES AND PROSPECTS MAPS (MF-SERIES MAPS AND OPEN-FILE REPORTS) IN THE BLACK HILLS REGION

EXPLANATION

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

Shaft

Open pit or other type of opening

Prospect

Adit

Pit

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 long axis of claim

Placer claim--Number approximately in center of claim

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 An earlier unpublished version of this set of maps was the data base from which plate 4 (scale 1:250,000) of DeWitt and others (1986) was compiled.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 (1986).

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 patented claims were obtained from 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 (1972), Connolly (1933), Connolly and O'Harra (1929), O'Harra (1902), J.A. Redden (unpub. data, 1986), Roberts and Rapp (1965), 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 (1972) and J.A. Redden (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 (1972), Darton and Paige (1925), DeWitt and others (1986), Evans (1931), Fantone (1983), Hughes (1924), Larson (1971), J.A. Redden (unpub. data, 1986), Redden and Norton (1975), and Zeitner (1977).

PRECISION OF LOCATION INFORMATION

All mine symbols except the unfilled diamond (◇) 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 alphabetized and are followed by a query (?).

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 designations (D, Z, and so on), corresponding to those in DeWitt and others (1986), are used in the alphabetic list of mines. The criteria used for the deposit types are briefly summarized below and are explained more fully in DeWitt and others (1986).

PRINCIPAL TYPES OF DEPOSITS

D--Early Proterozoic veins and shear zones are discordant deposits of gold, silver, lead, and minor amounts of zinc, copper, and arsenic formed in a metamorphic and tectonic environment about 1.6–1.9 Ga. Hydrothermal solutions concentrated the metals in metasedimentary rocks.

Z--Upper Cretaceous or lower Tertiary vein deposits are discordant to concordant concentrations of base and precious metals formed in a tectonic environment about 65 Ma. Hydrothermal fluids rich in lead, zinc, and silver, and containing minor amounts of gold deposited sulfide minerals in fissures created by uplift of the Black Hills.

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

[Deposit-type letter designations are explained in the text]

Deposit Type	Name of Mine	Location
D	Alexander Lode	Sec. 31 T2N R5E
D	Barnes Group	Sec. 22 T1N R4E
D,Z	Diana	Sec. 31 T2N R5E
D	Duggan's Shaft	Sec. 6 T1N R5E
D	Duggan's Whim	Sec. 31 T2N R5E
D	Grand View	Sec. 25 T2N R4E
D,Z	Homelode	Sec. 24 T2N R4E
D	Huney	Sec. 25 T2N R4E
D	Jenney	Sec. 32 T2N R5E
D	Midnight	Sec. 30 T2N R5E
D	Omega	Sec. 17 T1N R5E
D	Queen Bee	Sec. 26 T1N R4E
D	Sunbeam	Sec. 35 T1N R4E
D	Tiffel	Sec. 23 T1N R4E
D	Unnamed	Sec. 31 T2N R5E
D	Unnamed	Sec. 35 T1N R4E
D	Unnamed	Sec. 8 T1N R5E

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 Claim	Location
014	Alexander	Sec. 31 T2N R5E
023	Alpha	Sec. 20 T1N R5E
024	Alpha No.1	Sec. 20 T1N R5E
025	Alpha No.2	Sec. 20 T1N R5E
026	Alpha No.3	Sec. 20 T1N R5E
035	Chicago No.5	Sec. 22 T1N R5E
034*	Chicago No.6	Sec. 22 T1N R5E
033*	Chicago No.7	Sec. 22 T1N R5E
022	Clark	Sec. 17 T1N R5E
021	Clark No.1	Sec. 17 T1N R5E
045*	Clear Creek Placer	Sec. 22 T1N R5E
015	Golden Reef	Sec. 27 T2N R5E
046	Golden Reef Mill Site	Sec. 27 T2N R5E
006	Grandview	Sec. 25 T2N R4E
005	Grandview No.1	Sec. 25 T2N R4E
004	Grandview No.4	Sec. 25 T2N R4E
042	Hidden Treasure	Sec. 26 T1N R4E
011	High No.1	Sec. 25 T2N R4E
012	High No.4	Sec. 36 T2N R4E
017	J. G. Blaine	Sec. 15 T1N R4E
013	La Cross	Sec. 31 T2N R5E
043	Landis	Sec. 26 T1N R4E
020	Lucky Boy	Sec. 17 T1N R5E
003	May	Sec. 35 T2N R4E
002	May No.1	Sec. 35 T2N R4E
019	Merritt No.1	Sec. 17 T1N R5E
009	Midnight Lode	Sec. 30 T2N R5E
008	Midnight No.1	Sec. 25 T2N R4E
001*	National Placer	Sec. 34 T2N R4E
016	Nebraska Bar Placer	Sec. 31 T2N R5E
040	New Holland No.2	Sec. 27 T1N R4E
032*	New Homestake No.1	Sec. 22 T1N R5E
027	Omega	Sec. 17 T1N R5E
028	Omega No.1	Sec. 17 T1N R5E
029	Omega No.2	Sec. 17 T1N R5E
030	Omega No.3	Sec. 20 T1N R5E
018	Peggy	Sec. 17 T1N R5E
037	Queen Bee	Sec. 26 T1N R4E
039	Queen Bee	Sec. 27 T1N R4E
036	Queen Bee Placer	Sec. 23 T1N R4E
031*	Queen of the Hills No.1	Sec. 22 T1N R5E
044$	Saxon Placer	Sec. 34 T1N R5E
045*	Clear Creek Placer	Sec. 22 T1N R5E
046	Golden Reef Mill Site	Sec. 27 T2N R5E

Numerical 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 Claim	Location
001*	National Placer	Sec. 34 T2N R4E
002	May No.1	Sec. 35 T2N R4E
003	May	Sec. 35 T2N R4E
004	Grandview No.4	Sec. 25 T2N R4E
005	Grandview No.1	Sec. 25 T2N R4E
006	Grandview	Sec. 25 T2N R4E
007	Standard	Sec. 25 T2N R4E
008	Midnight No.1	Sec. 25 T2N R4E
009	Midnight Lode	Sec. 30 T2N R5E
010	St. Louis Lode	Sec. 30 T2N R5E
011	High No.1	Sec. 25 T2N R4E
012	High No.4	Sec. 36 T2N R4E
013	La Cross	Sec. 31 T2N R5E
014	Alexander	Sec. 31 T2N R5E
015	Golden Reef	Sec. 27 T2N R5E
016	Nebraska Bar Placer	Sec. 31 T2N R5E
017	J. G. Blaine	Sec. 15 T1N R4E
018	Peggy	Sec. 17 T1N R5E
019	Merritt No.1	Sec. 17 T1N R5E
020	Lucky Boy	Sec. 17 T1N R5E
021	Clark No.1	Sec. 17 T1N R5E
022	Clark	Sec. 17 T1N R5E
023	Alpha	Sec. 20 T1N R5E
024	Alpha No.1	Sec. 20 T1N R5E
025	Alpha No.2	Sec. 20 T1N R5E
026	Alpha No.3	Sec. 20 T1N R5E
027	Omega	Sec. 17 T1N R5E
028	Omega No.1	Sec. 17 T1N R5E
029	Omega No.2	Sec. 17 T1N R5E
030	Omega No.3	Sec. 20 T1N R5E
031*	Queen of the Hills No.1	Sec. 22 T1N R5E
032*	New Homestake No.1	Sec. 22 T1N R5E
033*	Chicago No.7	Sec. 22 T1N R5E
034*	Chicago No.6	Sec. 22 T1N R5E
035	Chicago No.5	Sec. 22 T1N R5E
036	Queen Bee Placer	Sec. 23 T1N R4E
037	Queen Bee	Sec. 26 T1N R4E
038	Western Bell	Sec. 26 T1N R4E
039	Queen Bee	Sec. 27 T1N R4E
040	New Holland No.2	Sec. 27 T1N R4E
041	Summer Cloud	Sec. 26 T1N R4E
042	Hidden Treasure	Sec. 26 T1N R4E
043	Landis	Sec. 26 T1N R4E
044$	Saxon Placer	Sec. 34 T1N R5E
045*	Clear Creek Placer	Sec. 22 T1N R5E
046	Golden Reef Mill Site	Sec. 27 T2N R5E

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

By
Ed DeWitt, David Buscher, Anna Burack Wilson, and Tom Johnson
1988

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