



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 synonym are shown in the "Alphabetic list of mines"

Adit  
Shaft  
Open pit or other type of opening  
Gravel pit  
Prospect  
Adit  
Shaft  
Pit  
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 An earlier unpublished version of this set of maps was the data base from which plate 4 (scale 1:250,000) of DeWitt and others (1986) was compiled.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. The 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 Plate, available for inspection at the U.S. Forest Service, Rocky Mountain Region, 1117 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 Allman, (1940), Bayley (1972a), Connolly (1933), Connolly and O'Hara (1929), Hill and Lindgren (1912), O'Hara (1902), U.S. Bureau of Mines (1934, 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), Harter (1964), Kleinke and Redden (1975), Munson (1941), O'Hara (1916), Redden (unpub. data, 1986), Redden and Norton (1975), Wayland (1936), and Wilson (1951).

**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 map, principally because the workings lacked a name. On the map, the most common type of mine opening 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 associated minerals, as DeWitt and others (1986, p. 32-33). 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).

**PRINCIPAL TYPES OF DEPOSITS**

C—Early Proterozoic carbonate, silicate, and sulfide facies 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 volcanoclastic rocks by biologic, sedimentologic, or hydrothermal processes.

**ACKNOWLEDGMENTS**

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**REFERENCES CITED**

Allman, P. T., 1940, Reconnaissance of gold-mining districts in the Black Hills, South Dakota: U.S. Bureau of Mines Bulletin 427, 148 p.

Bayley, R. W., 1972a, Geologic field compilation map of the northern Black Hills, South Dakota: U.S. Geological Survey Open-File Report 72-29, scale 1:48,000.

—, 1972b, A preliminary report on the geology and gold deposits of the Black Hills, South Dakota: U.S. Geological Survey Open-File Report 72-29, scale 1:48,000.

Connolly, J. P., and O'Hara, C. C., 1929, The mineral wealth of the Black Hills: South Dakota School of Mines and Technology Bulletin 16, 418 p.

Darton, R. H., and Paige, Sidney, 1925, Central Black Hills (quadrangle), South Dakota: U.S. Geological Survey Geologic Atlas of the United States, Folio 219, 38 p.

DeWitt, Ed., Redden, J. A., Wilson, Anna Burack, and Buscher, David, 1986, Mineral resource potential and geology of the Black Hills National Forest, South Dakota and Wyoming, with a section on Salable commodities, by J. S. Derach: U.S. Geological Survey Bulletin 1580, 135 p.

Harder, J. O., 1934, Geology of a Pre-Cambrian area at Rochford and its relation to regional structure of the northern Black Hills: Rapid City, South Dakota School of Mines and Technology, Professional [thesis].

Harter, C. M., 1964, Metallic mineral resources—Iron, in U.S. Congress, Senate Committee on Interior and Insular Affairs, Mineral and water resources of South Dakota: U.S. 88th Congress, 2nd session, p. 56-59.

Hill, J. M., and Lindgren, Waldemar, 1912, The mining districts of the western United States: U.S. Geological Survey Bulletin 507, 309 p.

Kleinke, M. D., and Redden, J. A., 1975, Souger gravity, aeromagnetic, and generalized geologic maps of part of the Black Hills of South Dakota and Wyoming: U.S. Geological Survey Geophysical Investigations Map GP-903, scale 1:250,000.

Munson, G. A., 1941, A preliminary report on the type of gold ore and an account of laboratory tests to develop a commercial recovery method at the Minnesota Ridge Mine, Rochford, South Dakota: Rapid City, South Dakota School of Mines and Technology, Professional [thesis].

O'Hara, B. M., 1916, Black Hills gold-bearing iron-quartz-tremolite belt: Engineering and Mining Journal, v. 101, p. 770-773.

O'Hara, C. C., 1902, The mineral wealth of the Black Hills: South Dakota School of Mines and Technology Bulletin 6, 88 p.

Redden, J. A., and Norton, J. J., 1975, Precambrian geology of the Black Hills, in U.S. Congress, Senate Committee on Interior and Insular Affairs, Mineral and water resources of South Dakota: U.S. 94th Congress, 1st session, p. 21-28.

U.S. Bureau of Mines, 1934, Black Hills mineral atlas, South Dakota, Part 1: U.S. Bureau of Mines Information Circular 7688, 123 p.

—, 1986, Mineral Inventory Location System (MILS): U.S. Bureau of Mines active computer file; data available from U.S. Bureau of Mines, International Field Operations Center, Building 20, Denver Federal Center, Denver, CO 80225.

U.S. Geological Survey, 1986, Mineral Resources Data System (MRDS), formerly Computer Resources Information Bank, CRIB: U.S. Geological Survey active computer file; data available from U.S. Geological Survey, Branch of Resource Analysis, Building 25, Denver Federal Center, Denver, CO 80225.

Wayland, R. G., 1936, Osmingtonite from the Black Hills, South Dakota: American Mineralogist, v. 21, p. 607-610.

Wilhelm, A. R., Bowers, J. R., Jones, D. T., and Patel, S., 1978, Map of mineral claims of the northern Black Hills, Lawrence County, South Dakota: South Dakota School of Mines and Technology, Mining Engineering Department Map, available for inspection at Lawrence County Courthouse, Deadwood, SD 57732, map nos. 1-4, scale 1:19,200.

Wilson, J. M., 1951, The geology of a Precambrian area near Rochford, South Dakota: Rapid City, South Dakota School of Mines and Technology, M.S. thesis.

**Alphabetic list of mines**

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

Deposit Type	Name of Mine	Location
C	Benchmark Gravel Pit	Sec. 22 T3N R4E
C	Gold King (Gordelia)	Sec. 13 T3N R3E
C	Gordelia (Gold King)	Sec. 13 T3N R3E
C	Jungle (Custer Peak Copper)	Sec. 24 T3N R3E
C	Minnesota Ridge	Sec. 6 T2N R3E
C	Montezuma	Sec. 3 T2N R3E
C	Montezuma	Sec. 11 T2N 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 Claim	Location
062	Alpha	Sec. 3 T2N R3E
076	Austin	Sec. 6 T2N R4E
011	Badger	Sec. 3 T2N R4E
083*	Bangor	Sec. 14 T2N R3E
061*	Beta	Sec. 3 T2N R3E
072	Black Bird	Sec. 6 T2N R4E
051	Copper King	Sec. 26 T3N R3E
053	Copper King No.2	Sec. 26 T3N R3E
052	Copper King No.3	Sec. 26 T3N R3E
059	Cornwall	Sec. 6 T2N R4E
042	Curran	Sec. 27 T3N R3E
043	Curran No.1	Sec. 27 T3N R3E
044	Curran No.2	Sec. 27 T3N R3E
045	Curran No.3	Sec. 27 T3N R3E
046	Curran No.4	Sec. 27 T3N R3E
047	Curran No.5	Sec. 27 T3N R3E
048	Curran No.6	Sec. 27 T3N R3E
049	Curran No.7	Sec. 27 T3N R3E
048*	Dakota	Sec. 14 T2N R3E
035	Dewey	Sec. 12 T2N R3E
036	Dewey No.1	Sec. 26 T3N R3E
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