



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

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 two 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, and 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 they lack 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, 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 (M, W, 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).

M—Carboniferous or Permian high-calcium limestone is a bedded sedimentary deposit formed in a shallow water marine environment about 250-350 Ma. Precipitation of calcium carbonate from seawater and accumulation of organisms rich in calcium carbonate created the deposits.

W, X, and Y—Paleocene or Eocene disseminated and carbonate deposits are fracture-filling, vein, and disseminated concentrations of base, precious, and rare-earth-element metals formed in a plutonic to subvolcanic environment about 50-60 Ma. Fracturing and metasomatic alteration of Tertiary alkalic igneous complexes and associated carbonates resulted in precipitation of sulfide and carbonate minerals. W, thorium-rich deposits containing thorium and manganese and minor amounts of uranium. X, rare-earth-element-rich deposits containing lanthanum, cerium, and other rare light-earth elements, lead, barium, strontium, and minor amounts of thorium and uranium. Y, precious metal-rich deposits containing gold, tellurium, and minor amounts of silver.

CO—Coal deposits in the Lower Cretaceous Inyan Kara Group are stratobound accumulations of organic remains that formed in a fresh-water environment about 100-150 Ma. Organic substances, mostly plant remains, were modified into subbituminous coal and carbon-rich sedimentary rocks.

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Alphabetic list of mines

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

Deposit of Type	Name of Mine	Location
CO	Albert Mann	Sec. 24 T31N R64W
W	Allen-Wright	Sec. 32 T52N R63W
W	Bear Lodge (Peterson)	Sec. 22 T52N R63W
W	Bear Lodge (Beveler)	Sec. 22 T52N R63W
CO	Balsher (Bolton No.1)	Sec. 24 T51N R64W
W	Bolton No.1 (Balsher)	Sec. 24 T51N R63W
CO	Bolton No.2	Sec. 24 T51N R64W
X	Bolton No.4	Sec. 17 T52N R63W
X	Climax 10	Sec. 17 T52N R63W
X	Gravel Pits	Sec. 8 T51N R63W
X	Inum 4	Sec. 20 T52N R63W
X	Gravel Pit	Sec. 22 T51N R63W
X	Gravel Pits	Sec. 23 T51N R63W
V	Gravel Pit	Sec. 27 T52N R63W
X	Gravel Pit	Sec. 27 T52N R63W
X	Gravel Pit	Sec. 1 T51N R64W
X	Home Fire 43	Sec. 21 T52N R63W
X	Inum 1	Sec. 20 T52N R63W
X	Inum 3	Sec. 20 T52N R63W
W	Jim Wayne Canyon	Sec. 25 T52N R64W
X	Lytle 3	Sec. 20 T52N R63W
X	Lytle 5	Sec. 20 T52N R63W
W	Lytle Creek	Sec. 18 T52N R63W
W	Peterson (Bear Lodge)	Sec. 27 T52N R63W
X	Potluc 1 & 2	Sec. 22 T52N R63W
M	Quarry	Sec. 11 T51R R63W
W	Rodwater (Bear Lodge)	Sec. 22 T52N R63W
W	Royal Purple 1 & 2	Sec. 29 T52N R63W
W	Summit Material	Sec. 27 T52N R63W
CO	Sundance	Sec. 24 T51N R64W
X	Sundance	Sec. 22 T52N R63W
X	Unnamed	Sec. 27 T52N R63W
X	Unnamed	Sec. 27 T52N R63W
X	Victory	Sec. 17 T52N R63W
Y	Warren Peaks	Sec. 20 T52N R63W

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
012	March No.1	Sec. 29 T52N R63W
013	March No.2	Sec. 29 T52N R63W
014	March No.3	Sec. 29 T52N R63W
015	March No.4	Sec. 29 T52N R63W
016	March No.5	Sec. 28 T52N R63W
017	March No.10	Sec. 29 T52N R63W
018	March No.11	Sec. 29 T52N R63W
019	March No.12	Sec. 29 T52N R63W
020	March No.15	Sec. 29 T52N R63W
021	March No.16	Sec. 29 T52N R63W
001	Smuglar	Sec. 20 T52N R63W
002	Smuglar No.1	Sec. 20 T52N R63W
003	Smuglar No.2	Sec. 20 T52N R63W
004	Smuglar No.3	Sec. 20 T52N R63W
005	Smuglar No.4	Sec. 20 T52N R63W
006	Smuglar No.5	Sec. 20 T52N R63W
007	Smuglar No.6	Sec. 29 T52N R63W
008	Smuglar No.7	Sec. 29 T52N R63W
009	Smuglar No.8	Sec. 29 T52N R63W
010	Smuglar No.9	Sec. 29 T52N R63W
011	Smuglar No.10	Sec. 29 T52N R63W

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	Smuglar	Sec. 20 T52N R63W
002	Smuglar No.1	Sec. 20 T52N R63W
003	Smuglar No.2	Sec. 20 T52N R63W
004	Smuglar No.3	Sec. 20 T52N R63W
005	Smuglar No.4	Sec. 20 T52N R63W
006	Smuglar No.5	Sec. 20 T52N R63W
007	Smuglar No.6	Sec. 29 T52N R63W
008	Smuglar No.7	Sec. 29 T52N R63W
009	Smuglar No.8	Sec. 29 T52N R63W
010	Smuglar No.9	Sec. 29 T52N R63W
011	Smuglar No.10	Sec. 29 T52N R63W
012	March No.1	Sec. 29 T52N R63W
013	March No.2	Sec. 29 T52N R63W
014	March No.3	Sec. 29 T52N R63W
015	March No.4	Sec. 29 T52N R63W
016	March No.5	Sec. 28 T52N R63W
017	March No.10	Sec. 29 T52N R63W
018	March No.11	Sec. 29 T52N R63W
019	March No.12	Sec. 29 T52N R63W
020	March No.15	Sec. 29 T52N R63W
021	March No.16	Sec. 29 T52N R63W

MAP SHOWING LOCATIONS OF MINES, PROSPECTS, AND PATENTED MINING CLAIMS, AND CLASSIFICATION OF MINERAL DEPOSITS IN THE SUNDANCE WEST 7 1/2-MINUTE QUADRANGLE, BLACK HILLS, SOUTH DAKOTA

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