



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

EXPLANATION

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

Large pit

Mine—Approximate location shown. Open pit, shaft, adit, or other type of opening

Prospect

Adit

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 have been published by 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 edition 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 data 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).

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

SOURCES OF INFORMATION

There are no patented mining claims in the Edgemont Northeast 7 1/2 minute quadrangle.

Locations of mines and prospects were compiled from all available published and unpublished data.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 Bales and Erickson (1952), Bell and Bales (1954, 1955), Braddock (1955), Gott and Schnabel (1963), Gott, Wolcott, and Bowles (1974), Page and Redden (1952a), Roberts and Rapp (1965), Trusdell, Daddazio, and Martin (1982), U.S. Bureau of Mines (1955, 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 was not possible with 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 Gott and Schnabel (1963). 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, is not warranted. 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 show prospect pits.

Geologic data for the map are from Bell and Bales (1955), Bell and others (1956), Bidgood (1973), Bowles (1968), Bowles and others (1980), Braddock (1957), DeWitt and others (1986), Gott and Schnabel (1963), Gott, Wolcott, and Bowles (1974), Gries (1974), Hall (1955), Lang (1963), Lisenbee (1965), Myers, Hamilton, and Wilmarth (1960), Page and Redden (1952b), Renfro (1969), Schnabel (1956), Shaw and Granger (1965), Shaw (1957), and Wilmarth and Gott (1958).

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 less than a 1/4 mile radius were not plotted on the map.

ALPHABETIC LIST OF MINES

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

Deposit Type	Name of Mine	Location
0	Alice	Sec. 24 T7S R2E
CO	Anthony Prospect	Sec. 22 T7S R2E
0	Apple Pie	Sec. 27 T7S R2E
0	B and H No.3	Sec. 28 T7S R3E
0	B and H No.5	Sec. 28 T7S R3E
0	Bear Lodge (?)	Sec. 25 T7S R2E
0	Berit No.1	Sec. 24 T7S R2E
0	Betty	Sec. 24 T7S R2E
0	Blue Chip	Sec. 24 T7S R2E
0	Blue Note	Sec. 30 T7S R3E
0	Bremnon	Sec. 6 T8S R3E
0	Buda-Dexter (Range, Range East)	Sec. 19 T7S R3E
0	Carnotite Cave	Sec. 24 T7S R2E
0	Clara	Sec. 19 T7S R3E
0	Clarabelle No.1 and No.2	Sec. 30 T7S R3E
0	Clarabelle No.4	Sec. 30 T7S R3E
0	Clarabelle No.5	Sec. 30 T7S R3E
0	Clarabelle No.6	Sec. 30 T7S R3E
CO	Coal Canyon	Sec. 22 T7S R2E
CO	Coal Canyon No.1	Sec. 22 T7S R2E
CO	Coal Canyon No.17	Sec. 22 T7S R2E
CO	Coal Canyon No.2	Sec. 22 T7S R2E
CO	Coal Canyon No.3	Sec. 22 T7S R2E
CO	Coal Canyon No.4	Sec. 22 T7S R2E
CO	Coal Canyon No.5	Sec. 22 T7S R2E
CO	Coal Canyon No.6	Sec. 22 T7S R2E
CO	Coal Canyon No.7	Sec. 22 T7S R2E
CO	Coal Canyon No.8	Sec. 22 T7S R2E
CO	Coal Canyon No.9	Sec. 22 T7S R2E
CO	Coal Canyon No.10	Sec. 22 T7S R2E
CO	Coal Canyon No.11	Sec. 22 T7S R2E
CO	Coal Canyon No.12	Sec. 22 T7S R2E
CO	Coal Canyon No.13	Sec. 22 T7S R2E
CO	Coal Canyon No.14	Sec. 22 T7S R2E
CO	Coal Canyon No.15	Sec. 22 T7S R2E
CO	Coal Canyon No.16	Sec. 22 T7S R2E
CO	Coal Canyon No.17	Sec. 22 T7S R2E
CO	Coal Canyon No.18	Sec. 22 T7S R2E
CO	Coal Canyon No.19	Sec. 22 T7S R2E
CO	Coal Canyon No.20	Sec. 22 T7S R2E
CO	Coal Canyon No.21	Sec. 22 T7S R2E
CO	Coal Canyon No.22	Sec. 22 T7S R2E
CO	Coal Canyon No.23	Sec. 22 T7S R2E
CO	Coal Canyon No.24	Sec. 22 T7S R2E
CO	Coal Canyon No.25	Sec. 22 T7S R2E
CO	Coal Canyon No.26	Sec. 22 T7S R2E
CO	Coal Canyon No.27	Sec. 22 T7S R2E
CO	Coal Canyon No.28	Sec. 22 T7S R2E
CO	Coal Canyon No.29	Sec. 22 T7S R2E
CO	Coal Canyon No.30	Sec. 22 T7S R2E
CO	Coal Canyon No.31	Sec. 22 T7S R2E
CO	Coal Canyon No.32	Sec. 22 T7S R2E
CO	Coal Canyon No.33	Sec. 22 T7S R2E
CO	Coal Canyon No.34	Sec. 22 T7S R2E
CO	Coal Canyon No.35	Sec. 22 T7S R2E
CO	Coal Canyon No.36	Sec. 22 T7S R2E
CO	Coal Canyon No.37	Sec. 22 T7S R2E
CO	Coal Canyon No.38	Sec. 22 T7S R2E
CO	Coal Canyon No.39	Sec. 22 T7S R2E
CO	Coal Canyon No.40	Sec. 22 T7S R2E
CO	Coal Canyon No.41	Sec. 22 T7S R2E
CO	Coal Canyon No.42	Sec. 22 T7S R2E
CO	Coal Canyon No.43	Sec. 22 T7S R2E
CO	Coal Canyon No.44	Sec. 22 T7S R2E
CO	Coal Canyon No.45	Sec. 22 T7S R2E
CO	Coal Canyon No.46	Sec. 22 T7S R2E
CO	Coal Canyon No.47	Sec. 22 T7S R2E
CO	Coal Canyon No.48	Sec. 22 T7S R2E
CO	Coal Canyon No.49	Sec. 22 T7S R2E
CO	Coal Canyon No.50	Sec. 22 T7S R2E
CO	Coal Canyon No.51	Sec. 22 T7S R2E
CO	Coal Canyon No.52	Sec. 22 T7S R2E
CO	Coal Canyon No.53	Sec. 22 T7S R2E
CO	Coal Canyon No.54	Sec. 22 T7S R2E
CO	Coal Canyon No.55	Sec. 22 T7S R2E
CO	Coal Canyon No.56	Sec. 22 T7S R2E
CO	Coal Canyon No.57	Sec. 22 T7S R2E
CO	Coal Canyon No.58	Sec. 22 T7S R2E
CO	Coal Canyon No.59	Sec. 22 T7S R2E
CO	Coal Canyon No.60	Sec. 22 T7S R2E
CO	Coal Canyon No.61	Sec. 22 T7S R2E
CO	Coal Canyon No.62	Sec. 22 T7S R2E
CO	Coal Canyon No.63	Sec. 22 T7S R2E
CO	Coal Canyon No.64	Sec. 22 T7S R2E
CO	Coal Canyon No.65	Sec. 22 T7S R2E
CO	Coal Canyon No.66	Sec. 22 T7S R2E
CO	Coal Canyon No.67	Sec. 22 T7S R2E
CO	Coal Canyon No.68	Sec. 22 T7S R2E
CO	Coal Canyon No.69	Sec. 22 T7S R2E
CO	Coal Canyon No.70	Sec. 22 T7S R2E
CO	Coal Canyon No.71	Sec. 22 T7S R2E
CO	Coal Canyon No.72	Sec. 22 T7S R2E
CO	Coal Canyon No.73	Sec. 22 T7S R2E
CO	Coal Canyon No.74	Sec. 22 T7S R2E
CO	Coal Canyon No.75	Sec. 22 T7S R2E
CO	Coal Canyon No.76	Sec. 22 T7S R2E
CO	Coal Canyon No.77	Sec. 22 T7S R2E
CO	Coal Canyon No.78	Sec. 22 T7S R2E
CO	Coal Canyon No.79	Sec. 22 T7S R2E
CO	Coal Canyon No.80	Sec. 22 T7S R2E
CO	Coal Canyon No.81	Sec. 22 T7S R2E
CO	Coal Canyon No.82	Sec. 22 T7S R2E
CO	Coal Canyon No.83	Sec. 22 T7S R2E
CO	Coal Canyon No.84	Sec. 22 T7S R2E
CO	Coal Canyon No.85	Sec. 22 T7S R2E
CO	Coal Canyon No.86	Sec. 22 T7S R2E
CO	Coal Canyon No.87	Sec. 22 T7S R2E
CO	Coal Canyon No.88	Sec. 22 T7S R2E
CO	Coal Canyon No.89	Sec. 22 T7S R2E
CO	Coal Canyon No.90	Sec. 22 T7S R2E
CO	Coal Canyon No.91	Sec. 22 T7S R2E
CO	Coal Canyon No.92	Sec. 22 T7S R2E
CO	Coal Canyon No.93	Sec. 22 T7S R2E
CO	Coal Canyon No.94	Sec. 22 T7S R2E
CO	Coal Canyon No.95	Sec. 22 T7S R2E
CO	Coal Canyon No.96	Sec. 22 T7S R2E
CO	Coal Canyon No.97	Sec. 22 T7S R2E
CO	Coal Canyon No.98	Sec. 22 T7S R2E
CO	Coal Canyon No.99	Sec. 22 T7S R2E
CO	Coal Canyon No.100	Sec. 22 T7S R2E

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 (O, CO, and so on) corresponding to those in DeWitt and others (1986) for deposit types 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

O—Roll-front deposits in Cretaceous rocks are stratabound accumulations of uranium and vanadium that were formed in a near surface, locally reducing environment. Low temperature, bicarbonate-rich fluids containing minor amounts of selenium and molybdenum moved down-dip through the host rocks and precipitated minerals in carbon-rich horizons.

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

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MAP OF MINES, PROSPECTS, AND CLASSIFICATION OF MINERAL DEPOSITS IN THE EDMONT NORTHEAST 7 1/2 MINUTE QUADRANGLE, BLACK HILLS, SOUTH DAKOTA

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