

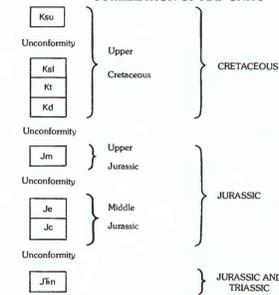
EXPLANATION OF MINERAL RESOURCE POTENTIAL

- H/C** Geologic terrane having high mineral resource potential for coal beds less than 5 feet thick, and for titanium, with certainty level C—Includes coal in the John Henry Member of the Straight Cliffs Formation, the Dakota Sandstone, and the Tropic Shale, and titanium in the John Henry Member of the Straight Cliffs Formation. Applies to all but southwesternmost (pink) part of study area, where Cretaceous rocks are absent.
- M/B** Geologic terrane having high mineral resource potential for uranium, with certainty level B—Applies to portions of the Fifty Mile Point and Cat Pasture areas of Peterson and others (1982, p. 41-42). Uranium potential is in the Salt Wash Member of the Morrison Formation in the subsurface.
- L/B** Geologic terrane having low mineral resource potential for metals other than titanium and uranium, with certainty level B—Applies to entire study area.
- N/D** Geologic terrane having no mineral resource potential for coal or titanium, with certainty level D—Applies only to southwesternmost (pink) part of study area.

DESCRIPTION OF MAP UNITS

- Straight Cliffs Formation (Upper Cretaceous):**
- Ksu** Upper part—Includes the Drip Tank Member and the John Henry Member, a coal and titanium-bearing sandstone.
 - Kkl** Lower part—Includes the Smoky Hollow Member and the Tibbet Canyon Member; sandstone, siltstone, and mudstone.
 - Kt** Tropic Shale (Upper Cretaceous)—Medium to dark olive gray.
 - Kd** Dakota Sandstone (Upper Cretaceous)—Sandstone, siltstone, shale, and minor coal.
 - Jm** Morrison Formation (Upper Jurassic)—Conglomeratic sandstone, siltstone, and mudstone. Consists of the upper member, the Salt Wash member (a uranium-bearing sandstone), and the lower member.
 - Jc** Roman and Entrada Sandstones, undifferentiated (Middle Jurassic)—Cliff-forming sandstone, conglomerate lenses, and mudstone.
 - Jc** Carmel Formation (Middle Jurassic)—Mottled sandstone, siltstone, mudstone, limestone, and gypsum.
 - Jkn** Navajo Sandstone (Jurassic and Triassic)—Strikingly cross-bedded to massive, white to buff colored, cliff-forming sandstone.
- Contact**—Includes some approximately located and concealed contacts.
- Fault**—Dashed where inferred; bar and ball on down-thrown side.
- Strike and dip of beds**
- Anticline**—Showing trace of axial plane and plunge to entire study area.
- Syncline**—Showing trace of axial plane and plunge to entire study area.
- Dry hole or abandoned oil well**

CORRELATION OF MAP UNITS



LEVEL OF RESOURCE POTENTIAL	U/A	M/B	H/C	H/D
	UNKNOWN POTENTIAL	HIGH POTENTIAL	MODERATE POTENTIAL	MODERATE POTENTIAL
	L/B	M/C	L/C	L/D
	LOW POTENTIAL	LOW POTENTIAL	LOW POTENTIAL	N/D
	A	B	C	D
	LEVEL OF CERTAINTY →			

LEVELS OF RESOURCE POTENTIAL

- H** High mineral resource potential
- M** Moderate mineral resource potential
- L** Low mineral resource potential
- U** Unknown mineral resource potential
- N** No known mineral resource potential

LEVELS OF CERTAINTY

- A** Available data not adequate
- B** Data indicate geologic environment and suggest level of resource potential
- C** Data indicate geologic environment, give good indication of level of resource potential, but do not establish activity of resource-forming processes
- D** Data clearly define geologic environment and level of resource potential and indicate activity of resource-forming processes in all or part of the area

Diagram showing relationships between levels of mineral resource potential and levels of certainty. Shading shows levels that apply to this study area.

MAP SHOWING MINERAL RESOURCE POTENTIAL AND GENERALIZED BEDROCK GEOLOGY OF THE FIFTY MILE MOUNTAIN WILDERNESS STUDY AREA

Based on U.S. Geological Survey 1:24,000 Topographic Map, Big Hollow Wash, Blackhawk Canyon, Cedar Top, East of the House, Middle Fire Point, and Snow Bench, all 1982; Six Down Bench, 1985; and from U.S. Geological Survey 1:82,500 Cummings, 1993.

Geology modified from Sargent and Hansen (1982).