

EXPLANATION OF MINERAL RESOURCE POTENTIAL

M/B Geologic terrane having moderate energy resource potential for oil and gas, with certainty level B—Applies to entire study area

L/B Geologic terrane having low resource potential for coal, all metals including uranium, high-purity limestone and dolomite, and geothermal energy, with certainty level B—Applies to entire study area

L/C Geologic terrane having low mineral resource potential for phosphate and vanadium in the Phosphoria Formation, with certainty level C—Applies to entire study area

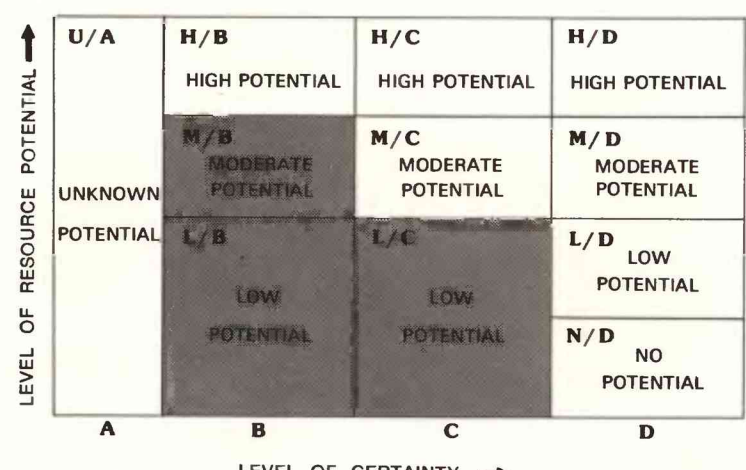
CORRELATION OF MAP UNITS

Qu			QUATERNARY
Unconformity			
Tf	Stratigraphic relationship to Wasatch Formation is unknown	Pliocene(?) and Eocene	TERTIARY
Tw		Eocene	
Ta		Eocene or Paleocene	
Unconformity			
Ksj		Lower Cretaceous	CRETACEOUS
Kq			
Kck			
Ktf			
Ks			
Kg	Upper and Middle Jurassic	JURASSIC	
Js			
Jp			
Jt	Middle Jurassic	JURASSIC(?) AND TRIASSIC(?)	
Jtn			
Jta	Upper Triassic	TRIASSIC	
Tt			
Tw	Lower Triassic		
Td			
Unconformity			
Pp	Lower Permian	PERMIAN	
Ppw			Upper and Middle Pennsylvanian

DESCRIPTION OF MAP UNITS

- Qu Alluvium and colluvium (Quaternary)—Unconsolidated bouldery to sandy debris
- Tf Fowkes Formation (Pliocene? and Eocene)—Light-colored, tuffaceous conglomerate, sandstone, and siltstone. Shown only outside the southern boundary of the wilderness study area
- Tw Wasatch Formation (Eocene)—Variegated red to gray mudstone; brown to gray sandstone; and conglomeratic lenses. Occurs in down-dropped block on west side of Cokeville normal fault, west side of Sublette Range
- Tsr Conglomerate of Sublette Range (Eocene or Paleocene)—Basal coarse-grained sandstone and upper boulder-to-cobble conglomerate in gravel-sand matrix. Exposed in south and central parts of Sublette Range. Stratigraphic relationship to Wasatch Formation not established
- Ksj Sage Junction Formation (Lower Cretaceous)—Gray and tan siltstone and sandstone; minor quartzite, limestone, conglomerate, porcellanite, and coal beds
- Kq Quealy Formation (Lower Cretaceous)—Red and variegated mudstone and tan sandstone
- Kck Cokeville Formation (Lower Cretaceous)—Gray to tan sandstone; some siltstone, claystone, limestone, bentonite, porcellanite, and coal
- Ktf Thomas Fork Formation (Lower Cretaceous)—Red, purple, brown, and green mudstone; some sandstone
- Ks Smiths Formation (Lower Cretaceous)—Ferruginous black and tan to brown sandstone
- Kg Gannett Group (Lower Cretaceous)—Red sandy mudstone, sandstone, and chert-pebble conglomerate. Thin limestone and shale beds in upper part; more conglomerate in lower part
- Js Stump Formation (Upper and Middle Jurassic)—Glaucous siltstone, sandstone, and limestone
- Jp Preuss Redbeds (Middle Jurassic)—Purple, maroon, and reddish-gray argillaceous limestone and calcareous siltstone
- Jt Twin Creek Limestone (Middle Jurassic)—Greenish-gray argillaceous limestone and calcareous siltstone
- Jtn Nugget Sandstone (Jurassic? and Triassic?)—Buff to pink, crossbedded, well-sorted sandstone and quartzite
- Jta Ankaresh Formation (Upper Triassic)—Red and maroon shale and pale-purple limestone; minor white to red fine-grained quartzite
- Tt Thaynes Limestone (Lower Triassic)—Gray limestone and brown-weathering gray, calcareous siltstone; dark-gray shale and limestone abundant in lower part
- Tw Woodside Shale (Lower Triassic)—Red siltstone and shale; minor sandstone and gray limestone
- Td Dinwoody Formation (Lower Triassic)—Gray limestone and olive to greenish-brown siltstone
- Pp Phosphoria Formation (Lower Permian)—Upper part dark to light-gray chert and shale; lower part brown-weathering phosphatic shale and limestone
- Ppw Wells Formation (Lower Permian and Upper and Middle Pennsylvanian)—Interbedded gray limestone and pale-yellow calcareous sandstone; minor gray dolomite

- Contact—Dashed where approximately located, dotted where concealed
- High-angle fault—Dashed where approximately located, dotted where concealed; bar and ball on downthrown side; arrows show direction of movement
- Thrust fault—Dashed where approximately located, dotted where concealed; sawteeth on upper plate
- Strike and dip of bedding
- Strike and dip of cleavage
- Strike and dip of overturned bedding
- Upright anticline
- Overturned anticline
- Upright syncline
- Overturned syncline
- Exploratory oil well



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

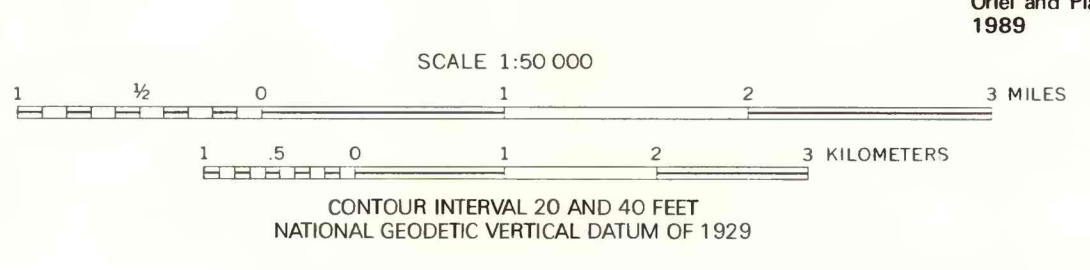
C Data indicate geologic environment, give good indication of level of resource potential, but do not establish activity of resource-forming processes

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

MINERAL RESOURCE POTENTIAL AND GEOLOGIC MAP OF THE RAYMOUNT MOUNTAIN WILDERNESS STUDY AREA, LINCOLN COUNTY, WYOMING

Base from U.S. Geological Survey, 1:24,000. Border, 1970; Cokeville, 1967; Geneva, 1970; Graffle Creek, 1970; Huff Lake, 1967; Marse, 1967; Salt Flat, 1967; 1:24,000



Geology from Evans (1983); J.P. Evans, unpublished mapping 1984-1988; Oriol and Platt (1980); Rubey and others (1980). Compiled by Karen Lund, 1989