

MAP A.-- MINERAL RESOURCE POTENTIAL AND SAMPLE LOCALITIES

EXPLANATION OF MINERAL RESOURCE POTENTIAL (MAP A)

[Unless noted otherwise, the study areas have low potential for all metals, oil and gas, geothermal sources, and high-purity limestone, with certainty level C. The southern part of the Pryor Mountain study area has low potential for uranium and vanadium in the Morrison and Cloverly Formations, with certainty level C. The study areas have no potential for sand and gravel.]

- H/B** Geologic terrane having high mineral resource potential for uranium and vanadium in the Madison Limestone, with certainty level B
 - M/B** Geologic terrane having moderate mineral resource potential for uranium and vanadium in the Madison Limestone, with certainty level B
 - M/B** Geologic terrane having moderate mineral resource potential for bentonite, with certainty level B
- Claim group or claim—**1, George claim group; 2, Owl-Wash claim group; 3, Flint claim group; 4, Four Leaf claim group; 5, Unknown claim group; 6, Sunday claim; 7, Leatherneck-Bonnie claim group; 8, SOS Nos. 50-54 claims; 9, Unknown prospect (secs. 18 and 19, T. 8 S., R. 28 E.); 10, Yellowstone Nos. 1-10 claims; 11, Hi-Lite Canyon claims; 12, East Pryor mine claims; 13, USM claims; 14, SOS claims; 15, Sunset claims; 16, Bud Nos. 3-15; 17, Frieda No. 1 claim; 18, Red Hill claims; 19, Bettise No. 1 claim; 20, Albrecht claims; 21, Lucky Strike claims; 22, Unknown claim (secs. 28, 33, and 34, T. 9 S., R. 28 E.); 23, Vee Gee Nos. 1-21 claims; 24, Flat Rock Nos. 1 and 2 claims; 25, Dixie Lee claim group; 26, Char claim group; 27, Marchant claims; 28, Bluebird Nos. 1 and 2 claim group; 29, Big cave in Nos. 1-18 claim group; 30, Midland Empire Nos. 1-14 claim group; 31, Unnamed claim
- Adit** —
 - Stream-sediment sample locality**—Symbols may be combined
 - 7.2** Uranium-bearing—Value in parts per million
 - △** Fluorite-bearing—Abundant visually
 - Barite-bearing—Abundant visually

EXPLANATION FOR MAP B
CORRELATION OF MAP UNITS

Qal	Qt	Qlc	Holocene	QUATERNARY
Unconformity	Kt		Pleistocene	
	Kcv		Lower Cretaceous	CRETACEOUS
	Jm		Upper Jurassic	
	Je		Middle Jurassic	JURASSIC
Unconformity	Tc		Triassic	
	Ppc		Permian	PERMIAN
	Pts		Pennsylvanian	
	Pa		Pennsylvanian	PENNSYLVANIAN
Unconformity	Mm		Mississippian	
	Dj		Devonian	DEVONIAN
Unconformity	Obh		Ordovician	
	Cgf		Cambrian	CAMBRIAN
Unconformity	Wc		Late(?) Archean	

LIST OF MAP UNITS

- Qal Alluvium (Holocene and Pleistocene?)
- Qt Older alluvium (Pleistocene?)
- Qlc Landslide and colluvium (Holocene and Pleistocene?)
- Kt Thermopolis Shale (Lower Cretaceous)
- Kcv Cloverly Formation (Lower Cretaceous)
- Jm Morrison Formation (Upper Jurassic)
- Je Ellis Group (Upper and Middle Jurassic)
- Tc Chugwater Formation (Triassic)
- Ppc Park City Formation (Permian)
- Pts Tensleep Formation (Pennsylvanian)
- Pa Amsden Formation (Pennsylvanian)
- Mm Madison Limestone (Upper and Lower Mississippian)
- Dj Jefferson Dolomite (Upper Devonian)
- Obh Bighorn Dolomite (Lower Ordovician)
- Cgf Gallatin Limestone (Upper Cambrian), Gros Ventre Formation (Upper and Middle Cambrian), and Flathead Sandstone (Middle Cambrian), undivided (Middle and Late Cambrian)
- Wc Crystalline rocks, undifferentiated (Late? Archean)

LEVEL OF RESOURCE POTENTIAL	U/A	H/B	H/C	H/D
	UNKNOWN	HIGH POTENTIAL	HIGH POTENTIAL	HIGH POTENTIAL
	POTENTIAL	M/B	M/C	M/D
		MODERATE POTENTIAL	MODERATE POTENTIAL	MODERATE POTENTIAL
	L/B	L/C	L/D	
	LOW POTENTIAL	LOW POTENTIAL	LOW POTENTIAL	
		N/D	N/D	
		NO POTENTIAL	NO POTENTIAL	

LEVEL OF CERTAINTY →

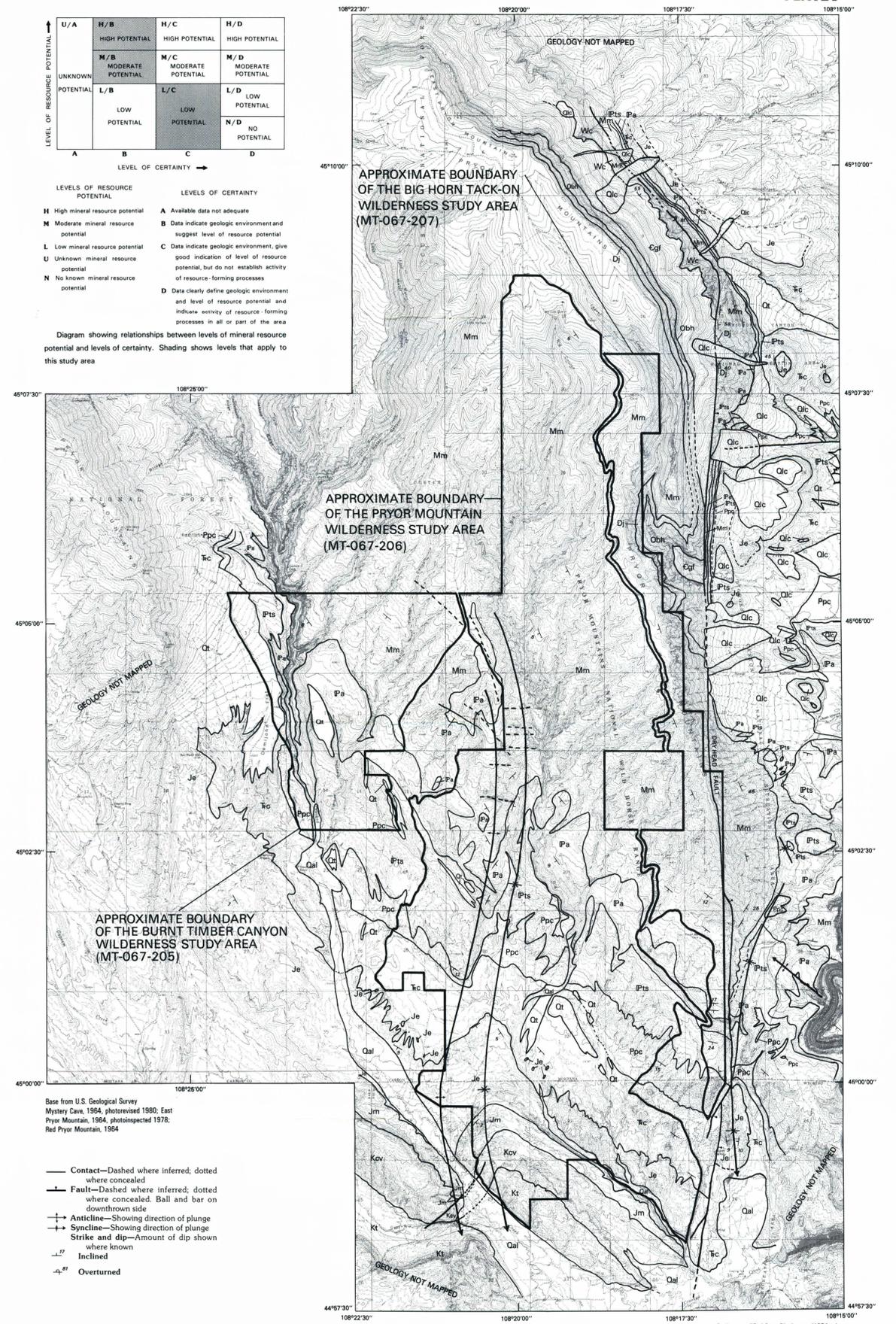
LEVELS OF RESOURCE POTENTIAL

- 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 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 B.-- GEOLOGY

MAPS SHOWING A, MINERAL RESOURCE POTENTIAL AND SAMPLE LOCALITIES AND B, GEOLOGY OF THE PRYOR MOUNTAIN, BURNT TIMBER CANYON AND BIG HORN TACK-ON WILDERNESS STUDY AREAS AND VICINITY, MONTANA AND WYOMING