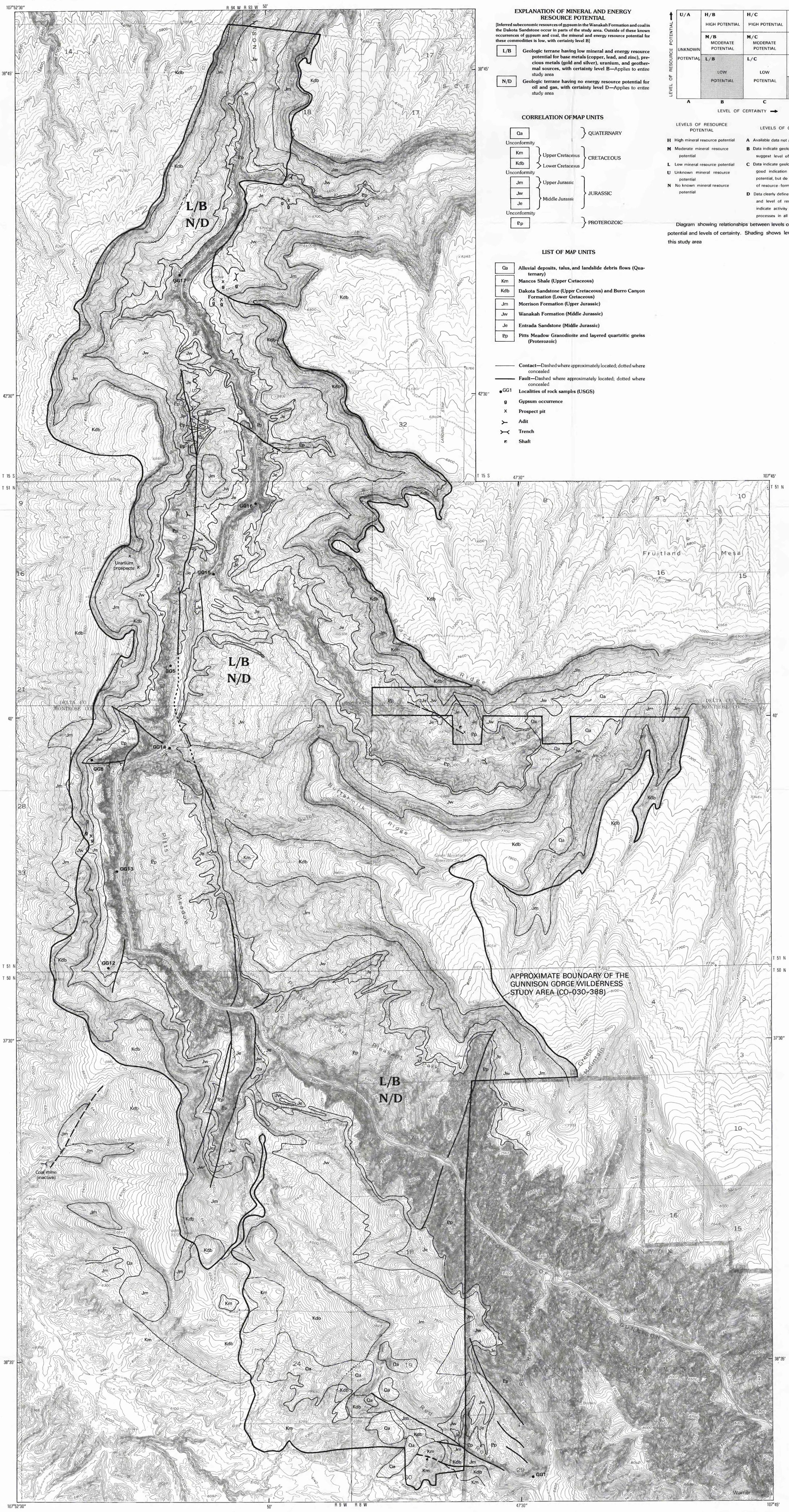

EXPLANATION OF MINERAL AND ENERGY RESOURCE POTENTIAL

[Inferred subeconomic resources of gypsum in the Wanakah Formation and coal in the Dakota Sandstone occur in parts of the study area. Outside of these known occurrences of gypsum and coal, the mineral and energy resource potential for these commodities is low, with certainty level B]

L/B Geologic terrane having low mineral and energy resource potential for base metals (copper, lead, and zinc), precious metals (gold and silver), uranium, and geothermal sources, with certainty level B—Applies to entire study area

N/D Geologic terrane having no energy resource potential for oil and gas, with certainty level D—Applies to entire study area

CORRELATION OF MAP UNITS

Qa		QUATERNARY
Unconformity		
Km	Upper Cretaceous	CRETACEOUS
Kdb	Lower Cretaceous	CRETACEOUS
Unconformity		
Jm	Upper Jurassic	JURASSIC
Jw	Middle Jurassic	JURASSIC
Je	Middle Jurassic	JURASSIC
Unconformity		
Ep		PROTEROZOIC

LIST OF MAP UNITS

- **Qa** Alluvial deposits, talus, and landslide debris flows (Quaternary)
- **Km** Mancos Shale (Upper Cretaceous)
- **Kdb** Dakota Sandstone (Upper Cretaceous) and Burro Canyon Formation (Lower Cretaceous)
- **Jm** Morrison Formation (Upper Jurassic)
- **Jw** Wanakah Formation (Middle Jurassic)
- **Je** Entrada Sandstone (Middle Jurassic)
- **Ep** Pitts Meadow Granodiorite and layered quartzitic gneiss (Proterozoic)

Contact—Dashed where approximately located; dotted where concealed

Fault—Dashed where approximately located; dotted where concealed

GG1 Localities of rock samples (USGS)

g Gypsum occurrence

x Prospect pit

Adit

Trench

Shaft

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

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

Base from U.S. Geological Survey
Black Ridge, Lazear, Red Rock Canyon, 1955

13½°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1978

SCALE 1:24 000
1 ½ 0 1 MILE
1 .5 0 1 KILOMETER
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

COLORADO
MAP LOCATION

Geology modified from Hail (1972) and Hansen (1968, 1971)

MINERAL AND ENERGY RESOURCE POTENTIAL, GEOLOGY, AND SAMPLE LOCALITIES FOR THE GUNNISON GORGE WILDERNESS STUDY AREA, MONTROSE AND DELTA COUNTIES, COLORADO