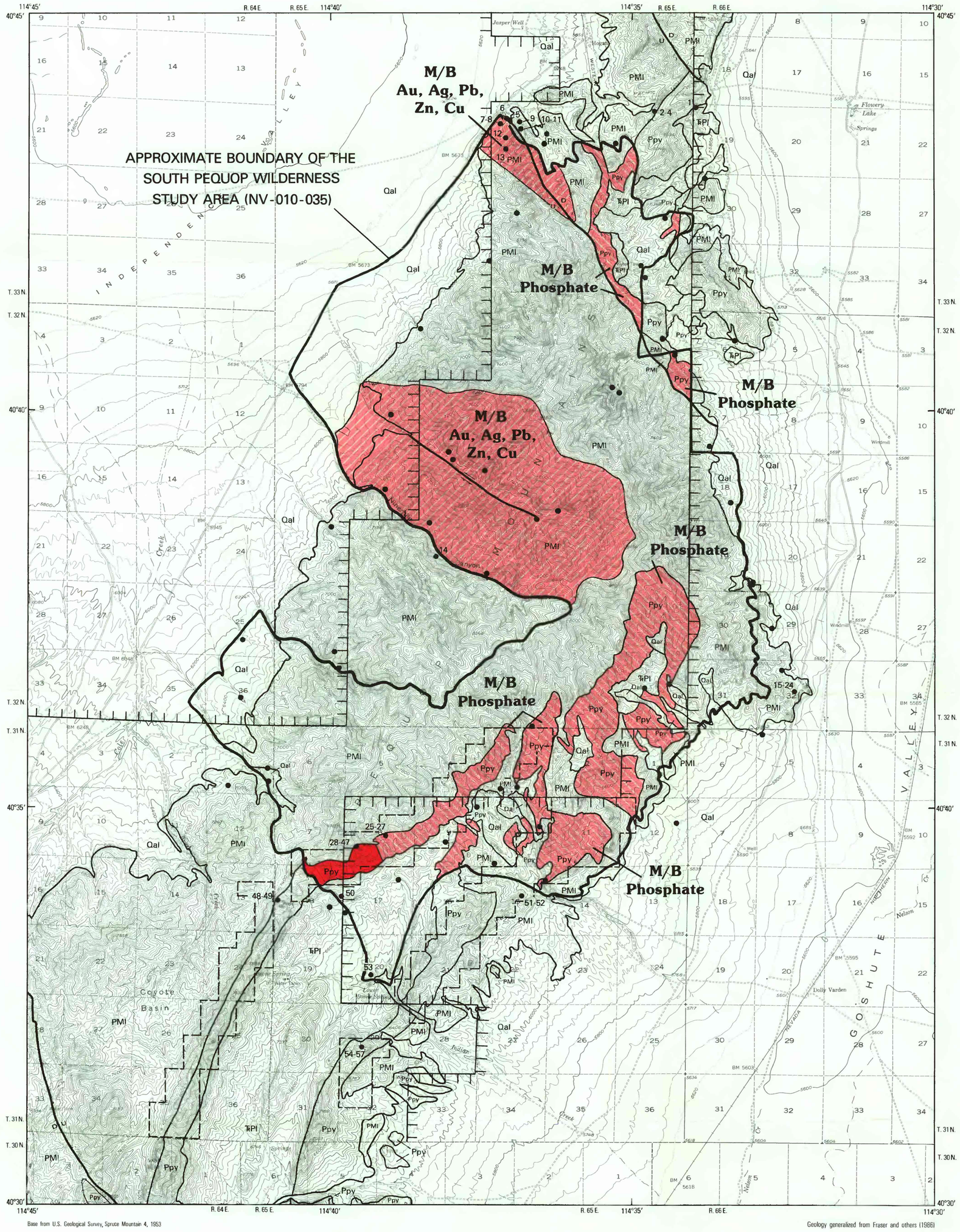
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

BULLETIN 1725-B
PLATE 1



Base from U.S. Geological Survey, Spruce Mountain 4, 1953

Geology generalized from Fraser and others (1986)

SCALE 1:62 500

1 ½ 0 1 2 3 4 MILES

1 .5 0 1 2 3 4 KILOMETERS

CONTOUR INTERVAL 40 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

17½°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1953

NEVADA

EXPLANATION OF IDENTIFIED RESOURCES AND MINERAL RESOURCE POTENTIAL

[Entire study area has low resource potential for oil and gas, with certainty level C]

- **M/B** — Area of identified phosphate resources
- **M/B** — Geologic terrane having moderate mineral resource potential for gold, silver, lead, zinc, and copper, with certainty level B
- **M/B** — Geologic terrane having moderate mineral resource potential for phosphate, with certainty level B
- **L/C** — Areas labeled TPPI and PMI have identified resources of common limestone and dolomite and low mineral resource potential for undiscovered high-purity limestone and dolomite, with certainty level C
- **L/D** — Areas labeled Qal have identified resources of common sand and gravel and low mineral resource potential for specialty sand and gravel, with certainty level D

CORRELATION OF MAP UNITS

Qal	QUATERNARY
Unconformity	
TPPI	TRIASSIC TO PERMIAN
Ppy	PERMIAN
PMI	PERMIAN TO MISSISSIPPIAN

DESCRIPTION OF MAP UNITS

Qal — **Alluvium, colluvium, and landslide deposits (Quaternary)**

TPPI — **Limestone (Triassic and Permian)**—Limestone with few shale interbeds underlain by cherty limestone

Ppy — **Plympton Formation (Permian)**—Poorly exposed phosphatic rocks interbedded with mainly cherty dolomite; and subordinate limestone, silty rocks, and bedded spiculitic chert

PMI — **Silty limestone and conglomerate (Permian-Mississippian)**—Siltstone and cherty limestone at top underlain by a thick sequence of silty and sandy limestone; conglomerate and shale at base

- **Contact**
- **High-angle fault**—Relative vertical movement shown by D (down) and U (up); relative horizontal movement shown by arrows
- **Geochemical sample site**—Bedrock samples by U.S. Bureau of Mines are numbered 1-57; stream-sediment samples by U.S. Geological Survey are unnumbered
- **Area of phosphate prospecting permits, 1965-1972**
- **Boundary of oil and gas leases**—Hachures are inside

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

MINERAL AND ENERGY RESOURCE POTENTIAL MAP OF THE SOUTH PEQUOP WILDERNESS STUDY AREA, ELKO COUNTY, NEVADA