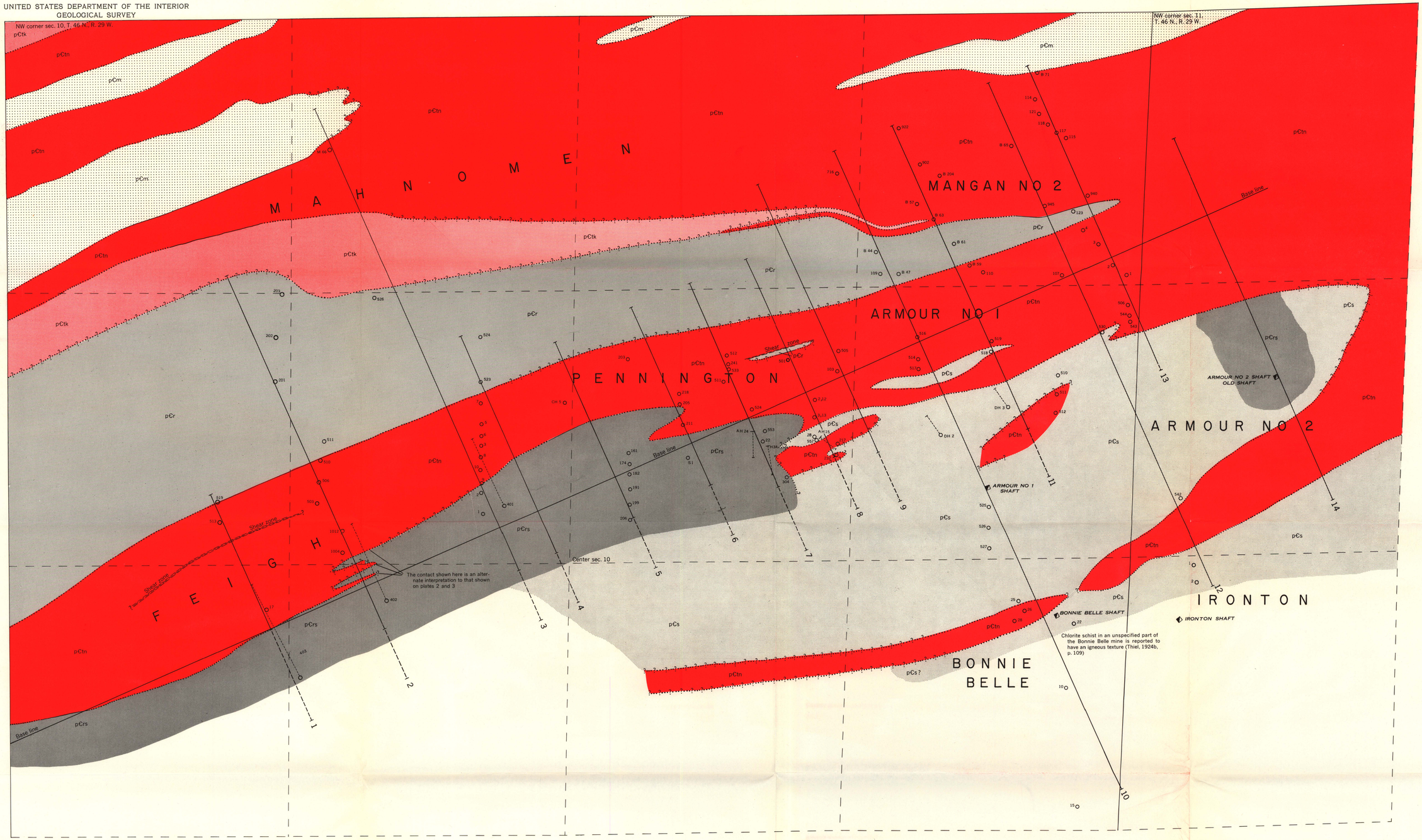

EXPLANATION

Middle(?) Precambrian

pCs

Chlorite schist of uncertain origin

Locally oxidized to red or brown

Middle Precambrian

pCr **pCrs**

Rabbit Lake formation

Argillite and slate, gray and black, generally ferruginous, and interbedded tuffs and perhaps flows near the base; partly oxidized to red, brown, or buff; metamorphosed to greenish-gray chlorite or biotite schist, pCrs

pCtk **pCtn**

Trommald formation

Iron-formation consisting chiefly of quartz and iron- and manganese-bearing minerals; each facies occurs by itself in part of the district, and in about one-third of the North range the thick-bedded overlies the thin-bedded facies and grades downward into it

pCtk, *thick-bedded facies*

pCtn, *thin-bedded facies*

pCm

Mahnomen formation

Sericitic argillite, slate, and siltstone, and local phyllite or schist, gray, light green, or light brown; local lenses of quartzite near the upper contact

PRECAMBRIAN

Contact

Solid where exposed continuously or at short intervals at the bedrock surface in mines; dotted where established by drill holes or projected to original bedrock surface from mine data; queried where position not well defined

Vertical shaft

114 Vertical drill hole

DH 2 Inclined drill hole, projected to horizontal

AH24 Horizontal drill hole

Collar of hole indicated on symbol by longer end crossbar

Base compiled from mining company coordinate systems

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—61154

Geology by R. G. Schmidt and C. E. Dutton, 1951–58

BEDROCK GEOLOGIC MAP OF FEIGH-PENNINGTON-ARMOUR MINES AREA, MINNESOTA, SHOWING GEOLOGIC CONTACTS PREVIOUS TO MINING AND POSITIONS OF SECTIONS ON PLATE 8

SCALE 1:2400

200 0 200 400 600 800 FEET