



Geology mapped by Carl Fries, Jr., at intervals from 1950 through 1956, under the auspices of the International Cooperation Administration of the United States Department of State, through the Geological Survey of the Department of the Interior, incident to a cooperative program with the Instituto de Geologia de la Universidad Nacional Autónoma de México.

Base constructed from aerial photographs taken by Compañía Mexicana Aerólota, S. A., Departamento Cartográfico de la Defensa Nacional and American Air Force, by Carl Fries, Jr., and José L. Ramirez, 1955-56

EXPLANATION

SEDIMENTARY, VOLCANIC, AND METAMORPHIC ROCKS

- Qc** Continental clastic deposits (Alluvium, volcanic ash, diatomaceous earth, peat, marl, travertine)
- Qcb, Qcb, Qcb** Chichinautzin basalt series (Qcb, basaltic and andesitic lava flows, with minor tuff, breccia, and alluvium; Qcb, basaltic and andesitic cinder and scoria cones; Qcb, basaltic and andesitic lava domes)
- Tpc** Cuernavaca formation (Conglomerate, fanglomerate, alluvium, volcanic ash, diatomaceous earth, peat, marl, travertine)
- Tomb** Buenavista volcanic series (Predominantly andesitic lava, breccia and tuff, units interfinger or overlap and are largely correlative)
- Tuf** Undifferentiated volcanic series
- Tzp** Tepoztlán formation
- Zmp** Zempala andesite series
- Tsr** Tilzapotlán rhyolite series (Rhyolite tuff, tuff-breccia, breccia, and lava; some welded tuff)
- Teob** Balsas clastic group (Limestone conglomerate, volcanic conglomerate, siltstone, sandstone, gypsum, lacustrine limestone, basaltic and andesitic lava, breccia, and tuff; generally reddish, partly interbedded; non-marine)
- Ksm** Mexcala formation (Interbedded marine siltstone, sandstone, shale, fine conglomerate; thin limestone beds in basal part)
- Ksc** Cuautla formation (Thick- to thin-bedded limestone, in part with chert lenses and nodules)
- Kim** Morelos formation (Limestone and dolomite, with anhydrite locally in basal part)
- Kix** Xochicalco formation (Thin-bedded limestone with interbeds and lenses of chert)
- Kig** Acuitlapán formation (Phyllitic siltstone and shale)
- P1** Taxco schist series (Mainly sericite schist, includes erosion remnants of infolded Upper Jurassic (?) Acahuatla formation and Upper Triassic (?) Taxco Viejo green volcanic series)

INTRUSIVE IGNEOUS ROCKS

- Tib** Dikes and small intrusive bodies of basaltic to andesitic or dioritic composition
- Tid** Dikes and small intrusive bodies of dacitic to rhyolitic composition
- Tig** Intrusive bodies of monzonitic to granitic composition

QUATERNARY
TERTIARY
CRETACEOUS
PRE-CRETACEOUS

- Contact; dashed where approximately located
- Fault; showing downthrown side
- Probable fault, showing downthrown side, dashed where concealed
- Anticline, showing trace of axial plane and direction of plunge; dashed where approximately located
- Concealed anticline
- Overturned anticline, showing trace of axial plane and direction of dip of limbs
- Syncline, showing trace of axial plane and direction of plunge; dashed where approximately located
- Concealed syncline
- Overturned syncline, showing trace of axial plane and direction of dip of limbs
- Strike and dip of beds
- Strike and dip of overturned beds
- Mine, quarry, or large open pit
- Spring
- Standard gage railroad
- Narrow gage railroad
- Paved highway, showing kilometer posts
- Secondary road
- State boundary, with interrogation where uncertain

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GEOLOGIC MAP OF WESTERN MORELOS AND EXTREME NORTH-CENTRAL GUERRERO, MEXICO

Mexico (Western Morelos - North central Guerrero area). Geol. 1:100,000. 1959. sheet 2. cap. 1.