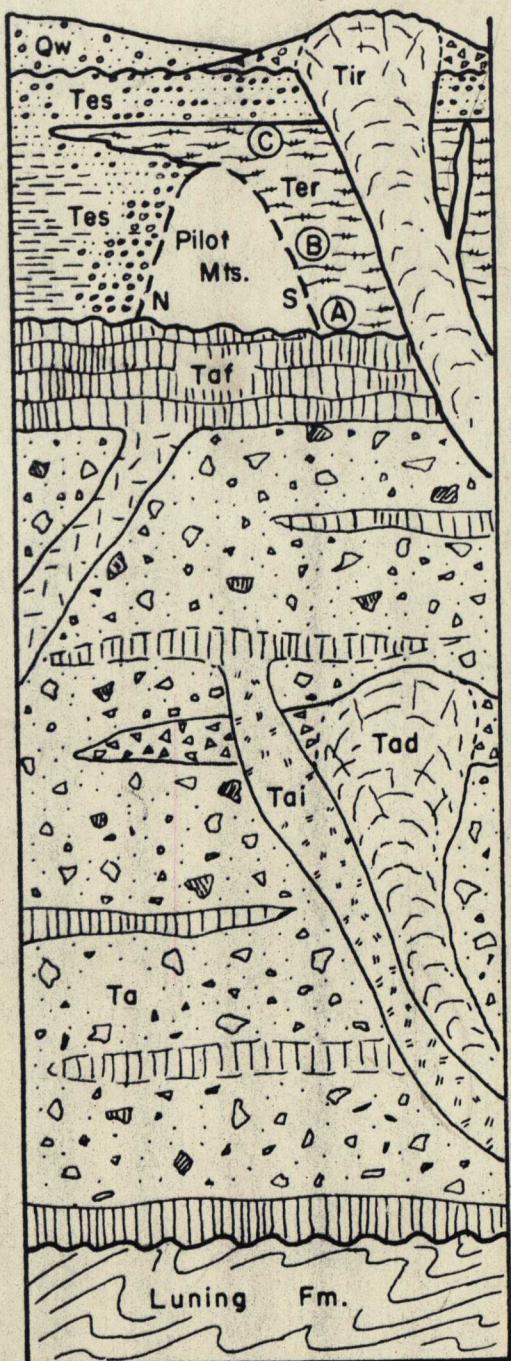


198

TERTIARY VOLCANIC AND SEDIMENTARY ROCKS OF THE PILOT MOUNTAINS



Thickness in feet

Description

0 - 100

Desert wash and alluvium (Qw): Includes surficial deposits, fanglomerate, playa deposits and valley fill.

0 - 500

Mammoth rhyodacite (Tir): hornblende rhyodacite dome and associated dikes of the central Pilot Mts., with minor rhyodacite breccia.

0 - 700

Esmeralda Formation, sedimentary rocks (Tes): Diatomaceous shales and sandstone, fine-grained sandstones, siliceous shales and water laid tuff in the valley between Pilot Mountains and Gabbs Valley Range. Grades into fanglomerate and coarse sandstones near the ranges. Overlain by veneer of fanglomerate. Rhyolitic tuff interfingers with sediments in northern Pilot Mts. Largely restricted to central and southern Pilot Mts.

0 - 3000

Esmeralda Formation, rhyolitic Ignimbrites (Ter): Composite sheet of three flows comprise a single cooling unit. A) Dense black rhyodacite vitrophyre (90 feet); B) Pink-gray lithoidal rhyodacite tuff (300 feet); C) Pink-gray crystal-rich lithoidal rhyolite tuff (300 feet). Largely restricted to central and southern Pilot Mountains.

Thick accumulation of andesite breccia and flows. Rare dark thin flows (100 feet) of olivine basalt near base of unit. Massive monolithologic hypersthene-andesite breccia (lahar) with minor hornblende andesite breccia and flows are most abundant near base. These grade up into dark to light gray hornblende andesite breccia (lahar) and flows. Unit capped by thick hornblende andesite flow (Taf) (300 feet) exposed on Table Mt. near Battle's well. Includes hornblende andesite volcanic necks (Tai) in central and northeast Pilot Mts. Interbedded dacite domes, flows, and breccia in northern Pilot Mts. About 50 percent of the unit is hornblende andesite, about 40 percent hypersthene-augite andesite, about 10 percent dacite, and a trace of olivene basalt.