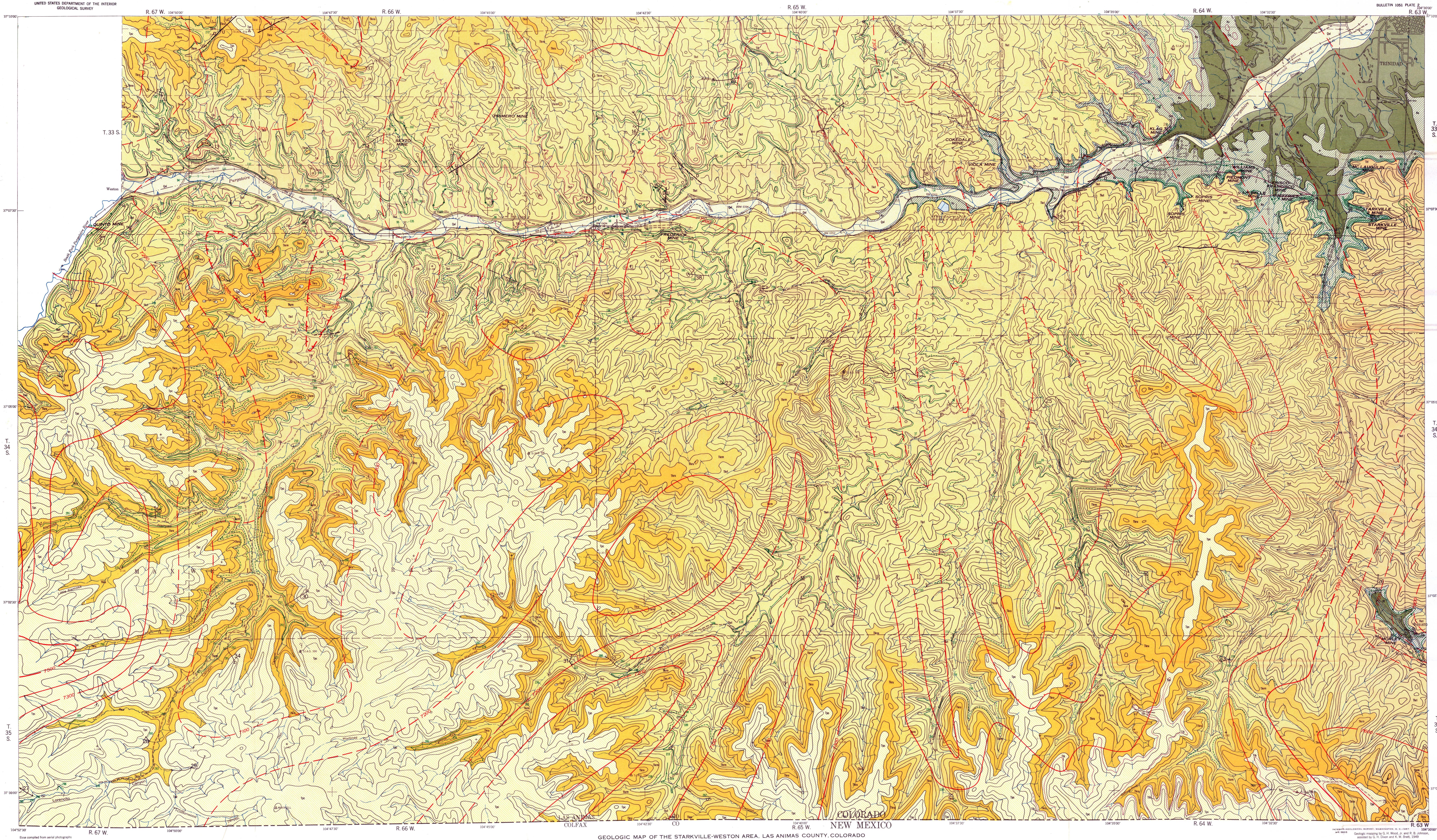




EXPLANATION

SEDIMENTARY ROCKS

Quaternary

Alluvium
Valley fill, sand wash, landslides, fan material, and locally soil mantle

Tertiary

Paleocene
Pisano Canyon formation
Buff, light-gray, and tan shales and buff, gray, and red arkosic sandstone and conglomerate
Contact lines show where formations are bases of sandstone zones 600 ft thick (see graphic sections)

Upper Cretaceous and Tertiary
Baton formation
Gray to dark-gray siltstone, gray to tan-gray carbonaceous and non-carbonaceous silty shale, coal, buff, gray, and olive-gray arkose, graywacke and quartzite sandstone, and a basal buff, gray, purple, gray and dark-gray granite and possible conglomeratic sandstone. Includes upper member TM (1000-1200 ft thick), middle member TM (80-160 ft thick), and lower member TM (1000-1200 ft thick). Contact lines show where members are bases of sandstone zones (see graphic sections)

Lower Cretaceous
Vermilion formation
Gray to dark-gray siltstone, gray to tan-gray carbonaceous and non-carbonaceous silty shale, coal, and buff, gray, and gray-green slightly arkosic sandstone (80-250 ft thick)

Upper Cretaceous
Trinidad sandstone
Buff, light-gray and gray, slightly arkosic sandstone and occasional thin beds of light-tan, light-gray, and gray silty shale (45-225 ft thick)

Lower Cretaceous
Fremont shale
Dark-gray to black, noncarbonaceous fossiliferous shale (1800 to 1900 ft thick), uppermost 200 ft is an alternation of buff to medium-gray thin-bedded silty and shaly sandstone and gray to nearly black thin-bedded silty and sandy shale

IGNEOUS ROCKS

Tertiary
Basic intrusive rocks

Geologic Symbols

--- Contact
--- Dashed where inferred, dotted where concealed
--- Fault
--- Dashed where approximately located; U, upthrown side; D, downthrown side
--- Strike and dip of beds
--- Line of graphic section
--- Section shown on plates 3 and 4
--- Dry hole
--- Numerals indicate total depth
--- Mine or prospect
--- Coal bed
--- Solid line, where correlation and linear extent uncertain; dashed line, where correlation and linear extent uncertain; dotted line, where correlation and linear extent uncertain
--- Coal bed less than 16 inches thick are not mapped
--- Bracketed numerals on coal-outcrop line indicate extent and number of coal beds intersected or inferred in stratigraphic interval between mapped sandstones
--- Arrows on coal-outcrop line indicate direction of observed or inferred increasing thickness of coal bed when only one bed is present, or of single coal bed when more than one bed is present; open arrow points indicate coal more than 20 inches thick, and solid arrow points indicate coal more than 42 inches thick
--- The numerals indicate the location of measured coal section

Structure Symbols

--- Structure contours
--- Contours approximate, drawn on or projected to a datum plane on basis of middle member of the Pecos formation. Dashed lines are shown for areas of moderate control. Contour interval 100 feet. Datum is sea level

Other Symbols

--- 61617
--- Benchmark
--- 5145.374
--- Triangulation station
--- Principal or center point of aerial photograph
--- Land grant corner