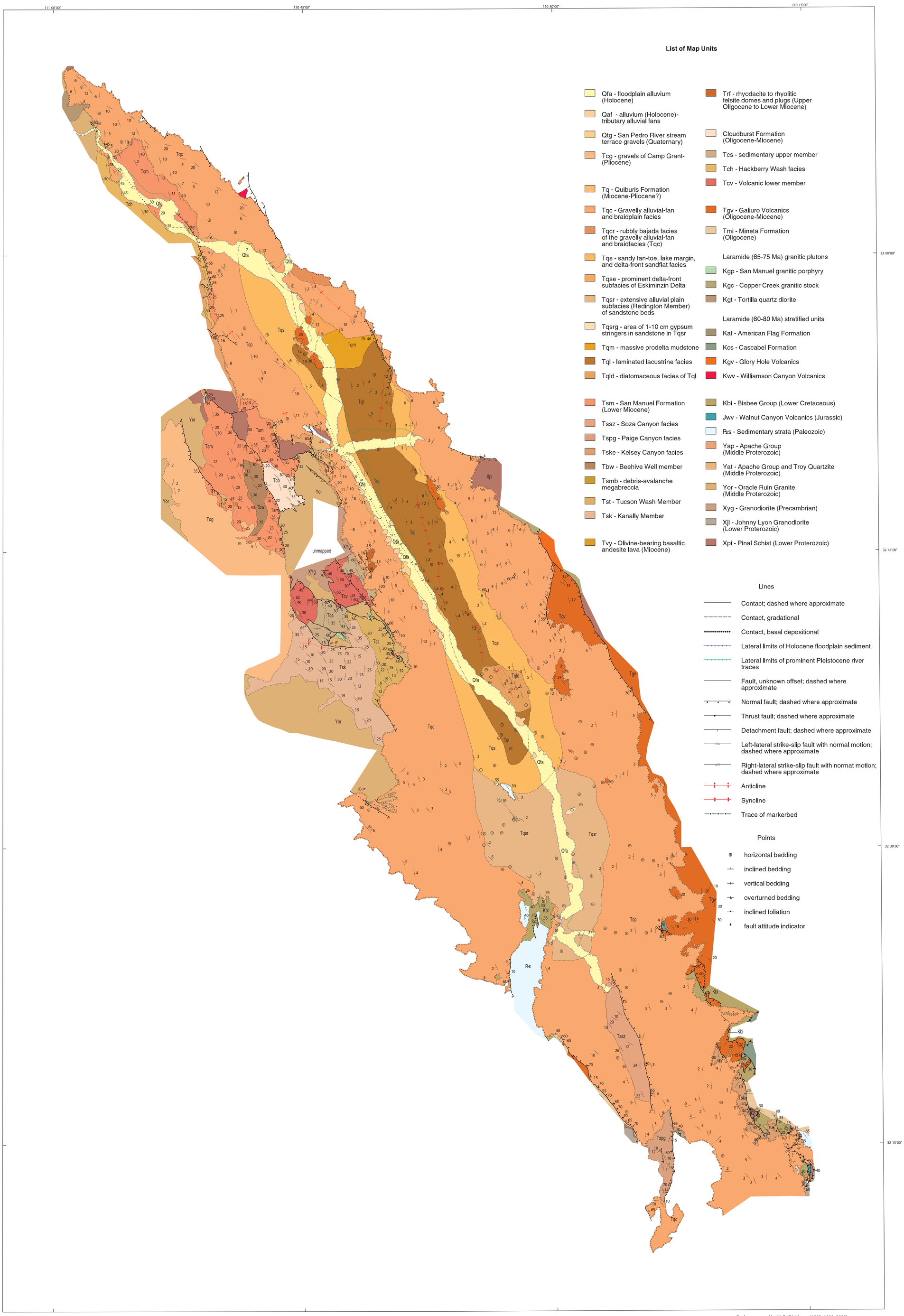
U.S. Department of the Interior
U.S. Geological Survey

Open-File Report 02-393
Database, version 1.0



List of Map Units

- Qfa - floodplain alluvium (Holocene)
- Qaf - alluvium (Holocene)-tributary alluvial fans
- Qtg - San Pedro River stream terrace gravels (Quaternary)
- Tcg - gravels of Camp Grant-(Pliocene)
- Tq - Quiburis Formation (Miocene-Pliocene?)
- Tqc - Gravelly alluvial-fan and braidplain facies
- Tqcr - rubbly bajada facies of the gravelly alluvial-fan and braidfacies (Tqc)
- Tqs - sandy fan-toe, lake margin, and delta-front sandflat facies
- Tqse - prominent delta-front subfacies of Eskiminzin Delta
- Tqsr - extensive alluvial plain subfacies (Redington Member) of sandstone beds
- Tqsrg - area of 1-10 cm gypsum stringers in sandstone in Tqsr
- Tqm - massive prodelta mudstone
- Tql - laminated lacustrine facies
- Tqld - diatomaceous facies of Tql
- Tsm - San Manuel Formation (Lower Miocene)
- Tssz - Soza Canyon facies
- Tspg - Paige Canyon facies
- Tske - Kelsey Canyon facies
- Tbw - Beehive Well member
- Tsmb - debris-avalanche megabreccia
- Tst - Tucson Wash Member
- Tsk - Kanally Member
- Tvy - Olivine-bearing basaltic andesite lava (Miocene)
- Trf - rhyodacite to rhyolitic felsite domes and plugs (Upper Oligocene to Lower Miocene)
- Cloudburst Formation (Oligocene-Miocene)
- Tcs - sedimentary upper member
- Tch - Hackberry Wash facies
- Tcv - Volcanic lower member
- Tgv - Galiuro Volcanics (Oligocene-Miocene)
- Tmi - Mineta Formation (Oligocene)

Laramide (65-75 Ma) granitic plutons

- Kgp - San Manuel granitic porphyry
- Kgc - Copper Creek granitic stock
- Kgt - Tortilla quartz diorite

Laramide (60-80 Ma) stratified units

- Kaf - American Flag Formation
- Kcs - Cascabel Formation
- Kgv - Glory Hole Volcanics
- Kwv - Williamson Canyon Volcanics
- Kbi - Bisbee Group (Lower Cretaceous)
- Jwv - Walnut Canyon Volcanics (Jurassic)
- Pzs - Sedimentary strata (Paleozoic)
- Yap - Apache Group (Middle Proterozoic)
- Yat - Apache Group and Troy Quartzite (Middle Proterozoic)
- Yor - Oracle Ruin Granite (Middle Proterozoic)
- Xyg - Granodiorite (Precambrian)
- Xjl - Johnny Lyon Granodiorite (Lower Proterozoic)
- Xpi - Pinal Schist (Lower Proterozoic)

Lines

- Contact; dashed where approximate
- Contact, gradational
- Contact, basal depositional
- Lateral limits of Holocene floodplain sediment
- Lateral limits of prominent Pleistocene river traces
- Fault, unknown offset; dashed where approximate
- Normal fault; dashed where approximate
- Thrust fault; dashed where approximate
- Detachment fault; dashed where approximate
- Left-lateral strike-slip fault with normal motion; dashed where approximate
- Right-lateral strike-slip fault with normat motion; dashed where approximate
- Anticline
- Syncline
- Trace of markerbed

Points

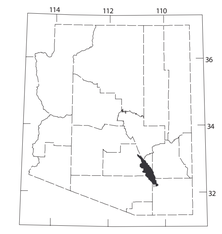
- horizontal bedding
- inclined bedding
- vertical bedding
- overturned bedding
- inclined foliation
- fault attitude indicator

References

Dickinson, W.R., 1993, Summary geologic map of Black Hills near Mammoth, Pinal County, Arizona: Tucson, Arizona Geological Survey Contributed Map CM-93-B, scale 1:24,000

Dickinson, W.R., 1998, Facies map of post-mid Miocene Quiburis Formation, San Pedro trough, Pinal, Pima, Gila, Graham, and Cochise counties, Arizona: Tucson, Arizona Geological Survey Contributed Map CM-98-A, 10 sheets, scale 1:24,000, 6 p. text.

Dickinson, W.R., 2000, Summary of Tertiary stratigraphic and structural relationships, Camp Grant Wash-Antelope Peak area, Pinal County, Arizona: Tucson, Arizona Geological Survey Contributed Map CM-00-B, scale 1:24,000, 10 p. text.



Index map showing area of the Quiburis Formation

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Digital files are available on the World Wide Web at http://geopubs.wr.usgs.gov/open-file/of02-393.

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

The digital database is not meant to be used or displayed at any scale larger that 1:24,000 (1:12,000 or 1:2,000).

Projection: UTM
Units: Meters
Zone12
Clarke 1866 spheroid
NAD27

SCALE 1: 125 000

5 0 5 MILES

5 0 5 10 KILOMETERS

Geology mapped by W.R. Dickinson (1993, 1998, 2000)
Digital Database by K.S. Bolm, Tasha Lewis (University of Arizona), D.M. Hirschberg, (University of Arizona), G.S. Pitts, (University of Arizona) and W.R.Dickinson (University of Arizona, emeritus)

Database approved for publication on September 30, 2002.

Spatial Digital Database for the Geology of the San Pedro River Basin in Cochise, Gila, Graham, Pima, and Pinal Counties, Arizona

By

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2002