Arizona Geological Survey
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Geologic Map of the Sawtooth Mountains and the north end of the West Silver Bell Mountains, Pima and Pinal Counties, southern Arizona

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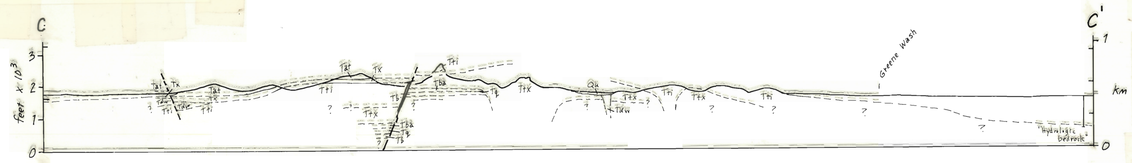
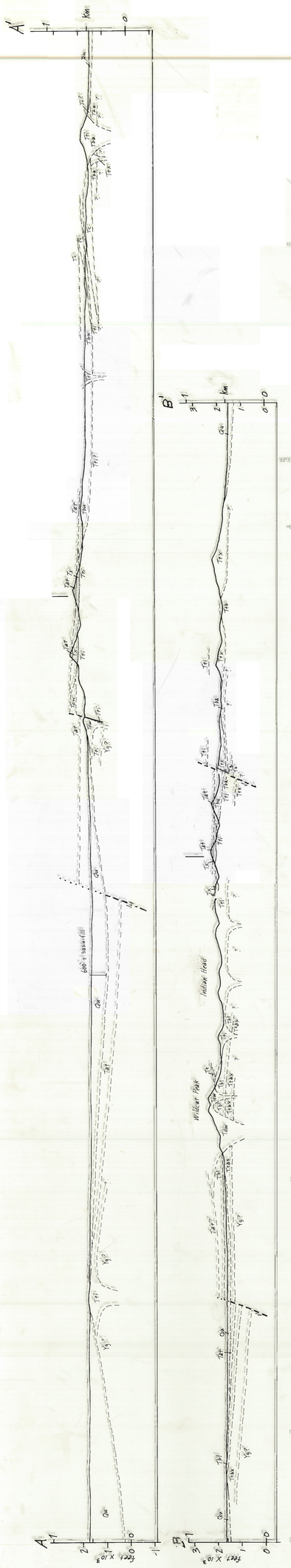
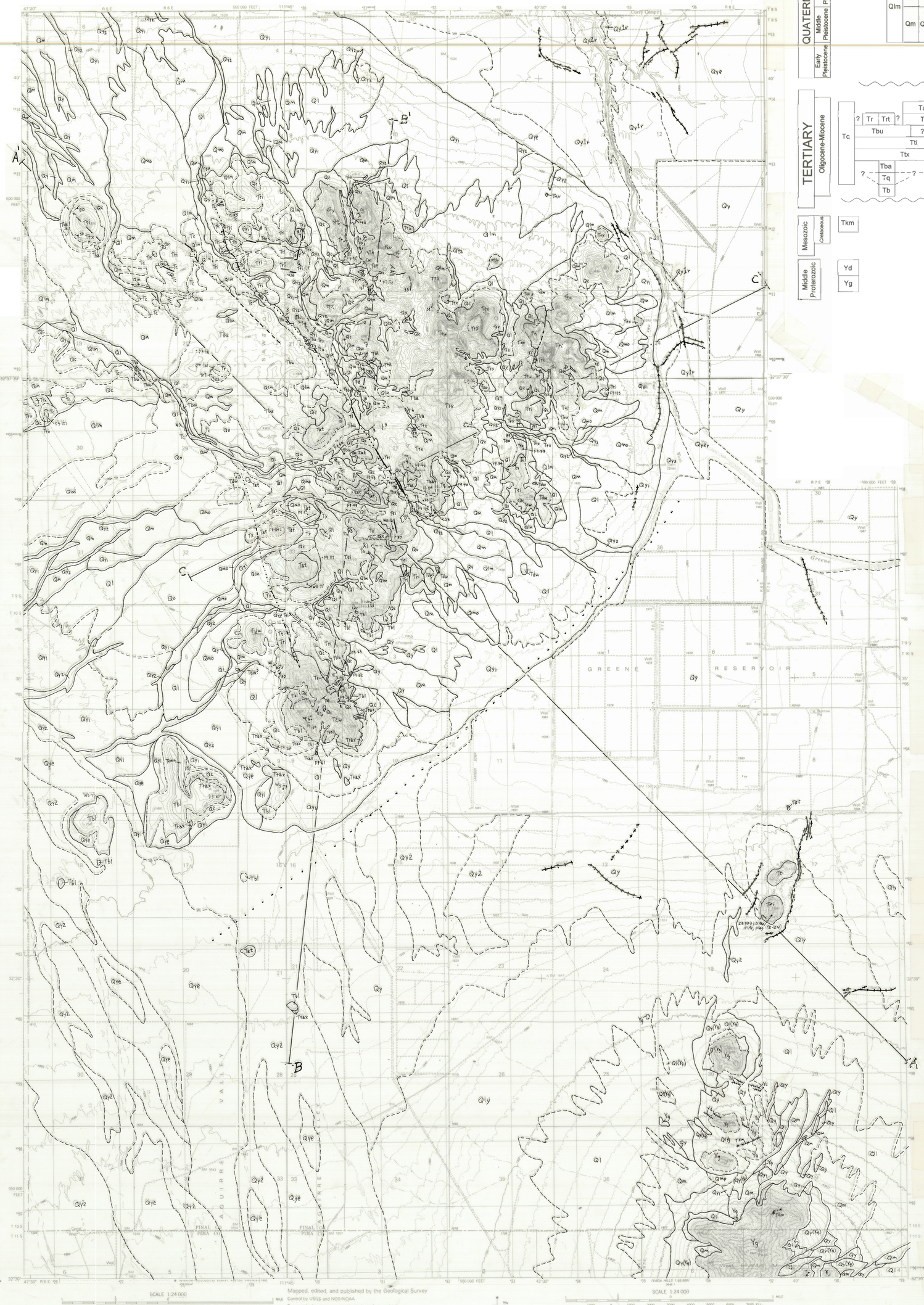
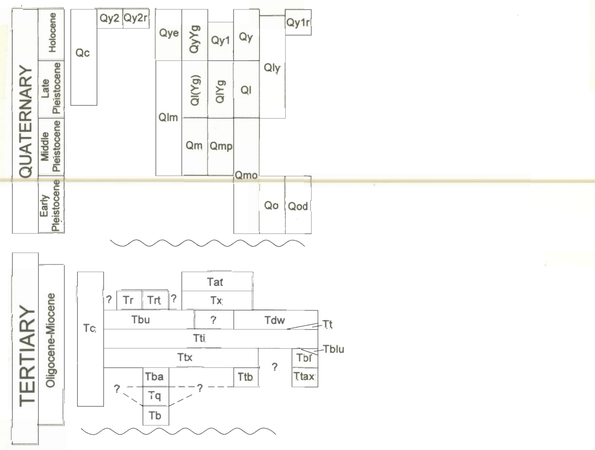


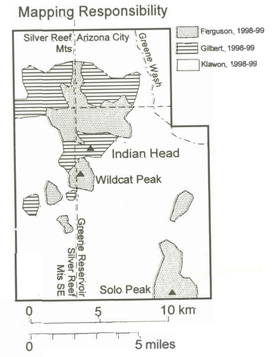




Stratigraphic Correlations, Sawtooth Mountains



Mapping Responsibility



EXPLANATION

QUATERNARY

- **Qye** Holocene alluvium and Holocene eolian deposits (0 to 10 ka)
- **Qc** Hillslope colluvial deposits (Holocene and Pleistocene)
- **Qy2** Late Holocene alluvium (<4 ka)
- **Qy2r** Late Holocene river deposits (<4 ka)
- **Qy1r** Late to Middle Holocene river deposits (0 to 6 ka)
- **Qy** Holocene alluvium (0 to 10 ka)
- **Qy(Yg)** Holocene alluvium with exposed pediment (0 to 10 ka)
- **Qy1** Early to Middle Holocene alluvium (2 to 10 ka)
- **Qly** Middle Holocene to Late Pleistocene alluvium (2 to 130 ka)
- **Ql** Late Pleistocene alluvium (10 to 130 ka)
- **Ql(Yg)** Late Pleistocene alluvium with exposed pediment (10 to 130 ka)
- **Ql(Yg)** Late Pleistocene alluvium with buried pediment (10 to 130 ka)
- **Qlm** Late to Middle Pleistocene alluvium (10 to 750 ka)
- **Qm** Middle Pleistocene alluvium (130 to 750 ka)
- **Qmp** Middle Pleistocene alluvium with buried pediment (130-750 ka)
- **Qmo** Middle to Early Pleistocene alluvium (500 ka to 2 Ma)
- **Qo** Early Pleistocene alluvium (750 ka to 2 Ma)
- **Qod** Early Pleistocene alluvium, degraded (750 ka to 2 Ma)
- **Qu** undifferentiated (on cross-sections only)

TERTIARY

- **Tc** Conglomerate
- **Tr** Generic non-welded tuff
- **Tat** Aphyric trachyandesite
- **Tx** Heterolithic breccia and conglomerate
- **Trt** Rhyolite
- **Trt** Nonwelded rhyolite tuff
- **Tbu** Upper basaltic trachyandesite
- **Tdw** Dacite of Wildcat Peak
- **Tti** Trachyte of Indian Head
- **Ttx** Crystal-rich trachyte lava, lava breccia, and monomict conglomerate
- **Tba** Basaltic andesite
- **Tq** Quartz-phyric basaltic trachyandesite
- **Tb** Basaltic trachyandesite
- **Ttb** Biotite-rich trachyte
- **Tblu** Upper flow unit of the lower basaltic trachyandesite
- **Tbl** Lower basaltic trachyandesite
- **Ttax** Crystal-rich trachyandesite

TERTIARY OR UPPER CRETACEOUS

- **Tkm** Mafic dikes

MIDDLE PROTEROZOIC

- **Yd** Diabase
- **Yg** Granite

MAP SYMBOLS

- contact, dashed where approximate
- intraformational contact
- fault, dashed where approximate, dotted where concealed
- earth fissure (from Harris, 1994)
- flow foliation in lava
- bedding in stratified rocks, and depositional contacts between lava flows
- location of petrology and/or geochemistry sample
- cross-section end point
- topographic profile for cross-sections

Mapped, edited, and published by the Geological Survey
Control by USGS and NOS/NOAA
Topography by photogrammetric methods from aerial photographs taken 1976. Field checked 1977. Map edited 1981
Projection and 10,000-foot grid ticks: Arizona coordinate system, central zone (transverse Mercator)
1000-meter Universal Transverse Mercator grid, zone 12
1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 4 meters south and 64 meters east as shown by dashed corner ticks
Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked
A portion of the east half of this map lies within a subsidence area
Vertical control based on latest available adjustment
SCALE 1:24 000
CONTOUR INTERVAL 40 FEET
SUPPLEMENTARY CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
SCALE 1:24 000
CONTOUR INTERVAL 20 FEET
SUPPLEMENTARY CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
UTM GRID AND 1981 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST
QUADRANGLE LOCATION

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