Cross-sections and Explanation to accompany the geologic map of the southern Roskruge Mountains

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Cross-sections drawn by Charles A. Ferguson

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EXPLANATION

SURFICIAL UNITS

PIEDMONT ALLUVIUM

Qy2 late Holocene alluvium (<2 ka)

Qy1 Holocene alluvium (<10 ka)

Qy undifferentiated Holocene alluvium (0-10 ka)

Qly Holocene to Pleistocene alluvium (0-130 ka)

Ql late Pleistocene alluvium (10-130 ka)

Qm middle Pleistocene alluvium (130-500 ka)

Qlm undifferentiated middle and late Pleistocene alluvium (10-500 ka)

Qmo Middle to early Pleistocene alluvium (500 ka to 2 Ma)

Qo Early Pleistocene alluvium (1 to 2 Ma)

AXIAL STREAM DEPOSITS

Qycr Modern river channel deposits (< 100 years)

Qy2r Late Holocene proximal floodplain deposits

Qy1r Holocene distal floodplain and terrace deposits (<10 ka)

Qyr Holocene floodplain and terrace deposits (<10 ka)

Qlr Late Pleistocene river terrace deposits (10 to 130 ka)

HILLSLOPE DEPOSITS

Qc Quaternary hillslope colluvium

Qsl Quaternary landslide deposits

QTs Degraded Tertiary sedimentary rocks

Q undifferentiated (on cross-sections only)

BEDROCK UNITS

ROSKRUGE MOUNTAINS

R bedrock undifferentiated

Tb basalt of Brawley Wash

Tsy younger sedimentary rocks

Ttr Recortado Tuff

Ts sedimentary rocks

Tsm lacustrine facies

Tsd diamictite facies

Tm trachyandesite lava

Tt nonwelded felsic tuff

Tz trachyte porphyry of Martina Mountain

Ttz porphyry of La Tortuga Butte

TKp plagioclase porphyry

TKq quartz porphyry

TKs sedimentary rocks

TKxp crystal-poor tuff

TKm mafic lava

TKf felsic lava

TKr rhyolite lava

Ksp welded zone of the tuff of Sharp Peak

Kspl nonwelded base of the tuff of Sharp Peak

Kspz tuff of Sharp Peak, mesobreccia

Kspm tuff of Sharp Peak, megabreccia

Kv Viopuli Tuff

Kr rhyolite lava

Kr1 rhyolite lava

Kr1t rhyolite lithic tuff

Kcp Confidence Peak Tuff

KJi intermediate composition lava and hypabyssal rocks

KJd dacitic dikes

KJxpu upper crystal-poor tuff

KJxp crystal-poor tuff

KJs sedimentary rocks

KJp tuff of San Pedro

KJm mafic lava

MzPl limestone

JYXg granite

COYOTE MOUNTAINS

Tp intrusive porphyry

Tfb fault breccia

Tl lamprophyre dikes

Tpg pegmatitic granite

Mzd diorite

MAP SYMBOLS

STRIKE AND DIP

- 37 **bedding**
- 43 **eutaxitic foliation**
- 71 **flow-banding in lava**
- 35 **dike contacts (Coyote Mountains)**
- 31 17 **mylonite, arrow indicates down plunge shear sense**

CONTACTS

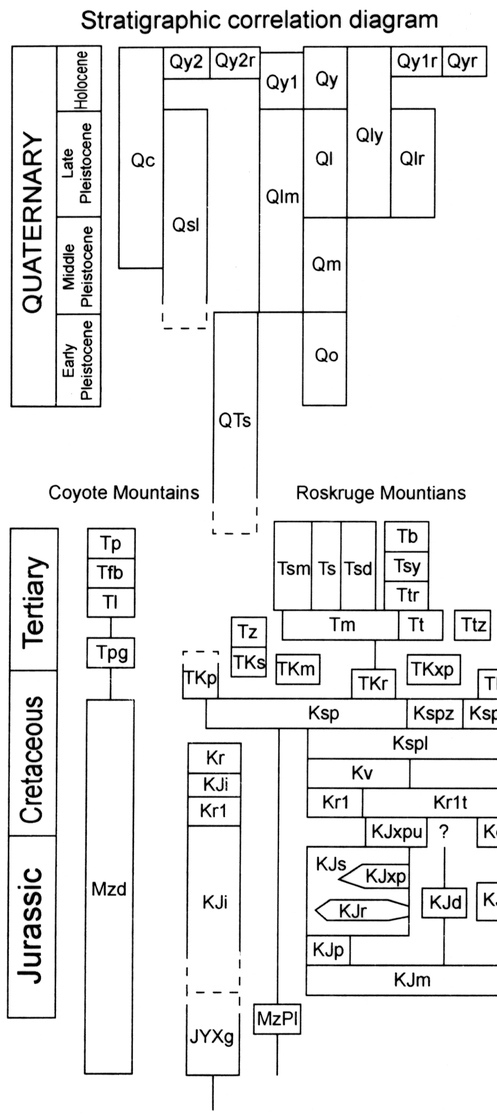
- **depositional or intrusive, dashed if approximate**
- **prominent intraformational contacts or orientation of layering/bedding on cross-sections**
- **fault, dashed if approximate, dotted if buried or intruded (ball in hangingwall)**
- **boundary between bedrock of known and unknown lithology**
- **limit of mapping**

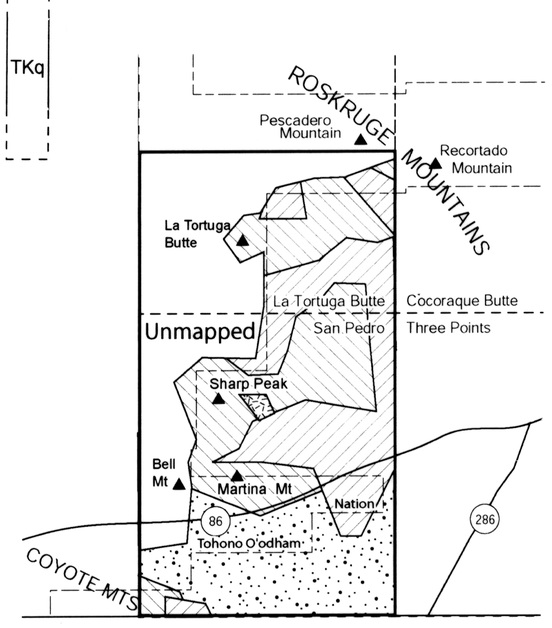
OTHERS

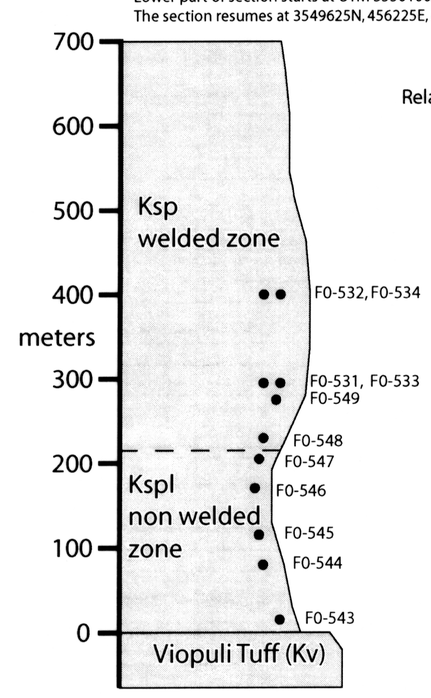
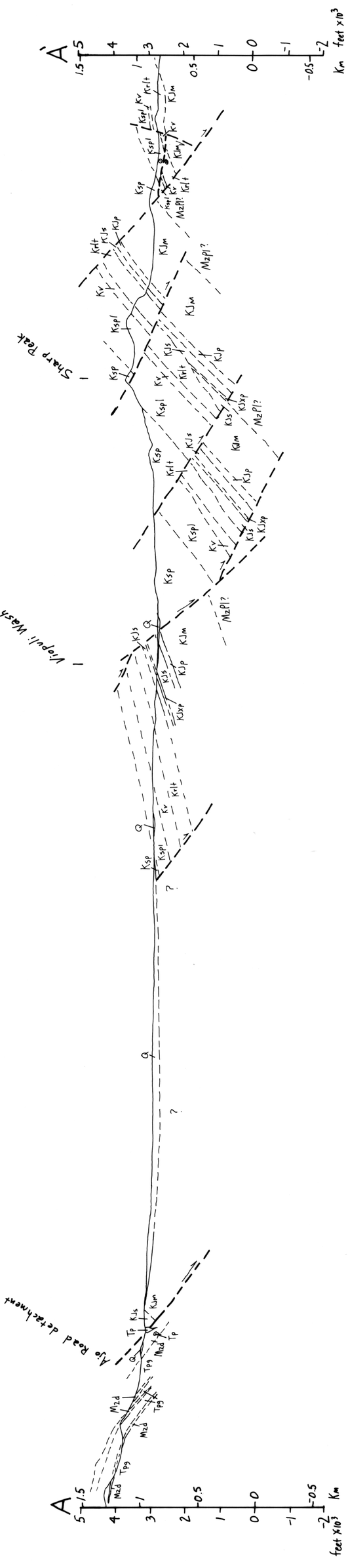
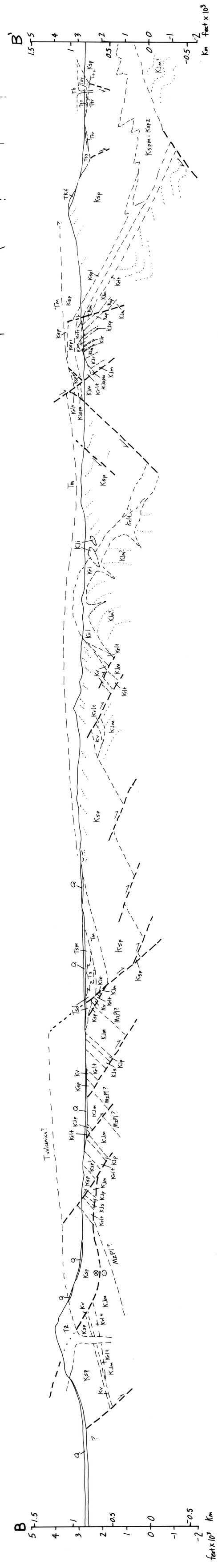
- **plunging anticline axis**
- **tie line between fields of same map unit**
- B **cross-section end point**
- **motion of fault oriented at low angle to cross-section**
  - ⊙ = towards the reader
  - ⊗ = away from reader
- G7 **geochronology sample location**

GEOCHRONOLOGY

G1	70.30 ± 1.90 Ma, K/Ar biotite, MB-14-64, Bikerman, 1967
	71.70 ± 1.50 Ma, K/Ar biotite, MB-14-64, Bikerman, 1967
G2	34.9 ± 0.3 Ma, K/Ar plagioclase, MB-09-64, Bikerman, 1967
G3	66.90 ± 3.00 Ma, K/Ar plagioclase, MB-15-64, Bikerman, 1967
	70.40 ± 1.70 Ma, K/Ar sanidine, MB-15-64, Bikerman, 1967
	73.80 ± 1.60 Ma, K/Ar biotite, MB-15-64, Bikerman, 1967
	74.20 ± 1.50 Ma, K/Ar biotite, MB-15-64, Bikerman, 1967
G4	70.40 ± 1.50 Ma, K/Ar biotite, MB-01-65, Bikerman, 1967
G5	66.70 ± 2.0 Ma, K/Ar whole rock, MB-02-65, Bikerman, 1967
G6	76.00 ± 1.50 Ma, K/Ar biotite, MB-05-64, Bikerman, 1967
G7	75.80 ± 1.50 Ma, K/Ar biotite, PED-12-61, Bikerman, 1967
G8	71.40 ± 1.60 Ma, K/Ar biotite, MB-01-64, Bikerman, 1967
	73.00 ± 1.60 Ma, K/Ar biotite, MB-01-64, Bikerman, 1967
G9	23.91 ± 0.70 Ma, K/Ar whole rock, MB-6-64, Bikerman, 1967







Mapping Responsibility
- Ferguson, 99/00
- Gilbert, 99/00
- Richard and Spencer, 99
- and Quaternary in other areas: Biggs and Pearthree, 00