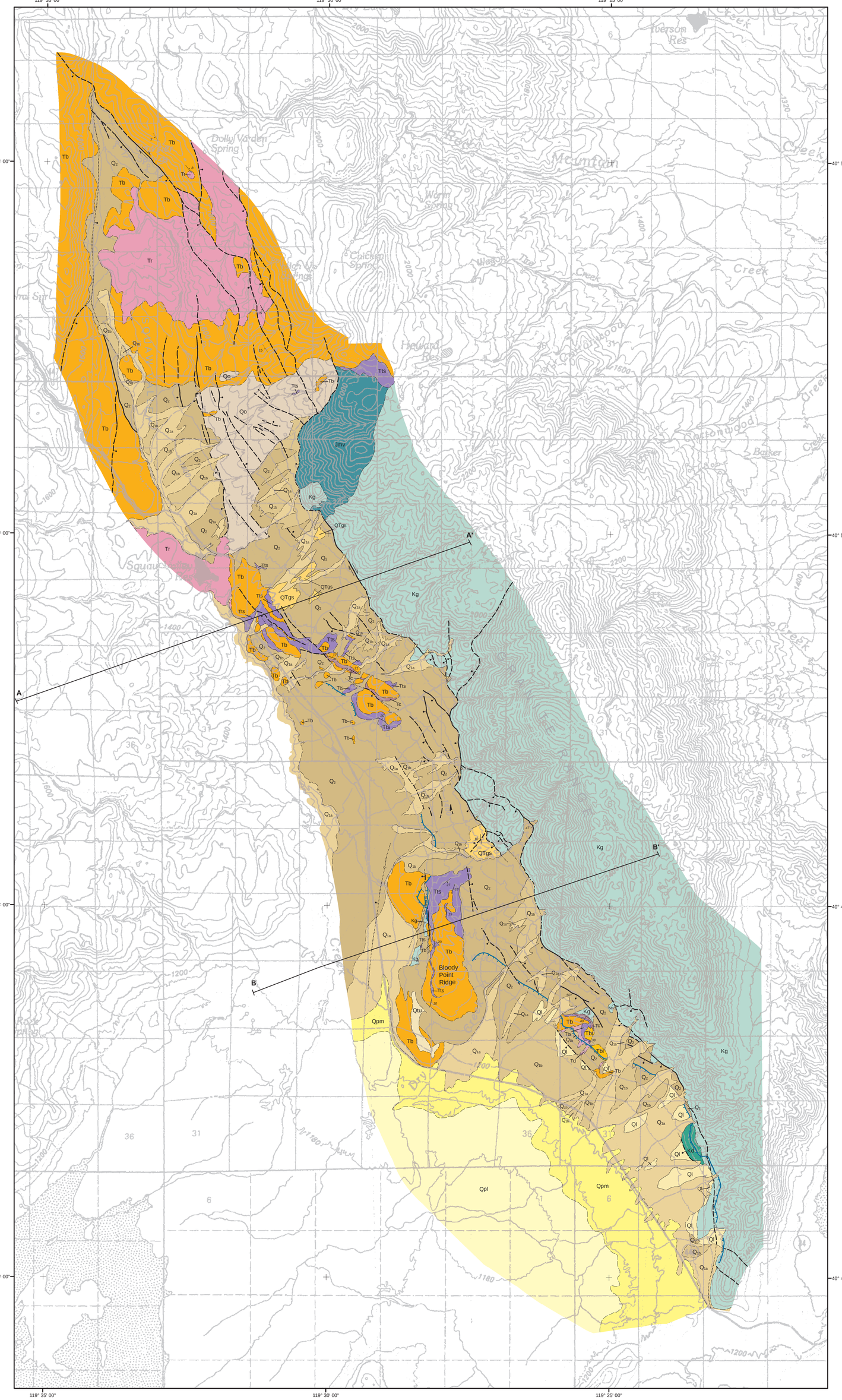
Mapping supported by funding from Southwest Geology, Inc.



Qpl **Playa deposits** Fine-grained fill; includes some eolian deposits and minor gravel.

Qpm **Playa margin deposits** Eolian-dominated deposits around playa margins.

Q_{1a} **Late Holocene alluvial fan deposits** Sand and gravel in active or recently abandoned parts of alluvial fans; granitic dominated near Granite Range; volcanic rock dominated elsewhere.

Q_{1b} **Latest Pleistocene to middle Holocene alluvial fan deposits** Sand and gravel; post-Lake Lahontan highstand (~14 ka); granitic dominated near Granite Range; volcanic dominated elsewhere.

Ql **Lake Lahontan deposits** Fine-grained lacustrine deposits, beach gravel, and reworked alluvial fan deposits.

Qtu **Tufa deposits associated with Lake Lahontan**

Q_2 **Late Pleistocene alluvial fan deposits** Sand and gravel; pre-Lake Lahontan highstand (~14ka); granitic dominated near Granite Range; volcanic dominated elsewhere.

Qo **Middle Pleistocene(?) alluvial fan deposits**

QTgs **Pleistocene–Pliocene grussy alluvial fan deposits** (sand and gravel).

Tb **Basalt lavas** Late to middle Miocene generally aphanitic vesicular olivine basalt flows.

Tbi **Basalt intrusions** Late to middle Miocene olivine basalt plugs and dikes.

Tts **Tuffaceous sedimentary rock** Late to middle Miocene tuffaceous sedimentary rocks, including interbedded tuffaceous siltstone and shale, volcaniclastic sandstone, ash-fall deposits (tephras), and conglomerate; locally includes granitic dominated sandstone and conglomerate.

Tr **Rhyolite** Late to middle Miocene generally aphyric sanidine and quartz rhyolite lava and domes.

Td **Dacite** Miocene biotite porphyritic dacite lava; locally includes minor ash-flow tuff.

Tc **Sedimentary rocks** Miocene volcaniclastic conglomerate and sandstone.

Kg **Granite** Late Cretaceous(?) biotite-hornblende granite; locally includes highly weathered granite along range front.

Kd **Diorite** Late Cretaceous(?) hornblende-biotite diorite.

Jmv **Metamorphic rocks** Plagioclase-hornblende metavolcanic(?) rock.

Contact Dashed where approximately located.

Normal Fault Dashed where approximately located, dotted where concealed, alternating dash-dots where fault scarp preserved but thin veneer of alluvium or colluvium not faulted; ball on downthrown side. Line shows dip on fault.

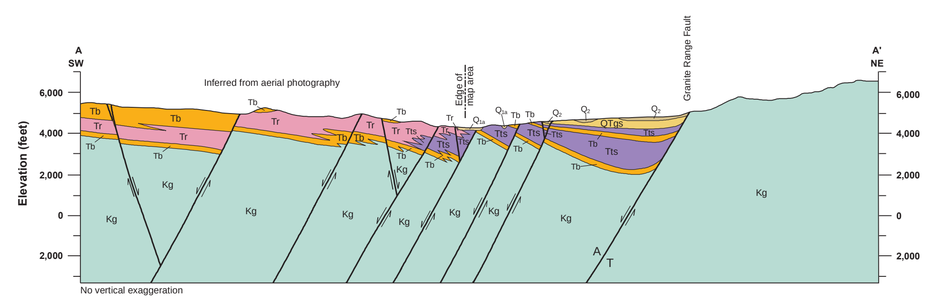
Strike-Slip Fault Dashed where approximately located, dotted where concealed, alternating dash-dots where fault scarp preserved but thin veneer of alluvium or colluvium not faulted. Arrows show relative movement.

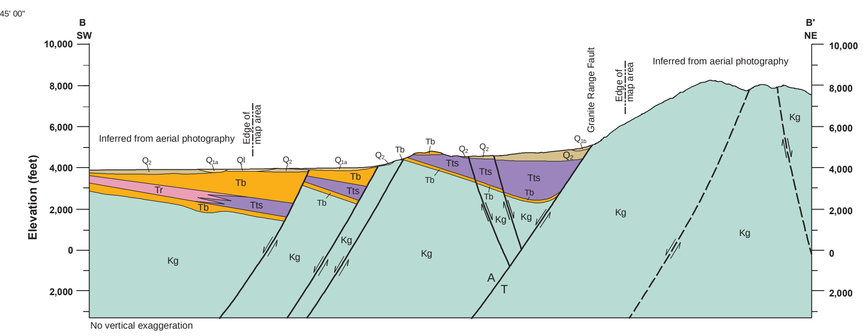
Lake Lahontan (~14 ka) highstand shoreline

Strike and dip of bedding in sedimentary or layering in volcanic rocks.

See accompanying text for a discussion of the geologic setting of the area with references.

Location diagram showing mapped area in red





Scale 1:50,000

0 1 2 4 kilometers

0 0.5 1 2 miles

0 2,500 5,000 7,500 10,000 feet

CONTOUR INTERVAL 40 METERS

Base map:
U.S. Geological Survey Gerlach 30 X 60 Minute Quadrangle, 1981
Universal Transverse Mercator projection, projected to 1983 North American Datum

Field work 2004-2005.

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DRAFT

Preliminary geologic map.
Has not undergone office or field review.
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RECONNAISSANCE GEOLOGIC MAP OF THE GRANITE RANGE FAULT ZONE AND ADJACENT AREAS, WASHOE COUNTY, NEVADA

James E. Faulds and Alan R. Ramelli

2005