

Quaternary

- Qay** Younger alluvium
- Qao** Older alluvium
- Qls** Landslides and mass movement deposits
- Qc** Talus and colluvial slope deposits
- QTs** Partially indurated, locally derived conglomerate (New River Mountains)

Tertiary

- Tey** Younger conglomerate, equivalent to Carefree Formation
- Tdt** Welded, thin to medium-bedded dacitic tuff
- Tvs** Volcaniclastic sandstone, conglomerate, mudstone, marl, nonwelded tuff
- Tt** Nonwelded, bedded tuff, locally interbedded with subordinate volcaniclastic rocks
- Td** Dacite lava
- Tdb** Dacite lava breccia
- Tb** Basaltic lava
- Tbs** Basaltic scoria
- Tbi** Intrusive basalt
- Tfi** Felsic intrusive rocks
- Tl** Hornblende latite or andesite lava, lava breccia and hypabyssal rocks
- Tc** Nonvolcaniclastic conglomerate and sandstone

Middle Proterozoic

- YXd** Medium-grained equigranular diorite
- YXdf** Fine-grained equigranular diorite

Early Proterozoic

- Xgc** Leucocratic, medium-grained granite (Continental Mountain pluton)
- Xgg** K-spar porphyritic granitoid (Grays Gulch pluton)
- Xgn** Medium- to coarse-grained granite (New River Mountains pluton)
- Xgm** Fine-grained quartz monzonite
- Xgf** Fine-grained granitic porphyry dikes
- Xqp** Quartz porphyry
- Xd** Dacite porphyry
- Xfi** Crystal-poor, light-colored, flow-banded rhyolite sills
- Xl** Limestone
- Xs** Argillite, siltite, and argillaceous sandstone (turbidites)
- Xc** Individual chert beds
- Xsc** Siliceous shale and chert
- Xms** Green argillite
- Xcg** Granitoid boulder to cobble conglomerate, argillaceous sandstone, and mudstone
- Xa** Andesite tuff and tuff breccia (mostly subaqueous)
- Xfv** Felsic lava and lava breccia
- Xfs** Felsic volcaniclastic and pyroclastic rocks
- Xfx** Crystal-rich felsic to felsic-intermediate volcanic rock
- Xma** Mafic (andesite-basalt) subaqueous lava complex
- Xm** Mafic (basalt-ultramafic) subaqueous lava complex

MAP SYMBOLS

Contacts, dashed where approximate, dotted where concealed by younger deposits

--- depositional and intrusive

--- normal fault, ball in hanging wall

Strike and dip of planar features

$\frac{13}{\text{---}}$ bedding

$\frac{71}{\text{---}}$ bedding, stratigraphic facing known

$\frac{87}{\text{---}}$ overturned bedding, stratigraphic facing known

$\frac{73}{\text{---}}$ cleavage, ranging from slaty cleavage to schistosity (S_1)

$\frac{81}{\text{---}}$ crenulation cleavage (S_2)

$\frac{67}{\text{---}}$ dip of fault plane, spike indicates dip direction

Trend of linear features

$\rightarrow i$ paleocurrent direction from pebble imbrication in conglomerate

$\rightarrow 23$ intersection lineation (L_1) between bedding and S_1 cleavage in metamorphic rocks

$\rightarrow 5$ crenulation lineation (L_2)

Cross-section end points

$\rightarrow B$ $\leftarrow B'$

Fold axis

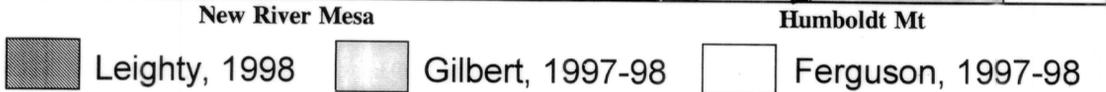
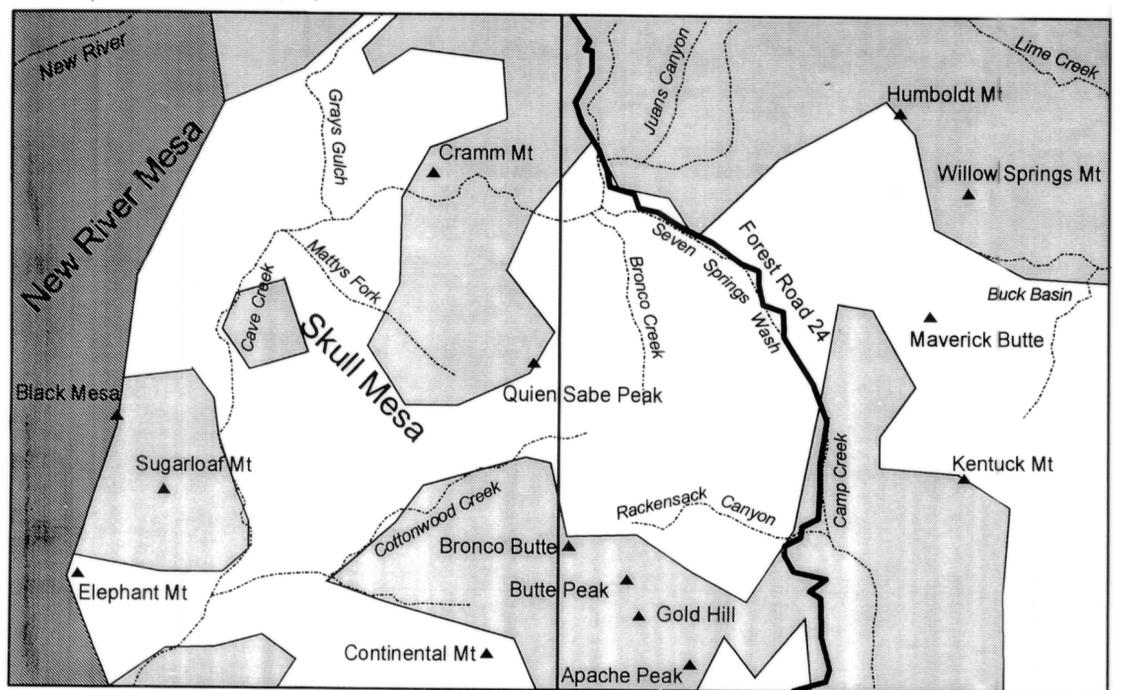
\rightarrow anticline showing plunge

\rightarrow overturned anticline showing plunge

\rightarrow syncline showing plunge

\rightarrow overturned syncline showing plunge

5 Geochronology sample location



Mapping responsibility

GEOCHRONOLOGY

| Location | Date | Technique | Sample | Source |
|----------|------------------|---|-------------|-----------------------------|
| 1 | 14.67 ± 0.35 Ma | K-Ar whole rock | UAKA 78-36 | Scarborough and Wilt, 1979 |
| 2 | 14.81 ± 0.79 Ma | K-Ar whole rock | UAKA 77-106 | Scarborough and Wilt, 1979 |
| 3 | 20.98 ± 0.06 Ma | ⁴⁰ Ar/ ³⁹ Ar sanidine | F8-42 | This report |
| 4 | 21.03 ± 0.06 Ma* | ⁴⁰ Ar/ ³⁹ Ar sanidine | F8-186 | This report (in progress) |
| 5 | 21.34 ± 0.46 Ma | K-Ar whole rock | UAKA 77-108 | Scarborough and Wilt, 1979 |
| 6 | 23.30 ± 2.70 Ma | K-Ar whole rock | UAKA 70-05 | Shafiqulla and others, 1980 |
| 7 | | U-Pb | F8-227 | in storage (AZGS) |
| 8 | | U-Pb | WG-3-7-98-5 | in storage (AZGS) |

* Date added 3/15/99

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