Geologic Map of the Little Horn Mountains 30' x 60' Quadrangle, southwestern Arizona

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Scale 1:100,000

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1 0 2 4 6 8 MILES

5,000 0 10,000 20,000 30,000 40,000 FEET

1 0 2 4 6 8 10 KILOMETERS

EXPLANATION

CONTACTS (dashed where approximately located, dotted where concealed)

Intrusive or depositional contact

High-angle fault, showing dip, bar and ball on downthrown side

Low-angle normal fault, ticks on hanging-wall block

MAP SYMBOLS

Bedding: upright 25 horizontal

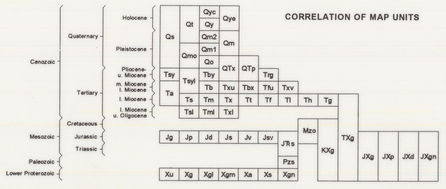
Foliation with lineation in granitoids and metamorphic rocks, compositional layering in gneiss 85

Dikes: Felsic to intermediate mafic

Potassium-argon radiometric date 20.9 ± 0.5 K-Ar w.r.

Volcanic vent

CORRELATION OF MAP UNITS



MAP UNITS

Quaternary sedimentary deposits

- Qs Undivided surficial deposits *(Quaternary)*
- Qyc Active alluvium *(late Holocene)*
- Qy Young alluvium *(Holocene)*
- Qye Eolian deposits *(Holocene)*
- Qt Talus *(Holocene to late Pleistocene)*
- Qm_2 Younger middle alluvium *(late Pleistocene)*
- Qm_1 Older middle alluvium *(middle Pleistocene)*
- Qm Middle alluvium, undivided *(late to middle Pleistocene)*
- Qmo Older middle to older alluvium *(middle to early Pleistocene)*
- Qo Older alluvium *(early Pleistocene)*

Quaternary to upper Tertiary sedimentary and volcanic units

- QTp Pedogenic carbonate *(early Pleistocene to Pliocene)*
- QTx Unconsolidated breccia and rubble *(early Pleistocene to late Miocene)*

Tertiary sedimentary and volcanic units

- Tby Younger basalt *(Pliocene)*
- Trg River gravels *(Pliocene)*
- Tsy Younger sediments *(Pliocene to upper Miocene)*
- Tsyl Younger sediments, lower unit *(Pliocene to middle Miocene)*
- Tb Basalt *(middle to early Miocene)*
- Tbx Basaltic volcanogenic breccia, Eagletail Mountains *(middle to early Miocene)*
- Txv Breccia and volcanic rocks in the Tank Mountains *(middle to early Miocene)*
- Txu Rock avalanche breccia, upper unit *(middle to early Miocene)*
- Tfu Felsic to intermediate volcanic rocks, upper unit *(middle to early Miocene)*
- Ta Andesitic volcanic rocks *(middle to early Miocene)*
- Ts Clastic sedimentary rocks *(early Miocene)*
- Tx Rock avalanche breccia, middle unit *(early Miocene)*
- Tm Mafic to intermediate volcanic rocks *(early Miocene)*
- Tf Felsic to intermediate volcanic rocks *(early Miocene)*
- Tt Tuff and bedded pyroclastic deposits *(early Miocene)*
- Tl Tuffaceous limestone in the Clanton Hills *(early Miocene)*
- Tml Mafic to intermediate volcanic rocks, lower unit *(early Miocene or Oligocene)*
- Tsl Clastic sedimentary rocks, lower unit *(early Miocene or Oligocene)*
- Txl Rock avalanche breccia, lower unit *(early Miocene or Oligocene)*

Tertiary intrusive rocks

- Tg Granitic rocks *(early Miocene)*
- Th Hypabyssal intrusive rocks *(middle to early Miocene)*

Mesozoic intrusive rocks

- Jg Granitic rocks *(Jurassic)*
- Jp Porphyritic granitic rocks *(Jurassic)*
- Jd Dioritic rocks *(Jurassic)*

Mesozoic and Paleozoic sedimentary and volcanic units

- Js Metasedimentary rocks *(Jurassic)*
- Jv Metavolcanic rocks *(Jurassic)*
- Jsv Metasedimentary and metavolcanic rocks, undivided *(Jurassic)*
- Mzo Orocopia schist *(Jurassic)*
- JTrs Metasedimentary rocks *(Jurassic to Triassic)*
- Pzs Quartzite and carbonate rocks *(Paleozoic)*

Tertiary to Proterozoic crystalline rocks

- TXg Felsic granitic rocks *(Tertiary to Early Proterozoic)*
- KXg Felsic granitic rocks *(Cretaceous to Early Proterozoic)*
- JXg Felsic granitic rocks *(Jurassic to Early Proterozoic)*
- JXp Porphyritic felsic granitic rocks *(Jurassic to Early Proterozoic)*
- JXd Dioritic rocks *(Jurassic to Early Proterozoic)*
- JXgn Gneiss *(Jurassic to Early Proterozoic)*

Proterozoic igneous and metamorphic rocks

- Xv Metavolcanic rocks *(Early Proterozoic)*
- Xg Felsic granitic rocks, undivided *(Early Proterozoic)*
- Xgl Leucocratic felsic granitic rocks *(Early Proterozoic)*
- Xgm Mafic granitic rocks *(Early Proterozoic)*
- Xa Amphibolite *(Early Proterozoic)*
- Xs Schist *(Early Proterozoic)*
- Xgn Gneiss *(Early Proterozoic)*

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(Most Quaternary units for all areas are from source 2).

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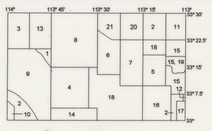

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