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Figure 11

Geology of the Blue Mountain Quadrangle

Beaver and Iron Counties, Utah

by

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EXPLANATION

QUATERNARY

- **Qac** Alluvial cover — Includes unconsolidated valley fill, slope wash, talus, and pediment gravels.
- **Qls** Landslide deposits

UNCONFORMITY

MIOCENE

Volcanic rocks undivided — **Tv**

Formation of Blawn Wash

- **Tf** Basalt flows — Black; dense to vesicular flows; olivine phenocrysts.
- **Tcg** Conglomerate — Pinkish-gray; friable; pebble to cobble size clasts.
- **Tbr** Rhyolite member — Light gray-pale purple; quartz, sanidine phenocrysts; dense to vuggy flows.
- **Tbt** Tuff member — Pinkish-gray; crystal poor with quartz, sanidine, and biotite phenocrysts; abundant dark lithic fragments; includes water-lain sands.
- **Tbm** Mafic flow member — Moderate-brown to brownish-gray; pyroxene, plagioclase phenocrysts.

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- **Ti** Isom Formation — Dark-reddish-brown; densely welded tuff; plagioclase, pyroxene phenocrysts (10–15%); prominent flattened pumice lapilli

Volcanic breccia — **Tbv**

Needles Range Formation

- **Tnl** Lund Tuff Member — Grayish-brown to grayish-red-purple; abundant large (3mm) quartz (5–15%), biotite (5–10%), plagioclase (25%), phenocrysts.
- **Tnw** Wah Wah Springs Tuff Member — Grayish-brown to grayish-red-purple; conspicuous hornblende (5–10%), biotite (5–10%), small quartz (2%), plagioclase (25%), phenocrysts.
- **Tnc** Cottonwood Wash Tuff Member — Grayish-brown to grayish-red-purple; large (5mm) biotite (15–20%), large quartz (2–5%), plagioclase (25%), phenocrysts.

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Carbonate breccia — **Tbc**

Escalante Desert Formation undivided — **Teu**

Escalante Desert Formation

- **Tefu** Upper quartz latite flow member — Dusky-red to moderate-brown; plagioclase (10–15%) and biotite (5%) phenocrysts.
- **Tel** Lamerdorf Tuff Member — Grayish-red; plagioclase (10–15%), biotite (5%), phenocrysts; abundant lithic fragments.
- **Tefl** Lower quartz latite flow member — Grayish-purple; large plagioclase phenocrysts (5–10%).
- **Tej** Latite flow member of Jockey Road — Grayish-red to grayish-brown to grayish-red-purple; biotite, plagioclase, locally abundant hornblende, phenocrysts.
- **Tea** Andesite member — Dark-gray to black; dense; pyroxene and plagioclase phenocrysts.
- **Tem** Tuff member of Marsden Spring — White; crystal poor; green "soapstone" and pink quartzite fragments common.

AUTOCHTHON

JURASSIC

- **Jc?** Carmel Formation — Red—white; siltstones, sandstones.
- **Jn** Navajo Sandstone — Light-brown to very-pale-orange; massively cross-bedded quartzite.

TRIASSIC

- **Trc** Chinle Formation — Variegated siltstone, sandstone.
- **Trs** Shinarump Conglomerate Member — Greenish-gray; cross- bedded sandstone with a basal pebble conglomerate.
- **Trm** Moenkopi Formation — Greenish-brown indurated siltstone.

ALLOCHTHON

CAMBRIAN

Cambrian undivided — **Cu**

- **Cnp?** Notch Peak Formation — Medium-gray dolomite; 2–5% bedded chert; algal structures.
- **Co?** Orr Formation — Medium-gray dolomite; minor oolitic limestone containing trilobite fragments.

Blue Mountain section	Miller Meadows section
Ctr Trippe Limestone — Medium-gray limestone and dolomite; interbedded laminated boundstone.	**Cd** Unit d — Medium-gray; limestone and dolomite; interbedded laminated boundstone.
Cpc Pierson Cove Formation — Medium-dark-gray; mottled limestone, dolomite.	
Cs Swasey Limestone — Medium-gray; massive; dolomite.	**Cc** Unit c — Very-light—medium-gray; dolomite and limestone; minor laminated boundstone
Cw Whirlwind Formation — Yellowish-brown; shale; interbedded limestone; abundant trilobites.	**Cb** Unit b — Yellowish-brown; shale; medium-gray; limestone; occasional trilobites.
Cdo Dome Limestone — Medium-gray; massive; limestone.	
Cch Chisholm Formation — Yellowish-brown; shale; oncolitic limestone interbeds; abundant trilobites.	**Ca** Unit a — Yellowish-brown; shale; oncolitic limestone interbeds; abundant trilobites.

Scale 1 24000

1 0 1 Mile

1 0 1 Kilometer

Utah

Quadrangle Location

Map Symbols

- Anticline; showing direction of plunge.
- Strike and dip of bedding
- Horizontal
- Inclined
- Strike and dip of foliation
- Normal fault, dashed where inferred or approximately located; dotted where concealed; ball or D on downthrown block.
- Thrust fault; dashed where inferred or approximately located; triangles only where concealed; sawteeth on the upper plate.
- Depositional contact; dashed where inferred or approximately located.