Smith-gi-1956

EXPLANATION

for geologic map (plate II)

Quaternary

Pleistocene and Recent

Qal

ALLUVIUM

Arkosic sand and gravel.

Qg | Qb | Qcc

QUATERNARY DEPOSITS

Older gravels (Qg): pediment gravels, terrace deposits, and alluvium now being dissected. Basaltic rocks (Qb): dark vesicular rocks containing phenocrysts of plagioclase and altered olivine(?). Christmas Canyon formation (Qcc): fine-grained sandstones, siltstones, and conglomerates along the northern edge of the area;elsewhere, boulder conglomerates with boulders of rhyolitic and vesicular andesitic rocks.

Tertiary

upper Pliocene

Tl | Tlc | Tlb | Tli

LAVA MOUNTAINS ANDESITE

Andesite flows (Tl): plagioclase andesites, gray to red-brown. Flow conglomerates (Tlc): rounded lava fragments in a lava matrix. Flow breccias (Tlb): angular lava fragments in a lava matrix. Intrusive sills and dikes (Tli): sills and dikes in the western part of the map, intrusive plugs and extrusive flows in the central part.

Tkb | Tkt | Tks | Tkg | Tkp

KLINKER MOUNTAIN VOLCANICS

Volcanic breccias and flow breccias (Tkb): volcanic fragments in a pyroclastic or tuffaceous matrix. Tuffs and pyroclastics (Tkt): chiefly fine-grained volcanic debris containing some larger fragments. Sandstones and conglomerates (Tks): arkosic and volcanic sandstones with some larger rounded pebbles. Purplish-weathering volcanic complex (Tkp): mostly intrusive but includes some extrusive and sedimentary rocks; partially altered. Greenish-weathering volcanic complex (Tkg): includes similar rock types as the purplish unit but is more heavily altered.

Tat | Tas | Tab | Ta

ALMOND MOUNTAIN VOLCANICS

Undifferentiated volcanics (Ta): non-bedded volcanic rocks, probably intrusive. Volcanic breccias and flow breccias (Tab): fragments of volcanic rocks in a pyroclastic or lava matrix. Tuffs and pyroclastics (Tat): fine-grained volcanic debris containing a few larger fragments. Sandstones and conglomerates (Tas): arkosic sandstones with some interbedded conglomerates.

Tpt | Tpi | Tpf | Tpb

LATE PLIOCENE(?) VOLCANICS

Intrusives (Tpi): fine-grained dikes and small plugs. Felsitic rocks (Tpf): light tan fine-grained rocks which form flaggy cleavage slabs; mostly intrusive. Tuffs and pyroclastics (Tpt): well-indurated fine-grained volcanic debris. Volcanic breccias (Tpb): debris of heterogeneous volcanic rock types, in the western exposures; better indurated and more homogeneous in the eastern exposures. Rocks from the two areas are not correlative.

Tu

TERTIARY ROCKS, UNDIFFERENTIATED

Tertiary rocks of unknown affinities; mostly brecciated volcanic rocks.

middle Pliocene

Tbs | Tbv | Tbt

BEDROCK SPRING FORMATION

Sedimentary clastic rocks (Tbs): mostly arkosic sandstones and conglomerates, some limestones, claystones, and siltstones. Volcanic breccias and flow breccias (Tbv): coarse volcanic debris, well indurated. Tuffs and pyroclastics (Tbt): fine volcanic debris.

pre-middle Pliocene

Tv

TERTIARY VOLCANICS

Mostly intrusive volcanic rocks, some tuffs and pyroclastics; complexly faulted and crushed.

Ts

TERTIARY SEDIMENTARY ROCKS

Tuffaceous arkosic sandstones and boulder conglomerates.

pre-Tertiary

aqm

ATOLIA QUARTZ MONZONITE

Intermediate plutonic rocks of unknown age. Includes aplitic and leucocratic rocks in the northwestern portion, some hornblende gabbro in the southeastern.

m

METAMORPHIC ROCKS

Limestones, siliceous limestones, slates, and phyllites of unknown age.

SEDIMENTARY STRUCTURES

- Dip and strike (horizontal, normal, vertical, overturned) 20 90 80
- Approximate dip and strike (horizontal, normal, vertical, overturned) 20 90 80
- Apparent dip of beds (as seen normal to arrow) 30

IGNEOUS STRUCTURES

- Lineation of phenocrysts, showing direction of dip 60
- Platy structures defined by phenocrysts (accurate, approximate, vertical) . . 20 40 90
- Platy structures defined by colors (accurate, approximate, vertical) 20 40 90
- Foliation (accurate, approximate, horizontal, vertical) 40 60 90
- Columnar joints, showing direction of dip 70

CONTACTS

- Well exposed . . . . . .
- Poorly exposed . . . . . .
- Questionable . . . . . ?
- Concealed . . . . . .
- Marker contact within a formation . . . . . .

FAULTS

- Well exposed 70
- Poorly exposed . . . . . .
- Questionable . . . . . ?
- Concealed . . . . . .
- Located primarily on the basis of aerial photographs . . .