Recent

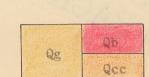
and

Pleistocene

Pliocene

upper

Arkosic sand and gravel.



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.

U. S. Geological Survey OPEN FILE REPORT This map or illustration is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

Quaternary

TI TICE TIME TIE

LAVA MOUNTAINS ANDESITE

Andesite flows (T1): 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.

Tkt

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 rragments. Sandstones and conglomerates (Tks): arkosic and volcanic sandstones with some larger rounded pebbles. Purplish-weathering volcanic complex (Tkp): mostly intru-sive 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

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.

Tpi + Tpf +]

LATE PLIOCENE(?) VOLCANICS

Intrusives (Tpi): fine-grained dikes and small plugs. Felsitic rocks (Tpf): light tan finegrained rocks which form flaggy cleavage slabs; mostly intrusive. Tuffs and pyroclastics (Tpt): well-indurated fine-grained volcanic debris. <u>Volcanic breccias</u> (<u>Tpb</u>): 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.

TERTIARY ROCKS, UNDIFFERENTIATED

Tertiary rocks of unknown affinities; mostly brecciated volcanic rocks.

Tertiary

Pliocene middle

Pliocene

middle

ā

Tertiary

The Thy Tht 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 in-

durated. Tuffs and pyroclastics (Tbt): fine volcanic debris.

TERTIARY VOLCANICS

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

TERTIARY SEDIMENTARY ROCKS

Tuffaceous arkosic sandstones and boulder conglomerates.

ATOLIA QUARTZ MONZONITE

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

METAMORPHIC ROCKS

Limestones, siliceous limestones, slates, and phyllites of unknown

SEDIMENTARY STRUCTURES

Approximate dip and strike (horizontal, normal, vertical, overturned). . . . @ 120 + 90 180

IGNEOUS STRUCTURES Platy structures defined by phenocrysts (accurate, approximate, vertical). . x20 x40 +

U. S. Geological Survey OPEN FILE REPORT This map or illustration is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

Tertiary

CONTACTS

FAULTS

Located primarily on the basis of aerial photographs . . __--