UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PROFESSIONAL PAPER 344-B
PLATE 1

EXPLANATION

TERTIARY

Paleocene(?) — Younger intrusive rocks

Tgp — **Granite porphyry**
Dikes and sills of coarse- to fine-grained gray rocks with quartz and plagioclase phenocrysts

Tgb / Td — **Lamprophyric dikes**
Tgb, *dark fine-grained dikes of gabbroic composition.*
Td, *gray medium-grained hornblende-bearing dikes of dioritic composition*

Tgs — **Pyroxene gabbro**
Sills of dark fine- to medium-grained rock consisting mainly of plagioclase, augite, and hornblende

CRETACEOUS

Lower Cretaceous — Older intrusive rocks

Kgr — **Granite**
Gray to reddish fine- to medium-grained rock, massive in large sills and stocks, gneissic in small occurrences

Kqm — **Quartz monzonite**
Medium- to coarse-grained gray rock with biotite and hornblende as dark constituents

Lower Cretaceous — Plutonic rocks

Kt — **Tonalite**
Medium-grained foliated rock with biotite as main dark constituent

Kqd — **Quartz diorite**
Coarse-grained rock with hornblende and biotite as dark constituents

Kgb — **Gabbro**
Contains hornblende and occasionally biotite as dark constituents

Ks — **Serpentine**
Consists of serpentine minerals and anthophyllite

PRECAMBRIAN TO JURASSIC(?)

Metasomatic rocks

an — **Anorthosite**
White to light-gray, medium- to coarse-grained rock that contains two plagioclases, andesine and bytownite, is locally foliated or shows a bedding-like structure. Hornblende, biotite, and chlorite are the dark constituents

ag — **Amphibolite and garnet amphibolite**
Medium-grained well-foliated dark hornblende-plagioclase rock that contains garnet, quartz, and biotite in varying amounts

PRECAMBRIAN

Belt series

ws / wq / ws / wq / wss — **Wallace and St. Regis formations**
ws, *coarse-grained sillimanite-garnet-biotite schist with biotite-plagioclase schist layers.*
wq, *thick beds of fairly homogeneous light-green diopside-plagioclase-quartz rock and layers consisting of alternating thin beds of diopside-plagioclase gneiss and biotite-plagioclase gneiss; some biotite-bearing quartzite layers also are interbedded.*
wss, *lowest schist unit, consists mainly of garnet-biotite schist; includes the St. Regis formation*

rs / rq — **Revett quartzite**
Coarse-grained thick-bedded pure quartzite with some schist layers, rs

bps / ps / pq / ps / pq / pl / ps — **Burke and Prichard formations**
ps, *coarse- to medium-grained gray well-foliated rock that shows shiny bronze-colored cleavage planes on weathered outcrops. Abundant aluminum silicates occur near the anothosite bodies, and muscovite is more common in the northwestern part of the area. Thin beds of biotite quartzite and biotite gneiss are interbedded with the schist.*
bps, *the upper part contains more quartzitic layers and includes the schist and mica-rich quartzite of the Burke formation.*
pl, *lime-silicate rock, medium- to coarse-grained distinctly bedded bluish gray-green rock, rich in diopside or hornblende or both and containing quartz, plagioclase, tremolite, scapolite, and calcite in varying amounts.*
pq, *thick beds of fairly pure coarse-grained white and light-gray quartzite overlain by thin-bedded fine-grained gray micaceous quartzite*

Aluminum silicates

Contact
Dashed where approximately located

Fault, showing dip
Dashed where approximately located
U, *upthrown side;* D, *downthrown side*

Bearing and plunge of fold axis

Strike and dip of beds

Strike of vertical beds

Strike and dip of fracture cleavage

Strike and dip of foliation

Strike of vertical foliation

Bearing and plunge of lineation
Point of observation at base of arrow

Horizontal lineation

Strike and dip of beds and plunge of lineation

Strike and dip of joints

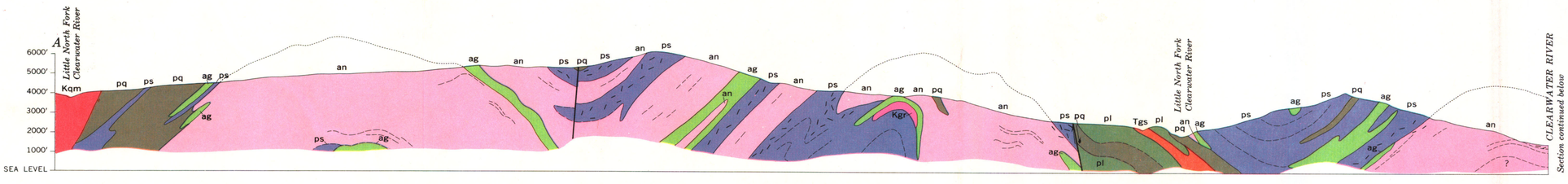
Strike of vertical joints

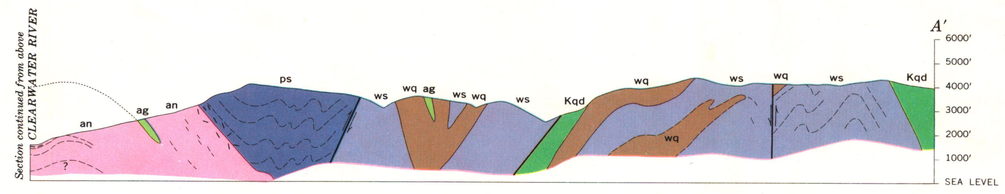
Location and number of specimen
Also identifies chemical analysis of rocks

Base from U. S. Geological Survey Boehls Butte 15′ topographic quadrangle, 1943 and planimetric maps compiled by Forest Service from aerial photography

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—10339

Geology by Anna Hietanen, 1951–57





GEOLOGIC MAP AND SECTION OF THE BOEHLS BUTTE QUADRANGLE AND VICINITY, IDAHO

SCALE 1:48 000

1 ½ 0 1 2 3 MILES

1 ½ 0 1 2 3 4 KILOMETERS

CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL