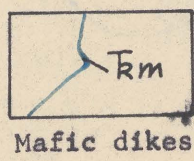
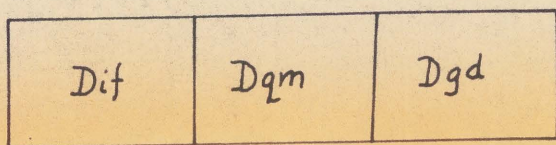


EXPLANATION

Minerals in rock descriptions are listed in order of decreasing abundance.
Minerals in parentheses are present locally



Dark-green to black, rusty and punky weathering, locally porphyritic mafic dikes intruding Devonian plutonic rocks and pre-Silurian metasedimentary rocks. Composed of plagioclase, titaniferous augite, (hornblende), calcite, ilmenite, pyrite, and (magnetite).

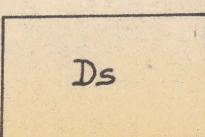


Plutonic rocks

Dif, white to light-gray, very fine-grained, massive intrusive felsite locally containing small, spherical, black, biotite-rich inclusions. Composed of quartz, perthitic alkali feldspar, plagioclase, biotite, muscovite, magnetite and zircon

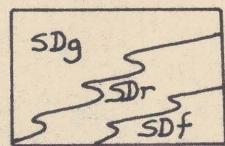
Dqm, white flecked with black, medium- to coarse-grained biotite-rich quartz monzonite; locally foliated adjacent to metasedimentary rocks. Composed of quartz, perthitic microcline, plagioclase, biotite, chlorite, minor amounts of muscovite, (hornblende), and (sphene) as well as trace amounts of zircon, apatite and magnetite. Associated with the quartz monzonite are abundant pink and gray pegmatite and aplite dikes containing quartz, microcline, muscovite, magnetite, and (hematite)

Dgd, gray, medium- to fine-grained, porphyritic to subporphyritic, sphene-flecked, hornblende-biotite granodiorite. Primary foliation commonly shown by aligned phenocrysts of biotite, hornblende, and plagioclase. Locally cut by numerous closely spaced joints that weather in relief giving a macroscopic boxwork pattern. Separated from Dqm by narrow transition zone of biotite-rich, hornblende-sphene-poor, non-foliated quartz monzonite.



Seboomook Formation

Dark-gray, light-gray-weathering slate and gray, fine-grained feldspathic quartzite interbedded in variable proportions. Cyclic, commonly graded, bedding locally formed by alternation of 1 to 3 inch beds of feldspathic quartzite with 2 to 6 inch beds of dark gray slate

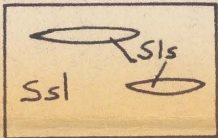


Green slate and siltstone, red slate and felsic tuff

SDg, green to greenish-gray, light-gray chalky-weathering slate and feldspathic metasiltstone and metasandstone. Metasandstone beds range in thickness from 2 inches to 4 feet; are commonly graded and locally cross laminated near the top of a thick bed. Locally the metasandstone is calcareous. Possibly equivalent in part to Ds

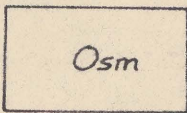
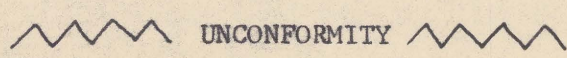
SDr, purple, maroon, and brick-red slate. West of Deer Brook contains complexly-folded beds and lenses generally less than 2 inches thick of white to salmon pink felsic tuff. East of Deer Brook red slate locally interfingers with green slate and overlies felsic tuff (SDF).

SDF, white to light-green or gray, massive to faintly layered and flow banded felsic tuff



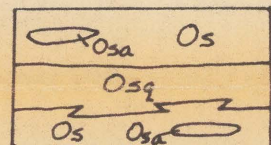
Calcareous slate and limestone

Ssl, dark-gray, rusty-tan, punky weathering, pyritic, calcareous slate. Bedding, where visible, is shown by thin siltstone layers and light- to dark-gray color variations. Locally contains isolated lenses of light- and dark-gray, coarsely crystalline limestone and limestone "edgewise" conglomerate (Slx) consisting of tabular fragments of limestone set in a matrix of crinoidal debris



Serpentinite and related ultramafic rocks

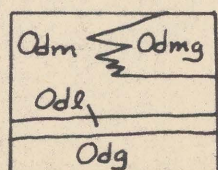
Dark-green, locally mottled green and tan, buff to light-tan weathering, fine-grained serpentinite containing small and widely scattered veinlet of slip-fiber and rarely cross-fiber asbestos; associated dark to light-green, medium- to coarse-grained, serpentinized pyroxenite and peridotite



Black slate, amphibolite, and quartzite

Os, dark-gray to black, rusty-tan weathering, sulfidic slate and fine- to coarse-grained feldspathic quartzite. Slate and quartzite locally alternate in beds 2 to 4 inches thick that are not graded. Quartz granule conglomerate layers ranging in thickness from 2 feet to 50 feet occur in the black slate near the base of Osa. Discontinuous thin lenses of massive, dark-green to finely laminated green and white, fine- to coarse-grained amphibolite, Osa, found in black slate adjacent to serpentinite bodies

Osq, massive to well-bedded, dark-gray, non-rusty weathering slate and fine-grained, white to light-gray orthoquartzite. Locally slate layers 1 to 2 inches thick alternate with beds and anatomosing lenses of white orthoquartzite of equal thickness. Orthoquartzite beds are commonly graded. Basal part of unit is either massive to faintly-layered, dark-gray slate, massive white- to light-gray orthoquartzite in lenses up to 50 feet thick, or lenses of white quartz-granule conglomerate. Primary sedimentary tops determined from graded beds indicate Osa overlies and underlies Os with apparent conformity

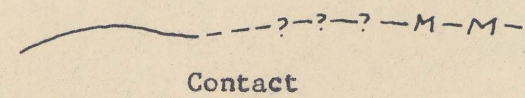


Dixville Formation

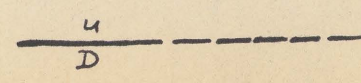
Odm, Magalloway member, dark-gray to gray-green, massive to schistose feldspathic and locally calcareous graywacke with lenses and discontinuous patches of green, purplish-gray and black slate, arkosic granule conglomerate and schistose felsite. Where contact metamorphosed the rock is either massive- to crudely-schistose, muscovite-spangled granofels composed of quartz, feldspar, biotite, (chlorite), (epidote), (garnet), (andalusite), and (sillimanite) or well-layered biotite gneiss, Odmg, consisting of highly-contorted, schistose layers composed of biotite, muscovite, quartz, plagioclase, (andalusite), (sillimanite), (garnet) and light-gray, granular layers composed predominantly of quartz and plagioclase; quartz and quartz-feldspar pods and stringers are common

Odl, black, rusty weathering pyritic slate and thin-bedded to finely-laminated, light-gray weathering feldspathic quartzite or quartzose tuff(?). Beds 1/4 inch to 3 inches thick

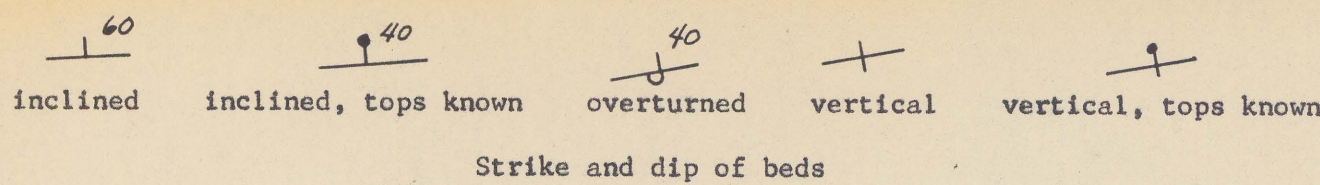
Odg, dark-green, massive to crudely foliated, locally pillowed or agglomeratic greenstone composed of plagioclase, actinolite, chlorite, calcite, epidote, quartz, (sphene), (magnetite) and (pyrite). Pillow structures commonly outlined by white, light-green, or purplish-gray chert. Quartz-calcite-epidote pods and veinlets common. Locally the greenstone contains layers of light greenish-gray felsite



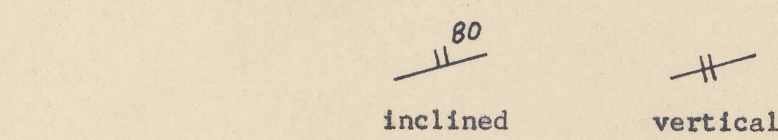
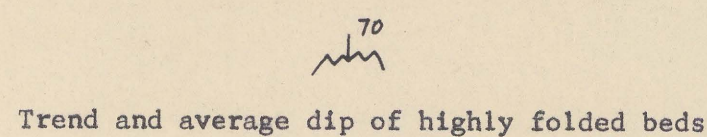
Dashed where approximately located, queried where inferred; M indicates contact located from aeromagnetic data



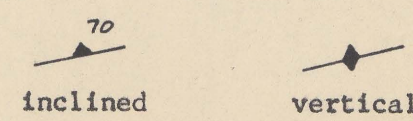
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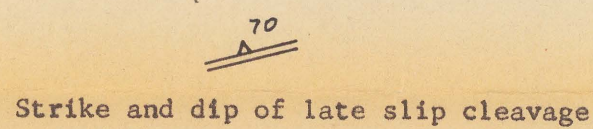
Strike and dip of beds



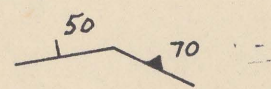
Strike and dip of flow structure of aligned minerals in plutonic rocks



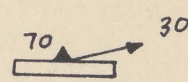
Strike and dip of schistosity and axial plane cleavage



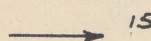
Strike and dip of parallel bedding and axial plane cleavage or schistosity



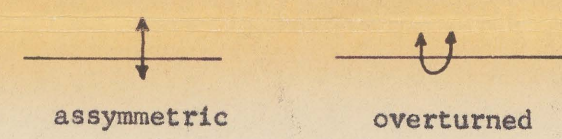
Strike and dip of non-parallel planar features. Symbols joined at point of observation



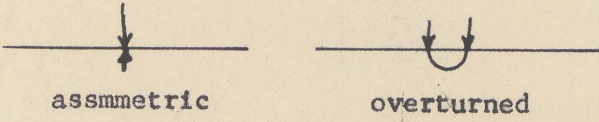
Strike and dip of axial plane of minor fold with bearing and plunge of axis



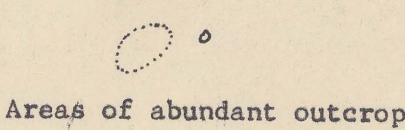
Bearing and plunge of mineral lineation or minor crenulations, may be combined with planar features



Approximate position of axial trace of anticline



Approximate position of axial trace of syncline



Metamorphic zones

Regional metamorphism

C - Chlorite zone

Contact metamorphism

B - Biotite zone; marked by first appearance in rocks of appropriate composition

A - Andalusite zone; marked by first appearance of andalusite in layers of pelitic rocks

S - Sillimanite zone; marked by first appearance of sillimanite in pelitic rocks

Typical assemblage in layered gneiss (Odmg) is: sillimanite-biotite-muscovite-quartz-plagioclase-magnetite-zircon, locally microcline or garnet is present. Typical assemblage in the hornfelsed black slate is: sillimanite-biotite-cordierite-muscovite-quartz-plagioclase pyrrhotite and graphite, locally microcline is present

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