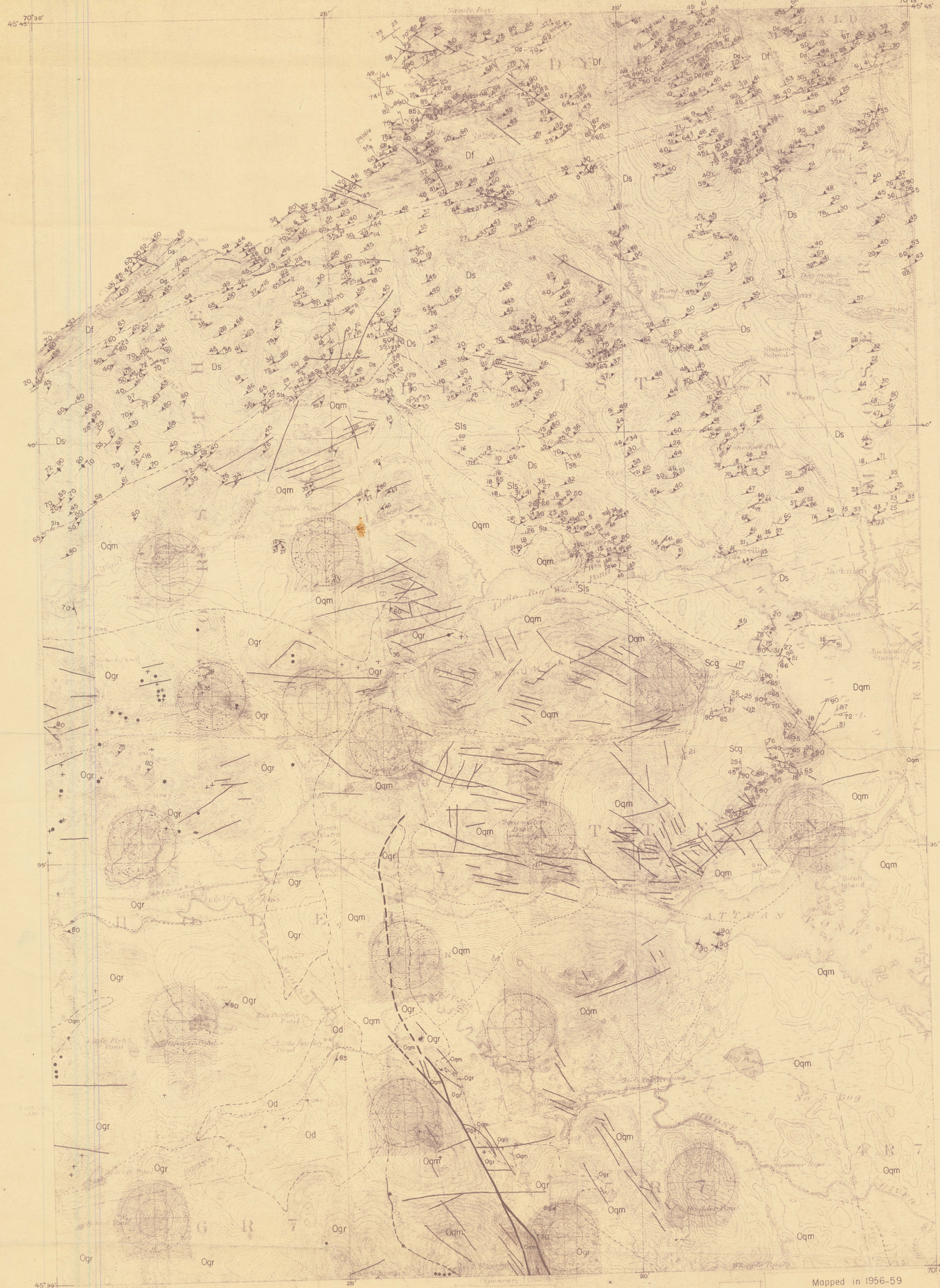
DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

OPEN FILE MAP



PRELIMINARY GEOLOGIC MAP OF THE ATTEAN QUADRANGLE, SOMERSET COUNTY, MAINE

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This map is preliminary and has not been edited for conformity with Geological Survey standards

EXPLANATION

DEVONIAN AND YOUNGER

Post-Lower Devonian

Xd — Altered dike rock

Fine-grained dolomite rock; weathers to orange brown

Dqm — Quartz monzonite

Medium-grained, light-colored, biotite-bearing monzonite

Dd — Hornblende diorite sills and (or) dikes

Lower Devonian

Df — Frontenac Formation

Fine-to medium-grained, greenish-gray, slightly calcareous, argillaceous sandstone and chloritic phyllite and slate

Ds — Seboomook Formation

Gray slate with thinner more arenaceous layers; locally a greenish phyllite. Lowermost part may be of Silurian age

SILURIAN

Upper Silurian

Relative age not certain

Scg — Conglomerate

Light-colored, quartzo-feldspathic boulder conglomerate and sandstone

Sls — Limestone and slate

Fine-grained, gray, argillaceous limestone, gray calcareous slate, light-colored, medium- to coarse-grained calcareous quartzo-feldspathic sandstone and granule conglomerate, fine-grained gray reefal limestone, and gray arenaceous limestone

Unconformity

ORDOVICIAN AND OLDER

+ + + — Mafic dikes

Fine-grained mafic dike rock; extent of alteration quite variable. Strike and dip shown were known

• • • — Quartz porphyry dikes

Megacrysts of quartz, K-feldspar, and plagioclase in an aphanetic, light-colored matrix

Oqm — Quartz monzonite

Mottled pink and green, medium- to coarse-grained, porphyritic quartz monzonite characterized by large megacrysts of K-feldspar. In northwest part of area it is extensively altered and has a cataclastic schistosity

Od — Diorite

Dark-colored, medium-grained, hornblende diorite; extensive alteration

Ogr — Granulite

Light-colored, fine- to medium-grained, quartzo-feldspathic metasediment (granulite), which commonly contains numerous lithic fragments. Also includes small areas of greenstone and hornblende diorite similar to Od

Contact

Dash-dot where it is also the boundary of an area whose joint sets are shown on the enclosed joint net

Fault

Dashed where doubtful or probable

PLANAR FEATURES

Inclined Vertical Overturned

Strike and dip of bedding

Inclined Vertical

Strike and dip of schistosity or cleavage in general parallel to bedding

Inclined Vertical

Strike and dip of schistosity or cleavage due to uniform planar alignment of minerals

Inclined Vertical

Strike and dip of spaced cleavage not due to uniform planar alignment of minerals

Inclined Vertical

Strike and dip of fold bands

Widely spaced monoclinal flectures which pass into partings. Heavy dot on side of upward displacement where consistent

Dextral Sinistral

Trend of folded planar feature

May be combined with other symbols to indicate plan of folded bedding, schistosity, or cleavage

Inclined Vertical

Strike and dip of axial plane of fold

Inclined Vertical

Strike and dip of joint sets

Coexisting planar features

Intersection is at point of observation

LINEAR FEATURES

Inclined Vertical Horizontal

Bearing and plunge of fold or crinkle axis or of the intersection of planar features, or of oriented inclusions (o). May be combined with any class of above planar symbols

Inclined Horizontal

Bearing and plunge of axis of small anticline

Boundary of an area whose joint sets are shown on the enclosed joint net

Joint net

Equal area projection (upper hemisphere) of poles to joint sets whose attitude was measured in the enclosed area. Inner ring is 45°

Linear features shown on aerial photographs

Linear features parallel to bedding not shown