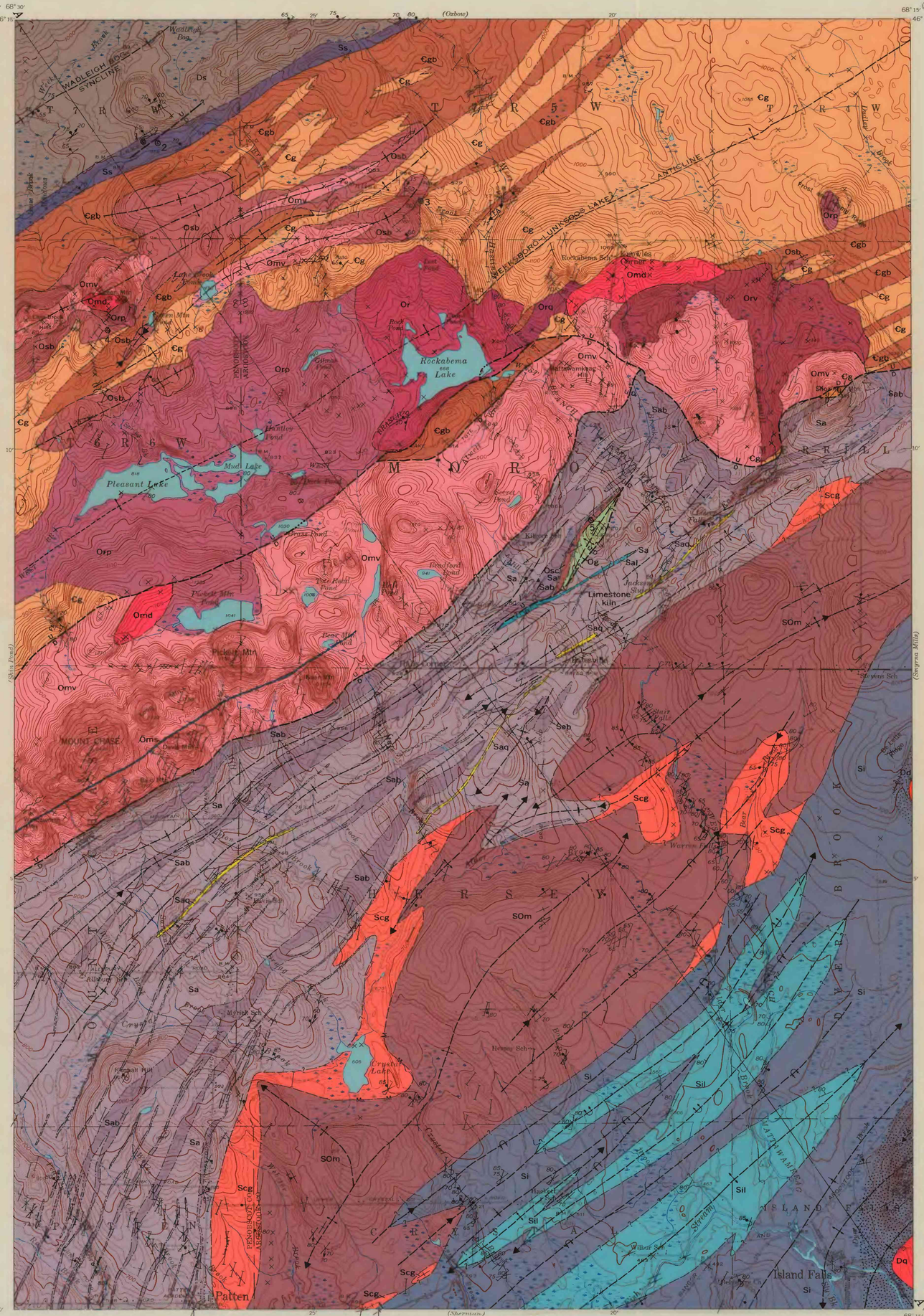


Base by U.S. Geological Survey, 1940

APPROXIMATE MEAN DECLINATION, 1966

SCALE 1:62 500

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

Geology by E. B. Ekren, F. C. Frischknecht, and A. S. Barwick, 1959–61

EXPLANATION

NORTHWESTERN

Ds — Seboomook Formation

Ss — Sedimentary rocks and quartz porphyry

Or, Orp, Orq, Orv — Rockabema Quartz Diorite
- Or, *equigranular quartz diorite*
- Orp, *porphyritic quartz diorite*
- Orq, *lit-par-lit quartz diorite and Grand Pitch Formation*
- Orv, *lit-par-lit quartz diorite and volcanic rocks*

Oms, Omv, Omd — Volcanic rocks and slate of Mount Chase area
- Omv, *volcanic rocks*
- Omd, *quartz diabase*
- Oms, *slate*

Lower or lower Middle Ordovician

Osb — Shin Brook Formation

UNCONFORMITY

Ꞓgb, Ꞓg — Grand Pitch Formation
- Ꞓg, *gray slate and quartzite*
- Ꞓgb, *conductive black slate and quartzite*

SOUTHEASTERN

Lower or Middle Devonian

Dd — Granite of De Lette Ridge

Dq — Quartz monzonite and granodiorite of Island Falls area — DEVONIAN

Middle and Upper Silurian

Lower Silurian

Sal, Sa, Sab, Saq — Allsbury Formation
- Sa, *slate and graywacke*
- Sab, *conductive black slate*
- Sal, *limestone*
- Saq, *quartzite*

Scg — Conglomerate

Si, Sil — Rocks of Island Falls — SILURIAN
- Si, *dominantly slate and sandstone*
- Sil, *dominantly limestone and siltstone*
- *Dotted pattern indicates hornfels*

SOm — Mattawamkeag Formation — ORDOVICIAN OR SILURIAN

Osc, Og — Sedimentary rocks and greenstone on Kilgore Knoll — ORDOVICIAN
- Osc, *black slate and chert*
- Og, *greenstone*

Contact
Dashed where approximately located; queried where indefinite; dot-long dashed where located by electromagnetic method; dot-short dashed where approximately located by electromagnetic method; M indicates contact located by aeromagnetic anomaly in vicinity of Crystal Lake

Fault
Dashed where approximately located; dotted where concealed; queried where doubtful. U, upthrown side; D, downthrown side

Shear zone

Anticline
Showing crestline and direction of plunge; dashed where approximately located

Overturned anticline
Showing direction of dip of limbs and plunge; dashed where approximately located

Inferred asymmetric anticline
Showing crestline and plunge; short arrow indicates steeper limb; short dashed where projected through area of Rockabema Quartz Diorite

Syncline
Showing troughline and direction of plunge; dashed where approximately located

Overturned syncline
Showing direction of dip of limbs and plunge; dashed where approximately located

Inferred asymmetric syncline
Showing troughline and direction of plunge. Short arrow indicates steeper limb

Minor fold axis showing plunge

Inclined — Vertical — Inferred overturned
Strike and dip of beds
Overturned beds inferred from poorly graded beds or from nearby outcrops

Inclined — Vertical — Overturned
Strike and dip of beds
Top of beds known from internal sedimentary features

Strike and dip of bedding and direction of plunge of bedding and cleavage intersection

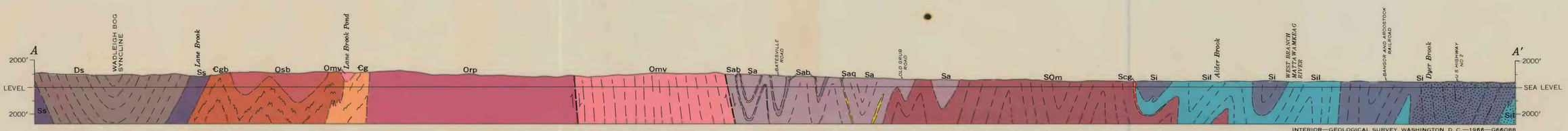
Inclined — Vertical
Strike and dip of cleavage

Crenulated — Chevron
Vertical cleavage superimposed on tightly folded beds

Inclined — Vertical
Joint

Outcrop having no conspicuous bedding or cleavage; or position of abundant float probably close to source

Fossil locality
1 *includes field collection numbers 61-10-1-3,-4,-5*
2 *60-E-1*
3 *60-E-2*
4 *60-8-9-5*
5 *61-9-9-1,-1B*



INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1966—G66088

GEOLOGIC MAP OF THE ISLAND FALLS QUADRANGLE, AROOSTOOK AND PENOBSCOT COUNTIES, MAINE