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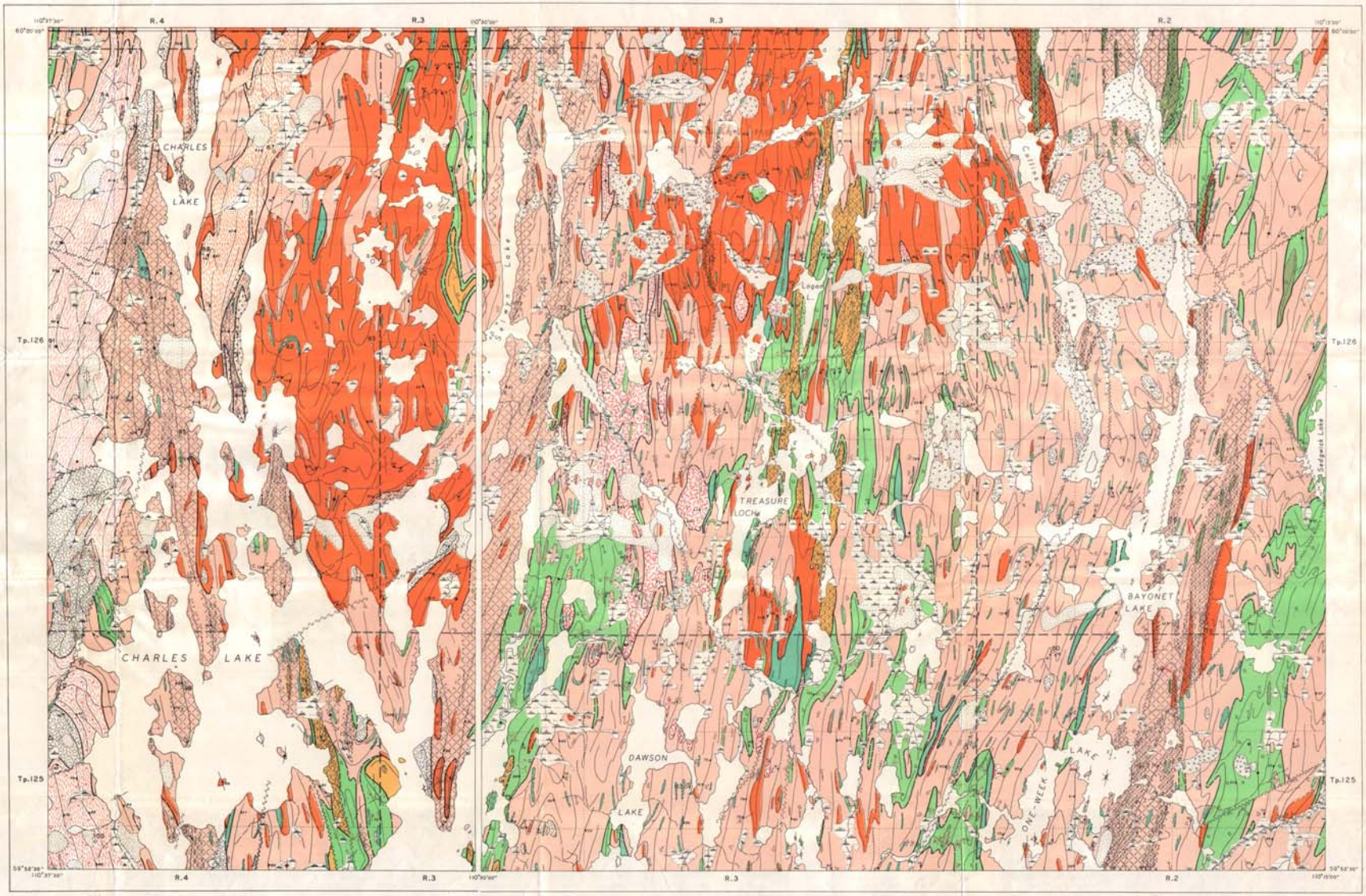


LEGEND

PRECAMBRIAN

Quartzite, pure and impure, white, grey, green, pink and blue; including biotite sericite schist, minor milky quartz pods, feldspar augen, granite and pegmatite lenses, ferruginous and garnetiferous zones.

Biotite schist, with abundant quartz, some sericite; including phyllite, phyllonite, quartzite, minor milky quartz pods, feldspar augen, granite and pegmatite lenses, ferruginous and garnetiferous zones.

Biotite granite F, with white to grey subhedral to euhedral feldspar megacrysts, one to five inches in size, averaging two inches, in a coarse-grained, massive matrix of quartz, feldspar and biotite; including minor aplite and pegmatite.

Biotite granite gneiss, with some hornblende, chlorite, megacrystic feldspar phases; including minor massive to foliated granite - some megacrystic, granodioritic, alaskitic, lenses of biotite, quartzite, amphibolite; garnetiferous zones.

Hornblende granite gneiss, with some biotite, chlorite, megacrystic feldspar phases; including minor massive to foliated granite - some megacrystic, granodioritic and amphibolitic.

Amphibolite, including biotite amphibolite, hornblendite; mainly massive, little banded.

Biotite 'q' granite, with white to pink to red abundant feldspar megacrysts one-quarter inch in size, minor sericite, to medium-grained, massive to foliated matrix of biotite, feldspar and quartz.

Batoche granite, mottled, with abundant white to red, rounded, feldspars one-tenth to one-quarter inch in size, in a sheared green chloritic foliated matrix with lenticular quartz and minor; rare white to pink feldspar augen up to one-half inch in size.

Arch Lake granite, with white to pink subhedral elongate feldspar megacrysts from one-half to one inch in size subparallel aligned, in a medium-grained, streaky to foliated matrix of blue quartz, biotite and feldspar.

Leucocratic granite, with pink to red anhedral feldspars, equigranular, massive, locally foliated; including minor micrographic and pegmatite.

Granitic material, biotite- and muscovite-granite and pegmatite, some leucocratic phases, interwined with host rock; typically massive, generally equigranular.

Foliated hornblende granite, pink to grey, with pink feldspar, quartz, and streaky patches of hornblendic aggregates; texture equigranular, medium- to coarse-grained, typically foliated.

Recrystallized porphyroblastic hornblende catachasite, light greyish-green, with hornblende porphyroblasts up to one-tenth inch in size, and local feldspar porphyroblasts from one-half to three-quarters inch in size in a crushed, foliated, fine-grained matrix, some indistinct banding. Locally mixed with and transitional to minor grey hornblende granite. (see legend map 65-6B).

Recrystallized mylonite K, light colored, with minor white to pink feldspar porphyroblasts one-quarter to three-quarters inch in size, constituting up to 2 per cent of rock, in a foliated, finely banded, aphanitic matrix; including recrystallized mylonites L, M, N, and O.

Recrystallized mylonite L, light colored, with white to pink feldspar porphyroblasts, one-quarter to three-quarters inch in size, constituting about 5 per cent of rock, in a foliated, finely banded, aphanitic matrix, including recrystallized mylonites K, M, N, and O.

Recrystallized mylonite M, dark colored, with white to pink feldspar porphyroblasts, one-quarter to three-quarters inch in size, constituting about 5 per cent of rock, in a foliated, finely banded, aphanitic matrix; including recrystallized mylonites K, L, N, and O.

Recrystallized mylonite N, green to black, schistose to slaty, with biotite, sericite, and some chlorite; feldspar and minor quartz porphyroclasts in a foliated, finely banded, aphanitic matrix; including minor recrystallized mylonite O.

Recrystallized mylonite O, green to black, siliceous, with biotite, chlorite, sericite, and minor feldspar porphyroclasts in a banded, aphanitic matrix; massive to foliated; including minor recrystallized mylonite N.

Recrystallized mylonite Y, dark colored, with white to grey anhedral porphyroclasts and euhedral feldspar porphyroblasts, one-half to two inches in size, foliated, locally gneissoic, in an aphanitic locally medium-grained, matrix; including minor aplite and pegmatite.

Basic dyke, massive, locally sheared with chlorite.

*Note: Rock units are not arranged chronologically.

Geological boundary (defined, approximate, assumed)

Schistosity, gneissosity, foliation (defined, dip known, dip vertical, assumed)

Lineation (plunge known)

Extreme contortion (structural trend)

Tight folds (structural trend)

Faults (defined, approximate, assumed)

Shear

Breccia

Mylonite

Quartz vein

Joint (dip known, unknown)

Sample location 96

Glacial striae (direction of ice movement known)

Radioactivity

Garnet G

Chlorite, abundant C

Epidote, abundant E

Hornblende H

Graphite G

Magnetite M

Geology by John D. Godfrey, 1959, 1960; Bayonet Lake District.
Geology by John D. Godfrey, and Roy Y. Watanabe, 1960, 1961; Charles Lake North District.

Drainage (permanent, intermittent)

Muskeg

Sand-covered area

Sand- and boulder-covered area

Provincial boundary

Township boundary

Section line

Cabin

Base maps compiled from planimetric sheets 74 M/9 NW. and 74 M/9 NE. published by Government of Alberta, Department of Lands and Forests, Edmonton.

Air photographs covering this area are obtainable from the Technical Division, Department of Lands and Forests, Government of Alberta, Edmonton, and the National Air Photographic Library, Topographical Survey, Ottawa.

Approximate magnetic declination 25° 40' East in 1965, decreasing 6' annually.

MAP 65-6B

CHARLES LAKE, NORTH DISTRICT

WEST OF FOURTH MERIDIAN

Scale: Two Inches to One Mile

MAP 65-6A

BAYONET LAKE DISTRICT

WEST OF FOURTH MERIDIAN

Scale: Two Inches to One Mile

Maps to Accompany Preliminary Report 65-6

Published 1966

RESEARCH COUNCIL OF ALBERTA
GEOLOGICAL DIVISION

LEGEND

PRECAMBRIAN*

Quartzite, pure and impure, white, grey, green, pink and blue; including biotite sericite schist, minor milky quartz pods, feldspar augen, granite and pegmatite lenses, ferruginous and garnetiferous zones.

Biotite schist, with abundant quartz; some sericite; including phyllite, phyllonite, quartzite, minor milky quartz pods, feldspar augen, granite and pegmatite lenses, ferruginous and garnetiferous zones.

Biotite granite F, with white to grey subhedral to euhedral feldspar megacrysts, one to four inches in size, averaging two inches, in a coarse-grained, massive matrix of quartz, feldspar and biotite; including minor aplite and pegmatite.

Biotite granite gneiss, with some hornblende, chlorite, megacrystic feldspar phases; including minor massive to foliated granite - some megacrystic, granodiorite, diabase, lenses of biotite, quartzite, amphibolite, garnetiferous zones.

Hornblende granite gneiss, with some biotite, chlorite, megacrystic feldspar phases; including minor massive to foliated granite - some megacrystic, granodiorite and amphibolite.

Amphibolite, including biotite amphibolite, hornblendite; mainly massive, little banded. Feldspar - rich type F.

Biotite 'g' granite, with white to pink to red abundant feldspar megacrysts one-quarter inch in size, minor sericite; in medium-grained, massive to foliated matrix of biotite, feldspar and quartz.

Arch Lake granite, with white to pink subhedral elongate feldspar megacrysts from one-half to one inch in size subparallel aligned, in a medium-grained, streaky to foliated matrix of blue quartz, biotite and feldspar.

Leucocratic granite, with pink to red anhedral feldspars, equigranular; massive, locally foliated; including minor microgranite and pegmatite.

Granitic material, biotite- and muscovite-granite and pegmatite, some leucocratic phases, intermixed with host rock, typically massive, generally equigranular.

Grey hornblende granite, buff to grey, with dark specks of hornblende and local feldspar porphyroclasts from one-quarter to one-half inch in size in a quartz-feldspar matrix; texture fine to medium grained, massive to slightly foliated. Locally mixed with and gradational to recrystallized porphyroclastic hornblende cataclasite.

Recrystallized porphyroclastic hornblende cataclasite, light grayish-green, with hornblende porphyroclasts up to one-tenth inch in size, and local feldspar porphyroclasts from one-half to three-quarters inch in size, in a crushed, foliated, fine-grained matrix; some indistinct banding. Locally mixed with and transitional to minor grey hornblende granite.

Recrystallized orthogneiss K, light coloured, with minor white to pink feldspar porphyroclasts, one-quarter to three-quarters inch in size, constituting up to 2 per cent of rock, in a foliated, finely banded, aphanitic matrix; including recrystallized equivalents of L, M, N, and O.

Recrystallized orthogneiss L, light coloured, with white to pink feldspar porphyroclasts, one-quarter to three-quarters inch in size, constituting about 5 per cent of rock, in a foliated, finely banded, aphanitic matrix; including recrystallized equivalents of K, M, N, and O.

Recrystallized orthogneiss F, dark coloured, with white to grey anhedral porphyroclasts and euhedral feldspar porphyroblasts, one-half to two inches in size, foliated, locally gneissose, in an aphanitic locally medium-grained, matrix; including minor aplite and pegmatite.

*Note: Rock units are not arranged chronologically.

Geological boundary (defined, approximate)
Schistosity, gneissosity, foliation (defined, dip known, dip vertical, assumed)
Extreme contortion (structural trend)
Tight folds (structural trend)
Fault (defined, approximate, assumed)
Shear
Breccia
Mylonite
Joint (dip known, vertical, unknown)
Sample location
Glacial striae (direction of ice movement known)
Mineral occurrence (molybdenite)
Radioactivity
Garnet
Chlorite, abundant
Kyanite, abundant
Hornblende
Graphite
Magnetite

Geology by John D. Godfrey, 1958, 1960, 1961; Ashton Lake District.
Geology by John D. Godfrey and Roy T. Watanabe, 1961, Charles Lake Central District.

Drainage (permanent, intermittent)
Muskeg
Sand-covered area
Sand- and boulder-covered area
Township boundary
Section line

Base maps compiled from planimetric sheets 74E/SW. and 74E/SE., published by Government of Alberta, Department of Lands and Forests, Edmonton.

Air photographs covering this area are obtainable from the Technical Division, Department of Lands and Forests, Government of Alberta, Edmonton, and the National Air Photographic Library, Transportation Survey, Ottawa.

Approximate magnetic declination 25° 40' East in 1965, decreasing 6' annually.

LOCATION MAP

Maps to Accompany Preliminary Report 65-6

Published 1966

MAP 65-6D

CHARLES LAKE, CENTRAL

WEST OF FOURTH MERIDIAN

Scale: Two Inches to One Mile

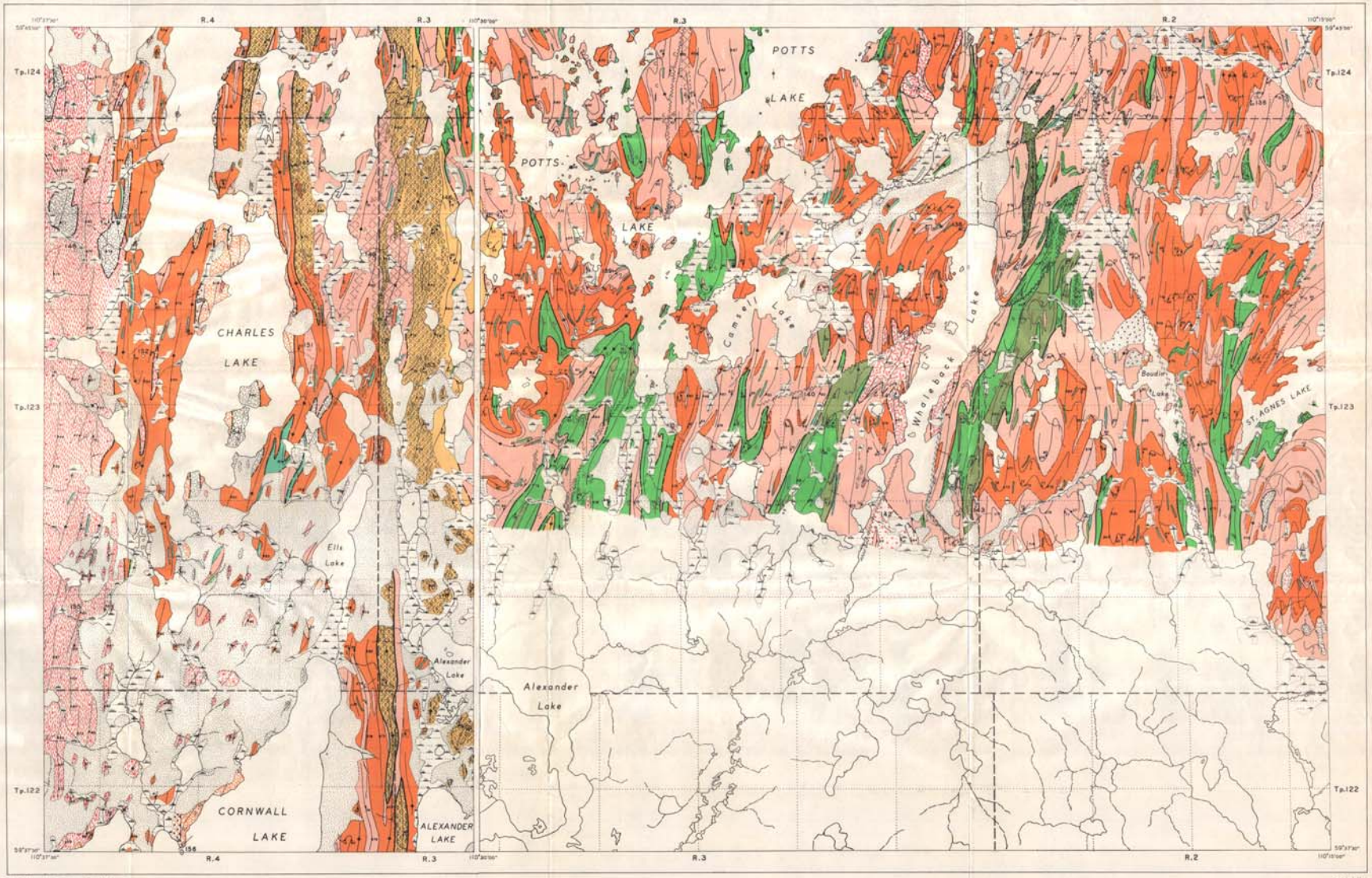
MAP 65-6C

ASHTON LAKE DISTRICT

WEST OF FOURTH MERIDIAN

Scale: Two Inches to One Mile

RESEARCH COUNCIL OF ALBERTA



Maps to Accompany Preliminary Report 65-6

Published 1966

MAP 65-6F

CHARLES LAKE, SOUTH DISTRICT

WEST OF FOURTH MERIDIAN

Scale: Two Inches to One Mile

MAP 65-6E

POTTS LAKE DISTRICT

WEST OF FOURTH MERIDIAN

Scale: Two Inches to One Mile