EXTENDED LEGEND

Common to NTS map sheets 14D/9 and 14D/16. Some units are restricted to a single map sheet. Unit order does not necessarily reflect relative ages. Parts of maps having subdued unit colours and random dotted pattern denote various types of overburden, largely interpreted from aerial photographs, and have little or no outcrop.

MESOPROTEROZOIC AND OLDER

DYKES OF DIVERSE COMPOSITION AND STRUCTURE: Includes all dykes in the area; some dykes cutting pre-Mesoproterozoic rocks are likely pre-Mesoproterozoic

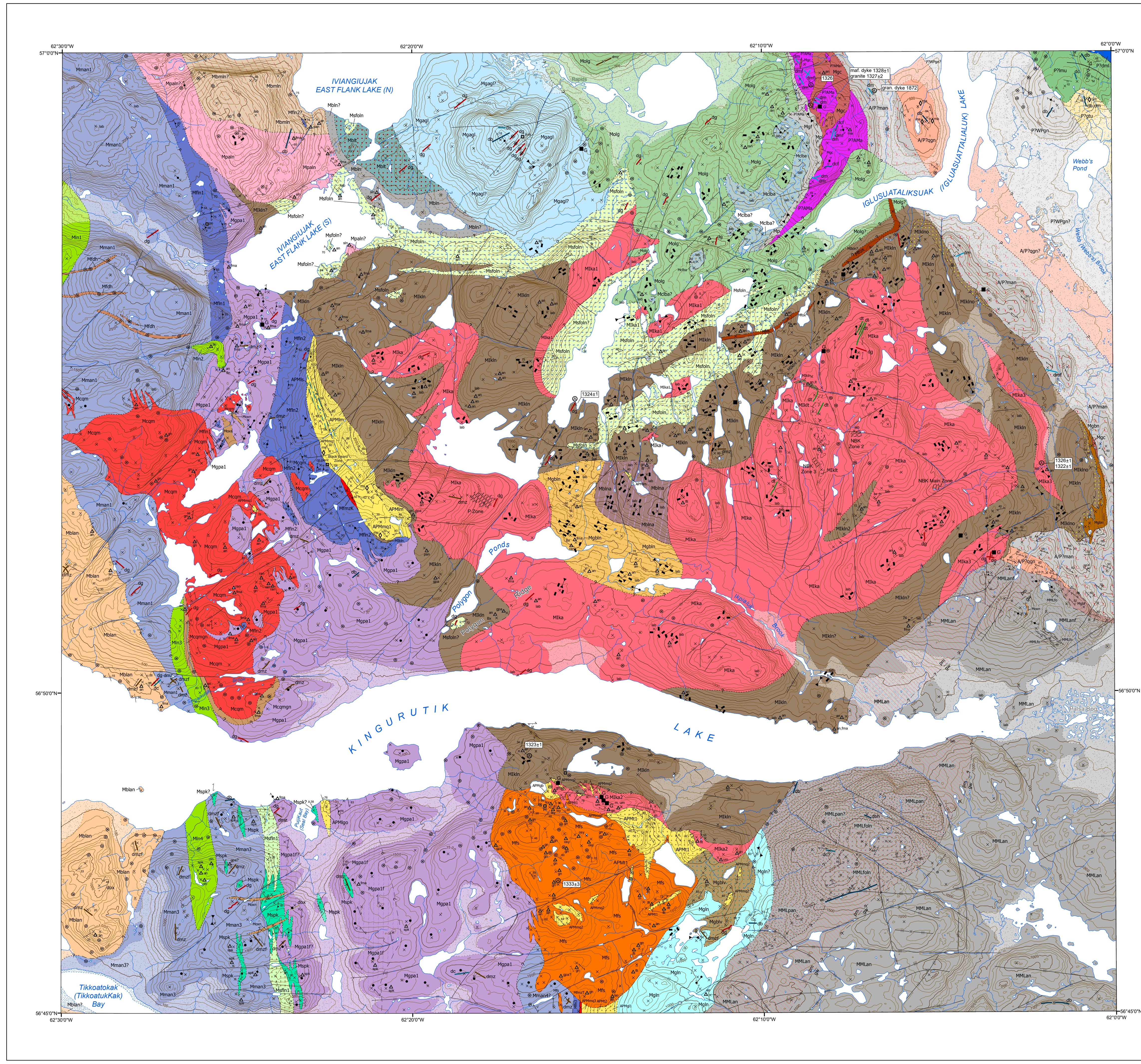
Massive to foliated, mafic and felsic dykes, generally less than 2 m wide, and having an array of strike and dip attitudes; includes rocks showing a wide variation in mineral assemblages and deformation (undeformed to mylonitic); local dyke compositions mirror some proximal larger intrusions, to which they may be genetically related

db, dbN, dbh: Fine-grained, black- to dark-green-weathering, steeply dipping to gently inclined, diabase, metadiabase, and other undivided mafic dykes of several ages (Unit *db*); includes possible Paleoproterozoic metagabbroic dykes, the Mesoproterozoic olivine-gabbroic 'Nain dykes' (Unit *dbN*) and 'hydrated' olivine-bearing dykes (Unit *dbh*) [some dykes are extrapolated along, or assumed to occupy, long linears lacking outcrop]

dm, dmf: Fine-grained, granular, grey to black, variably 'hydrated', straight to meandering to podiform, massive (Unit *dm*) and foliated (Unit *dmf*) mafic dykes; range from anhydrous gabbronorite ('mafic granulite') to hornblende+biotite-rich amphibolite (meladiorite); rare olivine-bearing variants; many dykes resemble larger gabbronoritic (ferrodioritic) intrusions of the NPS in having abundant apatite and opaque oxides; includes dykes that may have undergone *in situ* autometamorphic modification and/or reflect the influence of thermal imprints of Paleoproterozoic regional metamorphism as well as Mesoproterozoic contact metamorphism from nearby NPS intrusions

dc, dcf: Composite dykes of multiple generations, having varying volumes of mafic and felsic components and exhibiting textural and grain-size inhomogeneity (Unit *dc*); some dykes are internally foliated (Unit *dcf*)

dmz, dmzf: Undivided, fine-grained to pegmatitic, brown-weathering, dykes of monzonite, quartz ...



SYMBOLS

Unit contact: defined, approximate, gradational, assumed, conjectural

Unit contact having intrusive relationship displayed in outcrop; arrow points into older rock

Fault: approximate, assumed

Approximate boundary to weathering-colour change in Mount Lister intrusion (pm = pink and mauve dominant; gw = grey and white dominant)

Outcrop: visited, observed from air or through binoculars, compiled mainly from unpublished sources

Prominent topographic linears (some mark mafic dykes and minor faults)

Gneissic layering and associated mineral fabrics (also designates foliated primary compositional variations in some metaplutonic rocks within the gneissic units, and mineral fabrics in metaplutonic rocks assigned to the gneissic units; see Note 5a): inclined, vertical, dip unknown; M, S, V indicate moderate, steep and vertical attitudes derived from unpublished maps of E.P. Wheeler 2nd

Igneous layering (primary planar compositional variations in igneous rocks as well as well-preserved primary layering in metaplutonic rocks that are part of gneiss units; see Note 5b): inclined, vertical, dip unknown, dip estimated

Dispersed feldspar megacrysts (antecrysts, autocrysts, and xenocrysts) prominent in outcrop: random orientation, preferred orientation

Trend of trains of dispersed plagioclase megacrysts, showing dip where determined

Pronounced primary lamination or prominent preferred orientation to tabular plagioclase in anorthositic and leuconoritic rocks: inclined, vertical, dip unknown

Compositional layering having aligned feldspar tablets

Labradoresence prominent in outcrop feldspars; includes that shown by megacrysts as well as by host rock

Trend of orthopyroxene trains, including small cumulus grains and megacrysts

Trend of ellipsoidal mafic enclaves in monzonitic rocks

Primary and late-magmatic (pre-full-consolidation) fabrics of igneous rocks (defined by phenocryst or xenocryst orientation in monzonitic and ferrodioritic [gabbronoritic] rocks, by streaks of orthopyroxene aggregates in medium- to fine-grained granular leuconoritic rocks, and by ellipsoidal elongate pyroxene oikocrysts in medium-to coarse-grained leuconoritic rocks; see Note 5c): inclined, vertical, dip unknown

Solid-state (post-crystallization) fabrics in igneous rocks (defined by variably deformed and variably recrystallized felsic and mafic minerals and their macroscopic textures; includes foliations in Paleoproterozoic plutonic rocks and in some NPS leuconoritic and monzonitic rocks abutting the gneissic septa; see Note 5d): inclined, vertical, dip unknown

Unspecified fabrics (includes some fabrics of the larger intrusions and observed in narrow dykes, and may be of both pre-full-crystallization and solid-state origin; see Note 5e): inclined, vertical, dip unknown; M, S, V indicate moderate, steep and vertical attitudes derived from unpublished maps of E.P. Wheeler 2nd

Primary or superposed mineral foliation parallel to compositional layering: inclined, vertical

Metre-scale inclusions, layers and screens within, and subordinate to, the surrounding gneissic and foliated meta-plutonic rocks: *ma* – meta-anorthosite; *m* – mafic gneiss; *ms* – metasedimentary gneiss; *um* – ultramafic rocks; *Q* – quartzite

Metre-scale inclusions within plutonic rocks, including those of autolithic origin: *an* – undivided, white to grey to mauve to pink, anorthositic rocks of variable grain size; *cln* – coarse-grained leuconorite (in some cases may be derived from the 'giant-pyroxene' anorthosite unit); *flt* – foliated leucotroctolite; *fma* – anorthositic and leuconoritic rocks of 'foliated margin' type; *fln* – foliated leuconorite of unspecified type; *gpa* – 'giant-pyroxene' anorthosite; *m* – mafic gneiss; *gn* – undivided gneisses; *lsy* – layered syenite; *ln* – leuconorite; *lt* – leucotroctolite; *um* – undivided ultramafic and melanocratic mafic rocks; *ma* – meta-anorthosite/meta-leucogabbro; *osy* – oxide-rich syenite; *ran* – recrystallized and fine-grained anorthosite; *sln* – streaky-foliated oikocrystic leuconorite; *spk* – speckled leuconorite

Giant orthopyroxene (intercumulus, rounded individuals and multi-crystal aggregates) prominent in outcrop; locations so designated have pyroxene on the tens-of-centimetre to metre scale

Mineral occurrences (*py* – pyrite; *po* – pyrrhotite; *cp* – chalcopyrite; *pent* – pentlandite; *il-m* – ilmenite and/or magnetite)

Gossan zone, area displaying several separated gossan zones

Breccia zones (outcrop area of plutonic rocks having numerous angular blocks of older rock, or older rock pervasively fragmented by networks of younger dykes)

Mineral lineation, showing plunge

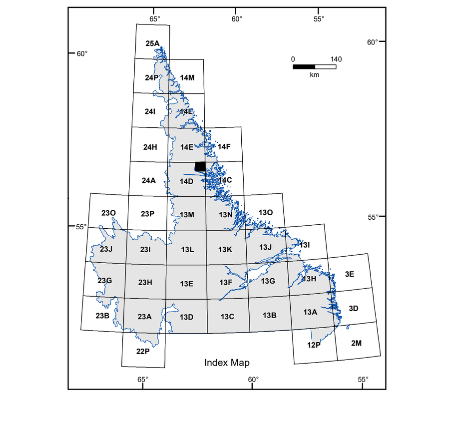
Small-folds of layering (symmetry and plunge, open or unspecified, isoclinal)

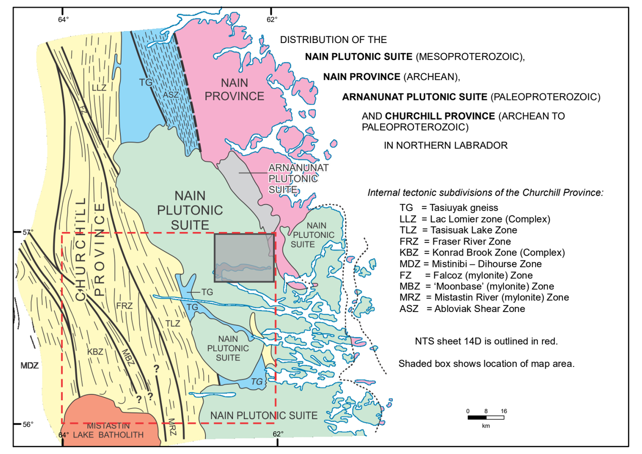
Antiform, synform

Age determination site (U-Pb ages, in millions of years; see Note 7)

Localized lenses of ultramafic rocks southeast of Maligiak (NTS 14D/9)

NOTE:
Notes reflecting ancillary aspects encountered during field work and map assembly are available as a separate document released with this map.





Geology compiled by B. Ryan, interpreted mainly from helicopter-supported regional mapping by B. Ryan and D. James in 2003. A full listing of the data sources from which the final map has been constructed is provided in Note 1 of accompanying notes (see separate document).

GIS/digital cartography by K. Morgan.

Base map in digital format published by Geomatics Canada, Earth Sciences Sector, Natural Resources Canada, Ottawa.

Approximate magnetic declination at centre of map (2015 model): 22˚54' west, decreasing 16' annually.

Elevations in feet above mean sea level. Contour interval 100 feet.

Universal Transverse Mercator (UTM) projection Zone 20.

North American Datum (NAD) 1927.

Open File # 014D/16/0340 (includes notes for map users as separate document).

Copies of this map may be obtained from Geoscience Publications and Information, Geological Survey, Department of Natural Resources, Government of Newfoundland and Labrador, P.O. Box 8700, St. John's, NL, Canada A1B 4J6 [pub@gov.nl.ca]

Department Website: http://www.nr.gov.nl.ca/nr
Geological Survey Website: http://www.nr.gov.nl.ca/nr/mines/Geoscience/

This map is subject to revision and modification.

Published 2018.

MAP 2018-04

GEOLOGICAL MAP OF THE KINGURUTIK LAKE AREA, (NTS 14D/16)

0 1 2 3 4
km

Note
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