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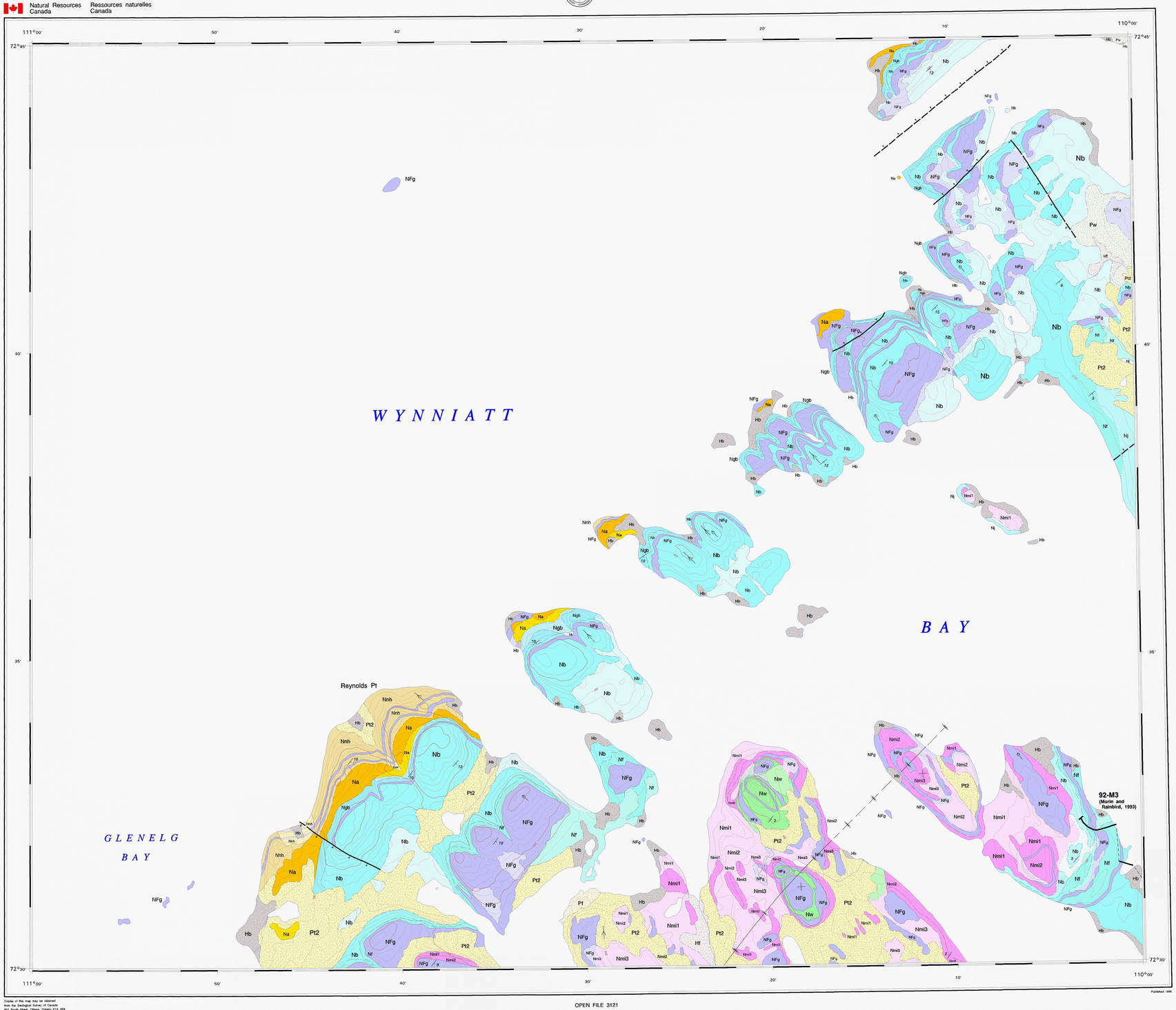

Published 1995

Copies of this map may be obtained from the Geological Survey of Canada
601 Booth Street, Ottawa, Ontario K1A 0E8
3303-33rd Street, N.W., Calgary, Alberta T2L 2A7

LOCATION MAP

Canada

Bedrock geology compilation by R.H. Rainbird.
Surficial geology compilation by D.A. Hodgson.
Additional mapping by G. Green, J. Morin and C.W. Jefferson.
Logistical support provided by Polar Continental Shelf Project, and their operators

Digital cartography by Louis P. Renaud, Geological Survey of Canada

Electrostatic plot produced by the Geological Survey of Canada

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

OPEN FILE 3121

BEDROCK AND SURFICIAL GEOLOGY

REYNOLDS POINT

DISTRICT OF FRANKLIN

NORTHWEST TERRITORIES

Scale 1:50 000 - Échelle 1/50 000

Kilometres 1 0 1 2 3 4 Kilometres

Transverse Mercator Projection
CM 110°00', Scale Factor 1
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Projection transverse de Mercator
MC 110°00', facteur d'échelle 1
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Digital base map from Surveys, Mapping and Remote Sensing Branch published at 1:250 000 scale. Generalized and modified by the Geological Survey of Canada

Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Natural Resources Canada, Ottawa, Ontario, K1A 0E9

The proximity of the North Magnetic Pole causes the magnetic compass to be erratic in this area.
Mean magnetic declination 1995, 38°24' E, decreasing 47.7' annually.
Readings vary from 37°17' E in the SE corner to 39°27' E in the NW corner of the map

Elevations in feet above mean sea level

78 B/12	78 B/11 OF 3121	78 B/10
78 B/5 OF 2920	78 B/6 OF 2921	78 B/7 OF 2781
78 B/4 OF 3111	78 B/3	78 B/2 OF 3035

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

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3121
GEOLOGICAL SURVEY OF CANADA
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OTTAWA
08/1995

LEGEND

CENOZOIC (Hodgson, 1993)

HOLOGENE

Hf — *FLUVIAL DEPOSITS: gravel and silty sand; channel, floodplain, delta and terrace deposits; 1 to 10 m thick*

Hb — *RAISED BEACH DEPOSITS: bouldery to silty sand over till, rubbly to silty gravel over rock; single ridges shown by symbol; a few cm to several m thick*

PLEISTOCENE

Pw — *GLACIOMARINE DEPOSITS: silt or fine sand; massive to finely laminated deposits with scattered dropstones; commonly gullied; deposited adjacent to major glacial meltwater outlets; 1 to 20 m thick*

Pf — *GLACIALFLUVIAL DEPOSITS: bouldery to gravelly sand; knolls of hummocky complexes deposited in subglacial or englacial environment; proglacial floodplains, deltas and fans; marine deltas may include massive to stratified sand or silt beds up to 20 m thick; 1 to 20 m thick*

Pt2 — *Victoria Island till: stony loam; commonly shows lineations on air photos, some fields of spindle drumlins; deposited by continental glacier, possibly late Wisconsinan maximum; includes till veneer too thin to mask underlying bedrock relief; <1 to 10 m thick*

unconformity

NEOPROTEROZOIC

723+4/-2 Ma (U-Pb baddeleyite; Heaman et al., 1992)

NFg — *Franklin igneous Event-diabase/gabbro sills; differentiation sequence in sills: olivine-phyrootic cumulates, plagioclase-olivine cumulates, plagioclase-olivine-clinopyroxene cumulates, plagioclase-clinopyroxene-cumulates, plagioclase-clinopyroxene-pigeonite cumulates,± granophyre*

intrusive contact

SHALER SUPERGROUP (Nnh-Nw) (Rainbird et al., 1994)

Nw — *WYNNIATT FORMATION: divisble into three informal intergradational members, in ascending stratigraphic order. Member 1 (w1): interlaminated dolosiltite and dololutite with desiccation features. An overlying unit contains metre-scale cycles consisting of rhythmically-laminated dolosiltite overlain by oolitic dolarenite, intraformational breccia and stromatolitic dolostone. Member 2 (w2): thin- to thick-laminated black, rusty-weathering mudstone/siltstone with minor quartzarenite and dolosiltite interbeds at top. Desiccation cracks near top and base. Member 3 (w3): coarsening upward sequence of dolomitic siltstone and sandstone overlain by a stromatolitic biostrome. Fine-grained microbial laminites and carbonaceous limestones occur at the top of the member*

Nmi — *MINTO INLET FORMATION: five cyclically alternating informal members: lower evaporite (mi1), lower carbonate (mi2), middle evaporite (mi3), upper carbonate (mi4) and upper evaporite (mi5). Evaporite members: laminated to thin bedded and cross-laminated white gypsite and grey anhydrite, red gypsiferous siltstone and buff to grey calcisiltite. Chickenwire, nodular anhydrite and crosscutting satinspar veinlets common in gypsiferous siltstone units. Rip-ups and intraclast beds are common. Rare halite molds and desiccation cracks in calcisiltite. Carbonate members: grey to buff-grey laminated to thin bedded to massive dolosiltite and fine dolarenite. Hummocky cross-bedding and laterally linked stromatolites in mi1*

REYNOLDS POINT GROUP

Nj — *JAGO BAY FORMATION: interbedded yellow-weathering, cross-bedded quartzarenite, parallel-laminated and mudcracked dolosiltite/magnesilitite and dololutite. Distinctive, yellow-weathering stromatolite composed of both laterally-linked and digitate forms with abundant inter-columnar quartz (form genus of. Anacolella_) occurs within 10 m of base of formation*

Nf — *FORT COLLINSON FORMATION: medium-bedded, fine- to medium-grained quartzarenite and dolomitic quartzarenite with common herringbone cross-bedding and subordinate sub horizontal planar stratification to low angle cross-bedding. Locally glauconitic*

Nb — *BOOT INLET FORMATION: cyclically alternating cold grainstone, stromatolitic dolostone and dolosiltite rhythmite megnaflenite (Morin and Rainbird, 1993). Quartzarenite absent from base of formation (by definition) but becomes gradually more abundant toward top*

Ngb — *GRASSY BAY FORMATION: basal mudstone unit of variable thicknees (increasing westward), which coarsens abruptly upward to fine- to medium-grained, planar-tabular cross-bedded quartzarenite. Top defined by sporadic erosional unconformity overlain by fining upward succession of hummocky cross-bedded quartzarenite, parallel-bedded dolosiltite and parallel-laminated dololutite*

RAE GROUP

Na — *AOK FORMATION: cream-coloured and orange-brown-weathering sideritic to ankeritic dolostone composed of upright to fanning digitate columnar (elongate in plan) stromatolites. In some areas comprises two biostromes of similar thickness that are separated by wavy laminated dolosiltite and dololutite*

Nnh — *NELSON HEAD FORMATION: fine- to medium-grained, small- to moderate-scale planar-tabular cross-bedded, white to light pink quartzarenite interbedded with thin (<1m) intervalsitons of red ripple cross- laminated to parallel-bedded siltstone and very fine quartzarenite. Top is parallel to planar hummocky cross-bedded fine-grained pink to green glauconitic quartzarenite passing gradationally upward into wavy to parallel-laminated grey dolosiltite interbedded with dark siltstone*

Subdued tones - Surficial veneer: includes till veneer (Pt1) too thin to mask underlying bedrock relief and talus beneath which bedrock map units can be inferred with confidence

Geological boundary (defined, approximate, inferred)

Fault trace (defined, inferred; solid circle indicates downthrown side)

Lineament (from air photograph)

Synclinal axial surface trace (defined, approximate)

Measured stratigraphic section (referenced) — 92-M3 (Morin and Rainbird 1993)

Stratigraphic section tie line

Bedding orientation with dip

Rock drumlin with inferred ice-flow direction

Striae

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CANADA-NWT
MINERAL INITIATIVES
1991-1996

Canada CANADA-GNWT ECONOMIC DEVELOPMENT AGREEMENT

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