The project area straddles the northern margin of the Trans-Hudson Orogen on Baffin Island (Lewry and Collerson, 1990; Foxe Fold Belt). The orogenic margin extends west onto Melville Peninsula (Fig. 1) and is correlated to the east with the Rinkian Belt in Greenland (Taylor, 1982; Hoffman, 1988). On Baffin Island, the Foxe Fold Belt is flanked to the worth by the Archean Rae Province (Fig. 1) and to the south by the Cumberland batholith (Fig. 2). The main nological assemblage consists of the Piling Group (Fig. 2), which comprises a thin lower sequence of mark quartzite, schists, and minor iron-formation of platformal facies, and an upper sequence of ferrugenous pelites overlain by a large volume of wacke turbidites interpreted as foredeep flysch (Morgan et al., 1976; Henderson et al., 1988; Jackson, 2000). Mafic volcanic rocks have been recognized within the Piling Group (Bravo Lake Formation) and storically interpreted as mafic and ultramafic flows and sills intercalated with the lower sequence of the Piling G ippett, 1980; Henderson et al., 1988; Henderson and Henderson, 1994). Archean basement is interpreted to o rth of the Piling Group as well as in antiformal culminations in the SSE region of the project area, near Dewar L organ 1983; Henderson and Henderson 1994). New observations outlined below suggest, however, t oportion of what had been initially interpreted as Archean basement in the Flint Lake and MacDonald River area nay in fact include Proterozoic intrusions. The following sections outline the results of new geological mapping in 000, described sequentially from north to south, or from lowermost to highest exposed structural levels.

ECTONOSTRATIGRAPHIC UNITS

Archean basement/Paleoproterozoic (units Agn-Agb) chean rocks have previously been interpreted to underlie most of the area north of the Piling Group and to fo nt Lake (OF 3959 and OF 3960). Consequently, areas underlain predominantly by Archean rocks seem to be ricted to a more northern part of the project area (OF 3958 and western portion of OF 3959), where they comprise ite  $\pm$  hornblende quartzofeldspathic orthogneisses of granodioritic to monzogranitic composition (unit Agn; pelitic to psammitic rocks with abundant biotite and melt pods (unit AMp), as well as minor hornblende linopyroxene amphibolite (unit Ama). These rocks extend along strike to the southwest in the Eqe Bay area, where hey have yielded U-Pb zircon ages ranging between 2.84 - 2.71 Ga (Bethune and Scammell, 1997). The orthogneisses and supracrustal rocks are pervasively intruded by massive to strongly foliated plutonic rocks of predominantly biotite monzogranite composition (unit Agr), and by distinct bodies of biotite ± hornblende K-feldspar megacrystic monzogranite and granodiorite (unit Agk). Dykes of hornblende-biotite  $\pm$  clinopyroxene gabbro (unit Agb) cross-cut the biotite monzogranite (unit Agr) northwest and southeast of Lake Gillian (OF 3958 and OF 3959). milar plutonic rocks and dykes in the Eqe Bay area yield Archean ages (ibid.).

Northern Paleoproterozoic plutonic rocks (units Pqd-Pgr) In the Flint Lake area (OF 3959 and OF 3960), as well as in the area of the MacDonald River (OF 3958), the distribution Archean basement is complicated by the presence of biotite-allanite  $\pm$  hornblende monzogranite (unit Pgr; Fig ends to be massive and contain rafts and xenoliths of marble, psammite, quartzofeldspathic orthogneiss hornblende-clinopyroxene-biotite quartz diorite (unit Pqd). Commonly the granite sits structurally above . Unfortunately these field criteria don't always apply, making the distinction between reworked Prote ns and Archean basement less straightforward in some areas. Total field aeromagnetic maps of the Flint L trea (W. Miles, GSC; unpublished data) seem to indicate a rough correlation between areas of potential Archean assement and regions of high magnetic anomalies (see also Jackson, 2000, p. 231). This may provide a useful tool to lace additional constrains on the extent of exposed basement. Systematic sampling for U-Pb geochronology (N. odicka, GSC) and tracer isotope geochemistry, as well as reconnaissance gamma-ray spectrometry measurements . Ford, GSC) were undertaken this summer in order to further define areas underlain by basement versus oterozoic plutonic rocks in the northern portion of the project area. A unique map-scale feature observed in the northern portion of the project area, especially around Flint Lake ( 1959 and OF 3960), is a marked spatial association between Proterozoic plutons (unit Pgr) and garnet-biot uscovite  $\pm$  tourmaline pegmatite, which occurs in abundance in aureoles surrounding the plutons. These aureole e a few kilometres thick and consist of numerous, discontinuous pegmatite sills injected in the Piling Grou etasedimentary rocks. The pegmatites, as well as the metasedimentary rocks, are structurally concordant with n outlines and suggest the presence of abundant fluids in the immediate metasedimentary wallrock during pl pplacement. Similar pegmatites as the ones described here have been observed along strike, east of the map are d have been interpreted as the potential product of shear heating at the interface between Archean basement ar

sp). This past summer, other potential basement inliers were identified south and east of Nadluardjuk Lake (OF 60 and OF 3961). They consist of migmatitic orthogneiss and banded gneiss of predominantly felsic composition hat are separated from the Longstaff Bluff Formation by a narrow (few tens of metres) unit of banded quartzite, meta-irkose, silicate-facies iron formation and amphibolite, interpreted as Dewar Lakes Formation (see also Henderson et

Piling Group (units PPD-PPB) The Piling Group is continuously exposed from the Flint Lake area (OF 3959 and OF 3960) to approximately the uthern limit of the project area (68° N; OF 3961), as well as in narrow bands between MacDonald River and Flint e (OF 3958). In the Flint Lake area, a lower sequence consists of muscovite schist and quartzite intercalate r Iron-formation (Dewar Lakes Formation; unit PPD), overlain by dolomitic and calcareous marble (Fig. 6 silicate metasedimentary rocks and minor chert (Flint Lake Formation; unit PPF). An unner sequence cons cate metasedimentary rocks and minor cnert (Fiint Lake Formation; unit PPF). An upper sequence consis assemblage of black pelite (Fig. 7), ferruginous psammites, and sulfide-facies iron-formation (Astarte f on; unit PPA) that is overlain by a thick assemblage (few kilometres?) of thin- to thick-bedded psammite (Fig. eldspathic wacke (Fig. 9), with thin intercalations of semipelite and pelite, and local calc-silicate beds and pods after rbonate concretions (Longstaff Bluff Formation; unit PPLb). Mappable wacke intervals (unit PPLa) in the Long f Formation contain euhedral to slightly rounded, medium-sized feldspar crystals and rounded blue quar well as fine-grained, angular, lithic fragments of supracrustal origin. The association of equidimentional euhedral depathic grains and rounded blue quartz suggests derivation, at least in part, from felsic volcanic rocks (Corrigan et Rocks from the lower sequence are mostly found in the Flint Lake area (OF 3959 and OF 3960). However, a relatively thin apron of siliciclastic and chemical sediments that include garnet-biotite schist, quartzite, arkose with sillimanite-quartz nodules (faserkiesel) and iron-formation occurs between the structural culminations cored by potential Archean gneisses (unit Agn) and the psammites of the Longstaff Bluff Formation (units PPLs and PPLg) in the southern portion of the map area (OF 3961). Henderson and Henderson (1994) interpreted a similar association in the ewar Lakes area (NTS 27 B) as part of the lower sequence. Mafic to ultramafic volcanic and intrusive rocks and associated sedimentary units occur in an east-west corridor at extends from Straits Bay, to and beyond Western River (Fig. 2). In the area investigated this summer, this packag

tified beneath some of the mafic klippen (H. Helmstaedt, pers. com.). This assemblage, measuring up to of metres in thickness, contains centimetre- to metre-size blocks of mafic, ultramafic, carbonate, granite and mer as part of an M.Sc thesis study on the structural elements of the project area (F. Berniolles; Queen's Western River (Dewar Lakes area; NTS 27 B) and named Bravo Lake Formation (unit PPB) by Tippett (1984). In the Dewar Lakes area, amphibolite, hornbiendite and ultramafic bodies of the Bravo Lake Formation have been interpreted as sills emplaced in the lower sequence of the Piling Group by Tippett (ibid.), Henderson et al., (1988, 1989) and Henderson and Henderson (1994). Field work next summer, as well as a trace and major element geochemical study presently in progress, will test the correlation between the volcanic rocks preserved in the set of

open west and east of Nadluardjuk Lake (OF 3960 and OF 3961) and the intrusive bodies in the Dewar Lakes area nd form part of a Ph.D. thesis study on the petrology and petrogenesis of the Bravo Lake Formation by S. Southern Paleoproterozoic plutonic rocks (units PCgk-Pggr) have different relative ages than the Paleoproteorozic plutons mapped to the north in the Flint Lake area and scribed above. Field relationships suggest that plutons which we correlate with the Cumberland batholith o main mafic phases (up to 25 %). Garnet is locally present, mostly near contacts with aluminous metasedimen tons of the Cumberland batholith contain enclaves of foliated and folded migmatitic metasedimentary rocks of t Longstaff Bluff Formation (unit PPLg), suggesting that the latter was being deformed and metamorphosed prior to r during intrusion by the batholith. Plutons of the Cumberland batholith are themselves intruded by whitish to edium-grained to pegmatitic garnet-biotite  $\pm$  muscovite  $\pm$  cordierite leucogranite dykes and pl

ggr). The leucogranites (Fig. 14) form several major bodies in the southern region of the map area, the largest on hich are in close spatial association with the Cumberland batholith (OF 3961). As explained below in the etamorphic section, field evidence suggests that the leucogranites are entirely derived from partial to total melting on ling Group metasedimentary rocks. Small bodies of massive, pink, exfoliated, biotite syeno- and monzogranite it PCgr) are also found in the southern region of the map area. They were observed cross-cutting the leucogranites

lowest metamorphic grade in the map area is upper-greenschist facies and it is characterized by biotite-musco emblages in pelitic beds of the Longstaff Bluff Formation (unit PPLb). The grade increases both northwards athwards from there, with highest pressure-temperature conditions being reached in the southern part of the area, where uppermost-amphibolite to incipient granulite facies assemblages occur. To the north, metamorph conditions reach middle-amphibolite facies at most. With increasing regional metamorphic grade, the Longstaff Bli mation acquires biotite-muscovite-cordierite  $\pm$  andalusite assemblages (melt pods absent) in the more pe ayers (unit PPLc). The first appearance of melt is noticed along a roughly eastwest isograd south of Nadluardjuk Lake OF 3960) in pelitic beds of the Longstaff Bluff Formation (unit PPLs) and appears to be produced by the reaction nuscovite + plagioclase + quartz = sillimanite + K-feldspar + melt (see Spear, 1993, p. 368; and references therein). Approximately 10 kilometres further south, along an isograd that is roughly parallel to the one above (D.M. Carmichael, pers. com.), breakdown of biotite is observed through the vapor-absent reaction biotite + sillimanite + = garnet + cordierite + K-feldspar + melt (see Spear, 1993, p. 368; and references therein). This reaction tually leads to production of large quantities of melt (unit PPLg) and we would suggest ultimately the product et ± cordierite bearing granitic plutons (unit Pggr). The spatial relationship between the Cumberland bath to be a considered by the constant of the comber o the highest metamorphic grades observed in the Longstaff Bluff Formation (unit PPLg), together valuement of the garnet  $\pm$  cordierite leucogranites (unit Pggr), suggests that heat input by advection lacement of the Cumberland batholith, played an important role in the tectonothermal evolution of this re illar, southward increase in metamorphic facies has also been reported east of the map area in the Dewar Lake ion (Jackson and Morgan, 1978; Tippett, 1984; Henderson et al., 1988). The field and laboratory study o etamorphic mineral reactions and assemblages in pelitic units of the Piling Group form part of an ongoing Ph.D. Towards the north, metamorphic grade in the Piling Group gradually increases from greenschist to upper amphibolite facies, with K-feldspar-sillimanite-melt pod assemblages observed in metapelitic cover rocks located between Flint Lake and the MacDonald River. Corresponding assemblages in marble of the Flint Lake Formation (unit PPF) consist of tremolite-calcite-quartz  $\pm$  diopside  $\pm$  dolomite, with the presence of the latter two phases dependant on bulk rock composition. The study of metamorphic mineral assemblages in the Flint Lake Formation marbles is part of an ongoing B.Sc. thesis study by S. Gagné (Université du Québec à Montréal). In the Archean basement rocks, the assemblages hornblende-plagioclase ± clinopyroxene in rocks of mafic composition (unit AMa) and biotite-melt pod ± sillimanite ± garnet in rocks of pelitic composition (unit AMp) also indicate middle- to upper-amphibolite facies conditions. The fact that granitic plutons, similar to those yielding Archean ages in the Eqe Bay area (Bethune and Scammel, 1997), cross-cut folded migmatitic fabrics in the basement pracrustal rocks suggests that at least part of the upper-amphibolite facies metamorphic assemblage is Archean he Eqe Bay area, the age of Archean metamorphism and Proterozoic overprint is constrained at pre-

part of the map area yield ca. 1.81 Ga ages (Henderson and Henderson, 1994), suggesting later

egional deformation along the northern margin of Trans-Hudson Orogen on Baffin Island can be separated into fo The earliest (D<sub>1A</sub>) is an Archean-age deformation event that was accompanied by middle hism (see above) and produced a strong transposition fabric in plutonic and supracru nent. The original orientation and strain distribution of this tectonothermal event is partitioned Proterozoic reworking and is best observed locally, where late-Archean intrusions (e.g. units A ut high-grade fabrics preserved in the older units (see also Bethune and Scammell, 1997). ne overlying lower sequence Piling Group, a number of low-angle repetitions of the Dewar Lakes and Flint Lake nations (OF 3959 and OF 3960) attest to an early (D<sub>1P</sub>) Proterozoic-age thin-skinned deformation event. D<sub>1P</sub> thrust ibrication of the upper sequence Piling Group is more difficult to document due to the absence of regional atigraphic markers within the Longstaff Bluff Formation, but it is nonetheless suggested by the presence of sharp, d by a flat-ramp geometry, suggestive of a thrust contact. The D<sub>1P</sub> event was both accompanied and outlive gional metamorphic conditions, as suggested by the growth of peak metamorphic minerals. Emplacement of t umberland batholith must have occurred during D<sub>1P</sub> since the two-mica leucogranites (unit Pggr) which are stentially derived by partial melting of the Piling Group metasedimentary rocks, and are in part spatially associated the Brayo Lake Formation. Cumulatively, D., therefore encompasses early Cumberland batholith, intrude the Bravo Lake Formation. Cumulatively,  $D_{1P}$  therefore encompasses enbrication of the Dewar Lakes and Flint Lake formations, folding (and imbrication?) of the Astarte Rive taff Bluff formations, overthrusting of the Bravo Lake Formation and emplacement of the Cumberland batholi The second Proterozoic event  $(D_{2p})$  was largely coaxial with  $D_{1p}$  and involved folding of the Archean base thick-skinned deformation). It produced predominantly EW trending map-scale tight to isoclinal, uprig tly north-vergent reclined and recumbent folds with shallow, doubly-plunging axes. Garnet-muscovite-biotite naline pegmatites associated with the emplacement of biotite granite (unit Pgr) along the northern margin of th Group crosscut the  $D_{1p}$  fabric and yet show evidence of transposition and boudinage. The foliation observed in title granite is parallel to the  $D_{2p}$  axial-planar foliation developed in the folded Piling Group metasedimentar. bined, these observations suggest that emplacement of the granite and associated pegmatite overlap oup cover and map-scale folds of the Archean basement in the north part of the project area (OF 3958). nmon deformation event involving both basement and cover is supported by monazite, which yields similar U-Pb es in pegmatites within the Piling Group sedimentary rocks (ca. 1.81 Ga; Henderson and Henderson, 1994); in orked Archean basement gneiss inliers (ca. 1.81 Ga; ibid.); and in reworked Archean gneisses immediately to the of the present map area (ca. 1.82 Ga; Bethune and Scammell, 1997). A question that remains is the absolute etween (1) the emplacement of the Cumberland batholith, (2) high-grade metamorphism of the Piling Government of the porthern biotite granite and (4) regional December 1. The last deformation event of regional importance (D<sub>sp</sub>) resulted in orogen-perpendicular, large-wavelengt pht, open folds of all previously described Paleoproterozoic and Archean units. These folds interfere with F uce the current dome and basin map pattern in the project area. This fold interference is responsible fo ) gneiss-cored domes in the southern portion of the transect (OF 3961) and to the southeast (Henderson e 988, 1989) and for the preservation of the Bravo Lake Formation in synformal basin structures or klippen (th F<sub>3P</sub> folds do not appear to have been accompanied by new metamorphic mineral growth. The

margin by F. Berniolles (M.Sc. thesis; Queen's University) and 3D structural modeling by E. de Kemp (GS

Figure 5. Biotite-allanite monzogranite (unit Pgr) overlying

and emplaced into quartzite and muscovite of the Dewar Lakes Formation (unit PPD).

is two metres in height. Location shown on O

(Bravo Lake Formation; unit PPB). Pen is 14 centimetres long. Location shown on OF 3960.

ere is potential in the central Baffin area for different types of mineralization, including Pb-Zn in the platformal rbonates of the Flint Lake formation; Ni-Cu-Co-PGEs in the layered mafic-ultramafic sills of the Bravo Lake Formation; omalies were reported in the regional lake sediment geochemical survey (Friske et al., 1998), in close associatio bedrock exposure of the Longstaff Bluff formation. Evidence for sulphide remobilization in the axial planes of s in the Astarte Lake Formation was observed, suggesting potential mineral concentration during this deformatio yered mafic/ultramafic sills of the Bravo Lake Formation have an identical age, within error er sill in Manitoba (N. Wodicka, pers. com.), and are associated with sulphidic metasediments, providing a cont entially similar to that of the Raglan deposit in the Cape Smith Belt. Although Henderson and Henderson (19 ribute little economic interest to these sills, it should be noted that occurrences of disseminated and mas ulphides (Fig. 15) were noted in the Bravo Lake Formation during the course of systematic field work in 2000. Thes occurrences will form part of a metallogenic and petrogenetic M.Sc. thesis study by J. Stacey (University of Calgary).

NEOPROTEROZOIC DIABASE DYKES an and Flint Lake (OF 3958, OF 3959, and OF 3960). A second group occurs southeast of Straits Bay (OF 3950) and OF 3961). The dykes vary in width from tens of metres to approximately 200 meters and are near vertical. Locally they anastomose. Dykelets a few metres in width (Fig. 16) are locally observed branching from the larger intrusions. he dykes generally exhibit a brown-weathered surface and the larger ones, a rectangular joint pattern.

Bethune, K.M. and Scammell, R.J. 97: Legend and descriptive notes, Koch Island area, District of Franklin, Northwest Territories, (Part of NTS 37 C); Geological Survey of Canada, Open File 3391.

1986: Regional geochemical reconnaissance, an introduction to the interpretation of data from central Baffin Island, District of Franklin; Geological Survey of Canada, Paper 86-10, 22p. in press: Geology of the northern margin of the Trans-Hudson Orogen (Foxe Fold Belt), central Baffin Island, Nunavut; in Current Research, Winter Release; Geological Survey of Canada Paper, in press. de Kemp, E.A., Corrigan, D., and St-Onge, M.R.

press: Evaluating the potential for 3D structural modeling of the Archean and Paleoproterozoic rocks of Central Baffin Island, Nunavut, Canada; In Current Research, Winter Release; Geological Survey of Canada Friske, P.W.B., Day, S.J.A., McCurdy, M.W., and Durham, C.C. 1998: Reanalysis of 1775 lake sediments from surveys on central Baffin Island, Nunavut (Northwest Territories parts of NTS 27 B, 27 C, 37 A and 37 D; Geological Survey of Canada, Open File 3716, scale 1:300,000. Henderson, J.R., and Henderson, M.N.

994: Geology of the Dewar Lakes area, central Baffin Island, District of Franklin, N.W.T. (parts of 27 B and 37 A); Geological Survey of Canada, Open File 2924, scale 1:100,000. Henderson, J.R., Grocott, J., Henderson, M.N., Falardeau, F., and Heijke, P. 1988: Results of field work near Dewar Lakes, Baffin Island, N.W.T.; in Current Research, Part C; Geological Survey of Canada, Paper 88-1C, p. 101–108.

Henderson, J.R., Grocott, J., Henderson, M.N., and Perreault, S. 1989: Tectonic history of the Lower Proterozoic Foxe-Rinkian Belt in central Baffin Island, N.W.T.; in Current Research, Part C; Geological Survey of Canada, Paper 89-1C, p. 186-187.

1988: United plates of America, the birth of a craton: Early Proterozoic assembly and growth of Laurentia. Annual Reviews of Earth and Planetary Sciences, v. 16: 543–603. 969: Reconnaissance of north-central Baffin Island; *in* Report of Activities, Part A; Geological Survey of Canada, Paper 69-1, pt. A, p. 171-176. McBeth Gneiss Dome and associated Piling Group, central Baffin Island, District of Franklin; in Rubidium-Strontium Isotopic Age Studies, Report 2, (ed.) R.K. Wanless and W.D. Loveridge; Geological Survey of

984: Geology, Clyde River, District of Franklin, Northwest Territories; Geological Survey of Canada, Map 582A, with expanded legend and brief marginal notes, scale 1:250,000. D: Geology of the Clyde-Cockburn Land map area, north-central Baffin Island, Nunavut. Geological Survey of Canada Memoir 440, 303 p. '972: Correlation of major Aphebian rock units in the northeastern Canadian Shield. Canadian Journal of Earth Sciences, v. 9, p. 1650–1669.

Jackson, G.D., and Morgan, W.C. 1978: Precambrian metamorphism on Baffin and Bylot Islands; *in* Metamorphism in the Canadian Shield (ed.) J.A. Fraser and W.W. Heywood; Geological Survey of Canada, Paper 78-10, p. 249-267.

1983: Lake Gillian, District of Franklin, Northwest Territories; Geological Survey of Canada, Map 1560A, scale Morgan, W.C., Bourne, J., Herd, R.K., Pickett, J.W., and Tippett, C.R. 1975: Geology of the Foxe Fold Belt, Baffin Island, District of Franklin; in Report of Activities, Part A; Geological Survey of Canada, Paper 75-1A, p. 343–347.

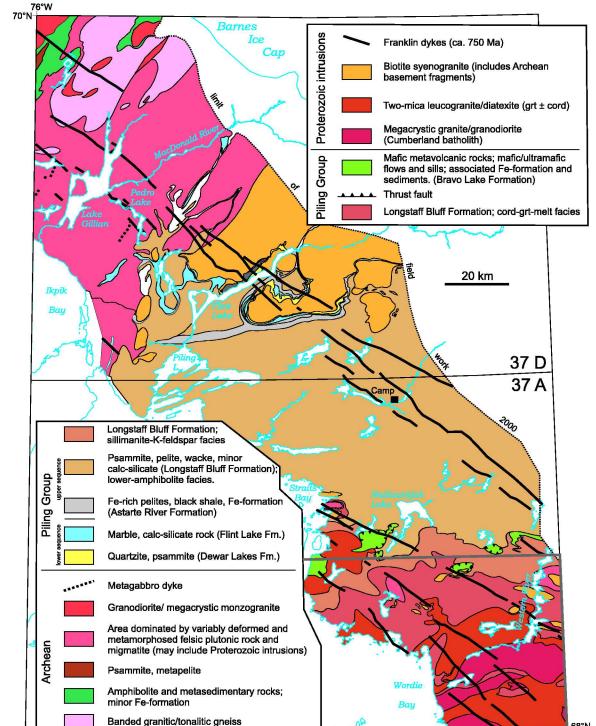
Morgan, W.C., Okulitch, A.V., and Thompson, P.H. 976: Stratigraphy, structure and metamorphism of the west half of the Foxe Fold Belt, Baffin Island; in Report of Activities, Part A; Geological Survey of Canada, Paper 76-1A, p. 387-391. 1993: Metamorphic phase equilibria and Pressure-Temperature-Time paths; Mineralogical Society of America Monograph no. 1, 799 p.

1982: Precambrian Geology of the Canadian North Borderlands; *in* Geology of the North Atlantic Borderlands (ed.) J.W. Kerr, A.J. Fergusson, and L.C. Machan; Canadian Society of Petroleum Geologists, Memoir 7,

1980: A geological cross-section through the southern margin of the Foxe Fold Belt, Baffin Island, Arctic Canada, and its relevance to the tectonic evolution of the northeastern Churchill Province; PhD. thesis, Queen's University, Kingston, Ontario, 409 p.

Thelon Orogen Trans-Hudson Orogen Continental magmatic arcs Island arcs / oceanic crust Anorogenic intrusions Cover sequences Continental shelf / foredeep prisms the Trans-Hudson Orogen. Red box outlines location and surface extent of three-year mapping project in

Figure 1. Geological map of northeastern Canada modified after Wheeler et al. (1996) outlining the surface extent of



Banded granitic/tonalitic gneiss Figure 2. Generalized bedrock geology of the project area along transect mapped in 2000 in central Baffin Island (after Corrigan et al., in press). Gray outline shows map area.

1996: Geological Map of Canada; Geological Survey of Canada, Map 1860A, scale 1:5 000 000.

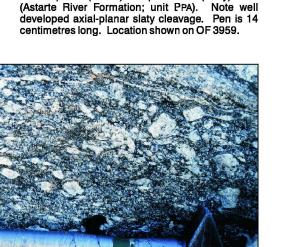
1985: Geology of a Transect through the southern margin of the Foxe Fold Belt, Central Baffin Island, District of Franklin; Geological Survey of Canada, Open File 1110; 77 p. Wheeler, J.O., Hoffman, P.F., Card, K.D., Davidson, A., Sanford, B.V., Okulitch, A.V., and Roest, W.R.

Figure 6. Shallowly-dipping calcareous marble of the Flint Lake Formation (unit PPF). Person is two metres in

Figure 12. Regularly bedded semipelite (Bravo Lake Formation; unit PPB). Pen is 14 centimetres long. Location shown on OF 3960.

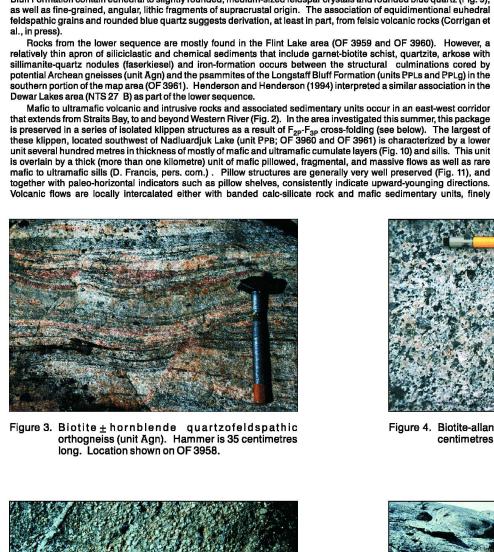
height. Location shown on OF 3959.

developed axial-planar slaty cleavage. Pen is 1



ammer is 35 centimetres long. Location shown

(Longstaff Bluff Formation; unit PPLb). Hammer is 35 centimetres long. Location shown on OF 3960.





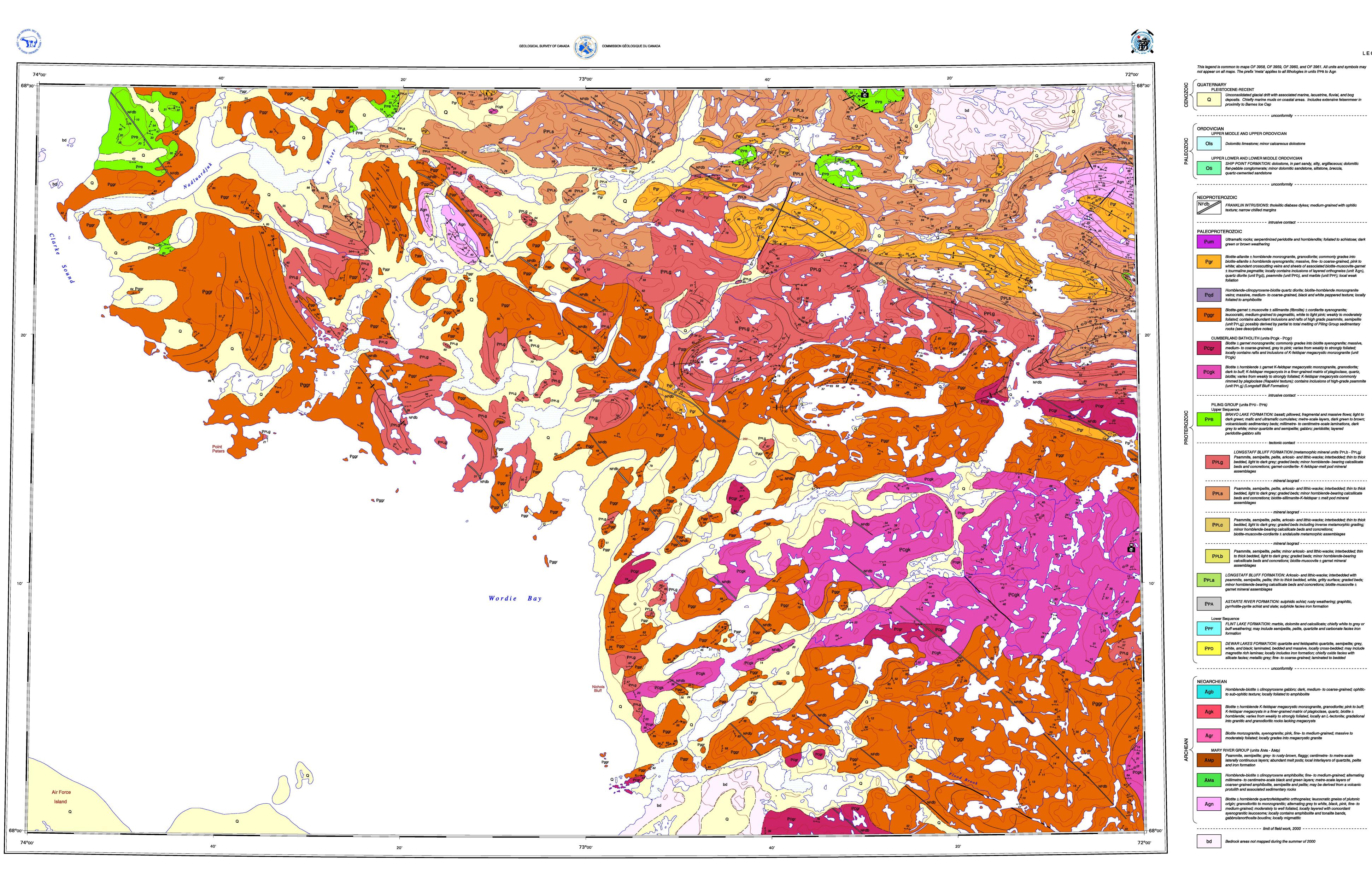
(unit PPB). Pocket knife is 8.5 centimetres long. Location shown on OF 3961.

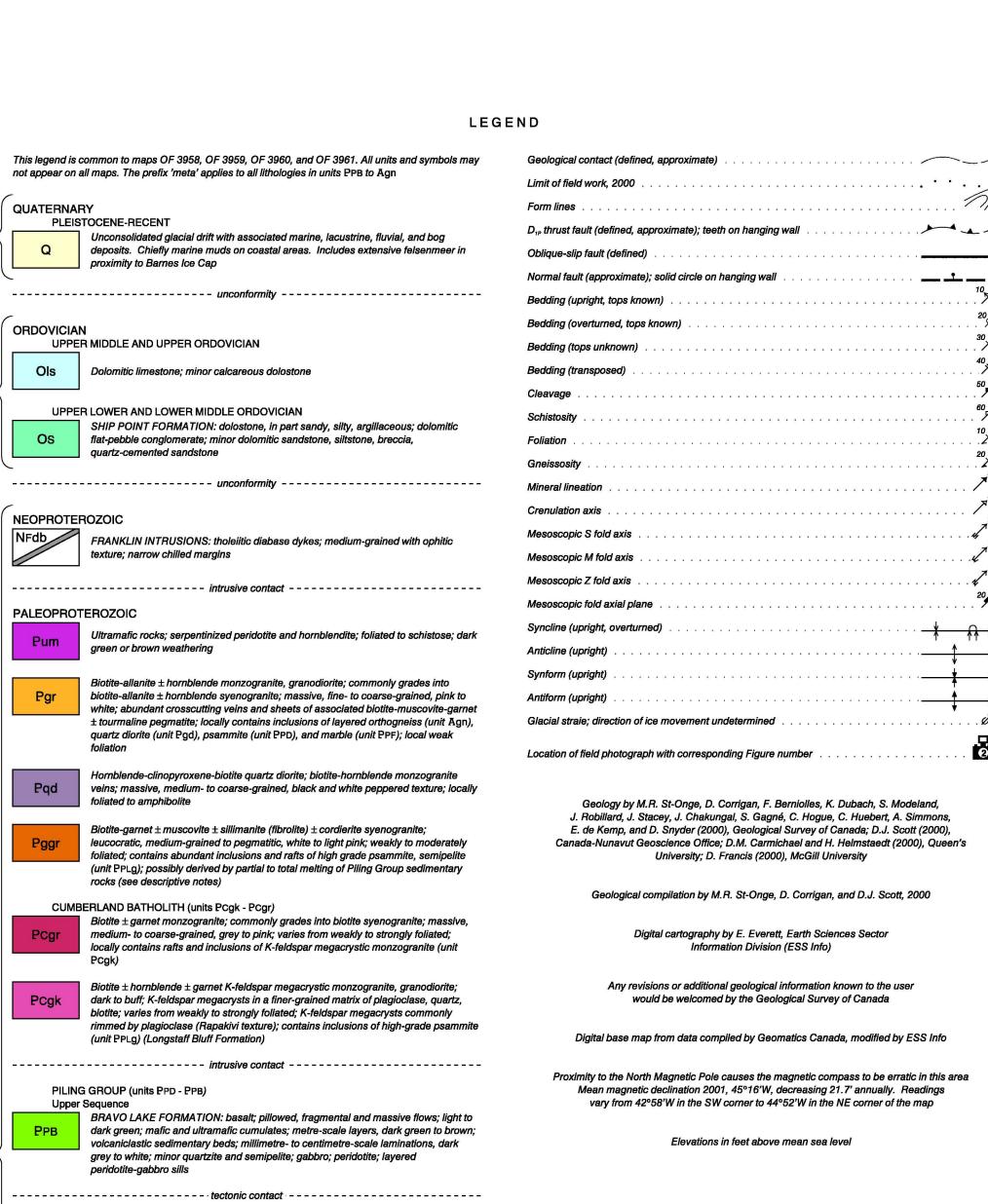
Figure 16. Franklin intrusion diabase dyke (unit NFdb Hammer is 35 centimetres long. Location shown on OF 3960.

Figure 4. Biotite-allanite monzogranite (unit Pgr). Pen is 14

centimetres long. Location shown on OF 3960.





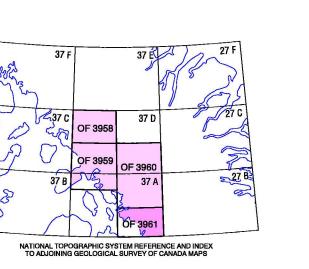


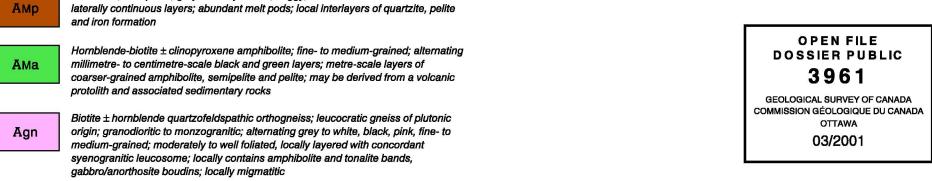
**OPEN FILE 3961 GEOLOGY** 

Scale 1:100 000/Échelle 1/100 000

Universal Transverse Mercator Projection Projection transverse universelle de Mercator North American Datum 1983 Système de référence géodésique nord-américain, 1983 ©Her Majesty the Queen in Right of Canada, 2001 ©Sa Majestéla Reine du chef du Canada, 2001







unconformity - -

--- limit of field work, 2000 ------

