



Preliminary Map Number: PMAP2003-2

## Geology of the Blueberry Lake Area, Manitoba (part of NTS 63K14NW)

### Legend

#### PRECAMBRIAN (Proterozoic)

#### POST 1.88 Ga INTRUSIVE ROCKS

- 5 Granodiorite, granite; quartz diorite, tonalite, minor diorite
  - (a) Granodiorite, granite, minor pegmatite and aplite
  - (b) Quartz diorite, tonalite, minor diorite and granodiorite
  - (c) Quartz-feldspar porphyry
  - (d) Leucotonalite and quartz-feldspar porphyry, garnet-bearing

#### 1.85 to 1.83 Ga MISSI GROUP

- M Quartzofeldspathic gneiss of sedimentary and volcanic origin

#### 1.92 to 1.87 Ga VOLCANIC, INTRUSIVE AND SEDIMENTARY ROCKS (AMISK COLLAGE)

#### INTRUSIVE ROCKS

- 4 Gabbro, pyroxenite
  - (a) Gabbro, minor hornblende
  - (b) Pyroxenite

#### VOLCANIC AND SEDIMENTARY ROCKS OF JUVENILE ARC AFFINITY

- J3 Sedimentary rocks of probable exhalative origin
  - (a) Chert

- J2 Rhyolite, dacite and felsic porphyry
  - (a) Rhyolite, massive to fragmental
  - (b) Quartz-feldspar porphyry
  - (c) Dacite tuff or flow, garnet-bearing

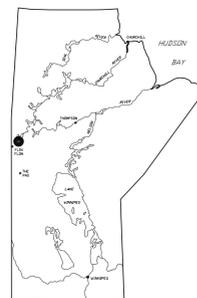
#### J1 Basalt, related fragmental and intrusive rocks; derived amphibolite and gneiss

- (a) Aphyric basalt and derived gneissic rocks; related gabbro
- (b) Gabbro
- (c) Aphyric and pyroxene-phyric pillowed basalt
- (d) Monolithic volcanic breccia
- (e) Heterolithic volcanic breccia
- (f) Plagioclase-phyric basalt
- (g) Amphibolite, mafic gneiss and schist
- (h) Amphibolite, garnet-bearing
- (i) Diorite of metasomatic origin

#### VOLCANIC ROCKS OF TRANSITIONAL ARC-MORB-LIKE AFFINITY

#### T1 Basalt, mafic tuff and related intrusive rocks; derived amphibolite and gneiss

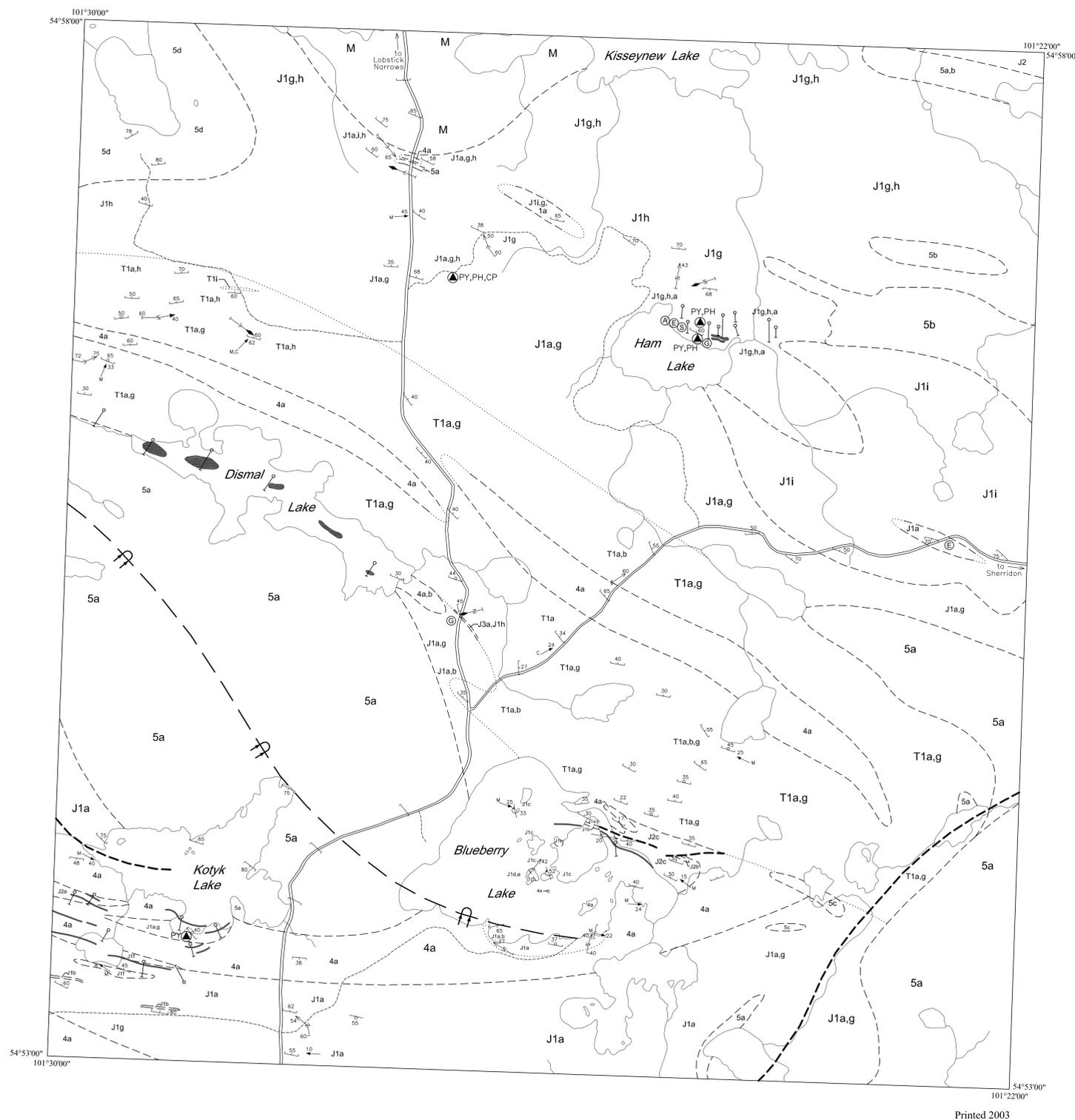
- (a) Aphyric basalt and derived gneissic rocks; related gabbro
- (b) Gabbro
- (c) Mafic tuff
- (d) Amphibolite, mafic gneiss and schist
- (e) Amphibolite, garnet-bearing



Geology by: H.P. Gilbert (2001, 2003)  
Cartography by: Mark Timcoe

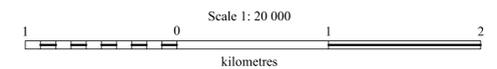
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This map is a provisional summary of work carried out during the summer field season and is printed directly from the geologist's manuscript. It is not to be regarded as a final interpretation of the geology of the area.



### Symbols

- |  |  |  |  |
|--|--|--|--|
|  | Pillows: tops known overturned, tops unknown |  | Geophysical anomaly (EM)                                 |
|  | Bedding, tops known                          |  | Gravel road  |
|  | Foliation                                    |  | Trail  |
|  | Pillow flattening                            |  | Diamond-drill hole                                       |
|  | Axial trace of overturned synform            |  | Mineralization   |
|  | Fold axis: inclined, vertical                |  | Pyrite   |
|  | S, Z and symmetrical folds                   |  | Chalcopryrite  |
|  | Axial plane: inclined, vertical              |  | Pyrrhotite   |
|  | Mineral lineation                            |  | Gossan   |
|  | Microcrenulation                             |  | Epidotization  |
|  | Stretch lineation (deformed amygdale)        |  | Silicification   |
|  | Geological contact: approximate, assumed     |  | Calcium metasomatism (abundant amphibole porphyroblasts) |
|  | Fault, inferred                              |  |  |



#### NOTES:

1. Contacts of granitoid rock units in the area northeast of Blueberry Lake are partly after Kalliokoski (1949).
2. The contact between the Missi Group and amphibolitic rocks at the north margin of the map is after Zwanzig et al. (1995).
3. Horizontal loop electromagnetic anomalies (HLEM) and diamond-drill hole locations south of Kotyk Lake are based on data in Manitoba Industry, Trade and Mines, Assessment Files 90400, 90401, Winnipeg. Airborne INPUT EM anomalies and diamond-drill hole locations at Blueberry Lake are from Assessment File 93337, Manitoba Industry, Trade and Mines. HLEM and diamond-drill hole locations at Dismal Lake and Ham Lake are reproduced with the permission of Aur Resources Inc. and Foran Mining Corp.

#### REFERENCES:

Gilbert, H.P. 2003: Geological investigations in the northern Flin Flon Belt, Manitoba (parts of NTS areas 63K13NE and 14NW); in Report of Activities 2003, Manitoba Industry, Economic Development and Mines, Manitoba Geological Survey, p. 9-21.

Kalliokoski, J. 1949: Weldon Bay; Geological Survey of Canada, Map 1020A; scale 1 inch = 1 mile, with marginal notes.

Zwanzig, H.V., Schledewitz, D.C.P. and Ashton, K.E. 1995: Geology, Flin Flon Belt-Kisseynew Belt transition zone, Manitoba-Saskatchewan; Manitoba Energy and Mines, Geological Services, Open File OF94-5; Geological Survey of Canada, Open File 3054; Saskatchewan Energy and Mines, Saskatchewan Geological Survey, Open File Report 95-1, scale 1:100 000.

#### SUGGESTED REFERENCE:

Gilbert, H.P. 2003: Geology of the Blueberry Lake area, Manitoba (part of NTS 63K14NW); Manitoba Industry, Economic Development and Mines, Manitoba Geological Survey, Preliminary Map PMAP2003-2, scale 1:20 000.