Geoscientific Map: MAP2002-1

Geology of the Baker Patton Complex Flin Flon, Manitoba

(parts of NTS areas 63K 12, 13)

LEGEND

Younger Intrusions and Intrusions of Unknown Age

- 31 Diatreme
- 30 Granodiorite to quartz diorite, medium grained
- 29 Gabbro and diorite, medium to coarse grained
  a) intrusion breccia
- 28 Gabbro and dolerite, fine to medium grained
- 27 Diabase, fine grained
- 26 Quartz feldspar porphry
  a) medium to coarse grained
  b) Leo Lake tonalite

Sourdough Bay Block

Undivided Rocks

- 25 Felsic sandstone and tuffaceous sandstone, garnetiferous
- 24 Basalt flows and volcaniclastic rocks, aphyric and plagioclase phyric, intruded by pyroxene-phyric dikes

Birch Bay Mafic Rocks

- 23 Basalt
  a) volcaniclastic rocks
  b) amygdular flows
- 22 Volcaniclastic rocks and basalt
  a) heterolithic mafic and felsic sandstone, grit and conglomerate
  b) heterolithic mafic sandstone and conglomerate
  c) mafic tuffaceous sandstone
  d) basalt flows and volcaniclastic rocks

Baker Patton Complex

- 21 Felsic intrusion, fine to medium grained, includes rafts of volcanic rocks
- 20 Quartz-feldspar porphyry
- 19 Felsic intrusion, fine grained
- 18 Bryan Lake rhyolite, quartz and feldspar phyric, massive
  a) quartz phyric
  b) intrusion breccia
  c) altered
- 17 Rhyolite dikes
  a) aphyric
  b) quartz and feldspar phyric
  c) quartz phyric
  d) quartz and feldspar phyric clastic dikes with accidental rock fragments
- 16 Epiclastic sedimentary rocks
  a) sandstone, mudstone and rhyolite pebble conglomerate
  b) sandstone and mudstone
  c) felsic rock derived, in part heterolithic
  d) quartz-rich tuffaceous sandstone
  e) mafic rock derived, in part heterolithic
- 15 Felsic fragmental rocks, 5-10% quartz and feldspar
- 14 Birch Bay rhyolite, quartz phenocrysts, up to 1 cm
- 13 Baker Patton rhyolite
  a) predominantly ash- and lapilli-sized fragments, 5-20% bimodal-sized quartz phenocrysts
  b) massive and fragmental rocks, 5-10% quartz phenocrysts
  c) quartz-feldspar phyric dikes/sills
- 12 Rhyolite
  a) >6% quartz phenocrysts, 1-4 mm
  b) 3-5% quartz phenocrysts, up to 2 mm
- 11 Rhyolite, 2-3% quartz phenocrysts, up to 2 mm
  a) dominantly volcaniclastic rocks
- 10 Rhyolite, 1-2% quartz phenocrysts
- 9 Rhyolite, <1% quartz phenocrysts, 1 mm
  a) Don Jon breccia
  b) Don Jon rhyolite
- 8 Rhyolite, aphyric
  a) rhyolite dike complex
- 7 Dacite
- 6 Andesite
  a) pyroxene bearing
- 5 Basalt

Bakers Narrows Block

- 4 Rhyolite
  a) flows and volcaniclastic rocks
  b) quartz-phyric and aphyric volcaniclastic rocks, locally including numerous quartz and feldspar phyric dikes
- 3 Dacite
- 2 Predominantly andesitic rocks
  a) andesite
  b) andesite and minor basalt
  c) andesite, basalt and minor rhyolite
- 1 Basalt
  a) basalt
  b) basalt and minor rhyolite
  c) basaltic volcaniclastic rocks

Note: Only quartz contents of rhyolitic rocks are noted; metasomatic feldspar is abundant.

SYMBOLS

- Contact (defined, underwater)
- Flow contact, boundary
- Fault
- Brittle-ductile shear
- Late subvertical fault
- Early subvertical fault
- Early ductile shear zone
- Direction of shear
- Outcrops
- Bed (inclined, vertical)
- Foliation (S1)
- Foliation (S2)
- Top determination, top uncertain
- Stratification (indistinct layers, flow organization)
- Fragment elongation
- Trench
- Limit of detailed mapping
- Road
- Trail
- Swamp boundary
- Cutlines, grid

Unit Modifiers

bx - breccia	m - massive
cc - carbonate	mt - magnetite
fd - flow banded	p - pillowed
fx - fine matrix	py - pyrite
hb - heterolithic breccia	rw - rusty weathered
js - jasper	sil - silicification
lo - lobes and pods	v - vesicular
lb - lapilli-breccia	vh - highly vesicular/pumiceous

Mineral Deposits and Occurences

1. North Star mine	10. Bryan occurence
2. Don Jon mine	11. Road occurence
3. Pine Bay mine	12. North Star Road occurence
4. Cabin zone	13. Birch occurence
5. Baker Patton zone	14. Birch Bay occurence
6. Lew zone	15. Sourdough zone
7. Amulet zone	16. Hotstone zone
8. Alberts zone	17. Wally zone
9. Flintoba occurence	18-25. Py ± Po occurences

- Mineral deposit and occurence
- Mineralized zone and occurence
  - stratabound massive-sulphide deposit
  - chemical-sediment deposit
  - vein
  - disseminated mineralization
- Visible alteration sulphide ± chlorite

Scale 1:10 000

0.5 0 0.5 1

kilometres

* unofficial place name

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Cartography by: M.E. McFarlane

Suggested Reference: Gale, G. H. and Dabek, L. B. 2002: Geology of the Baker Patton Complex, Flin Flon, Manitoba (parts of NTS areas 63K 12, 13); Manitoba Industry, Trade and Mines, Manitoba Geological Survey, Geoscientific Map MAP2002-1, scale 1:10 000.

Manitoba Industry, Trade and Mines
Manitoba Geological Survey