

Approximate mean declination (1993) for the centre of the map is 7°49' E, decreasing 9.3" annually.
 Scale 1:250 000
 Printed 1993

LEGEND

PHANEROZOIC

Paleozoic

Silurian

Interlake Group

SEA East Arm Formation (5-8m): dolomite, light to dark grey, finely crystalline, containing argillaceous/arenaceous marker beds

SA Atkameg Formation (3-7m): dolomite, buff orange, fine- to medium-crystalline, massive, vuggy, may contain fossils

SFB.M.L. Fisher Branch and Moose Lake formations (10-15m): dolomite, light brown to tan, fine- to medium-crystalline, fossiliferous, stromatolitic, containing argillaceous/arenaceous marker beds

Ordovician

OSM.S. Story Mountain (Ordovician) and Stonewall (Ordovician and Lower Silurian) formations (40-7m): dolomite, yellow-brown, gray to dark brown, finely crystalline, sparsely fossiliferous, mottled to nodular (SM), several thin argillaceous marker beds (S)

ORR Red River Formation (39-45m): dolomite, buff to brown, fine- to medium-crystalline, in part fossiliferous, mottled, upper part is an argillaceous dolomite with minor breccia beds (Fort Garry Member)

PRECAMBRIAN

TRANS-HUDSON OROGEN

FLIN FLON VOLCANIC BELT AND KISSENEW GNEISS COMPLEX

Paleoproterozoic

Intrusive Rocks

X Pegmatite

R Quartz-feldspar porphyry

G Gneissic granite, granodiorite, tonalite; Gn - gneissic magnetiferous, microcline augen granite, locally garnetiferous; Gf - magnetiferous leucogranite; Gm - gneissic leucogranite, anastatic derivative of W

T Tonalite; Tn - gneissic tonalite, commonly garnetiferous

Gd Granodiorite, gneissic granodiorite, granite; 1: 1834-6/6 Ma; 2: 1641 ± 4 Ma (Wekusko granite); 3: 1832-4/3 Ma (Fox Lake pluton)

E Enderbite

D Diorite-gabbro, quartz diorite, granodiorite, granite

B Gabbro, diorite, quartz diorite

U Metapyroxenite

Rocks of Unknown Genesis

H.N. Magnetiferous tonalitic gneiss (Herbert Lake gneiss dome complex); 4: 1890-8/6 Ma

Continental Assemblage (Misal Group, etc.)

uSq Protoquartzite, siliceous paragneiss

uVt Felsic tuff and breccia, flows; 6: 1832 +/-2 Ma

uV Mafic metavolcanic rocks

uA Amphibolite

K Calc-silicatic gneiss; amphibolite; siliceous metasediments

Felsic migmatite

uS Greynwacke, derived schist and gneiss, minor arkose, local conglomerate layers; uSt - staurolite-bearing metasilts and pebble conglomerate; uS (patterned) migmatitic biotite gneiss; S - (patterned) quartzofeldspathic migmatitic gneiss

uC.C. Polymictic conglomerate

Turbidite Assemblage (File Lake Formation/ Burntwood River Metamorphic Suite)

W Greynwacke, siltstone, mudstone and derived gneiss; 6: 1850-1687 Ma; W - (patterned) garnet-bearing migmatitic gneiss

Arc Assemblage (Flin Flon Assemblage)

uVt Felsic metavolcanic rocks, derived gneiss

uVt Tholeiitic mafic flows and volcanoclastic rocks, related intrusions; metamorphic derivatives

Back Arc Assemblage (Athapuskow Lake Assemblage)

uV Mafic volcanic rocks of MORB affinity and related mafic and ultramafic intrusive rocks

SUPERIOR PROVINCE

SUPERIOR BOUNDARY ZONE, PIKWITONEI DOMAIN, GOOS LAKE DOMAIN, MOLSON LAKE DOMAIN

Pegmatite, apatite

Gneissic magnetiferous microcline augen granite, locally garnetiferous; Gm - gneissic leucogranite, anastatic derivative of W

Foliated to gneissic granodiorite-leucotonalite, pegmatite, minor granite, locally migmatite

Diabase, gabbro dyke (Molson swarm)

Ospwagan Group

Metabasalt, amphibolite

Quartz-rich siltstone, ferruginous shale and phyllite, iron formation, minor greynwacke

Proterozoic and Archean

Garnet-bearing migmatitic gneiss

N - felsic gneiss; Nx - with abundant pegmatite and apatite; N - (patterned) migmatitic gneiss of tonalitic-granodioritic composition, commonly strongly layered; N' - (patterned) migmatitic quartzofeldspathic gneiss

Archean

Granite; Gx - pegmatitic granite, pegmatite, locally rare element enriched; Gp - peristerite granite; Gr - sericite to pegmatitic red granite (Jerppeg Complex)

Granodiorite-tonalite; Gb - biotite granodiorite gneiss, most tonalite gneiss; Ga - augen gneiss; Gc - megacrystic biotite granodiorite-gneiss; 7: 2684 +/- 2 Ma (Jerppeg Complex); Gd - porphyritic granodiorite with inclusions of anorthositic and gabbro (Jerppeg Complex)

Megacrystic tonalite-granodiorite (Jerppeg Complex)

Clearwater Bay Complex

Leucocratic biotite granodiorite

Augen tonalite

Cross Lake Group and Similar Rocks

S Quartz-plagioclase-biotite gneiss; Sx - biotite gneiss ± garnet ± sillimanite ± pyroxene; c.S.B - arkose pebbly sandstone, metasediment and derived gneiss ± garnet (Cross Lake Group); c.S.M - granitized sandstone and pebbly sandstone (Cross Lake Group)

C Conglomerate; c.C - pebble cobble conglomerate (Cross Lake Group); c.Cx - conglomerate intruded by pegmatitic granite and pegmatite (Cross Lake Group)

W Metagreywacke (Cross Lake Group)

Gumpoint Group

Greywacke, siltstone

Gneissic opalite

Granite (Playgreen Complex); P-GH - with inclusions of gabbro and anorthosite (Playgreen Complex)

Enderbitic gneiss and enderbite, locally garnetiferous; minor opalitic gneiss; Eg - garnet-bearing enderbite gneiss

Leucocratic granofels, minor granite; pT - isooclase biotite tonalite-granodiorite, in part porphyritic (Playgreen Complex); pTh - with inclusions of anorthosite and gabbro (Playgreen Complex); pTn - tonalitic gneiss (Playgreen Complex); pTa - augen tonalite (Playgreen Complex); pTnTa - augen tonalite (Whiskey Jack Complex)

Tonalitic gneiss, augen gneiss, minor granodiorite gneiss, tonalite; commonly with numerous mafic inclusions; Tn - megacrystic tonalite-granodiorite with inclusions of anorthosite and gabbro; Tl - well layered, tonalitic gneiss

Intermediate biotite-hornblende gneiss

Ni Hornblende porphyroblastic biotite-hornblende gneiss (retrogressed mafic granulite)

Garnet-pyroxene (hornblende) gneiss and granofels, mafic granulite

Anorthositic gabbro; B - porphyritic leucogabbro

Anorthosite

Pipestone Lake Group and Similar Rocks

A Layered amphibolite (Pipestone Lake Group); A - amphibolite, pyroxene amphibolite; Ad - garnet-dioptide amphibolite

Mafic volcanic rocks (Pipestone Lake Group); V - metabasalt, minor anorthositic metabasalt

References for U-Pb zircon ages:
 1, 3, 4, 5 © Gordon, et al., 1990
 2, 6 © David, et al., 1993
 7 © Davis, 1992

SYNOPSIS GEOLOGY by: A. H. Balles, M. T. Corkery, J. J. Macik, R. K. Bezys and C. R. McGregor

Compilation by D. Lindal

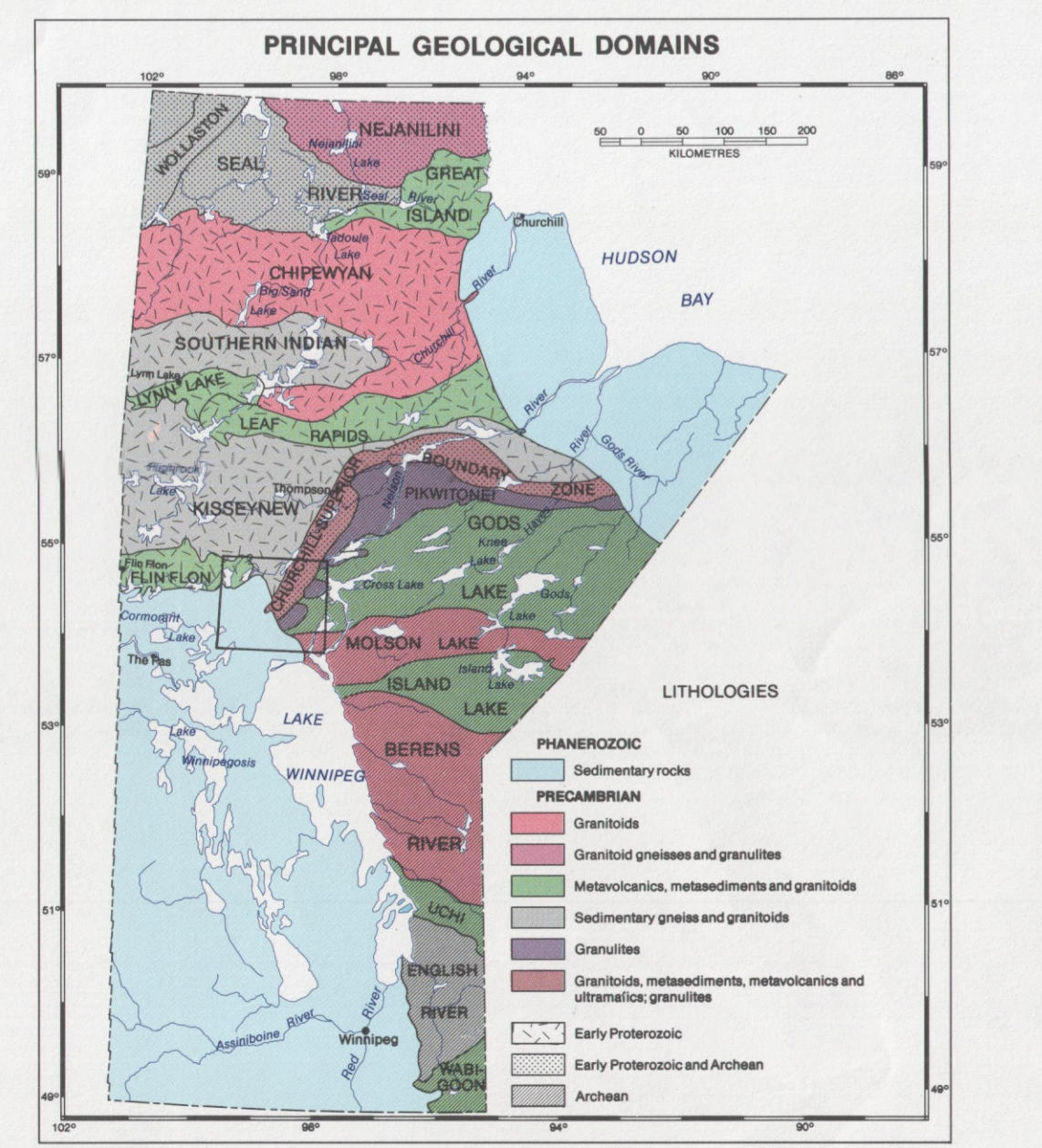
Cartography by T. Franceschet

Suggested reference to this publication:
 Manitoba Energy and Mines, 1993: Bedrock Geology Compilation Map Series, Preliminary Edition, Wekusko Lake, NTS 63J, 1:250 000.

This map is a provisional compilation based, in part, on preliminary geological maps. It is not to be regarded as a final interpretation of the geology of the area.

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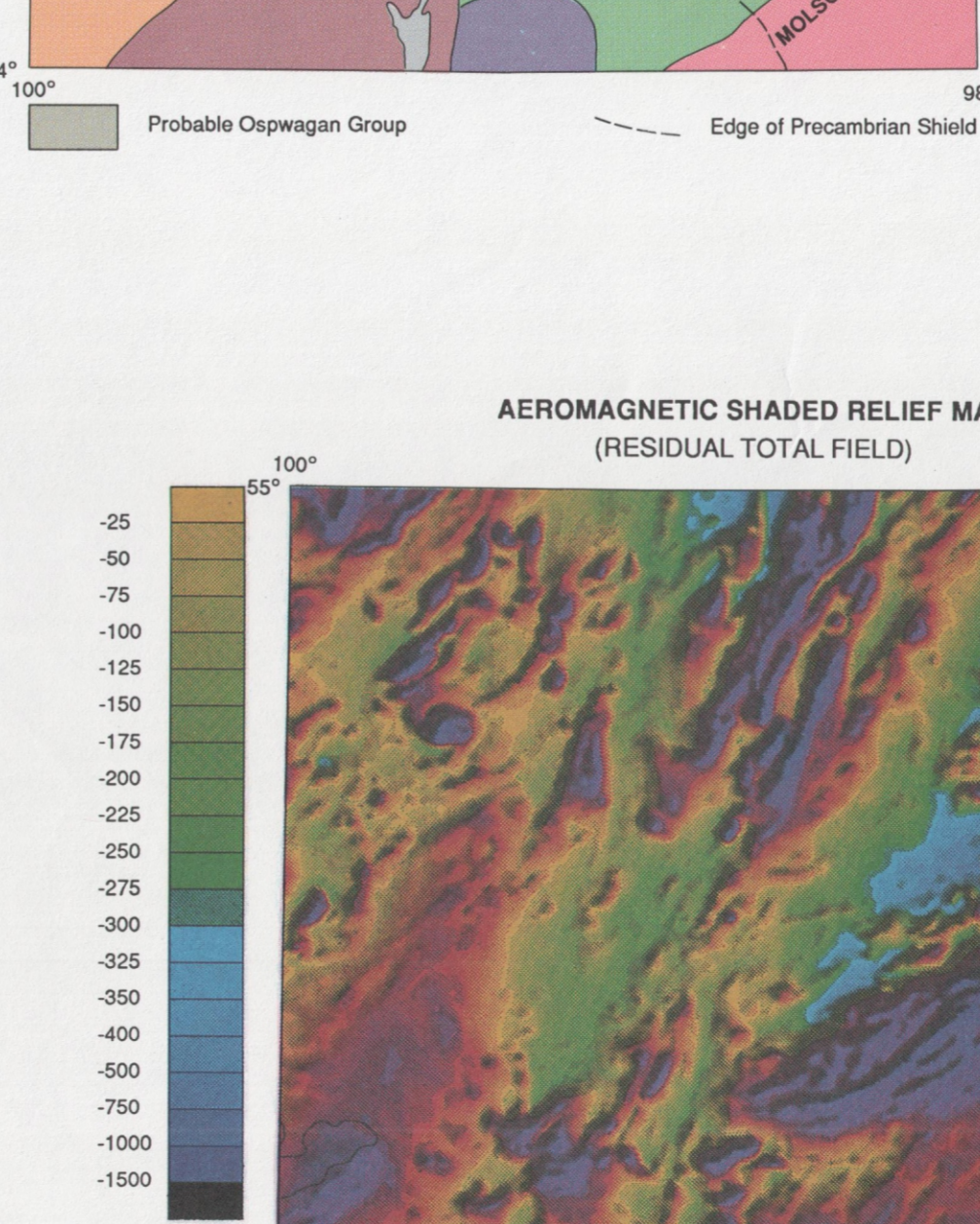
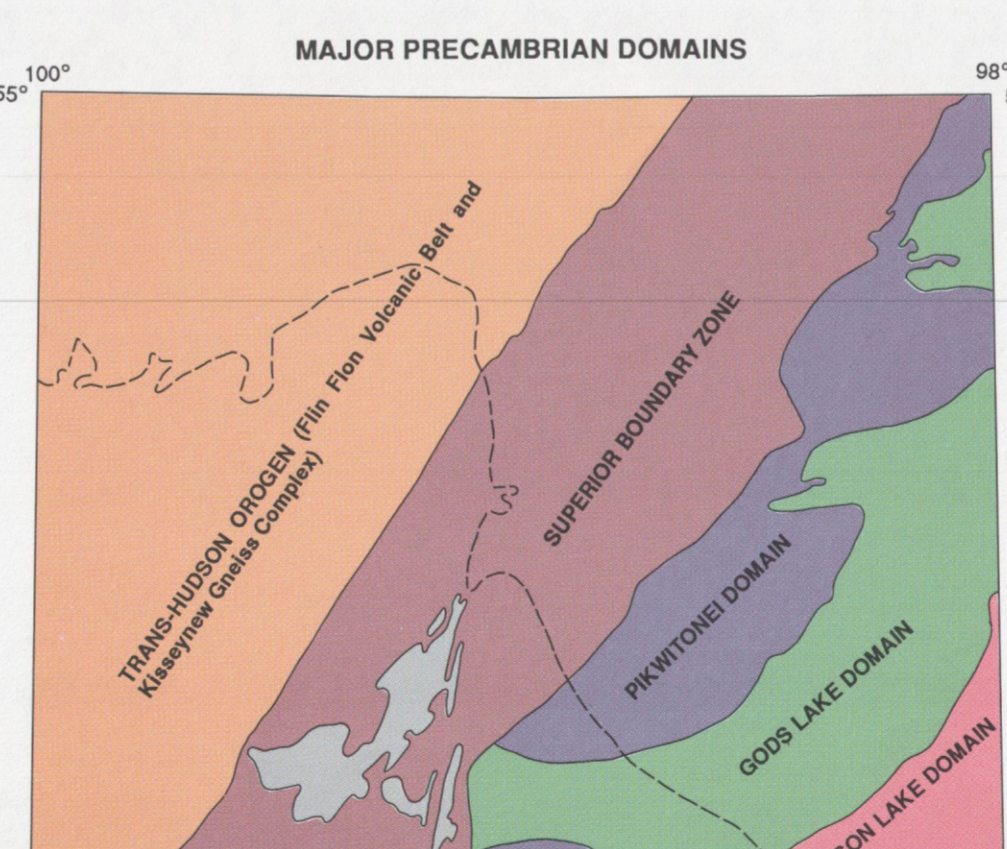
MINERAL OCCURRENCES

Name	Commodity
1. STALL LAKE	Cu, Zn, Au, Ag
2. Rod No. 1	Cu, Zn, Au, Ag
3. Rod No. 2	Cu, Zn, Au, Ag
4. Anderson Lake	Cu, Zn, Au, Ag
5. Osborne Lake	Cu, Zn, Au, Ag
6. Linda-McKaysell	Zn, Cu, Ag
7. A. Minago River (Reservation 34, Area 1)	Ni, Cu, Pb, Ag, Au
8. Rine Island	Ni, Cu, Pt, Pd, Zn
9. Kiskittoo	Au, Ag
10. Laguna (Rex)	Au, Ag, Cu
11. Ferro-Rainbow-Gold Dust	Au, Cu, Ag, PGM
12. Bingo	Au, Ag
13. Talbot-Moose Lake	Ni, Cu, Pb, Zn, Cu
14. Cyclone (Sask-Man)	Pt, Au, Cu
15. Ferguson (Miss 1)	Au, U
16. Manbridge	Ni, Cu, PGM
17. Bucko	Ni, Cu
18. Residing Lake North	Ni, Cu
19. Copper-Man	Zn, Cu, Au, Ag, Pd
20. Bowden	Ni, Cu
21. Discovery	Ni
22. Apex	W, Au, Cu
23. McCallarty	Au, Ag, Pt, Pd, Zn, Cu, Pb
24. Gamma-Star	U
25. Bar Zone	Zn, Cu, Ag
26. Ruby-Silver-Lead-Zinc	Zn, Pb, Ag
27. Arctic-Tag	Ni, Cu, Pt, Au
28. Minago River North	cs/ls
29. Minago River South	cs/ls
30. Talbot-Moose Lake	cs/ls
31. Ponton	cs/ls
32. Ponton Northeast	cs
33. Sunday Lake East	cs/ls
34. Sunday Lake	cs/ls
35. Wekusko North	cs/ls/ls
36. Snow Lake	cs/ls
37. Wekusko Lake: Munro 1	cs/ls
38. Wekusko Lake: Munro 2	cs/ls
39. Violet Group	U
40. Li Group (Green Bay)	U
41. Gold Hill	U

COMMODITIES	PROPERTY STATUS
Ag	Silver
Au	Gold
Cu	Copper
Ni	Nickel
Pb	Lead
Pd	Palladium
PGM	Platinum Group Minerals
Pt	Platinum
U	Uranium
W	Tungsten
Zn	Zinc

INDUSTRIAL MINERALS	PROPERTY STATUS
cs	Crushed stone
ds	Dimensional stone
ls	Limestone

Further information is contained in the Mineral Inventory and the Mineral Deposit Series, Manitoba Energy and Mines.



SYMBOLS

- Geological boundary (approximate, estimated, interpreted)
- Fault (defined, inferred, assumed)
- Thrust fault
- Area of sparse or no Precambrian outcrop
- Area of sparse or no Paleozoic outcrop
- Near surface Paleozoic outcrop (overburden less than 3 m)
- Paleozoic outcrop
- Drillhole intersecting ultramafic rocks
- Sample locality for U-Pb zircon age determination
- ORR
- OW