

PUBLICATIONS

PRELIMINARY MAPS

PMAP2005-1	Geology and structure of the Rice Lake area, Rice Lake greenstone belt, Manitoba (part of NTS 52M4 and 52L13) by S.D. Anderson	scale 1:20 000
PMAP2005-2	Bedrock geology of north and central Wintering Lake, Manitoba (parts of NTS 63P5 and 12) by C.O. Böhm	scale 1:25 000
PMAP2005-3	Bedrock geology of Nejanilini Lake, Manitoba (parts of NTS 64P5, 12 and 13) by S.D. Anderson and C.O. Böhm	scale 1:35 000
PMAP2005-4	Quaternary geology of Nejanilini Lake, Manitoba (parts of NTS 64P5, 12 and 13) by G.L.D. Matile	scale 1:35 000
PMAP2005-5	Structural geology of the Mystery–Apussigamasi lakes area, Manitoba (parts of NTS 63P13 and 14) by Y. D. Kuiper	scale 1:35 000
PMAP2005-6	Geology of the Bernic Lake Formation, Tanco mine area, southeastern Manitoba (part of NTS 52L6) by P.D. Kremer	scale 1:10 000
PMAP2005-7	Geology of the Bird River area, southeastern Manitoba (part of NTS 52L5 and 6) by M. Duguet	scale 1:50 000
PMAP2005-8	Geology of the Chrome Property, Bird River Sill, southeastern Manitoba (part of NTS 52L5) by C. Mealin	scale 1:5 000

Manitoba Geological Survey Reports and Maps

Geoscientific Papers

GP2005-2

Scoping study for the hydrothermal iron-oxide copper-gold (IOCG) deposit type in Manitoba: summary of regional investigations / by A.H. Mumin and J.A. Perrin

GP2005-1

Compositions of olivine, augite, orthopyroxene, chromite and plagioclase from the Fox River Sill, northeastern Manitoba (NTS 53M16) / by A.C. Turnock, M. Raudsepp and R.F.J. Scoates

Geoscientific Reports

GR2005-2

Geology of the Black Island area, Lake Winnipeg, Manitoba (parts of NTS 62P1, 7 and 8) / by A.H. Bailes and J.A. Percival

GR2005-1

Structure and geometry of the Paleoproterozoic Ruttan VMS deposit, southwest Rusty Lake belt (NTS 64B5), Manitoba / by S.D. Anderson, C.J. Beaumont-Smith and C.O. Böhm

Open File Reports

OF2004-25 (digital web release only)

Manitoba Kimberlite Indicator Mineral Database (version 3.0) / by G.R. Keller, D.J. Bodgan and G.L.D. Matile (Supercedes OF2004-2)

OF2004-3 to OF2004-24

High-resolution maps of the residual total magnetic field and the first vertical derivative of the magnetic field, Assean Lake area, northern Manitoba (NTS 64 A1, 2, 3, 4, 6, 7, 8, 9, 10 and 54D5, 6) / by M. Coyle, F. Kiss, D. Oneschuk (22 colour maps, scale 1:50 000)

Bedrock Geology Compilation Map Series

NTS 54M

Caribou River (1 full-colour map, scale 1:250 000)

Surficial Geology Compilation Map Series

SG-52E, SG-52L, SG-52M, SG-53D, SG-62F, SG-62G, SG-62H, SG-62I, SG-62J, SG-62K, SG-62N, SG 62O, SG-62P, SG-63A, SG-63B, SG-63C

16 surficial geology maps of southern Manitoba / by G.L.D. Matile and G.R. Keller (colour maps, scale 1:250 000)

Geoscientific Map Series

MAP2005-3

3-D topography of Manitoba / by P. Morin, G.L.D. Matile and G.R. Keller (33" x 59" colour map with accompanying 3-D glasses, scale 1:1 000 000)

MAP2005-2

Geology of the southern Wekusko Lake area, Manitoba (NTS 63J12NW) / by H.P. Gilbert and A.H. Bailes (1 colour map, scale 1:20 000)

MAP2005-1

Geology of the South pit (northwest shoulder), Thompson mine, Thompson, Manitoba (part of NTS 63P12) / by J.J. Macek, C.R. McGregor and H.V. Zwanzig (1 colour map, scale 1:200)

MAP2004-1

Geology and tectonostratigraphic assemblages, eastern Sachigo Subprovince, Ontario and Manitoba / by D. Stone, M.T. Corkery, J. Hallé, J. Ketchum, M. Lange, T. Shulski and J. Whalen (1 colour map, scale 1:250 000 with marginal notes)

Stratigraphic Map Series

(Digital web release only)

35 Lower Paleozoic structure and isopach maps / by TGI II Williston Basin Project Working Group, scale 1:1 000 000

Report of Activities 2004

Annual review / by E.C. Syme, p. 1-8.

FLIN FLON-SNOW LAKE

Geological investigations in the northern Flin Flon Belt, Manitoba (parts of NTS 63K13N and 63K14NW) / by H.P. Gilbert, p. 9-23.

Physical description of the 1920 member, Hidden formation, Flin Flon, Manitoba (NTS 63K16SW) / by Y.M. DeWolfe and H.L. Gibson, p. 24-35.

Geological investigations of the platinum group element potential of the Chisel Lake mafic-ultramafic intrusion and other targets in the Flin Flon Belt, Manitoba (parts of NTS 63K16) / by P. Theyer and A.E. Stansell, p. 36-42.

Evaluation of an electromagnetic conductor at Reed Lake, Manitoba, using Enzyme LeachSM analyses of peat bog and lake sediment (NTS 63K10) / by G.H. Gale, p. 43-52.

Activities of the Manitoba Geological Survey's Flin Flon regional office / by T.H. Heine, p. 53-54.

LYNN LAKE-LEAF RAPIDS

Structural analysis of the Lynn Lake greenstone belt, Manitoba (NTS 64C10, 11, 12, 14, 15 and 16) / by C.J. Beaumont-Smith and C.O. Böhm, p. 55-68.

Eden deformation corridor and polymetallic mineral belt, Trans-Hudson Orogen, Leaf Rapids area, Manitoba (NTS 64B and 64C) / by A.H. Mumin and L. Corriveau, p. 69-91.

Enzyme LeachSM and Terrasol LeachSM studies of soils at the MacLellan Au-Ag deposit, Lynn Lake, Manitoba (NTS 64C15) / by G.H. Gale, P. Pawliw and G.T. Hill, p. 92-103.

Rock and spruce-bark analyses in the vicinity of a zone of 'barren sulphide': implications for exploration of the Sheila-Margaret lakes area, Lynn Lake, Manitoba (NTS 64C14) / by G.H. Gale, p. 104-114.

SUPERIOR BOUNDARY ZONE, THOMPSON NICKEL BELT

Northern extension of the Thompson Nickel Belt, Manitoba (NTS 64A3 and 4) / by H.V. Zwanzig and C.O. Böhm, p. 115-119.

Pikwitonei–Snow Lake, Manitoba transect (parts of NTS 63J, 63O and 63P), Trans-Hudson Orogen–Superior Margin Metalotect Project: initial geological, isotopic and SHRIMP U-Pb results / by J.A. Percival, J.B. Whalen and N. Rayner, p. 120-134.

Thompson Nickel Belt Project, Manitoba (part of NTS 63P): geology of the South pit, Thompson mine / by J.J. Macek, C.R. McGregor and H.V. Zwanzig, p. 135-148.

Mafic-ultramafic magmatism of the Bah Lake assemblage, Ospwagan Group, Upper Ospwagan Lake, Manitoba (NTS 63O9) / by H.V. Zwanzig, p. 149-155.

Preliminary geochemical and isotopic results from the Gull Rapids area of the eastern Split Lake Block, north-western Superior Province, Manitoba (parts of NTS 54D5 and 6) / by M.S. Bowerman, C.O. Böhm, R.P. Hartlaub, L.M. Heaman and R.A. Creaser, p. 156-170.

New insights into the structural geology and timing of deformation at the Superior craton margin, Gull Rapids, Manitoba (NTS 54D6) / by M.W. Downey, S. Lin and C.O. Böhm, p. 171-186.

Archean and Paleoproterozoic geology of the northwestern Split Lake Block, Superior Province, Manitoba (parts of NTS 54D4, 5, 6 and 64A1) / by R.P. Hartlaub, C.O. Böhm, Y.D. Kuiper, M.S. Bowerman and L.M. Heaman, p. 187-194.

Structural geology of Assean Lake, Manitoba (NTS 64A1, 2 and 8) / by Y.D. Kuiper, S. Lin, C.O. Böhm and M.T. Corkery, p. 195-200.

Structural geology of the Aiken River deformation zone, Manitoba (NTS 64A1 and 2) / by Y.D. Kuiper, S. Lin, C.O. Böhm and M.T. Corkery, p. 201-208.

FAR NORTH

Preliminary Sm-Nd isotope results from granitoid samples from the Nejanilini granulite domain, north of Seal River, Manitoba (NTS 64P) / by C.O. Böhm, M.T. Corkery and R.A. Creaser, p. 209-215.

SOUTHEASTERN MANITOBA

Preliminary results and economic significance of geological mapping and structural analysis in the Rice Lake area, central Rice Lake greenstone belt, Manitoba (NTS 52M4 and 52L13) / by S.D. Anderson, p. 216-231.

Platinum group element investigations in the area of the Mayville igneous complex, Manitoba (NTS 52L12): exploiting palladium's mobility using humus samples / by P. Theyer, p. 232-235.

Investigation of spruce bark and soil geochemistry at the Poundmaker Au deposit, Bissett, Manitoba (NTS 52M4) / by G.H. Gale and N. Yavorskaya, p. 236-253.

Initial collection of dendrohydrological records to study drought in the Winnipeg River basin, Manitoba / by S. St. George, p. 254-256.

Phytoremediation and revegetation of mine tailings and bio-ore production: progress report on plant growth in amended tailings and metal accumulation in seedlings planted at Central Manitoba (Au) minesite (NTS 52L13) / by S. Renault, C. Szczerski, E. Sailerova and M.A.F. Fedikow, p. 257-261.

SOUTH-CENTRAL MANITOBA

Targeted Geoscience Initiative II – Williston Basin architecture and hydrocarbon potential in southwestern Manitoba and southeastern Saskatchewan: an update / by R.K. Bezys, B. Beauchamp, L.K. Kreis, C.D. Martiniuk, M. Nicolas and S. Whittaker, p. 262-265.

A possible new Mississippi Valley-type mineral occurrence near Pemmican Island in the north basin of Lake Winnipegosis, Manitoba (NTS 63B12 and 13, 63C9 and 16) / by J.D. Bamburak and K. Klyne, p. 266-278.

Study of the surface karst and related features in the Limestone Bay Component of the proposed Manitoba Lowlands national park, Manitoba (NTS 63G6, 11 and 14) — preliminary results / by A.J. Kobylecki and D.J. Bogdan, p. 279-291.

Quaternary mapping progress in southern Manitoba Phanerozoic terrane: 2-D and 3-D / by G.L.D. Matile, G.R. Keller and L.H. Thorleifson, p. 292-300.

Aggregate resources in the Rural Municipality of Grahamdale, Manitoba (NTS 62I13, 62J16, 62O1, 2, 7, 8, 9, 10, 15, 16 and 62P4) / by H.D. Groom, p. 301-308.

MANITOBA GENERAL

Kimberlite potential in Manitoba: an update / by E.C. Syme, R.K. Bezys, D.J. Bogdan, C.O. Böhm, C.A. Kaszycki, G.R. Keller, P.G. Lenton and G.L.D. Matile, p. 309-319.

The Manitoba Kimberlite Indicator Mineral Database: an update / by G.R. Keller and D.J. Bogdan, p. 320-322.

Manitoba's Precambrian Drillcore Libraries Program / by D.E. Prouse, p. 323-325.

**Manitoba Mining & Minerals Convention Speaker Abstracts
Winnipeg, Manitoba, November 18-20, 2004**

Archean orogenic lode gold in the Superior Province of Manitoba: geodynamic setting, metallogenesis and exploration potential / by S.D. Anderson, p. 42.

Assean Lake Gold Project / by J. Christoffersen, p. 42.

Cooperative geological mapping strategies across Canada (CGMS): public geoscience, exploration and development / by S. Hanmer, p. 42.

Cr-diopside (clinopyroxene) as a kimberlite indicator mineral for diamond exploration in glaciated terrains / by D. Quirt, p. 42.

East Wekusko gold belt – an underexplored gold area with structural similarities to the Snow Lake gold belt, northern Manitoba (63J-SE13) / by D.V. Ziehlke, p. 43.

Eskay Mine and the Tahltans / by Chief Jerry Asp, p. 43.

Exploration business and opportunities for Aboriginal communities / by T. Lewis, p. 43.

Exploration for VMS deposits in the Flin Flon area / by K. Gilmore, p. 44.

Exploring the Manitoba Kimberlite Indicator Mineral Database / by C.O. Böhm and G.R. Keller, p. 44.

Geological interpretation of newly acquired high-resolution aeromagnetic data, Assean Lake area, Superior Boundary Zone / by D. Corrigan, T. Corkery, H. Zwanzig, C. Böhm, M. Coyle and P. Lenton, p. 44.

Geological overview: target your exploration / by E.C. Syme, p. 44.

Geology and mineralogy of 1.88 Ga mafic-ultramafic intrusive complexes in the Lynn Lake greenstone belt, Manitoba / by L. Hulbert, p. 45.

Gold metallogeny and exploration potential of the Trans-Hudson Orogen of Manitoba / by C.J. Beaumont-Smith, p. 45.

Hot, thin and mineral-rich – evolution of the Paleoproterozoic Trans-Hudson Orogen in western Canada / by H. Zwanzig, p. 45.

Hudson Bay Lowland Phanerozoic stratigraphy: recent developments / by R.K. Bezys, G.L.D. Matile, and J.D. Bamburak, p. 46.

Indicator mineral methods in mineral exploration / by H. Thorleifson, p. 46.

Iron oxide Cu-Au-U-REE deposits and the prospectivity of pinkstone belts / by L. Corriveau, p. 46.

Kinematics of the Assean Lake and Aiken River deformation zones, Superior Boundary Zone, northern Manitoba / by Y.D. Kuiper, S. Lin, C.O. Böhm and M.T. Corkery, p. 46.

Mineral exploration and the Crown land permitting process in Manitoba / by D. Dunnigan, p. 46.

Mineral exploration and the Fisheries Act / by B. Ross, p. 47.

The Mineral tenure system within an integrated management process / by C. Jones, p. 48.

Musselwhite Aboriginal Agreement / by C. Seeley, p. 47.

North Star gold veins, history and development / by S. Masson, K. Albert, and R. Masson, p. 47.

An overview of Canadian diamond exploration / by E. Thomas, p. 42.

PGE in Manitoba: what's new for 2004 / by Peter Theyer, p. 47.

Rice Lake Gold Corporation – Manitoba's next gold producer / by D. Ginn , p. 47.

Superior margin program news / by C.O. Böhm, M.S. Bowerman, M.W. Downey, R.P. Hartlaub and Y. Kuiper, p. 48.

Tackling the last true northern frontier: towards a modern tectonostratigraphic framework for the western Churchill Province / by S. Pehrsson and the Western Churchill Metallogeny Project team, p. 48.

EXTERNAL PUBLICATIONS

- Bamburak, J.D. 2005: Industrial mineral developments and opportunities in Manitoba 2005; *in* Industrial Minerals 2005, Seventeenth Annual Canadian Conference on Markets for Industrial Minerals, Toronto, Ontario, October 18-19, 2005, Blendon Information Services.
- Beaumont-Smith, C.J. and Böhm, C.O. 2005: Tectonic evolution of the Paleoproterozoic Lynn Lake greenstone belt: structural and isotopic analysis along the northern margin of the Trans-Hudson Orogen in Manitoba; Geological Association of Canada–Mineralogical Association of Canada–Canadian Society of Petroleum Geologists–Canadian Society of Soil Science, Joint Meeting 2005, Halifax, Nova Scotia, Abstracts Volume 30, p.11.
- Böhm, C.O., Corrigan, D., Corkery, M.T., Zwanzig, H.V., Lenton, P.G., Coyle, M. and Thomas, M. 2005: Re-mapping the northern Superior–Trans-Hudson boundary by using newly acquired high-resolution aeromagnetic data; Geological Association of Canada–Mineralogical Association of Canada–Canadian Society of Petroleum Geologists–Canadian Society of Soil Science, Joint Meeting 2005, Halifax, Nova Scotia, Abstracts Volume 30, p.14.
- Bowerman, M.S., Heaman, L.M., Chacko, T. and Böhm, C.O. 2005: Constraining the assembly of the northwestern Superior Province: the polymetamorphic history of the Split Lake Block, Manitoba; Geological Association of Canada–Mineralogical Association of Canada–Canadian Society of Petroleum Geologists–Canadian Society of Soil Science, Joint Meeting 2005, Halifax, Nova Scotia, Abstracts Volume 30, p.17.
- Downey, M.W., Lin, S. and Böhm, C.O. 2005: The structural geology, kinematics, and timing of deformation at the Superior craton margin, Gull Rapids, Manitoba; Geological Association of Canada–Mineralogical Association of Canada–Canadian Society of Petroleum Geologists–Canadian Society of Soil Science, Joint Meeting 2005, Halifax, Nova Scotia, Abstracts Volume 30, p. 46.
- Hartlaub, R.P., Heaman, L.M., Simonetti, A. and Böhm, C.O. in press: Relicts of Earth's earliest crust: U-Pb, Lu-Hf, and morphological characteristics of >3.7 Ga detrital zircon of the western Canadian Shield; *in* Processes on the Early Earth, W. Reimold and R. Gibson (ed.), Geological Society of America, Special Paper 405.
- Hartlaub, R.P., Heaman, L.M., Simonetti, A. and Böhm, C.O. 2005: Was there voluminous ancient (>4.0 Ga) sialic crust? Implications from the Hf composition of detrital zircons; 15 V.M. Goldschmidt Conference, May 2005, Moscow, Idaho, United States, Abstract Volume, p. A394.
- Kuiper, Y.D., Lin, S., Böhm, C.O. and Corkery, M.T., 2005: Shear zones of the Superior Boundary Zone northeast of Thompson, Manitoba; Canadian Tectonics Group 25th Annual Meeting (October 28–30, 2005), Orillia, Ontario, Canada, abstract volume.
- Prouse, D.E.: Manitoba exploration and development highlights 2004; Exploration and development highlights: an annual publication of the Prospectors and Developers Association of Canada, March 2005, p. 16-17.
- Simonetti, A., Heaman, L.M., Hartlaub, R.P., Creaser, R.A., MacHattie, T.G. and Böhm, C.O. 2005: U–Pb zircon dating by laser ablation-MC-ICP-MS using a new multiple ion counting Faraday collector array; *Journal of Analytical Atomic Spectrometry*, v. 20, no. 8, p. 677–686.