

PUBLICATIONS

Preliminary Maps

GEOLOGICAL SERVICES BRANCH

1999F-1	Geology of the Squall-Varnson lakes area (parts of NTS 63K/16) by A.H. Bailes and D.C.P. Schledewitz	1:20 000
1999S-1	Geology of the Max Lake area (parts of NTS 53L/5NW and 12SW) by H.P. Gilbert	1:20 000
1999T-1	Geology of the Waskaiowaka Lake area (part of NTS 64A/7, 8 9,10) by Ch. Böhm and M.T. Corkery	1:50 000
1999R-1	Geology of the Wallace-Siderock lakes area (parts of 52M/3 and 52L/14) by C. Sasseville	1:20 000

Publications Released
November 1998 - November 1999

- Bailes, A.H. 1998: Geochemical sampling of the Bidou Lake subgroup of the Rice Lake greenstone belt; *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 144-150.
- Bailes, A.H. and Schledewitz, D.C.P. 1998: Geology and geochemistry of Paleoproterozoic volcanic rocks between the McLeod Road and Birch Lake faults, Snow Lake area, Flin Flon Belt (parts of NTS 63K/16 and 63J/13); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 4-13.
- Bamburak, J.D. and Bezys, R.K. 1998: Anomalous structures and mineralization related to basement reactivation in Manitoba; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 26 (abstract).
- Bezys, R.K. 1999: Sub-Paleozoic structure in Manitoba's northern Interlake along the Churchill Superior Boundary zone: a detailed investigation of the Falconbridge William Lake study area: supplement; Manitoba Energy and Mines, Geological Services, Open File Report OF94-3 (Supplement), 121 p.
- Bezys, R.K., Bamburak, J.D., and Conley, G.G. 1999: Capital Region Study: mineral resource potential and overburden thickness, Selkirk (N.T.S. 62I/2); Manitoba Energy and Mines, Geological Services, Preliminary Map 1999CAP-1, scale 1:50 000.
- 1999: Capital Region Study: geology and bedrock topography, Selkirk (N.T.S. 62I/2); Manitoba Energy and Mines, Geological Services, Preliminary Map 1999CAP-2, scale 1:50 000.
- 1999: Capital Region Study: mineral resource potential and overburden thickness, Stonewall (N.T.S. 62I/3); Manitoba Energy and Mines, Geological Services, Preliminary Map 1999CAP-3, scale 1:50 000.
- 1999: Capital Region Study: geology and bedrock topography, Stonewall (N.T.S. 62I/3); Manitoba Energy and Mines, Geological Services, Preliminary Map 1999CAP-4, scale 1:50 000.
- 1999: Capital Region Study: mineral resource potential and overburden thickness, Teulon (N.T.S. 62I/6); Manitoba Energy and Mines, Geological Services, Preliminary Map 1999CAP-5, scale 1:50 000.
- 1999: Capital Region Study: geology and bedrock topography, Teulon (N.T.S. 62I/6); Manitoba Energy and Mines, Geological Services, Preliminary Map 1999CAP-6, scale 1:50 000.
- 1999: Capital Region Study: mineral resource potential and overburden thickness, Netley Marsh (N.T.S. 62I/7); Manitoba Energy and Mines, Geological Services, Preliminary Map 1999CAP-7, scale 1:50 000.
- 1999: Capital Region Study: geology and bedrock topography, Netley Marsh (N.T.S. 62I/7); Manitoba Energy and Mines, Geological Services, Preliminary Map 1999CAP-8, scale 1:50 000.
- Bezys, R.K. and Conley, G.G. 1998: Upper Cretaceous and Boissevain Formation/Tertiary Turtle Mountain Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, KB-TTM-1, scale 1:125 000.
- 1998: Cretaceous Riding Mountain Formation - Odanah Member (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, KRM-2, scale 1:1 000 000.
- 1998: Cretaceous Riding Mountain Formation - Millwood Member (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, KRM-1, scale 1:1 000 000.
- 1998: Cretaceous Vermillion River Formation - top of Pembina Member to base of Boyne Member (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, KVR-2, scale 1:1 000 000.
- 1998: Cretaceous Vermillion River Formation - Morden Member (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, KVR-1, scale 1:1 000 000.
- 1998: Cretaceous Favel Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, KF-1, scale 1:1 000 000.
- 1998: Cretaceous Upper Ashville (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, KA-2, scale 1:1 000 000.

1998: Cretaceous Lower Ashville (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, KA-1, scale 1:1 000 000.

1998: Pre-Mississippian Oil Show Map; Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, PC-2, scale 1:1 000 000.

1998: Mississippian Erosion Surface (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, M-2, scale 1:500 000.

1998: Mississippian Madison Group (isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, M-1, scale 1:500 000.

1998: Devonian-Mississippian Lyleton and Bakken formations (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, D-M-1, scale 1:500 000.

1998: Devonian Nisku Formation (=Birdbear) (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DN-1, scale 1:500 000.

1998: Devonian Duperow Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DD-1, scale 1:1 000 000.

1998: Devonian Duperow Formation - Swan River Area; Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DD-2, scale 1:250 000.

1998: Devonian Souris River Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DSR-1, scale 1:1 000 000.

1998: Devonian Souris River Formation-Swan River Area; Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DSR-2, scale 1:250 000.

1998: Devonian Dawson Bay Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DDB-1, scale 1:1 000 000.

1998: Devonian Elk Point Group (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DEP-1, scale 1:1 000 000.

1998: Devonian Prairie Evaporite Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DPE-1, scale 1:1 000 000.

1998: Devonian Winnipegosis Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DW-1, scale 1:1 000 000.

1998: Devonian Ashern Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, DA-1, scale 1:1 000 000.

1998: Silurian Interlake Group (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, SI-1, scale 1:2 000 000.

1998: Ordovician Red River Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, ORR-1, scale 1:2 000 000.

1998: Ordovician Stony Mountain Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, OSM-1, scale 1:2 000 000.

1998: Ordovician (and Silurian) Stonewall Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, OS-1, scale 1:2 000 000.

1998: Ordovician Winnipeg Formation (contour and isopach map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, OW-1, scale 1:2 000 000.

- 1998: Precambrian (structure contour map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, PC-1, scale 1:2 000 000.
- 1998: Paleozoic Erosion Surface-Swan River Area (detailed subcrop-structure contour map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, P-2, scale 1:250 000.
- 1998: Paleozoic Erosion Surface (subcrop and outcrop structure contour map); Manitoba Energy and Mines, Geological Services, Stratigraphic Map Series, P-1, scale 1:1 000 000.
- 1999: Manitoba Stratigraphic Database and the Manitoba Stratigraphic Map Series; Manitoba Energy and Mines, Geological Services, Open File Report OF98-7, CD-ROM.
- Bickford, M.E., Condie, K.C., Heizler, M., Kelley, S.A., and Lewry, J.F. 1998: How an orogen became a craton: thermochronology of the Trans-Hudson Orogen, Canada; *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 32-33.
- Böhm, C. 1998: Geology of the Natawahunan Lake area (part of NTS 63P/11); Manitoba Energy and Mines, Geological Services, Preliminary Map 1998T-1, scale 1:50 000.
- 1998: Geology of the Natawahunan Lake area (part of NTS 63P/11); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 56-59.
- Böhm, C.O., Heaman, L.M., Creaser, R.A., and Corkery, M.T. 1998: Archean evolution of the northwestern Superior Province margin: U-Pb and Sm-Nd isotopic results; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 26 (abstract).
- Boulette, O. 1998: Manitoba minerals industry and Aboriginal partnership protocol; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 26 (abstract).
- Briggs, G. 1998: Creating a world class gold mining company: the Bissett Gold Mine acquisition; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 26-27 (abstract).
- Campbell, J. 1998: An inside look at the industrial minerals activities of Gossan Resources Limited; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 27 (abstract).
- Comaskey, B. 1998: From discovery to production and beyond; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 27 (abstract).
- Conley, G.G. and Bezys, R.K. 1998: The Manitoba Stratigraphic map series (Paleozoic and Mesozoic maps) and the Manitoba Stratigraphic Database: new and previously released subsurface geological data; *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 210-211.
- Cooper, K. 1998: Doing business on the WSE; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 27 (abstract).
- Corkery, M.T. 1998: Geology of the Edmund Lake area (part of NTS 53K/11NW); Manitoba Energy and Mines, Geological Services, Preliminary Map 1998S-1, scale 1:20 000.
- Corkery, M.T. and Heaman, L.M. 1998: Geology of the Edmund Lake area, northwestern (NTS 53K/11NW); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 103-110.
- Corkery, M.T. and Skulski, T. 1998: Geology of the Little Stull Lake area (part of NTS 63K/10 and 7); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 111-118.
- Corkery, M.T., Skulski, T., and Whalen, J.B. 1998: Geology of the Little Stull Lake area (part of NTS 53K/10SE & 7NE); Manitoba Energy and Mines, Geological Services, Preliminary Map 1998S-2, scale 1:25 000.
- Corkery, M.T., Skulski, T., Whalen, J.B., Stone, D., and Jaing, D. 1998: Geological investigations of supracrustal belts in the Edmund-Stull lakes area of the northern Superior Province; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 27 (abstract).
- De Souza, H. 1998: The mobile metal ion process, a routine geochemical exploration tool; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 28 (abstract).

- Ellwood, E.L. 1998: Strategic business analysis in exploration: a junior perspective; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 28 (abstract).
- Fedikow, M.A.F. 1999: Vertical zonation of elements in glaciofluvial sands and gravels overlying the Photo Lake Cu-Zn massive sulphide type deposit (Snow Lake area): preliminary results of a mobile metal ion process survey; Manitoba Energy and Mines, Geological Services, Open File Report OF99-9, 17 p.
- Fedikow, M.A.F. and Nielsen, E. 1998: Multimedia geochemical signatures of base and precious metal depositional environments, Edmund Lake and Sharpe Lake greenstone belts, northeast Manitoba (NTS 53K); Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 28 (abstract).
- 1998: Operation Superior: multimedia geochemical surveys in the Knife Lake, Webber Lake, Goose Lake and Echimamish River greenstone belts, northern Superior Province, Manitoba (NTS 53L and 53K); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 75-77.
- Fedikow, M.A.F., Nielsen, E., Conley, G.G., and Lenton, P.G. 1999: Operation Superior: multimedia geochemical survey results from the Webber Lake, Knife Lake, Goose Lake and Echimamish River greenstone belts, Northern superior Province, Manitoba (NTS 53L and 53K); Manitoba Energy and Mines, Geological Services, Open File Report OF99-8, 400 p. + 1 CD-ROM.
- Frazer, G.R. 1998: The spectrum electromagnetic system; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 28 (abstract).
- Gilbert, H.P. 1998: Geochemistry of Paleoproterozoic volcanic rocks in the Lac Aimée area, Flin Flon Belt (parts of NTS 63K/13SE and 63K/14SW); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 19-22.
- 1999: Geochemistry of Paleoproterozoic volcanic rocks in the Lac Aimée-Naosap Lake area, Flin Flon Belt (parts of NTS 63K/13SE and 63K/14SW); Manitoba Energy and Mines, Geological Services, Open File Report OF99-1, 21 p.
- Gregory, S. 1998: Hudson Bay Railway and new mining development; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 28 (abstract).
- Groom, H.D. 1998: Assessment of aggregate potential in selected wildlife management areas; *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 212-213.
- Harris, M.J., Symons, D.T.A., Blackburn, W.H., Peck, D.C., and Turek, A. 1998: Tectonic analysis of the accretion of the Trans-Hudson Orogen to the Superior Craton from paleomagnetism with geobarometric corrections; *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 66-68.
- Heaman, L.M., Böhm, Ch.O., Corkery, M.T., and Creaser, R.A. 1999: Re-examining the northwest Superior Province margin; Manitoba Energy and Mines, Geological Services, Open File Report OF99-11, 6 p.
- Heine, T.H. and Prouse, D. 1998: Photo Lake Mine archive project (NTS 63K/16SE); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 23-24.
- Hoffman, E.L., Clark, J.R., Yeager, J.R., and Rogers, P. 1998: The "enzyme leach", some new discoveries of blind deposits; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 28-29 (abstract).
- Hosain, I.T. 1999: Summary of geophysical data from open assessment files of the northern portion of the Gods Lake area, Manitoba: Volume 2 (NTS 53L, 53M, 53N and 63P); Manitoba Energy and Mines, Geological Services, Open File Report OF99-7, 25 p.
- Huebert, E. 1998: Mineral exploration, mining and land access: the Manitoba experience; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 28 (abstract).
- Hulbert, L., Hamilton, M., and Horan, M. 1998: U-Pb zircon and Re-Os isotope geochronology of mineralized ultramafic intrusions and associated nickel ores from the Thompson Nickel Belt, Manitoba, Canada; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 29 (abstract).
- Jiang, D. and Corkery, M.T. 1998: A preliminary structural analysis of the Edmund Lake - Little Stull Lake area, northwestern Superior Province, Manitoba (part of NTS 63K/10, 11 and 7); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 119-126.
- Kaszycki, C.A. 1998: Introductory summary; *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 1-3.

- Kjarsgaard, B.A. 1998: Kimberlites in the western Canada sedimentary basin; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 29 (abstract).
- Kraus, J., Peck, D.C., and Bleeker, W. 1998: Structural investigation of the Thompson Mine south pit, Thompson Nickel Belt (part of NTS 63P/13); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 60-65.
- Lenton, P.G. 1998: Geoscience information services projects; *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 214-215.
- Lin, S. and Cameron, H.D.M. 1998: Contrasting timing of gold mineralization in the Superior Province: examples from Ontario and Manitoba; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 29 (abstract).
- Lin, S., Cameron, H.D.M., Syme, E.C., and Corfu, F. 1998: Geological investigation in the Island Lake, Goose Lake greenstone belt, northwestern Superior Province, Manitoba (parts of NTS 53E/15 & 16); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 78-87.
- Lin, S., Jiang, D., Syme, E.C., Corkery, M.T., and Bailes, A.H. 1998: Structural study in the southern Knee Lake area, northwestern Superior Province, Manitoba (part of NTS 53L/15); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 96-102.
- Macek, J.J. and McGregor, C.R. 1998: Thompson Nickel Belt project: progress on a new compilation map of the Thompson Nickel Belt (parts of NTS 63J, 63O, 63P); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 36-38.
- Manitoba Energy and Mines. 1999: Norway House; Manitoba Energy and Mines, Geological Services, Bedrock Geology Compilation Map Series, NTS 63H, scale 1:250 000.
- Matile, G.L.D., Thorleifson, L.H., Grant, N., Burt, A., and Mann, J. 1998: Geology of the Winnipeg region NATMAP project (NTS 62H/W, 62I and 52L/W); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 161-171.
- McGregor, C.R. 1998: Thompson Nickel Belt project: petrographic and chemical characterization of major lithologies (parts of NTS 63J, 63O, 63P); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 39.
- NATMAP Shield Margin Project Working Group. 1998: Geology, NATMAP Shield Margin Project area (Flin Flon Belt), Manitoba-Saskatchewan; Geological Survey of Canada, Map 1968A, Manitoba Energy and Mines, Map A-98-2, Saskatchewan Energy and Mines, Map 258A, 6 sheets (1:100 000), 2 figures (1:325 000), legend sheet, and accompanying notes, 54 p.
- Norquay, D. 1998: Transportation challenges; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p.29 (abstract).
- Ostry, G., Athayde, P., and Trembath, G.D. 1998: Mineral deposits and occurrences in the Sherridon area, NTS 63N/03; Manitoba Energy and Mines, Geological Services, Mineral Deposit Series, No. 17, 157 p.
- Peck, D.C. 1998: Characteristics of mafic and ultramafic dykes and volcanic suites in the Thompson Nickel Belt; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 29-30 (abstract).
- 1998: The Thompson Nickel Belt project: an update (parts of NTS 63J, 63O, 63P); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 34-35.
- Peck, D.C. and Heaman, L.M. 1998: Geochemical characteristics and preliminary U-Pb zircon age of Proterozoic mafic dykes from the eastern part of the Carrot River greenstone belt (part of NTS 63I/16); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 135-143.
- Peck, D.C., Layton-Matthews, D., Chandler, C., Freund, C.C., and Heaman, L.M. 1998: Petrogenetic and metallogenic significance of mafic-ultramafic dykes and volcanic sequences in the Thompson Nickel Belt: preliminary results (parts of NTS 63J, 63O, and 63P); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 49-55.
- Peck, D.C., Lin, S., Atkin, K., and Eastwood, A.M. 1998: Reconnaissance structural studies of Au metallotectics in the Lynn Lake greenstone belt (parts of NTS 63C/10, C/11, C/15); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 69-74.
- Peck, D.C., Messing, C., Halden, N.M., and Chandler, C. 1998: New insights into the petrogenesis of the Pipestone Lake anorthosite complex and its Ti-V-Fe oxide deposits (parts of NTS 63I/5 and I/12); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 127-134.
- Peck, D.C. and Theyer, P. 1998: PGE-copper-nickel potential of mafic-ultramafic intrusions in the Bird River greenstone belt (parts of NTS 52L); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 161-171.

- Percival, J.A. 1998: Western Superior NATMAP: interaction of Archean continental and oceanic blocks; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 30 (abstract).
- Pickell, J. 1998: The Triple Seven VMS deposit - a geological discovery in a mature mining camp; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 30 (abstract).
- Pullan, S.E. and Stea, R.R. 1998: Seismic exploration for Cretaceous kaolin deposits in Nova Scotia; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 31 (abstract).
- Scanlan, S. 1998: Shared values, common goals, exceptional results: the Red Dog Mine story; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 31 (abstract).
- Schledewitz, D.C.P. 1998: Squall Lake project: geology and mineralization in the area of Snow Lake and Squall Lake (NTS 63K/16NE); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 14-18.
- Schledewitz, D.C.P. and Bailes, A.H. 1998: Compilation of the geology of the Squall Lake area (63K/16NE); Manitoba Energy and Mines, Geological Services, Preliminary Map 1998F-1, scale 1:20 000.
- Skulski, T., Sanborn-Barrie, M., Percival, J.A., Stern, R., Corkery, M.T., Syme, E.C., and Lin, S. 1998: Anatomy of two late Archean continental margins: new data from the central Wabigoon subprovince and northern margin of the North Caribou terrane; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 31 (abstract).
- Syme, E.C. 1998: Ore-associated and barren rhyolites in the central Flin Flon belt: case study of the Flin Flon mine sequence; Manitoba Energy and Mines, Geological Services, Open File Report, OF98-9, 26 p.
- Syme, E.C., Corkery, M.T., Lin, S., Bailes, and A.H., Skulski, T. 1998: New stratigraphic and structural framework for the Knee Lake Greenstone Belt; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 31-32 (abstract).
- Syme, E.C., Corkery, M.T., Lin, S., Skulski, T., and Jiang, D. 1998: Geological investigations in the Knee Lake area, northern Superior Province (parts of NTS 53L/15 and 53M/2); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 88-95.
- Symons, D.T.A. and Harris, M.J. 1998: Paleomagnetic data from the Big Island gneiss dome at Kississing Lake (NTS 63N/3); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 25-31.
- Theyer, P. 1998: A new source of carveable soapstone in the vicinity of Thompson, Manitoba (part of NTS 63O/9); Manitoba Energy and Mines, Geological Services, Open File Report, OF98-8, 3 p.
- 1998: Lake Winnipegosis komatiites; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 32 (abstract).
- Theyer, P. and Freund, C.C. 1998: Stratigraphic studies on Upper and Lower Ospawagan lakes, Thompson Nickel Belt (parts of NTS 63O/9); *in* Manitoba Energy and Mines, Geological Services, Report of Activities, 1998, p. 46-48.
- Thortleifson, L.H., Anderson, T., Betcher, R.N., Bezys, R.K., Buhay, W., Burbidge, S.M., Cobb, D., Courtier, N., Doering, J., Fisher-Smith, G., Forbes, D., Franzin, W., Friesen, K., Frobels, D., Fuchs, D., Gibson, C., Henderson, P.J., Jarrett, K., James, T., King, J., Kling, H., Lambert, A., Last, W., Lewis, M., Lockhart, L., Matile, G.L.D., McKinnon, T., Moran, K., Nielsen, E., Pullan, S., Rack, F., Risberg, J., Rodrigues, C., Salki, A., Schröder-Adams, C., Stainton, M., Telka, A., Todd, B., Vance, R., and Weber, W. 1998: Status of the Lake Winnipeg Project (NTS 62I, 62P, 63A, 63B, 63G and 63H); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 196-209.
- Thortleifson, L.H., Betcher, R.N., Birks, J., Boyle, D., Cherry, A., Clark, I., Desbarats, A., Edwards, T., Farrell, D., Grasby, S., Hinton, M., Kaszycki, C.A., Kennedy, P., Leybourne, M., McDougall, W., McRitchie, W.D., Osadetz, K., Remenda, V., Render, F., Ryan, S., and Woodbury, A. 1998: Hydrogeology and hydrogeochemistry of the Red River Valley/Interlake region of Manitoba (NTS 62H, 62I, 62O, 62P and 63B); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 172-185.
- Thortleifson, L.H., Brooks, G., Hanuta, I., Kroker, S., Matile, G.L.D., Nielsen, E., Prévost, C., and Rannie, W. 1998: Red River flooding: evolutionary geomorphic trends and evidence for major floods in recent centuries (NTS 62H/W); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 186-195.
- Vaughan, W.S. 1998: Current issues affecting Canadian mining finance; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p.32 (abstract).

- Viljoen, D., Chackowsky, L., Lenton, P., and Broome, H.J. 1999: Geology, magnetic & gravity maps of Manitoba: a digital perspective; Geological Survey of Canada; Open File D3695, Manitoba Energy and Mines, Geological Services, Open File Report OF99-12, CD-ROM.
- Warden, V. 1998: Manitoba Hydro — into the new millennium; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 32 (abstract).
- Wyshynski, M. 1998: Nickel industry challenges — the new reality of lower nickel prices; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p.33 (abstract).
- Zwanzig, H.V. 1998: Structural mapping of the Setting Lake area (parts of NTS 63J/15 and 63O/1,2); *in* Report of Activities, 1998, Manitoba Energy and Mines, Geological Services, p. 40-45.
- 1998: Geology of the Setting Lake area; Manitoba Energy and Mines, Manitoba Mining & Minerals Convention '98: program, p. 33 (abstract).

External Publications

- Böhm, Ch.O., Heaman, L.M., Creaser, R.A., and Corkery, M.T. 1998: New insights into the tectonic evolution and assembly of the northwestern Superior Province margin: U-Pb and Sm-Nd isotopic evidence for a late Archean suture; Geological Society of America Annual Meeting, (abstract).
- 1999: Redefining the nature and location of the Churchill-Superior boundary zone, Manitoba; Geological Association of Canada/Mineralogical Association of Canada, Abstract Volume 24, p. 11.
- in press: Archean tectonic evolution of the northwestern Superior craton margin: U-Pb zircon results from the Split Lake Block; Canadian Journal of Earth Sciences.
- in prep.: Ancient exotic crust at the northwestern Superior Province margin, Manitoba.
- Corkery, M.T. 1999: Geological investigations of the supracrustal rocks in the Edmund-Stull lakes area of Manitoba/Ontario; in Lithoprobe Western Superior Transect, Fifth Annual Workshop, Lithoprobe Report 70, p. 153.
- Corkery, M.T., Skulski, T., Whalen, J.B., Stone, D., and Jiang, D. 1999: Geological investigations of supracrustal rocks in the Edmund-Stull lakes area of Manitoba/Ontario; Geological Association of Canada/Mineralogical Association of Canada, Abstract Volume, v. 24, p. 26.
- Fedikow, M.A.F. and Nielsen, E. in press: Multimedia geochemical survey results from Archean greenstone belts in the Superior Province of east-central Manitoba; EXPLORE: Newsletter for the Association of Exploration Geochemists.
- Harris, M.J., Symons, D.T.A., Turek, A., and Peck, D.C. 1999: Tectonic analysis of the Trans-Hudson Orogen and Superior Craton for 1840 to 1770 Ma from paleomagnetism with geobarometric corrections: progress report; in Lithoprobe Western Superior Transect, Fifth Annual Workshop, Lithoprobe Report 70, p. 132-135.
- Heaman, L.M., Böhm, Ch.O., Corkery, M.T., and Creaser, R.A. 1999: Re-examining the northwest Superior Province margin in Lithoprobe Western Superior Transect, Fifth Annual Workshop, Lithoprobe Report 70, p. 15-119.
- Jobin-Bevans, L.S., Halden, N.M., Peck, D.C., and Cameron, H.D.M. 1997: Geology and oxide mineralization of the Pipestone Lake anorthosite complex; Journal of Exploration and Mining Geology, v. 6, p. 35-61.
- Lin, S., Jiang, D., Syme, E.C., Corkery, M.T., and Bailes, A.H. 1999: Kinematics and tectonic significance of shear zones in the northwestern Superior Province of Manitoba; in Lithoprobe Western Superior Transect, Lithoprobe Report No. 70, p.157-158.
- 1999: Kinematics of the southern Knee Lake shear zone in the northwestern Superior Province of Manitoba; Geological Association of Canada/Mineralogical Association of Canada, 1999 Joint Annual Meeting, Abstract Volume 24, p. 73.
- Lucas, S.B., Syme, E.C., Stern, R.A., White, D.J., Ansdell, K.M., and Ryan, J.J. 1998: Four-dimensional mapping of the Flin Flon Belt through interdisciplinary NATMAP and Lithoprobe studies; Geological Society of America, Northeastern Section, 33rd Annual Meeting, Portland, ME, March 19-21, 1998, Abstracts with Programs, v. 30, no. 1, p. 58.

- Peck, D.C., Halden, N.M., and Jobin-Bevans, L.S. 1999: Plagioclase buoyancy and the development of igneous layering and ilmenite deposits in the Pipestone Lake anorthosite complex, Manitoba; Geological Association of Canada/Mineralogical Association of Canada Joint Annual Meeting, Abstracts Volume 24, p. 98.
- Peck, D.C., Halden, N.M., Jobin-Bevans, L.S., and Theyer, P. 1999: Origins of igneous layering and mineralization in Archean megacrystic anorthosites in Manitoba; IGCP Project 427, Ore Forming Processes in Dynamic Magmatic Systems, Abstracts Volume from Symposium, July 18-19, Rouyn-Noranda, p. 30.
- Percival, J.A., Corkery, M.T., Jiang, D., Lin, S., McNicoll, V., Parker, J.R., Rogers, N., Sanborn-Barrie, M., Sasseville, C., Skulski, T., Stone, D., Stott, G., Syme, E.C., Thurston, P.C., Tomlinson, K., van Staal, C., and Whalen, J.B. 1998: Western Superior NATMAP: progress in understanding the evolution of Continental and Oceanic blocks; in Summary of Field Work and Other Activities 1998, Ontario Geological Survey, Miscellaneous Paper 169, p. 109-112.
- Skulski, T., Whalen, J.B., Stern, R.A., Stone, D., and Corkery, M.T. 1999: Archean terranes and their boundaries in the northern Superior Province; in Lithoprobe Western Superior Transect, Lithoprobe Report No. 70, p. 163.
- 1999: Archean terranes and their boundaries in the northern Superior Province; Geological Association of Canada/Mineralogical Association of Canada, Abstract Volume 24, p. 118.
- Syme, E.C., Corkery, M.T., Bailes, A.H., Lin, S., Skulski, T., and Stern, R.A. 1999: Towards a new tectonostratigraphy for the Knee Lake Greenstone Belt, Sachigo Subprovince, Manitoba; in Lithoprobe Western Superior Transect, Lithoprobe Report No. 70, p.124-131.
- 1999: Geological evolution of the Archean Knee Lake greenstone belt, Sachigo Subprovince, Manitoba; Geological Association of Canada/Mineralogical Association of Canada, Annual Meeting, Abstract Volume 24, p. 124.

GEOLOGICAL STAFF, GEOLOGICAL SERVICES BRANCH

POSITION	PERSONNEL	E-MAIL	PHONE	AREAS OF INTEREST
Director	Dr. Christine Kaszycki	ckaszycki@em.gov.mb.ca	(204) 945-6549	Manitoba
<u>PRECAMBRIAN SECTION</u>				
Chief Geologist	Ric Syme	esyeme@em.gov.mb.ca	(204) 945-6556	Flin Flon Belt, N Superior Fox R. Belt
Geologist	Dr. Alan Bailes	abailes@em.gov.mb.ca	(204) 945-6555	Flin Flon Belt, SE Manitoba
Geologist	Tim Corkery	tcorkery@em.gov.mb.ca	(204) 945-6554	Superior Province, SE Manitoba
Geochemist/ mineral deposit geologist	Dr. Mark Fedikow	mfedikow@em.gov.mb.ca	(204) 945-6562	Multi-media geochemical survey, Superior Province
Mineral deposit geologist	Dr. George Gale	ggale@em.gov.mb.ca	(204) 945-6561	Flin Flon Belt
Geologist	Paul Gilbert	pgilbert@em.gov.mb.ca	(204) 945-6547	Flin Flon Belt, N Superior Province
Geophysicist	Ifti Hosain	ihosain@em.gov.mb.ca	(204) 945-6540	Manitoba, Superior Province
Geologist	Cathy McGregor	cmcgregor@em.gov.mb.ca	(204) 945-6543	compilation, Thompson Belt
Geologist	Dr. Josef Macek	jmacek@em.gov.mb.ca	(204) 945-6548	compilation, Thompson Belt
Geologist	Dr. Dave Peck	dpeck@em.gov.mb.ca	(204) 945-6545	Thompson Belt, Fox R. Belt,
<i>Superior Province</i>				
Geologist	Dave Schledewitz	dschledewitz@em.gov.mb.ca	(204) 945-6566	Kisseynew Belt, Flin Flon Belt
Geologist	Dr. Herman Zwanzig	hzwanzig@em.gov.mb.ca	(204) 945-6552	Kisseynew Belt, Superior Boundary Zone
<i>Thompson office:</i>				
Regional geologist	Dr. Peter Theyer	ptheyer@em.gov.mb.ca	(204) 677-6888	Thompson Belt, Superior Province
Regional geologist	Chris Beaumont-Smith	cbeaumont@em.gov.mb.ca	(204) 677-6880	Lynn Lake Belt
Geologist	Malcolm Cameron	malcameron@em.gov.mb.ca	(204) 677-6884	Superior Province
<i>Flin Flon office:</i>				
Regional geologist	Tom Heine	theine@em.gov.mb.ca	(204) 687-4222	Flin Flon Belt
Resident geologist	Dave Prouse	dprouse@em.gov.mb.ca	(204) 687-4221	Flin Flon Belt
<u>SEDIMENTARY AND INDUSTRIAL MINERALS SECTION</u>				
Chief Geologist	Vacant			
Industrial minerals geologist	Jim Bamburak	jbamburak@em.gov.mb.ca	(204) 945-6534	Capital region, Cretaceous
Phanerozoic stratigrapher	Ruth Bezys	rbezys@em.gov.mb.ca	(204) 945-6563	Southern Manitoba, Interlake
Quaternary geologist	Heather Groom	hgroom@em.gov.mb.ca	(204) 945-6546	Aggregate
Geologist	Peter Leskiw	pleskiw@em.gov.mb.ca	(204) 945-6508	MEAP/Endangered Spaces
Quaternary geologist	Gaywood Matile	gmatile@em.gov.mb.ca	(204) 945-6530	Red River
Quaternary geologist	Dr. Erik Nielsen	enielsen@em.gov.mb.ca	(204) 945-6506	Manitoba; multi-media geo-chemical survey
<u>GEOSCIENCE INFORMATION SECTION</u>				
Section Head	Paul Lenton	plenton@em.gov.mb.ca	(204) 945-6553	Geological data management and analysis
Database geologist	Glen Conley	gconley@em.gov.mb.ca	(204) 945-7255	Stratigraphic data files
GIS specialist	Len Chackowsky	lchackowsky@em.gov.mb.ca	(204) 945-8204	GIS
Geological compiler	Dorne Lindal	dlindal@em.gov.mb.ca	(204) 945-0661	1:250 000 compilation series