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MANITOBA GEOLOGICAL SURVEY PUBLICATIONS RELEASED DECEMBER 2016 TO NOVEMBER 2017

Data Repository Items

DRI2017001

Biogeochemistry data from a vegetation orientation survey in the area of the Tanco pegmatite, Bernic Lake, southeastern Manitoba (NTS 52L6)

by M.A.F. Fedikow, C.E. Dunn, T. Martins and S.K.Y. Lee

Microsoft® Excel® file supplements:

Fedikow, M.A.F. and Dunn, C.E. 1990: Anomalous trace element concentrations in vegetation from the area of the Tanco pegmatite, Bernic Lake, Manitoba (NTS 52L/6); *in* Report of Activities 1990, Manitoba Energy and Mines, Minerals Division, p. 100–104.

Fedikow, M.A.F. and Dunn, C.E. 1991: A vegetation geochemical survey in the vicinity of the Tanco pegmatite, Bernic Lake area, southeastern Manitoba (NTS 52L/6); *in* Report of Activities 1991, Manitoba Energy and Mines, Minerals Division, p. 105.

Fedikow, M.A.F. and Dunn, C.E. 1992: Vegetation geochemical surveys in the area of the Tanco Pegmatite - a regional assessment of geochemical haloes (NTS 52L/6); *in* Report of Activities 1992, Manitoba Energy and Mines, Minerals Division, p. 114.

DRI2017002

Carbon and oxygen stable-isotope results from Paleozoic cores and outcrops from the Hudson Bay Basin, northeastern Manitoba (NTS 54B7, 54C10, 54G1, parts of 54E, K, L)

By M.P.B. Nicolas

Microsoft® Excel® file supplements:

Nicolas, M.P.B. and Armstrong, D.K. 2017: Update on Paleozoic stratigraphic correlations in the Hudson Bay Lowland, northeastern Manitoba and northern Ontario; *in* Report of Activities 2017, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 133–147.

DRI2017003

Field-based ice-flow-indicator data, Kinoosao-Lynn Lake-Leaf Rapids, northwestern Manitoba (parts of NTS 64B12, 64C9, 11, 12, 14–16, 64F3, 4)

By M.S. Gauthier and T.J. Hodder

Microsoft[®] Excel[®] file supplements:

Gauthier, M.S. and Hodder, T.J. 2017: Till sampling and ice-flow mapping between Leaf Rapids, Lynn Lake and Kinoosao, northwestern Manitoba (parts of NTS 64B12, 64C9, 11, 12, 14–16, 64F3, 4); *in* Report of Activities 2017, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 191–204.

DRI2017004

Whole-rock and mineral geochemistry as exploration tools for rare-element pegmatite in Manitoba: examples from the Cat Lake–Winnipeg River and Wekusko Lake pegmatite fields (parts of NTS 52L6, 63J13)

By T. Martins and R.L. Linnen

Microsoft[®] Excel[®] file supplements:

Martins, T., Linnen, R.L., Fedikow, M.A.F. and Singh, J. 2017: Whole-rock and mineral geochemistry as exploration tools for rare-element pegmatite in Manitoba: examples from the Cat Lake–Winnipeg River and Wekusko Lake pegmatite fields (parts of NTS 52L6, 63J13); *in* Report of Activities 2017, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 42–51.

DRI2017005

Stable C and O isotope and major- and trace-element data, with calcite-dolomite equilibration geothermometry, for genetically diverse carbonate rocks in the Pikwitonei granulite domain and Split Lake block (parts of NTS 63P11, 12, 64A1)

By J.A. Macdonald, A.R. Chakhmouradian, C.G. Couëslan and E.P. Reguir

Microsoft® Excel® file supplements:

Macdonald, J.A., Chakhmouradian, A.R., Couëslan, C.G. and Reguir, E.P. 2017: Discriminative study of genetically diverse carbonate rocks in the northwestern Pikwitonei granulite domain and Split Lake block, central Manitoba (parts of NTS 63P11, 12, 64A1); *in* Report of Activities 2017, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 30–41.

DRI2017006

MB GeoTours of southern Manitoba
By J.D. Bamburak, J.M.Pacey, and K. Lapenskie
Microsoft* Excel* file

Open Files

OF2017-1

Kimberlite-indicator-mineral results derived from glacial sediments (till) in the Kaskattama by T.J. Hodder and S.E. Kelley

OF2017-2

Kimberlite-indicator-mineral results derived from glacial sediments (till) in the Southern Indian Lake area of north-central Manitoba (parts of NTS 64B15, 64G1, 2, 7, 8)

by T.J. Hodder

OF2017-3

Preliminary geology of the diamond occurrence at southern Knee Lake, Oxford Lake–Knee Lake greenstone belt, Manitoba (NTS 53L15)

by S.D. Anderson

OF2017-4

Quaternary stratigraphy and till composition along the Hayes, Gods, Nelson, Fox, Stupart, Yakaw, Angling and Pennycutaway rivers, northeast Manitoba (parts of NTS 53N, 54C, 54D, 54F)

by T.J. Hodder, M.S. Gauthier and E. Nielsen

Preliminary Maps

PMAP2017-1

Geology of the exposed basement in the Reed Lake area, Flin Flon belt, west-central Manitoba (parts of NTS 63K9, 10, 15, 16)

by S. Gagné, E.C. Syme, S.D. Anderson and A.H. Bailes (scale 1:30 000)

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PMAP2017-2

Sub-Phanerozoic geology of the Reed Lake area, Flin Flon belt, west-central Manitoba (parts of NTS 63K7, 8, 9, 10) by S. Gagné (scale 1:30 000)

PMAP2017-3

Bedrock geology of the Wasekwan Lake area, Lynn Lake greenstone belt, northwestern Manitoba (parts of NTS 64C10, 15)

by X.M. Yang and C.J. Beaumont-Smith (scale 1:20 000)

EXTERNAL PUBLICATIONS

- Brown, J.A., Martins, T. and Černý, P. 2017: The Tanco pegmatite at Bernic Lake, Manitoba, XVII: mineralogy and geochemistry of alkali feldspars; Canadian Mineralogist, v. 55, p. 483–500.
- Craven, J.A., Ferguson, I.J., Nicolas, M.P.B., Zaprozan, T., Hodder, T., Roberts, B.R. and Clarke, N. 2017: Report of activities for the ground geophysical survey across the Kaskattama highland, Manitoba: GEM-2 Hudson-Ungava Project; Geological Survey of Canada, Open File OF8321, 30 p.
- Dragovic, B., Guevara, V., Caddick, M., Couëslan, C. and Baxter, E. 2017: Punctuated HT/UHT metamorphism during prolonged Archean orogenesis in the Pikwitonei Granulite Domain revealed by garnet petrochronology; 19th European Geoscience Union General Assembly (EGU 2017), Vienna, Austria, April 23–28, 2017, Program with Abstracts, v. 19, p. 11430.
- Hahn, K.E., Armstrong, D.K., Turner, E.C. and Nicolas, M.P.B. 2016: Toward a sequence stratigraphic framework for the Ordovician Hudson Bay and Moose River basins, northern Ontario; *in* Summary of Field Work and Other Activities 2016; Ontario Geological Survey, Open File Report 6323, p. 28-1–28-10.
- Hahn, K.E., Turner, E.C., Armstrong, D.K. and Nicolas, M.P.B. 2017: Late Ordovician chemostratigraphy of the Hudson Bay and Moose River basins; Geological Association of Canada-Mineralogical Association of Canada, Joint Annual Meeting, Kingston, Ontario, May 14–17, 2017, poster presentation; URL < http://gac.esd.mun.ca/GAC_2017/search_abs/sub_program.asp?sess=98&form=13&abs_no=382> [October 2017].
- Hodder, T.J., Kelley, S.E., Trommelen, M.S., Ross, M. and Rinne, M.L. 2017: The Kaskattama highland: till composition and indications of a new Precambrian inlier in the Hudson Bay Lowland?; Geological Association of Canada-Mineralogical Association of Canada, Joint Annual Meeting, Kingston, Ontario, May 14–17, 2017, poster presentation.
- Lavoie, D., Nicolas, M.P.B., Armstrong, D.K., Ardakani, O.H., Jiang, C., Reyes, J., Dhillon, R.S., Savard, M.M., Pinet, N., Brake, V.I., Duchesne, M.J., Beauchemin, M. and Tolszczuk-Leclerc, S. 2017: Report of Activities for the 2017 GEM-2 Hudson Bay-Ungava project: stratigraphy, source rock, and RADARSAT-2 research, Nunavut, Manitoba, and Ontario; Geological Survey of Canada, Open File OF8319, 18 p.
- Martins, T., Kressall, R., Medici, L. and Chakhmouradian A.R. 2017: Cancrinite–vishnevite solid solution from Cinder Lake (Manitoba, Canada): crystal chemistry and implications for alkaline igneous rocks; Mineralogical Magazine, v. 81(5), p. 1261–1277.
- Scoates, J.S., Scoates, J.R.F., Wall, C.J., Friedman, R.M. and Couëslan, C.G. 2017: Direct dating of ultra-mafic sills and mafic intrusions associated with Ni-sulfide mineralization in the Thompson nickel belt, Manitoba, Canada; Economic Geology, v. 112, p. 675–692.
- Trommelen, M.S., Kelley, S.E., Hodder, T.J., Wang, Y. and Ross, M. 2017: Till compositional inheritance and overprinting in the Hudson Bay Lowland and across onto the Precambrian Shield; Geological Association of Canada-Mineralogical Association of Canada, Joint Annual Meeting, Kingston, Ontario, May 14–17, 2017, oral presentation.
- Yang, X.M. 2017: Book review on Peter C Lightfoot: Nickel sulfide ores and impact melts: Origin of the Sudbury Igneous Complex; Mineralium Deposita, v. 52(1), p. 135–136.
- Yang, X.M. 2017: Estimation of crystallization pressure of granite intrusions; Lithos, v. 286, p. 324–329.
- Yang, X.M. 2017: Paleo-Asian oceanic slab under the North China craton revealed by carbonatites derived from subducted limestones: Comment; Geology, v. 45(5), p. e413, doi: 10.1130/G39005C.1

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