PUBLICATIONS

MANITOBA GEOLOGICAL SURVEY PUBLICATIONS RELEASED DECEMBER 2019 TO NOVEMBER 2020

Data Repository Items

DRI2019007

Whole rock geochemistry compilation of the Oxford Lake–Knee Lake greenstone belt, northwestern Superior Province, Manitoba (parts of NTS 53L6, 12–15, 53M2, 63I9, 16)

by S. Anderson and T. Martins

Microsoft® Excel® file supplements:

Anderson, S.D., Kremer, P.D. and Martins, T. 2012: Preliminary results of bedrock mapping at Oxford Lake, northwestern Superior Province, Manitoba (parts of NTS 53L12, 13, 63I9, 16); *in* Report of Activities 2012, Manitoba Innovation, Energy and Mines, Manitoba Geological Survey, p. 6–22.

Anderson, S.D., Kremer, P.D. and Martins, T. 2013: Preliminary results of bedrock mapping at Oxford Lake, northwestern Superior province, Manitoba (parts of NTS 53L13, 14); *in* Report of Activities 2013, Manitoba Mineral Resources, Manitoba Geological Survey, p. 7–22.

Anderson, S.D., Syme, E.C., Corkery, M.T., Bailes, A.H. and Lin, S. 2015: Preliminary results of bedrock mapping at southern Knee Lake, northwestern Superior province, Manitoba (parts of NTS 53L14, 15); *in* Report of Activities 2015, Manitoba Mineral Resources, Manitoba Geological Survey, p. 9–23.

Anderson, S.D. 2016: Preliminary results of bedrock mapping at central Knee Lake, northwestern Superior province, Manitoba (parts of NTS 53L15, 53M2); *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 1–15.

Anderson, S.D. 2016: Alkaline rocks at Oxford Lake and Knee Lake, northwestern Superior province, Manitoba (NTS 53L13, 14, 15): preliminary results of new bedrock mapping and lithogeochemistry; *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 16–27.

Anderson, S.D. 2017: Preliminary geology of the diamond occurrence at southern Knee Lake, Oxford Lake–Knee Lake greenstone belt, Manitoba (NTS 53L15); Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, Open File OF2017-3, 27 p.

DRI2019008

Compilation of Sm-Nd isotopes from the Oxford Lake–Knee Lake greenstone belt, northwestern Superior Province, Manitoba (parts of NTS 53L6, 12–15, 53M2, 63I9, 16)

by S. Anderson and T. Martins

Microsoft® Excel® file supplements:

Anderson, S.D., Kremer, P.D. and Martins, T. 2012: Preliminary results of bedrock mapping at Oxford Lake, northwestern Superior Province, Manitoba (parts of NTS 53L12, 13, 63I9, 16); *in* Report of Activities 2012, Manitoba Innovation, Energy and Mines, Manitoba Geological Survey, p. 6–22.

Anderson, S.D., Kremer, P.D. and Martins, T. 2013: Preliminary results of bedrock mapping at Oxford Lake, northwestern Superior province, Manitoba (parts of NTS 53L13, 14); *in* Report of Activities 2013, Manitoba Mineral Resources, Manitoba Geological Survey, p. 7–22.

Anderson, S.D., Syme, E.C., Corkery, M.T., Bailes, A.H. and Lin, S. 2015: Preliminary results of bedrock mapping at southern Knee Lake, northwestern Superior province, Manitoba (parts of NTS 53L14, 15); *in* Report of Activities 2015, Manitoba Mineral Resources, Manitoba Geological Survey, p. 9–23.

Anderson, S.D. 2016: Preliminary results of bedrock mapping at central Knee Lake, northwestern Superior province, Manitoba (parts of NTS 53L15, 53M2); *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 1–15.

Anderson, S.D. 2016: Alkaline rocks at Oxford Lake and Knee Lake, northwestern Superior province, Manitoba (NTS 53L13, 14, 15): preliminary results of new bedrock mapping and lithogeochemistry; *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 16–27.

Anderson, S.D. 2017: Preliminary geology of the diamond occurrence at southern Knee Lake, Oxford Lake–Knee Lake greenstone belt, Manitoba (NTS 53L15); Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, Open File OF2017-3, 27 p.

Whole-rock geochemistry of the Russell Lake mapping project, northwestern Manitoba (parts of NTS 64C3-6)

by T. Martins and C.G. Couëslan

Microsoft[®] Excel[®] file supplements:

Martins, T. and Couëslan, C.G. 2019: Geological investigations in the Russell–McCallum lakes area, northwestern Manitoba (parts of NTS 64C3–6); *in* Report of Activities 2019, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 30–41.

DRI2020002

Lithogeochemistry of drillcore from the Huzyk Creek property, central Manitoba, and the Flin Flon paleosol, west-central Manitoba (NTS 63J6, 63K13)

by C.G. Couëslan

Microsoft® Excel® file supplements:

Couëslan, C.G. 2019: Evaluation of graphite- and vanadium-bearing drillcore from the Huzyk Creek property, sub-Phanerozoic Kisseynew domain, central Manitoba (NTS 63J6); *in* Report of Activities 2019, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 60–71.

DRI2020003

Till-matrix geochemistry data, Machichi-Kettle rivers area, far northeastern Manitoba (parts of NTS 54A-C)

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

Microsoft® Excel® file supplements:

Hodder, T.J. and Gauthier, M.S. 2019: Quaternary stratigraphy and till sampling in the Machichi–Kettle rivers area, far northeastern Manitoba (parts of NTS 54A–C); *in* Report of Activities 2019, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 83–89.

DRI2020004

Till-matrix geochemistry data, Russell-McCallum Lakes area, northwestern Manitoba (parts of NTS 64C3-6)

by T.J. Hodder

Microsoft® Excel® file supplements:

Hodder, T.J. 2019: Till sampling and ice-flow mapping in the Russell–McCallum lakes area, northwestern Manitoba (parts of NTS 64C3–6); *in* Report of Activities 2019, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 90–96.

DRI2020005

Till-matrix geochemistry data from the Gillam area, northeast Manitoba

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

DRI2020006

Whole-rock geochemistry data of the Winnipeg Formation, west-central Manitoba (parts of NTS 63J5, 6, 11, 12, 14)

by K. Lapenskie

Microsoft[®] Excel[®] file supplements:

Lapenskie, K. 2019: Summary of Phanerozoic core logging activities in Manitoba in 2019 (parts of NTS 63C3, 14, 63J5, 6, 11, 12, 14); *in* Report of Activities 2019, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 77–82.

Lapenskie, K. 2019: Lithostratigraphy and brief lithological descriptions of logged Phanerozoic core, southwestern and central Manitoba (parts of NTS 63C3, 14, 63J5, 6, 11, 12, 14); Manitoba Agriculture and Resource Development, Manitoba Geological Survey, Data Repository Item DRI2019006, Microsoft® Excel® file.

Bedrock geochemistry from the Puella Bay area (Wekusko Lake), north-central Manitoba (part of NTS 63J12)

by K.D. Reid

Microsoft® Excel® file supplements:

Reid, K.D. 2019: Bedrock geological mapping of the Puella Bay area (Wekusko Lake), north-central Manitoba (part of NTS 63J12); in Report of Activities 2019, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 42–51.

DRI2020008

Whole-rock geochemistry compilation of the Bigstone Lake greenstone belt, east-central Manitoba (parts of NTS 53E11–14)

by M. Rinne

Microsoft[®] Excel[®] file supplements:

Rinne, M.L., Anderson, S.D. and Reid, K.D. 2016: Preliminary results of bedrock mapping at Bigstone Lake, northwestern Superior province, Manitoba (parts of NTS 53E12, 13); *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 51–62.

Rinne, M.L. 2017: Preliminary results of bedrock mapping at Bigstone Lake and Knight Lake, northwestern Superior province, Manitoba (parts of NTS 53E11, 12, 13, 14); *in* Report of Activities 2017, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 19–29.

Rinne, M.L. 2019: Results of bedrock mapping at Knight Lake, east-central Manitoba (parts of NTS 53E11, 12, 13, 14); *in* Report of Activities 2019, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 1–9.

DRI2020009

Bedrock geochemical data of the Gemmell Lake area, Lynn Lake greenstone belt, northwestern Manitoba (parts of NTS 64C11, 14)

by X.M. Yang

Microsoft[®] Excel[®] file supplements:

Yang, X.M. 2019: Preliminary results of bedrock mapping in the Gemmell Lake area, Lynn Lake greenstone belt, northwestern Manitoba (parts of NTS 64C11, 14); *in* Report of Activities 2019, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 10–29.

DRI2020010

Whole-rock geochemistry of drillcores M-1-07 and M-2-07, southwestern Manitoba (parts of NTS 62N16 and 63C1)

by K. Lapenskie and J.D. Bamburak

Microsoft[®] Excel[®] file supplements:

Bamburak, J.D. 2007: Manitoba Geological Survey's Stratigraphic Corehole Drilling Program, 2007 (parts of NTS 62N1, 16, 63C1); *in* Report of Activities 2007, Manitoba Science, Technology, Energy and Mines, Manitoba Geological Survey, p. 166–174.

DRI2020011

Compilation of Sm-Nd isotope results from the Manitoba Geological Survey 2019/2020 season by Manitoba Geological Survey

DRI2020012

Compilation of Sm-Nd isotope results from the Manitoba Geological Survey 2018/2019 season

by Manitoba Geological Survey

Till geochemistry data north of Leclair Lake, northwest Manitoba (NTS 64F8)

by E. Nielsen and M.S. Gauthier

Microsoft® Excel® file supplements:

Nielsen, E. 1985: Till geochemical investigations in northwestern Manitoba; *in* Report of Field Activities 1985, Manitoba Energy and Mines, Geological Services/Mines Branch, p. 14–19.

DRI2020014

Till geochemistry data northeast of Ruttan Mine, northwest Manitoba (NTS 64B5)

by E. Nielsen and M.S. Gauthier

Microsoft® Excel® file supplements:

Nielsen, E. 1985: Till geochemical investigations in northwestern Manitoba; *in* Report of Field Activities 1985, Manitoba Energy and Mines, Geological Services/Mines Branch, p. 14–19.

Nielsen, E. 1986: Till geochemistry east of the Ruttan Mine; *in* Report of Field Activities 1986, Manitoba Energy and Mines, Minerals Division, p. 26–31.

Nielsen, E. 1987: Till geochemistry in selected areas of northern Manitoba; *in* Report of Field Activities 1987, Manitoba Energy and Mines, Minerals Division, p. 27–29.

DRI2020015

Till geochemistry data for the Flin Flon area, northwest Manitoba (NTS 63K13)

by E. Nielsen and M.S. Gauthier

Microsoft® Excel® file supplements:

Nielsen, E. 1994: Highlights of surficial geology and till geochemical sampling in the Flin Flon area (NTS 63K/13); *in* Report of Activities 1994, Manitoba Energy and Mines, Geological Services, p. 81–82.

DRI2020016

Till geochemistry data for the Elbow Lake area, northwest Manitoba (NTS 63K15, 16, 63N2)

by E. Nielsen and M.S. Gauthier

Microsoft® Excel® file supplements:

Nielsen, E. 1992: Surficial geology mapping and glacial dispersion studies as aids to geochemical exploration and mineral tracing in the Elbow Lake area (NTS 63K/15); *in* Report of Activities 1992, Manitoba Energy and Mines, Geological Services, p. 52–55.

DRI2020017

Till-geochemistry data from Iskwasum Lake (NTS 63K10), northwest Manitoba

by E. Nielsen and M.S. Gauthier

DRI2020018

Till-geochemistry data from Kississing Lake (NTS 63N3), northwest Manitoba

by E. Nielsen and M.S. Gauthier

Microsoft[®] Excel[®] file supplements:

Nielsen, E. and Gobert, G. 1988: Till geochemistry in northern Manitoba; *in* Report of Field Activities 1988, Manitoba Energy and Mines, Minerals Division, p. 161–166.

Gobert, G. and Nielsen, E. 1989: Till geochemistry of the Kississing Lake area, Manitoba; *in* Report of Field Activities 1989, Manitoba Energy and Mines, Minerals Division, p. 41–43.

Till-geochemistry data near Darrol Lake (NTS 64B5), northwest Manitoba

by E. Nielsen and M.S. Gauthier

Microsoft® Excel® file supplements:

Nielsen, E. 1987: Till geochemistry in selected areas of northern Manitoba; in Report of Field Activities 1987, Manitoba Energy and Mines, Minerals Division, p. 27–29.

Nielsen, E. and Gobert, G. 1988: Till geochemistry in northern Manitoba; *in* Report of Field Activities 1988, Manitoba Energy and Mines, Minerals Division, p. 161–166.

DRI2020020

Till-geochemistry data for the Naosap Lake area (NTS 63K14), northwest Manitoba

by E. Nielsen and M.S. Gauthier

Microsoft® Excel® file supplements:

Nielsen, E. 1993: Surficial geology and till geochemical sampling in the Naosap Lake area (63K/14); *in* Report of Activities 1993, Manitoba Energy and Mines, Geological Services, p. 47–49.

DRI2020021

Quaternary stratigraphy and overburden geochemistry in the Phanerozoic terrane of southern Manitoba

by E. Nielsen and M.S. Gauthier

Microsoft® Excel® file supplements:

Nielsen, E. 1989: Quaternary stratigraphy and overburden geochemistry in the Phanerozoic terrane of southern Manitoba; Manitoba Energy and Mines, Geological Services, Geological Paper GP87-1, 78 p.

DRI2020022

Till-geochemistry data for the Snow Lake area, northwest Manitoba (NTS 63K16, 63J12, 13)

by E. Nielsen and M.S. Gauthier

Microsoft® Excel® file supplements:

Gobert, G. 1990: Till geochemistry of the Snow Lake area (NTS 63K/16, 63J/13, 63J/12); *in* Report of Activities 1990, Manitoba Energy and Mines, Minerals Division p. 72–73.

Gobert, G. and Nielsen, E. 1991: Till geochemistry of the Snow Lake area (NTS 63K/16, 63J/13); *in* Report of Activities 1991, Manitoba Energy and Mines, Minerals Division p. 47–48.

DRI2020023

Drillcore geochemistry from the eastern sub-Phanerozoic Flin Flon domain, north-central Manitoba (NTS 63J5, 6, 11, 12, 14, 63K8, 9)

by K.D. Reid

Microsoft® Excel® file supplements:

Reid, K.D. and Gagné, S. 2016: Examination of exploration drillcore from the south Wekusko Lake area, eastern Flin Flon belt, north-central Manitoba (parts of NTS 63J5, 12, 63K8, 9); *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 74–86.

Reid, K.D. 2017: Sub-Phanerozoic basement geology south of Wekusko Lake, eastern Flin Flon belt, north-central Manitoba (parts of NTS 63J5, 12, 63K8, 9): insights from drillcore observations and whole-rock geochemistry of mafic rocks; *in* Report of Activities 2017, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 65–77.

Reid, K.D. 2018: Sub-Phanerozoic basement geology from drillcore observations in the Watts, Mitishto and Hargrave rivers area, eastern Flin Flon belt, west-central Manitoba (parts of NTS 63J5, 6, 11, 12, 13, 14); *in* Report of Activities 2018, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 37–47.

Field-based ice-flow—indicator data from Manigotagan to Berens River, southeastern Manitoba (parts of NTS 62P1, 7, 8, 10, 15, 63A2, 7)

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

Microsoft[®] Excel[®] file supplements:

Gauthier, M.S. and Hodder, T.J. 2020: Surficial geology mapping from Manigotagan to Berens River, southeastern Manitoba (parts of NTS 62P1, 7, 8, 10, 15, 63A2, 7); *in* Report of Activities 2020, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 41–46.

DRI2020026

Laser-ablation inductively coupled plasma—mass spectrometry analyses of detrital zircon grains from metasedimentary rocks in drillcores KUS378 and HAR070 in the Watts, Mitishto and Hargrave river areas, central Manitoba (parts of NTS 63J5, 6, 11–14) by K.D. Reid

Microsoft® Excel® file supplements:

Reid, K.D. 2020: Detrital zircon and whole-rock lithogeochemical analyses of poorly exposed and sub-Phanerozoic metasedimentary basement rocks in the Watts, Mitishto and Hargrave rivers area, north-central Manitoba (parts of NTS 63J5, 6, 11–14); *in* Report of Activities 2020, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 21–30.

DRI2020027

Whole-rock geochemistry of the Russell Lake mapping project (2020 field season), northwestern Manitoba (parts of NTS 64C5, 6) by T. Martins and C.G. Couëslan

Microsoft® Excel® file supplements:

Martins, T. and Couëslan, C.G. 2020: Preliminary results from bedrock mapping in the northern arm of Russell Lake, northwestern Manitoba (parts of NTS 64C5, 6); *in* Report of Activities 2020, Manitoba Agriculture and Resource Development, Manitoba Geological Survey, p. 31–40.

DRI2020028

Lithogeochemistry of drillcore from the Huzyk Creek property, central Manitoba (NTS 63J6) by C.G. Couëslan

Geoscientific Map

MAP2020-1

Surficial geology of the Arden area, Manitoba (NTS 62J6) by T.J. Hodder and M.S. Gauthier (scale 1:50 000)

Geoscientific Paper

GP2020-1

Geology and interpretation of graphite- and vanadium-enriched drillcore from the Huzyk Creek property, sub-Phanerozoic Kisseynew domain, central Manitoba (NTS 63J6)

by C.G. Couëslan

Open Files

OF2020-1

Digital compilation of surficial point and line features for Manitoba: datasets

by M.S. Gauthier and G.R. Keller

OF2020-2

Manitoba till-matrix geochemistry compilation 1: silt plus clay (<63 μ m) size-fraction by instrumental neutron activation analysis by M.S. Gauthier

OF2020-3

Manitoba till-matrix geochemistry compilation 2: silt plus clay (<63 μ m) size-fraction by inductively coupled plasma–mass spectrometry after an aqua-regia or modified aqua-regia digestion

by M.S. Gauthier

OF2020-4

Bedrock geology of the Fox River belt, Manitoba (parts of NTS 53M-O, 54B, D)

by M.L. Rinne

OF2020-5

Manitoba till-matrix geochemistry compilation 3: clay ($<2 \mu m$) size-fraction by atomic absorption spectrometry or inductively coupled plasma—emission spectrometry after aqua-regia digestion

by M.S. Gauthier

OF2020-6

Manitoba till-matrix geochemistry compilation 4: visible gold grains in the heavy mineral (<2 mm; -10 mesh) size-fraction by M.S. Gauthier

OF2020-7

Phanerozoic stratigraphic correlation chart for Manitoba

by M.P.B. Nicolas

Preliminary Map

PMAP2020-1

Bedrock geology of Russell Lake, northern arm, northwestern Manitoba (parts of NTS 64C5, 6)

by T. Martins and C.G. Couëslan (scale 1:20 000)

Surficial Geology Compilation Maps

Updated maps can be downloaded at https://www.manitoba.ca/iem/geo/surficial/digitalcompilation.html

EXTERNAL PUBLICATIONS

- Benn, D., Linnen, R. and Martins, T. 2020: Evaluating muscovite as an indicator mineral for lithium bearing pegmatites, Wekus-ko Lake pegmatite field, Manitoba, Canada (abstract); GeoConvention 2020 virtual event, September 21–23, 2020, Calgary, Alberta, Program with Abstracts, URL https://geoconvention.com/wp-content/uploads/abstracts/2020/56191-evaluating-muscovite-as-an-indicator-mineral-for-l.pdf [October 2020].
- Dalton, A.S., Margold, M., Stokes, C.R., Tarasov, L., Dyke, A.S., Adams, R.S., Allard, S., Arends, H., Atkinson, N., Attig, J.W., Barnett, P.J., Barnett, R.L., Batterson, M.J., Bernatchez, P., Borns, H.W., Breckenridge, A., Briner, J.P., Brouard, E., Campbell, J.E., Carlson, A.E. et al. 2020: An updated radiocarbon-based ice margin chronology for the last deglaciation of the North American Ice Sheet complex; Quaternary Science Reviews, v. 234, art. 106223, URL https://doi.org/10.1016/j.quascirev.2020.106223.
- Dragovic, B., Guevara, V.E., Caddick, M.J. and Couëslan, C.G. 2020: Deciphering the timescales and mode of Archean orogenesis in the Pikwitonei Granulite Domain using multi-mineral petrochronology; GeoConvention 2020 virtual event, September 21–23, 2020, Calgary, Alberta, oral presentation.
- Gauthier, M.S., Kelley, S.E. and Hodder, T.J. 2020: Lake Agassiz drainage bracketed Holocene Hudson Bay ice saddle collapse; Earth and Planetary Science Letters, v. 554, art. 116372, URL https://doi.org/10.1016/j.epsl.2020.116372.
- Guevara, V.E., Dragovic, B., Caddick, M.J. and Couëslan, C.G. 2020: Slow differentiation of continental crust in an Archean granulite terrane; Geological Society of America, Annual Meeting virtual event, October 26–30, 2020, Montréal, Quebec, oral presentation.
- Guevara, V.E., MacLennan, S.A., Dragovic, B., Caddick, M.J., Schoene, B., Kylander-Clark, A.R.C. and Couëslan, C.G. 2020: Polyphase zircon growth during slow cooling from ultrahigh temperature: an example from the Archean Pikwitonei granulite domain; Journal of Petrology, v. 61, art. egaa021, URL https://doi.org/10.1093/petrology/egaa021.
- Hodder, T.J., Gauthier, M.S., and Ross, M. 2020: Deciphering the exceptional Quaternary stratigraphic record of southwest Hudson Bay, Canada; Geological Society of America, Annual Meeting virtual event, October 26–30, 2020, Montréal, Quebec, Abstracts with Programs, v. 52, no. 6, URL https://doi.org/10.1130/abs/2020AM-352972.
- Houlé, M.G., Lesher, C.M., Sappin, A.-A., Bédard, M.-P.; Goutier, J. and Yang, X.M. 2020: Overview of Ni-Cu-(PGE), Cr-(PGE), and Fe-Ti-V magmatic mineralization in the Superior Province: insights on metallotects and metal endowment; *in* Targeted Geoscience Initiative 5: advances in the understanding of Canadian Ni-Cu-PGE and Cr ore systems examples from the midcontinent rift, the Circum-Superior belt, the Archean Superior Province, and Cordilleran Alaskan-type intrusions, W. Bleeker and M.G. Houlé, (ed.), Geological Survey of Canada, Open File 8722, p. 117–139, URL https://doi.org/10.4095/326890.
- Lawley, C.J.M., Selby, D., Davis, W.J., Yang, E., Zhang, S., Jackson, S.E., Petts, D.C., O'Connor, A.R. and Schneider, D.A. 2020: Paleoproterozoic gold and its tectonic triggers and traps: implications from Re-Os sulphide and U-Pb detrital zircon geochronology, Lynn Lake, Manitoba; *in* Targeted Geoscience Initiative 5: contributions to the understanding of Canadian gold systems, P. Mercier-Langevin, C.J.M. Lawley and S. Castonguay, (ed.), Geological Survey of Canada, Open File 8712, p. 211–222, URL https://doi.org/10.4095/326033>.
- Lawley, C.J.M., Yang, X.M., Selby, D., Davis, W., Zhang, S., Petts, D.C. and Jackson, S.E. 2020: Sedimentary basin controls on orogenic gold deposits: new constraints from U-Pb detrital zircon and Re-Os sulphide geochronology, Lynn Lake greenstone belt, Canada; Ore Geology Reviews, v. 126, art. 103790, URL https://doi.org/10.1016/j.oregeorev.2020.103790.
- Martins, T., Corrigan, D. and Rayner, N. 2020: Updated geology, geochemistry, and geochronology of Southern Indian Lake, Manitoba: contributing for a better understanding of architecture of the Trans-Hudson Orogen (abstract); GeoConvention 2020 virtual event, September 21–23, 2020, Calgary, Alberta, Program with Abstracts, URL https://geoconvention.com/wp-content/uploads/abstracts/2020/57364-updated-geology-geochemistry-and-geochronology-o.pdf [October 2020].
- McClenaghan, M.B., Spirito, W.A., Plouffe, A., McMartin, I., Campbell, J.E., Paulen, R.C., Garrett, R.G., Hall, G.E.M., Pelchat, P. and Gauthier, M.S. 2020: Geological Survey of Canada till-sampling and analytical protocols: from field to archive, 2020 update; Geological Survey of Canada, Open File 8591, 73 p., URL https://doi.org/10.4095/326162>.

- Nicolas, M.P.B. 2020: Helium and lithium brine occurrences in southwestern Manitoba; GeoConvention 2020 virtual event, September 21–23, 2020, Calgary, Alberta, oral presentation.
- Polat, A., Sotiriou, P. and Yang, X.M. 2020: Convergent margin origin of Neoarchean anorthosite-bearing layered intrusions in the Superior Province, Canada (abstract); GeoConvention 2020 virtual event, September 21–23, 2020, Calgary, Alberta, Program with Abstracts, URL https://geoconvention.com/wp-content/uploads/abstracts/2020/56669-convergent-margin-origin-of-neoarchean-anorthosite.pdf [September 2020].
- Rinne, M.L. 2020: Gold potential in the Bigstone Lake greenstone belt; Manitoba Mining Review 2019-2020, p. 22.
- Sotiriou, P., Polat, A., Frei, R., Yang, X.M. and van Vessem, J. 2020: Evidence for Neoarchean hydrous arc magmatism, the anorthosite-bearing Mayville intrusion, western Superior Province, Canada; Lithos, v. 362–363, art. 105482, URL https://doi.org/10.1016/j.lithos.2020.105482.
- Yang, X.M., Lentz, D.R. and Chi, G. 2020: Redox effect on estimating crystallization pressure of granites (abstract); GeoConvention 2020 virtual event, September 21–23, 2020, Calgary, Alberta, Program with Abstracts, URL https://geoconvention.com/wp-content/uploads/abstracts/2020/56244-redox-effect-on-estimating-crystallization-pressur.pdf [September 2020].