

PUBLICATIONS

MANITOBA GEOLOGICAL SURVEY PUBLICATIONS
RELEASED DECEMBER 2015 TO NOVEMBER 2016

Data Repository Items

DRI2016001

Whole-rock litho geochemistry, Sm-Nd isotope geochemistry, and U-Pb zircon geochronology for samples from the Paint and Phillips lakes area, Manitoba (parts of NTS 63O1, 8, 9, 63P5, 12)

by C.G. Couëslan

Microsoft® Excel® file supplements:

Couëslan, C.G. 2016: Geology of the Paint and Phillips lakes area, Thompson nickel belt, central Manitoba (parts of NTS 63O1, 8, 9, 63P5, 12); Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, Geoscientific Report GR2016-1, 44 p. and 1 colour map at 1:50 000 scale.

DRI2016002

Carbon and oxygen stable-isotope results from three petroleum-exploration Paleozoic cores from the Hudson Bay Basin, northeastern Manitoba (parts of NTS 54B7, 8, 54F8, 54G1)

by M.P.B. Nicolas

Microsoft® Excel® file supplements:

Nicolas, M.P.B. 2016: Carbon and oxygen stable-isotope profiles of Paleozoic core from the Hudson Bay Basin, northeastern Manitoba (parts of NTS 54B7, 8, 54F8, 54G1); *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 142–149.

DRI2016003

Kimberlite-indicator mineral results from the Arden NTS area (62J6), southwestern Manitoba

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

Microsoft® Excel® file supplements:

Hodder, T.J. and Trommelen, M.S. 2015: Quaternary geology of the Arden NTS area (62J6), southwestern Manitoba; *in* Report of Activities 2015, Manitoba Mineral Resources, Manitoba Geological Survey, p. 115–123.

DRI2016004

Till-matrix (<177 µm) geochemistry analytical results from the Lynn Lake (parts of NTS 64C14, 64F3, 4), Southern Indian Lake (parts of NTS 64G8, 9), Churchill River (parts of NTS 64F14, 64K3, 6, 11) and Fisher Branch (NTS 62P) areas, Manitoba

by T.J. Hodder and C.W. Bater

Microsoft® Excel® file supplements:

Hodder, T.J. 2016: Till sampling and ice-flow mapping in the central area of Southern Indian Lake, north-central Manitoba (parts of NTS 64G1, 2, 7–10, 64B15); *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 196–202.

DRI2016005

Rock-Eval 6 and total organic carbon results from three wells of the Upper Devonian Wymark Member, Duperow Formation, southwestern Manitoba (NTS 62F14 and 16)

by K.B. Bates, N. Chow and M.P.B. Nicolas

Microsoft® Excel® file supplements:

Bates, K.B., Chow, N. and Nicolas, M.P.B. 2016: Preliminary results from sedimentological investigations and petroleum evaluation of the Upper Devonian Duperow Formation, southwestern Manitoba; *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 157–167.

DRI2016006

U-Pb data for the Northern Indian Lake pluton, north-central Manitoba (parts of NTS 64H3, 5, 6)

by T. Martins and C.R.M. McFarlane

Microsoft® Excel® file supplements:

Martins T. and McFarlane C.R.M. 2016: Evidence of juvenile-arc magmatism at Northern Indian Lake: implications for base-metal exploration in north-central Manitoba (parts of NTS 64H3, 5, 6); *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 135–141.

DRI2016007

MB GeoTours of southern Manitoba

by J.D. Bamburak, J.M.Pacey and K. Lapenskie

Microsoft® Excel® file supplements:

Bamburak, J.D., Pacey, J.M. and Lapenskie, K. 2016: Roadside geology of southern Manitoba: 2016 update; *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 212–214.

DRI2016008

Results of U-Pb age determinations by isotope dilution–thermal ionization mass spectrometry, southwestern Manitoba

by J.D. Bamburak and L.M. Heaman

Microsoft® Excel® file supplements:

Bamburak, J.D., Hamilton, M. and Heaman, L.M. 2016: Geochronology of Late Cretaceous bentonite beds in southwestern Manitoba: 2016 update; *in* Report of Activities 2016, Manitoba Growth, Enterprise and Trade, Manitoba Geological Survey, p. 168–175.

Geoscientific Maps

MAP2015-1

Surficial geology of the North Knife and South Knife lakes area (west half), Manitoba (parts of NTS 64I2–7, 10, 11)

by M.S. Gauthier

MAP2015-2

Surficial geology of the North Knife and South Knife lakes area (east half), Manitoba (parts of NTS 54L4, 5, 12, 64I1, 8, 9)

by M.S. Gauthier

Geoscientific Papers

GP2015-1

Postglacial lacustrine and marine deposits, far northeastern Manitoba (parts of NTS 54E, L, M, 64I, P)

by M.S. Gauthier

(Report on CD)

Geoscientific Reports

GR2016-1

Geology of the Paint and Phillips lakes area, Thompson nickel belt, central Manitoba (parts of NTS 63O1, 8, 9, 63P5, 12)
by C.G. Couëslan
(*Report with one accompanying map*)

Open Files

OF2016-1

Geochemical Data for Lake Sediments in the Superior Province of Manitoba (NTS 53-E, 53-L and 53-M)
by M.W. McCurdy, C.O. Böhm, S.D. Anderson and M.S. Gauthier

Preliminary Maps

PMAP2016-1

Bedrock geology of south-central Knee Lake, Manitoba (parts of NTS 53L15, 53M2)
by S.D. Anderson, E.C. Syme and M.T. Corkery (scale 1:15 000)

PMAP2016-2

Bedrock geology of the Natawahunan Lake area, central Manitoba (parts of NTS 63P11, 14)
by C.G. Couëslan (scale 1:20 000)

PMAP2016-3

Bedrock geology of the southeastern Duck Lake–Sesep Rapids area, central Manitoba (part of NTS 63J16)
by C.G. Couëslan (scale 1:10 000)

PMAP2016-4

Bedrock geology of Bigstone Lake, Manitoba (parts of NTS 53E12, 13)
by M.L. Rinne, S.D. Anderson and K.D. Reid (scale 1:20 000)

PMAP2016-5

Bedrock geology of the Farley Lake area, Lynn Lake greenstone belt, northwestern Manitoba (part of NTS 64C16)
by X.M. Yang and C.J. Beaumont-Smith (scale 1:20 000)

PMAP2016-6

Bedrock geology of central Southern Indian Lake, Manitoba (parts of NTS 64G1, 2, 7, 8)
by T. Martins (scale 1:50 000)

EXTERNAL PUBLICATIONS

- Chakhmouradian A.R., Reguir E.P., Couëslan C. and Yang P. 2016: Calcite and dolomite in intrusive carbonatites: II Trace-element variations; *Mineralogy and Petrology*, v. 110, p. 361–377.
- Couëslan, C.G. 2016: The Pikwitonei granulite domain, Manitoba: a collisional orogenic zone along the northwestern margin of the Superior craton; Geological Association of Canada–Mineralogical Association of Canada, Joint Annual Meeting 2016, Whitehorse, Yukon, June 1–3, 2016, abstract, URL <http://gac.esd.mun.ca/gac_2016/search_abs/sub_program.asp?sess=98&form=10&abs_no=115> [October 2016].
- Dragovic, B., Guevara, V.E., Caddick, M.J., Couëslan, C.G., Baxter, E.F. 2016 in press: Deciphering the timescales of Archean HT/UHT metamorphism in the Pikwitonei Granulite Domain using garnet petrochronology; American Geophysical Union, Fall Meeting, San Francisco, California, December 12–16, 2016.
- Guevara, V.E., Dragovic, B., Caddick, M.J., Kylander-Clark, A.R.C., Couëslan, C.G. 2016: Ultrahigh temperature metamorphism of the Archean Pikwitonei Granulite Domain; Geological Society of America, Annual Meeting, Denver, Colorado, September 25–28, 2016, Paper No. 270-4.
- Guevara, V.E., Maclennan, S.A., Schoene, B., Dragovic, B., Caddick, M.J., Kylander-Clark, A.R.C., Couëslan, C.G. in press: Quantifying the timescales of Archean UHT metamorphism through U-Pb monazite and zircon petrochronology: insights from the Pikwitonei Granulite Domain; American Geophysical Union, Fall Meeting, San Francisco, California, December 12–16, 2016.
- Hodder, T. J., Ross, M. and Menzies, J. 2016: Sedimentary record of ice divide migration and ice streams in the Keewatin core region of the Laurentide Ice Sheet; *Sedimentary Geology*, v. 338, p. 97–114.
- Lavoie, D., Armstrong, D., Nicolas, M.P.B., Zhang, S., Pinet, N., Reyes, J., Beauchemin, M., Decker, V., Castagner, A., Desrochers, A., Galloway, J.M., and Duchesne, M.J. 2016: Report of activities for the GEM-2 Hudson Bay Basin project: stratigraphy, source rock and RADARSAT research, Nunavut, Manitoba and Ontario, GEM 2 Hudson-Ungava Project; Geological Survey of Canada, Open File 8126, 26 p., doi:10.4095/299191
- Lavoie, D., Zhang, S., Desrochers, A., Castagner, A., Nicolas, M.P.B., Beauchemin, M. and Decker, V. 2015: Report of activities for the Hudson Platform: stratigraphy, source rock and RADARSAT research, Nunavut and Manitoba, GEM 2 Hudson-Ungava Project; Geological Survey of Canada Open File 7943; 23 p.
- Scoates, J.S., Scoates, J.R.F., Wall, C.J., Friedman, R.M. and Couëslan, C.G. in press: Direct dating of ultramafic sills and mafic intrusions associated with Ni-sulfide mineralization in the Thompson Nickel Belt, Manitoba, Canada; *Economic Geology*.
- Zhou, X., Lin, S. and Anderson, S.D. 2016: Stratigraphy, structure and lode gold system at the Central Manitoba mine trend, Rice Lake greenstone belt, Archean Superior Province, Manitoba, Canada; *Precambrian Research*, v. 281, p. 80–100.