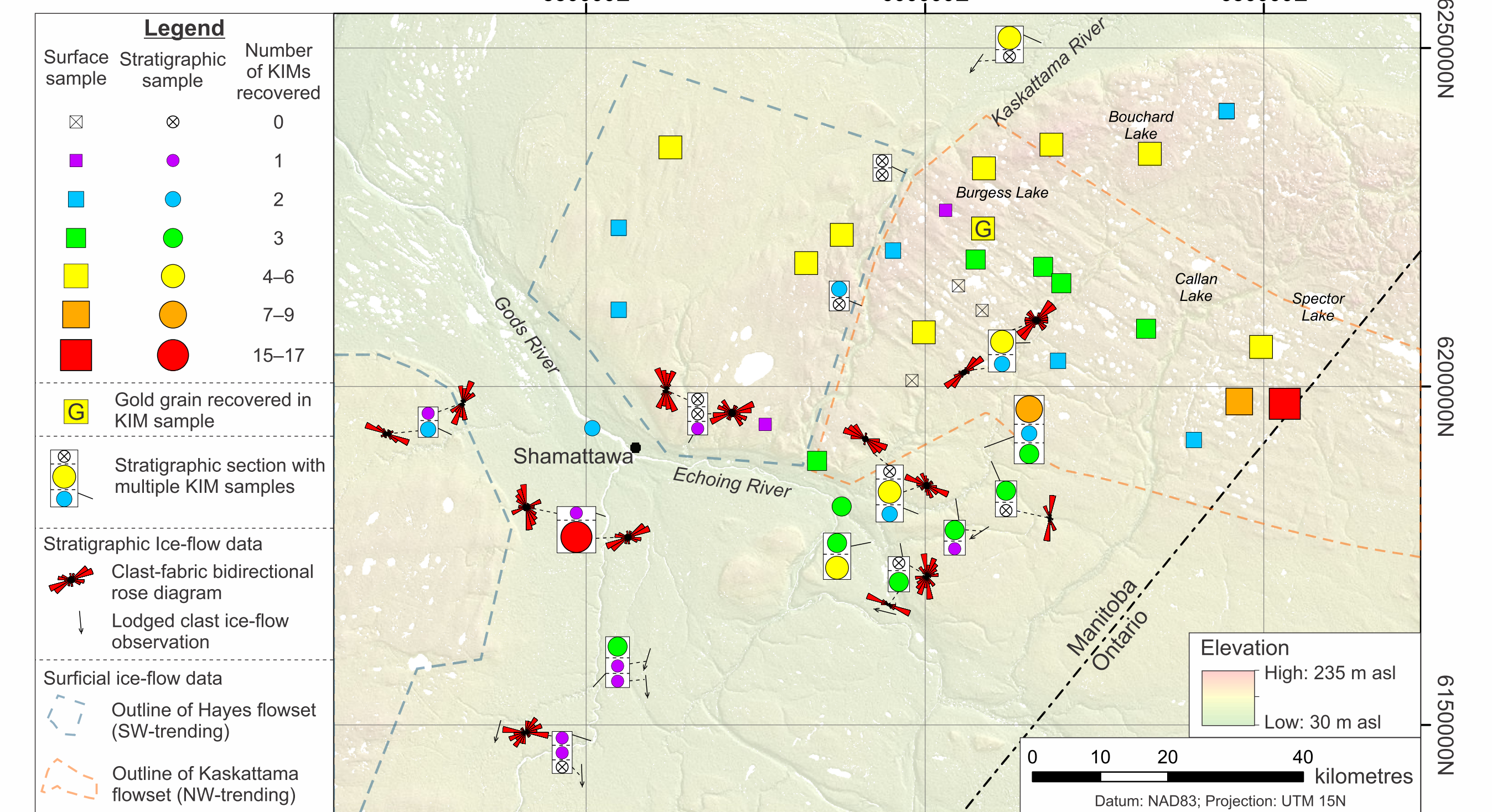


Hodder, T.J.¹, Gauthier, M.S.¹, Böhm, C.O.¹, Kelley, S.E.²

1. Manitoba Geological Survey 2. University of Waterloo

Kaskattama region



Legend

- Cr-diopside
- Cr-spinel
- Diamond inclusion Cr-spinel
- Mg-ilmenite
- G3-garnet
- G9-garnet
- G11-garnet

Stratigraphic section with multiple KIM samples

Number of KIMs recovered

1 17

⊗/⊗ No KIM recovery

Outline of Hayes flowset (SW-trending)

Outline of Kaskaskia flowset (NW-trending)

Elevation

High: 235 m asl

Low: 30 m asl

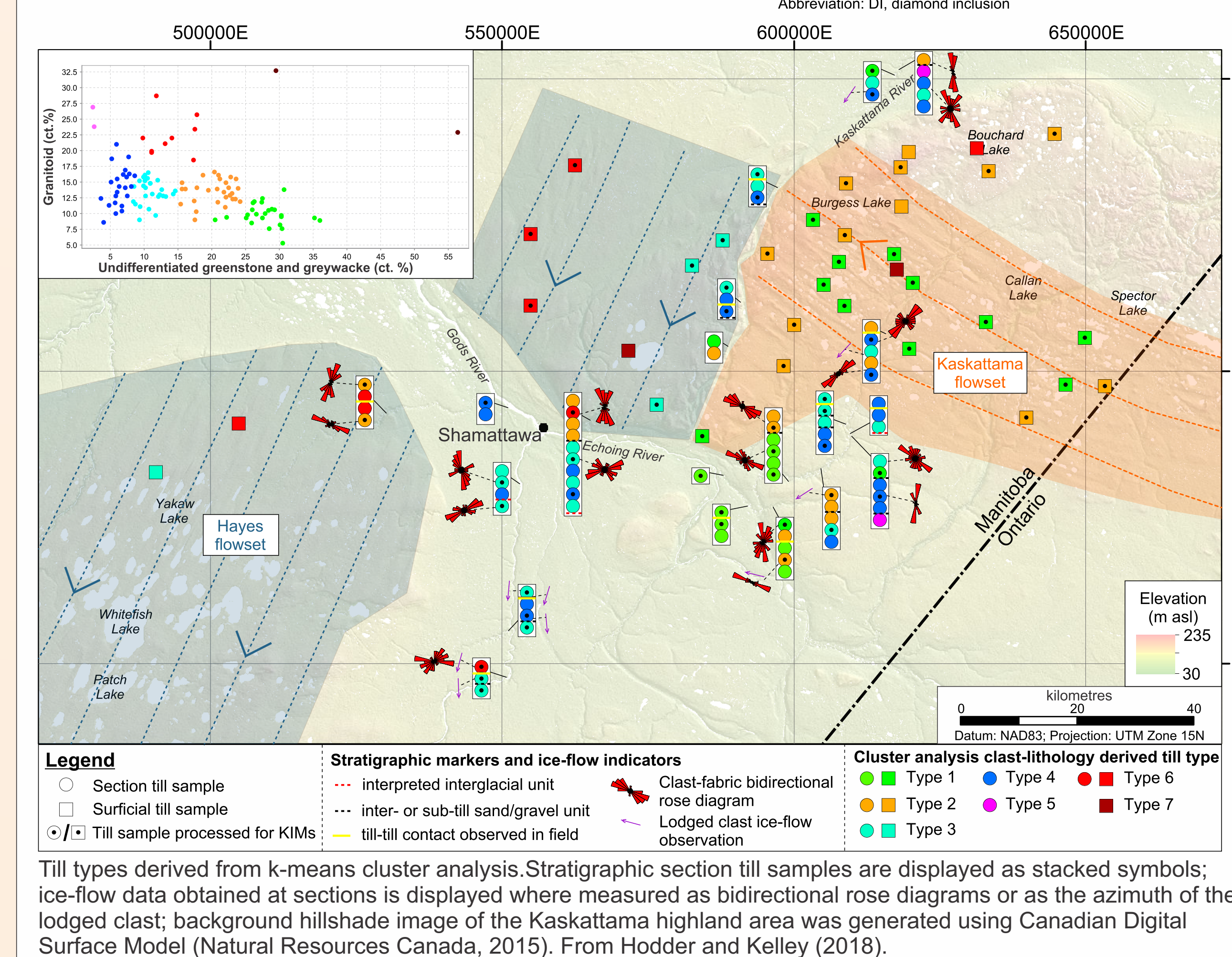
0 10 20 40 kilometres

Datum: NAD83, Projection: UTM 15N

Geographic coordinates: 550000E, 650000E, 6500000N, 6500000N, 6500000N, 6500000N

Geographic labels: Kaskaskia River, Bourland Lake, Burgess Lake, Callan Lake, Spector Lake, Shamaltawa, Echoing River, Manitoba, Ontario

The spatial distribution of total-KIM counts per sample does exhibit variation: no KIM grains were recovered from till samples north of Little Brightsand Lake along PR394; the majority of KIM grains (9/17) were recovered from till samples along PR391 between Hughes and Adams lakes. There is a correlation with KIM recovery and the carbonate content of the till-matrix.



The highest average KIM recovery was from till type 2 at 3.6 KIMs per sample. Till-type 2 is associated with relatively elevated undifferentiated greywacke and greenstone content. Ice-flow indicators associated with this till-type indicate deposition by northwest-trending ice-flow.

References.

Anderson, S.D., Mather, G.L.D. and Keller, G.R.: 2008, 'Geochronal and kerbitrinite indicator-microfossils from 17 samples from the Neaguen, Karmen and Padoux lake areas, northern Manitoba', *Manitoba Geological Survey Open File Report 2008-1*, p. 26.

Gauthier, M.S. and Hodder, T.J.: 2007, 'Field-based low-to-high index diatom, Kooresay-Lynn Lake Rapids, northwestern Manitoba (parts of NTS 64B12, 64C13, 12, 14, 16, 64F3, 64J)', *Manitoba Geology, Enterprise and Trade*, Manitoba Geological Survey, Data Repository Item DR210073, Microsoft Excel file.

Hodder, T.J. and Gauthier, M.S.: 2009, 'Diatom biostratigraphy along the Kooresay-Lynn Lake Rapids, northwestern Manitoba (parts of NTS 64G1, 7, 12, 14, 16, 64B15, 64H, 64I, 64J, 64K, 64L, 64M, 64N, 64O, 64P, 64Q, 64R, 64S, 64T, 64U, 64V, 64W, 64X, 64Y, 64Z, 64AA, 64AB, 64AC, 64AD, 64AE, 64AF, 64AG, 64AH, 64AI, 64AJ, 64AK, 64AL, 64AM, 64AN, 64AO, 64AP, 64AQ, 64AR, 64AS, 64AT, 64AU, 64AV, 64AW, 64AX, 64AY, 64AZ, 64BA, 64BB, 64BC, 64BD, 64BE, 64BF, 64BG, 64BH, 64BI, 64BJ, 64BK, 64BL, 64BM, 64BN, 64BO, 64BP, 64BQ, 64BR, 64BS, 64BT, 64BU, 64BV, 64BW, 64BX, 64BY, 64BZ, 64CA, 64CB, 64CC, 64CD, 64CE, 64CF, 64CG, 64CH, 64CI, 64CJ, 64CK, 64CL, 64CM, 64CN, 64CO, 64CP, 64CQ, 64CR, 64CS, 64CT, 64CU, 64CV, 64CW, 64CX, 64CY, 64CZ, 64DA, 64DB, 64DC, 64DD, 64DE, 64DF, 64DG, 64DH, 64DI, 64DJ, 64DK, 64DL, 64DM, 64DN, 64DO, 64DP, 64DQ, 64DR, 64DS, 64DT, 64DU, 64DV, 64DW, 64DX, 64DY, 64DZ, 64EA, 64EB, 64EC, 64ED, 64EE, 64EF, 64EG, 64EH, 64EI, 64EJ, 64EK, 64EL, 64EM, 64EN, 64EO, 64EP, 64EQ, 64ER, 64ES, 64ET, 64EU, 64EV, 64EW, 64EX, 64EY, 64EZ, 64FA, 64FB, 64FC, 64FD, 64FE, 64FF, 64FG, 64FH, 64FI, 64FJ, 64FK, 64FL, 64FM, 64FN, 64FO, 64FP, 64FQ, 64FR, 64FS, 64FT, 64FU, 64FV, 64FW, 64FX, 64FY, 64FZ, 64GA, 64GB, 64GC, 64GD, 64GE, 64GF, 64GG, 64GH, 64GI, 64GJ, 64GK, 64GL, 64GM, 64GN, 64GO, 64GP, 64GQ, 64GR, 64GS, 64GT, 64GU, 64GV, 64GW, 64GX, 64GY, 64GZ, 64HA, 64HB, 64HC, 64HD, 64HE, 64HF, 64HG, 64HH, 64HI, 64HJ, 64HK, 64HL, 64HM, 64HN, 64HO, 64HP, 64HQ, 64HR, 64HS, 64HT, 64HU, 64HV, 64HW, 64HX, 64HY, 64HZ, 64IA, 64IB, 64IC, 64ID, 64IE, 64IF, 64IG, 64IH, 64II, 64IJ, 64IK, 64IL, 64IM, 64IN, 64IO, 64IP, 64IQ, 64IR, 64IS, 64IT, 64IU, 64IV, 64IW, 64IX, 64IY, 64IZ, 64JA, 64JB, 64JC, 64JD, 64JE, 64JF, 64JG, 64JH, 64JI, 64JJ, 64JK, 64JL, 64JM, 64JN, 64JO, 64JP, 64JQ, 64JR, 64JS, 64JT, 64JU, 64JV, 64JW, 64JX, 64JY, 64JZ, 64KA, 64KB, 64KC, 64KD, 64KE, 64KF, 64KG, 64KH, 64KI, 64KJ, 64KL, 64KM, 64KN, 64KO, 64KP, 64KQ, 64KR, 64KS, 64KT, 64KU, 64KV, 64KW, 64KX, 64KY, 64KZ, 64LA, 64LB, 64LC, 64LD, 64LE, 64LF, 64LG, 64LH, 64LI, 64LJ, 64LK, 64LL, 64LM, 64LN, 64LO, 64LP, 64LQ, 64LR, 64LS, 64LT, 64LU, 64LV, 64LW, 64LX, 64LY, 64LZ, 64MA, 64MB, 64MC, 64MD, 64ME, 64MF, 64MG, 64MH, 64MI, 64MJ, 64MK, 64ML, 64MN, 64MO, 64MP, 64MQ, 64MR, 64MS, 64MT, 64MU, 64MV, 64MW, 64MX, 64MY, 64MZ, 64NA, 64NB, 64NC, 64ND, 64NE, 64NF, 64NG, 64NH, 64NI, 64NJ, 64NK, 64NL, 64NM, 64NO, 64NP, 64NQ, 64NR, 64NS, 64NT, 64NU, 64NV, 64NW, 64NX, 64NY, 64NZ, 64OA, 64OB, 64OC, 64OD, 64OE, 64OF, 64OG, 64OH, 64OI, 64OJ, 64OK, 64OL, 64OM, 64ON, 64OO, 64OP, 64OQ, 64OR, 64OS, 64OT, 64OU, 64OV, 64OW, 64OX, 64OY, 64OZ, 64PA, 64PB, 64PC, 64PD, 64PE, 64PF, 64PG, 64PH, 64PI, 64PJ, 64PK, 64PL, 64PM, 64PN, 64PO, 64PP, 64PQ, 64PR, 64PS, 64PT, 64PU, 64PV, 64PW, 64PX, 64PY, 64PZ, 64QA, 64QB, 64QC, 64QD, 64QE, 64QF, 64QG, 64QH, 64QI, 64QJ, 64QK, 64QL, 64QM, 64QN, 64QO, 64QP, 64QQ, 64QR, 64QS, 64QT, 64QU, 64QV, 64QW, 64QX, 64QY, 64QZ, 64RA, 64RB, 64RC, 64RD, 64RE, 64RF, 64RG, 64RH, 64RI, 64RJ, 64RK, 64RL, 64RM, 64RN, 64RO, 64RP, 64RQ, 64RR, 64RS, 64RT, 64RU, 64RV, 64RW, 64RX, 64RY, 64RZ, 64SA, 64SB, 64SC, 64SD, 64SE, 64SF, 64SG, 64SH, 64SI, 64SJ, 64SK, 64SL, 64SM, 64SN, 64SO, 64SP, 64SQ, 64SR, 64SS, 64ST, 64SU, 64SV, 64SW, 64SX, 64SY, 64SZ, 64TA, 64TB, 64TC, 64TD, 64TE, 64TF, 64TG, 64TH, 64TI, 64TJ, 64TK, 64TL, 64TM, 64TN, 64TO, 64TP, 64TQ, 64TR, 64TS, 64TT, 64TU, 64TV, 64TW, 64TX, 64TY, 64TZ, 64UA, 64UB, 64UC, 64UD, 64UE, 64UF, 64UG, 64UH, 64UI, 64UJ, 64UK, 64UL, 64UM, 64UN, 64UO, 64UP, 64UQ, 64UR, 64US, 64UT, 64UU, 64UV, 64UW, 64UX, 64UY, 64UZ, 64VA, 64VB, 64VC, 64VD, 64VE, 64VF, 64VG, 64VH, 64VI, 64VJ, 64VK, 64VL, 64VM, 64VN, 64VO, 64VP, 64VQ, 64VR, 64VS, 64VT, 64VU, 64VV, 64VW, 64VX, 64VY, 64VZ, 64WA, 64WB, 64WC, 64WD, 64WE, 64WF, 64WG, 64WH, 64WI, 64WJ, 64WK, 64WL, 64WM, 64WN, 64WO, 64WP, 64WQ, 64WR, 64WS, 64WT, 64WU, 64WV, 64WW, 64WX, 64WY, 64WZ, 64XA, 64XB, 64XC, 64XD, 64XE, 64XF, 64XG, 64XH, 64XI, 64XJ, 64XK, 64XL, 64XM, 64XN, 64XO, 64XP, 64XQ, 64XR, 64XS, 64XT, 64XU, 64XV, 64XW, 64XX, 64XY, 64XZ, 64YA, 64YB, 64YC, 64YD, 64YE, 64YF, 64YG, 64YH, 64YI, 64YJ, 64YK, 64YL, 64YM, 64YN, 64YO, 64YP, 64YQ, 64YR, 64YS, 64YT, 64YU, 64YV, 64YW, 64YX, 64YY, 64YZ, 64ZA, 64ZB, 64ZC, 64ZD, 64ZE, 64ZF, 64ZG, 64ZH, 64ZI, 64ZJ, 64ZK, 64ZL, 64ZM, 64ZN, 64ZO, 64ZP, 64ZQ, 64ZR, 64ZS, 64ZT, 64ZU, 64ZV, 64ZW, 64ZX, 64ZY, 64ZZ' (September 2010).

Nelson, E. and Fedock, M.A.: 2002, 'Kerbitrinite indicator-microfossils from 10 samples from the Neaguen, Karmen and Padoux lake areas, northern Manitoba (parts of NTS 64B12, 64C13, 12, 14, 16, 64F3, 64J)', *Manitoba Geological Survey Open File Report 2002-1*, p. 209–215.

Neufeld, E. and Gauthier, M.S.: 2004, 'Diatom biostratigraphy along the Kooresay-Lynn Lake Rapids, northwestern Manitoba (parts of NTS 64G1, 7, 12, 14, 16, 64B15, 64H