APPENDIX 1

Electron microprobe data (wt.%) for chlorite and micas from the Dewon Quarry

	JN1a *n* = 21	JN1b *n* = 29	JN1 vein *n* = 10	JN1vein *n* = 5	JN2a *n* = 10	JN2b *n* = 11	JN4 *n* = 10	Muscovite JN1 *n* = 10	Biotite JN2 *n* = 11
SiO_2	24.97(62)	25.13(1.41)	25.20(30)	24.29(24)	25.70(2.50)	24.88(37)	24.53(20)	48.16(16)	34.86(15)
TiO_2	0.06(02)	0.03(03)	0.05(02)	0.07(02)	0.06(01)	0.07(02)	0.06(01)	0.40(03)	1.68(20)
Al_2O_3	22.11(59)	22.45(44)	20.96(32)	21.87(27)	22.20(37)	22.32(42)	21.36(17)	31.41(19)	18.77(17)
MgO	11.87(31)	11.99(51)	11.97(23)	12.09(26)	12.21(45)	12.37(36)	12.14(21)	1.47(03)	8.76(06)
MnO	0.33(06)	0.33(06)	0.27(07)	0.31(08)	0.39(09)	0.43(06)	0.40(04)	0.00	0.22(03)
FeO*	28.02(54)	27.40(84)	29.54(55)	28.48(28)	27.06(93)	27.63(41)	28.82(38)	2.23(03)	21.89(16)
Na_2O	nd							0.33(02)	0.05(01)
K_2O								10.20(03)	7.70(23)
Total	87.36	87.33	87.99	87.11	87.62	87.70	87.31		
Number of cations per 140								Number of cations per 110	
Tetrahedral sites									
Si	2.678	2.684	2.706	2.627	2.727	2.653	2.653	3.243	2.702
Al^{IV}	1.322	1.316	1.294	1.373	1.273	1.347	1.347	0.757	1.298
Octahedral sites									
Al^{VI}	1.473	1.510	1.359	1.414	1.503	1.458	1.376	1.736	0.416
Ti	0.005	0.001	0.004	0.006	0.005	0.006	0.005	0.020	0.098
Mg	1.898	1.909	1.916	1.949	1.931	1.966	1.954	0.148	1.012
Mn	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001
Fe^{2+}	2.513	2.447	2.653	2.576	2.401	2.464	2.607	0.126	1.419
Σoct	5.890	5.868	5.933	5.946	5.841	5.895	5.942	2.030	2.946
Na	–	–	–	–	–	–	–	0.043	0.008
K	–	–	–	–	–	–	–	0.876	0.761
f**	0.570	0.562	0.581	0.571	0.554	0.556	0.572	0.460	0.584

* – total iron as FeO; **f = Fe/(Fe + Mg); CaO, Na_2O, and K_2O in chlorites are below detection limits of 0.05, 0.04, and 0.04 wt.%, respectively; values in parentheses refer to the standard deviation of the last two digits; Σoct = sum of octahedral cations; nd – not determined