APPENDIX

Metamorphic evolution of ultrahigh-temperature granulite facies and upper amphibolite facies rocks of the Epupa Complex, NW Namibia

Dissertation zur Erlangung des

naturwissenschaftlichen Doktorgrades

der Bayerischen Julius-Maximilians-Universität Würzburg

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A.1 ABBREVIATIONS

Abbreviation of the rock-forming minerals follows the scheme of Kretz (1983).

Ab	albite	En	enstatite	Pl	plagioclase
Act	actinolite	Ep	epidote	Prp	pyrope
Alm	almandine	Fs	ferrosilite	Qtz	quartz
An	anorthite	Grs	grossular	Rt	rutile
And	andalusite	Grt	garnet	Sil	sillimanite
Bt	biotite	Hbl	hornblende	Spl	spinel
Cal	calcite	Ilm	ilmenite	Sps	spessartine
Chl	chlorite	Kfs	K-feldspar	Spr	sapphirine
Crd	cordierite	Ky	kyanite	St	staurolite
Crn	corundum	Ms	muscovite	Ttn	titanite
Cum	cummingtonite	Opx	orthopyroxene	Wo	wollastonite
Czo	clinozoisite	Or	orthoclase		

Other abbreviations

a	activity	P	pressure
Am	amphibole	P_{ref}	reference pressure
Cels	celsian	T	temperature
EC	Epupa Complex	T_{ref}	reference temperature
f	fugacity	UHT	ultra-high temperature
KIC	Kunene Intrusive Complex	V	vapour
L	melt	X_{Mg}	$Mg/(Mg+Fe^{2+})_{molar}$

A.2 SAMPLE LOCATIONS

Table A.2: Sample locations

sample	rock unit	rock type	GPS		region	comment	TS	RFA	EMP
1998									
B-103-A-98	Orue	Metapelitic Grt-Crd-Bt gneiss	S 17° 00.012′	E 13°00.751′	Orokane		2 x	x	x
B-103-B-98	Orue	Metapelitic Grt-Crd-Bt gneiss	S 17° 00.012′	E 13°00.751′	Orokane		x		
B-106-B-98	Orue	Felsic gneiss	S 17° 01.348′	E 13°10.853′	Epupa		x		
B-108-A-98	Damara	Sandstone	S 17° 01.501′	E 13°09.634′	Epupa	rippelmarks	x		
B-109-A-98	Orue	Amphibolite	S 17°01.325′	E 13°10.345′	Epupa		x		
B-112-B-98	Orue	Felsic gneiss	S 17°00.666′	E 13°09.106′	Eyao		x		
B-114-A-98	Orue	Felsic gneiss	S 17°00.509′	E 13°07.796′	Eyao		x		
B-114-C-98	Orue	Felsic gneiss	S 17°00.509′	E 13°07.796′	Eyao		x		
B-122-A-98	Orue	Hornblendite	S 16°58.727′	E 13°05.290′	Eyao		x		
B-122-B-98	Orue	Grt-Hbl schist	S 16°58.727′	E 13°05.290′	Eyao		x		
B-122-C-98	Orue	Metapelitic Crd-Bt gneiss	S 16°58.727′	E 13°05.290′	Eyao		x		
B-124-A-98	Orue	Grt-Bt gneiss	S 16°59.149′	E 13°05.114′	Eyao		x		
B-124-D-98	Orue	Amphibolite	S 16°59.149′	E 13°05.114′	Eyao		x		
B-126-A-98	Orue	Hornblendite	S 16°59.391′	E 13°05.028′	Eyao		x		
B-131-A-98	Orue	Amphibolite	S 16°59.925′	E 13°04.627′	Eyao		x		
B-133-A-98	Orue	Felsic gneiss	S 16°59.787′	E 13°03.780′	Eyao		x		
B-137-B-98	Orue	Grt-Bt schist	S 16°59.624′	E 13°02.683′	Orokane	mylonitic	2 x		
B-137-C-98	Orue	Grt-Bt schist	S 16°59.624′	E 13°02.683′	Orokane	mylonitic	x	x	x
B-142-A-98	Orue	Amphibolite	S 16°59.272′	E 13°01.691′	Orokane	Bt-bearing	x		
B-143-B-98	Orue	Calc-silicate rock	S 16°59.237′	E 13°01.584′	Orokane		x		
B-143-C-98	Orue	Metapelitic Crd-Bt gneiss	S 16°59.237′	E 13°01.584′	Orokane		2 x		
B-145-A-98	Orue	Metapelitic Crd-Bt gneiss	S 16°59.848′	E 13°01.122′	Orokane		3 x		
B-148-A-98	Orue	Metapelitic Crd-Bt gneiss	S 16°58.845′	E 13°01.472′	Orokane		2 x	x	
B-149-A-98	Orue	Amphibolite	S 16°58.895′	E 13°01.550′	Orokane		x		
B-152-A-98	Orue	Felsic gneiss	S 17°00.426′	E 13°05.255′	Eyao		x		
B-155-A-98	Orue	Amphibolite	S 17°00.671′	E 13°07.937′	Eyao		x		
B-159-A-98	Orue	Felsic gneiss	S 17°00.748′	E 13°08.009′	Eyao		x		
B-159-C-98	Orue	Amphibolite	S 17°00.748′	E 13°08.009′	Eyao		x		
B-159-D-98	Orue	Felsic gneiss	S 17°00.748′	E 13°08.009′	Eyao		x		
B-159-E-98	Orue	Amphibolite	S 17°00.748′	E 13°08.009′	Eyao		x		
B-163-B-98	Orue	Hbl-Bt metagranitoid	S 17°00.384′	E 13°08.351′	Eyao	mylonitic	x		
B-167-B-98	Orue	Amphibolite	S 16°59.884′	E 13°14.326′	Epupa		x		
B-170-A-98		Granite	S 17°25.539′	E 13°48.832′	Okatjitjipe		x	x	
B-171-A-98	Orue	Grt-Bt gneiss	S 17°26.098′	E 13°48.793′	Okatjitjipe		x	x	
B-172-A-98	Orue	Amphibolite	S 17°26.435′	E 13°48.698′	Okatjitjipe	migmatitic	x		
B-174-A-98	Orue	Felsic gneiss	S 17°27.104′	E 13°48.725′	Okatjitjipe		x	x	
B-174-B-98	Orue	Amphibolite	S 17°27.104′	E 13°48.725′	Okatjitjipe		x		
B-177-A-98	Orue	Grt-Bt gneiss	S 17°27.059′	E 13°48.739′	Okatjitjipe		2 x		
B-177-B-98	Orue	Amphibolite	S 17°27.059′	E 13°48.739′	Okatjitjipe		x	x	
B-178-A-98	Orue	Grt-Bt gneiss	S 17°25.999′	E 13°59.691′	Kunene		x		
B-179-A-98	Orue	Felsic gneiss	S 17°25.972′	E 13°59.421′	Kunene		x		
B-181-A-98	Orue	Amphibolite	S 17°27.080′	E 13°45.426′	Ozongate		x		
B-182-A-98	Orue	Calc-silicate rock	S 17°27.410′	E 13°45.140′	Ozongate		x		
B-182-B-98	Orue	Calc-silicate rock	S 17°27.410′	E 13°45.140′	Ozongate		x		
B-184-A-98	Orue	Grt-Bt gneiss	S 17°28.647′	E 13°44.885′	Ehomba		x		
B-186-A-98	Orue	Grt-Bt gneiss	S 17°28.862′	E 13°45.102′	Ehomba		x		
B-187-A-98	Orue	Felsic gneiss	S 17°29.109′	E 13°45.312′	Ehomba	Hbl-rich	x		
B-191-A-98	Orue	Grt-Bt gneiss	S 17°28.266′	E 13°44.345′	Okotjite		x	x	x
B-191-B-98	Orue	Grt-Amphibolite	S 17°28.266′	E 13°44.345′	Okotjite		2 x	x	x
B-197-A-98	Orue	Grt-Bt gneiss	S 17°30.191′	E 13°41.482′	Okotjite		x		
B-197-B-98	Orue	Grt-Amphibolite	S 17°30.191′	E 13°41.482′	Okotjite		2 x		
B-202-A-98	Orue	Hbl-Bt metagranitoid	S 17°29.839′	E 13°42.069′	Okotjite	migmatitic	x	x	
B-206-B1-98	Epembe	Grt-Opx metagranitoid	S 17°32.519′	E 13°37.606′	Otjitambi		3 x	x	x

Table A.2 (continued): Sample locations

sample	rock unit	rock type	GPS		region	comment	TS	RFA	EMP
B-206-B2-98	Epembe	Grt-Opx metagranitoid	S 17°32.519´	E 13°37.606´	Otjitambi		2 x		
B-206-C-98	Epembe	Felsic granulite	S 17°32.519´	E 13°37.606´	Otjitambi		3 x		
B-206-E-98	Epembe	Mafic granulite	S 17°32.519´	E 13°37.606´	Otjitambi		x		
B-206-F-98	Epembe	Metapelitic Grt-Sil gneiss	S 17°32.519´	E 13°37.606´	Otjitambi	altered	x		
B-207-A-98	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.396´	E 13°34.176´	Otjitambi		x		
B-207-B-98	Epembe	Mafic granulite	S 17°33.396´	E 13°34.176´	Otjitambi		x		
B-207-C-98	Epembe	Felsic granulite	S 17°33.396´	E 13°34.176´	Otjitambi		x		
B-208-A-98	Epembe	Grt-bearing gneiss	S 17°33.039´	E 13°35.868´	Otjitambi		x		
B-208-B-98	Epembe	Felsic granulite	S 17°33.039´	E 13°35.868´	Otjitambi		x		
B-212-A-98	Epembe	Metapelitic Grt-Sil gneiss	S 17°34.688´	E 13°31.259´	Epembe		2 x	x	
B-212-B-98	Epembe	Mafic Dyke	S 17°34.688´	E 13°31.259´	Epembe		x		
B-212-C-98	Epembe	Metapelitic Grt-Sil gneiss	S 17°34.688´	E 13°31.259´	Epembe		x		
B-219-A-98	Orue	Leucosome of Grt-Bt-Sil gneiss	S 17°27.419´	E 13°43.644´	Orue		2 x	x	x
B-220-A-98	Orue	Grt-Bt gneiss	S 17°27.255´	E 13°43.520´	Orue		x		
B-220-B-98	Orue	Grt-Hbl schist	S 17°27.255´	E 13°43.520´	Orue	lens in Grt-Bt-Gneiss	2 x		
B-226-A-98	Orue	Felsic gneiss	S 17°26.375´	E 13°41.010´	Orue		x		
B-229-A-98	Epembe	Felsic granulite	S 17°32.938´	E 13°36.502´	Epembe		x		
B-230-A-98	Epembe	Grt gneiss	S 17°33.051´	E 13°36.351´	Epembe	Bt-bearing	2 x	x	
B-230-B-98	Epembe	Mafic granulite	S 17°33.051´	E 13°36.351´	Epembe	Bt-bearing	x	x	x
B-230-C-98	Epembe	Felsic granulite	S 17°33.051´	E 13°36.351´	Epembe		x		
B-230-E-98	Epembe	Grt gneiss	S 17°33.051´	E 13°36.351´	Epembe	Bt-bearing	2 x	x	x
B-230-F-98	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.051´	E 13°36.351´	Epembe		2 x	x	x
B-231-A-98	Epembe	Mafic Dyke	S 17°34.511´	E 13°29.921´	Epembe		x		
B-240-A-98	Orue	Hbl-Bt metagranitoid	S 17°28.431´	E 13°20.150´	Okangwati	mylonitic	x		
B-241-A-98	Orue	Hbl-Bt metagranitoid	S 17°28.093´	E 13°19.844´	Okangwati	mylonitic, with Kfs-Blasts	x		
B-246-A-98	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°27.644´	E 13°14.836´	Okangwati		2 x	x	x
B-246-C-98	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°27.644´	E 13°14.836´	Okangwati		2 x		
B-246-D-98	Orue	Grt-Hbl schist	S 17°27.644´	E 13°14.836´	Okangwati		x		
B-246-E-98	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°27.644´	E 13°14.836´	Okangwati		x		
B-246-F-98	Orue	Grt-Hbl schist	S 17°27.644´	E 13°14.836´	Okangwati		5 x		
B-248-B-98	Orue	Amphibolite	S 17°02.282´	E 13°13.408´	Epupa		x		
B-258-98	Orue	Hbl-Bt metagranitoid	S 17°14.186´	E 13°13.710´	Ondova		x		
B-259-A-98	Orue	Hbl-Bt metagranitoid	S 17°14.696´	E 13°13.530´	Ondova		x		
B-260-A-98	Orue	Amphibolite	S 17°16.087´	E 13°12.022´	Ondova	Bt-bearing	x		
B-268-A-98	Orue	Hbl-Bt metagranitoid	S 17°18.381´	E 13°07.815´	Ondova		x		
B-268-B-98	Orue	Amphibolite	S 17°18.381´	E 13°07.815´	Ondova		x		
B-289-A-98	Orue	Amphibolite	S 17°01.254´	E 12°57.557´	Orokane		2 x		
B-294-A-98	Orue	Amphibolite	S 17°00.098´	E 13°14.510´	Epupa		x		
1999									
B-122-2-99	Orue	Grt-Hbl schist	S 16°58.757´	E 13°05.290´	Epupa		x		
B-180-1-99		Granite	S 17°25.907´	E 13°45.796´	Ehomba		x	x	
B-184-2-99	Orue	Grt-Hbl schist	S 17°28.647´	E 13°44.885´	Ehomba		x		
B-190-1-99	Orue	Hbl-Bt metagranitoid	S 17°29.312´	E 13°46.512´	Ehomba		x	x	
B-197-99	Orue	Grt-Hbl schist	S 17°30.191´	E 13°41.482´	Okotjite		x		
B-208-99	Epembe	Mafic granulite	S 17°33.039´	E 13°35.868´	Otjitambi	banded	x		
B-212-6-99	Epembe	Leucosome of Grt-Sil gneiss	S 17°34.688´	E 13°31.259´	Epembe		x		
B-212-7-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°34.688´	E 13°31.259´	Epembe		x		
B-228-2-99	Orue	Amphibolite	S 17°31.456´	E 13°37.623´	Otjitambi	in OEL shear zone	x		
B-302-1-99	Orue	Metapelitic Grt-Sil-Crd fels	S 17°26.112´	E 13°40.813´	Orue	contact to KIC	x		
B-302-2-99	Orue	Metapelitic Grt-Sil-Crd fels	S 17°26.112´	E 13°40.813´	Orue	contact to KIC	2 x	2 x	x
B-305-1-99	Orue	Grt-Pl rock	S 17°27.786´	E 13°44.908´	Ehomba		x		
B-305-2-99	Orue	Amphibolite	S 17°27.786´	E 13°44.908´	Ehomba		x	x	
B-307-2-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°28.166´	E 13°44.867´	Ehomba		x		
B-307-3-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°28.166´	E 13°44.867´	Ehomba		x		
B-308-1-99	Orue	Grt-Hbl schist	S 17°28.215´	E 13°44.915´	Ehomba		2 x		
B-310-1-99	Orue	Grt-Bt gneiss	S 17°28.894´	E 13°44.920´	Ehomba		x		

Table A.2 (continued): Sample locations

sample	rock unit	rock type	GPS	region	comment	TS	RFA	EMP
B-310-2-99	Orue	Grt-Hbl schist	S 17°28.894′ E 13°44.920′	Ehomba		x		
B-311-1-99	Epembe	Mafic Grt-Cpx granulite	S 17°29.550′ E 13°46.697′	Ehomba	lens in shear zone	2 x	x	x
B-311-2-99	Epembe	Felsic layer in Grt-Cpx granulite	S 17°29.550′ E 13°46.697′	Ehomba	lens in shear zone	x		
B-317-1-99	Epembe	Mafic granulite	S 17°30.867′ E 13°44.162′	Okotjite / E		x		
B-317-2-99	Epembe	Mafic granulite	S 17°30.867′ E 13°44.162′	Okotjite / E	banded	x		
B-321-99	Epembe	Mafic granulite (retrogressed)	S 17°31.468′ E 13°43.888′	Okotjite / E	mylonitic	x		
B-326-99	Epembe	Grt-bearing mafic granulite	S 17°30.584′ E 13°41.899′	Okotjite		x	x	
B-326-2-99	Epembe	Mafic Granulite	S 17°30.584′ E 13°41.899′	Okotjite		x		
B-326-3-99	Epembe	Grt-bearing mafic granulite	S 17°30.584′ E 13°41.899′	Okotjite	leucosome	x		
B-327-99	Epembe	Mafic granulite (retrogressed)	S 17°31.130′ E 13°41.822′	Okotjite	late garnet	x		
B-329-1-99	Epembe	Grt-Opx metagranitoid	S 17°31.622′ E 13°41.679′	Okotjite	massive	x	x	
B-329-3-99	Epembe	Grt-Opx metagranitoid	S 17°31.622′ E 13°41.679′	Okotjite	massive	2 x		
B-336-99	Epembe	Mafic granulite (retrogressed)	S 17°31.900′ E 13°41.755′	Okotjite	Cpx-relics	x		
B-341-1-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°28.365′ E 13°42.673′	Okotjite / N		x		
B-342-2-99	Orue	Grt-Bt gneiss	S 17°28.403′ E 13°42.490′	Okotjite / N		x		
B-342-3-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°28.403′ E 13°42.490′	Okotjite / N		x	x	x
B-342-4-99	Orue	Calc-silicate rock	S 17°28.403′ E 13°42.490′	Okotjite / N		2 x		
B-342-5-99	Orue	Leucosome of metapelite	S 17°28.403′ E 13°42.490′	Okotjite / N		x	x	
B-345-99	Orue	Grt-Bt gneiss	S 17°27.657′ E 13°42.579′	Okotjite / N		x		
B-345-1-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°27.657′ E 13°42.579′	Okotjite / N		x		
B-345-2-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°27.657′ E 13°42.579′	Okotjite / N		x		
B-345-3-99	Orue	Grt-Amphibolite	S 17°27.657′ E 13°42.579′	Okotjite / N	layer in Grt-Bt gneiss	x		
B-347-99	Orue	Calc-silicate rock	S 17°27.565′ E 13°42.522′	Okotjite / N		x		
B-358-2-99	Epembe	Grt gneiss	S 17°33.430′ E 13°37.600′	Otjitambi		x	x	
B-358-5-99	Epembe	Grt gneiss	S 17°33.430′ E 13°37.600′	Otjitambi		x		
B-358-6-99	Epembe	Mafic granulite	S 17°33.430′ E 13°37.600′	Otjitambi		x		
B-359-2-99	Epembe	Grt-bearing gneiss	S 17°33.245′ E 13°25 412 ′	Otjiveze		x		
B-367-99	Orue	Felsic gneiss	S 17°24.668′ E 13°19.113′	Okangwati		x		
B-373-2-99	Epembe	Mafic granulite	S 17°22.975′ E 13°17.628′	Okangwati		x		
B-379-2-99	Epembe	Mafic granulite	S 17°23.792′ E 13°17.124′	Okangwati		x		
B-380-99	Epembe	Felsic granulite	S 17°23.040′ E 13°18.356′	Okangwati		x		
B-382-99	Epembe	Felsic granulite	S 17°23.385′ E 13°18.532′	Okangwati		x		
B-386-99	Orue	Amphibolite	S 17°23.775′ E 13°18.885′	Okangwati		x		
B-389-99	Epembe	Grt-Crd-bearing gneiss	S 17°23.172′ E 13°17.021′	Okangwati	altered	x		
B-392-99	Epembe	Grt gneiss	S 17°23.124′ E 13°17.266′	Okangwati	altered	x		
B-394-1-99	Orue	Grt-Bt gneiss	S 16°59.218′ E 13°05.021′	Epupa		x		
B-394-2-99	Orue	Grt-Bt gneiss	S 16°59.218′ E 13°05.021′	Epupa		x		
B-396-1-99	Orue	Grt-Bt gneiss	S 16°58.926′ E 13°05.078′	Epupa		x		
B-396-2-99	Orue	Amphibolite	S 16°58.926′ E 13°05.078′	Epupa		x		
B-399-1-99	Orue	Grt-Bt gneiss	S 16°59.695′ E 13°09.262′	Epupa	mylonitic	x		
B-401-1-99	Orue	Hbl-Bt metagranitoid	S 17° 29.783′ E 13°41.905′	Okotjite / N	migmatitic	x	x	
B-401-2-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17° 29.783′ E 13°41.905′	Okotjite / N		2 x	x	x
B-401-3-99	Orue	Grt-Amphibolite	S 17° 29.783′ E 13°41.905′	Okotjite / N	layer in Grt-Bt gneiss	x		
B-401-4-99	Orue	Grt-Bt gneiss	S 17° 29.783′ E 13°41.905′	Okotjite / N		x		
B-402-99	Orue	Grt-Hornblendite	S 17°29.718′ E 13°41.940′	Okotjite / N	lens in Grt-Bt gneiss	x		
B-404-1-99	Orue	Grt-Bt gneiss	S 17°29.484′ E 13°42.067′	Okotjite / N	lens in Grt-Bt gneiss	x		
B-404-2-99	Orue	Grt-Bt gneiss	S 17°29.484′ E 13°42.067′	Okotjite / N	lens in Grt-Bt gneiss	x		
B-405-1-99	Orue	Grt-Amphibolite	S 17°29.453′ E 13°42.072′	Okotjite / N		x	x	
B-406-1-99	Orue	Grt-Bt gneiss	S 17°29.177′ E 13°42.389′	Okotjite / N	xenolith in	x		
B-406-2-99	Orue	Hbl-Bt metagranitoid	S 17°29.177′ E 13°42.389′	Okotjite / N		x	x	
B-407-1-99	Orue	Grt-Bt gneiss	S 17°29.088′ E 13°42.601′	Okotjite / N	lens in Grt-Bt gneiss	x		
B-407-2-99	Orue	Grt-Bt gneiss	S 17°29.088′ E 13°42.601′	Okotjite / N		x		
B-407-3-99	Orue	Grt-Hbl schist	S 17°29.088′ E 13°42.601′	Okotjite / N	lens in Grt-Bt gneiss	x		
B-407-4-99	Orue	Grt-Hbl schist	S 17°29.088′ E 13°42.601′	Okotjite / N	lens in Grt-Bt gneiss	x		
B-407-5-99	Orue	Grt-Bt gneiss	S 17°29.088′ E 13°42.601′	Okotjite / N	lens in Grt-Bt gneiss	x		
B-408-99	Orue	Hornblendite	S 17°29.021′ E 13°42.517′	Okotjite / N		x		

Table A.2 (continued): Sample locations

sample	rock unit	rock type	GPS		region	comment	TS	RFA	EMP
B-410-99	Orue	Felsic gneiss	S 17°26.103′	E 13°43.128′	Orue		x	x	
B-423-99	Epembe	Mafic granulite	S 17°35.203′	E 13°34.670′	Otjitambi/SW		x	x	
B-426-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°35.594′	E 13°34.654′	Otjitambi/SW	altered	x		
B-427-1-99	Epembe	Mafic granulite (retrogressed)	S 17°35.719′	E 13°34.601′	Otjitambi/SW	close to shear zone	x		
B-427-2-99	Epembe	Mafic granulite (retrogressed)	S 17°35.719′	E 13°34.601′	Otjitambi/SW	close to shear zone	x		
B-434-1-99	Epembe	Felsic granulite	S 17°31.830′	E 13°37.721′	Otjitambi/E		x	x	
B-434-2-99	Epembe	Grt-bearing mafic granulite	S 17°31.830′	E 13°37.721′	Otjitambi/E		2 x	x	x
B-440-2-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°30.127′	E 13°38.421′	Euiyu		x		
B-446-99	Orue	Amphibolite	S 17°29.371′	E 17°29.371′	Euiyu	migmatitic	x	x	
B-447-1-99	Epembe	Mafic granulite	S 17°33.049′	E 13°36.392′	Otjitambi		x	x	
B-447-2-99	Epembe	Grt gneiss	S 17°33.049′	E 13°36.392′	Otjitambi		x		
B-447-3-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.049′	E 13°36.392′	Otjitambi		x		
B-457-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.784′	E 13°36.262′	Otjitambi		x	x	
B-458-1-99	Epembe	Mg-rich Grt-Opx gneiss	S 17°33.590′	E 13°36.265′	Otjitambi	migmatitic	4 x	x	
B-458-2-99	Epembe	Mg-rich Grt-Opx gneiss	S 17°33.590′	E 13°36.265′	Otjitambi		x		
B-458-3-99	Epembe	Mg-rich Grt-Opx gneiss	S 17°33.590′	E 13°36.265′	Otjitambi		2 x		x
B-458-4-99	Epembe	Spr-bearing Opx-Sil gneiss	S 17°33.590′	E 13°36.265′	Otjitambi		4 x	2 x	3 x
B-459-99	Epembe	Mafic granulite	S 17°33.113′	E 13°35.179′	Otjitambi		x		
B-461-1-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°32.972′	E 13°35.206′	Otjitambi/W	banded	x	x	
B-461-2-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°32.972′	E 13°35.206′	Otjitambi/W	banded	x		
B-462-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°32.890′	E 13°35.251′	Otjitambi/W	banded	x		
B-465-1-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°32.583′	E 13°35.430′	Otjitambi/W	altered	x		
B-465-2-99	Epembe	Mafic dyke	S 17°32.583′	E 13°35.430′	Otjitambi/W	lens in Grt-Sil gneiss	x		
B-465-3-99	Epembe	Granulite	S 17°32.583′	E 13°35.430′	Otjitambi/W	lens in Grt-Sil gneiss	x		
B-465-4-99	Epembe	Mafic granulite	S 17°32.583′	E 13°35.430′	Otjitambi/W	xenolith in metagranitoid	x		
B-466-1-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°36.362′	E 13°28.016′	Otjiveze		x		
B-466-2-99	Epembe	Grt gneiss	S 17°36.362′	E 13°28.016′	Otjiveze	banded, Bt-bearing	x		
B-466-3-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°36.362′	E 13°28.016′	Otjiveze		x		
B-468-1-99	Epembe	Mafic granulite	S 17°35.454′	E 13°27.541′	Otjiveze		x		
B-468-2-99	Epembe	Grt-bearing gneiss	S 17°35.454′	E 13°27.541′	Otjiveze		x		
B-469-99	Epembe	Grt-bearing mafic granulite	S 17°35.055′	E 13°27.342′	Otjiveze		x	x	
B-485-99	Epembe	Mafic granulite	S 17°31.368′	E 13°40.863′	Okotjite		x		
B-486-1-99	Epembe	Metapelitic Grt-Sil gneiss	S 17° 34.653′	E 13°30.424′	Epembe / W	retrogressed, altered	x		
B-486-4-99	Epembe	Mafic granulite	S 17° 34.653′	E 13°30.424′	Epembe / W		x		
B-486-5-99	Epembe	Fe-rich Grt-Opx gneiss	S 17° 34.653′	E 13°30.424′	Epembe / W	with Grt-Blast	x	x	
B-486-6-99	Epembe	Metapelitic Grt-Sil gneiss	S 17° 34.653′	E 13°30.424′	Epembe / W	altered	2 x		
B-486-7-99	Epembe	Opx-bearing leucosome	S 17° 34.653′	E 13°30.424′	Epembe / W		x		
B-486-8-99	Epembe	Opx-bearing leucosome	S 17° 34.653′	E 13°30.424′	Epembe / W		x		
B-488-99	Epembe	Metapelitic Grt-Sil gneiss	S 17° 34.809′	E 13°30.384′	Epembe / W	altered	x		
B-490-99	Epembe	Grt-Opx metagranitoid	S 17° 35.055′	E 13°30.140′	Epembe / W		x		
B-492-99	Epembe	Fe-rich Grt-Opx gneiss	S 17° 35.400′	E 13°30.050′	Epembe / W		x		
B-493-99	Epembe	Grt-bearing mafic granulite	S 17° 35.340′	E 13°30.084′	Epembe / W		3 x		
B-509-1-99	Epembe	Grt-Amphibolite	S 17° 30.810′	E 13°38.680′	Euiyu	lens in Grt gneiss	x		
B-509-2-99	Epembe	Metapelitic Grt-Sil gneiss	S 17° 30.810′	E 13°38.680′	Euiyu		2 x		
B-509-3-99	Epembe	Fe-rich Grt-Opx gneiss	S 17° 30.810′	E 13°38.680′	Euiyu		x	x	
B-509-4-99	Epembe	Grt-Amphibolite	S 17° 30.810′	E 13°38.680′	Euiyu	layer in Grt gneiss	x		
B-511-1-99	Orue	Grt-Bt gneiss	S 17° 30.504′	E 13°38.514′	Euiyu		x		
B-511-2-99	Orue	Grt-Bt gneiss	S 17° 30.504′	E 13°38.514′	Euiyu		x		
B-512-99	Epembe	Grt-bearing mafic granulite	S 17°32.139′	E 13°43.656′	Okotjite / E		x	x	
B-513-99	Epembe	Mafic Granulite	S 17°32.388′	E 13°43.578′	Okotjite / E		x		
B-520-99	Orue	Hbl-Bt metagranitoid	S 17°34.346′	E 13°41.792′	Ombahu		x		
B-521-1-99	Orue	Felsic gneiss	S 17°34.556′	E 13°41.526′	Ombahu	Bt-bearing	x		
B-521-2-99	Orue	Mafic dyke	S 17°34.556′	E 13°41.526′	Ombahu	amphibolite	x		
B-527-1-99	Epembe	Grt-bearing mafic granulite	S 17°31.224′	E 13°39.884′	Okotjite / W	retrogressed	x		
B-527-2-99	Epembe	Grt-bearing mafic granulite	S 17°31.224′	E 13°39.884′	Okotjite / W	retrogressed	x		
B-527-3-99	Epembe	Grt-bearing mafic granulite	S 17°31.224′	E 13°39.884′	Okotjite / W	retrogressed	x		
B-527-4-99	Epembe	Grt-bearing mafic granulite	S 17°31.224′	E 13°39.884′	Okotjite / W	retrogressed	x		

Table A.2 (continued): Sample locations

sample	rock unit	rock type	GPS	region	comment	TS	RFA	EMP
B-531-99	Epembe	Felsic granulite	S 17°31.700′ E 13°39.500′	Okotjite / W		x		
B-536-1-99	Epembe	Mafic dyke	S 17°33.120′ E 13°35.440′	Otjitambi / W	dyke in Grt gneiss	x		
B-536-2-99	Epembe	Qtz-rich Grt-Opx rock	S 17°33.120′ E 13°35.440′	Otjitambi / W	restitic	2 x		
B-537-1-99	Epembe	Mafic dyke	S 17°33.210′ E 13°34.320′	Otjitambi / W	lens in Grt gneiss	x		
B-537-2-99	Epembe	Mafic dyke	S 17°33.210′ E 13°34.320′	Otjitambi / W		x		
B-540-1-99	Epembe	Mg-rich Grt-Opx gneiss	S 17°32.970′ E 13°34.350′	Otjitambi / W		x	x	
B-540-2-99	Epembe	Grt gneiss	S 17°32.970′ E 13°34.350′	Otjitambi / W		x		
B-540-3-99	Epembe	Grt gneiss	S 17°32.970′ E 13°34.350′	Otjitambi / W	with Spl-bearing schliere	2 x		
B-540-4-99	Epembe	Mafic granulite	S 17°32.970′ E 13°34.350′	Otjitambi / W		x		
B-545-1-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°32.950′ E 13°34.040′	Otjitambi / W		x		
B-545-3-99	Epembe	Mafic granulite	S 17°32.950′ E 13°34.040′	Otjitambi / W	Px-Blasts	x	x	
B-548-1-99	Epembe	Qtz-rich Grt-Opx rock	S 17°33.180′ E 13°33.800′	Otjitambi / W	with Grt-rich restite	2 x		
B-548-2-99	Epembe	Qtz-rich Grt-Opx rock	S 17°33.180′ E 13°33.800′	Otjitambi / W		x		
B-551-1-99	Epembe	Grt-bearing mafic granulite	S 17°31.700′ E 13°37.000′	Otjitambi / N	Pl-corona around Grt	x		
B-551-2-99	Epembe	Grt-bearing mafic granulite	S 17°31.700′ E 13°37.000′	Otjitambi / N		x		
B-551-5-99	Epembe	Grt-Qtz rock	S 17°31.700′ E 13°37.000′	Otjitambi / N		x		
B-551-7-99	Epembe	Grt-bearing gneiss	S 17°31.700′ E 13°37.000′	Otjitambi / N		x		
B-551-8-99	Epembe	Grt-bearing gneiss	S 17°31.700′ E 13°37.000′	Otjitambi / N		x		
B-556-1-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°32.500′ E 13°35.770′	Otjitambi / W		x	x	
B-556-2-99	Epembe	Mafic dyke	S 17°32.500′ E 13°35.770′	Otjitambi / W		x		
B-556-3-99	Epembe	Mafic dyke	S 17°32.500′ E 13°35.770′	Otjitambi / W	dyke in Grt gneiss	x		
B-557-1-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.700′ E 13°32.600′	Epembe / N		x		
B-557-2-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.700′ E 13°32.600′	Epembe / N		x		
B-557-3-99	Epembe	Mafic granulite	S 17°33.700′ E 13°32.600′	Epembe / N		x		
B-564-1-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°32.550′ E 13°35.250′	Otjitambi / W		x		
B-564-2-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°32.550′ E 13°35.250′	Otjitambi / W		x		
B-564-3-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°32.550′ E 13°35.250′	Otjitambi / W		x		
B-568-99	Epembe	Qtz-rich Grt-Opx rock	S 17°34.150′ E 13°39.670′	Ombahu / W	Crd-bearing, altered	x		
B-569-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°34.200′ E 13°39.380′	Ombahu / W	altered	x		
B-570-99	Epembe	Metapelitic Grt-Sil gneiss	S 13°34.350′ E 13°39.400′	Ombahu / W		x		
B-572-1-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°34.530′ E 13°39.260′	Ombahu / W		x	x	
B-572-2-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°34.530′ E 13°39.260′	Ombahu / W		x		
B-572-3-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°34.530′ E 13°39.260′	Ombahu / W		x	x	
B-573-99	Epembe	Mafic granulite	S 17°34.540′ E 13°39.080′	Ombahu / W	banded	x	x	
B-574-1-99	Epembe	Grt gneiss	S 17°34.675′ E 13°39.000′	Ombahu / W		x		
B-574-2-99	Epembe	Qtz-rich Grt-Opx rock	S 17°34.675′ E 13°39.000′	Ombahu / W		x		
B-574-3-99	Epembe	Mafic dyke	S 17°34.675′ E 13°39.000′	Ombahu / W	lens in Grt gneiss	x		
B-574-4-99	Epembe	Mafic dyke	S 17°34.675′ E 13°39.000′	Ombahu / W	lens in Grt gneiss	x		
B-574-5-99	Epembe	Qtz-rich Grt-Opx rock	S 17°34.675′ E 13°39.000′	Ombahu / W		x		
B-576-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°34.650′ E 13°32.300′	Epembe	altered	x		
B-577-1-99	Epembe	Qtz-rich Grt-Opx rock	S 17°34.750′ E 13°32.260′	Epembe		x		
B-577-2-99	Epembe	Grt-bearing mafic granulite	S 17°34.750′ E 13°32.260′	Epembe	Opx-Pl pseudomorph	2 x		
B-577-3-99	Epembe	Grt gneiss	S 17°34.750′ E 13°32.260′	Epembe		x		
B-580-1-99	Epembe	Grt-bearing mafic granulite	S 17°34.910′ E 13°32.125′	Epembe		2 x		
B-580-2-99	Epembe	Grt-bearing mafic granulite	S 17°34.910′ E 13°32.125′	Epembe	Opx-Pl pseudomorph	x		
B-580-3-99	Epembe	Grt-bearing gneiss	S 17°34.910′ E 13°32.125′	Epembe		x		
B-587-1-99	Epembe	Qtz-rich Grt-Opx rock	S 17°35.850′ E 13°32.500′	Epembe		x		
B-587-2-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°35.850′ E 13°32.500′	Epembe		x		
B-587-3-99	Epembe	Leucosome	S 17°35.850′ E 13°32.500′	Epembe		x		
B-587-4-99	Epembe	Qtz-rich Grt-Opx-Crd rock	S 17°35.850′ E 13°32.500′	Epembe	Crd-bearing	3 x	x	x
B-588-1-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°28.530′ E 13°42.570′	Okotjite / N		2 x		
B-588-2-99	Orue	Grt-Hbl schist	S 17°28.530′ E 13°42.570′	Okotjite / N		x		
B-588-3-99	Orue	Calc-silicate rock	S 17°28.530′ E 13°42.570′	Okotjite / N		x		
B-589-1-99	Orue	Metapelitic Grt-Bt-Sil schist	S 17°28.700′ E 13°42.550′	Okotjite / N		x		
B-590-99	Orue	Grt-Hbl schist	S 17°28.850′ E 13°42.530′	Okotjite / N	layer in Grt-Bt gneiss	x		
B-590-2-99	Orue	Calc-silicate rock	S 17°28.850′ E 13°42.530′	Okotjite / N		x		

Table A.2 (continued): Sample locations

sample	rock unit	rock type	GPS		region	comment	TS	RFA	EMP
B-591-1-99	Orue	Grt-Amphibolite	S 17°28.874´	E 13°42.549´	Okotjite / N		x		
B-591-2-99	Orue	Calc-silicate rock	S 17°28.874´	E 13°42.549´	Okotjite / N		x		
B-592-1-99	Orue	Grt-Bt gneiss	S 17°28.670´	E 13°44.180´	Ehomba		x		
B-592-2-99	Orue	Hbl-Bt metagranitoid	S 17°28.670´	E 13°44.180´	Ehomba	Bt-rich	x		
B-592-3-99	Orue	Mafic dyke	S 17°28.670´	E 13°44.180´	Ehomba	amphibolite	x		
B-593-99	Orue	Grt-Bt gneiss	S 17°27.532´	E 13°44.522´	Ehomba		x		
B-600-99	Orue	Grt-Bt gneiss	S 17°29.250´	E 13°37.500´	Euiyu		x		
B-601-99	Orue	Grt-Bt gneiss	S 17°29.000´	E 13°37.430´	Euiyu		x		
B-605-99	Orue	Grt-Bt gneiss	S 17°28.540´	E 13°37.250´	Euiyu		x		
B-612-99	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°27.590´	E 13°37.000´	Euiyu	contact to KIC	x		
B-614-1-99	Epembe	Qtz-rich Grt-Opx rock	S 17°33.092´	E 13°36.333´	Otjitambi		2 x	2 x	x
B-614-2-99	Epembe	Felsic granulite	S 17°33.092´	E 13°36.333´	Otjitambi		x	x	
B-615-1-99	Epembe	Qtz-rich Grt-Opx rock	S 17°33.180´	E 13°36.290´	Otjitambi		x		
B-615-3-99	Epembe	Fe-rich Grt-Opx gneiss	S 17°33.180´	E 13°36.290´	Otjitambi		x	x	
B-615-4-99	Epembe	Mafic granulite	S 17°33.180´	E 13°36.290´	Otjitambi	banded	x		
B-615-5-99	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.180´	E 13°36.290´	Otjitambi		x	x	
B-615-6-99	Epembe	Grt gneiss	S 17°33.180´	E 13°36.290´	Otjitambi	Grt-rich schliere	x		
2000									
B-311-3-00	Epembe	Mafic Grt-Cpx granulite	S 17°29.550´	E 13°46.697´	Ehomba	lens in shear zone	3 x	x	
B-311-4-00	Epembe	Mafic Grt-Cpx granulite	S 17°29.550´	E 13°46.697´	Ehomba	lens in shear zone	x		
B-311-5-00	Orue	Amphibolite	S 17°29.550´	E 13°46.697´	Ehomba		x		
B-342-5-00	Orue	Calc-silicate rock	S 17°28.403´	E 13°42.490´	Orue		x		
B-342-6-00	Orue	Calc-silicate rock	S 17°28.403´	E 13°42.490´	Orue		x		
B-342-7-00	Orue	Calc-silicate rock	S 17°28.403´	E 13°42.490´	Orue		x		
B-342-8-00	Orue	Calc-silicate rock	S 17°28.403´	E 13°42.490´	Orue		x		
B-342-10-00	Orue	Grt-Hbl schist	S 17°28.403´	E 13°42.490´	Orue		x		
B-342-11-00	Orue	Grt-Hbl schist	S 17°28.403´	E 13°42.490´	Orue		x		
B-411-00	Orue	Amphibolite	S 17°27.274´	E 13°43.491´	Orue		x		
B-447-4-00	Epembe	Fe-rich Grt-Opx gneiss	S 17°33.049´	E 13°36.392´	Otjitambi		x		
B-447-5-00	Epembe	Qtz-rich Grt-Opx rock	S 17°33.049´	E 13°36.392´	Otjitambi	with Grt-Blast	x		
B-447-6-00	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.049´	E 13°36.392´	Otjitambi		2 x		
B-458-5-00	Epembe	Spr-bearing Opx-Sil gneiss	S 17°33.590´	E 13°36.265´	Otjitambi		3 x	x	x
B-458-6-00	Epembe	Spr-bearing Opx-Sil gneiss	S 17°33.590´	E 13°36.265´	Otjitambi		x		
B-458-7-00	Epembe	Spr-bearing Opx-Sil gneiss	S 17°33.590´	E 13°36.265´	Otjitambi		2 x		
B-458-8-00	Epembe	Spr-bearing Opx-Sil gneiss	S 17°33.590´	E 13°36.265´	Otjitambi		2 x		
B-458-9-00	Epembe	Spr-bearing Opx-Sil gneiss	S 17°33.590´	E 13°36.265´	Otjitambi		5 x	x	x
B-614-3-00	Epembe	Qtz-rich Grt-Opx rock	S 17°33.092´	E 13°36.333´	Otjitambi		2 x		
B-614-4-00	Epembe	Qtz-rich Grt-Opx rock	S 17°33.092´	E 13°36.333´	Otjitambi		x		
B-614-10-00	Epembe	Qtz-rich Grt-Opx rock	S 17°33.092´	E 13°36.333´	Otjitambi		x	x	
B-625-00	Epembe	Metapelitic Grt-Sil gneiss	S 17°34.850´	E 13°36.325´	Otjitambi		x		
B-629-00	Epembe	Mafic granulite	S 17°35.510´	E 13°36.200´	Otjitambi		x		
B-632-00	Epembe	Grt gneiss	S 17°34.900´	E 13°36.386´	Otjitambi		3 x		
B-633-00	Epembe	Grt gneiss	S 17°34.372´	E 13°36.436´	Otjitambi		x		
B-634-00	Epembe	Mg-rich Grt-Opx gneiss	S 17°33.787´	E 13°36.385´	Otjitambi		2 x	x	x
B-640-00	Orue	Grt-Bt gneiss	S 17°29.045´	E 13°41.003´	Orue		x		
B-644-1-00	Orue	Hbl-Bt metagranitoid	S 17°29.536´	E 13°40.002´	Orue	migmatitic	x	x	
B-644-2-00	Orue	Leucosome of metagranitoid	S 17°29.536´	E 13°40.002´	Orue		x		
B-645-1-00	Orue	Grt-Bt gneiss	S 17°28.835´	E 13°41.051´	Orue		x		
B-645-2-00	Orue	Amphibolite	S 17°28.835´	E 13°41.051´	Orue		x		
B-646-1-00	Epembe	Grt-Opx metagranitoid	S 17°31.800´	E 13°37.700´	Otjitambi	+ xenolith of mafic granulite	x	x	x
B-646-2-00	Epembe	Grt-Opx metagranitoid	S 17°31.800´	E 13°37.700´	Otjitambi	+ xenolith of mafic granulite	x		
B-646-3-00	Epembe	Grt-Opx metagranitoid	S 17°31.800´	E 13°37.700´	Otjitambi	+ xenolith of mafic granulite	x		
B-647-00	Epembe	Mafic granulite (retrogressed)	S 17°36.500´	E 13°31.380´	Epembe		x		
B-649-00	Damara	Arkose	S 17°37.050´	E 13°31.500´	Epembe		x		
B-654-00	Orue	Grt-Hornblendite	S 17°29.670´	E 13°42.770´	Okotjite / N		x		
B-654-2-00	Orue	Metaarkose	S 17°29.670´	E 13°42.770´	Okotjite / N		x		

Table A.2 (continued): Sample locations

sample	rock unit	rock type	GPS	region	comment	TS	RFA	EMP
B-660-00	Epembe	Grt-bearing mafic granulite	S 17°34.180′ E 13°28.560′	Omuangate		x		
B-661-1-00	Epembe	Grt-Opx metagranitoid	S 17°31.765′ E 13°22.700′	Omuangate	+ xenolith of mafic granulite	2 x		
B-661-2-00	Epembe	Grt-Opx metagranitoid	S 17°31.765′ E 13°22.700′	Omuangate		x	x	
B-661-3-00	Epembe	Grt-Opx metagranitoid	S 17°31.765′ E 13°22.700′	Omuangate		x		
B-661-4-00	Epembe	Mafic granulite	S 17°31.765′ E 13°22.700′	Omuangate	xenolith in metagranitoid	x		
B-661-5-00	Epembe	Mafic granulite (retrogressed)	S 17°31.765′ E 13°22.700′	Omuangate	xenolith in metagranitoid	x		
B-662-1-00	Epembe	Gneiss	S 17°31.680′ E 13°22.770′	Omuangate		x		
B-662-2-00	Epembe	Grt-Crd gneiss	S 17°31.680′ E 13°22.770′	Omuangate		x		
B-663-1-00	Epembe	Mafic granulite (retrogressed)	S 17°31.180′ E 13°22.800′	Omuangate		x		
B-663-2-00	Epembe	Mafic granulite (retrogressed)	S 17°31.180′ E 13°22.800′	Omuangate		x		
B-664-00	Epembe	Mafic granulite	S 17°30.530′ E 13°22.600′	Omuangate		x		
B-666-1-00	Epembe	Grt-bearing mafic granulite	S 17°29.150′ E 13°23.615′	Omuangate		x		
B-666-2-00	Epembe	Mafic granulite	S 17°29.150′ E 13°23.615′	Omuangate		x		
B-666-4-00	Epembe	Mafic granulite	S 17°29.150′ E 13°23.615′	Omuangate		x		
B-670-1-00	Epembe	Grt-Opx metagranitoid	S 17°32.500′ E 13°22.580′	Omuangate		x		
B-670-2-00	Epembe	Grt-Opx metagranitoid	S 17°32.500′ E 13°22.580′	Omuangate		x		
B-671-1-00	Epembe	Felsic granulite	S 17°33.337′ E 13°21.778′	Omuangate		x		
B-676-00	Orue	Mafic dyke	S 17°27.950′ E 13°26.250′	Omuangate	amphibolite	x		
B-679-1-00	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°28.664′ E 13°44.914′	Ehomba		3 x	x	x
B-679-2-00	Orue	Grt-Hbl schist	S 17°28.664′ E 13°44.914′	Ehomba	lens in Grt-Bt-Sil gneiss	x		
B-679-3-00	Orue	Grt-Hbl schist	S 17°28.664′ E 13°44.914′	Ehomba	lens in Grt-Bt-Sil gneiss	x		
B-680-1-00	Orue	Grt-bearing metaarkose	S 17°29.044′ E 13°45.450′	Ehomba		x		
B-680-2-00	Orue	Grt-Hbl schist	S 17°29.044′ E 13°45.450′	Ehomba		x		
B-681-1-00	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°29.063′ E 13°45.497 ′	Ehomba		x		
B-681-2-00	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°29.063′ E 13°45.497 ′	Ehomba		x		
B-681-3-00	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°29.063′ E 13°45.497 ′	Ehomba		x		
B-681-4-00	Orue	Metaquartzite	S 17°29.063′ E 13°45.497 ′	Ehomba		x		
B-681-5-00	Orue	Grt-Hbl schist	S 17°29.063′ E 13°45.497 ′	Ehomba		x		
B-685-00	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°28.850′ E 13°46.125′	Ehomba		x		
B-686-00	Epembe	Fe-rich Grt-Opx gneiss	S 17°37.240′ E 13°28.600′	Otjiveze		x		
B-688-00	Epembe	Mafic granulite	S 17°36.770′ E 13°28.700′	Otjiveze		x		
B-689-00	Epembe	Metapelitic Grt-Sil gneiss	S 17°36.585′ E 13°28.840′	Otjiveze		x		
B-690-1-00	Epembe	Fe-rich Grt-Opx gneiss	S 17°36.430′ E 13°28.940′	Otjiveze		x	x	
B-690-2-00	Epembe	Fe-rich Grt-Opx gneiss	S 17°36.430′ E 13°28.940′	Otjiveze		2 x	x	x
B-691-1-00	Epembe	Leucosome of Grt-Opx gneiss	S 17°36.289′ E 13°29.130′	Otjiveze		x		
B-691-2-00	Epembe	Fe-rich Grt-Opx gneiss	S 17°36.289′ E 13°29.130′	Otjiveze		x		
B-692-00	Epembe	Mafic dyke	S 17°33.320′ E 13°36.350′	Otjitambi		x	x	
B-693-00	Epembe	Spr-bearing Opx-Sil gneiss	S 17°33.370′ E 13°36.336′	Otjitambi		3 x	x	
B-697-00	Epembe	Grt gneiss	S 17°33.200′ E 13°36.000′	Otjitambi		x		
B-698-00	Epembe	Mafic granulite	S 17°33.320′ E 13°36.000′	Otjitambi		x		
B-699-00	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.500′ E 13°35.960′	Otjitambi		x	x	
B-700-1-00	Epembe	Opx-Grt rock	S 17°33.550′ E 13°36.060′	Otjitambi		3 x	x	x
B-700-2-00	Epembe	Spr-bearing Opx-Sil gneiss	S 17°33.550′ E 13°36.060′	Otjitambi		5 x	x	
B-700-3-00	Epembe	Mafic dyke	S 17°33.550′ E 13°36.060′	Otjitambi		x		
B-700-4-00	Epembe	Opx-Grt rock	S 17°33.550′ E 13°36.060′	Otjitambi		x		
B-702-00	Orue	Felsic gneiss	S 17°27.981′ E 13°44.333′	Orue		x	x	
B-703-00	Orue	Metapelitic Grt-Bt-Sil gneiss	S 17°28.050′ E 13°44.383′	Orue		2 x	x	x
1997								
Ku 97-46	Orue	Hbl-Bt metagranitoid	S 17°29.553′ E 13°42.603′	Okotjite / N		x	x	
Ku 97-47	Orue	Hbl-Bt metagranitoid	S 17°29.839′ E 13°42.069′	Okotjite / N		x	x	
Ku 97-85	Epembe	Metapelitic Grt-Sil gneiss	S 17°33.049′ E 13°36.392′	Epembe		4 x		

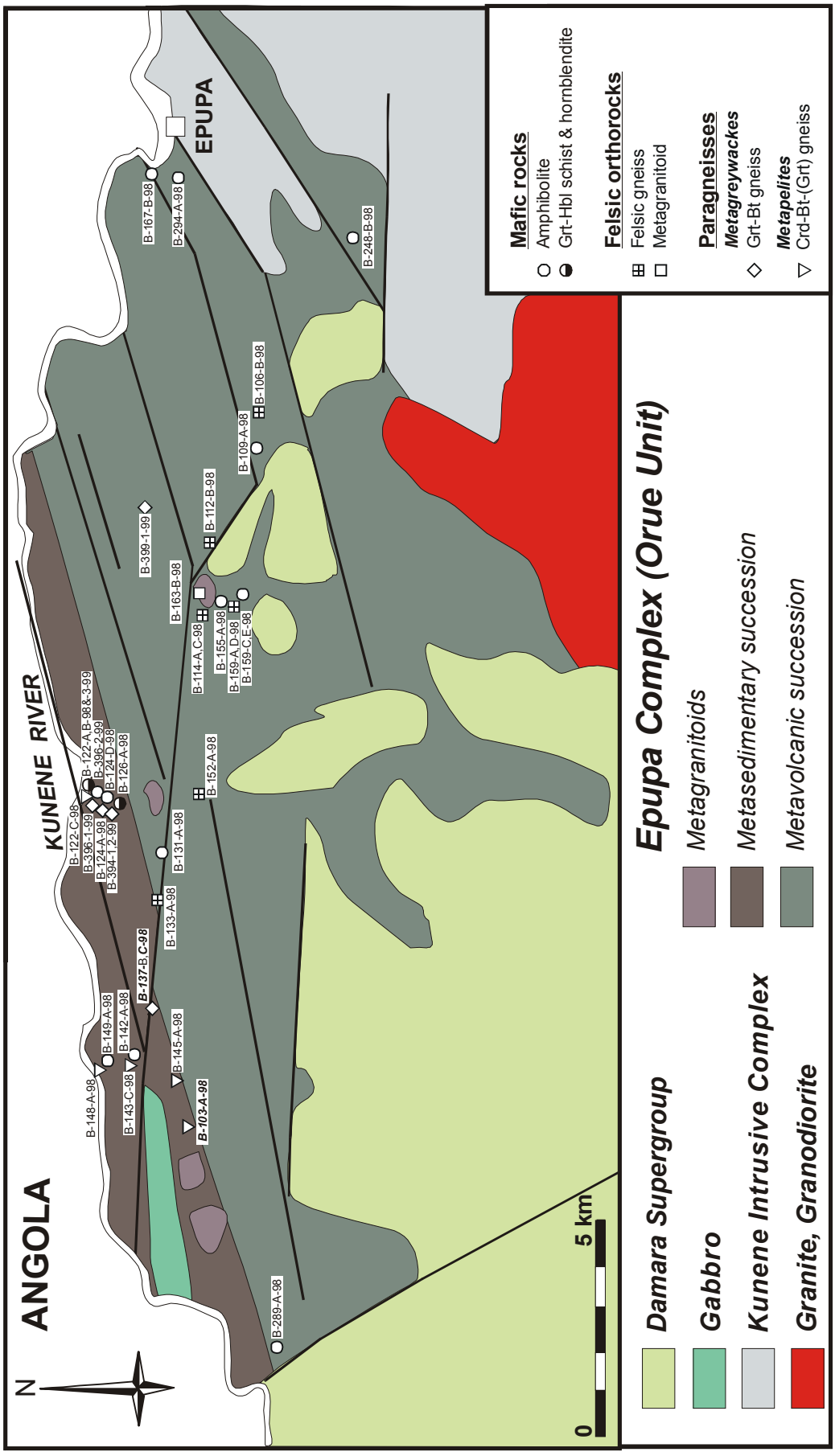

Fig. A.2.1: Sample locality map of the northern part of the study area. EMP samples are indicated with bold, cursive characters.

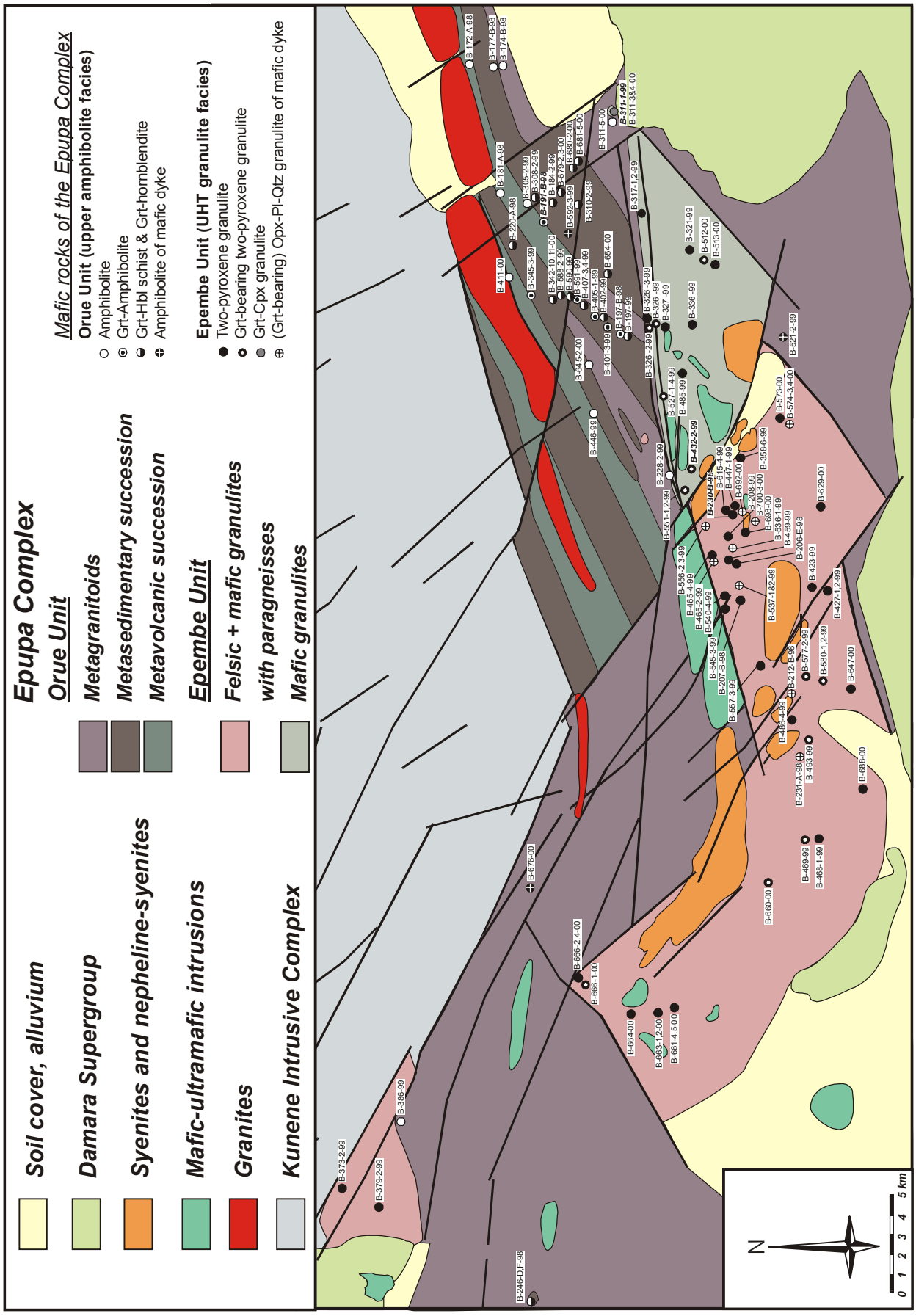

Fig. A.2.2: Sample locality map of the southern part of the study area, showing the distribution of the investigated mafic rocks. EMP samples are indicated with bold, cursive characters.

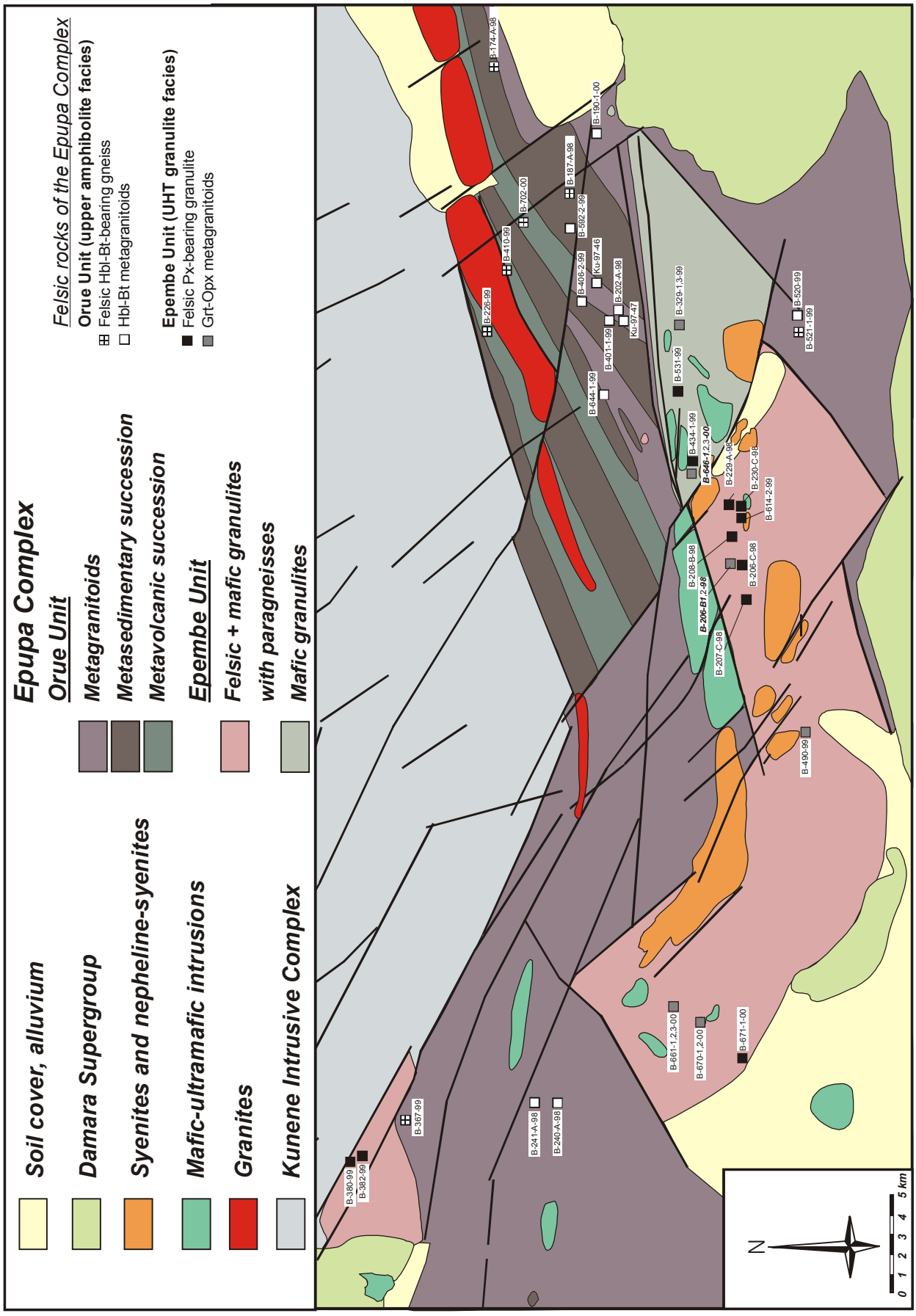

Fig. A.2.3: Sample locality map of the southern part of the study area, showing the distribution of the investigated felsic rocks. EMP samples are indicated with bold, cursive characters.

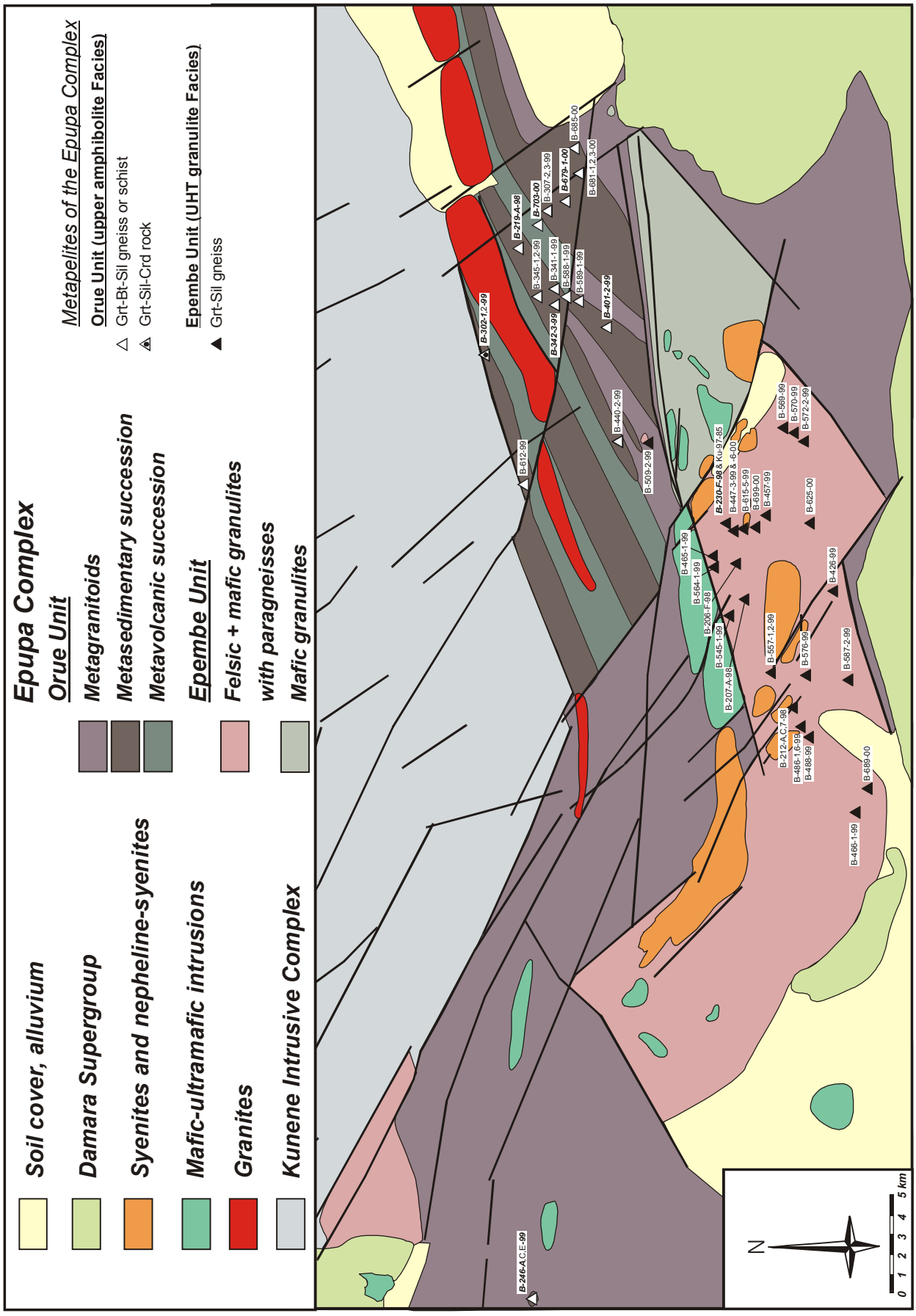

Fig. A.2.4: Sample locality map of the southern part of the study area, showing the distribution of the investigated metapelites. EMP samples are indicated with bold, cursive characters.

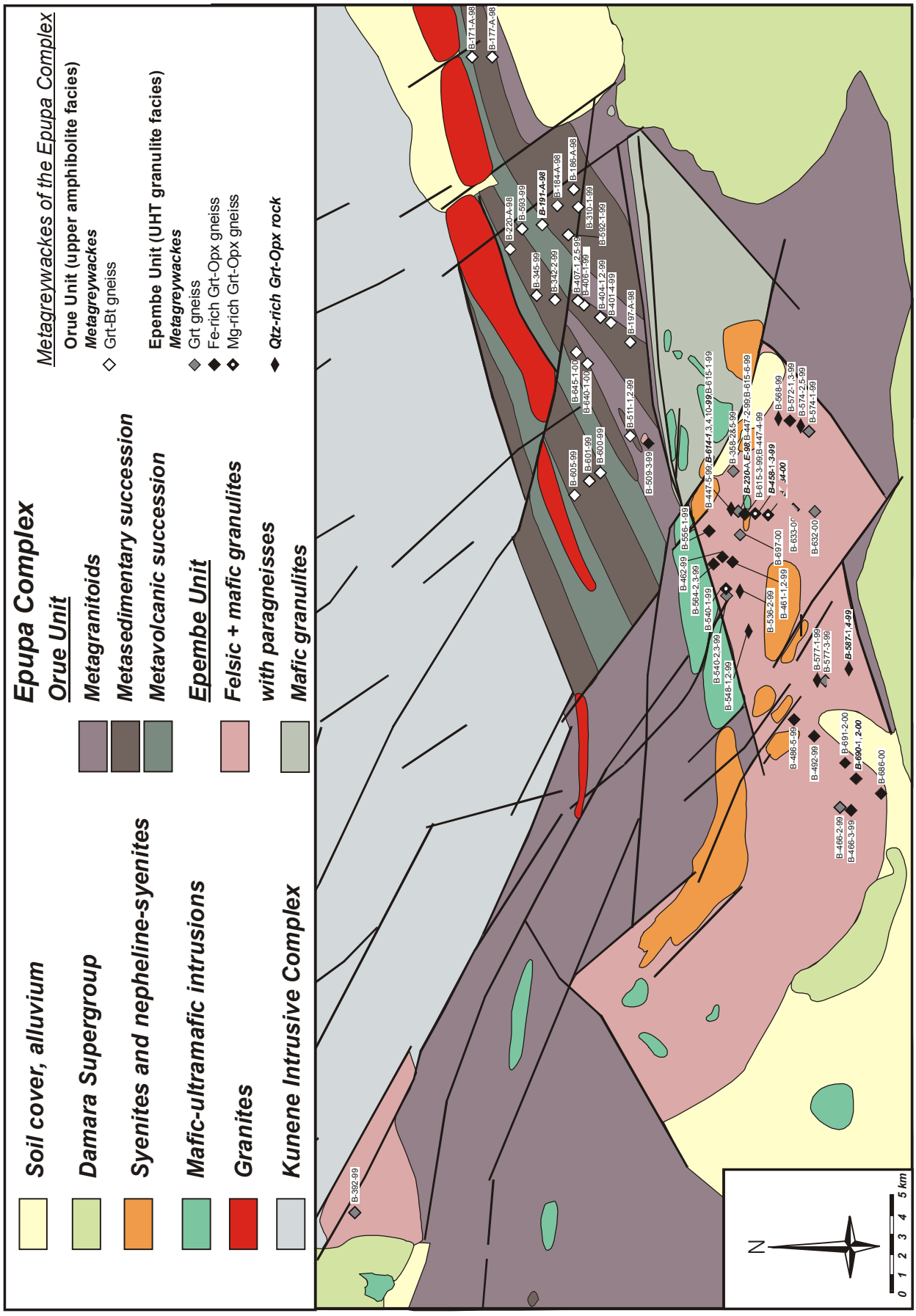

Fig. A.2.5: Sample locality map of the southern part of the study area, showing the distribution of the investigated metagreywackes. EMP samples are indicated with bold, cursive characters.

A.3 ANALYTICAL METHODS

A.3.1 BULK-ROCK GEOCHEMISTRY

All samples were prepared by removing weathering crusts. Afterwards the rock samples were crushed into chips of < 1 cm in diameter with a steel jaw breaker and subsequently finely ground in an agate mill.

A.3.1.1 X-ray fluorescence (XRF)

After drying 600 mg sample powder was mixed with 3.6 g SPECTROMELT A12 and 600-1000 mg NH_4NO_3. The mixture was fused at a NUTECH burner at temperatures of up to 1000°C. Major and trace elements were determined from fused glass discs using a PHILIPS PW 1480 XRF spectrometer. The relative analytical error for major and trace elements is 1 % and 1-8 %, respectively.

A.3.1.2 FeO content

After decomposing the sample with HF/H_2SO_4, the FeO contents were determined using a ZEISS PMD2 spectral photometer at an extinction $\lambda = 522$ nm.

A.3.1.3 Loss of ignition (LOI)

The loss of ignition was determined by heating ~ 1 g dry sample powder for 4 hours at 1100°C. After cooling the sample was re-weighed. The LOI is obtained by subtracting the weight of the heated sample from the weight before heating.

A.3.2 MINERAL CHEMISTRY

A.3.2.1 Analytical procedure

All electron microprobe (EMP) analyses were performed on a CAMECA SX50 with three wavelength spectrometers. Matrix effects were corrected automatically with the PAP program of CAMECA. Operating conditions were 15kV accelerating voltage and 15nA beam current, with generally 1µm beam size (biotite: 5 µm beam size) and counting times of 20 s on the TAP/PET and 30 s on the LIF crystals. Standards and radiations used were as follows: andradite (Si$K\alpha$, Ca$K\alpha$), orthoclase (K$K\alpha$), albite (NaKα), periclase (Mg$K\alpha$), $MnTiO_3$ (Mn$K\alpha$, Ti$K\alpha$), Al_2O_3 (Al$K\alpha$), Fe_2O_3 (Fe$K\alpha$), Cr_2O_3 (Cr$K\alpha$), Ni (Ni$K\alpha$), $BaSO_4$ (Ba$L\alpha$), LiF (F$K\alpha$), and vanadinite (Cl$K\alpha$). The relative analytical error is ± 1 % for major elements and ± 5 % for minor elements

with concentrations < 1wt.%. For zoned minerals, such as garnet, feldspar and pyroxene, profiles of 10-120 points were analyzed. If possible, two or three mineral profiles were investigated for each sample.

A.3.2.2 Mineral formula calculation

EMP analyses were processed using formula calculation macros for the computer software Framework IV (Ashton Tate GmbH) and Excel 9.0 (Microsoft). The various macros were computed by S. Brandt, Dr. K. Drüppel, Dr. L. Franz, Dr. H. Häussinger, Prof. Dr. E. Schmädicke, Dr. P. Wrobel, and Dr. A. Zeh.

The following calculation modes have been chosen for the calculation of the structural formulae and the estimation of the Fe^{3+}-contents of the analyzed minerals:

Garnet formulae were calculated on a 24-oxygen basis. As the granulite facies paragneisses contain garnet with extremely low Ca-contents, a normalization mode on 16 cations often yields meaningless negative grossular contents. Therefore, the Fe^{3+} content of all garnets analyzed was calculated with a constant best fit Fe^{3+}/Fe^{tot} ratio of 2%, resulting in cation sums close to the ideal of 16 cations. The Fe^{3+} of analyses selected for P-T calculations was recalculated on a 16-cation basis. End-member calculation followed the sequence grossular, almandine, spessartine and pyrope. Andradite and uvarovite were excluded from the end-member calculation.

Biotite formulae were calculated on an anhydrous basis of 22 oxygens. All Fe was calculated as Fe^{2+}.

Cordierite was calculated on an 18-oxygen basis, with the total Fe being calculated as Fe^{2+}.

Staurolite: formulae were calculated on an anhydrous basis of 23 oxygens.

Clino- and orthopyroxene: Pyroxene formulae were calculated on a basis of 6 oxygens. The estimation of the Fe^{3+} contents of pyroxene follows a calculation modus on the basis of 4 cations.

***Amphibole*:** The structural formula of amphibole was calculated on an anhydrous 23-oxygen basis. For the estimation of minimum and maximum Fe^{3+} contents a calculation modus on the basis of 15 cations (excluding Na and K) and 13 cations (excluding Na, K and Ca), respectively, was chosen, following Spear & Kimball (1984). For the calculation of the average Fe^{3+} contents the mean value between the two extreme compositions was calculated, following the method of Papike et al. (1974), modified by Franz & Häussinger (1990).

Sapphirine formulae were calculated on a 20-oxygen basis, with the Fe^{3+} being estimated from a calculation modus on the basis of 14 cations.

Spinel: The calculation of the spinel formula was based on 4 oxygens. For the estimation of the Fe^{3+} contents of magnetite a calculation modus on the basis of 3 cations, respectively, was

chosen.

Ilmenite: The ilmenite formulae were calculated on a 6-oxygens basis. The estimation of the Fe^{3+} contents of ilmenite followed a calculation modus on the basis of 4 cations.

Rutile: The structural formulae of rutile were calculated on a basis of 4 oxygens.

Sillimanite formulae were calculated on a 20-oxygen basis.

Feldspar: Calculation of the feldspar formula is based on 8 oxygens.

A.4 CONVENTIONAL GEOTHERMOBAROMETRY

The general principles and thermodynamic basics of conventional geothermobarometry are described in several publications (e.g. Spear, 1993; Will, 1998a). Reviews of the most widely used geothermometers and geobarometers are given by Newton (1983), Essene (1989), Spear (1989, 1993), and Bucher & Frey (1994).

The geothermobarometric calculations presented in this study were mainly performed with computed macros for the computer software Excel 9.0. Additional calculations were performed with the program GTB (GeoThermoBarometry) v. 2.0 (updated in May 1999) of Kohn & Spear (1996). Mineral end-member activities used for geothermobarometry were calculated using the shareware AX of Holland & Powell (2000). In the following section a brief description of the applied geothermometers and geobarometers will be given.

A.4.1 GEOTHERMOMETERS

Garnet-orthopyroxene Fe-Mg thermometer (Grt-Opx thermometer)

The thermometer is based on the temperature-dependent Fe-Mg exchange between garnet and coexisting orthopyroxene, expressed by the reaction:

(A-1) $2\ Mg_3Al_2Si_3O_{12} + 3\ Fe_2Si_2O_6 = 2\ Fe_3Al_2Si_3O_{12} + 3\ Mg_2Si_2O_6$

Pyrope Ferrosilite Almandine Enstatite

This reaction has been calibrated as a geothermometer by Harley (1984) and Lee & Ganguly (1988). According to Carswell & Harley (1990) and Fitzsimons & Harley (1994), the Harley (1984) calibration is very sensitive to retrograde re-equilibration and has therefore been excluded from the present study. Carswell & Harley (1990) derived a hybrid equation as best fit formula for the two experimental data sets of Harley (1984) and Lee & Ganguly (1988), whereas the calibration of Bhattacharya et al. (1991) combines the experimental data of Lee & Ganguly (1988) with better constrained values of mixing parameters for the pyrope-almandine binary (Geiger et al., 1987). The frequently used calibration of Sen & Bhattacharya (1984) has been excluded since it yields geologically unreasonably high temperatures for most granulites of the Epembe Unit. This observation is consistent with the findings of Carswell & Harley (1990) that the Sen & Bhattacharya geothermometer overestimates the palaeo-temperatures at ultrahigh metamorphic conditions of $T > 900°C$.

Following the above arguments, the geothermometer formulations adopted for this study are those of Lee & Ganguly (1988), Carswell & Harley (1990) and Bhattacharya et al. (1991).

Al-in orthopyroxene thermometer (Grt-Opx Al-thermometer)

Temperatures during orthopyroxene formation were furthermore estimated with the experimentally calibrated Al-in Opx thermometers of Harley & Green (1982) and Aranovich & Berman (1997), based on temperature-dependent Al_2O_3-solubility in orthopyroxene coexisting with garnet, expressed the FAS and MAS end-member reactions:

(A-2) $Mg_3Al_2Si_3O_{12} = Mg_2Si_2O_6 + MgAl_2SiO_6$

Pyrope Enstatite Mg Tschermak's component

(A-3) $Fe_3Al_2Si_3O_{12} = 3\ FeSiO_3 + Al_2O_3$

Almandine Ferrosilite Ortho-corundum

The thermometer calibration of Aranovich & Berman (1997) is based on experimentally derived thermodynamic data of Berman & Aranovich (1996) and Aranovich & Berman (1997). Applied to the granulites of the Epembe Unit the thermometer generally yields slightly higher peak-metamorphic temperatures than the Grt-Opx Fe-Mg exchange thermometer. These results are consistent with the observations of Aranovich & Berman (1997), who found that the Al-in orthopyroxene thermometer is insensitive to post-peak Fe-Mg exchange.

Garnet-clinopyroxene Fe-Mg thermometer (Grt-Cpx thermometer)

The thermometer is based on the temperature-dependent Fe-Mg exchange between garnet and coexisting clinopyroxene, which is expressed by the reaction:

(A-4) $Mg_3Al_2Si_3O_{12} + 3\ CaFeSi_2O_6 = Fe_3Al_2Si_3O_{12} + 3\ CaMgSi_2O_6$

Pyrope Hedenbergite Almandine Diopside

The reaction has been calibrated as a geothermometer by several authors (for a review see Krogh Ravna, 2001). The widely used calibration of Ellis & Green (1979) has been excluded as it tends to overestimate palaeo-temperatures by the order of 50-150°C when applied to granulite facies rocks (see Green & Adam, 1991, for a review). Therefore the more recent calibrations of Powell (1985), Ai (1994) and Krogh Ravna (2001), based on more recent experimental thermodynamic data, have been used.

Garnet-cordierite Fe-Mg thermometer (Grt-Crd thermometer)

The thermometer is based on the temperature-dependent Fe-Mg exchange between coexisting garnet and cordierite, which is expressed by the reaction:

(A-5) $2\ Mg_3Al_2Si_3O_{12} + 3\ Fe_2Al_4Si_5O_{18} = 2\ Fe_3Al_2Si_3O_{12} + 3\ Mg_2Al_4Si_5O_{18}$

Pyrope Fe-cordierite Almandine Mg-cordierite

The most recent calibrations of Bhattacharya et al. (1988) and Dwivedi (1998) have been used. Both calibrations are applicable to upper amphibolite facies and granulite facies rocks.

Garnet-biotite Fe-Mg thermometer(Grt-Bt thermometer)

The fluid-independent thermometer is based on the temperature-dependent Fe-Mg exchange between garnet and biotite, expressed by the reaction:

(A-6) $Fe_3Al_2Si_3O_{12} + KMg_3AlSi_3O_{10}(OH)_2 = Mg_3Al_2Si_3O_{12} + KFe_3AlSi_3O_{10}(OH)_2$

Almandine Phlogopite Pyrope Annite

The reaction was calibrated as a thermometer by several authors. Thermometers adopted for this study include Perchuk & Lavrent'eva (1983), Bhattacharya et al. (1992) and Kleemann & Reinhardt (1994), whereas the Ferry & Spear (1978) thermometer has been excluded, since it yields unreasonable high peak-metamorphic temperatures for the granulites of the Epembe Unit. Perchuk & Lavrent'eva (1983) performed experimental studies on the garnet-biotite Fe-Mg exchange, using natural minerals with a Fe/(Fe+Mg) ratio ranging between 0.3 and 0.7. In addition, the Grt-Bt thermometer calibration of Bhattacharya et al. (1992) was applied, which is based on the experimental data of Ferry & Spear (1978) and Perchuk & Lavrent'eva (1983), but additionally considers the grossular component in garnet and non-ideal mixing of the phlogopite-annite binary. The Kleemann & Reinhardt (1994) thermometer uses the garnet mixing model of Berman (1990) and considers the effect of Ti and Al^{VI} in biotite.

Garnet-hornblende Fe-Mg thermometer (Grt-Hbl thermometer)

The thermometer garnet-hornblende thermometers of Graham & Powell (1984) and Perchuk et al. (1985) are based on the temperature dependent Fe-Mg exchange between garnet and hornblende, as expressed by the reaction

(A-7) $4\ Mg_3Al_2Si_3O_{12} + 3\ NaCa_2Fe_4Al_3Si_6O_{22}(OH)_2 = 4\ Fe_3Al_2Si_3O_{12} + 3\ NaCa_2Mg_4Al_3Si_6O_{22}(OH)_2$

Pyrope Fe-pargasite Almandine Pargasite

The semi-empirical thermometer formulation of Graham & Powell (1984) has been calibrated against the Grt-Cpx geothermometer of Ellis & Green (1979) using data on natural coexisting garnet, hornblende and clinopyroxene of amphibolite- and granulite-facies rocks. The Grt-Hbl thermometer of Perchuk et al. (1985) is an empirical calibration, based on the amphibole-plagioclase thermometer of Perchuk (1966, in Perchuk et al., 1985)

Two-pyroxene thermometer

Two-pyroxene geothermometry is based on the temperature-dependent distribution of Ca and Mg between coexisting clinopyroxene and orthopyroxene. The calibrations of Bertrand & Mercier (1985) and of Brey & Köhler (1990) were used.

A.4.2 GEOBAROMETERS

Garnet-Orthopyroxene-Plagioclase-Quartz barometer (Grt-Opx-Pl-Qtz barometer)

Pressures for the formation of coexisting Grt, Opx, Pl and Qtz of the granulites of the Epembe Unit were calculated using the garnet-orthopyroxene-plagioclase-quartz barometer, based on the net-transfer reaction Pl + Opx = Grt + Qtz. Two barometers are applicable for the P calculation of granulite-facies metabasites and charnockites, based on the following two CMAS and CFAS end-member reactions:

(A-8) $3\ Mg_2Si_2O_6 + 3\ CaAl_2Si_2O_8 = 2\ Mg_3Al_2Si_3O_{12} + Ca_3Al_2Si_3O_{12} + 3\ SiO_2$

Enstatite Anorthite Pyrope Grossular Quartz

(A-9) $3\ Fe_2Si_2O_6 + 3\ CaAl_2Si_2O_82 = 2\ Fe_3Al_2Si_3O_{12} + Ca_3Al_2Si_3O_{12} + 3\ SiO_2$

Ferrosilite Anorthite Almandine Grossular Quartz

For the pressure estimation based on the Mg-exchange reaction (A-8) the barometer calibration of Newton & Perkins (1982) and the most recent calibration of Eckert et al. (1991) were used, the latter of which including more accurately determined enthaply values. Pressures following the Fe-exchange reaction (A-9) were calculated with the barometer calibrations of Bohlen et al. (1983a), based on experimental data of Bohlen et al. (1983b), and that of Moecher et al. (1988), using more recent thermodynamic data and experimental studies (see Moecher et al., 1988, for references).

Garnet-Clinopyroxene-Plagioclase-Quartz barometer (Grt-Cpx-Pl-Qtz barometer)

The Grt-Cpx-Pl-Qtz barometer is based on the CMAS and CFAS end member reactions

(A-10) $3\ CaMgSi_2O_6 + 3\ CaAl_2Si_2O_8 = Mg_3Al_2Si_3O_{12} + 2\ Ca_3Al_2Si_3O_{12} + 3\ SiO_2$

Diopside Anorthite Pyrope Grossular Quartz

(A-11) $3\ CaFeSi_2O_6 + 3\ CaAl_2Si_2O_8 = Fe_3Al_2Si_3O_{12} + 2\ Ca_3Al_2Si_3O_{12} + 3\ SiO_2$

Hedenbergite Anorthite Almandine Grossular Quartz

Pressures using the Mg-endmember reaction (A-10) have been calculated with the calibrations of Newton & Perkins (1982), Eckert et al. (1991) and Moecher et al. (1988), whereas pressure estimates following the Fe-exchange reaction (A-11) were calculated with the only available barometer calibration of Moecher et al. (1988).

Garnet-Hornblende-Plagioclase-Quartz barometer (Grt-Hbl-Pl-Qtz barometer)

The Grt-Hbl-Pl-Qtz barometer of Kohn & Spear (1990) is an empirical geobarometer, based on the data obtained from 37 natural amphibolite to granulite facies rock samples. It is expressed by the CMASH and CFASH equilibria:

(A-12) $3\ Ca_2Mg_5Si_8O_{22}(OH)_2 + 6\ CaAl_2Si_2O_8 = 3\ Ca_2Mg_4Al_2Si_7O_{22}(OH)_2 + 2\ Ca_3Al_2Si_3O_{12} + Mg_3Al_2Si_3O_{12} + 6\ SiO_2$

Tremolite Anorthite Tschermakite Grossular Pyrope Quartz

(A-13) $3\ Ca_2Fe_5Si_8O_{22}(OH)_2 + 6\ CaAl_2Si_2O_8 = 3\ Ca_2Fe_4Al_2Si_7O_{22}(OH)_2 + 2\ Ca_3Al_2Si_3O_{12} + Fe_3Al_2Si_3O_{12} + 6\ SiO_2$

Fe-Actinolite Anorthite Fe-Tschermakite Grossular Almandine Quartz

Errors of the calculated pressure are generally ± 0.5 kbar.

Garnet-Plagioclase-Alumosilicate-Quartz barometer (GASP barometer)

The GASP barometer is based on the net transfer reaction:

(A-14) $3\ CaAl_2Si_2O_8 = Ca_3Al_2Si_3O_{12} + 2\ Al_2SiO_5 + SiO_2$

Anorthite Grossular Alumosilicate Quartz

The reaction has been calibrated as a geobarometer by several workers (see Koziol & Newton, 1988, for a review). For the present study, the calibration of Newton & Haselton (1981) and the barometer formulation of Koziol & Newton (1988), the latter of which using more recent experimental data, have been applied. Moreover, the calibration of Powell & Holland (1988) has been used, which is based on the internally consistent dataset of Holland & Powell (1988).

Garnet-Orthopyroxene-Cordierite-Quartz barometer

The garnet-orthopyroxene-cordierite-quartz barometer is based on the divariant pressure-dependent net-transfer reaction Opx + Crd = Grt + Qtz (Hensen & Green, 1973), expressed by the end-member reactions:

(A-15) $Fe_2Al_4Si_5O_{18} + 2\ Fe_2Si_2O_6\ 2 = 2\ Fe_3Al_2Si_3O_{12} + 3\ SiO_2 + nH_2O$ (FASH)

Fe-cordierite Ferosilite Almandine Quartz

(A-16) $Mg_2Al_4Si_5\ O_{18} + 2\ Mg_2Si_2O_6 = 2\ Mg_3Al_2Si_3O_{12} + 3\ SiO_2 + nH_2O$ (MASH)

Mg-cordierite Enstatite Pyrope Quartz

The Fe-endmember reaction has been calibrated as a geobarometer by Bhattacharya (1986), using published thermodynamic data (see Bhattacharya, 1986, for references), which , however, is not adopted for this study. Instead, the location of the two end-member reactions has been calculated with the computer software THERMOCALC v.2.7, using the internally consistent dataset of Holland & Powell (1998b). A listing of the activity models is given in Chapters 4.5.1 and 5.4.

Garnet-Cordierite-Sillimanite-Quartz barometer

The garnet-cordierite-sillimanite-quartz barometer is based on the divariant pressure-dependent net-transfer reaction Crd = Grt + Sil + Qtz expressed by the MASH and FASH end-member reactions:

(A17) $3\ Mg_2Al_4Si_5O_{18} = 2\ Mg_3Al_2Si_3O_{12} + 4\ Al_2SiO_5 + 5\ SiO_2 + nH_2O$

Mg-cordierite Pyrope Alumosilicate Quartz

(A18) $3\ Fe_2Al_4Si_5O_{18} = 2\ Fe_3Al_2Si_3O_{12} + 4\ Al_2SiO_5 + 5\ SiO_2 + nH_2O$

Fe-cordierite Almandine Alumosilicate Quartz

These reactions have been calibrated as a geobarometer by several workers (see Nichols et al., 1992 and Bhattacharya, 1986, for a review). For this study, however, the location of the end-member reactions has been calculated with the computer software THERMOCALC v.2.7, using the internally consistent dataset of Holland & Powell (1998b). A listing of the activity models is given in Chapters 4.5.1 and 5.4.

Garnet-Sillimanite-Cordierite-Spinel barometer

The garnet-sillimanite-cordierite-spinel barometer is based on the divariant pressure-dependent net-transfer reaction Crd + Spl = Grt + Sil (Harris, 1981) expressed by the MAS and FAS end-member reactions:

(A19) $Mg_2Al_4Si_5O_{18} + MgAl_2O_4 = Mg_3Al_2Si_3O_{12} + 2\ Al_2SiO_5 + nH_2O$

Mg-cordierite Spinel Pyrope Alumosilicate

(A20) $Fe_2Al_4Si_5O_{18} + FeAl_2O_4 = Fe_3Al_2Si_3O_{12} + 2\ Al_2SiO_5 + nH_2O$

Fe-cordierite Hercynite Almandine Alumosilicate

Bhattacharya (1986) calibrated the Fe-endmember reaction as a geobarometer, which is not used for this study. Instead, the pressures have been calculated with the THERMOCALC software (v.2.7), using the internally consistent dataset of Holland & Powell (1998b). A listing of the activity models is given in Chapters 4.5.1 and 5.4.

A.5 PETROGENETIC GRIDS AND P-T PSEUDOSECTIONS

The chemical composition of a rock as well as the stability of its mineral phases can be described by real systems, which, however are far too complex, to be investigated satisfactorily. Therefore, phase diagrams are commonly constructed for simplified 'model systems'. The model system chosen for a specific rock type should be suited best to describe its bulk-rock composition and its mineral phases, as for example K_2O-FeO-MgO-Al_2O_3-SiO_2-H_2O (KFMASH) for metapelitic rocks or Na_2O-CaO-FeO-MgO-Al_2O_3-SiO_2-H_2O (NCFMASH) for metabasic rocks (e.g. Will, 1998b). Following Spear (1993), the constituents of the model system, as for example Na_2O and CaO in the NCFMASH system, are termed 'system components', whereas parts of the model system are referred to as 'sub-system', such as Na_2O-CaO-MgO-Al_2O_3-SiO_2-H_2O (NCMASH) and Na_2O-CaO-FeO-Al_2O_3-SiO_2-H_2O (NCFASH) for the model system NCFMASH (Will, 1998b). The phase relationships and the stability of mineral assemblages of a specific rock sample can be expressed as a function of pressure and temperature in a P-T projection for a selected model system, i.e. a 'petrogenetic grid'. A detailed description of the scientific background and calculation method for petrogenetic grids is given by Will (1998a, 1998b).

The petrogenetic grid for granulite facies metapelites presented in this study is calculated for the model system FeO-MgO-Al_2O_3-SiO_2-H_2O (FMASH) by T. Will (pers. comm), using the computer software THERMOCALC v.2.7 of Holland & Powell (1998a) and the internally consistent dataset of Holland & Powell (1998b). For the P-T window, a pressure range of 5-12 kbar and a temperature range of 650-1350°C is selected. Minerals included are orthopyroxene, sillimanite, kyanite, garnet, spinel, sapphirine, cordierite, and quartz. For end-member activities, ideal ionic mixing is assumed. $FeMg_{-1}$ substitution is considered in Opx, Grt, Spl, Spr, and Crd whereas $(Fe,Mg)AlSi_{-2}$ substitution is taken into account in Opx and Spr. The petrogenetic grid is calculated for a very low, constant water activity of 0.01. The model system approximates the bulk-rock geochemistry of the sapphirine-bearing Opx-Sil gneisses, as Na, K, Ca and Mn are minor constituents of these restitic rocks. It has to be mentioned, however, that melting reactions can not be illustrated in the FMASH system. The topology of the calculated FMASH grid is similar to that of previously published, experimentally derived FMASH grids for granulite facies metapelites (i.e. Hensen & Green, 1973; Hensen, 1987; Hensen & Harley, 1990; Bertrand et al., 1991; Harley 1998a).

As has been mentioned previously, the stability of minerals in a specific rock depends on both, pressure and temperature. However, the appearance and stability of minerals in a rock is

also strongly dependent on its bulk composition. The best possibility to illustrate the dependence of mineral assemblages on the bulk-rock geochemistry is to use 'P-T pseudosections'. This special type of phase diagram is drawn for the bulk-rock composition of a specific rock sample. Such P-T pseudosections allow to calculate all possible mineral reactions of the specific rock sample during metamorphism and observed mineral reactions, assemblages and compositions can be put in the context of pressure and temperature. In combination with petrographical investigations of the rock sample, pseudosections can hence be used to determine a detailed P-T path or at least P-T path segments.

P-T pseudosections are based on P-T projections in a specific model system. In the present study, the previously described P-T projection in the system FMAS(H), FeO-MgO-Al_2O_3-SiO_2 (+ H_2O), of T. Will (pers. comm) is used. The bulk composition of the selected metapelite samples (in wt.%) is normalized to molecular weights of the oxides in a first step and subsequently recalculated as mole proportions of the FeO-MgO-Al_2O_3-SiO_2 system components normalised to 100%. The P-T pseudosections are calculated using the computer software THERMOCALC v.2.7 of Holland & Powell (1998a) and the internally consistent dataset of Holland & Powell (1998b). The principles of the construction of P-T pseudosections is given by Will (1998b).

The resulting P-T pseudosections generally comprise univariant reactions, as well as di- and trivariant fields. Univariant curves represent discontinuous mineral reactions, whereas di- and trivariant fields illustrate the stability fields of specific mineral assemblages. The mineral composition changes along univariant reactions and within the di- and trivariant fields, as can be illustrated by isopleths. For the metapelitic granulites of the Epupa Complex, isopleths were calculated for the X_{Mg} of garnet and both the X_{Mg} and the Al-content of orthopyroxene.

By combining the observed mineral assemblages (prograde inclusions, peak-metamorphic matrix phases and retrograde reaction textures) and mineral chemical data with the calculated P-T pseudosections detailed P-T paths can be reconstructed, which is generally not possible with conventional geothermobarometry.

A.6 ANALYTICAL DATA

A.6.1 BULK-ROCK GEOCHEMISTRY

Table A.6.1.1: Major and trace element data of the upper amphibolite facies rocks of the Orue Unit

	mafic rocks					felsic gneisses			metagranitoids	
Sample	B-177-B-98	B-305-2-99	B-446-1-99	B-191-B-98	B-405-1-99	B-174-A-98	B-410-99	B-702-00	B-190-1-99	B-202-A-98
Rock type	amphibolite	amphibolite	amphibolite	Grt-amphibolite	Grt-amphibolite	Hbl-Bt bearing gneiss	Hbl-Bt bearing gneiss	Hbl-Bt-bearing gneiss	Hbl-Bt meta-granitoid	Hbl-Bt meta-granitoid
wt.%										
SiO_2	47.96	52.86	56.86	45.04	44.94	74.59	71.33	75.68	69.32	70.96
TiO_2	1.69	1.06	1.19	2.94	2.48	0.20	0.40	0.23	0.64	0.35
Al_2O_3	14.24	13.61	12.97	12.32	18.10	11.75	12.80	12.75	13.92	13.94
FeO	8.60	8.44	9.32	14.77	12.00	2.05	1.55	0.54	2.14	1.33
Fe_2O_3	2.89	2.06	2.14	3.11	2.26	1.11	2.37	0.90	1.87	0.77
MnO	0.21	0.20	0.23	0.25	0.21	0.05	0.08	0.04	0.07	0.04
MgO	7.15	6.27	4.38	6.07	4.93	0.69	0.36	0.17	1.07	0.64
CaO	10.81	8.53	6.26	9.82	9.27	0.64	1.21	1.02	2.46	1.79
Na_2O	2.61	3.55	2.74	0.86	2.39	2.78	3.13	3.60	2.91	2.95
K_2O	1.31	1.15	1.87	1.39	0.97	5.18	5.09	4.14	4.28	5.39
P_2O_5	0.15	0.27	0.18	0.20	0.25	0.04	0.05	0.03	0.15	0.06
S	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02
LOI	1.21	0.76	0.85	0.79	0.86	0.60	0.55	0.39	0.57	0.65
total	98.84	98.76	98.99	97.56	98.68	99.68	98.92	99.49	99.40	98.87
X_{Mg}	0.53	0.52	0.41	0.38	0.39	0.29	0.15	0.18	0.33	0.36
ppm										
Sc	34	38	38	37	36	11	< 10	< 10	15	< 10
V	321	280	297	662	219	12	15	11	62	34
Cr	231	102	46	87	123	< 10	< 10	< 10	12	< 10
Co	65	77	79	93	104	76	89	54	74	106
Ni	75	54	23	62	59	< 5	< 5	< 5	< 5	< 5
Zn	116	105	129	158	145	49	62	25	68	34
Ga	15	20	19	23	23	16	36	13	25	19
Rb	29	24	87	46	43	82	118	95	158	213
Sr	368	316	230	207	262	208	170	171	195	187
Y	29	36	77	32	38	38	133	57	33	24
Zr	106	81	91	135	158	277	860	204	298	169
Nb	6	10	13	9	12	12	60	10	13	10
Mo	8	< 5	< 5	< 5	< 5	< 5	5	< 5	< 5	< 5
Sn	< 15	15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	16
Ba	723	580	760	943	664	1153	1297	1325	918	982
Pb	15	10	18	< 5	13	17	8	26	35	42
Th	< 5	6	< 5	< 5	< 5	10	15	14	24	39
U	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5	< 5
CIPW										
Quartz	0.00	5.80	10.62	0.62	0.00	34.94	30.29	36.37	28.74	27.78
Corundum	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.44	0.29	0.04
Zircon	0.02	0.02	0.02	0.03	0.03	0.06	0.17	0.04	0.06	0.03
Orthoclase	7.75	6.81	11.09	8.23	5.75	30.65	30.13	24.51	25.36	31.94
Albite	22.08	30.04	23.18	7.28	20.22	23.52	26.48	30.46	24.62	24.96
Anorthite	23.30	17.83	17.59	25.69	35.84	3.30	5.92	5.29	11.54	8.82
Nepheline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diopside	24.19	15.67	10.49	18.44	7.35	0.00	0.14	0.00	0.00	0.00
Hypersthene	0.95	8.36	19.51	26.09	6.09	4.35	1.23	0.42	4.14	2.92
Olivine	11.71	0.00	0.00	0.00	14.09	0.00	0.00	0.00	0.00	0.00
Magnetite	4.19	0.00	3.11	4.51	3.28	1.61	3.44	1.23	2.71	1.12
Hematite	0.00	11.44	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
Ilmenite	3.21	0.44	2.26	5.58	4.71	0.38	0.76	0.44	1.22	0.66
Apatite	0.36	0.64	0.43	0.48	0.59	0.10	0.12	0.07	0.36	0.15
Rutile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromite	0.05	0.02	0.01	0.02	0.03	0.00	0.00	0.00	0.00	0.00
Titanite	0.00	2.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	97.81	99.10	98.31	96.97	97.98	99.30	98.68	99.32	99.04	98.42

Table A.6.1.1 (continued): Major and trace element data of the upper amphibolite facies rocks of the Orue Unit

	metagranitoids					metagreywackes			metapelites	
Sample	B-401-1-99	B-406-2-99	B-644-1-00	Ku-97-46	Ku-97-47	B-137-C-98	B-171-A-98	B-191-A-98	B-103-A-98	B-148-A-98
Rock type	Hbl-Bt meta-granitoid	Hbl-Bt meta-granitoid	Hbl-Bt meta-granitoid	Hbl-Bt meta-granitoid	Hbl-Bt meta-granitoid	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Crd-Bt gneiss	Crd-Bt gneiss
wt.%										
SiO_2	71.78	75.64	71.53	68.61	72.67	52.69	67.20	51.18	57.28	61.93
TiO_2	0.38	0.29	0.40	0.51	0.29	1.42	0.53	1.14	0.95	0.85
Al_2O_3	13.53	12.32	13.95	14.78	13.28	12.95	15.22	19.90	20.10	17.68
FeO	1.08	0.86	1.19	1.61	0.85	13.87	2.66	9.01	4.72	3.74
Fe_2O_3	1.38	1.00	1.16	1.65	0.71	2.87	1.33	1.63	1.75	1.24
MnO	0.05	0.03	0.05	0.06	0.04	0.52	0.12	0.17	0.09	0.06
MgO	0.84	0.73	0.76	1.11	0.64	5.01	1.88	3.73	1.36	1.55
CaO	1.46	1.41	2.43	2.30	1.39	1.70	1.55	3.12	1.00	1.15
Na_2O	2.75	3.78	3.02	2.97	3.44	0.46	3.73	3.85	2.45	2.72
K_2O	5.45	2.60	4.16	4.91	4.96	4.22	3.64	3.23	6.87	5.92
P_2O_5	0.07	0.03	0.07	0.10	0.05	0.21	0.10	0.05	0.04	0.05
S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
LOI	0.83	0.57	0.54	0.82	0.91	1.96	1.49	0.83	1.66	1.26
total	99.60	99.26	99.26	99.43	99.24	97.88	99.45	97.84	98.27	98.15
X_{Mg}	0.39	0.42	0.38	0.39	0.43	0.35	0.46	0.39	0.28	0.36
ppm										
Sc	< 10	15	14	17	< 10	16	14	21	29	25
V	34	15	36	47	22	196	54	136	106	90
Cr	< 10	17	14	16	< 10	130	52	108	63	56
Co	67	101	94	63	117	60	90	41	94	89
Ni	< 5	< 5	< 5	< 5	< 5	54	9	39	21	15
Zn	33	25	33	40	21	171	70	140	40	70
Ga	14	13	13	10	17	18	22	29	17	23
Rb	242	50	165	191	172	199	99	162	144	176
Sr	165	163	229	206	213	51	296	199	260	364
Y	34	40	38	31	15	52	31	67	36	32
Zr	202	327	220	233	154	381	293	374	312	304
Nb	12	15	10	12	14	17	15	18	15	14
Mo	< 5	< 5	< 5	< 5	< 5	6	< 5	< 5	< 5	< 5
Sn	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
Ba	871	1039	1034	1095	814	990	1554	1244	1699	1573
Pb	33	13	44	25	37	7	24	14	31	39
Th	35	13	11	23	36	26	13	21	23	19
U	6	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
CIPW										
Quartz	30.43	38.62	31.42	25.29	29.61	13.29	24.08	0.00	12.44	18.57
Corundum	0.52	0.70	0.12	0.52	0.00	4.95	2.41	4.39	6.75	4.66
Zircon	0.04	0.07	0.04	0.05	0.03	0.08	0.06	0.08	0.06	0.06
Orthoclase	32.30	15.39	24.65	29.09	29.38	25.02	21.55	19.15	40.66	35.06
Albite	23.27	31.98	25.55	25.13	29.11	3.89	31.56	32.57	20.73	23.01
Anorthite	7.08	7.14	11.96	11.13	6.18	7.34	7.56	15.56	5.25	5.94
Nepheline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diopside	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.00
Hypersthene	2.42	3.82	2.57	4.46	1.93	34.20	7.83	14.79	3.39	3.86
Olivine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.05	0.00	0.00
Magnetite	2.00	0.49	1.68	1.91	1.03	4.15	1.93	2.36	0.00	0.00
Hematite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.99	5.39
Ilmenite	0.72	0.55	0.76	0.97	0.55	2.70	1.01	2.16	0.21	0.15
Apatite	0.17	0.07	0.17	0.24	0.12	0.51	0.25	0.12	0.10	0.13
Rutile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.77
Chromite	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.02	0.01	0.01
Titanite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	98.95	98.83	98.92	98.79	98.49	96.16	98.25	97.25	97.43	97.61

Table A.6.1.1 (continued): Major and trace element data of the of the upper amphibolite facies rocks Orue Unit and of the Mesoproterozoic granites

	metapelites									Mesoproterozoic granites	
Sample	B-246-A-98	B-342-3-99	B-401-2-99	B-679-1-00	B-703-00	B-302-2A-99	B-302-2B-99	B-342-5-99	B-219-A-98	B-170-A-98	B-180-1-99
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil schist	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-bearing leucosome	Grt-Bt-Sil leucosome		
wt.%											
SiO_2	69.99	64.95	55.89	69.25	53.31	60.31	53.73	73.87	74.41	73.85	75.56
TiO_2	0.53	0.66	0.93	0.53	1.00	0.64	0.74	0.09	0.23	0.29	0.25
Al_2O_3	14.83	17.08	21.87	16.13	24.17	22.35	25.23	13.25	12.89	12.08	11.27
FeO	3.11	4.53	5.70	3.05	6.11	4.69	6.32	0.63	0.92	1.47	1.16
Fe_2O_3	1.10	0.98	1.68	0.69	1.59	2.23	1.69	0.45	0.64	1.75	1.71
MnO	0.12	0.08	0.12	0.08	0.11	0.12	0.17	0.06	0.04	0.07	0.05
MgO	1.15	2.40	3.00	0.97	3.11	2.59	2.93	0.32	0.58	0.22	0.12
CaO	0.49	0.39	0.67	1.07	0.63	1.34	1.68	0.46	0.62	0.30	0.33
Na_2O	1.49	0.76	0.95	1.91	1.27	2.13	2.62	2.49	2.68	3.60	3.11
K_2O	4.87	4.62	5.38	3.70	5.51	1.63	2.03	6.96	5.16	5.16	5.28
P_2O_5	0.04	0.04	0.03	0.10	0.07	0.03	0.03	0.05	0.03	0.02	0.12
S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
LOI	1.25	2.74	2.49	1.57	1.72	1.37	1.52	0.54	0.75	0.57	0.37
total	98.97	99.23	98.71	99.05	98.60	99.43	98.69	99.17	98.96	99.38	99.33
X_{Mg}	0.33	0.44	0.43	0.32	0.42	0.41	0.40	0.36	0.41	0.14	0.07
ppm											
Sc	11	23	27	18	29	11	12	< 10	< 10	< 10	< 10
V	45	81	121	49	137	102	104	< 10	16	< 10	10
Cr	33	77	100	29	102	61	64	< 10	11	< 10	< 10
Co	71	39	55	125	62	48	123	44	77	91	71
Ni	5	30	47	< 5	42	29	29	< 5	< 5	< 5	< 5
Zn	101	82	90	87	185	216	227	27	55	161	99
Ga	17	18	24	24	32	25	42	13	11	31	34
Rb	144	224	259	121	244	50	66	117	108	141	121
Sr	125	71	112	212	107	231	285	115	98	25	26
Y	49	41	30	39	38	32	29	38	27	139	107
Zr	247	233	261	224	278	247	289	119	168	701	617
Nb	11	20	21	12	17	9	13	< 5	8	82	63
Mo	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Sn	< 15	< 15	< 15	< 15	< 15	< 15	16	< 15	< 15	< 15	22
Ba	1653	806	1419	1535	905	1413	1635	2462	1343	256	239
Pb	32	16	10	29	10	< 5	24	50	117	21	25
Th	12	20	25	11	27	6	12	12	< 5	19	25
U	< 5	< 5	< 5	< 5	< 5	< 5	6	< 5	< 5	< 5	< 5
CIPW											
Quartz	37.92	35.41	23.74	40.32	18.88	32.15	18.37	31.16	36.40	32.14	36.43
Corundum	6.17	10.13	13.20	7.13	15.04	14.58	15.58	0.70	1.72	0.05	0.10
Zircon	0.05	0.05	0.05	0.05	0.06	0.05	0.06	0.02	0.03	0.14	0.12
Orthoclase	28.84	27.39	31.90	21.91	32.66	9.65	12.02	41.18	30.54	30.55	31.25
Albite	12.61	6.43	8.04	16.16	10.75	18.02	22.17	21.07	22.68	30.46	26.31
Anorthite	2.66	1.91	3.55	5.14	2.95	6.92	8.69	2.65	3.28	1.44	0.92
Nepheline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diopside	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hypersthene	7.03	12.55	7.47	2.42	7.75	12.38	16.63	0.80	2.32	0.55	0.71
Olivine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetite	1.60	1.42	0.00	0.00	0.00	3.24	2.45	0.00	0.93	0.00	2.48
Hematite	0.00	0.00	8.01	4.08	8.38	0.00	0.00	1.15	0.00	3.42	0.00
Ilmenite	1.01	1.25	0.27	0.20	0.25	1.22	1.41	0.14	0.44	0.17	0.47
Apatite	0.11	0.10	0.08	0.25	0.18	0.07	0.07	0.14	0.08	0.05	0.29
Rutile	0.00	0.00	0.79	0.43	0.87	0.00	0.00	0.02	0.00	0.20	0.00
Chromite	0.01	0.02	0.02	0.01	0.02	0.01	0.01	0.00	0.00	0.00	0.00
Titanite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	98.01	96.66	97.12	98.10	97.79	98.29	97.46	99.03	98.42	99.17	99.08

Table A.6.1.2: Major and trace element data of the granulites of the Epembe Unit

	mafic granulites										
Sample	B-230-B-98	B-423-99	B-447-1-99	B-545-3-99	B-573-99	B-326-99	B-434-2-99	B-469-99	B-512-99	B-311-1- 99	B-311-3-00
Rock type	two-Px granulite	two-Px granulite	two-Px granulite	two-Px granulite	two-Px granulite	Grt-bearing two-Px granulite	Grt-bearing two-Px granulite	Grt-bearing two-Px granulite	Grt-bearing two-Px granulite	Grt-Cpx granulite	Grt-Cpx granulite
wt.%											
SiO_2	52.84	49.28	50.73	48.31	48.25	52.89	47.69	45.25	47.27	42.65	43.45
TiO_2	1.27	0.87	1.16	0.58	1.42	0.63	1.68	0.94	0.69	1.05	1.49
Al_2O_3	15.15	14.58	15.96	15.22	13.53	17.58	14.93	16.16	13.04	17.12	16.11
FeO	10.81	8.90	8.96	9.20	12.14	7.50	12.83	10.72	9.07	7.77	9.18
Fe_2O_3	0.85	2.41	1.20	1.98	2.16	1.16	0.23	2.85	2.05	5.20	4.83
MnO	0.21	0.19	0.17	0.22	0.22	0.15	0.20	0.20	0.25	0.23	0.25
MgO	6.32	7.31	6.55	9.55	7.30	5.07	6.31	6.75	10.02	8.47	8.72
CaO	8.41	12.01	9.93	9.99	11.24	7.93	8.47	12.21	10.94	12.24	11.06
Na_2O	2.20	2.31	2.76	2.27	2.14	3.63	1.81	1.32	1.55	1.35	1.43
K_2O	0.60	0.69	0.72	0.60	0.35	0.67	1.96	0.95	1.84	1.31	1.27
P_2O_5	0.15	0.05	0.21	0.11	0.18	0.11	0.18	0.02	0.05	0.12	0.27
S	0.09	<0.02	0.03	<0.02	<0.02	0.04	0.46	0.04	<0.02	<0.02	<0.02
LOI	0.17	0.26	0.42	0.47	0.00	1.56	1.64	1.10	2.00	1.45	1.10
total	99.07	98.86	98.81	98.50	98.93	98.92	98.38	98.51	98.77	98.96	99.16
X_{Mg}	0.49	0.54	0.54	0.61	0.48	0.51	0.46	0.48	0.62	0.55	0.53
ppm											
Sc	30	39	29	29	51	25	31	45	53	58	36
V	265	260	208	210	408	131	275	269	240	317	276
Cr	202	65	111	496	129	201	188	144	75	191	157
Co	81	145	56	120	117	76	73	96	106	128	92
Ni	54	63	27	165	50	13	51	88	60	79	117
Zn	200	155	112	211	106	132	260	117	145	111	140
Ga	17	32	17	18	25	26	18	23	12	27	26
Rb	12	13	30	11	9	20	91	25	47	156	150
Sr	178	282	365	192	172	278	248	200	386	479	226
Y	31	18	33	31	38	22	32	24	18	23	35
Zr	105	49	109	33	47	90	107	48	28	92	161
Nb	6	6	8	< 5	8	7	6	< 5	< 5	6	10
Mo	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Sn	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
Ba	226	150	646	358	487	372	467	216	1071	135	184
Pb	6	14	< 5	14	9	15	< 5	< 5	43	10	15
Th	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	10	25
U	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	8
CIPW											
Quartz	5.14	0.00	0.00	0.00	0.00	1.37	0.00	0.00	0.00	0.00	0.00
Corundum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zircon	0.02	0.01	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.03
Orthoclase	3.55	4.08	4.27	3.55	2.07	3.97	11.62	5.62	10.89	7.80	7.56
Albite	18.61	19.54	23.35	19.21	18.11	30.71	15.31	11.17	13.11	7.07	12.10
Anorthite	29.71	27.39	29.07	29.59	26.30	29.73	26.84	35.38	23.23	36.79	33.78
Nepheline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.36	0.00
Diopside	9.27	26.22	15.75	15.83	23.59	7.52	11.89	20.83	25.34	18.83	15.76
Hypersthene	28.58	9.38	19.28	12.05	16.00	20.96	15.37	6.72	1.38	0.00	1.31
Olivine	0.00	6.79	2.32	13.64	6.70	0.00	11.40	11.75	18.60	14.95	17.16
Magnetite	1.23	3.49	1.74	2.87	3.13	1.68	0.33	4.13	2.97	7.54	7.00
Hematite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ilmenite	2.41	1.65	2.20	1.10	2.70	1.20	3.19	1.79	1.31	1.99	2.83
Apatite	0.36	0.12	0.50	0.26	0.43	0.26	0.43	0.05	0.12	0.28	0.64
Rutile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromite	0.04	0.01	0.02	0.11	0.03	0.04	0.04	0.03	0.02	0.04	0.03
Titanite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	98.92	98.68	98.52	98.22	99.07	97.46	96.44	97.48	96.98	97.67	98.20

Table A.6.1.2 (continued): Major and trace element data of the granulites of the Epembe Unit

	mafic dyke	felsic granulites		metagranitoids				metapelites		
Sample	B-692-00	B-434-1-99	B-614-2-99	B-206-B1-	B-329-1-99	B-646-1-00	B-661-2-00	B-212-A-98	B-230-F-98	B-457-99
Rock type	Grt-Opx-Pl-granulite	Px-bearing granulite	Px-bearing granulite	Grt-Opx meta-granitoid	Grt-Opx meta-granitoid	Grt-Opx meta-granitoid	Grt-Opx meta-granitoid	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss
wt.%										
SiO_2	55.86	65.62	75.52	66.29	67.71	63.99	70.60	49.05	69.90	73.02
TiO_2	2.35	1.08	0.30	0.51	0.61	0.78	0.46	0.98	0.48	0.44
Al_2O_3	15.75	13.61	11.58	14.93	13.88	15.77	12.73	25.47	14.48	14.12
FeO	10.55	6.34	1.24	3.66	5.35	6.38	3.44	8.65	3.84	2.31
Fe_2O_3	2.41	2.39	1.63	1.51	1.36	1.02	1.04	0.98	0.34	0.82
MnO	0.16	0.27	0.04	0.11	0.13	0.12	0.14	0.20	0.08	0.06
MgO	3.24	1.75	0.42	1.84	3.30	3.95	1.68	3.37	2.02	1.21
CaO	6.12	3.62	1.38	3.14	3.05	2.95	0.68	1.28	0.91	1.37
Na_2O	1.94	2.57	3.76	2.54	2.52	2.98	2.70	2.45	1.52	2.46
K_2O	0.42	0.91	2.63	3.15	1.27	1.02	4.72	4.74	4.86	2.85
P_2O_5	0.40	0.39	0.02	0.02	0.01	0.05	0.05	0.05	0.03	0.02
S	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
LOI	0.00	0.30	0.65	0.96	0.52	0.38	0.98	1.19	0.86	1.04
total	99.22	98.85	99.17	98.66	99.71	99.39	99.21	98.41	99.31	99.72
X_{Mg}	0.31	0.27	0.22	0.40	0.47	0.49	0.41	0.39	0.47	0.41
ppm										
Sc	38	18	12	16	17	26	22	25	< 10	< 10
V	173	48	14	87	88	142	40	138	61	50
Cr	22	34	< 10	68	69	68	21	114	54	47
Co	64	42	173	75	72	75	45	60	120	56
Ni	32	5	< 5	16	22	23	< 5	55	5	16
Zn	179	156	18	62	118	85	39	180	79	89
Ga	26	20	23	9	20	19	11	38	12	16
Rb	11	29	28	51	36	23	77	142	100	78
Sr	228	297	126	233	236	199	88	192	138	146
Y	49	84	66	60	57	45	245	55	49	30
Zr	286	333	412	176	282	170	452	319	255	218
Nb	22	15	10	5	11	15	16	30	10	8
Mo	5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Sn	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
Ba	493	581	1232	1762	752	965	1683	1565	1090	701
Pb	14	14	11	18	28	20	30	16	17	28
Th	5	< 5	11	< 5	8	< 5	< 5	29	< 5	< 5
U	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
CIPW										
Quartz	19.76	33.98	39.66	27.63	33.02	26.08	30.54	2.51	34.63	41.66
Corundum	1.87	2.67	0.00	1.52	2.75	4.42	1.92	13.96	5.03	4.47
Zircon	0.06	0.07	0.08	0.04	0.06	0.03	0.09	0.06	0.05	0.04
Orthoclase	2.49	5.39	15.56	18.64	7.52	6.04	27.93	28.07	28.76	16.87
Albite	16.41	21.74	31.81	21.49	21.32	25.21	22.84	20.73	12.86	20.81
Anorthite	27.97	15.67	7.04	16.01	15.36	14.65	3.53	6.52	4.66	6.91
Nepheline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diopside	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hypersthen	21.89	12.75	1.57	9.43	16.17	19.66	9.15	22.23	11.18	5.97
Olivine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetite	3.49	3.46	2.36	2.19	1.97	1.48	1.51	1.42	0.49	1.19
Hematite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ilmenite	4.46	2.05	0.57	0.97	1.16	1.48	0.87	1.86	0.91	0.84
Apatite	0.95	0.93	0.05	0.05	0.02	0.12	0.13	0.12	0.07	0.05
Rutile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromite	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.02	0.01	0.01
Titanite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	99.35	98.72	98.74	97.98	99.36	99.18	98.51	97.50	98.65	98.82

Table A.6.1.2 (continued): Major and trace element data of the granulites of the Epembe Unit

	metapelites		metagreywackes								
Sample	B-615-5-99	B-699-00	B-230-A-98	B-230-E-98	B-358-2-99	B-461-1-99	B-486-5-99	B-509-3-99	B-556-1-99	B-572-1-99	B-572-3-99
Rock type	Grt-Sil gneiss	Grt-Sil gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Fe-rich Grt-Opx gneiss	Fe-rich Grt-Opx gneiss	Fe-rich Grt-Opx gneiss	Fe-rich Grt-Opx gneiss	Fe-rich Grt-Opx gneiss	Fe-rich Grt-Opx gneiss
wt.%											
SiO_2	63.33	58.74	66.37	63.53	55.01	77.66	73.93	56.81	70.22	73.05	63.72
TiO_2	0.79	0.89	0.93	0.96	0.82	0.27	0.61	0.92	0.84	0.38	0.93
Al_2O_3	17.14	20.58	14.64	15.33	19.36	8.45	10.02	15.15	11.22	9.32	12.50
FeO	6.29	7.56	5.89	5.97	6.39	4.68	5.50	11.16	5.80	6.49	9.18
Fe_2O_3	0.63	0.83	0.91	1.37	1.98	0.77	0.99	1.53	1.38	1.02	1.34
MnO	0.11	0.11	0.18	0.13	0.16	0.09	0.08	0.24	0.13	0.20	0.18
MgO	3.06	3.16	2.38	3.11	3.12	2.46	2.33	4.20	3.39	3.56	4.57
CaO	0.86	0.78	3.06	3.47	2.05	2.13	0.98	4.83	1.68	1.33	3.14
Na_2O	1.25	1.01	2.94	2.47	3.74	2.15	3.29	2.16	1.89	1.36	3.29
K_2O	3.59	3.56	1.13	1.37	5.05	0.49	1.44	0.31	1.86	2.02	0.40
P_2O_5	0.04	0.02	0.05	0.09	0.04	0.01	0.02	0.25	0.12	0.02	0.16
S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
LOI	1.68	0.92	0.35	0.86	1.13	0.32	0.00	0.00	0.45	0.24	0.00
total	98.77	98.16	98.83	98.65	98.85	99.48	99.19	97.56	98.98	98.98	99.41
X_{Mg}	0.44	0.40	0.39	0.44	0.40	0.45	0.39	0.37	0.46	0.46	0.44
ppm											
Sc	18	23	13	22	21	20	24	27	18	11	25
V	112	122	90	128	114	51	29	227	63	33	146
Cr	130	102	45	65	115	13	11	49	17	63	55
Co	72	100	214	74	52	120	110	107	63	104	79
Ni	27	40	< 5	28	38	< 5	< 5	23	< 5	< 5	16
Zn	127	133	56	107	103	147	38	79	128	285	104
Ga	26	27	20	17	27	14	18	21	20	9	15
Rb	118	106	23	24	71	6	12	11	52	61	>5
Sr	105	118	200	209	415	124	56	251	132	81	111
Y	43	52	84	58	49	59	107	26	180	94	47
Zr	247	267	42	252	217	386	437	112	666	382	168
Nb	13	14	16	8	30	< 5	15	8	30	8	10
Mo	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Sn	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
Ba	852	890	486	742	1894	585	720	407	1934	831	551
Pb	10	17	17	9	31	12	9	72	22	13	20
Th	7	< 5	5	< 5	8	< 5	< 5	5	25	< 5	< 5
U	< 5	< 5	< 5	< 5	7	< 5	< 5	7	7	< 5	< 5
CIPW											
Quartz	31.37	32.78	0.62	30.84	28.11	51.47	39.82	27.07	39.73	44.25	23.26
Corundum	9.65	13.61	3.92	3.08	3.61	0.48	1.26	3.02	3.17	2.45	1.28
Zircon	0.05	0.05	0.04	0.01	0.05	0.08	0.09	0.02	0.13	0.08	0.03
Orthoclase	21.26	21.08	29.88	6.69	8.11	2.90	8.52	1.84	11.01	11.96	2.36
Albite	10.58	8.55	31.64	24.87	20.90	18.19	27.84	18.28	15.99	11.51	27.84
Anorthite	4.27	4.02	10.58	15.06	16.91	10.71	4.95	22.53	8.12	6.72	14.72
Nepheline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diopside	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hypersthene	17.56	7.87	16.82	14.84	16.25	13.84	14.24	10.46	16.82	19.69	25.94
Olivine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetite	0.91	0.00	2.87	1.31	1.98	1.11	1.44	0.00	1.99	1.48	1.95
Hematite	0.00	9.23	0.00	0.00	0.00	0.00	0.00	13.93	0.00	0.00	0.00
Ilmenite	1.50	0.26	1.56	1.77	1.82	0.51	1.16	0.54	1.60	0.72	1.77
Apatite	0.10	0.05	0.10	0.12	0.22	0.02	0.05	0.60	0.30	0.05	0.38
Rutile	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.00
Chromite	0.03	0.02	0.02	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01
Titanite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	97.28	98.27	98.05	98.60	97.97	99.31	99.37	98.94	98.86	98.92	99.54

Table A.6.1.2 (continued): Major and trace element data of the granulites of the Epembe Unit

	metagreywackes						Qtz-rich Grt-Opx rocks			
Sample	B-615-3-99	B-690-1-00	B-690-2-00	B-458-1-99	B-540-1-99	B-634-00	B-587-4-99	B-614-1A-99	B-614-1B-99	B-614-10-00
Rock type	Fe-rich Grt-Opx gneiss	Fe-rich Grt-Opx gneiss	Fe-rich Grt-Opx gneiss	Mg-rich Grt-Opx gneiss	Mg-rich Grt-Opx gneiss	Mg-rich Grt-Opx gneiss	Grt-Opx-Crd rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock
wt.%										
SiO_2	68.55	66.48	61.47	60.55	52.91	63.66	78.69	75.25	74.04	74.38
TiO_2	0.68	0.64	0.80	0.60	0.91	0.46	0.31	0.44	0.49	0.62
Al_2O_3	10.97	10.51	13.47	13.58	13.93	13.34	9.00	9.05	9.19	9.27
FeO	8.71	9.55	10.38	8.90	11.60	7.26	4.43	7.24	7.78	6.89
Fe_2O_3	1.46	0.75	0.62	0.89	1.05	0.70	0.36	0.09	0.40	0.60
MnO	0.17	0.15	0.17	0.12	0.24	0.10	0.06	0.11	0.14	0.11
MgO	3.62	3.96	4.66	8.90	10.62	6.44	3.67	5.25	5.17	4.51
CaO	1.61	1.18	4.21	2.39	2.65	1.72	0.17	0.29	0.33	0.39
Na_2O	2.28	1.71	2.50	2.16	2.02	1.87	0.13	0.19	0.21	0.18
K_2O	0.77	4.24	0.69	0.65	2.14	1.20	1.31	0.73	0.84	0.75
P_2O_5	0.01	0.01	0.05	0.06	0.02	0.05	0.01	0.01	0.01	0.02
S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
LOI	0.00	0.00	0.00	0.25	0.33	0.94	1.16	0.54	0.60	1.09
total	98.82	99.18	99.03	99.05	98.42	97.74	99.30	99.19	99.19	98.81
X_{Mg}	0.39	0.41	0.43	0.62	0.60	0.59	0.58	0.56	0.53	0.52
ppm										
Sc	22	18	29	17	33	27	14	15	10	19
V	39	79	183	144	211	96	35	29	41	27
Cr	14	52	115	241	190	132	15	< 10	14	< 10
Co	111	106	139	68	69	83	156	197	142	69
Ni	< 5	18	24	59	58	35	< 5	< 5	< 5	< 5
Zn	65	84	67	100	616	58	42	91	94	93
Ga	19	13	22	18	17	9	19	10	6	16
Rb	10	71	15	11	53	31	52	26	28	27
Sr	93	151	143	94	174	145	24	23	24	24
Y	178	48	37	33	50	65	69	123	141	118
Zr	556	381	151	171	210	252	272	489	549	473
Nb	20	8	11	9	16	5	8	12	18	15
Mo	< 5	< 5	< 5	< 5	5	< 5	9	< 5	< 5	< 5
Sn	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
Ba	1305	1731	686	580	1396	1159	592	405	433	560
Pb	9	10	7	13	20	8	11	7	12	10
Th	< 5	5	< 5	7	< 5	7	7	20	7	9
U	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
CIPW										
Quartz	36.95	24.33	20.37	20.44	2.52	34.90	63.60	57.05	54.99	57.70
Corundum	3.35	0.84	1.01	5.07	3.39	5.85	7.01	7.41	7.30	7.45
Zircon	0.11	0.08	0.03	0.03	0.04	0.05	0.05	0.10	0.11	0.10
Orthoclase	4.55	25.09	4.08	3.85	12.67	7.10	7.76	4.32	4.98	4.44
Albite	19.29	14.47	21.15	18.28	17.09	15.82	1.10	1.61	1.78	1.52
Anorthite	8.38	6.32	20.80	11.66	13.46	8.57	1.01	1.49	1.76	1.96
Nepheline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diopside	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hypersthene	23.02	26.02	29.18	37.01	45.83	16.04	16.61	25.82	26.31	22.58
Olivine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetite	2.12	1.09	0.90	1.29	1.52	0.00	0.52	0.13	0.58	0.87
Hematite	0.00	0.00	0.00	0.00	0.00	8.77	0.00	0.00	0.00	0.00
Ilmenite	1.29	1.22	1.52	1.14	1.73	0.22	0.59	0.84	0.93	1.18
Apatite	0.00	0.03	0.12	0.14	0.05	0.12	0.00	0.02	0.00	0.05
Rutile	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00
Chromite	0.00	0.01	0.02	0.05	0.04	0.03	0.00	0.00	0.00	0.00
Titanite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	99.06	99.50	99.18	98.96	98.34	97.81	98.25	98.79	98.74	97.85

Table A.6.1.2 (continued): Major and trace element data of the granulites of the Epembe Unit

	restitic domains						
Sample	B-458-4A-99	B-458-4B-99	B-458-5-00	B-458-9-00	B-693-00	B-700-2-00	B-700-1-00
Rock type	Spr-bearing Opx-Sil gneiss	Spr-bearing Opx-Sil gneiss	Spr-bearing Opx-Sil gneiss	Spr-bearing Opx-Sil gneiss	Spr-bearing Opx-Sil gneiss	Spr-bearing Opx-Sil gneiss	Opx-Grt rock
wt.%							
SiO_2	48.87	45.82	43.01	51.39	49.24	36.94	49.62
TiO_2	0.58	0.66	1.20	1.00	0.92	0.48	0.58
Al_2O_3	16.89	19.20	23.17	11.64	14.49	27.68	11.23
FeO	9.55	9.84	9.79	13.21	11.00	7.69	15.09
Fe_2O_3	1.07	1.34	1.21	1.45	1.27	1.06	1.46
MnO	0.06	0.07	0.12	0.10	0.28	0.05	0.13
MgO	17.46	17.45	11.04	15.35	17.67	17.44	18.69
CaO	0.26	0.30	0.77	0.56	1.36	0.22	0.60
Na_2O	0.42	0.40	0.60	0.38	1.25	0.36	0.46
K_2O	1.47	1.58	3.75	1.76	0.82	2.99	0.63
P_2O_5	0.03	0.02	0.06	0.03	0.02	0.02	0.01
S	<0.02	<0.02	<0.02	<0.02	0.06	<0.02	<0.02
LOI	1.81	1.72	3.00	0.69	0.69	2.78	0.00
total	98.47	98.40	97.72	97.56	99.07	97.71	98.49
X_{Mg}	0.75	0.74	0.64	0.65	0.72	0.78	0.67
ppm							
Sc	15	16	34	25	41	26	30
V	72	73	122	148	202	45	181
Cr	21	23	10	86	103	< 10	145
Co	84	70	49	103	68	39	105
Ni	48	53	< 5	65	66	26	88
Zn	257	259	70	235	263	361	694
Ga	40	43	26	37	27	37	42
Rb	31	37	74	37	20	76	14
Sr	18	21	47	38	89	63	31
Y	39	47	165	31	30	77	20
Zr	404	462	462	288	130	719	174
Nb	11	9	120	< 5	28	12	< 5
Mo	< 5	< 5	10	< 5	7	< 5	< 5
Sn	< 15	< 15	< 15	< 15	< 15	< 15	< 15
Ba	1324	1617	685	2150	609	1153	728
Pb	11	11	< 5	< 5	10	6	< 5
Th	12	9	27	< 5	5	12	< 5
U	< 5	< 5	< 5	< 5	< 5	< 5	< 5
CIPW							
Quartz	6.94	3.37	7.12	18.23	1.28	0.00	15.31
Corundum	14.10	16.21	16.81	8.00	9.07	23.40	8.64
Zircon	0.08	0.09	0.09	0.06	0.03	0.14	0.03
Orthoclase	8.70	9.35	22.19	10.42	4.85	17.70	3.73
Albite	3.55	3.38	5.08	3.22	10.58	3.05	3.89
Anorthite	1.45	1.80	3.63	3.17	6.82	1.29	3.19
Nepheline	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diopside	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hypersthene	59.32	59.49	27.49	38.23	62.17	32.80	46.55
Olivine	0.00	0.00	0.00	0.00	0.00	7.45	0.00
Magnetite	1.55	1.94	0.00	0.00	1.84	0.00	0.00
Hematite	0.00	0.00	12.09	16.13	0.00	9.60	18.22
Ilmenite	1.10	1.25	0.27	0.24	1.75	0.12	0.31
Apatite	0.08	0.06	0.15	0.08	0.05	0.06	0.00
Rutile	0.00	0.00	1.06	0.87	0.00	0.41	0.42
Chromite	0.00	0.00	0.00	0.02	0.02	0.00	0.03
Titanite	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	96.87	96.94	95.98	98.67	98.46	96.02	100.32

A.6.2 MINERAL CHEMICAL DATA

A.6.2.1 Garnet

Table A.6.2.1: Representative EMP analyses of garnet

Rock Unit	Orue	Orue	**Orue***	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	**Grt-Crd-Bt gneiss**	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss
Sample	103-A-98	103-A-98	**103-A-98**	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98
Profile	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	1	2	**5**	6	7	8	9	10	11	12	13	14	15	17	18	19
Position	rim	←	←	←	←	←	←	←	←	←	←	←	←	←	core	→
SiO_2	36.98	36.65	**36.86**	36.64	36.32	36.39	36.41	36.19	36.49	36.62	36.44	36.22	36.22	36.32	35.87	36.12
TiO_2	0.00	0.02	**0.00**	0.00	0.02	0.03	0.01	0.01	0.00	0.02	0.03	0.02	0.04	0.04	0.04	0.04
Al_2O_3	21.47	21.46	**21.28**	21.27	21.40	21.16	21.04	21.27	21.34	21.19	21.28	21.30	21.24	21.21	21.07	20.97
Cr_2O_3	0.09	0.03	**0.03**	0.00	0.00	0.06	0.03	0.01	0.04	0.04	0.05	0.03	0.06	0.05	0.05	0.02
Fe_2O_3	0.42	0.41	**0.42**	0.42	0.42	0.42	0.42	0.42	0.42	0.41	0.42	0.41	0.42	0.42	0.42	0.42
MgO	3.28	3.30	**3.33**	3.36	3.38	3.39	3.46	3.35	3.38	3.38	3.26	3.38	3.43	3.45	3.43	3.32
CaO	0.93	0.92	**0.92**	0.87	0.83	0.84	0.80	0.83	0.89	0.86	0.89	0.85	0.82	0.83	0.86	0.90
MnO	0.74	0.88	**0.79**	0.78	0.81	0.84	0.74	0.77	0.91	0.82	0.80	0.85	0.82	0.82	0.88	0.86
FeO	37.17	36.93	**37.38**	37.34	37.20	37.82	37.02	37.14	37.11	36.87	37.40	36.89	37.11	37.37	37.17	37.68
Total	101.08	100.60	**101.02**	100.68	100.37	100.96	99.94	99.98	100.57	100.19	100.57	99.96	100.13	100.52	99.78	100.33
Formula (O=24)																
Si	5.91	5.89	**5.91**	5.90	5.86	5.86	5.90	5.87	5.88	5.91	5.88	5.87	5.86	5.86	5.84	5.86
Ti	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.05	4.07	**4.02**	4.03	4.07	4.01	4.02	4.06	4.05	4.03	4.04	4.07	4.05	4.03	4.04	4.01
Cr	0.01	0.00	**0.00**	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.00
Fe^{3+}	0.05	0.05	**0.05**	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mg	0.78	0.79	**0.79**	0.81	0.81	0.81	0.84	0.81	0.81	0.81	0.78	0.82	0.83	0.83	0.83	0.80
Ca	0.16	0.16	**0.16**	0.15	0.14	0.15	0.14	0.14	0.15	0.15	0.15	0.15	0.14	0.14	0.15	0.16
Mn	0.10	0.12	**0.11**	0.11	0.11	0.12	0.10	0.11	0.12	0.11	0.11	0.12	0.11	0.11	0.12	0.12
Fe^{2+}	4.97	4.96	**5.01**	5.02	5.02	5.09	5.02	5.03	5.00	4.98	5.04	5.00	5.02	5.04	5.06	5.11
Total	16.03	16.05	**16.05**	16.06	16.07	16.10	16.06	16.08	16.07	16.05	16.07	16.07	16.08	16.09	16.11	16.11
X_{Mg}	0.14	0.14	**0.14**	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.14	0.14	0.14
Grs	2.6	2.6	**2.6**	2.5	2.4	2.4	2.3	2.4	2.5	2.5	2.5	2.4	2.3	2.3	2.4	2.5
Alm	82.7	82.3	**82.5**	82.6	82.5	82.6	82.3	82.6	82.1	82.3	82.8	82.2	82.3	82.3	82.1	82.6
Sps	1.7	2.0	**1.8**	1.8	1.8	1.9	1.7	1.7	2.0	1.8	1.8	1.9	1.8	1.8	2.0	1.9
Prp	13.0	13.1	**13.1**	13.2	13.4	13.2	13.7	13.3	13.3	13.4	12.8	13.4	13.6	13.6	13.5	13.0

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome
Sample	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	219-A-98	219-A-98	219-A-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	21	22	23	24	25	27	28	29	30	31	33	34	1	2	3
Position	→	→	→	→	→	→	→	→	→	→	→	rim	rim	←	←
SiO_2	36.18	35.97	36.46	36.18	36.38	36.07	36.01	36.08	36.08	35.94	35.81	35.75	36.10	36.11	36.03
TiO_2	0.02	0.02	0.05	0.02	0.02	0.01	0.02	0.01	0.00	0.03	0.04	0.00	0.00	0.00	0.05
Al_2O_3	20.98	20.87	21.23	21.42	21.00	21.17	21.09	20.96	20.99	21.28	21.12	20.76	20.81	20.86	20.93
Cr_2O_3	0.03	0.02	0.06	0.00	0.02	0.05	0.04	0.02	0.00	0.02	0.06	0.02	0.01	0.00	0.00
Fe_2O_3	0.41	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.73	0.73	0.73
MgO	3.48	3.46	3.43	3.46	3.44	3.40	3.33	3.41	3.25	3.23	3.25	3.21	1.74	2.08	2.11
CaO	0.87	0.88	0.88	0.80	0.87	0.91	0.85	0.82	0.85	0.89	0.86	0.93	0.89	0.92	0.93
MnO	0.78	0.83	0.79	0.88	0.90	0.81	0.83	0.83	0.83	0.70	0.77	0.82	7.20	6.69	6.54
FeO	36.98	36.98	37.08	37.38	37.11	37.18	37.56	37.23	37.13	37.55	37.34	37.33	32.30	32.31	32.10
Total	99.71	99.45	100.40	100.56	100.15	100.02	100.14	99.78	99.55	100.06	99.66	99.22	99.78	99.70	99.42
Formula (O=24)															
Si	5.88	5.87	5.88	5.84	5.89	5.85	5.85	5.87	5.88	5.84	5.84	5.86	5.91	5.91	5.90
Ti	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Al	4.02	4.01	4.04	4.07	4.01	4.05	4.03	4.02	4.03	4.07	4.06	4.01	4.02	4.02	4.04
Cr	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Fe^{3+}	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.09	0.09	0.09
Mg	0.84	0.84	0.82	0.83	0.83	0.82	0.80	0.83	0.79	0.78	0.79	0.78	0.42	0.51	0.52
Ca	0.15	0.15	0.15	0.14	0.15	0.16	0.15	0.14	0.15	0.16	0.15	0.16	0.16	0.16	0.16
Mn	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.11	0.11	1.00	0.93	0.91
Fe^{2+}	5.03	5.05	5.00	5.04	5.02	5.04	5.10	5.07	5.06	5.10	5.09	5.12	4.43	4.42	4.40
Total	16.08	16.10	16.07	16.10	16.08	16.09	16.11	16.09	16.08	16.10	16.10	16.11	16.03	16.04	16.03
X_{Mg}	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.09	0.10	0.10
Grs	2.5	2.5	2.5	2.2	2.5	2.6	2.4	2.3	2.4	2.5	2.5	2.6	2.6	2.7	2.7
Alm	82.1	81.9	82.2	82.2	82.0	82.2	82.7	82.4	82.8	83.2	83.0	82.8	73.7	73.5	73.5
Sps	1.7	1.9	1.8	2.0	2.0	1.8	1.9	1.9	1.9	1.6	1.7	1.8	16.6	15.4	15.2
Prp	13.7	13.7	13.5	13.6	13.5	13.4	13.1	13.4	12.9	12.7	12.9	12.7	7.1	8.4	8.6

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome
Sample	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	4	5	6	7	8	10	11	13	15	16	17	18	19	20	21	23
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	36.21	36.51	36.55	36.57	36.48	36.26	36.40	36.83	36.79	35.99	36.77	36.91	37.18	36.86	36.76	37.13
TiO_2	0.00	0.01	0.00	0.03	0.04	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.03
Al_2O_3	21.05	21.04	21.06	21.15	21.06	21.06	21.09	21.16	21.37	20.78	21.20	21.27	21.10	21.09	21.19	21.11
Cr_2O_3	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.06	0.00	0.02	0.02	0.01	0.02	0.01
Fe_2O_3	0.74	0.74	0.73	0.73	0.73	0.72	0.73	0.74	0.72	0.76	0.72	0.72	0.72	0.71	0.71	0.71
MgO	2.33	2.55	2.75	2.80	3.12	3.31	3.35	3.53	3.50	2.28	3.84	3.94	3.95	4.13	4.21	4.15
CaO	1.03	0.98	0.97	1.01	0.96	1.01	1.06	1.04	1.10	1.07	1.10	1.11	1.10	1.10	1.08	1.11
MnO	6.27	5.92	5.68	5.59	5.53	5.22	5.20	5.14	4.82	5.64	4.69	4.67	4.54	4.55	4.55	4.41
FeO	32.59	32.67	32.19	32.39	32.23	31.89	32.17	32.47	31.75	33.36	31.70	31.70	31.59	31.25	31.42	31.43
Total	100.22	100.42	99.93	100.26	100.14	99.51	100.01	100.94	100.05	99.94	100.03	100.33	100.21	99.70	99.96	100.09
Formula (O=24)																
Si	5.89	5.91	5.93	5.91	5.90	5.89	5.89	5.90	5.92	5.88	5.91	5.91	5.95	5.93	5.90	5.95
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.03	4.01	4.02	4.03	4.01	4.03	4.02	3.99	4.05	4.00	4.02	4.02	3.98	4.00	4.01	3.98
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	0.56	0.62	0.66	0.67	0.75	0.80	0.81	0.84	0.84	0.56	0.92	0.94	0.94	0.99	1.01	0.99
Ca	0.18	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Mn	0.86	0.81	0.78	0.77	0.76	0.72	0.71	0.70	0.66	0.78	0.64	0.63	0.62	0.62	0.62	0.60
Fe^{2+}	4.43	4.42	4.36	4.38	4.36	4.33	4.35	4.35	4.27	4.56	4.26	4.25	4.23	4.21	4.22	4.21
Total	16.05	16.04	16.02	16.03	16.04	16.04	16.06	16.05	16.01	16.07	16.03	16.03	16.01	16.03	16.04	16.01
X_{Mg}	0.11	0.12	0.13	0.13	0.15	0.16	0.16	0.16	0.16	0.11	0.18	0.18	0.18	0.19	0.19	0.19
Grs	3.0	2.8	2.8	2.9	2.8	2.9	3.0	2.9	3.2	3.1	3.1	3.2	3.2	3.2	3.1	3.2
Alm	73.4	73.5	73.0	73.1	72.2	71.9	71.9	71.7	71.7	74.9	70.9	70.6	70.8	70.0	69.9	70.3
Sps	14.3	13.5	13.0	12.8	12.6	11.9	11.8	11.5	11.0	12.8	10.6	10.5	10.3	10.3	10.2	10.0
Prp	9.3	10.2	11.1	11.2	12.5	13.3	13.3	13.9	14.1	9.1	15.3	15.7	15.8	16.5	16.7	16.5

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome
Sample	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	24	26	28	29	30	31	32	33	34	35	36	37	38	39	44	45
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	37.33	36.61	36.92	36.90	37.23	36.84	36.87	37.12	37.28	37.20	37.16	36.61	37.39	36.97	37.33	37.11
TiO_2	0.03	0.00	0.02	0.07	0.04	0.01	0.02	0.02	0.04	0.01	0.03	0.00	0.00	0.01	0.00	0.00
Al_2O_3	21.52	21.17	21.27	21.06	21.05	21.03	21.38	21.40	21.22	21.28	21.09	20.65	21.40	21.31	21.40	21.22
Cr_2O_3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.00	0.04	0.01	0.03	0.00	0.04	0.00
Fe_2O_3	0.71	0.72	0.72	0.71	0.73	0.72	0.72	0.71	0.71	0.71	0.72	0.71	0.71	0.71	0.71	0.70
MgO	4.26	4.36	4.25	4.32	3.89	3.92	4.16	4.37	4.35	4.52	4.29	4.13	4.43	4.48	4.48	4.44
CaO	1.12	1.09	1.12	1.13	1.15	1.21	1.13	1.14	1.03	1.00	0.90	0.98	0.90	0.93	0.94	0.93
MnO	4.39	4.47	4.43	4.46	4.45	4.53	4.44	4.38	4.40	4.52	4.56	4.35	4.41	4.26	4.38	4.38
FeO	31.19	31.54	31.56	31.28	32.21	31.70	31.77	31.46	31.13	31.35	31.83	31.29	31.20	31.21	31.33	31.01
Total	100.55	99.95	100.29	99.92	100.75	99.95	100.49	100.65	100.18	100.58	100.62	98.73	100.48	99.88	100.62	99.80
Formula (O=24)																
Si	5.94	5.89	5.91	5.92	5.95	5.93	5.89	5.91	5.95	5.92	5.93	5.95	5.95	5.92	5.94	5.95
Ti	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.03	4.01	4.01	3.98	3.96	3.99	4.03	4.02	3.99	4.00	3.97	3.96	4.01	4.02	4.01	4.01
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Fe^{3+}	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.08	0.09	0.09	0.08
Mg	1.01	1.04	1.01	1.03	0.93	0.94	0.99	1.04	1.04	1.07	1.02	1.00	1.05	1.07	1.06	1.06
Ca	0.19	0.19	0.19	0.19	0.20	0.21	0.19	0.19	0.18	0.17	0.15	0.17	0.15	0.16	0.16	0.16
Mn	0.59	0.61	0.60	0.61	0.60	0.62	0.60	0.59	0.59	0.61	0.62	0.60	0.59	0.58	0.59	0.59
Fe^{2+}	4.15	4.24	4.22	4.20	4.30	4.27	4.25	4.19	4.16	4.18	4.25	4.26	4.15	4.18	4.17	4.16
Total	16.00	16.07	16.04	16.03	16.03	16.03	16.05	16.03	16.00	16.03	16.03	16.02	16.00	16.02	16.01	16.01
X_{Mg}	0.20	0.20	0.19	0.20	0.18	0.18	0.19	0.20	0.20	0.20	0.19	0.19	0.20	0.20	0.20	0.20
Grs	3.2	3.1	3.2	3.2	3.3	3.5	3.2	3.2	2.9	2.8	2.5	2.8	2.6	2.7	2.7	2.7
Alm	69.8	69.7	70.0	69.6	71.4	70.7	70.4	69.7	69.7	69.3	70.3	70.6	69.8	69.8	69.7	69.6
Sps	10.0	10.0	10.0	10.1	10.0	10.2	10.0	9.8	10.0	10.1	10.2	9.9	10.0	9.6	9.9	10.0
Prp	17.0	17.2	16.8	17.1	15.4	15.6	16.4	17.3	17.4	17.8	16.9	16.6	17.6	17.9	17.8	17.7

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue	Orue	Orue
Rock type	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	**Grt-Bt-Sil leucosome**	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome
Sample	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	**219-A-98**	219-A-98	219-A-98	219-A-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1
Point	46	47	48	50	51	52	53	54	56	58	59	60	**61**	62	63	64
Position	←	←	core	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	37.14	37.16	37.24	37.34	37.18	37.06	37.07	37.17	37.12	37.13	37.18	36.82	**37.12**	36.92	36.47	36.72
TiO_2	0.00	0.00	0.01	0.00	0.01	0.01	0.03	0.02	0.01	0.01	0.00	0.04	**0.03**	0.00	0.00	0.05
Al_2O_3	21.36	21.46	21.25	21.34	21.07	21.49	21.42	21.22	21.33	21.25	21.53	21.28	**21.18**	21.60	21.21	21.25
Cr_2O_3	0.00	0.00	0.04	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.01	0.03	0.01
Fe_2O_3	0.72	0.71	0.72	0.71	0.71	0.70	0.72	0.72	0.72	0.72	0.72	0.71	**0.71**	0.71	0.72	0.71
MgO	4.38	4.45	4.28	4.25	4.43	4.20	4.32	4.29	3.79	4.39	4.31	4.39	**4.51**	4.37	4.39	4.55
CaO	0.83	1.00	0.99	1.10	1.09	1.04	1.08	1.06	0.98	1.00	0.99	0.91	**0.79**	0.85	0.86	0.75
MnO	4.38	4.33	4.49	4.38	4.41	4.45	4.42	4.50	4.50	4.31	4.45	4.51	**4.43**	4.42	4.43	4.34
FeO	31.56	31.45	31.77	31.50	31.19	30.78	31.61	31.59	31.63	31.69	31.56	31.12	**31.24**	31.47	31.66	31.35
Total	100.36	100.57	100.78	100.62	100.14	99.76	100.66	100.57	100.05	100.48	100.74	99.77	**100.00**	100.34	99.75	99.73
Formula (O=24)																
Si	5.93	5.92	5.93	5.94	5.95	5.94	5.91	5.93	5.95	5.92	5.91	5.91	**5.94**	5.89	5.88	5.90
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.01
Al	4.02	4.03	3.99	4.00	3.97	4.06	4.02	3.99	4.03	4.00	4.04	4.03	**3.99**	4.06	4.03	4.02
Cr	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09	**0.09**	0.09	0.09	0.09
Mg	1.04	1.06	1.01	1.01	1.06	1.00	1.03	1.02	0.90	1.04	1.02	1.05	**1.08**	1.04	1.05	1.09
Ca	0.14	0.17	0.17	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	**0.14**	0.15	0.15	0.13
Mn	0.59	0.58	0.61	0.59	0.60	0.60	0.60	0.61	0.61	0.58	0.60	0.61	**0.60**	0.60	0.60	0.59
Fe^{2+}	4.21	4.19	4.23	4.19	4.17	4.12	4.21	4.21	4.24	4.23	4.20	4.18	**4.18**	4.20	4.27	4.21
total	16.02	16.03	16.03	16.01	16.02	15.99	16.04	16.03	15.99	16.03	16.02	16.03	**16.02**	16.03	16.07	16.04
X_{Mg}	0.20	0.20	0.19	0.19	0.20	0.20	0.20	0.19	0.18	0.20	0.20	0.20	**0.20**	0.20	0.20	0.21
Grs	2.4	2.8	2.8	3.1	3.1	3.0	3.1	3.0	2.8	2.8	2.8	2.6	**2.3**	2.4	2.4	2.2
Alm	70.4	69.8	70.3	70.1	69.4	69.8	70.0	70.0	71.6	70.2	70.1	69.7	**69.8**	70.2	70.2	69.9
Sps	9.9	9.7	10.1	9.9	9.9	10.2	9.9	10.1	10.3	9.7	10.0	10.2	**10.0**	10.0	10.0	9.8
Prp	17.4	17.6	16.9	16.9	17.6	17.0	17.0	16.9	15.3	17.3	17.1	17.5	**18.0**	17.4	17.4	18.1

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome
Sample	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	65	67	68	69	70	71	74	75	76	77	80	82	85	88	89	90
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	37.07	37.31	37.19	36.74	37.12	36.50	36.84	36.55	36.42	36.57	36.00	36.28	36.43	36.78	36.94	36.92
TiO_2	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.02	0.00	0.03	0.00	0.02
Al_2O_3	21.14	21.34	21.42	21.17	21.34	20.98	21.17	21.11	20.98	20.71	20.75	21.13	20.81	21.09	21.33	21.25
Cr_2O_3	0.00	0.04	0.02	0.00	0.00	0.00	0.01	0.00	0.02	0.03	0.00	0.01	0.07	0.00	0.00	0.00
Fe_2O_3	0.71	0.71	0.72	0.71	0.72	0.75	0.75	0.74	0.74	0.76	0.75	0.75	0.76	0.74	0.73	0.72
MgO	4.49	4.41	4.31	4.39	4.18	3.05	3.41	3.17	2.81	2.53	1.99	1.95	1.74	3.79	3.85	4.08
CaO	0.76	0.74	0.75	0.73	0.83	0.69	0.82	0.90	0.92	0.97	0.92	0.93	0.82	0.92	0.88	0.87
MnO	4.36	4.46	4.41	4.39	4.47	4.67	4.85	5.07	5.18	5.71	6.29	6.06	6.08	4.66	4.51	4.44
FeO	31.43	31.31	31.63	31.49	31.75	33.18	32.86	32.49	32.43	33.51	33.10	33.24	33.69	32.56	32.35	31.87
total	99.96	100.32	100.49	99.63	100.41	99.81	100.69	100.06	99.51	100.78	99.80	100.38	100.40	100.56	100.59	100.18
Formula (O=24)																
Si	5.94	5.95	5.93	5.91	5.93	5.92	5.91	5.91	5.93	5.92	5.90	5.90	5.93	5.90	5.91	5.92
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	3.99	4.01	4.02	4.02	4.02	4.01	4.01	4.02	4.02	3.95	4.01	4.05	3.99	3.99	4.02	4.02
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	1.07	1.05	1.02	1.05	1.00	0.74	0.82	0.76	0.68	0.61	0.49	0.47	0.42	0.91	0.92	0.98
Ca	0.13	0.13	0.13	0.13	0.14	0.12	0.14	0.16	0.16	0.17	0.16	0.16	0.14	0.16	0.15	0.15
Mn	0.59	0.60	0.60	0.60	0.60	0.64	0.66	0.69	0.71	0.78	0.87	0.83	0.84	0.63	0.61	0.60
Fe^{2+}	4.21	4.18	4.22	4.24	4.24	4.50	4.41	4.39	4.41	4.53	4.54	4.52	4.59	4.37	4.33	4.27
total	16.02	16.00	16.01	16.03	16.02	16.03	16.04	16.03	16.01	16.06	16.05	16.03	16.02	16.05	16.03	16.03
X_{Mg}	0.20	0.20	0.20	0.20	0.19	0.14	0.16	0.15	0.13	0.12	0.10	0.09	0.08	0.17	0.17	0.19
Grs	2.2	2.1	2.2	2.1	2.4	2.0	2.3	2.6	2.7	2.8	2.7	2.7	2.4	2.6	2.5	2.5
Alm	70.1	70.1	70.7	70.5	70.9	75.0	73.2	73.1	73.9	74.4	74.9	75.5	76.6	72.0	72.1	71.2
Sps	9.9	10.1	10.0	9.9	10.1	10.7	10.9	11.5	12.0	12.8	14.4	13.9	14.0	10.4	10.2	10.1
Prp	17.9	17.6	17.2	17.5	16.6	12.3	13.5	12.7	11.4	10.0	8.0	7.9	7.0	14.9	15.3	16.2

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue**	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	246-A-98	246-A-98	**246-A-98**	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 5	grt 5	**grt 5**	grt 5	grt 5	grt 5	grt 5	grt 5
Point	92	96	97	99	100	102	103	1	2	**3**	5	8	9	10	11
Position	→	→	→	→	→	→	rim	rim	←	←	←	←	←	core	→
SiO_2	37.07	36.58	36.75	36.88	36.49	36.39	36.82	36.79	36.48	**37.38**	36.84	37.40	36.77	36.95	36.53
TiO_2	0.02	0.01	0.04	0.02	0.00	0.00	0.00	0.03	0.00	**0.00**	0.00	0.00	0.00	0.00	0.02
Al_2O_3	21.62	21.29	21.31	21.15	21.02	21.11	21.31	21.33	20.88	**21.32**	21.36	21.52	21.45	21.22	21.30
Cr_2O_3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.05	0.00	**0.00**	0.05	0.04	0.02	0.00	0.01
Fe_2O_3	0.72	0.72	0.72	0.74	0.74	0.75	0.75	0.76	0.76	**0.76**	0.76	0.76	0.76	0.76	0.75
MgO	4.25	4.17	3.96	3.57	3.21	2.82	2.34	4.62	4.54	**4.84**	4.77	4.74	4.74	4.69	4.77
CaO	0.85	0.89	0.83	0.84	0.78	0.77	0.73	0.88	0.91	**0.92**	0.91	0.87	0.89	0.84	0.96
MnO	4.46	4.61	4.66	4.76	5.11	5.43	5.82	1.85	1.97	**1.90**	1.81	1.90	1.94	1.85	1.94
FeO	31.93	31.83	31.92	32.58	32.47	32.95	33.01	33.41	33.48	**33.65**	33.42	33.37	33.72	33.56	32.92
total	100.93	100.10	100.19	100.54	99.83	100.21	100.77	99.71	99.00	**100.77**	99.92	100.58	100.29	99.87	99.21
Formula (O=24)															
Si	5.89	5.88	5.90	5.92	5.91	5.90	5.93	5.90	5.91	**5.93**	5.90	5.93	5.88	5.92	5.89
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Al	4.05	4.03	4.03	4.00	4.02	4.03	4.05	4.03	3.99	**3.99**	4.03	4.02	4.04	4.01	4.05
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	**0.00**	0.01	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	**0.09**	0.09	0.09	0.09	0.09	0.09
Mg	1.01	1.00	0.95	0.85	0.78	0.68	0.56	1.11	1.10	**1.14**	1.14	1.12	1.13	1.12	1.15
Ca	0.14	0.15	0.14	0.14	0.14	0.13	0.13	0.15	0.16	**0.16**	0.16	0.15	0.15	0.14	0.17
Mn	0.60	0.63	0.63	0.65	0.70	0.74	0.79	0.25	0.27	**0.26**	0.25	0.26	0.26	0.25	0.26
Fe^{2+}	4.25	4.28	4.29	4.37	4.40	4.47	4.45	4.48	4.54	**4.47**	4.47	4.43	4.51	4.50	4.44
total	16.03	16.06	16.03	16.03	16.03	16.04	16.00	16.03	16.05	**16.03**	16.04	16.01	16.06	16.03	16.04
X_{Mg}	0.19	0.19	0.18	0.16	0.15	0.13	0.11	0.20	0.19	**0.20**	0.20	0.20	0.20	0.20	0.21
Grs	2.4	2.5	2.4	2.4	2.3	2.2	2.1	2.5	2.6	**2.6**	2.6	2.5	2.5	2.4	2.8
Alm	70.8	70.6	71.3	72.7	73.2	74.1	75.0	74.8	74.9	**74.2**	74.4	74.4	74.5	74.8	73.8
Sps	10.0	10.4	10.5	10.7	11.7	12.4	13.4	4.2	4.5	**4.2**	4.1	4.3	4.3	4.2	4.4
Prp	16.8	16.5	15.8	14.2	12.9	11.3	9.5	18.4	18.1	**19.0**	18.9	18.8	18.7	18.6	19.1

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue*	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98
Profile	grt 5	grt 5	grt 5	grt 5	grt 5	grt 5	grt 5	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3
Point	12	14	15	17	18	19	20	2	4	6	7	9	10	12	13	
Position	→	→	→	→	→	→	rim	rim	←	←	←	←	←	←	←	
SiO_2	36.96	36.80	37.01	37.24	37.04	37.28	37.01	37.53	37.16	37.27	37.39	37.26	37.39	37.32	36.98	
TiO_2	0.05	0.02	0.04	0.00	0.03	0.03	0.00	0.00	0.01	0.02	0.02	0.02	0.03	0.00	0.02	
Al_2O_3	21.58	21.13	21.20	21.48	21.49	21.47	21.38	21.34	21.33	21.46	21.56	21.18	21.20	21.38	21.27	
Cr_2O_3	0.01	0.00	0.01	0.01	0.00	0.01	0.02	0.00	0.01	0.01	0.00	0.00	0.00	0.03	0.00	
Fe_2O_3	0.77	0.77	0.77	0.76	0.77	0.76	0.77	0.75	0.76	0.73	0.75	0.74	0.74	0.73	0.72	
MgO	4.80	4.70	4.64	4.78	4.64	4.47	4.51	4.32	4.66	4.82	4.77	4.75	4.55	4.51	4.36	
CaO	0.91	0.97	0.89	0.90	0.90	0.82	0.92	1.05	1.44	1.51	1.53	1.91	2.13	2.59	2.76	
MnO	1.83	1.89	2.01	1.89	1.90	2.01	2.16	2.15	2.03	1.92	1.99	1.86	1.98	1.87	1.93	
FeO	33.77	33.77	33.76	33.44	33.88	33.38	33.94	33.29	33.37	32.23	33.14	32.55	32.58	32.10	31.56	
total	100.67	100.04	100.33	100.51	100.65	100.21	100.70	100.43	100.76	99.97	101.14	100.27	100.60	100.51	99.59	
Formula (O=24)																
Si	5.88	5.90	5.91	5.92	5.90	5.94	5.90	5.97	5.91	5.93	5.91	5.93	5.94	5.92	5.92	
Ti	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Al	4.04	3.99	3.99	4.02	4.03	4.03	4.02	4.00	3.99	4.03	4.01	3.97	3.97	4.00	4.01	
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	
Mg	1.14	1.12	1.11	1.13	1.10	1.06	1.07	1.02	1.10	1.14	1.12	1.13	1.08	1.07	1.04	
Ca	0.15	0.17	0.15	0.15	0.15	0.14	0.16	0.18	0.24	0.26	0.26	0.33	0.36	0.44	0.47	
Mn	0.25	0.26	0.27	0.25	0.26	0.27	0.29	0.29	0.27	0.26	0.27	0.25	0.27	0.25	0.26	
Fe^{2+}	4.49	4.53	4.51	4.45	4.51	4.45	4.52	4.43	4.44	4.29	4.38	4.33	4.33	4.26	4.23	
total	16.05	16.06	16.04	16.02	16.04	15.99	16.05	15.98	16.05	16.01	16.04	16.03	16.03	16.03	16.03	
X_{Mg}	0.20	0.20	0.20	0.20	0.20	0.19	0.19	0.19	0.20	0.21	0.20	0.21	0.20	0.20	0.20	
Grs	2.6	2.7	2.5	2.6	2.5	2.4	2.6	3.0	4.0	4.3	4.3	5.4	6.0	7.3	7.9	
Alm	74.5	74.6	74.7	74.3	74.9	75.1	74.8	74.8	73.2	72.1	72.7	71.8	71.7	70.8	70.4	
Sps	4.1	4.2	4.5	4.3	4.3	4.6	4.8	4.9	4.5	4.3	4.4	4.2	4.4	4.2	4.4	
Prp	18.9	18.5	18.3	18.9	18.3	17.9	17.7	17.3	18.2	19.2	18.6	18.7	17.9	17.7	17.3	

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

														*	*
Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue**	**Orue**
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	**Grt-Sil-Crd rock**
Sample	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	**246-A-98**	**302-2-99**
Profile	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	**grt 3**	**grt 1**
Point	14	15	17	18	19	21	22	23	24	25	27	28	29	**30**	**1**
Position	←	core	→	→	→	→	→	→	→	→	→	→	→	**rim**	**rim**
SiO_2	37.20	37.11	36.93	37.06	37.19	37.31	36.82	36.82	37.54	37.41	37.10	37.20	37.10	**36.46**	**37.08**
TiO_2	0.06	0.00	0.03	0.03	0.00	0.07	0.02	0.01	0.02	0.00	0.03	0.04	0.02	**0.02**	**0.02**
Al_2O_3	21.54	21.28	20.98	21.36	21.31	21.27	21.20	21.35	21.32	21.38	21.48	21.48	21.36	**20.78**	**21.24**
Cr_2O_3	0.00	0.04	0.00	0.04	0.06	0.01	0.01	0.00	0.05	0.00	0.00	0.00	0.01	**0.00**	**0.00**
Fe_2O_3	0.73	0.71	0.72	0.73	0.73	0.72	0.74	0.72	0.72	0.72	0.74	0.74	0.77	**0.73**	**0.77**
MgO	4.45	4.37	4.55	4.40	4.36	4.29	4.35	4.48	4.41	4.55	4.33	4.15	3.66	**2.20**	**3.56**
CaO	2.85	2.92	2.86	2.83	2.91	2.77	2.64	2.51	2.59	2.51	2.32	2.25	1.75	**1.34**	**1.07**
MnO	1.93	1.93	1.86	1.82	1.85	1.88	1.86	1.92	1.96	1.91	2.07	2.09	2.51	**5.48**	**2.80**
FeO	32.21	31.37	31.72	32.04	32.06	31.83	32.56	31.90	31.97	31.85	32.47	32.75	33.81	**32.37**	**34.15**
total	100.97	99.72	99.62	100.30	100.46	100.14	100.20	99.72	100.60	100.34	100.54	100.72	100.97	**99.38**	**100.70**
Formula (O=24)															
Si	5.89	5.93	5.92	5.90	5.91	5.94	5.89	5.90	5.95	5.94	5.90	5.91	5.91	**5.96**	**5.93**
Ti	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	**0.00**	**0.00**
Al	4.02	4.01	3.96	4.01	3.99	3.99	4.00	4.03	3.98	4.00	4.03	4.02	4.01	**4.00**	**4.01**
Cr	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	**0.00**	**0.00**
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	**0.09**	**0.09**
Mg	1.05	1.04	1.09	1.04	1.03	1.02	1.04	1.07	1.04	1.08	1.03	0.98	0.87	**0.54**	**0.85**
Ca	0.48	0.50	0.49	0.48	0.50	0.47	0.45	0.43	0.44	0.43	0.40	0.38	0.30	**0.23**	**0.18**
Mn	0.26	0.26	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.28	0.28	0.34	**0.76**	**0.38**
Fe^{2+}	4.26	4.19	4.25	4.27	4.26	4.24	4.35	4.27	4.24	4.23	4.32	4.35	4.51	**4.42**	**4.57**
total	16.05	16.02	16.05	16.05	16.04	16.01	16.07	16.05	16.01	16.02	16.04	16.03	16.03	**16.00**	**16.02**
X_{Mg}	0.20	0.20	0.20	0.20	0.20	0.19	0.19	0.20	0.20	0.20	0.19	0.18	0.16	**0.11**	**0.16**
Grs	8.0	8.3	8.1	8.0	8.2	7.9	7.4	7.1	7.4	7.1	6.6	6.4	5.0	**3.9**	**3.1**
Alm	70.4	70.0	69.9	70.6	70.6	70.9	71.4	70.8	70.8	70.6	71.7	72.5	74.9	**74.3**	**76.4**
Sps	4.3	4.4	4.2	4.1	4.1	4.2	4.1	4.3	4.4	4.3	4.6	4.7	5.6	**12.7**	**6.3**
Prp	17.3	17.3	17.9	17.3	17.1	17.0	17.0	17.7	17.4	18.0	17.1	16.4	14.5	**9.0**	**14.2**

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock
Sample	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	2	3	4	5	7	9	13	16	17	20	22	25	26	27	28	29
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	37.30	37.29	37.00	37.26	37.28	37.33	37.21	37.55	37.21	37.38	37.40	37.62	37.59	37.52	37.51	37.05
TiO_2	0.05	0.01	0.04	0.00	0.01	0.03	0.03	0.00	0.01	0.03	0.06	0.04	0.06	0.03	0.06	0.06
Al_2O_3	21.44	21.15	21.25	21.37	21.35	21.32	21.48	21.43	21.54	21.40	21.62	21.61	21.45	21.50	21.24	21.51
Cr_2O_3	0.00	0.00	0.04	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
Fe_2O_3	0.78	0.77	0.76	0.77	0.76	0.77	0.75	0.75	0.74	0.73	0.73	0.71	0.72	0.71	0.71	0.71
MgO	3.88	4.04	4.27	4.34	4.42	4.41	4.62	4.53	4.75	4.66	4.79	4.91	4.68	4.67	4.58	4.61
CaO	1.04	1.07	1.10	1.07	1.13	1.13	1.13	1.10	1.13	1.21	1.30	1.28	1.30	1.35	1.46	1.36
MnO	2.53	2.62	2.52	2.55	2.53	2.50	2.81	3.13	3.38	3.52	3.44	3.86	3.93	3.61	3.90	3.93
FeO	34.33	33.80	33.56	33.77	33.58	33.76	33.06	33.01	32.74	32.01	32.28	31.36	31.66	31.20	31.34	31.37
total	101.36	100.72	100.52	101.13	101.08	101.24	101.12	101.49	101.51	100.93	101.62	101.39	101.41	100.59	100.80	100.59
Formula (O=24)																
Si	5.92	5.95	5.91	5.92	5.92	5.92	5.90	5.93	5.88	5.92	5.89	5.92	5.93	5.95	5.95	5.89
Ti	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01
Al	4.01	3.98	4.00	4.00	3.99	3.98	4.01	3.99	4.01	4.00	4.01	4.01	3.99	4.01	3.97	4.03
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.09	0.08	0.08	0.09
Mg	0.92	0.96	1.02	1.03	1.05	1.04	1.09	1.07	1.12	1.10	1.12	1.15	1.10	1.10	1.08	1.09
Ca	0.18	0.18	0.19	0.18	0.19	0.19	0.19	0.19	0.19	0.20	0.22	0.22	0.22	0.23	0.25	0.23
Mn	0.34	0.35	0.34	0.34	0.34	0.34	0.38	0.42	0.45	0.47	0.46	0.51	0.53	0.48	0.52	0.53
Fe^{2+}	4.56	4.51	4.48	4.48	4.46	4.48	4.38	4.36	4.33	4.24	4.25	4.13	4.17	4.13	4.16	4.17
total	16.02	16.02	16.04	16.04	16.04	16.04	16.05	16.03	16.07	16.03	16.05	16.03	16.03	16.00	16.02	16.04
X_{Mg}	0.17	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.21	0.21	0.21	0.22	0.21	0.21	0.21	0.21
Grs	3.0	3.0	3.1	3.0	3.2	3.2	3.2	3.1	3.1	3.4	3.6	3.6	3.7	3.9	4.1	3.8
Alm	76.1	75.1	74.4	74.3	73.9	74.1	72.5	72.3	71.0	70.5	70.2	68.7	69.3	69.5	69.1	69.2
Sps	5.7	5.9	5.7	5.7	5.6	5.5	6.2	6.9	7.4	7.9	7.6	8.6	8.7	8.1	8.7	8.8
Prp	15.3	16.0	16.8	17.0	17.3	17.2	18.1	17.7	18.4	18.3	18.6	19.2	18.3	18.5	18.0	18.1

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	**Orue***	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	**Grt-Sil-Crd rock**	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock
Sample	302-2-99	302-2-99	302-2-99	**302-2-99**	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99
Profile	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	30	31	32	**33**	34	35	36	38	39	40	43	46	48	49	54	55
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	37.58	37.48	37.05	**37.51**	37.38	37.76	37.26	37.52	37.43	37.74	37.84	37.06	37.45	37.32	37.73	37.74
TiO_2	0.00	0.03	0.04	**0.01**	0.00	0.01	0.00	0.03	0.04	0.16	0.05	0.12	0.06	0.05	0.04	0.06
Al_2O_3	21.52	21.41	21.34	**21.33**	21.63	21.36	21.74	21.42	21.12	21.05	21.21	20.85	21.18	21.11	21.36	21.25
Cr_2O_3	0.04	0.00	0.02	**0.00**	0.04	0.02	0.02	0.06	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01
Fe_2O_3	0.71	0.70	0.71	**0.70**	0.71	0.70	0.71	0.70	0.69	0.70	0.69	0.66	0.66	0.65	0.67	0.66
MgO	4.79	4.72	4.81	**4.66**	4.74	4.74	4.76	4.59	4.77	4.42	4.52	4.01	4.12	4.05	4.06	3.99
CaO	1.41	1.36	1.40	**1.32**	1.43	1.49	1.50	1.54	1.61	1.68	2.47	3.88	3.93	4.21	3.51	3.74
MnO	3.92	4.13	4.00	**4.14**	4.14	4.14	4.13	4.17	4.28	4.33	4.33	4.47	4.46	4.54	4.85	4.73
FeO	31.51	31.06	31.16	**30.89**	31.33	30.82	31.35	31.01	30.64	30.69	30.28	29.00	29.18	28.71	29.44	28.98
total	101.49	100.90	100.53	**100.56**	101.41	101.04	101.47	101.05	100.59	100.78	101.38	100.06	101.04	100.64	101.67	101.14
Formula (O=24)																
Si	5.92	5.93	5.90	**5.95**	5.90	5.96	5.88	5.93	5.94	5.98	5.96	5.93	5.92	5.93	5.93	5.96
Ti	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Al	3.99	3.99	4.00	**3.99**	4.02	3.97	4.04	3.99	3.95	3.93	3.94	3.93	3.95	3.95	3.96	3.95
Cr	0.00	0.00	0.00	**0.00**	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.08	0.08	0.08	**0.08**	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	1.12	1.11	1.14	**1.10**	1.11	1.12	1.12	1.08	1.13	1.04	1.06	0.96	0.97	0.96	0.95	0.94
Ca	0.24	0.23	0.24	**0.22**	0.24	0.25	0.25	0.26	0.27	0.29	0.42	0.66	0.67	0.72	0.59	0.63
Mn	0.52	0.55	0.54	**0.56**	0.55	0.55	0.55	0.56	0.58	0.58	0.58	0.60	0.60	0.61	0.65	0.63
Fe^{2+}	4.15	4.11	4.15	**4.10**	4.13	4.07	4.13	4.10	4.07	4.07	3.99	3.88	3.86	3.81	3.87	3.82
total	16.04	16.02	16.06	**16.01**	16.05	16.01	16.06	16.02	16.03	15.99	16.03	16.05	16.06	16.05	16.04	16.02
X_{Mg}	0.21	0.21	0.22	**0.21**	0.21	0.22	0.21	0.21	0.22	0.20	0.21	0.20	0.20	0.20	0.20	0.20
Grs	3.9	3.8	3.9	**3.8**	4.0	4.2	4.2	4.3	4.5	4.8	6.9	10.9	10.9	11.7	9.8	10.5
Alm	68.8	68.4	68.3	**68.5**	68.4	67.9	68.3	68.3	67.3	68.0	66.0	63.5	63.3	62.5	63.9	63.5
Sps	8.7	9.2	8.9	**9.3**	9.1	9.2	9.1	9.3	9.5	9.7	9.5	9.9	9.8	10.0	10.7	10.5
Prp	18.6	18.5	18.8	**18.4**	18.5	18.6	18.5	18.0	18.7	17.5	17.6	15.7	15.9	15.7	15.7	15.6

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock
Sample	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	60	61	62	63	64	65	66	68	71	73	75	77	82	86	89	90
Position	←	←	←	←	←	core	→	→	→	→	→	→	→	→	→	→
SiO_2	37.40	37.67	37.37	37.19	37.43	37.43	37.08	37.80	37.60	37.43	37.53	36.92	37.21	37.53	37.46	37.35
TiO_2	0.00	0.05	0.03	0.03	0.04	0.00	0.11	0.03	0.06	0.06	0.00	0.00	0.06	0.00	0.03	0.03
Al_2O_3	21.42	21.14	20.81	20.97	20.96	21.29	21.12	21.82	21.46	21.18	21.26	21.22	21.21	21.18	20.97	21.09
Cr_2O_3	0.00	0.02	0.00	0.00	0.00	0.03	0.00	0.02	0.03	0.01	0.01	0.00	0.00	0.00	0.03	0.02
Fe_2O_3	0.67	0.67	0.67	0.69	0.69	0.68	0.68	0.66	0.67	0.68	0.66	0.66	0.67	0.67	0.67	0.67
MgO	4.06	3.99	3.95	4.10	4.21	4.33	4.39	4.04	4.01	3.87	4.02	4.00	3.66	3.77	3.73	3.75
CaO	3.17	3.03	3.35	3.00	2.40	1.89	2.06	3.46	3.21	3.47	3.16	3.35	3.62	3.81	3.81	3.59
MnO	4.96	4.51	4.54	4.50	4.62	4.76	4.66	4.46	4.65	4.60	4.92	4.76	5.03	4.81	5.22	4.95
FeO	29.37	29.70	29.49	30.25	30.48	29.95	30.17	29.21	29.58	30.04	29.14	29.16	29.53	29.56	29.64	29.66
total	101.04	100.79	100.21	100.72	100.84	100.36	100.27	101.49	101.28	101.35	100.70	100.07	100.98	101.32	101.57	101.11
Formula (O=24)																
Si	5.92	5.97	5.97	5.92	5.95	5.96	5.92	5.93	5.93	5.92	5.95	5.90	5.91	5.94	5.93	5.93
Ti	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00
Al	3.99	3.95	3.92	3.94	3.93	3.99	3.97	4.04	3.99	3.95	3.97	4.00	3.97	3.95	3.91	3.94
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	0.96	0.94	0.94	0.97	1.00	1.03	1.04	0.95	0.94	0.91	0.95	0.95	0.87	0.89	0.88	0.89
Ca	0.54	0.51	0.57	0.51	0.41	0.32	0.35	0.58	0.54	0.59	0.54	0.57	0.62	0.64	0.65	0.61
Mn	0.66	0.60	0.61	0.61	0.62	0.64	0.63	0.59	0.62	0.62	0.66	0.65	0.68	0.64	0.70	0.67
Fe^{2+}	3.89	3.94	3.94	4.03	4.05	3.98	4.03	3.83	3.90	3.97	3.87	3.90	3.92	3.91	3.92	3.94
total	16.04	16.01	16.03	16.06	16.04	16.01	16.04	16.01	16.02	16.05	16.02	16.06	16.05	16.05	16.07	16.06
X_{Mg}	0.20	0.19	0.19	0.19	0.20	0.20	0.21	0.20	0.19	0.19	0.20	0.20	0.18	0.19	0.18	0.18
Grs	8.9	8.6	9.5	8.4	6.7	5.4	5.8	9.8	9.0	9.7	8.9	9.5	10.1	10.6	10.5	10.0
Alm	64.3	65.6	64.9	65.8	66.6	66.7	66.5	64.4	64.9	65.2	64.3	64.2	64.5	64.2	63.8	64.5
Sps	11.0	10.1	10.1	9.9	10.2	10.7	10.4	9.9	10.3	10.1	11.0	10.6	11.1	10.6	11.4	10.9
Prp	15.8	15.7	15.5	15.9	16.4	17.2	17.2	15.9	15.7	15.0	15.8	15.7	14.2	14.6	14.3	14.5

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock
Sample	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	91	93	95	97	99	102	103	104	105	106	107	108	109	113	115	117
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	37.58	37.40	37.45	37.20	36.93	37.84	37.25	37.61	37.25	37.28	37.40	37.16	37.03	37.35	37.54	37.83
TiO_2	0.00	0.00	0.10	0.05	0.04	0.08	0.08	0.05	0.06	0.06	0.00	0.01	0.00	0.00	0.03	0.01
Al_2O_3	21.26	21.33	21.15	21.23	20.95	21.14	20.97	21.04	20.94	21.06	21.22	21.38	21.13	21.19	21.16	21.34
Cr_2O_3	0.03	0.02	0.00	0.00	0.00	0.01	0.04	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.03
Fe_2O_3	0.68	0.66	0.68	0.69	0.68	0.70	0.72	0.71	0.73	0.75	0.74	0.75	0.76	0.76	0.76	0.76
MgO	3.61	3.79	3.63	3.73	3.84	3.69	3.84	3.87	4.01	4.03	4.12	4.26	4.18	4.31	4.30	4.28
CaO	3.52	3.58	3.83	3.36	3.33	3.30	3.04	2.95	2.47	2.10	1.73	1.38	1.23	1.42	1.24	1.21
MnO	4.79	4.80	4.65	4.68	4.36	3.88	3.51	3.82	3.30	3.30	3.06	3.06	2.92	2.88	2.61	2.47
FeO	30.04	29.19	29.88	30.52	30.12	31.03	31.76	31.30	32.35	32.98	32.85	33.13	33.43	33.61	33.56	33.60
total	101.51	100.78	101.37	101.44	100.24	101.68	101.21	101.35	101.12	101.57	101.12	101.11	100.69	101.54	101.22	101.54
Formula (O=24)																
Si	5.94	5.94	5.93	5.90	5.91	5.96	5.92	5.95	5.92	5.91	5.94	5.90	5.91	5.92	5.95	5.97
Ti	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Al	3.96	3.99	3.95	3.97	3.95	3.93	3.93	3.92	3.93	3.94	3.97	4.00	3.98	3.95	3.95	3.97
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	0.85	0.90	0.86	0.88	0.92	0.87	0.91	0.91	0.95	0.95	0.98	1.01	1.00	1.02	1.02	1.01
Ca	0.60	0.61	0.65	0.57	0.57	0.56	0.52	0.50	0.42	0.36	0.29	0.23	0.21	0.24	0.21	0.20
Mn	0.64	0.65	0.62	0.63	0.59	0.52	0.47	0.51	0.44	0.44	0.41	0.41	0.39	0.39	0.35	0.33
Fe^{2+}	3.97	3.87	3.96	4.05	4.03	4.09	4.22	4.14	4.30	4.37	4.36	4.40	4.47	4.45	4.45	4.43
total	16.04	16.03	16.05	16.07	16.06	16.02	16.06	16.04	16.06	16.07	16.04	16.05	16.05	16.06	16.02	16.00
X_{Mg}	0.18	0.19	0.18	0.18	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.18	0.19	0.19	0.18
Grs	9.8	10.1	10.7	9.3	9.3	9.2	8.4	8.3	6.9	5.8	4.9	3.9	3.5	4.0	3.5	3.4
Alm	65.6	64.3	65.0	66.1	66.0	67.8	69.0	68.3	70.3	71.4	72.2	72.7	73.6	73.0	73.8	74.2
Sps	10.6	10.7	10.3	10.3	9.7	8.6	7.7	8.4	7.3	7.2	6.8	6.8	6.5	6.3	5.8	5.5
Prp	14.0	14.9	14.1	14.4	15.0	14.4	14.9	15.1	15.5	15.5	16.1	16.6	16.4	16.7	16.9	16.8

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	118	119	123	125	126	128	130	1	2	3	4	5	6	7	8	
Position	→	→	→	→	→	→	rim	rim	←	←	←	←	←	←	←	
SiO_2	37.36	37.65	37.54	37.30	37.22	37.02	36.96	37.00	37.04	37.23	37.00	37.40	37.18	37.22	37.15	
TiO_2	0.00	0.02	0.03	0.00	0.02	0.02	0.01	0.00	0.01	0.02	0.00	0.03	0.00	0.00	0.00	
Al_2O_3	21.25	21.48	21.32	21.68	21.14	21.45	21.29	21.37	21.36	21.23	21.21	21.37	21.22	21.00	21.46	
Cr_2O_3	0.02	0.02	0.01	0.02	0.00	0.00	0.02	0.02	0.01	0.00	0.01	0.04	0.05	0.00	0.05	
Fe_2O_3	0.77	0.76	0.77	0.77	0.78	0.78	0.79	0.80	0.80	0.80	0.80	0.79	0.80	0.80	0.80	
MgO	4.30	4.22	4.28	3.93	3.93	3.55	2.92	3.56	3.51	3.70	3.70	3.85	3.66	3.83	4.11	
CaO	1.12	1.09	1.00	1.05	1.07	1.04	1.10	1.01	0.99	0.96	0.97	1.02	1.00	1.01	1.02	
MnO	2.43	2.65	2.52	2.53	2.55	2.72	3.28	1.99	1.85	1.99	1.94	1.89	1.83	1.90	1.73	
FeO	34.07	33.57	33.96	34.01	34.19	34.60	35.01	35.45	35.10	35.28	35.49	34.85	35.44	35.40	35.09	
total	101.33	101.46	101.42	101.29	100.88	101.19	101.37	101.20	100.65	101.21	101.13	101.23	101.18	101.14	101.41	
Formula (O=24)																
Si	5.93	5.95	5.94	5.91	5.94	5.90	5.91	5.90	5.93	5.93	5.91	5.94	5.93	5.94	5.90	
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Al	3.97	4.00	3.98	4.05	3.97	4.03	4.01	4.02	4.03	3.99	3.99	4.00	3.99	3.95	4.01	
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.09	0.10	0.10	0.10	
Mg	1.02	0.99	1.01	0.93	0.94	0.84	0.69	0.85	0.84	0.88	0.88	0.91	0.87	0.91	0.97	
Ca	0.19	0.18	0.17	0.18	0.18	0.18	0.19	0.17	0.17	0.16	0.17	0.17	0.17	0.17	0.17	
Mn	0.33	0.35	0.34	0.34	0.34	0.37	0.44	0.27	0.25	0.27	0.26	0.25	0.25	0.26	0.23	
Fe^{2+}	4.52	4.43	4.49	4.51	4.56	4.61	4.68	4.73	4.70	4.70	4.74	4.63	4.72	4.72	4.66	
total	16.04	16.01	16.02	16.01	16.03	16.03	16.03	16.04	16.01	16.03	16.05	16.01	16.03	16.04	16.05	
X_{Mg}	0.18	0.18	0.18	0.17	0.17	0.15	0.13	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.17	
Grs	3.1	3.1	2.8	3.0	3.0	3.0	3.1	2.9	2.8	2.7	2.8	2.9	2.8	2.8	2.9	
Alm	74.7	74.3	74.8	75.7	75.7	76.9	77.9	78.6	78.9	78.2	78.3	77.6	78.6	77.9	77.2	
Sps	5.4	5.9	5.6	5.7	5.7	6.1	7.4	4.5	4.2	4.5	4.3	4.3	4.1	4.2	3.8	
Prp	16.8	16.6	16.8	15.6	15.5	14.1	11.6	14.1	14.1	14.6	14.6	15.3	14.5	15.0	16.1	

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss
Sample	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	**342-3-99**	342-3-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1
Point	9	10	11	12	13	14	19	20	21	22	24	25	26	29	**31**	33
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	37.26	37.11	37.48	36.84	37.39	37.21	37.29	37.26	37.35	37.21	37.38	37.72	37.35	37.41	**37.58**	37.35
TiO_2	0.01	0.04	0.00	0.00	0.01	0.04	0.07	0.01	0.02	0.04	0.02	0.01	0.00	0.00	**0.00**	0.00
Al_2O_3	21.29	21.41	21.19	21.31	21.07	21.09	21.29	21.24	20.99	21.17	21.12	21.35	21.27	21.29	**21.27**	21.09
Cr_2O_3	0.00	0.00	0.01	0.02	0.03	0.02	0.03	0.03	0.05	0.00	0.01	0.03	0.00	0.04	**0.02**	0.04
Fe_2O_3	0.78	0.78	0.78	0.79	0.78	0.78	0.78	0.77	0.77	0.77	0.77	0.77	0.76	0.76	**0.77**	0.78
MgO	4.06	4.07	4.18	4.20	4.10	4.23	4.30	4.29	4.37	4.49	4.37	4.53	4.49	4.57	**4.64**	4.60
CaO	1.04	1.10	1.08	1.11	1.06	1.06	1.07	1.05	1.11	1.13	1.10	1.05	1.10	1.12	**1.14**	1.03
MnO	1.69	1.67	1.60	1.76	1.55	1.58	1.55	1.69	1.66	1.63	1.61	1.49	1.51	1.50	**1.56**	1.50
FeO	34.34	34.52	34.51	34.67	34.35	34.36	34.49	34.10	34.04	34.03	34.13	33.93	33.55	33.69	**33.86**	34.18
total	100.46	100.70	100.83	100.70	100.32	100.36	100.86	100.43	100.37	100.46	100.49	100.87	100.03	100.38	**100.83**	100.57
Formula (O=24)																
Si	5.95	5.92	5.96	5.89	5.97	5.95	5.93	5.94	5.96	5.93	5.96	5.97	5.96	5.95	**5.96**	5.95
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Al	4.01	4.02	3.97	4.01	3.97	3.97	3.99	3.99	3.95	3.98	3.97	3.98	4.00	3.99	**3.97**	3.96
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	**0.00**	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	**0.09**	0.09
Mg	0.97	0.97	0.99	1.00	0.98	1.01	1.02	1.02	1.04	1.07	1.04	1.07	1.07	1.08	**1.10**	1.09
Ca	0.18	0.19	0.18	0.19	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.18	0.19	0.19	**0.19**	0.18
Mn	0.23	0.23	0.22	0.24	0.21	0.21	0.21	0.23	0.22	0.22	0.22	0.20	0.20	0.20	**0.21**	0.20
Fe^{2+}	4.58	4.60	4.59	4.63	4.59	4.59	4.59	4.55	4.54	4.54	4.55	4.49	4.48	4.48	**4.49**	4.55
total	16.00	16.02	16.01	16.06	15.99	16.01	16.02	16.01	16.01	16.03	16.01	15.99	15.99	16.00	**16.01**	16.02
X_{Mg}	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19	**0.20**	0.19
Grs	3.0	3.1	3.1	3.1	3.0	3.0	3.0	3.0	3.2	3.2	3.1	3.0	3.2	3.2	**3.2**	2.9
Alm	77.0	76.9	76.7	76.4	77.1	76.6	76.5	76.1	75.7	75.4	75.9	75.6	75.4	75.2	**75.0**	75.6
Sps	3.8	3.8	3.6	3.9	3.5	3.6	3.5	3.8	3.7	3.7	3.6	3.4	3.4	3.4	**3.5**	3.3
Prp	16.2	16.2	16.6	16.5	16.4	16.8	17.0	17.1	17.3	17.7	17.3	18.0	18.0	18.2	**18.3**	18.1

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99
Analysis	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	34	35	36	39	42	43	48	50	51	52	53	54	56	58	59	60
Position	←	←	←	core	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	36.70	37.36	37.34	37.26	37.54	37.27	37.12	37.23	37.00	36.76	37.20	37.41	37.46	37.42	37.08	37.28
TiO_2	0.00	0.02	0.00	0.00	0.01	0.00	0.04	0.00	0.47	0.03	0.00	0.01	0.00	0.00	0.00	0.04
Al_2O_3	20.95	21.45	21.06	21.12	21.33	21.31	21.14	21.21	21.11	20.96	21.31	21.25	21.25	21.33	21.21	21.09
Cr_2O_3	0.00	0.04	0.00	0.00	0.06	0.01	0.00	0.00	0.00	0.02	0.02	0.03	0.00	0.03	0.00	0.00
Fe_2O_3	0.77	0.78	0.78	0.76	0.76	0.77	0.77	0.77	0.76	0.77	0.78	0.77	0.77	0.78	0.77	0.78
MgO	4.42	4.52	4.61	4.33	4.34	4.51	4.45	4.37	4.34	4.24	4.23	4.40	4.29	4.17	4.28	4.12
CaO	1.10	1.10	1.11	1.07	1.04	1.02	1.10	1.07	1.11	1.09	1.04	1.11	1.08	1.17	1.16	1.18
MnO	1.51	1.57	1.57	1.62	1.54	1.53	1.54	1.62	1.54	1.61	1.68	1.69	1.61	1.52	1.80	1.70
FeO	33.83	34.26	34.31	33.65	33.67	34.07	34.16	34.09	33.47	34.03	34.43	33.79	34.01	34.47	34.04	34.58
total	99.27	101.09	100.78	99.80	100.29	100.50	100.32	100.36	99.80	99.50	100.70	100.46	100.47	100.89	100.34	100.76
Formula (O=24)																
Si	5.93	5.92	5.94	5.97	5.98	5.94	5.93	5.94	5.93	5.93	5.93	5.96	5.96	5.95	5.93	5.94
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	3.99	4.00	3.95	3.99	4.00	4.00	3.98	3.99	3.99	3.98	4.00	3.99	3.99	3.99	4.00	3.96
Cr	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	1.06	1.07	1.09	1.03	1.03	1.07	1.06	1.04	1.04	1.02	1.01	1.04	1.02	0.99	1.02	0.98
Ca	0.19	0.19	0.19	0.18	0.18	0.17	0.19	0.18	0.19	0.19	0.18	0.19	0.18	0.20	0.20	0.20
Mn	0.21	0.21	0.21	0.22	0.21	0.21	0.21	0.22	0.21	0.22	0.23	0.23	0.22	0.20	0.24	0.23
Fe^{2+}	4.57	4.54	4.56	4.51	4.48	4.54	4.56	4.55	4.48	4.59	4.59	4.50	4.53	4.58	4.55	4.61
total	16.03	16.03	16.04	15.99	15.97	16.02	16.03	16.02	15.98	16.03	16.02	16.00	15.99	16.01	16.03	16.02
X_{Mg}	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.18	0.18	0.19	0.18	0.18	0.18	0.18
Grs	3.2	3.1	3.1	3.1	3.0	2.9	3.1	3.0	3.2	3.1	3.0	3.2	3.1	3.3	3.3	3.3
Alm	75.8	75.6	75.3	75.8	76.0	75.8	75.8	75.9	75.7	76.3	76.5	75.5	76.1	76.7	75.7	76.6
Sps	3.4	3.5	3.5	3.7	3.5	3.4	3.5	3.7	3.5	3.7	3.8	3.8	3.7	3.4	4.1	3.8
Prp	17.6	17.8	18.1	17.4	17.5	17.9	17.6	17.4	17.5	16.9	16.8	17.5	17.1	16.5	16.9	16.3

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	401-2-99	**401-2-99**	401-2-99	401-2-99
Analysis	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1
Point	62	63	66	67	69	72	73	76	77	78	80	1	**2**	3	4
Position	→	→	→	→	→	→	→	→	→	→	rim	rim	←	←	←
SiO_2	37.26	37.18	37.14	37.23	37.28	37.61	37.15	36.86	37.03	37.25	37.36	37.06	**36.99**	36.98	37.05
TiO_2	0.03	0.02	0.02	0.03	0.00	0.01	0.03	0.01	0.05	0.02	0.00	0.05	**0.00**	0.00	0.03
Al_2O_3	21.33	21.35	21.10	21.00	21.26	21.21	21.06	21.07	21.14	21.15	21.24	20.93	**21.17**	21.19	21.15
Cr_2O_3	0.06	0.00	0.02	0.02	0.02	0.07	0.03	0.00	0.01	0.01	0.00	0.01	**0.05**	0.00	0.00
Fe_2O_3	0.76	0.79	0.78	0.79	0.78	0.79	0.79	0.79	0.79	0.79	0.81	0.82	**0.81**	0.80	0.79
MgO	4.05	3.93	3.81	3.82	3.68	3.52	3.46	3.30	3.30	3.19	2.67	3.30	**3.29**	3.63	3.58
CaO	1.14	1.23	1.23	1.20	1.26	1.20	1.20	1.13	1.10	1.11	1.01	1.05	**1.15**	1.13	1.09
MnO	1.69	1.72	1.74	1.86	1.96	1.83	1.89	2.10	2.09	2.16	2.27	1.73	**1.79**	1.72	1.64
FeO	33.68	34.76	34.46	34.69	34.24	34.73	34.68	34.93	34.67	34.80	35.74	35.95	**35.63**	35.34	35.06
total	99.99	100.98	100.31	100.63	100.48	100.95	100.28	100.19	100.16	100.48	101.09	100.89	**100.87**	100.78	100.39
Formula (O=24)															
Si	5.96	5.92	5.95	5.95	5.96	5.98	5.96	5.94	5.95	5.97	5.98	5.94	**5.93**	5.92	5.94
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	**0.00**	0.00	0.00
Al	4.02	4.01	3.98	3.96	4.00	3.98	3.98	4.00	4.01	4.00	4.00	3.95	**4.00**	4.00	4.00
Cr	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.01**	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	**0.10**	0.10	0.10
Mg	0.96	0.93	0.91	0.91	0.88	0.83	0.83	0.79	0.79	0.76	0.64	0.79	**0.78**	0.87	0.85
Ca	0.20	0.21	0.21	0.21	0.21	0.20	0.21	0.20	0.19	0.19	0.17	0.18	**0.20**	0.19	0.19
Mn	0.23	0.23	0.24	0.25	0.27	0.25	0.26	0.29	0.28	0.29	0.31	0.23	**0.24**	0.23	0.22
Fe^{2+}	4.51	4.63	4.62	4.64	4.58	4.62	4.65	4.71	4.66	4.67	4.78	4.82	**4.77**	4.73	4.70
total	15.98	16.03	16.01	16.02	15.99	15.97	15.99	16.01	15.99	15.98	15.97	16.03	**16.02**	16.03	16.01
X_{Mg}	0.18	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.12	0.14	**0.14**	0.15	0.15
Grs	3.3	3.5	3.5	3.4	3.6	3.5	3.5	3.3	3.2	3.2	2.9	3.0	**3.3**	3.2	3.1
Alm	76.4	77.1	77.3	77.2	77.1	78.3	78.3	78.7	78.7	78.9	81.1	80.0	**79.6**	78.6	78.8
Sps	3.9	3.9	4.0	4.2	4.5	4.2	4.3	4.8	4.8	5.0	5.2	3.9	**4.0**	3.9	3.7
Prp	16.4	15.5	15.2	15.1	14.8	14.1	13.9	13.2	13.3	12.9	10.8	13.1	**13.1**	14.4	14.3

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue*
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**
Sample	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	**401-2-99**
Analysis	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**
Point	5	6	7	8	10	11	13	14	15	16	17	18	21	24	25	**26**
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	core	→
SiO_2	36.60	37.23	36.77	37.21	37.11	37.39	37.23	37.38	37.30	37.07	37.04	37.21	37.35	37.54	37.63	**37.53**
TiO_2	0.01	0.00	0.00	0.07	0.01	0.00	0.01	0.01	0.00	0.05	0.04	0.02	0.05	0.04	0.00	**0.04**
Al_2O_3	21.29	21.13	21.20	21.02	21.46	21.33	21.32	21.43	21.51	21.14	21.54	21.29	21.67	21.37	21.25	**21.31**
Cr_2O_3	0.03	0.00	0.00	0.00	0.01	0.01	0.05	0.05	0.00	0.01	0.00	0.02	0.02	0.01	0.00	**0.03**
Fe_2O_3	0.80	0.79	0.79	0.78	0.78	0.78	0.78	0.77	0.77	0.77	0.77	0.78	0.77	0.77	0.77	**0.77**
MgO	3.87	4.10	4.19	4.18	4.60	4.52	4.70	4.74	4.83	4.74	4.94	4.86	4.91	5.06	4.77	**5.02**
CaO	1.18	1.24	1.22	1.15	1.14	1.13	1.18	1.11	1.04	1.10	1.12	1.15	1.11	1.11	1.07	**1.07**
MnO	1.61	1.48	1.49	1.34	1.24	1.33	1.38	1.36	1.30	1.16	1.29	1.32	1.21	1.31	1.21	**1.24**
FeO	35.25	34.96	34.86	34.20	34.19	34.45	34.50	33.92	34.05	33.85	33.94	34.41	33.78	33.97	33.78	**33.91**
total	100.62	100.95	100.52	99.94	100.52	100.93	101.13	100.76	100.80	99.88	100.66	101.05	100.86	101.17	100.47	**100.90**
Formula (O=24)																
Si	5.87	5.93	5.89	5.96	5.91	5.93	5.90	5.93	5.91	5.93	5.88	5.90	5.91	5.93	5.97	**5.94**
Ti	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	**0.00**
Al	4.02	3.97	4.00	3.97	4.03	3.99	3.98	4.01	4.02	3.99	4.03	3.98	4.04	3.98	3.97	**3.97**
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fe^{3+}	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	**0.09**
Mg	0.92	0.97	1.00	1.00	1.09	1.07	1.11	1.12	1.14	1.13	1.17	1.15	1.16	1.19	1.13	**1.18**
Ca	0.20	0.21	0.21	0.20	0.19	0.19	0.20	0.19	0.18	0.19	0.19	0.20	0.19	0.19	0.18	**0.18**
Mn	0.22	0.20	0.20	0.18	0.17	0.18	0.19	0.18	0.17	0.16	0.17	0.18	0.16	0.17	0.16	**0.17**
Fe^{2+}	4.73	4.66	4.67	4.58	4.55	4.57	4.57	4.50	4.51	4.53	4.51	4.56	4.47	4.48	4.48	**4.49**
total	16.07	16.04	16.06	16.00	16.03	16.03	16.06	16.02	16.03	16.02	16.05	16.06	16.02	16.04	15.99	**16.02**
X_{Mg}	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20	0.20	0.21	0.20	0.21	0.21	0.20	**0.21**
Grs	3.3	3.5	3.4	3.3	3.2	3.2	3.3	3.1	2.9	3.1	3.2	3.2	3.1	3.1	3.1	**3.0**
Alm	77.8	77.1	76.8	76.9	75.8	76.1	75.4	75.1	75.2	75.4	74.6	75.0	74.8	74.3	75.3	**74.6**
Sps	3.6	3.3	3.3	3.1	2.8	3.0	3.0	3.0	2.9	2.6	2.9	2.9	2.7	2.9	2.7	**2.8**
Prp	15.2	16.1	16.5	16.7	18.2	17.8	18.3	18.7	19.0	18.8	19.3	18.9	19.4	19.7	18.9	**19.7**

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	679-1-00	679-1-00
Analysis	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	27	28	30	32	35	36	38	39	41	43	45	46	50	1	2
Position	→	→	→	→	→	→	→	→	→	→	→	→	rim	rim	←
SiO_2	37.11	37.41	37.48	37.75	37.42	37.23	37.41	37.28	37.43	37.03	36.83	37.12	37.04	36.36	36.76
TiO_2	0.00	0.02	0.00	0.00	0.00	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.04	0.01
Al_2O_3	21.33	21.42	21.40	21.38	21.65	21.28	21.63	21.52	21.59	21.00	21.32	21.35	21.32	20.90	20.85
Cr_2O_3	0.00	0.00	0.00	0.03	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.02
Fe_2O_3	0.77	0.76	0.77	0.77	0.76	0.78	0.77	0.78	0.78	0.78	0.80	0.80	0.81	0.78	0.78
MgO	4.85	4.91	4.91	4.77	4.69	4.60	4.53	4.57	4.37	4.16	3.91	3.89	3.53	1.62	1.95
CaO	1.05	1.07	1.06	1.08	0.99	1.01	1.08	1.05	1.06	1.01	1.09	1.06	1.05	1.05	1.05
MnO	1.31	1.25	1.31	1.39	1.31	1.35	1.42	1.36	1.26	1.44	1.46	1.46	1.53	4.76	4.70
FeO	34.17	33.57	33.86	33.95	33.73	34.24	34.09	34.50	34.51	34.47	35.32	35.22	35.64	34.53	34.60
total	100.58	100.40	100.78	101.11	100.56	100.53	100.94	101.08	101.02	99.92	100.74	100.92	100.94	100.07	100.72
Formula (O=24)															
Si	5.90	5.94	5.94	5.96	5.93	5.93	5.92	5.91	5.93	5.95	5.89	5.92	5.92	5.93	5.95
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.00	4.01	3.99	3.98	4.05	3.99	4.04	4.02	4.03	3.98	4.02	4.01	4.01	4.02	3.98
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10
Mg	1.15	1.16	1.16	1.12	1.11	1.09	1.07	1.08	1.03	1.00	0.93	0.92	0.84	0.39	0.47
Ca	0.18	0.18	0.18	0.18	0.17	0.17	0.18	0.18	0.18	0.17	0.19	0.18	0.18	0.18	0.18
Mn	0.18	0.17	0.18	0.19	0.18	0.18	0.19	0.18	0.17	0.20	0.20	0.20	0.21	0.66	0.64
Fe^{2+}	4.55	4.46	4.49	4.48	4.47	4.56	4.51	4.57	4.57	4.63	4.72	4.70	4.76	4.71	4.68
total	16.05	16.01	16.02	16.00	16.00	16.03	16.01	16.03	16.01	16.02	16.05	16.03	16.02	16.00	16.01
X_{Mg}	0.20	0.21	0.21	0.20	0.20	0.19	0.19	0.19	0.18	0.18	0.16	0.16	0.15	0.08	0.09
Grs	2.9	3.0	3.0	3.1	2.8	2.9	3.1	3.0	3.0	2.9	3.1	3.0	3.0	3.1	3.0
Alm	75.1	74.7	74.8	75.0	75.5	75.9	75.8	76.1	76.8	77.2	78.2	78.3	79.5	79.2	78.3
Sps	2.9	2.8	2.9	3.1	3.0	3.0	3.2	3.0	2.8	3.3	3.3	3.3	3.5	11.1	10.8
Prp	19.0	19.5	19.3	18.8	18.7	18.2	17.9	18.0	17.3	16.6	15.4	15.4	14.0	6.6	7.9

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	**679-1-00**	679-1-00	679-1-00	679-1-00	679-1-00
Analysis	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 1
Point	5	6	7	9	10	11	12	13	14	16	17	**18**	19	20	21	25
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	core	→	→
SiO_2	36.76	36.48	36.68	36.39	36.73	36.43	36.41	36.66	36.64	36.38	36.59	**36.66**	36.45	36.32	36.20	36.64
TiO_2	0.01	0.00	0.00	0.00	0.01	0.05	0.00	0.01	0.00	0.00	0.02	**0.00**	0.00	0.01	0.02	0.00
Al_2O_3	20.86	20.73	21.02	20.81	20.66	20.80	20.83	20.87	20.55	20.70	20.78	**20.91**	20.77	20.62	20.93	21.04
Cr_2O_3	0.00	0.00	0.00	0.02	0.00	0.02	0.01	0.02	0.00	0.04	0.02	**0.04**	0.03	0.02	0.01	0.00
Fe_2O_3	0.79	0.80	0.78	0.79	0.78	0.78	0.79	0.78	0.79	0.79	0.79	**0.78**	0.79	0.77	0.78	0.78
MgO	2.10	2.18	2.19	2.28	2.24	2.31	2.31	2.39	2.43	2.52	2.42	**2.56**	2.56	2.55	2.47	2.63
CaO	1.00	0.99	1.06	1.05	1.02	1.01	1.04	1.04	1.05	1.07	1.08	**1.08**	0.99	1.04	0.96	1.02
MnO	4.52	4.42	4.23	4.19	4.33	4.21	4.25	4.15	4.14	3.98	3.98	**3.88**	4.14	3.98	4.00	4.00
FeO	34.97	35.25	34.58	34.86	34.44	34.61	34.90	34.44	34.84	34.78	34.77	**34.18**	34.84	34.13	34.37	34.37
total	101.00	100.84	100.55	100.38	100.22	100.23	100.53	100.36	100.44	100.25	100.44	**100.09**	100.58	99.44	99.74	100.49
Formula (O=24)																
Si	5.94	5.91	5.94	5.91	5.96	5.92	5.91	5.94	5.95	5.91	5.93	**5.94**	5.91	5.94	5.90	5.92
Ti	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Al	3.97	3.96	4.01	3.98	3.95	3.98	3.98	3.98	3.93	3.97	3.97	**3.99**	3.97	3.97	4.02	4.01
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	**0.00**	0.00	0.00	0.00	0.00
Fe^{3+}	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	**0.09**	0.10	0.10	0.10	0.09
Mg	0.50	0.53	0.53	0.55	0.54	0.56	0.56	0.58	0.59	0.61	0.59	**0.62**	0.62	0.62	0.60	0.63
Ca	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	**0.19**	0.17	0.18	0.17	0.18
Mn	0.62	0.61	0.58	0.58	0.60	0.58	0.58	0.57	0.57	0.55	0.55	**0.53**	0.57	0.55	0.55	0.55
Fe^{2+}	4.72	4.78	4.68	4.74	4.68	4.70	4.74	4.67	4.73	4.73	4.71	**4.63**	4.72	4.67	4.69	4.64
total	16.03	16.06	16.01	16.05	16.01	16.03	16.05	16.02	16.04	16.05	16.03	**16.01**	16.06	16.03	16.03	16.03
X_{Mg}	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	**0.12**	0.12	0.12	0.11	0.12
Grs	2.9	2.8	3.1	3.0	3.0	2.9	3.0	3.0	3.0	3.1	3.1	**3.1**	2.8	3.0	2.8	3.0
Alm	78.5	78.6	78.4	78.3	78.0	78.1	78.2	77.8	77.9	77.9	78.1	**77.6**	77.6	77.5	78.0	77.4
Sps	10.3	10.0	9.7	9.5	9.9	9.6	9.6	9.5	9.4	9.0	9.1	**8.9**	9.4	9.1	9.2	9.1
Prp	8.4	8.6	8.9	9.1	9.0	9.3	9.2	9.6	9.7	10.0	9.7	**10.3**	10.2	10.3	10.0	10.6

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	703-00
Analysis	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	26	27	28	29	31	32	33	34	35	36	37	38	39	40	1
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	rim	rim
SiO_2	36.29	37.00	36.44	36.14	36.71	36.45	35.94	36.58	36.62	37.01	36.24	36.30	36.04	36.43	36.93
TiO_2	0.04	0.00	0.01	0.03	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.03
Al_2O_3	20.91	21.00	20.99	20.63	20.82	20.69	20.69	20.61	20.91	20.90	20.73	20.68	20.92	20.78	21.39
Cr_2O_3	0.02	0.01	0.00	0.03	0.05	0.00	0.00	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.03
Fe_2O_3	0.79	0.78	0.78	0.77	0.78	0.78	0.77	0.79	0.78	0.79	0.78	0.80	0.78	0.79	0.83
MgO	2.50	2.58	2.50	2.39	2.51	2.41	2.45	2.41	2.38	2.38	2.11	2.03	1.96	1.72	2.92
CaO	1.03	1.06	1.04	1.05	0.98	1.03	1.05	0.95	1.10	1.01	1.01	1.00	1.01	1.01	0.90
MnO	4.17	4.08	4.25	4.02	4.13	4.09	4.21	4.08	4.42	4.41	4.39	4.42	4.66	4.69	1.79
FeO	34.95	34.24	34.53	34.07	34.34	34.33	34.10	34.85	34.43	34.63	34.57	35.12	34.61	34.88	36.78
total	100.72	100.75	100.54	99.13	100.32	99.83	99.20	100.28	100.66	101.14	99.84	100.37	100.02	100.33	101.60
Formula (O=24)															
Si	5.88	5.96	5.90	5.93	5.95	5.94	5.90	5.94	5.92	5.95	5.92	5.91	5.89	5.93	5.90
Ti	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	3.99	3.98	4.01	3.99	3.97	3.97	4.00	3.95	3.99	3.96	3.99	3.97	4.03	3.99	4.03
Cr	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.10	0.09	0.10	0.10	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Mg	0.60	0.62	0.60	0.58	0.61	0.58	0.60	0.58	0.57	0.57	0.51	0.49	0.48	0.42	0.69
Ca	0.18	0.18	0.18	0.18	0.17	0.18	0.18	0.16	0.19	0.17	0.18	0.18	0.18	0.18	0.15
Mn	0.57	0.56	0.58	0.56	0.57	0.57	0.59	0.56	0.60	0.60	0.61	0.61	0.65	0.65	0.24
Fe^{2+}	4.74	4.61	4.68	4.67	4.65	4.68	4.68	4.74	4.66	4.66	4.72	4.79	4.73	4.75	4.91
total	16.07	16.00	16.05	16.02	16.02	16.02	16.05	16.03	16.03	16.02	16.03	16.05	16.04	16.02	16.03
X_{Mg}	0.11	0.12	0.11	0.11	0.12	0.11	0.11	0.11	0.11	0.11	0.10	0.09	0.09	0.08	0.12
Grs	2.9	3.1	3.0	3.1	2.8	3.0	3.0	2.7	3.2	2.9	2.9	2.9	2.9	2.9	2.6
Alm	77.7	77.2	77.4	77.9	77.6	77.9	77.4	78.3	77.3	77.6	78.4	78.9	78.5	79.3	81.9
Sps	9.4	9.3	9.6	9.3	9.5	9.4	9.7	9.3	10.0	10.0	10.1	10.0	10.7	10.8	4.0
Prp	9.9	10.4	10.0	9.7	10.1	9.7	9.9	9.6	9.5	9.5	8.5	8.1	7.9	7.0	11.6

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	**703-00**	703-00	703-00	703-00
Analysis	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1
Point	2	3	5	6	7	8	12	13	14	20	22	23	**24**	25	26	27
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	37.26	37.23	37.44	37.26	37.31	37.04	37.16	37.25	37.76	37.66	37.42	37.26	**37.15**	37.00	37.36	37.22
TiO_2	0.02	0.00	0.00	0.02	0.05	0.03	0.00	0.02	0.00	0.00	0.01	0.00	**0.00**	0.02	0.01	0.03
Al_2O_3	21.55	21.31	21.45	21.56	21.45	21.42	21.74	21.67	21.41	21.55	21.57	21.33	**21.17**	21.34	21.77	21.59
Cr_2O_3	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.01	0.00	0.06	0.04	0.00	**0.01**	0.01	0.05	0.01
Fe_2O_3	0.82	0.80	0.79	0.79	0.77	0.78	0.77	0.77	0.76	0.76	0.75	0.75	**0.74**	0.75	0.77	0.75
MgO	3.45	4.03	4.52	4.65	4.99	4.97	5.35	5.26	5.39	5.41	5.38	5.24	**5.41**	5.41	5.02	5.63
CaO	0.87	0.89	0.94	0.97	0.98	0.99	0.96	0.98	1.02	1.00	0.95	0.87	**0.92**	0.86	0.81	0.80
MnO	1.41	1.29	1.15	1.16	1.10	1.16	1.08	1.08	1.08	1.14	1.00	1.11	**1.08**	1.15	1.23	1.00
FeO	36.07	35.43	34.87	34.76	34.07	34.33	33.99	33.81	33.57	33.42	33.29	33.04	**32.80**	33.28	34.09	32.91
total	101.45	100.99	101.17	101.22	100.76	100.71	101.04	100.86	100.99	101.00	100.42	99.59	**99.29**	99.82	101.12	99.93
Formula (O=24)																
Si	5.92	5.93	5.93	5.90	5.91	5.89	5.87	5.89	5.95	5.93	5.92	5.95	**5.95**	5.90	5.90	5.91
Ti	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00
Al	4.04	4.00	4.00	4.02	4.01	4.01	4.05	4.04	3.98	4.00	4.02	4.01	**3.99**	4.01	4.05	4.04
Cr	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**	0.00	0.01	0.00
Fe^{3+}	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	**0.09**	0.09	0.09	0.09
Mg	0.82	0.96	1.07	1.10	1.18	1.18	1.26	1.24	1.26	1.27	1.27	1.25	**1.29**	1.29	1.18	1.33
Ca	0.15	0.15	0.16	0.16	0.17	0.17	0.16	0.17	0.17	0.17	0.16	0.15	**0.16**	0.15	0.14	0.14
Mn	0.19	0.17	0.15	0.16	0.15	0.16	0.14	0.15	0.14	0.15	0.13	0.15	**0.15**	0.16	0.16	0.13
Fe^{2+}	4.79	4.72	4.62	4.60	4.52	4.56	4.49	4.47	4.42	4.40	4.41	4.41	**4.39**	4.44	4.50	4.37
total	16.01	16.02	16.02	16.04	16.03	16.06	16.06	16.04	16.02	16.02	16.02	16.00	**16.01**	16.04	16.03	16.02
X_{Mg}	0.15	0.17	0.19	0.19	0.21	0.20	0.22	0.22	0.22	0.22	0.22	0.22	**0.23**	0.22	0.21	0.23
Grs	2.5	2.5	2.7	2.7	2.8	2.8	2.7	2.8	2.9	2.8	2.7	2.5	**2.6**	2.4	2.3	2.3
Alm	80.6	78.6	77.0	76.5	75.2	75.3	74.1	74.2	73.7	73.4	73.8	74.1	**73.4**	73.7	75.2	73.2
Sps	3.2	2.9	2.6	2.6	2.5	2.6	2.4	2.4	2.4	2.5	2.3	2.5	**2.4**	2.6	2.7	2.3
Prp	13.7	15.9	17.8	18.2	19.6	19.4	20.8	20.6	21.1	21.2	21.3	20.9	**21.5**	21.3	19.7	22.3

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00
Analysis	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	29	30	32	33	34	35	36	37	38	39	41	43	44	45	46	49
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	37.52	37.24	37.69	37.69	37.23	37.75	37.37	37.79	37.31	37.61	37.62	37.50	37.43	37.41	37.02	36.86
TiO_2	0.02	0.02	0.00	0.01	0.01	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.06	0.02	0.01	0.03
Al_2O_3	21.52	21.40	22.00	21.79	21.43	21.61	21.31	21.45	21.61	21.46	21.64	21.45	21.78	21.48	21.24	21.35
Cr_2O_3	0.05	0.02	0.00	0.02	0.05	0.03	0.03	0.03	0.01	0.00	0.03	0.08	0.02	0.01	0.00	0.00
Fe_2O_3	0.76	0.76	0.76	0.76	0.75	0.76	0.76	0.76	0.77	0.76	0.77	0.77	0.78	0.78	0.78	0.77
MgO	5.63	5.48	5.54	5.57	5.45	5.42	5.48	5.48	5.46	5.25	5.28	5.00	5.03	4.69	4.92	5.12
CaO	0.80	0.78	0.82	0.88	0.82	0.84	0.85	0.82	0.81	0.87	0.84	0.85	0.80	0.80	0.82	0.82
MnO	1.14	1.11	1.08	1.14	1.15	1.16	1.13	1.09	1.04	1.11	1.05	1.13	1.14	1.18	1.24	1.08
FeO	33.63	33.37	33.51	33.37	32.93	33.60	33.49	33.61	33.86	33.69	34.09	34.18	34.33	34.54	34.48	33.98
total	101.06	100.17	101.40	101.24	99.81	101.21	100.42	101.03	100.88	100.76	101.33	100.95	101.37	100.91	100.52	100.00
Formula (O=24)																
Si	5.91	5.92	5.90	5.92	5.93	5.93	5.93	5.95	5.89	5.94	5.92	5.93	5.90	5.93	5.90	5.89
Ti	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Al	3.99	4.01	4.06	4.03	4.02	4.00	3.98	3.98	4.02	4.00	4.01	4.00	4.04	4.01	3.99	4.02
Cr	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	1.32	1.30	1.29	1.30	1.29	1.27	1.30	1.29	1.29	1.24	1.24	1.18	1.18	1.11	1.17	1.22
Ca	0.13	0.13	0.14	0.15	0.14	0.14	0.15	0.14	0.14	0.15	0.14	0.14	0.13	0.14	0.14	0.14
Mn	0.15	0.15	0.14	0.15	0.16	0.15	0.15	0.15	0.14	0.15	0.14	0.15	0.15	0.16	0.17	0.15
Fe^{2+}	4.43	4.43	4.39	4.38	4.38	4.42	4.44	4.42	4.47	4.45	4.48	4.52	4.52	4.58	4.60	4.54
total	16.04	16.03	16.02	16.02	16.01	16.01	16.04	16.01	16.05	16.01	16.03	16.02	16.03	16.02	16.06	16.05
X_{Mg}	0.23	0.23	0.23	0.23	0.23	0.22	0.23	0.23	0.22	0.22	0.22	0.21	0.21	0.19	0.20	0.21
Grs	2.2	2.2	2.3	2.5	2.3	2.4	2.4	2.3	2.3	2.5	2.4	2.4	2.2	2.3	2.3	2.3
Alm	73.4	73.7	73.6	73.2	73.4	73.8	73.6	73.8	74.1	74.4	74.7	75.4	75.5	76.6	75.7	75.1
Sps	2.5	2.5	2.4	2.5	2.6	2.6	2.5	2.4	2.3	2.5	2.3	2.5	2.5	2.7	2.8	2.4
Prp	21.9	21.6	21.7	21.8	21.6	21.2	21.5	21.4	21.3	20.7	20.6	19.7	19.7	18.5	19.2	20.2

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00
Analysis	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	50	53	54	55	56	58	59	61	62	64	65	68	71	72	74	75
Position	core	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	36.95	37.21	37.10	37.03	36.85	36.87	36.69	37.05	36.98	37.20	37.00	36.76	36.68	36.80	37.08	36.87
TiO_2	0.02	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.04
Al_2O_3	21.77	21.39	21.72	21.62	21.58	21.82	21.42	21.83	21.65	21.59	21.64	21.62	21.40	21.55	21.72	21.26
Cr_2O_3	0.03	0.00	0.03	0.03	0.04	0.07	0.03	0.02	0.04	0.00	0.01	0.00	0.00	0.01	0.00	0.00
Fe_2O_3	0.76	0.77	0.77	0.77	0.76	0.76	0.78	0.76	0.77	0.77	0.76	0.77	0.78	0.78	0.79	0.79
MgO	5.17	4.82	5.35	5.44	5.31	5.33	5.25	5.44	5.34	5.47	5.42	5.14	4.95	4.65	4.75	4.58
CaO	0.82	0.88	0.81	0.85	0.81	0.83	0.85	0.87	0.88	0.88	0.92	0.87	0.86	0.81	0.90	0.85
MnO	1.23	1.05	1.09	1.07	1.16	1.19	1.22	1.09	1.07	1.07	1.11	1.17	1.25	1.20	1.22	1.20
FeO	33.50	33.94	33.92	33.92	33.44	33.61	34.20	33.62	33.80	34.17	33.69	34.17	34.42	34.28	34.72	34.94
total	100.25	100.06	100.79	100.72	99.97	100.48	100.47	100.68	100.53	101.16	100.56	100.51	100.36	100.08	101.19	100.53
Formula (O=24)																
Si	5.88	5.93	5.87	5.87	5.88	5.85	5.85	5.86	5.87	5.87	5.87	5.85	5.86	5.88	5.87	5.89
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Al	4.08	4.02	4.05	4.04	4.06	4.08	4.02	4.07	4.05	4.02	4.05	4.06	4.03	4.06	4.05	4.00
Cr	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10
Mg	1.23	1.15	1.26	1.28	1.26	1.26	1.25	1.28	1.26	1.29	1.28	1.22	1.18	1.11	1.12	1.09
Ca	0.14	0.15	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.15	0.15	0.14	0.15	0.15
Mn	0.17	0.14	0.15	0.14	0.16	0.16	0.16	0.15	0.14	0.14	0.15	0.16	0.17	0.16	0.16	0.16
Fe^{2+}	4.45	4.53	4.49	4.50	4.46	4.46	4.56	4.45	4.49	4.51	4.47	4.55	4.60	4.58	4.60	4.67
total	16.04	16.01	16.05	16.07	16.05	16.06	16.09	16.05	16.06	16.07	16.06	16.07	16.08	16.04	16.05	16.06
X_{Mg}	0.22	0.20	0.22	0.22	0.22	0.22	0.21	0.22	0.22	0.22	0.22	0.21	0.20	0.19	0.20	0.19
Grs	2.3	2.5	2.3	2.4	2.3	2.3	2.4	2.5	2.5	2.4	2.6	2.4	2.4	2.3	2.5	2.4
Alm	74.4	75.9	74.4	74.1	74.1	74.1	74.5	73.8	74.2	74.1	73.8	74.9	75.5	76.5	76.2	77.0
Sps	2.8	2.4	2.4	2.4	2.6	2.7	2.7	2.4	2.4	2.3	2.5	2.6	2.8	2.7	2.7	2.7
Prp	20.5	19.2	20.9	21.2	21.0	20.9	20.4	21.3	20.9	21.1	21.2	20.1	19.3	18.5	18.6	18.0

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue*	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist
Sample	703-00	703-00	703-00	**703-00**	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98
Analysis	grt 1	grt 1	grt 1	grt 1	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3
Point	76	78	79	80	1	2	3	4	6	7	9	10	11	12	13
Position	→	→	→	rim	rim	←	←	←	←	←	←	←	←	←	←
SiO_2	36.45	36.30	36.56	**36.87**	36.95	36.39	36.95	37.34	36.98	37.01	36.82	37.12	36.80	36.73	36.59
TiO_2	0.00	0.00	0.00	**0.00**	0.01	0.01	0.02	0.02	0.03	0.01	0.05	0.02	0.02	0.04	0.05
Al_2O_3	21.17	21.36	21.09	**21.25**	21.11	21.18	21.31	21.24	21.21	21.13	21.08	21.11	20.87	20.87	20.93
Cr_2O_3	0.00	0.00	0.04	**0.00**	0.02	0.02	0.04	0.00	0.01	0.00	0.02	0.02	0.00	0.00	0.03
Fe_2O_3	0.80	0.81	0.81	**0.82**	0.73	0.70	0.71	0.71	0.71	0.69	0.67	0.66	0.65	0.64	0.64
MgO	4.38	4.09	3.90	**3.45**	2.38	2.90	3.29	3.17	3.04	2.97	2.87	2.74	2.46	2.34	2.24
CaO	0.81	0.83	0.86	**0.87**	3.43	2.96	3.98	4.12	4.73	5.12	6.21	6.77	6.62	6.90	7.04
MnO	1.27	1.31	1.45	**1.39**	4.20	3.95	3.20	2.83	2.70	2.51	2.76	2.95	3.22	3.45	3.66
FeO	35.09	35.57	35.89	**36.00**	32.36	30.95	31.18	31.35	31.29	30.37	29.47	29.28	28.86	28.32	28.37
total	99.97	100.27	100.59	**100.64**	101.19	99.06	100.66	100.79	100.69	99.79	99.93	100.66	99.51	99.29	99.54
Formula (O=24)															
Si	5.87	5.84	5.88	**5.92**	5.92	5.91	5.90	5.94	5.90	5.94	5.90	5.91	5.93	5.93	5.90
Ti	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01
Al	4.02	4.05	3.99	**4.02**	3.98	4.05	4.01	3.98	3.99	3.99	3.98	3.96	3.96	3.97	3.98
Cr	0.00	0.00	0.00	**0.00**	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.10	0.10	0.10	**0.10**	0.09	0.09	0.08	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08
Mg	1.05	0.98	0.93	**0.83**	0.57	0.70	0.78	0.75	0.72	0.71	0.68	0.65	0.59	0.56	0.54
Ca	0.14	0.14	0.15	**0.15**	0.59	0.52	0.68	0.70	0.81	0.88	1.07	1.15	1.14	1.19	1.22
Mn	0.17	0.18	0.20	**0.19**	0.57	0.54	0.43	0.38	0.36	0.34	0.37	0.40	0.44	0.47	0.50
Fe^{2+}	4.73	4.79	4.82	**4.83**	4.33	4.20	4.16	4.17	4.18	4.08	3.95	3.90	3.89	3.82	3.83
total	16.07	16.08	16.08	**16.03**	16.05	16.02	16.05	16.02	16.06	16.02	16.06	16.06	16.04	16.04	16.06
X_{Mg}	0.18	0.17	0.16	0.15	0.12	0.14	0.16	0.15	0.15	0.15	0.15	0.14	0.13	0.13	0.12
Grs	2.3	2.4	2.4	2.5	9.7	8.6	11.2	11.7	13.3	14.6	17.5	18.9	18.8	19.7	20.0
Alm	77.6	78.6	79.0	80.6	71.5	70.5	68.7	69.4	68.8	67.9	65.0	63.9	64.2	63.2	62.9
Sps	2.9	2.9	3.2	3.1	9.4	9.1	7.1	6.4	6.0	5.7	6.2	6.5	7.2	7.8	8.2
Prp	17.3	16.1	15.3	13.8	9.4	11.8	12.9	12.5	11.9	11.8	11.3	10.6	9.8	9.3	8.8

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue	Orue	Orue	Orue
Rock type	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	Grt-Bt schist	**Grt-Bt schist**	Grt-Bt schist	Grt-Bt schist	Grt-Bt gneiss	Grt-Bt gneiss
Sample	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	**137-C-98**	137-C-98	137-C-98	191-A-98	191-A-98
Analysis	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt3	grt1	grt1
Point	14	15	17	19	20	21	22	23	24	25	**28**	29	30	1	3
Position	←	core	→	→	→	→	→	→	→	→	→	→	rim	rim	←
SiO_2	36.55	36.36	37.04	37.19	36.58	36.69	36.93	36.71	36.95	36.73	**36.86**	37.05	36.53	36.77	36.84
TiO_2	0.07	0.02	0.04	0.03	0.04	0.05	0.01	0.02	0.06	0.06	**0.04**	0.00	0.00	0.03	0.00
Al_2O_3	20.91	20.57	21.38	20.76	20.77	20.97	20.96	20.99	21.04	20.96	**21.32**	21.51	20.92	20.75	21.14
Cr_2O_3	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.01	**0.02**	0.04	0.00	0.02	0.03
Fe_2O_3	0.64	0.64	0.64	0.65	0.64	0.67	0.65	0.65	0.67	0.68	**0.70**	0.70	0.72	0.77	0.80
MgO	2.21	2.19	2.43	2.44	2.56	2.60	2.55	2.80	2.74	2.90	**3.18**	3.23	1.92	3.26	3.51
CaO	7.07	7.15	6.83	7.04	6.66	6.48	6.39	6.41	6.01	5.48	**4.19**	3.93	2.80	1.82	1.85
MnO	3.67	3.76	3.78	3.61	3.51	3.38	3.15	2.99	2.86	2.70	**2.85**	3.38	5.52	1.67	1.58
FeO	28.04	28.36	28.16	28.68	28.16	29.35	28.83	28.57	29.42	30.14	**30.78**	30.81	31.92	34.11	35.21
total	99.18	99.05	100.33	100.39	98.92	100.17	99.48	99.15	99.74	99.67	**99.93**	100.65	100.33	99.21	100.95
Formula (O=24)															
Si	5.91	5.91	5.91	5.95	5.93	5.89	5.94	5.92	5.93	5.91	**5.91**	5.90	5.92	5.97	5.90
Ti	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.01	**0.00**	0.00	0.00	0.00	0.00
Al	3.99	3.94	4.02	3.91	3.97	3.97	3.98	3.99	3.98	3.98	**4.03**	4.04	4.00	3.97	3.99
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	**0.08**	0.08	0.09	0.09	0.10
Mg	0.53	0.53	0.58	0.58	0.62	0.62	0.61	0.67	0.66	0.70	**0.76**	0.77	0.46	0.79	0.84
Ca	1.23	1.24	1.17	1.21	1.16	1.12	1.10	1.11	1.03	0.95	**0.72**	0.67	0.49	0.32	0.32
Mn	0.50	0.52	0.51	0.49	0.48	0.46	0.43	0.41	0.39	0.37	**0.39**	0.46	0.76	0.23	0.21
Fe^{2+}	3.79	3.86	3.76	3.84	3.82	3.94	3.88	3.85	3.95	4.06	**4.13**	4.11	4.33	4.63	4.71
total	16.04	16.08	16.03	16.05	16.05	16.08	16.03	16.04	16.03	16.05	**16.03**	16.03	16.04	16.00	16.06
X_{Mg}	0.12	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.14	0.15	**0.16**	0.16	0.10	0.15	0.15
Grs	20.2	20.2	19.4	19.7	19.0	18.2	18.3	18.3	17.1	15.6	**12.0**	11.2	8.1	5.3	5.2
Alm	62.7	62.7	62.5	62.8	62.9	64.2	64.4	63.8	65.5	66.9	**68.9**	68.4	71.7	77.6	77.5
Sps	8.3	8.4	8.5	8.0	7.9	7.5	7.1	6.8	6.5	6.1	**6.5**	7.6	12.6	3.9	3.5
Prp	8.8	8.6	9.6	9.5	10.2	10.1	10.2	11.1	10.9	11.5	**12.7**	12.8	7.7	13.2	13.8

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss
Sample	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98
Analysis	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1
Point	4	5	6	7	8	9	10	12	16	19	20	21	23	24	29	30
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	core
SiO_2	36.88	37.07	36.97	37.09	36.92	37.27	37.19	37.36	37.08	36.86	36.92	37.38	37.09	36.69	37.14	37.19
TiO_2	0.03	0.00	0.02	0.00	0.00	0.01	0.02	0.01	0.02	0.00	0.00	0.02	0.01	0.01	0.00	0.03
Al_2O_3	21.03	21.27	21.36	21.41	20.99	21.13	21.38	21.17	21.30	21.12	20.89	21.35	21.40	21.22	21.28	21.38
Cr_2O_3	0.02	0.01	0.00	0.01	0.00	0.00	0.03	0.06	0.00	0.03	0.02	0.00	0.02	0.05	0.00	0.00
Fe_2O_3	0.78	0.77	0.78	0.77	0.78	0.77	0.77	0.76	0.77	0.76	0.76	0.77	0.75	0.75	0.76	0.76
MgO	3.55	3.84	3.97	4.01	4.12	4.22	4.21	4.45	3.94	4.20	4.29	3.89	4.29	4.24	4.25	4.11
CaO	1.83	1.83	1.80	1.79	1.78	1.84	1.75	1.83	1.79	2.05	2.20	2.11	2.16	2.09	2.18	2.04
MnO	1.53	1.47	1.39	1.32	1.41	1.36	1.41	1.35	1.30	1.35	1.30	1.33	1.28	1.29	1.29	1.35
FeO	34.31	34.09	34.34	33.89	34.34	34.01	33.94	33.63	33.86	33.60	33.30	33.85	33.21	33.08	33.47	33.45
total	99.94	100.36	100.63	100.30	100.34	100.61	100.69	100.63	100.07	99.97	99.68	100.69	100.19	99.42	100.36	100.31
Formula (O=24)																
Si	5.94	5.93	5.90	5.92	5.92	5.94	5.92	5.94	5.94	5.91	5.93	5.94	5.92	5.90	5.92	5.93
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	3.99	4.01	4.02	4.03	3.96	3.97	4.01	3.97	4.02	3.99	3.96	4.00	4.02	4.03	4.00	4.02
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	0.85	0.92	0.95	0.96	0.98	1.00	1.00	1.05	0.94	1.00	1.03	0.92	1.02	1.02	1.01	0.98
Ca	0.32	0.31	0.31	0.31	0.31	0.31	0.30	0.31	0.31	0.35	0.38	0.36	0.37	0.36	0.37	0.35
Mn	0.21	0.20	0.19	0.18	0.19	0.18	0.19	0.18	0.18	0.18	0.18	0.18	0.17	0.18	0.17	0.18
Fe^{2+}	4.62	4.56	4.58	4.53	4.60	4.53	4.52	4.47	4.53	4.51	4.48	4.50	4.43	4.45	4.46	4.46
total	16.02	16.02	16.04	16.01	16.06	16.03	16.03	16.03	16.01	16.05	16.04	16.01	16.02	16.03	16.03	16.01
X_{Mg}	0.16	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.17	0.18	0.19	0.17	0.19	0.19	0.18	0.18
Grs	5.3	5.2	5.1	5.1	5.0	5.2	5.0	5.2	5.2	5.8	6.2	6.0	6.2	6.0	6.2	5.8
Alm	77.0	76.1	76.1	75.9	75.7	75.1	75.2	74.3	76.1	74.5	73.9	75.5	73.9	74.1	74.2	74.7
Sps	3.5	3.3	3.1	3.0	3.2	3.0	3.2	3.0	3.0	3.0	2.9	3.0	2.9	2.9	2.9	3.0
Prp	14.2	15.3	15.7	16.0	16.2	16.6	16.6	17.5	15.8	16.6	17.0	15.5	17.0	16.9	16.8	16.4

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	**Orue***	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt gneiss	**Grt-Bt gneiss**	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss
Sample	191-A-98	**191-A-98**	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98
Analysis	grt1	**grt1**	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1
Point	31	**34**	36	37	41	42	44	45	46	47	48	49	51	53	54	55
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	37.39	**37.88**	37.07	37.68	37.38	37.11	37.01	37.40	36.93	37.28	37.17	37.44	36.75	36.83	36.44	36.73
TiO_2	0.00	**0.00**	0.00	0.05	0.03	0.01	0.00	0.00	0.03	0.00	0.01	0.00	0.03	0.02	0.02	0.01
Al_2O_3	21.16	**21.51**	21.12	21.44	21.32	21.23	21.19	21.23	21.04	21.07	21.32	21.41	20.73	20.90	20.53	20.84
Cr_2O_3	0.00	**0.00**	0.03	0.02	0.05	0.04	0.06	0.00	0.05	0.00	0.00	0.00	0.02	0.01	0.01	0.03
Fe_2O_3	0.77	**0.75**	0.78	0.77	0.76	0.78	0.78	0.78	0.79	0.79	0.77	0.77	0.78	0.78	0.79	0.79
MgO	4.14	**4.20**	4.02	4.04	3.86	3.97	3.48	3.95	3.28	3.50	3.99	4.06	3.74	3.83	3.65	3.24
CaO	2.11	**1.97**	1.95	1.89	1.92	1.85	1.84	1.87	1.83	1.92	1.89	1.84	1.78	1.83	1.86	1.84
MnO	1.33	**1.34**	1.41	1.35	1.30	1.40	1.39	1.38	1.32	1.45	1.41	1.38	1.43	1.36	1.41	1.44
FeO	33.78	**33.13**	34.42	33.76	33.67	34.32	34.45	34.18	34.84	34.71	34.09	34.03	34.28	34.61	34.81	34.75
total	100.67	**100.78**	100.79	100.99	100.31	100.70	100.19	100.79	100.11	100.72	100.64	100.93	99.53	100.16	99.51	99.67
Formula (O=24)																
Si	5.95	**5.99**	5.91	5.96	5.96	5.92	5.94	5.95	5.94	5.96	5.92	5.94	5.94	5.92	5.92	5.94
Ti	0.00	**0.00**	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	3.97	**4.01**	3.97	4.00	4.01	3.99	4.01	3.98	3.99	3.97	4.01	4.00	3.95	3.96	3.93	3.97
Cr	0.00	**0.00**	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	**0.09**	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.09	0.09	0.09	0.09	0.09	0.10	0.10
Mg	0.98	**0.99**	0.96	0.95	0.92	0.94	0.83	0.94	0.79	0.83	0.95	0.96	0.90	0.92	0.88	0.78
Ca	0.36	**0.33**	0.33	0.32	0.33	0.32	0.32	0.32	0.32	0.33	0.32	0.31	0.31	0.32	0.32	0.32
Mn	0.18	**0.18**	0.19	0.18	0.18	0.19	0.19	0.19	0.18	0.20	0.19	0.19	0.20	0.19	0.19	0.20
Fe^{2+}	4.49	**4.38**	4.59	4.47	4.49	4.58	4.62	4.55	4.69	4.64	4.54	4.51	4.64	4.65	4.73	4.70
total	16.02	**15.96**	16.05	15.98	15.98	16.04	16.01	16.01	16.01	16.01	16.03	16.01	16.03	16.05	16.07	16.02
X_{Mg}	0.18	**0.18**	0.17	0.18	0.17	0.17	0.15	0.17	0.14	0.15	0.17	0.18	0.16	0.16	0.16	0.14
Grs	6.0	**5.7**	5.5	5.4	5.6	5.2	5.3	5.3	5.3	5.5	5.4	5.2	5.1	5.2	5.3	5.3
Alm	74.7	**74.5**	75.6	75.5	76.0	76.0	77.6	75.9	78.5	77.3	75.7	75.6	76.7	76.6	77.2	78.4
Sps	3.0	**3.0**	3.1	3.0	3.0	3.1	3.2	3.1	3.0	3.3	3.2	3.1	3.2	3.1	3.2	3.3
Prp	16.3	**16.8**	15.7	16.1	15.5	15.6	13.9	15.6	13.2	13.9	15.8	16.1	14.9	15.1	14.4	13.0

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	* **Orue**	Orue	Orue	Orue	Orue	Orue	* **Orue**	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	**Grt-Cpx amphibolite**	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	**Grt-Cpx amphibolite**	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite
Sample	191-A-98	191-A-98	191-A-98	**191-B-98**	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	**191-B-98**	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98
Analysis	grt1	grt1	grt1	**grt 3**	grt 3	grt 3	grt 3	grt 3	grt 3	**grt 3**	grt 3	grt 3	grt 3	grt 3	grt 3
Point	57	59	60	**1**	2	4	6	8	9	**10**	11	12	13	14	15
Position	→	→	rim	rim	←	←	←	←	←	←	←	←	←	←	core
SiO_2	36.83	36.79	35.98	**36.78**	37.37	37.44	37.54	38.06	37.67	**37.75**	37.73	37.80	38.09	37.45	37.45
TiO_2	0.05	0.00	0.04	**0.06**	0.10	0.05	0.04	0.00	0.05	**0.04**	0.08	0.07	0.08	0.02	0.05
Al_2O_3	21.12	20.83	20.63	**21.00**	21.00	20.88	21.05	21.27	21.05	**21.21**	21.06	21.11	20.85	21.03	20.92
Cr_2O_3	0.00	0.00	0.03	**0.03**	0.01	0.00	0.00	0.00	0.03	**0.00**	0.00	0.01	0.02	0.02	0.00
Fe_2O_3	0.80	0.81	0.81	**0.65**	0.65	0.65	0.64	0.63	0.62	**0.60**	0.61	0.61	0.62	0.62	0.61
MgO	3.43	2.69	2.17	**2.27**	2.53	2.45	2.66	2.68	2.49	**2.55**	2.55	2.50	2.60	2.79	2.57
CaO	1.84	1.79	1.80	**8.27**	8.06	8.05	8.65	8.84	9.42	**9.94**	9.97	10.03	9.41	9.62	9.33
MnO	1.46	1.71	1.90	**2.03**	1.97	1.98	1.87	1.96	1.91	**2.00**	1.82	2.01	1.95	2.05	1.97
FeO	35.22	35.58	35.84	**28.56**	28.74	28.63	28.33	27.88	27.55	**26.58**	26.91	26.80	27.22	27.31	27.12
total	100.74	100.20	99.21	**99.65**	100.43	100.12	100.78	101.33	100.81	**100.68**	100.72	100.94	100.84	100.91	100.03
Formula (O=24)															
Si	5.90	5.95	5.91	**5.91**	5.95	5.97	5.94	5.97	5.95	**5.96**	5.96	5.96	6.00	5.92	5.96
Ti	0.01	0.00	0.00	**0.01**	0.01	0.01	0.01	0.00	0.01	**0.01**	0.01	0.01	0.01	0.00	0.01
Al	3.99	3.97	3.99	**3.98**	3.94	3.93	3.93	3.94	3.92	**3.94**	3.92	3.92	3.87	3.92	3.92
Cr	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.10	0.10	0.10	**0.08**	0.08	0.08	0.08	0.07	0.07	**0.07**	0.07	0.07	0.07	0.07	0.07
Mg	0.82	0.65	0.53	**0.54**	0.60	0.58	0.63	0.63	0.59	**0.60**	0.60	0.59	0.61	0.66	0.61
Ca	0.32	0.31	0.32	**1.42**	1.37	1.38	1.47	1.49	1.60	**1.68**	1.69	1.69	1.59	1.63	1.59
Mn	0.20	0.23	0.26	**0.28**	0.27	0.27	0.25	0.26	0.26	**0.27**	0.24	0.27	0.26	0.27	0.27
Fe^{2+}	4.72	4.81	4.92	**3.84**	3.82	3.82	3.75	3.66	3.64	**3.51**	3.55	3.53	3.59	3.61	3.61
total	16.05	16.02	16.04	**16.05**	16.04	16.02	16.05	16.02	16.04	**16.03**	16.04	16.04	16.01	16.08	16.04
X_{Mg}	0.15	0.12	0.10	**0.12**	0.14	0.13	0.14	0.15	0.14	**0.15**	0.14	0.14	0.15	0.15	0.14
Grs	5.2	5.2	5.3	**23.4**	22.7	22.8	24.1	24.6	26.2	**27.7**	27.7	27.9	26.3	26.4	26.2
Alm	78.0	80.1	81.6	**63.1**	63.1	63.2	61.5	60.7	59.9	**57.9**	58.4	58.1	59.3	58.5	59.4
Sps	3.3	3.9	4.4	**4.5**	4.4	4.4	4.1	4.3	4.2	**4.4**	4.0	4.4	4.3	4.5	4.4
Prp	13.5	10.8	8.8	**8.9**	9.9	9.6	10.3	10.4	9.7	**9.9**	9.9	9.6	10.1	10.6	10.0

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite
Sample	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98
Analysis	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3
Point	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	rim
SiO_2	37.59	37.55	37.67	37.52	37.53	37.81	37.63	37.47	37.72	37.47	37.25	37.46	37.56	37.71	37.40
TiO_2	0.05	0.07	0.04	0.04	0.08	0.05	0.03	0.06	0.00	0.05	0.06	0.05	0.03	0.10	0.32
Al_2O_3	20.67	20.97	21.20	21.09	21.21	20.94	20.81	21.08	21.17	21.03	21.12	21.23	21.43	21.05	20.94
Cr_2O_3	0.04	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.05	0.03
Fe_2O_3	0.61	0.61	0.61	0.61	0.61	0.62	0.62	0.62	0.63	0.63	0.65	0.65	0.64	0.65	0.67
MgO	2.57	2.69	2.59	2.51	2.47	2.66	2.40	2.57	2.67	2.65	2.75	2.75	2.71	2.55	2.07
CaO	9.62	9.60	9.92	9.82	9.86	9.81	9.65	9.46	8.99	8.40	8.33	8.10	7.92	8.05	8.13
MnO	1.95	1.99	1.95	1.91	1.88	1.96	1.90	1.87	1.94	1.86	1.98	1.96	1.97	1.97	2.03
FeO	26.73	27.09	26.83	26.94	26.68	27.26	27.14	27.55	27.76	28.00	28.61	28.66	28.43	28.73	29.36
total	99.81	100.58	100.86	100.45	100.32	101.11	100.16	100.69	100.88	100.09	100.73	100.88	100.68	100.88	100.94
Formula (O=24)															
Si	5.99	5.94	5.94	5.94	5.94	5.96	5.98	5.93	5.95	5.96	5.91	5.93	5.94	5.97	5.94
Ti	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.04
Al	3.88	3.91	3.94	3.94	3.96	3.89	3.90	3.93	3.94	3.94	3.95	3.96	3.99	3.93	3.92
Cr	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08
Mg	0.61	0.63	0.61	0.59	0.58	0.62	0.57	0.61	0.63	0.63	0.65	0.65	0.64	0.60	0.49
Ca	1.64	1.63	1.68	1.67	1.67	1.66	1.64	1.61	1.52	1.43	1.42	1.37	1.34	1.36	1.38
Mn	0.26	0.27	0.26	0.26	0.25	0.26	0.26	0.25	0.26	0.25	0.27	0.26	0.26	0.26	0.27
Fe^{2+}	3.56	3.59	3.54	3.57	3.53	3.59	3.61	3.65	3.66	3.73	3.80	3.79	3.76	3.80	3.90
total	16.03	16.05	16.05	16.05	16.03	16.06	16.03	16.06	16.04	16.02	16.07	16.05	16.02	16.02	16.02
X_{Mg}	0.15	0.15	0.15	0.14	0.14	0.15	0.14	0.14	0.15	0.14	0.15	0.15	0.15	0.14	0.11
Grs	27.0	26.6	27.5	27.4	27.7	27.0	27.1	26.3	25.0	23.7	23.1	22.6	22.4	22.6	22.9
Alm	58.6	58.6	58.2	58.7	58.5	58.6	59.4	59.7	60.3	61.7	61.9	62.4	62.6	63.0	64.5
Sps	4.3	4.4	4.3	4.2	4.2	4.3	4.2	4.1	4.3	4.1	4.4	4.3	4.4	4.4	4.5
Prp	10.0	10.4	10.0	9.7	9.7	10.2	9.3	9.9	10.3	10.4	10.6	10.7	10.6	10.0	8.1

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99
Profile	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2
Point	1	4	5	6	7	8	9	10	11	12	13	14	16	17	18	19
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	rim	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	39.44	39.19	39.32	38.91	39.11	39.24	39.12	39.20	39.10	39.30	39.04	39.02	39.02	39.32	38.99	38.97
TiO_2	0.04	0.04	0.03	0.03	0.02	0.03	0.03	0.04	0.02	0.08	0.02	0.08	0.04	0.02	0.00	0.04
Al_2O_3	22.29	22.32	22.44	22.29	22.43	22.21	22.30	21.99	22.47	21.96	22.08	22.19	22.16	22.17	22.34	22.07
Cr_2O_3	0.05	0.04	0.02	0.01	0.00	0.00	0.00	0.06	0.02	0.00	0.03	0.00	0.04	0.02	0.00	0.02
Fe_2O_3	0.45	0.43	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.45	0.44	0.44	0.47	0.47	0.46	0.48
MgO	9.05	9.41	9.56	9.46	9.46	9.55	9.46	9.66	9.46	9.32	9.50	9.37	9.08	9.21	9.09	8.87
CaO	8.38	8.96	8.73	8.68	8.78	8.46	8.72	8.48	8.68	8.75	8.44	8.42	8.40	8.32	8.15	8.17
MnO	0.42	0.46	0.45	0.40	0.42	0.44	0.43	0.43	0.35	0.51	0.42	0.45	0.40	0.39	0.45	0.46
FeO	19.87	19.10	19.55	19.35	19.49	19.23	19.49	19.38	19.61	19.98	19.23	19.59	20.71	20.76	20.47	21.05
total	99.99	99.95	100.54	99.57	100.15	99.60	99.99	99.68	100.15	100.35	99.20	99.56	100.32	100.68	99.95	100.13
Formula (O=24)																
Si	5.98	5.94	5.93	5.92	5.92	5.96	5.93	5.96	5.92	5.95	5.96	5.94	5.93	5.94	5.93	5.94
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00
Al	3.98	3.99	3.99	4.00	4.00	3.98	3.98	3.94	4.01	3.92	3.97	3.98	3.97	3.95	4.01	3.96
Cr	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mg	2.04	2.12	2.15	2.15	2.13	2.16	2.14	2.19	2.13	2.10	2.16	2.13	2.05	2.07	2.06	2.01
Ca	1.36	1.45	1.41	1.41	1.42	1.38	1.42	1.38	1.41	1.42	1.38	1.37	1.37	1.35	1.33	1.33
Mn	0.05	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.04	0.06	0.05	0.06	0.05	0.05	0.06	0.06
Fe^{2+}	2.52	2.42	2.47	2.46	2.47	2.44	2.47	2.46	2.48	2.53	2.45	2.49	2.63	2.62	2.60	2.68
total	16.00	16.04	16.05	16.05	16.05	16.03	16.05	16.04	16.05	16.05	16.03	16.03	16.06	16.05	16.04	16.05
X_{Mg}	0.45	0.47	0.47	0.47	0.46	0.47	0.46	0.47	0.46	0.45	0.47	0.46	0.44	0.44	0.44	0.43
Grs	22.8	24.0	23.2	23.2	23.4	22.8	23.3	22.7	23.3	23.2	22.8	22.6	22.5	22.2	22.0	21.9
Alm	34.2	35.0	35.3	35.4	35.1	35.8	35.1	36.0	35.1	34.4	35.8	35.2	33.6	34.0	34.0	33.1
Sps	0.9	1.0	1.0	0.9	0.9	1.0	1.0	1.0	0.7	1.1	0.9	1.1	0.9	0.9	1.1	1.1
Prp	42.2	40.0	40.6	40.5	40.7	40.4	40.6	40.4	40.9	41.4	40.6	41.2	43.1	43.0	43.0	44.1

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99
Profile	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2
Point	22	23	24	25	26	27	31	32	34	35	37	38	39	41	42	43
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	←	←	←	←	←	←	core	→	→	→	→	→	→	→	→	→
SiO_2	39.14	39.01	39.01	38.94	38.88	39.07	38.93	38.84	38.59	38.76	38.75	38.90	38.54	38.83	38.77	38.68
TiO_2	0.04	0.00	0.05	0.04	0.03	0.04	0.06	0.01	0.05	0.10	0.04	0.08	0.02	0.00	0.07	0.04
Al_2O_3	22.15	22.05	22.34	22.01	22.14	21.86	22.01	22.14	22.10	21.89	22.08	21.80	21.79	21.97	22.07	22.00
Cr_2O_3	0.01	0.08	0.06	0.00	0.09	0.12	0.10	0.00	0.01	0.03	0.00	0.00	0.02	0.07	0.01	0.00
Fe_2O_3	0.48	0.49	0.49	0.49	0.48	0.48	0.48	0.49	0.48	0.49	0.48	0.48	0.47	0.47	0.47	0.47
MgO	8.77	8.66	8.94	8.71	8.72	8.69	8.52	8.68	8.62	8.58	8.54	8.53	8.61	8.86	9.19	9.06
CaO	7.62	7.61	7.60	7.37	7.78	7.75	8.18	7.89	7.85	8.11	8.64	8.50	8.48	8.29	8.41	8.06
MnO	0.45	0.49	0.51	0.58	0.49	0.47	0.49	0.51	0.46	0.43	0.37	0.36	0.37	0.33	0.32	0.24
FeO	21.19	21.51	21.70	21.77	21.32	21.18	21.29	21.56	21.23	21.57	21.12	21.18	20.82	20.66	20.73	20.69
total	99.85	99.90	100.70	99.91	99.93	99.66	100.06	100.12	99.39	99.96	100.02	99.83	99.12	99.48	100.04	99.24
Formula (O=24)																
Si	5.97	5.96	5.92	5.95	5.94	5.98	5.94	5.93	5.93	5.93	5.92	5.95	5.94	5.95	5.91	5.93
Ti	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00
Al	3.98	3.97	3.99	3.97	3.98	3.94	3.96	3.98	4.00	3.95	3.98	3.93	3.96	3.96	3.96	3.98
Cr	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Fe^{3+}	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05
Mg	1.99	1.97	2.02	1.98	1.98	1.98	1.94	1.97	1.97	1.96	1.94	1.94	1.98	2.02	2.09	2.07
Ca	1.24	1.25	1.23	1.21	1.27	1.27	1.34	1.29	1.29	1.33	1.41	1.39	1.40	1.36	1.37	1.32
Mn	0.06	0.06	0.07	0.07	0.06	0.06	0.06	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03
Fe^{2+}	2.70	2.75	2.75	2.78	2.72	2.71	2.72	2.75	2.73	2.76	2.70	2.71	2.68	2.65	2.64	2.65
total	16.01	16.02	16.05	16.03	16.03	16.01	16.04	16.05	16.04	16.05	16.06	16.05	16.06	16.04	16.08	16.05
X_{Mg}	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.43	0.44	0.44
Grs	20.7	20.7	20.3	20.0	21.1	21.1	22.1	21.2	21.3	21.8	23.1	22.8	22.9	22.4	22.3	21.7
Alm	33.2	32.7	33.3	32.8	32.8	32.9	32.0	32.4	32.6	32.1	31.8	31.9	32.4	33.3	34.0	34.1
Sps	1.1	1.1	1.3	1.3	1.1	1.1	1.1	1.3	1.1	1.1	0.9	0.9	0.9	0.7	0.7	0.5
Prp	45.1	45.6	45.3	46.0	45.1	45.0	44.9	45.2	45.1	45.2	44.3	44.5	43.9	43.7	43.0	43.7

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	**Epembe**
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	**Grt-Cpx granulite**	Grt-Cpx granulite	Grt-Cpx granulite	Two-Px granulite	**Two-Px granulite**
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	**311-1-99**	311-1-99	311-1-99	434-2-99	**434-2-99**
Profile	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	**grt 2**	grt 2	grt 2	grt 1	**grt 1**
Point	44	45	46	47	48	49	50	52	54	57	**58**	59	60	1	**31**
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**
Position	→	→	→	→	→	→	→	→	→	→	→	→	rim	rim	**core**
SiO_2	38.76	38.69	38.89	38.80	39.34	39.12	39.14	38.83	39.35	39.09	**39.32**	38.93	38.13	37.32	**37.79**
TiO_2	0.02	0.03	0.02	0.03	0.05	0.06	0.03	0.03	0.01	0.04	**0.00**	0.00	0.05	0.20	**0.15**
Al_2O_3	22.09	22.18	22.16	22.18	22.25	22.43	22.39	22.19	22.14	22.06	**22.37**	22.22	21.60	20.74	**21.28**
Cr_2O_3	0.03	0.00	0.04	0.02	0.02	0.04	0.00	0.05	0.06	0.02	**0.06**	0.03	0.03	0.03	**0.00**
Fe_2O_3	0.46	0.46	0.46	0.45	0.46	0.46	0.45	0.44	0.44	0.43	**0.44**	0.44	0.50	0.65	**0.62**
MgO	9.26	9.38	9.38	9.40	9.50	9.84	10.04	10.11	10.28	10.15	**10.23**	9.73	7.81	3.50	**4.54**
CaO	8.14	8.23	8.34	8.35	8.14	7.99	8.07	8.05	8.04	7.74	**7.90**	8.24	8.02	7.86	**7.58**
MnO	0.30	0.31	0.24	0.29	0.31	0.28	0.32	0.30	0.29	0.35	**0.38**	0.38	1.11	1.16	**0.50**
FeO	20.46	20.47	20.30	19.97	20.09	20.30	19.89	19.60	19.32	18.95	**19.37**	19.61	22.03	28.51	**27.13**
total	99.52	99.75	99.83	99.49	100.16	100.52	100.33	99.60	99.93	98.83	**100.07**	99.58	99.28	99.95	**99.59**
Formula (O=24)															
Si	5.92	5.90	5.92	5.92	5.95	5.91	5.91	5.90	5.95	5.96	**5.93**	5.92	5.92	5.94	**5.96**
Ti	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	**0.00**	0.00	0.01	0.02	**0.02**
Al	3.98	3.99	3.98	3.99	3.97	3.99	3.99	3.98	3.95	3.97	**3.98**	3.99	3.95	3.89	**3.96**
Cr	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	**0.01**	0.00	0.00	0.00	**0.00**
Fe^{3+}	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	**0.05**	0.05	0.06	0.08	**0.07**
Mg	2.11	2.13	2.13	2.14	2.14	2.21	2.26	2.29	2.32	2.31	**2.30**	2.21	1.81	0.83	**1.07**
Ca	1.33	1.35	1.36	1.37	1.32	1.29	1.30	1.31	1.30	1.26	**1.28**	1.34	1.33	1.34	**1.28**
Mn	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	**0.05**	0.05	0.15	0.16	**0.07**
Fe^{2+}	2.62	2.61	2.58	2.55	2.54	2.56	2.51	2.49	2.44	2.42	**2.45**	2.50	2.86	3.79	**3.58**
total	16.06	16.08	16.06	16.05	16.03	16.06	16.07	16.08	16.05	16.02	**16.05**	16.06	16.07	16.05	**16.01**
X_{Mg}	0.45	0.45	0.45	0.46	0.46	0.46	0.47	0.48	0.49	0.49	**0.48**	0.47	0.39	0.18	**0.23**
Grs	21.8	22.0	22.3	22.5	21.9	21.1	21.3	21.4	21.3	20.9	21.1	22.0	21.7	21.9	21.4
Alm	34.6	34.7	34.9	35.1	35.4	36.2	37.0	37.4	38.0	38.3	37.8	36.2	29.4	13.6	17.8
Sps	0.7	0.7	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	2.9	5.0	1.9
Prp	43.0	42.6	42.3	41.8	42.1	42.0	41.1	40.6	40.0	40.1	40.3	40.9	46.5	62.0	59.7

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe
Rock type	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	**Grt-Opx metagranit.**	Grt-Opx metagranit.	Grt-Opx metagranit.
Sample	206-B-98	206-B-98	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	**646-1-00**	646-1-00	646-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1
Point	1	61	1	2	3	4	5	9	10	11	13	17	**20**	21	22
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2
Position	rim	core	rim	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	38.29	38.49	38.41	37.95	38.07	38.34	38.01	38.16	38.42	38.36	38.03	38.12	**38.29**	38.23	38.28
TiO_2	0.09	0.03	0.05	0.04	0.04	0.01	0.00	0.02	0.05	0.04	0.00	0.03	**0.00**	0.05	0.05
Al_2O_3	21.85	21.82	21.57	21.53	21.57	21.54	21.67	21.76	21.61	21.94	21.61	21.59	**21.90**	21.72	21.81
Cr_2O_3	0.10	0.00	0.02	0.02	0.01	0.03	0.00	0.05	0.02	0.07	0.06	0.05	**0.04**	0.05	0.05
Fe_2O_3	0.66	0.66	0.66	0.66	0.65	0.66	0.67	0.66	0.65	0.66	0.66	0.65	**0.64**	0.66	0.65
MgO	7.01	7.63	7.12	7.24	7.22	7.35	7.40	7.59	7.76	7.63	7.85	7.95	**8.25**	8.13	7.99
CaO	2.44	2.11	2.64	2.32	2.40	2.44	2.21	2.16	2.14	2.04	1.82	1.79	**2.00**	2.07	1.84
MnO	1.38	1.23	0.91	0.96	1.01	0.97	0.95	0.96	0.84	1.03	0.92	0.96	**1.08**	0.82	0.95
FeO	29.23	29.32	29.14	29.06	28.87	29.00	29.53	28.91	28.84	28.94	29.06	28.68	**28.12**	29.10	28.75
total	101.05	101.30	100.52	99.78	99.85	100.32	100.45	100.27	100.33	100.72	100.01	99.80	**100.31**	100.83	100.37
Formula (O=24)															
Si	5.93	5.94	5.97	5.95	5.96	5.97	5.92	5.94	5.97	5.94	5.93	5.95	**5.93**	5.92	5.94
Ti	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	**0.00**	0.01	0.01
Al	3.99	3.97	3.95	3.98	3.98	3.95	3.98	3.99	3.95	4.00	3.97	3.97	**4.00**	3.96	3.99
Cr	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	**0.01**	0.01	0.01
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	**0.07**	0.08	0.08
Mg	1.62	1.76	1.65	1.69	1.68	1.71	1.72	1.76	1.80	1.76	1.83	1.85	**1.90**	1.88	1.85
Ca	0.41	0.35	0.44	0.39	0.40	0.41	0.37	0.36	0.36	0.34	0.30	0.30	**0.33**	0.34	0.30
Mn	0.18	0.16	0.12	0.13	0.13	0.13	0.13	0.13	0.11	0.13	0.12	0.13	**0.14**	0.11	0.13
Fe^{2+}	3.79	3.78	3.79	3.81	3.78	3.77	3.85	3.76	3.75	3.75	3.79	3.74	**3.64**	3.77	3.73
total	16.02	16.04	16.01	16.02	16.01	16.01	16.05	16.02	16.01	16.01	16.04	16.02	**16.03**	16.06	16.02
X_{Mg}	0.30	0.32	0.30	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.33	0.33	**0.34**	0.33	0.33
Grs	6.8	5.8	7.3	6.5	6.7	6.8	6.1	6.0	5.9	5.7	5.0	5.0	**5.5**	5.6	5.1
Alm	27.0	29.0	27.5	28.1	28.1	28.4	28.3	29.3	29.9	29.4	30.2	30.7	**31.6**	30.8	30.8
Sps	4.7	4.0	3.1	3.3	3.4	3.2	3.2	3.2	2.7	3.4	3.0	3.1	**3.3**	2.5	3.0
Prp	63.2	62.5	63.2	63.3	63.0	62.8	63.5	62.6	62.3	62.6	62.7	62.2	**60.5**	61.8	62.1

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.
Sample	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	23	24	25	27	28	29	30	31	32	33	34	35	36	37	39	40
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	←	←	core	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	38.19	37.46	37.96	37.91	37.85	37.83	37.90	38.09	38.01	38.18	38.13	37.84	37.85	38.18	37.91	38.00
TiO_2	0.03	0.01	0.04	0.05	0.07	0.08	0.07	0.05	0.01	0.07	0.01	0.05	0.04	0.09	0.05	0.03
Al_2O_3	21.72	21.49	21.73	21.85	21.69	21.54	21.71	21.71	21.66	21.53	21.79	21.57	21.72	21.73	21.55	21.85
Cr_2O_3	0.04	0.05	0.01	0.09	0.07	0.03	0.04	0.03	0.05	0.04	0.06	0.02	0.03	0.05	0.04	0.07
Fe_2O_3	0.66	0.65	0.66	0.66	0.67	0.65	0.66	0.66	0.66	0.65	0.66	0.66	0.65	0.66	0.66	0.67
MgO	8.04	7.89	8.07	8.20	8.05	8.26	8.11	8.07	8.03	7.98	8.13	8.19	8.03	7.87	7.94	7.77
CaO	1.82	1.74	1.69	1.67	1.67	1.73	1.69	1.70	1.73	1.60	1.68	1.60	1.70	1.66	1.73	1.79
MnO	0.98	0.97	0.99	0.89	1.00	0.89	0.92	0.98	0.89	0.99	0.85	0.92	0.94	0.91	0.88	0.93
FeO	29.05	28.78	28.89	29.21	29.44	28.63	29.02	28.99	29.01	28.77	29.11	29.28	28.89	28.90	29.22	29.64
total	100.53	99.03	100.03	100.54	100.51	99.62	100.13	100.29	100.04	99.80	100.42	100.13	99.84	100.05	99.97	100.75
Formula (O=24)																
Si	5.93	5.91	5.92	5.89	5.89	5.92	5.90	5.92	5.93	5.96	5.92	5.90	5.91	5.94	5.92	5.90
Ti	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.00
Al	3.97	3.99	3.99	4.00	3.98	3.97	3.99	3.98	3.98	3.96	3.99	3.97	4.00	3.99	3.97	4.00
Cr	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	1.86	1.85	1.87	1.90	1.87	1.92	1.88	1.87	1.86	1.85	1.88	1.90	1.87	1.83	1.85	1.80
Ca	0.30	0.29	0.28	0.28	0.28	0.29	0.28	0.28	0.29	0.27	0.28	0.27	0.28	0.28	0.29	0.30
Mn	0.13	0.13	0.13	0.12	0.13	0.12	0.12	0.13	0.12	0.13	0.11	0.12	0.12	0.12	0.12	0.12
Fe^{2+}	3.77	3.80	3.77	3.79	3.83	3.74	3.78	3.77	3.78	3.75	3.78	3.82	3.77	3.76	3.82	3.85
total	16.04	16.06	16.04	16.07	16.07	16.05	16.05	16.04	16.04	16.01	16.04	16.07	16.04	16.01	16.05	16.05
X_{Mg}	0.33	0.33	0.33	0.33	0.33	0.34	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32
Grs	5.0	4.8	4.7	4.6	4.6	4.8	4.7	4.7	4.8	4.5	4.6	4.4	4.7	4.6	4.8	4.9
Alm	30.7	30.5	31.0	31.2	30.6	31.7	31.0	30.9	30.8	30.9	31.1	31.2	30.9	30.5	30.4	29.6
Sps	3.1	3.1	3.1	2.8	3.2	2.8	2.9	3.1	2.8	3.2	2.7	2.9	3.0	3.0	2.8	3.0
Prp	62.2	62.5	62.2	62.3	62.7	61.6	62.3	62.3	62.5	62.5	62.4	62.5	62.4	62.9	62.9	63.4

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.
Sample	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2
Point	41	42	43	44	46	47	48	49	1	3	4	5	6	7	9
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4
Position	→	→	→	→	→	→	→	rim	rim	←	←	←	←	←	←
SiO_2	37.78	37.88	38.02	38.56	38.10	37.76	37.51	37.93	37.25	37.65	37.33	37.52	37.63	38.05	37.99
TiO_2	0.07	0.02	0.04	0.02	0.05	0.03	0.01	0.02	0.00	0.01	0.01	0.00	0.00	0.00	0.01
Al_2O_3	21.78	21.73	21.45	21.61	21.67	21.68	21.52	21.53	21.48	21.52	21.29	21.49	21.14	21.45	21.25
Cr_2O_3	0.03	0.03	0.01	0.01	0.03	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Fe_2O_3	0.67	0.67	0.65	0.67	0.68	0.68	0.68	0.68	0.71	0.69	0.69	0.69	0.68	0.68	0.68
MgO	7.98	7.83	7.58	7.53	7.12	6.79	6.73	6.70	5.29	5.56	5.86	5.74	5.84	5.83	5.77
CaO	1.72	1.77	1.94	1.99	2.15	2.17	2.17	2.37	2.65	3.34	3.13	3.74	3.59	4.11	3.68
MnO	1.00	0.93	0.99	0.97	0.87	0.90	0.94	0.90	0.91	0.97	0.87	0.96	0.91	0.90	0.85
FeO	29.39	29.57	28.88	29.33	29.79	30.17	30.02	30.15	31.42	30.58	30.39	30.28	30.17	29.78	29.90
total	100.41	100.43	99.55	100.69	100.46	100.23	99.60	100.30	99.71	100.32	99.56	100.41	99.97	100.80	100.12
Formula (O=24)															
Si	5.88	5.90	5.96	5.98	5.94	5.92	5.92	5.94	5.92	5.93	5.92	5.90	5.94	5.95	5.98
Ti	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.00	3.99	3.96	3.95	3.98	4.00	4.00	3.97	4.02	3.99	3.98	3.99	3.93	3.95	3.94
Cr	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08
Mg	1.85	1.82	1.77	1.74	1.65	1.59	1.58	1.56	1.25	1.30	1.38	1.35	1.37	1.36	1.35
Ca	0.29	0.30	0.33	0.33	0.36	0.36	0.37	0.40	0.45	0.56	0.53	0.63	0.61	0.69	0.62
Mn	0.13	0.12	0.13	0.13	0.12	0.12	0.13	0.12	0.12	0.13	0.12	0.13	0.12	0.12	0.11
Fe^{2+}	3.83	3.85	3.79	3.80	3.88	3.95	3.96	3.95	4.18	4.03	4.03	3.99	3.99	3.89	3.93
total	16.07	16.06	16.02	16.01	16.02	16.03	16.04	16.03	16.03	16.03	16.05	16.06	16.05	16.04	16.01
X_{Mg}	0.33	0.32	0.32	0.31	0.30	0.29	0.29	0.28	0.23	0.24	0.26	0.25	0.26	0.26	0.26
Grs	4.7	4.9	5.4	5.5	6.0	6.1	6.1	6.6	7.5	9.4	8.8	10.3	10.0	11.3	10.3
Alm	30.4	29.8	29.4	29.0	27.5	26.3	26.2	25.9	20.9	21.6	22.8	22.1	22.6	22.4	22.5
Sps	3.2	3.0	3.3	3.2	3.1	3.3	3.4	3.3	4.0	3.9	3.4	3.7	3.5	3.4	3.3
Prp	62.8	63.3	63.0	63.4	64.6	65.6	65.6	65.5	69.6	66.8	66.5	65.4	65.5	64.3	65.3

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe*	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	**Grt-Opx metagranit.**	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock
Sample	**646-1-00**	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	**grt 2**	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2	grt 2
Point	**16**	17	19	21	22	23	24	27	2	3	4	5	6	7	8
Texture	**late Grt4**	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	Grt1 in Opx2	Grt1 in Opx2	Grt1 in Opx2	Grt1 in Opx2	Grt1 in Opx2	Grt1 in Opx2	Grt1 in Opx2
Position	**core**	→	→	→	→	→	→	rim	rim	←	←	←	core	→	→
SiO_2	**37.76**	37.41	37.86	37.52	37.39	37.42	37.98	37.66	37.94	37.81	37.74	37.96	37.90	37.99	38.16
TiO_2	**0.01**	0.00	0.02	0.00	0.00	0.04	0.01	0.00	0.06	0.06	0.08	0.05	0.11	0.03	0.01
Al_2O_3	**21.43**	21.31	21.36	21.51	21.40	21.22	21.04	21.35	21.82	21.72	21.70	21.75	21.85	21.99	22.03
Cr_2O_3	**0.01**	0.00	0.00	0.03	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.04	0.00
Fe_2O_3	**0.67**	0.68	0.68	0.68	0.68	0.68	0.70	0.71	0.67	0.67	0.68	0.68	0.68	0.67	0.68
MgO	**5.89**	5.73	5.85	5.63	5.64	5.59	5.41	5.09	7.90	8.03	8.29	8.21	8.43	8.29	8.18
CaO	**3.69**	3.69	3.53	3.54	3.84	3.39	3.26	3.08	0.94	0.94	0.93	0.91	0.83	0.89	0.85
MnO	**0.92**	0.92	0.93	1.00	0.87	0.94	0.91	1.01	0.96	0.94	0.94	0.98	0.90	0.84	0.91
FeO	**29.71**	29.90	30.08	30.06	29.97	30.11	30.68	31.40	29.66	29.77	29.93	29.93	29.92	29.48	29.77
total	**100.09**	99.63	100.31	99.96	99.79	99.40	99.99	100.31	99.95	99.95	100.28	100.47	100.65	100.21	100.58
Formula (O=24)															
Si	**5.94**	5.93	5.95	5.92	5.91	5.94	6.00	5.95	5.92	5.91	5.89	5.90	5.88	5.91	5.92
Ti	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Al	**3.97**	3.98	3.96	4.00	3.99	3.97	3.92	3.98	4.02	4.00	3.99	3.99	4.00	4.03	4.03
Cr	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00
Fe^{3+}	**0.08**	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	**1.38**	1.35	1.37	1.32	1.33	1.32	1.27	1.20	1.84	1.87	1.93	1.90	1.95	1.92	1.89
Ca	**0.62**	0.63	0.59	0.60	0.65	0.58	0.55	0.52	0.16	0.16	0.15	0.15	0.14	0.15	0.14
Mn	**0.12**	0.12	0.12	0.13	0.12	0.13	0.12	0.14	0.13	0.12	0.12	0.13	0.12	0.11	0.12
Fe^{2+}	**3.91**	3.96	3.95	3.97	3.97	4.00	4.05	4.15	3.87	3.89	3.90	3.89	3.88	3.83	3.86
total	**16.03**	16.05	16.03	16.03	16.05	16.03	16.00	16.02	16.02	16.04	16.07	16.06	16.07	16.03	16.03
X_{Mg}	**0.26**	0.25	0.26	0.25	0.25	0.25	0.24	0.22	0.32	0.32	0.33	0.33	0.33	0.33	0.33
Grs	10.3	10.3	9.8	9.9	10.7	9.6	9.2	8.7	2.6	2.6	2.5	2.5	2.3	2.5	2.4
Alm	22.9	22.3	22.7	22.0	21.9	22.0	21.2	20.0	64.6	64.4	63.9	64.1	63.8	63.7	64.2
Sps	3.5	3.6	3.6	3.9	3.4	3.8	3.8	4.4	2.1	2.1	2.0	2.1	1.9	1.8	2.0
Prp	64.8	65.3	65.4	65.9	65.4	66.4	67.5	69.1	30.6	31.0	31.5	31.3	32.0	32.0	31.5

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	**614-1-99**	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	grt 2	grt 2	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	9	10	1	2	4	6	7	**8**	9	11	12	14	16	17	18
Texture	Grt1 in Opx2	Grt1 in Opx2	Grt4 rim	Grt4 rim	Grt4 rim	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	rim	rim	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	38.31	38.28	37.17	37.61	37.94	37.77	37.83	**37.81**	37.89	37.77	38.10	38.00	38.28	38.35	38.46
TiO_2	0.05	0.02	0.01	0.00	0.01	0.02	0.04	**0.03**	0.09	0.08	0.03	0.05	0.09	0.02	0.01
Al_2O_3	21.96	21.94	21.57	21.75	21.87	21.77	21.89	**21.80**	21.72	21.86	22.07	22.01	21.95	22.16	22.07
Cr_2O_3	0.00	0.00	0.00	0.00	0.05	0.00	0.00	**0.00**	0.05	0.03	0.03	0.00	0.00	0.02	0.01
Fe_2O_3	0.67	0.67	0.70	0.70	0.70	0.70	0.70	**0.69**	0.67	0.68	0.67	0.67	0.67	0.66	0.65
MgO	8.63	8.34	6.41	6.94	6.66	6.87	7.42	**7.39**	7.96	7.89	8.31	8.35	8.56	8.82	9.26
CaO	0.88	1.08	1.28	1.14	1.08	0.85	0.91	**0.90**	0.89	0.83	0.90	0.88	0.91	0.86	0.93
MnO	0.86	0.87	0.99	1.04	1.03	0.96	1.02	**0.92**	0.86	0.81	0.84	0.74	0.74	0.59	0.59
FeO	29.40	29.44	31.04	31.01	30.94	30.83	30.78	**30.53**	29.69	30.13	29.63	29.67	29.39	29.21	28.62
total	100.76	100.64	99.17	100.19	100.28	99.77	100.58	**100.07**	99.81	100.08	100.57	100.38	100.58	100.69	100.60
Formula (O=24)															
Si	5.92	5.92	5.91	5.91	5.94	5.94	5.90	**5.92**	5.92	5.90	5.90	5.90	5.92	5.91	5.92
Ti	0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.01	0.01	0.00	0.01	0.01	0.00	0.00
Al	4.00	4.00	4.04	4.03	4.04	4.04	4.02	**4.02**	4.00	4.03	4.03	4.03	4.00	4.03	4.00
Cr	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	**0.08**	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	1.99	1.92	1.52	1.62	1.55	1.61	1.73	**1.72**	1.85	1.84	1.92	1.93	1.97	2.03	2.12
Ca	0.15	0.18	0.22	0.19	0.18	0.14	0.15	**0.15**	0.15	0.14	0.15	0.15	0.15	0.14	0.15
Mn	0.11	0.11	0.13	0.14	0.14	0.13	0.13	**0.12**	0.11	0.11	0.11	0.10	0.10	0.08	0.08
Fe^{2+}	3.80	3.81	4.13	4.07	4.05	4.05	4.02	**4.00**	3.88	3.94	3.84	3.85	3.80	3.77	3.68
total	16.04	16.03	16.03	16.04	15.99	16.00	16.04	**16.02**	16.02	16.04	16.04	16.04	16.03	16.03	16.04
X_{Mg}	0.34	0.34	0.27	0.29	0.28	0.28	0.30	**0.30**	0.32	0.32	0.33	0.33	0.34	0.35	0.37
Grs	2.4	3.0	3.6	3.2	3.1	2.4	2.5	**2.5**	2.5	2.3	2.5	2.4	2.5	2.4	2.5
Alm	62.8	63.2	68.8	67.6	68.4	68.3	66.6	**66.7**	64.7	65.4	63.8	63.9	63.1	62.6	61.0
Sps	1.9	1.9	2.2	2.3	2.3	2.2	2.2	**2.0**	1.9	1.8	1.8	1.6	1.6	1.3	1.3
Prp	32.9	31.9	25.3	26.9	26.2	27.1	28.6	**28.8**	30.9	30.5	31.9	32.1	32.8	33.7	35.2

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	22	23	24	26	27	28	30	31	34	35	36	37	38	39	41	42
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	38.61	38.76	38.50	38.67	38.66	38.67	38.72	39.02	39.24	39.33	38.98	38.83	38.86	39.68	38.99	38.59
TiO_2	0.05	0.02	0.09	0.05	0.08	0.02	0.01	0.06	0.06	0.02	0.01	0.02	0.09	0.00	0.04	0.04
Al_2O_3	22.14	22.06	22.26	22.32	22.33	22.53	22.23	22.42	22.48	22.58	22.33	22.22	22.46	22.83	22.52	22.36
Cr_2O_3	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.01	0.02	0.00	0.01	0.00	0.02	0.00	0.02	0.05
Fe_2O_3	0.64	0.62	0.63	0.62	0.61	0.60	0.59	0.59	0.58	0.58	0.57	0.57	0.57	0.56	0.56	0.57
MgO	9.44	9.77	9.77	9.82	10.48	10.53	10.83	11.00	11.15	11.16	11.51	11.34	11.59	11.58	11.36	11.43
CaO	0.92	1.02	1.10	1.01	1.06	1.09	1.06	1.12	1.17	1.15	1.21	1.23	1.16	1.19	1.17	1.22
MnO	0.56	0.53	0.60	0.50	0.49	0.50	0.44	0.45	0.47	0.42	0.49	0.49	0.47	0.49	0.43	0.50
FeO	28.37	27.42	27.75	27.13	26.77	26.50	26.07	25.80	25.73	25.72	25.08	25.16	25.34	24.76	24.53	25.14
total	100.74	100.20	100.70	100.13	100.47	100.44	99.96	100.47	100.89	100.96	100.20	99.86	100.56	101.10	99.62	99.90
Formula (O=24)																
Si	5.92	5.95	5.90	5.93	5.90	5.90	5.92	5.93	5.93	5.94	5.92	5.93	5.89	5.95	5.94	5.89
Ti	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Al	4.00	3.99	4.02	4.04	4.02	4.05	4.01	4.01	4.00	4.02	4.00	4.00	4.01	4.04	4.04	4.02
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.07
Mg	2.16	2.24	2.23	2.25	2.39	2.39	2.47	2.49	2.51	2.51	2.61	2.58	2.62	2.59	2.58	2.60
Ca	0.15	0.17	0.18	0.17	0.17	0.18	0.17	0.18	0.19	0.19	0.20	0.20	0.19	0.19	0.19	0.20
Mn	0.07	0.07	0.08	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.06
Fe^{2+}	3.64	3.52	3.56	3.48	3.42	3.38	3.34	3.28	3.25	3.25	3.19	3.21	3.21	3.11	3.12	3.21
total	16.03	16.01	16.05	16.01	16.04	16.04	16.04	16.02	16.03	16.02	16.04	16.04	16.06	16.00	16.00	16.06
X_{Mg}	0.37	0.39	0.39	0.39	0.41	0.41	0.43	0.43	0.44	0.44	0.45	0.45	0.45	0.45	0.45	0.45
Grs	2.5	2.8	3.0	2.8	2.9	3.0	2.9	3.0	3.1	3.1	3.3	3.3	3.1	3.2	3.2	3.3
Alm	60.4	58.7	58.8	58.4	56.6	56.2	55.3	54.6	54.1	54.1	52.6	53.0	52.8	52.2	52.5	52.8
Sps	1.2	1.1	1.3	1.1	1.0	1.1	0.9	1.0	1.0	0.9	1.0	1.0	1.0	1.0	0.9	1.1
Prp	35.8	37.3	36.9	37.7	39.5	39.8	40.9	41.4	41.8	41.9	43.1	42.6	43.1	43.5	43.4	42.8

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	**Qtz-rich Grt-Opx**	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	**614-1-99**	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	43	46	47	48	49	50	**51**	52	55	56	57	58	59	60	61	62	
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	
Position	←	←	core	→	→	→	→	→	→	→	→	→	→	→	→	→	
SiO_2	39.23	39.27	39.01	38.91	38.97	39.13	**39.31**	38.72	39.14	39.03	39.07	39.28	39.21	38.95	39.16	39.30	
TiO_2	0.05	0.06	0.03	0.08	0.06	0.02	**0.03**	0.08	0.06	0.08	0.06	0.05	0.02	0.01	0.07	0.06	
Al_2O_3	22.39	22.77	22.68	22.58	22.54	22.57	**22.57**	22.22	22.15	22.46	22.38	22.57	22.53	22.55	22.35	22.54	
Cr_2O_3	0.01	0.01	0.00	0.04	0.01	0.00	**0.03**	0.00	0.02	0.00	0.00	0.00	0.03	0.01	0.03	0.02	
Fe_2O_3	0.57	0.56	0.57	0.56	0.57	0.57	**0.56**	0.56	0.57	0.57	0.56	0.57	0.57	0.56	0.57	0.57	
MgO	11.50	11.49	11.61	11.50	11.46	11.55	**11.63**	11.64	11.48	11.58	11.63	11.57	11.33	11.49	11.56	11.53	
CaO	1.20	1.27	1.21	1.18	1.16	1.19	**1.12**	1.19	1.18	1.17	1.18	1.13	1.17	1.12	1.13	1.05	
MnO	0.51	0.49	0.50	0.43	0.55	0.47	**0.46**	0.50	0.57	0.44	0.47	0.43	0.46	0.41	0.46	0.45	
FeO	24.95	24.86	25.31	24.80	25.05	25.15	**24.63**	24.78	24.94	25.27	24.86	25.09	25.05	24.75	24.97	24.97	
total	100.40	100.79	100.92	100.10	100.37	100.63	**100.33**	99.68	100.10	100.61	100.20	100.69	100.36	99.85	100.29	100.48	
Formula (O=24)																	
Si	5.94	5.92	5.89	5.91	5.91	5.92	**5.94**	5.91	5.95	5.91	5.93	5.93	5.94	5.92	5.94	5.94	
Ti	0.01	0.01	0.00	0.01	0.01	0.00	**0.00**	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	
Al	4.00	4.04	4.03	4.04	4.03	4.02	**4.02**	4.00	3.97	4.01	4.00	4.02	4.02	4.04	3.99	4.02	
Cr	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fe^{3+}	0.06	0.06	0.07	0.06	0.06	0.06	**0.06**	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.06	
Mg	2.60	2.58	2.61	2.60	2.59	2.60	**2.62**	2.65	2.60	2.61	2.63	2.60	2.56	2.60	2.61	2.60	
Ca	0.19	0.20	0.20	0.19	0.19	0.19	**0.18**	0.19	0.19	0.19	0.19	0.18	0.19	0.18	0.18	0.17	
Mn	0.07	0.06	0.06	0.06	0.07	0.06	**0.06**	0.06	0.07	0.06	0.06	0.06	0.06	0.05	0.06	0.06	
Fe^{2+}	3.16	3.13	3.20	3.15	3.18	3.18	**3.11**	3.16	3.17	3.20	3.15	3.17	3.17	3.15	3.17	3.16	
total	16.02	16.02	16.06	16.03	16.04	16.04	**16.01**	16.05	16.03	16.05	16.03	16.02	16.01	16.02	16.03	16.01	
X_{Mg}	0.45	0.45	0.45	0.45	0.45	0.45	**0.46**	0.46	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	
Grs	3.2	3.4	3.2	3.2	3.1	3.2	**3.0**	3.2	3.2	3.1	3.2	3.0	3.2	3.0	3.1	2.8	
Alm	52.5	52.4	52.7	52.5	52.7	52.7	**52.1**	52.1	52.5	52.8	52.3	52.7	53.1	52.6	52.6	52.8	
Sps	1.1	1.1	1.1	0.9	1.2	1.0	**1.0**	1.1	1.2	0.9	1.0	0.9	1.0	0.9	1.0	1.0	
Prp	43.1	43.1	43.1	43.4	43.0	43.1	**43.9**	43.6	43.1	43.1	43.6	43.3	42.8	43.5	43.4	43.4	

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	64	66	67	68	69	70	71	72	73	76	77	79	80	83	84	85
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	39.14	38.94	39.07	39.08	38.70	38.67	38.69	39.08	38.46	38.58	38.44	38.14	38.47	38.49	38.40	38.42
TiO_2	0.02	0.04	0.00	0.00	0.02	0.03	0.10	0.14	0.03	0.06	0.07	0.01	0.00	0.01	0.02	0.03
Al_2O_3	22.52	22.43	22.39	22.44	22.22	22.32	22.51	22.29	22.29	22.34	22.30	22.17	22.05	22.09	22.24	22.08
Cr_2O_3	0.00	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.07	0.01	0.00	0.00
Fe_2O_3	0.58	0.58	0.59	0.59	0.60	0.60	0.61	0.61	0.61	0.61	0.63	0.63	0.63	0.63	0.64	0.64
MgO	11.51	11.13	10.88	10.98	10.83	10.55	10.32	10.19	9.95	9.98	10.05	9.79	9.62	9.51	9.47	9.12
CaO	1.09	1.08	1.06	1.05	1.04	1.01	1.04	1.01	0.99	1.06	0.97	0.92	0.92	0.95	0.93	0.94
MnO	0.42	0.47	0.45	0.46	0.43	0.49	0.49	0.48	0.54	0.53	0.53	0.53	0.48	0.59	0.58	0.60
FeO	25.53	25.66	26.04	26.18	26.46	26.33	27.09	26.86	26.75	27.06	27.66	27.87	27.87	27.76	28.16	28.38
total	100.80	100.34	100.50	100.79	100.30	99.99	100.84	100.65	99.63	100.22	100.67	100.07	100.11	100.04	100.43	100.20
Formula (O=24)																
Si	5.92	5.92	5.94	5.93	5.91	5.92	5.89	5.95	5.93	5.92	5.89	5.88	5.93	5.93	5.91	5.93
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Al	4.01	4.02	4.01	4.01	4.00	4.03	4.04	4.00	4.05	4.04	4.02	4.03	4.00	4.01	4.03	4.02
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Mg	2.59	2.52	2.46	2.48	2.46	2.41	2.34	2.31	2.28	2.28	2.29	2.25	2.21	2.19	2.17	2.10
Ca	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.17	0.16	0.15	0.15	0.16	0.15	0.15
Mn	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.06	0.08	0.08	0.08
Fe^{2+}	3.23	3.26	3.31	3.32	3.38	3.37	3.45	3.42	3.45	3.47	3.54	3.60	3.59	3.58	3.62	3.66
total	16.04	16.03	16.02	16.04	16.05	16.03	16.04	16.00	16.01	16.02	16.06	16.06	16.03	16.02	16.04	16.02
X_{Mg}	0.45	0.44	0.43	0.43	0.42	0.42	0.40	0.40	0.40	0.40	0.39	0.38	0.38	0.38	0.37	0.36
Grs	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.7	2.9	2.6	2.5	2.5	2.6	2.5	2.6
Alm	53.3	54.2	55.1	55.0	55.7	56.1	57.3	57.4	57.8	57.9	58.4	59.3	59.7	59.7	60.2	61.1
Sps	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.2	1.1	1.1	1.1	1.0	1.3	1.3	1.3
Prp	42.9	41.9	41.0	41.1	40.6	40.1	38.9	38.8	38.3	38.1	37.8	37.1	36.7	36.4	36.1	35.0

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	**Qtz-rich**	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich
	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	**Grt-Opx rock**	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	**614-1-99**	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4
Point	86	87	89	90	91	92	93	94	**95**	1	2	3	6	9	11
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	Grt4 rim	Grt4 rim	**Grt4 rim**	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4
Position	→	→	→	→	→	→	→	→	**rim**	rim	←	←	←	←	←
SiO_2	38.40	37.71	38.20	38.09	38.20	38.46	37.88	38.13	**37.92**	36.96	37.50	36.96	37.13	37.47	37.62
TiO_2	0.05	0.00	0.04	0.00	0.04	0.04	0.00	0.03	**0.03**	0.03	0.03	0.02	0.01	0.00	0.00
Al_2O_3	22.11	21.84	22.13	21.86	21.95	22.29	22.10	22.01	**21.78**	21.07	21.17	21.26	21.42	21.63	21.38
Cr_2O_3	0.00	0.07	0.01	0.00	0.03	0.01	0.02	0.00	**0.00**	0.04	0.00	0.00	0.00	0.00	0.02
Fe_2O_3	0.64	0.65	0.66	0.66	0.67	0.67	0.69	0.68	**0.69**	0.73	0.73	0.74	0.74	0.73	0.73
MgO	9.15	8.85	8.83	8.79	8.39	8.30	7.93	7.62	**6.81**	5.21	5.42	5.45	5.49	5.39	5.54
CaO	0.91	0.92	0.96	0.91	0.87	0.92	1.08	1.28	**1.47**	1.30	1.34	1.35	1.32	1.36	1.43
MnO	0.66	0.60	0.70	0.78	0.74	0.78	0.77	0.79	**0.90**	1.41	1.33	1.31	1.30	1.40	1.40
FeO	28.33	28.56	29.13	29.28	29.61	29.64	30.41	30.02	**30.44**	32.17	32.36	32.64	32.61	32.36	32.36
total	100.26	99.19	100.65	100.37	100.49	101.12	100.87	100.55	**100.04**	98.92	99.88	99.73	100.02	100.34	100.49
Formula (O=24)															
Si	5.92	5.90	5.90	5.91	5.92	5.92	5.88	5.92	**5.94**	5.94	5.96	5.90	5.90	5.93	5.94
Ti	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.02	4.03	4.03	3.99	4.01	4.04	4.04	4.03	**4.02**	3.99	3.97	4.00	4.01	4.03	3.98
Cr	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	**0.08**	0.09	0.09	0.09	0.09	0.09	0.09
Mg	2.10	2.06	2.03	2.03	1.94	1.90	1.83	1.76	**1.59**	1.25	1.28	1.30	1.30	1.27	1.30
Ca	0.15	0.15	0.16	0.15	0.14	0.15	0.18	0.21	**0.25**	0.22	0.23	0.23	0.22	0.23	0.24
Mn	0.09	0.08	0.09	0.10	0.10	0.10	0.10	0.10	**0.12**	0.19	0.18	0.18	0.18	0.19	0.19
Fe^{2+}	3.66	3.74	3.76	3.80	3.84	3.81	3.95	3.90	**3.99**	4.32	4.30	4.36	4.34	4.28	4.27
total	16.02	16.05	16.05	16.06	16.03	16.02	16.06	16.02	**16.00**	16.01	16.01	16.05	16.04	16.01	16.02
X_{Mg}	0.37	0.36	0.35	0.35	0.34	0.33	0.32	0.31	**0.29**	0.22	0.23	0.23	0.23	0.23	0.23
Grs	2.5	2.6	2.6	2.5	2.4	2.5	3.0	3.6	**4.1**	3.7	3.8	3.8	3.7	3.9	4.0
Alm	61.0	61.9	62.2	62.4	63.8	63.9	65.1	65.2	**67.1**	72.2	71.8	71.9	71.8	71.7	71.1
Sps	1.4	1.3	1.5	1.7	1.6	1.7	1.7	1.7	**2.0**	3.2	3.0	2.9	2.9	3.1	3.1
Prp	35.1	34.2	33.6	33.4	32.2	31.9	30.3	29.5	**26.8**	20.9	21.4	21.4	21.5	21.3	21.7

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe*	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	**Qtz-rich Grt-Opx**	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx
Sample	614-1-99	614-1-99	614-1-99	**614-1-99**	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	grt 4	grt 4	grt 4	**grt 4**	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4
Point	12	13	14	**15**	16	18	19	20	22	23	25	26	27	28	29	30
Texture	late Grt4	late Grt4	late Grt4	**late Grt4**	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4
Position	←	←	←	**core**	→	→	→	→	→	→	→	→	→	→	→	rim
SiO_2	37.75	37.47	37.99	**37.84**	37.97	37.66	37.71	37.67	37.96	37.82	37.83	37.94	37.71	38.19	37.70	38.04
TiO_2	0.02	0.00	0.00	**0.02**	0.02	0.03	0.02	0.00	0.01	0.03	0.04	0.00	0.02	0.00	0.00	0.00
Al_2O_3	21.64	21.33	21.39	**21.63**	21.63	21.38	21.44	21.25	21.39	21.53	21.43	21.76	21.57	21.56	21.65	21.59
Cr_2O_3	0.00	0.03	0.02	**0.00**	0.00	0.00	0.05	0.03	0.05	0.04	0.00	0.02	0.01	0.00	0.03	0.00
Fe_2O_3	0.74	0.73	0.74	**0.73**	0.74	0.74	0.74	0.73	0.74	0.73	0.74	0.74	0.75	0.74	0.74	0.75
MgO	5.61	5.56	5.61	**5.61**	5.46	5.38	5.49	5.34	5.43	5.50	5.44	5.45	5.32	5.31	5.27	5.23
CaO	1.38	1.36	1.33	**1.40**	1.42	1.39	1.45	1.34	1.45	1.38	1.33	1.30	1.34	1.31	1.34	1.38
MnO	1.38	1.42	1.38	**1.38**	1.37	1.47	1.39	1.30	1.40	1.34	1.37	1.51	1.41	1.43	1.35	1.35
FeO	32.51	32.38	32.55	**32.39**	32.48	32.68	32.84	32.34	32.50	32.18	32.50	32.43	33.09	32.44	32.46	32.89
total	101.01	100.28	101.00	**100.98**	101.09	100.73	101.14	100.00	100.94	100.56	100.67	101.15	101.21	100.98	100.53	101.22
Formula (O=24)																
Si	5.93	5.93	5.97	**5.94**	5.95	5.94	5.93	5.98	5.97	5.96	5.96	5.95	5.93	5.99	5.95	5.97
Ti	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.01	3.98	3.96	**4.00**	4.00	3.98	3.97	3.97	3.96	4.00	3.98	4.02	4.00	3.99	4.03	3.99
Cr	0.00	0.00	0.00	**0.00**	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	**0.09**	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	1.31	1.31	1.31	**1.31**	1.28	1.27	1.29	1.26	1.27	1.29	1.28	1.27	1.25	1.24	1.24	1.22
Ca	0.23	0.23	0.22	**0.23**	0.24	0.24	0.24	0.23	0.24	0.23	0.22	0.22	0.23	0.22	0.23	0.23
Mn	0.18	0.19	0.18	**0.18**	0.18	0.20	0.18	0.17	0.19	0.18	0.18	0.20	0.19	0.19	0.18	0.18
Fe^{2+}	4.27	4.29	4.27	**4.25**	4.26	4.31	4.32	4.29	4.27	4.24	4.28	4.25	4.35	4.26	4.28	4.31
total	16.02	16.03	16.01	**16.01**	16.00	16.02	16.03	15.99	16.00	15.99	16.00	16.00	16.03	15.97	15.99	15.99
X_{Mg}	0.24	0.23	0.24	**0.24**	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.22	0.23	0.22	0.22
Grs	3.9	3.8	3.7	**3.9**	4.0	3.9	4.1	3.8	4.1	3.9	3.8	3.7	3.8	3.7	3.8	3.9
Alm	71.2	71.2	71.3	**71.1**	71.5	71.8	71.5	72.0	71.5	71.3	71.8	71.5	72.4	72.0	72.2	72.5
Sps	3.1	3.2	3.1	**3.1**	3.1	3.3	3.1	2.9	3.1	3.0	3.1	3.4	3.1	3.2	3.0	3.0
Prp	21.9	21.8	21.9	**21.9**	21.4	21.1	21.3	21.2	21.3	21.7	21.4	21.4	20.7	21.0	20.9	20.5

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	**Qtz-rich Grt-Opx**	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx	Qtz-rich Grt-Opx
Sample	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	**587-4-99**	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	2	3	5	11	14	15	18	26	**29**	36	38	39	40	42	43	44
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	←	←	←	←	←	←	←	←	←	←	←	←	core	→	→	→
SiO_2	38.23	38.72	38.02	38.27	38.27	38.08	38.32	38.41	**38.00**	38.43	38.51	38.45	38.23	38.15	38.23	38.03
TiO_2	0.05	0.04	0.06	0.06	0.05	0.00	0.03	0.02	**0.011**	0.00	0.03	0.00	0.03	0.02	0.00	0.00
Al_2O_3	22.04	22.02	22.04	21.86	21.75	21.99	22.11	22.05	**21.67**	21.93	21.85	22.15	22.15	21.88	22.04	21.90
Cr_2O_3	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	**0.00**	0.00	0.03	0.03	0.07	0.03	0.04	0.00
Fe_2O_3	0.67	0.66	0.67	0.66	0.67	0.66	0.65	0.65	**0.64**	0.66	0.64	0.66	0.66	0.66	0.66	0.65
MgO	8.62	8.39	8.50	8.31	8.49	8.36	8.36	8.45	**8.66**	8.57	8.40	8.62	8.75	8.46	8.59	8.53
CaO	1.05	1.14	1.21	1.27	1.27	1.32	1.37	1.37	**1.26**	1.29	1.37	1.34	1.34	1.37	1.39	1.40
MnO	0.74	0.62	0.74	0.74	0.75	0.81	0.82	0.67	**0.64**	0.72	0.70	0.70	0.60	0.76	0.75	0.69
FeO	29.52	29.18	29.34	28.95	29.42	29.13	28.65	28.88	**28.16**	28.96	28.44	29.16	29.09	28.95	29.04	28.58
total	100.93	100.77	100.56	100.11	100.67	100.36	100.31	100.50	**99.04**	100.55	99.97	101.12	100.92	100.29	100.73	99.78
Formula (O=24)																
Si	5.90	5.96	5.89	5.94	5.92	5.91	5.93	5.93	**5.94**	5.94	5.97	5.91	5.89	5.92	5.90	5.92
Ti	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.01	4.00	4.02	4.00	3.97	4.02	4.03	4.01	**4.00**	3.99	3.99	4.01	4.02	4.00	4.01	4.02
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	**0.08**	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	1.98	1.93	1.96	1.92	1.96	1.93	1.93	1.95	**2.02**	1.97	1.94	1.98	2.01	1.96	1.98	1.98
Ca	0.17	0.19	0.20	0.21	0.21	0.22	0.23	0.23	**0.21**	0.21	0.23	0.22	0.22	0.23	0.23	0.23
Mn	0.10	0.08	0.10	0.10	0.10	0.11	0.11	0.09	**0.08**	0.09	0.09	0.09	0.08	0.10	0.10	0.09
Fe^{2+}	3.81	3.76	3.80	3.76	3.81	3.78	3.71	3.73	**3.69**	3.74	3.69	3.75	3.75	3.75	3.75	3.72
total	16.05	16.00	16.06	16.01	16.05	16.04	16.01	16.02	**16.02**	16.03	15.99	16.04	16.05	16.04	16.05	16.03
X_{Mg}	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	**0.35**	0.35	0.34	0.35	0.35	0.34	0.35	0.35
Grs	2.9	3.2	3.3	3.5	3.5	3.6	3.8	3.8	**3.5**	3.5	3.8	3.7	3.6	3.8	3.8	3.9
Alm	62.9	63.1	62.7	62.7	62.7	62.6	62.1	62.3	**61.4**	62.1	62.0	62.1	61.9	62.2	61.9	61.8
Sps	1.6	1.4	1.6	1.6	1.6	1.8	1.8	1.5	**1.4**	1.6	1.5	1.5	1.3	1.7	1.6	1.5
Prp	32.7	32.4	32.4	32.1	32.2	32.0	32.3	32.5	**33.7**	32.8	32.6	32.7	33.2	32.4	32.7	32.8

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock
Sample	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 3	grt 3	grt 3	grt 3	grt 3
Point	51	54	57	65	66	68	76	77	78	80	1	3	4	7	10
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	Grt2 in Crd2	Grt2 in Crd2	Grt2 in Crd2	Grt2 in Crd2	Grt2 in Crd2
Position	→	→	→	→	→	→	→	→	→	rim	rim	←	←	core	→
SiO_2	37.75	38.10	38.19	38.22	37.98	38.11	37.96	38.13	38.19	38.09	37.28	37.98	38.03	38.02	37.79
TiO_2	0.00	0.05	0.05	0.02	0.04	0.05	0.00	0.04	0.08	0.03	0.00	0.00	0.04	0.03	0.05
Al_2O_3	21.84	21.87	21.92	21.84	21.99	21.88	21.82	21.68	22.07	21.83	21.60	21.63	21.73	21.85	21.68
Cr_2O_3	0.04	0.00	0.00	0.02	0.01	0.04	0.03	0.04	0.02	0.02	0.00	0.00	0.00	0.00	0.00
Fe_2O_3	0.65	0.65	0.66	0.66	0.66	0.67	0.66	0.65	0.67	0.65	0.72	0.70	0.69	0.69	0.68
MgO	8.60	8.42	8.54	8.45	8.55	8.46	8.19	8.38	8.49	8.52	6.84	7.50	7.69	7.92	8.10
CaO	1.39	1.37	1.41	1.19	1.26	1.16	1.18	1.10	1.15	0.88	0.78	0.89	1.05	1.05	0.96
MnO	0.80	0.81	0.70	0.73	0.74	0.84	0.71	0.74	0.80	0.68	0.58	0.52	0.53	0.60	0.51
FeO	28.48	28.85	29.19	29.21	28.96	29.39	29.25	28.88	29.52	28.83	31.71	31.04	30.52	30.23	29.93
total	99.54	100.12	100.65	100.34	100.17	100.59	99.79	99.63	100.99	99.53	99.50	100.25	100.27	100.37	99.70
Formula (O=24)															
Si	5.90	5.92	5.91	5.93	5.90	5.90	5.92	5.95	5.89	5.94	5.90	5.94	5.93	5.92	5.92
Ti	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
Al	4.02	4.00	4.00	3.99	4.02	3.99	4.01	3.99	4.01	4.01	4.03	3.99	3.99	4.01	4.00
Cr	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.08	0.08
Mg	2.00	1.95	1.97	1.95	1.98	1.95	1.90	1.95	1.95	1.98	1.61	1.75	1.79	1.84	1.89
Ca	0.23	0.23	0.23	0.20	0.21	0.19	0.20	0.18	0.19	0.15	0.13	0.15	0.18	0.17	0.16
Mn	0.11	0.11	0.09	0.10	0.10	0.11	0.09	0.10	0.10	0.09	0.08	0.07	0.07	0.08	0.07
Fe^{2+}	3.72	3.75	3.78	3.79	3.76	3.81	3.82	3.77	3.81	3.76	4.20	4.06	3.98	3.94	3.92
total	16.05	16.04	16.05	16.03	16.05	16.05	16.03	16.01	16.05	16.01	16.04	16.03	16.03	16.03	16.04
X_{Mg}	0.35	0.34	0.34	0.34	0.34	0.34	0.33	0.34	0.34	0.34	0.28	0.30	0.31	0.32	0.33
Grs	3.8	3.8	3.8	3.3	3.5	3.2	3.3	3.1	3.1	2.5	2.2	2.5	2.9	2.9	2.7
Alm	61.4	62.1	62.2	62.8	62.2	62.8	63.5	62.8	62.9	62.9	69.7	67.4	66.2	65.3	64.9
Sps	1.7	1.8	1.5	1.6	1.6	1.8	1.6	1.6	1.7	1.5	1.3	1.1	1.2	1.3	1.1
Prp	33.0	32.3	32.4	32.4	32.7	32.2	31.7	32.5	32.2	33.1	26.8	29.0	29.7	30.5	31.3

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	**587-4-99**	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	458-3-99	458-3-99	458-3-99
Profile	grt 3	grt 3	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 1	grt 1	grt1	grt1	grt1
Point	12	13	1	4	9	15	**24**	27	34	43	45	50	1	2	4
Texture	Grt2 in Crd2	Grt2 in Crd2	late Grt4	late Grt4	late Grt4	late Grt4	**late Grt4**	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	rim	rim	←	←	←	←	core	→	→	→	rim	rim	←	←
SiO_2	38.46	38.34	38.08	38.10	37.84	38.06	**38.14**	38.08	38.33	37.75	38.01	37.73	37.92	38.09	38.24
TiO_2	0.02	0.00	0.00	0.00	0.00	0.02	**0.00**	0.02	0.02	0.00	0.00	0.01	0.00	0.00	0.05
Al_2O_3	21.91	21.87	21.64	21.89	21.88	22.02	**21.87**	21.80	22.06	21.88	21.79	21.89	21.39	21.48	21.66
Cr_2O_3	0.00	0.00	0.00	0.00	0.00	0.01	**0.01**	0.00	0.00	0.00	0.01	0.00	0.10	0.12	0.13
Fe_2O_3	0.68	0.69	0.71	0.70	0.70	0.71	**0.71**	0.70	0.70	0.71	0.71	0.71	0.61	0.62	0.63
MgO	8.08	8.00	7.88	7.58	7.65	7.67	**7.75**	7.64	7.83	7.45	7.46	6.91	8.52	9.02	9.29
CaO	1.10	0.99	0.61	0.87	0.99	0.81	**0.84**	0.95	0.67	0.59	0.66	0.93	1.72	1.38	1.27
MnO	0.48	0.67	0.48	0.49	0.57	0.56	**0.55**	0.58	0.58	0.55	0.50	0.57	0.88	0.80	0.83
FeO	29.82	30.24	31.37	31.00	30.84	31.16	**31.14**	30.92	30.78	31.50	31.24	31.44	27.09	27.24	27.86
total	100.54	100.80	100.76	100.63	100.45	101.01	**100.99**	100.69	100.96	100.43	100.40	100.18	98.24	98.74	99.96
Formula (O=24)															
Si	5.95	5.94	5.92	5.93	5.90	5.90	**5.92**	5.92	5.93	5.90	5.93	5.92	5.97	5.96	5.92
Ti	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Al	4.00	3.99	3.97	4.01	4.02	4.03	**4.00**	4.00	4.02	4.03	4.01	4.05	3.97	3.96	3.95
Cr	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	**0.08**	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07
Mg	1.87	1.85	1.83	1.76	1.78	1.77	**1.79**	1.77	1.81	1.74	1.74	1.61	2.00	2.10	2.15
Ca	0.18	0.16	0.10	0.14	0.16	0.13	**0.14**	0.16	0.11	0.10	0.11	0.16	0.29	0.23	0.21
Mn	0.06	0.09	0.06	0.06	0.07	0.07	**0.07**	0.08	0.08	0.07	0.07	0.08	0.12	0.11	0.11
Fe^{2+}	3.86	3.92	4.08	4.03	4.02	4.04	**4.04**	4.02	3.98	4.12	4.08	4.12	3.57	3.56	3.61
total	16.00	16.03	16.05	16.02	16.05	16.04	**16.04**	16.03	16.01	16.04	16.02	16.02	16.00	16.01	16.05
X_{Mg}	0.33	0.32	0.31	0.30	0.31	0.31	**0.31**	0.31	0.31	0.30	0.30	0.28	0.36	0.37	0.37
Grs	3.0	2.7	1.7	2.4	2.7	2.2	**2.3**	2.6	1.8	1.6	1.8	2.6	4.9	3.8	3.5
Alm	64.7	65.1	67.2	67.2	66.6	67.1	**66.9**	66.7	66.7	68.3	68.1	69.1	59.7	59.4	59.4
Sps	1.1	1.5	1.0	1.1	1.2	1.2	**1.2**	1.3	1.3	1.2	1.1	1.3	2.0	1.8	1.8
Prp	31.2	30.7	30.1	29.3	29.4	29.5	**29.6**	29.4	30.2	28.8	29.0	27.0	33.5	35.0	35.3

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99
Profile	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1
Point	5	6	8	11	12	13	15	18	19	24	28	29	32	37	40	48
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
SiO_2	38.19	38.23	38.06	38.25	38.09	38.84	38.48	38.63	38.98	38.25	38.32	38.14	38.62	38.67	38.67	38.47
TiO_2	0.00	0.00	0.02	0.04	0.02	0.00	0.02	0.02	0.00	0.04	0.02	0.03	0.00	0.01	0.04	0.04
Al_2O_3	21.58	21.99	21.99	21.98	21.83	21.77	22.02	21.78	21.95	22.01	21.94	22.10	22.02	22.16	22.32	22.20
Cr_2O_3	0.10	0.12	0.12	0.12	0.12	0.17	0.08	0.10	0.09	0.09	0.06	0.13	0.13	0.11	0.08	0.09
Fe_2O_3	0.63	0.63	0.62	0.63	0.62	0.62	0.62	0.62	0.61	0.61	0.61	0.59	0.60	0.60	0.58	0.59
MgO	9.25	9.24	9.22	9.35	9.42	9.36	9.57	9.65	9.41	9.90	10.12	10.27	10.53	10.47	10.81	10.84
CaO	1.18	1.18	1.12	1.09	1.13	1.10	1.12	1.13	1.39	1.11	1.18	1.21	1.19	1.20	1.24	1.23
MnO	0.83	0.83	0.84	0.88	0.84	0.95	0.83	0.80	0.85	0.72	0.72	0.74	0.72	0.62	0.61	0.68
FeO	27.60	27.98	27.50	27.62	27.39	27.25	27.41	27.38	27.00	26.80	26.83	26.17	26.37	26.28	25.61	25.94
total	99.37	100.18	99.51	99.95	99.46	100.06	100.15	100.13	100.27	99.53	99.79	99.38	100.18	100.10	99.96	100.06
Formula (O=24)																
Si	5.94	5.91	5.91	5.91	5.92	5.98	5.93	5.95	5.98	5.91	5.91	5.89	5.92	5.92	5.91	5.89
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Al	3.96	4.00	4.02	4.01	4.00	3.95	4.00	3.95	3.97	4.01	3.99	4.02	3.98	4.00	4.02	4.01
Cr	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Mg	2.15	2.13	2.14	2.15	2.18	2.15	2.20	2.22	2.15	2.28	2.33	2.36	2.40	2.39	2.46	2.47
Ca	0.20	0.20	0.19	0.18	0.19	0.18	0.18	0.19	0.23	0.18	0.19	0.20	0.20	0.20	0.20	0.20
Mn	0.11	0.11	0.11	0.12	0.11	0.12	0.11	0.10	0.11	0.09	0.09	0.10	0.09	0.08	0.08	0.09
Fe^{2+}	3.59	3.62	3.57	3.57	3.56	3.51	3.53	3.53	3.46	3.47	3.46	3.38	3.38	3.37	3.27	3.32
total	16.03	16.05	16.03	16.03	16.04	15.99	16.03	16.03	15.99	16.04	16.05	16.05	16.05	16.04	16.03	16.06
X_{Mg}	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.39	0.38	0.40	0.40	0.41	0.42	0.42	0.43	0.43
Grs	3.3	3.2	3.1	3.0	3.1	3.0	3.1	3.1	3.8	3.1	3.2	3.3	3.2	3.3	3.4	3.3
Alm	59.4	59.8	59.5	59.3	58.9	58.9	58.7	58.4	58.2	57.5	57.0	56.0	55.7	55.8	54.4	54.6
Sps	1.8	1.8	1.8	1.9	1.8	2.1	1.8	1.7	1.9	1.6	1.5	1.6	1.5	1.3	1.3	1.5
Prp	35.5	35.2	35.6	35.8	36.1	36.0	36.5	36.7	36.1	37.9	38.3	39.1	39.6	39.6	40.9	40.6

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	**458-3-99**	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99
Profile	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	**grt1**	grt1	grt1	grt1	grt1	grt1
Point	49	53	54	55	59	60	63	64	65	66	**67**	68	71	73	74	75
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	←	←	←	core	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	38.82	38.22	38.32	38.60	38.64	38.71	38.49	39.31	38.80	38.44	**39.06**	38.76	38.79	38.56	38.49	38.36
TiO_2	0.03	0.03	0.01	0.02	0.01	0.02	0.05	0.02	0.01	0.01	**0.03**	0.02	0.00	0.02	0.04	0.04
Al_2O_3	22.16	21.94	22.13	22.36	22.06	22.13	22.08	22.10	22.14	22.19	**22.19**	22.06	22.20	22.17	22.25	21.86
Cr_2O_3	0.07	0.08	0.05	0.09	0.06	0.09	0.04	0.14	0.09	0.06	**0.08**	0.09	0.09	0.06	0.05	0.11
Fe_2O_3	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.58	0.60	0.59	**0.57**	0.58	0.59	0.59	0.59	0.59
MgO	10.88	10.72	10.69	10.77	10.76	10.65	10.60	10.75	10.68	10.75	**11.00**	10.66	10.84	10.82	10.78	10.48
CaO	1.19	1.17	1.26	1.24	1.23	1.33	1.26	1.27	1.22	1.27	**1.26**	1.20	1.21	1.21	1.24	1.24
MnO	0.62	0.62	0.58	0.66	0.63	0.64	0.63	0.71	0.58	0.71	**0.64**	0.71	0.64	0.66	0.70	0.70
FeO	26.06	25.85	25.95	26.02	25.97	25.81	26.13	25.49	26.28	25.86	**25.30**	25.54	26.19	25.86	25.83	25.85
total	100.41	99.22	99.59	100.35	99.95	99.96	99.88	100.38	100.40	99.87	**100.12**	99.61	100.55	99.94	99.96	99.23
Formula (O=24)																
Si	5.92	5.90	5.90	5.89	5.92	5.93	5.91	5.98	5.92	5.90	**5.95**	5.95	5.91	5.91	5.90	5.93
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01	0.00
Al	3.98	3.99	4.01	4.02	3.98	3.99	3.99	3.96	3.98	4.01	**3.98**	3.99	3.99	4.00	4.02	3.98
Cr	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	**0.07**	0.07	0.07	0.07	0.07	0.07
Mg	2.47	2.47	2.45	2.45	2.46	2.43	2.43	2.44	2.43	2.46	**2.50**	2.44	2.46	2.47	2.46	2.41
Ca	0.19	0.19	0.21	0.20	0.20	0.22	0.21	0.21	0.20	0.21	**0.21**	0.20	0.20	0.20	0.20	0.20
Mn	0.08	0.08	0.08	0.09	0.08	0.08	0.08	0.09	0.07	0.09	**0.08**	0.09	0.08	0.09	0.09	0.09
Fe^{2+}	3.32	3.34	3.34	3.32	3.33	3.30	3.35	3.24	3.35	3.32	**3.22**	3.28	3.34	3.31	3.31	3.34
total	16.05	16.06	16.06	16.06	16.05	16.04	16.05	16.00	16.05	16.06	**16.02**	16.02	16.06	16.05	16.05	16.04
X_{Mg}	0.43	0.43	0.42	0.42	0.42	0.42	0.42	0.43	0.42	0.43	**0.44**	0.43	0.42	0.43	0.43	0.42
Grs	3.2	3.2	3.4	3.4	3.3	3.6	3.4	3.5	3.3	3.4	**3.4**	3.3	3.2	3.3	3.4	3.4
Alm	54.7	54.9	55.0	54.8	54.8	54.8	55.3	54.2	55.4	54.6	**53.6**	54.6	54.9	54.6	54.6	55.2
Sps	1.3	1.3	1.2	1.4	1.3	1.4	1.4	1.5	1.2	1.5	**1.4**	1.5	1.4	1.4	1.5	1.5
Prp	40.7	40.6	40.4	40.4	40.5	40.3	40.0	40.8	40.1	40.4	**41.6**	40.6	40.5	40.7	40.6	39.9

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99
Profile	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1	grt1
Point	76	78	79	82	83	84	86	87	90	91	92	93	96	97	98	99
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	38.52	38.74	38.62	39.02	38.38	38.40	38.74	38.47	38.55	38.77	38.59	38.79	38.36	38.37	38.45	38.60
TiO_2	0.00	0.01	0.04	0.02	0.06	0.05	0.00	0.02	0.04	0.02	0.01	0.04	0.02	0.03	0.03	0.00
Al_2O_3	21.93	22.16	22.20	22.25	21.72	21.87	22.06	21.76	21.94	22.15	21.96	22.05	21.87	21.98	21.90	22.02
Cr_2O_3	0.11	0.05	0.02	0.13	0.08	0.07	0.09	0.10	0.08	0.10	0.13	0.12	0.09	0.08	0.08	0.10
Fe_2O_3	0.59	0.59	0.59	0.59	0.59	0.60	0.60	0.59	0.60	0.60	0.60	0.61	0.60	0.61	0.61	0.61
MgO	10.68	10.69	10.59	10.25	9.98	10.09	10.01	9.99	10.04	10.25	10.13	10.00	10.18	10.11	10.02	9.79
CaO	1.20	1.20	1.14	1.67	1.48	1.14	1.29	1.46	1.24	1.13	1.13	1.15	1.12	1.15	1.06	1.11
MnO	0.64	0.61	0.64	0.70	0.78	0.66	0.67	0.68	0.74	0.74	0.73	0.77	0.75	0.72	0.84	0.84
FeO	26.05	25.87	25.82	25.80	25.92	26.58	26.43	25.99	26.60	26.52	26.65	26.75	26.66	27.10	26.77	26.89
total	99.72	99.91	99.65	100.42	98.99	99.46	99.89	99.06	99.82	100.28	99.92	100.28	99.65	100.16	99.76	99.96
Formula (O=24)																
Si	5.92	5.93	5.93	5.95	5.95	5.93	5.95	5.96	5.94	5.93	5.93	5.94	5.92	5.90	5.93	5.94
Ti	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	3.97	4.00	4.02	4.00	3.97	3.98	3.99	3.97	3.98	3.99	3.98	3.98	3.98	3.99	3.98	3.99
Cr	0.01	0.01	0.00	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Mg	2.45	2.44	2.42	2.33	2.31	2.32	2.29	2.31	2.30	2.34	2.32	2.28	2.34	2.32	2.30	2.25
Ca	0.20	0.20	0.19	0.27	0.25	0.19	0.21	0.24	0.20	0.19	0.19	0.19	0.18	0.19	0.18	0.18
Mn	0.08	0.08	0.08	0.09	0.10	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.09	0.11	0.11
Fe^{2+}	3.35	3.31	3.32	3.29	3.36	3.43	3.40	3.37	3.42	3.39	3.43	3.43	3.44	3.49	3.45	3.46
total	16.05	16.03	16.03	16.01	16.02	16.03	16.01	16.01	16.03	16.03	16.03	16.02	16.05	16.06	16.04	16.02
X_{Mg}	0.42	0.42	0.42	0.41	0.41	0.40	0.40	0.41	0.40	0.41	0.40	0.40	0.40	0.40	0.40	0.39
Grs	3.3	3.3	3.1	4.6	4.1	3.1	3.5	4.0	3.4	3.1	3.1	3.1	3.0	3.1	2.9	3.1
Alm	55.1	55.0	55.2	55.0	55.9	56.9	56.7	56.1	56.8	56.4	56.8	57.1	56.7	57.3	57.2	57.7
Sps	1.4	1.3	1.4	1.5	1.7	1.4	1.5	1.5	1.6	1.6	1.6	1.7	1.6	1.5	1.8	1.8
Prp	40.3	40.5	40.3	38.9	38.3	38.5	38.3	38.4	38.2	38.9	38.5	38.1	38.6	38.1	38.1	37.4

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	**Epembe***	**Epembe***	**Epembe***	**Epembe***	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	**Grt-Opx gneiss**	**Grt-Opx gneiss**	**Grt-Opx gneiss**	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	**458-3-99**	**B-634-00**	**B-634-00**	**B-634-00**	**B-634-00**	690-2-00	690-2-00	690-2-00
Profile	grt1	grt1	grt1	grt1	grt1	grt1	grt1	**grt1**	**grt1**	**grt1**	**grt1**	**grt1**	grt2	grt2	grt2
Point	102	103	104	105	106	107	108	**110**	**40**	**20**	**13**	**7**	1	2	4
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	**matrix Grt2**	**matrix Grt2**	**matrix Grt2**	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	→	→	**rim**	**core**	**close rim**	**crd+spl**	**rim**	rim	←	←
SiO_2	38.23	38.78	38.72	38.77	38.27	38.35	38.18	**38.85**	**39.11**	**38.49**	**37.96**	**37.96**	37.81	37.60	37.68
TiO_2	0.04	0.01	0.00	0.01	0.02	0.02	0.04	**0.05**	**0.05**	**0.06**	**0.07**	**0.07**	0.03	0.05	0.09
Al_2O_3	21.84	22.28	22.00	21.92	22.13	22.06	21.90	**22.26**	**22.32**	**21.95**	**21.69**	**21.66**	21.62	21.21	21.25
Cr_2O_3	0.08	0.08	0.08	0.07	0.10	0.12	0.08	**0.08**	**0.00**	**0.02**	**0.01**	**0.00**	0.10	0.13	0.01
Fe_2O_3	0.60	0.61	0.61	0.62	0.62	0.62	0.61	**0.62**	**0.57**	**0.66**	**0.66**	**0.68**	0.68	0.69	0.70
MgO	9.84	9.91	9.85	9.76	9.78	9.77	9.69	**9.73**	**10.95**	**8.59**	**8.41**	**7.67**	5.87	5.99	6.12
CaO	1.04	1.12	1.18	1.12	1.11	1.06	1.10	**1.17**	**0.94**	**0.82**	**0.91**	**0.86**	3.00	2.24	2.07
MnO	0.85	0.83	0.88	0.85	0.87	0.91	0.87	**0.92**	**0.72**	**0.76**	**0.84**	**1.06**	1.21	1.19	1.28
FeO	26.66	27.02	27.01	27.14	27.19	27.39	27.00	**27.27**	**25.26**	**29.01**	**29.18**	**29.98**	30.04	30.61	30.90
total	99.16	100.65	100.33	100.26	100.08	100.30	99.47	**100.94**	**99.92**	**100.36**	**99.73**	**99.94**	100.36	99.70	100.10
Formula (O=24)															
Si	5.93	5.93	5.94	5.96	5.90	5.90	5.92	**5.93**	**5.96**	**5.95**	**5.93**	**5.94**	5.94	5.95	5.94
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	0.00	0.01	0.01
Al	3.99	4.01	3.98	3.97	4.02	4.00	4.00	**4.00**	**4.01**	**4.00**	**3.99**	**3.99**	4.00	3.96	3.95
Cr	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	0.01	0.02	0.00
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	**0.07**	**0.07**	**0.08**	**0.08**	**0.08**	0.08	0.08	0.08
Mg	2.27	2.26	2.25	2.23	2.25	2.24	2.24	**2.21**	**2.49**	**1.98**	**1.96**	**1.79**	1.37	1.41	1.44
Ca	0.17	0.18	0.19	0.18	0.18	0.18	0.18	**0.19**	**0.15**	**0.14**	**0.15**	**0.14**	0.50	0.38	0.35
Mn	0.11	0.11	0.11	0.11	0.11	0.12	0.11	**0.12**	**0.09**	**0.10**	**0.11**	**0.14**	0.16	0.16	0.17
Fe^{2+}	3.46	3.45	3.47	3.49	3.50	3.53	3.50	**3.48**	**3.22**	**3.75**	**3.81**	**3.92**	3.94	4.05	4.08
total	16.03	16.02	16.03	16.02	16.05	16.05	16.04	**16.02**	**16.00**	**16.00**	**16.03**	**16.02**	16.01	16.02	16.03
X_{Mg}	0.40	0.40	0.39	0.39	0.39	0.39	0.39	**0.39**	**0.44**	**0.35**	**0.34**	**0.31**	0.26	0.26	0.26
Grs	2.9	3.1	3.2	3.1	3.0	2.9	3.0	**3.2**	**2.6**	**2.3**	**2.5**	**2.4**	8.4	6.3	5.8
Alm	57.5	57.5	57.5	58.0	58.0	58.2	58.0	**58.0**	**54.1**	**62.9**	**63.2**	**65.4**	65.9	67.5	67.5
Sps	1.8	1.8	1.9	1.8	1.9	2.0	1.9	**2.0**	**1.6**	**1.7**	**1.8**	**2.3**	2.7	2.7	2.8
Prp	37.8	37.6	37.4	37.1	37.1	37.0	37.1	**36.9**	**41.8**	**33.2**	**32.5**	**29.8**	22.9	23.5	23.8

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00
Profile	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2
Point	12	14	15	17	24	26	28	32	36	38	47	48	52	55	59	60
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	core
SiO_2	37.82	37.93	37.91	37.83	37.73	37.65	37.75	37.56	37.89	37.72	38.07	38.20	37.55	37.82	37.53	37.71
TiO_2	0.06	0.07	0.00	0.02	0.02	0.04	0.07	0.03	0.08	0.02	0.07	0.05	0.03	0.04	0.10	0.06
Al_2O_3	21.42	21.44	21.53	21.39	21.54	21.42	21.65	21.21	21.20	21.17	21.52	21.38	21.18	21.57	21.25	21.27
Cr_2O_3	0.05	0.03	0.03	0.04	0.04	0.04	0.05	0.03	0.02	0.05	0.06	0.02	0.02	0.07	0.01	0.01
Fe_2O_3	0.71	0.70	0.70	0.69	0.70	0.70	0.70	0.70	0.69	0.70	0.70	0.70	0.69	0.70	0.70	0.70
MgO	6.18	6.23	6.25	6.25	6.09	6.11	6.28	6.05	6.06	5.96	5.90	5.92	5.92	6.06	5.99	6.08
CaO	2.13	2.15	2.03	2.18	2.20	2.19	2.23	2.16	2.45	2.13	2.42	2.44	2.53	2.61	2.31	2.33
MnO	1.28	1.17	1.12	1.28	1.18	1.14	1.23	1.20	1.23	1.27	1.11	1.14	1.15	1.21	1.22	1.20
FeO	31.18	31.08	30.74	30.58	30.76	31.01	30.91	30.72	30.63	30.77	30.65	30.78	30.60	30.68	30.70	31.01
total	100.83	100.79	100.31	100.26	100.25	100.30	100.87	99.64	100.23	99.78	100.50	100.63	99.67	100.76	99.79	100.36
Formula (O=24)																
Si	5.93	5.94	5.95	5.95	5.93	5.93	5.91	5.95	5.96	5.97	5.97	5.98	5.95	5.92	5.94	5.94
Ti	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.01
Al	3.96	3.96	3.98	3.96	3.99	3.97	3.99	3.96	3.93	3.95	3.98	3.95	3.96	3.98	3.96	3.95
Cr	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	1.44	1.45	1.46	1.46	1.43	1.43	1.47	1.43	1.42	1.41	1.38	1.38	1.40	1.41	1.41	1.43
Ca	0.36	0.36	0.34	0.37	0.37	0.37	0.37	0.37	0.41	0.36	0.41	0.41	0.43	0.44	0.39	0.39
Mn	0.17	0.15	0.15	0.17	0.16	0.15	0.16	0.16	0.16	0.17	0.15	0.15	0.15	0.16	0.16	0.16
Fe^{2+}	4.09	4.07	4.04	4.02	4.05	4.08	4.04	4.07	4.03	4.07	4.02	4.03	4.05	4.02	4.06	4.08
total	16.04	16.03	16.01	16.02	16.02	16.04	16.04	16.02	16.02	16.01	15.99	15.99	16.03	16.03	16.03	16.04
X_{Mg}	0.26	0.26	0.27	0.27	0.26	0.26	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Grs	5.9	6.0	5.7	6.1	6.2	6.1	6.2	6.1	6.8	6.0	6.8	6.9	7.1	7.3	6.5	6.5
Alm	67.5	67.4	67.4	66.8	67.4	67.6	66.9	67.6	66.9	67.8	67.5	67.5	67.2	66.6	67.4	67.4
Sps	2.8	2.6	2.5	2.8	2.6	2.5	2.7	2.7	2.7	2.8	2.5	2.5	2.6	2.7	2.7	2.6
Prp	23.8	24.1	24.4	24.3	23.8	23.7	24.2	23.7	23.6	23.4	23.2	23.1	23.1	23.5	23.4	23.5

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00
Profile	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2
Point	61	65	68	74	76	77	78	80	81	82	83	84	85	88	89	90
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	37.69	37.28	37.76	37.30	37.42	37.40	37.54	37.90	37.80	37.49	37.69	37.77	37.53	37.86	38.06	37.85
TiO_2	0.05	0.05	0.02	0.03	0.01	0.01	0.06	0.05	0.01	0.04	0.02	0.06	0.05	0.00	0.03	0.03
Al_2O_3	21.29	21.39	21.37	21.52	21.50	21.64	21.38	21.49	21.54	21.63	21.37	21.51	21.46	21.38	21.42	21.59
Cr_2O_3	0.00	0.02	0.04	0.01	0.06	0.06	0.07	0.00	0.02	0.05	0.02	0.03	0.02	0.02	0.05	0.05
Fe_2O_3	0.70	0.70	0.71	0.70	0.70	0.70	0.70	0.71	0.70	0.71	0.70	0.71	0.70	0.69	0.69	0.70
MgO	6.17	6.14	6.15	5.88	5.79	5.91	5.98	5.89	6.19	5.91	6.01	6.07	6.22	6.27	6.04	6.21
CaO	2.35	2.06	2.07	2.12	2.18	2.18	2.05	1.98	2.03	1.96	1.98	2.09	1.97	2.17	2.19	2.12
MnO	1.19	1.16	1.24	1.26	1.30	1.28	1.29	1.19	1.23	1.24	1.18	1.24	1.18	1.25	1.03	1.23
FeO	30.75	30.69	31.36	30.74	30.82	31.08	30.80	31.35	31.07	31.47	30.93	31.28	30.98	30.46	30.57	30.71
total	100.18	99.48	100.73	99.56	99.77	100.25	99.88	100.56	100.59	100.51	99.89	100.75	100.12	100.09	100.07	100.47
Formula (O=24)																
Si	5.94	5.92	5.93	5.92	5.93	5.90	5.93	5.95	5.93	5.90	5.95	5.93	5.92	5.96	5.98	5.94
Ti	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00
Al	3.95	4.00	3.95	4.02	4.01	4.02	3.98	3.98	3.98	4.01	3.98	3.98	3.99	3.96	3.97	3.99
Cr	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	1.45	1.45	1.44	1.39	1.37	1.39	1.41	1.38	1.45	1.39	1.42	1.42	1.46	1.47	1.42	1.45
Ca	0.40	0.35	0.35	0.36	0.37	0.37	0.35	0.33	0.34	0.33	0.34	0.35	0.33	0.37	0.37	0.36
Mn	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.17	0.16	0.17	0.16	0.17	0.14	0.16
Fe^{2+}	4.05	4.07	4.12	4.08	4.08	4.10	4.07	4.12	4.08	4.14	4.09	4.10	4.09	4.01	4.02	4.03
total	16.04	16.04	16.05	16.03	16.02	16.04	16.02	16.01	16.03	16.04	16.01	16.04	16.04	16.02	15.98	16.02
X_{Mg}	0.26	0.26	0.26	0.25	0.25	0.25	0.26	0.25	0.26	0.25	0.26	0.26	0.26	0.27	0.26	0.26
Grs	6.5	5.8	5.7	6.0	6.2	6.1	5.8	5.6	5.7	5.5	5.6	5.8	5.5	6.1	6.2	5.9
Alm	66.9	67.5	67.8	68.0	68.1	68.0	67.8	68.8	67.6	68.8	68.2	67.9	67.7	66.7	67.7	67.2
Sps	2.6	2.6	2.7	2.8	2.9	2.8	2.9	2.7	2.7	2.8	2.6	2.7	2.6	2.8	2.3	2.7
Prp	23.9	24.1	23.7	23.2	22.8	23.0	23.5	23.0	24.0	23.0	23.6	23.5	24.2	24.5	23.8	24.2

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	**690-2-00**	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00
Profile	grt2	grt2	grt2	grt2	grt2	grt2	grt2	**grt2**	grt2	grt2	grt2	grt2	grt2	grt2	grt2	grt2
Point	91	94	96	97	99	100	105	**106**	107	110	112	113	115	116	117	118
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	37.61	37.75	37.93	37.66	37.33	37.39	37.76	**37.99**	37.80	37.60	37.71	37.93	37.69	37.87	37.68	37.22
TiO_2	0.05	0.01	0.00	0.06	0.06	0.09	0.10	**0.05**	0.06	0.06	0.06	0.08	0.06	0.07	0.06	0.06
Al_2O_3	21.60	21.38	21.60	21.50	21.31	21.22	21.25	**21.61**	21.52	21.29	21.40	21.43	21.63	21.39	21.43	21.22
Cr_2O_3	0.05	0.00	0.05	0.02	0.00	0.05	0.01	**0.01**	0.00	0.05	0.04	0.06	0.00	0.04	0.03	0.05
Fe_2O_3	0.70	0.70	0.69	0.69	0.70	0.69	0.68	**0.69**	0.69	0.70	0.70	0.69	0.71	0.71	0.71	0.70
MgO	6.09	6.25	5.96	6.06	5.94	5.92	5.89	**5.98**	5.99	5.95	5.99	6.05	6.17	6.07	6.19	5.97
CaO	2.14	2.44	2.43	2.62	2.79	2.92	2.87	**2.89**	2.82	2.56	2.42	2.37	2.33	2.27	2.17	2.14
MnO	1.10	1.28	1.24	1.16	1.24	1.30	1.25	**1.18**	1.19	1.13	1.14	1.22	1.26	1.10	1.18	1.18
FeO	31.02	30.85	30.57	30.58	30.65	30.46	30.21	**30.40**	30.35	30.82	30.91	30.65	31.18	31.10	31.15	30.82
total	100.36	100.66	100.48	100.35	100.00	100.03	100.01	**100.80**	100.40	100.14	100.38	100.49	101.02	100.61	100.60	99.35
Formula (O=24)																
Si	5.92	5.92	5.95	5.92	5.90	5.91	5.96	**5.94**	5.94	5.93	5.93	5.95	5.90	5.94	5.92	5.92
Ti	0.01	0.00	0.00	0.01	0.01	0.01	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Al	4.00	3.96	3.99	3.99	3.97	3.95	3.95	**3.98**	3.98	3.96	3.97	3.96	3.99	3.96	3.97	3.98
Cr	0.01	0.00	0.01	0.00	0.00	0.01	0.00	**0.00**	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.01
Fe^{3+}	0.08	0.08	0.08	0.08	0.08	0.08	0.08	**0.08**	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	1.43	1.46	1.39	1.42	1.40	1.40	1.39	**1.39**	1.40	1.40	1.41	1.42	1.44	1.42	1.45	1.41
Ca	0.36	0.41	0.41	0.44	0.47	0.49	0.48	**0.48**	0.47	0.43	0.41	0.40	0.39	0.38	0.37	0.36
Mn	0.15	0.17	0.16	0.15	0.17	0.17	0.17	**0.16**	0.16	0.15	0.15	0.16	0.17	0.15	0.16	0.16
Fe^{2+}	4.08	4.05	4.01	4.02	4.06	4.03	3.98	**3.98**	3.99	4.07	4.07	4.02	4.08	4.08	4.09	4.10
total	16.03	16.05	16.01	16.04	16.06	16.06	16.02	**16.02**	16.03	16.04	16.03	16.01	16.06	16.03	16.05	16.04
X_{Mg}	0.26	0.27	0.26	0.26	0.26	0.26	0.26	**0.26**	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Grs	6.0	6.7	6.8	7.3	7.7	8.1	8.0	**8.1**	7.9	7.2	6.8	6.6	6.4	6.3	6.0	6.0
Alm	67.8	66.5	67.1	66.6	66.6	66.1	66.2	**66.1**	66.2	67.2	67.4	67.1	67.1	67.7	67.5	67.9
Sps	2.4	2.8	2.8	2.6	2.7	2.8	2.8	**2.6**	2.6	2.5	2.5	2.7	2.7	2.4	2.6	2.6
Prp	23.7	24.0	23.3	23.5	23.0	22.9	23.0	**23.2**	23.3	23.1	23.3	23.6	23.7	23.5	23.9	23.4

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe *	Epembe	Epembe *	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	690-2-00	690-2-00	690-2-00	690-2-00	**690-2-00**	690-2-00	**690-2-00**	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00
Profile	grt2	grt2	grt2	grt2	**grt2**	grt 4	**grt 4**	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4
Point	119	120	121	122	**124**	1	**2**	3	4	5	7	8	9	11	13
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	late Grt4	**late Grt4**	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4
Position	→	→	→	→	**rim**	rim	←	←	←	←	←	←	core	→	→
SiO_2	37.61	37.62	37.85	37.68	**38.29**	37.16	**37.24**	36.88	36.88	36.94	37.10	37.16	36.76	37.22	37.57
TiO_2	0.07	0.04	0.05	0.05	**0.04**	0.02	**0.00**	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.01
Al_2O_3	21.43	21.41	21.65	21.57	**21.65**	21.05	**21.26**	21.32	21.03	21.19	21.00	21.24	21.17	21.27	21.11
Cr_2O_3	0.06	0.01	0.02	0.07	**0.10**	0.01	**0.00**	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.00
Fe_2O_3	0.71	0.70	0.70	0.70	**0.69**	0.74	**0.73**	0.74	0.73	0.74	0.74	0.75	0.74	0.73	0.74
MgO	6.21	6.16	6.26	5.98	**6.30**	4.20	**4.25**	4.17	4.22	4.05	4.29	4.21	4.39	4.03	4.04
CaO	2.07	2.08	2.08	1.98	**2.32**	3.26	**3.17**	3.04	3.03	2.96	2.64	2.57	2.71	3.04	2.63
MnO	1.25	1.21	1.28	1.23	**1.19**	0.99	**0.93**	1.02	1.09	1.10	0.98	1.09	0.91	1.02	1.00
FeO	31.10	30.98	30.68	31.06	**30.62**	32.56	**32.27**	32.82	32.24	32.53	32.58	32.92	32.45	32.27	32.78
total	100.50	100.20	100.56	100.33	**101.20**	99.99	**99.86**	100.00	99.22	99.50	99.33	99.92	99.16	99.62	99.88
Formula (O=24)															
Si	5.91	5.93	5.93	5.93	**5.96**	5.94	**5.94**	5.90	5.93	5.93	5.96	5.94	5.91	5.95	5.99
Ti	0.01	0.00	0.01	0.01	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	3.97	3.98	4.00	4.00	**3.97**	3.96	**4.00**	4.02	3.99	4.01	3.97	4.00	4.01	4.01	3.97
Cr	0.01	0.00	0.00	0.01	**0.01**	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Fe^{3+}	0.08	0.08	0.08	0.08	**0.08**	0.09	**0.09**	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	1.46	1.45	1.46	1.40	**1.46**	1.00	**1.01**	0.99	1.01	0.97	1.03	1.00	1.05	0.96	0.96
Ca	0.35	0.35	0.35	0.33	**0.39**	0.56	**0.54**	0.52	0.52	0.51	0.45	0.44	0.47	0.52	0.45
Mn	0.17	0.16	0.17	0.16	**0.16**	0.13	**0.13**	0.14	0.15	0.15	0.13	0.15	0.12	0.14	0.13
Fe^{2+}	4.09	4.08	4.02	4.09	**3.98**	4.35	**4.31**	4.39	4.34	4.37	4.38	4.40	4.37	4.32	4.37
total	16.05	16.04	16.02	16.02	**16.01**	16.03	**16.01**	16.05	16.03	16.02	16.01	16.02	16.03	15.99	15.97
X_{Mg}	0.26	0.26	0.27	0.26	**0.27**	0.19	**0.19**	0.18	0.19	0.18	0.19	0.19	0.19	0.18	0.18
Grs	5.8	5.8	5.8	5.6	**6.5**	9.2	**9.1**	8.6	8.7	8.5	7.6	7.4	7.8	8.8	7.6
Alm	67.5	67.6	67.0	68.3	**66.5**	72.0	**71.9**	72.7	72.0	72.9	73.1	73.5	72.6	72.7	73.9
Sps	2.7	2.7	2.8	2.7	**2.6**	2.2	**2.1**	2.3	2.5	2.5	2.2	2.5	2.1	2.3	2.3
Prp	24.0	23.9	24.4	23.4	**24.4**	16.5	**16.9**	16.4	16.8	16.2	17.1	16.7	17.5	16.2	16.2

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss
Sample	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98
Profile	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 4	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	15	16	17	18	19	20	21	1	4	6	8	10	11	13	14
Texture	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	→	rim	rim	←	←	←	←	←	←	←
SiO_2	37.53	37.35	37.19	37.27	37.35	37.32	37.60	37.50	37.82	38.15	38.13	37.69	38.06	38.48	38.25
TiO_2	0.03	0.00	0.00	0.05	0.02	0.00	0.05	0.05	0.00	0.07	0.04	0.00	0.05	0.05	0.03
Al_2O_3	21.47	21.41	21.11	21.32	21.40	21.32	21.41	21.72	21.82	21.90	21.94	21.68	21.95	22.12	21.74
Cr_2O_3	0.01	0.02	0.04	0.02	0.00	0.04	0.05	0.00	0.01	0.02	0.05	0.02	0.03	0.03	0.01
Fe_2O_3	0.75	0.75	0.75	0.76	0.76	0.77	0.76	0.71	0.71	0.69	0.68	0.66	0.66	0.65	0.65
MgO	4.18	4.21	4.39	4.17	4.20	4.03	3.82	6.58	6.91	7.47	7.75	8.01	8.35	8.67	8.51
CaO	2.49	2.32	2.05	2.07	2.01	2.11	2.27	1.42	1.31	1.27	1.19	1.29	1.29	1.29	1.34
MnO	0.97	0.99	0.92	1.00	0.93	1.08	0.97	1.05	1.03	0.89	0.83	0.74	0.68	0.69	0.70
FeO	33.00	33.23	33.15	33.68	33.51	33.75	33.59	31.33	31.27	30.48	30.13	29.00	29.32	28.77	28.85
total	100.42	100.28	99.60	100.34	100.17	100.41	100.51	100.36	100.87	100.94	100.74	99.08	100.39	100.76	100.08
Formula (O=24)															
Si	5.96	5.94	5.96	5.94	5.95	5.94	5.97	5.89	5.90	5.92	5.92	5.92	5.90	5.92	5.94
Ti	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00
Al	4.02	4.01	3.99	4.00	4.02	4.00	4.01	4.02	4.01	4.01	4.01	4.02	4.01	4.01	3.98
Cr	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Mg	0.99	1.00	1.05	0.99	1.00	0.96	0.90	1.54	1.61	1.73	1.79	1.88	1.93	1.99	1.97
Ca	0.42	0.40	0.35	0.35	0.34	0.36	0.39	0.24	0.22	0.21	0.20	0.22	0.21	0.21	0.22
Mn	0.13	0.13	0.12	0.13	0.13	0.15	0.13	0.14	0.14	0.12	0.11	0.10	0.09	0.09	0.09
Fe^{2+}	4.38	4.42	4.44	4.49	4.46	4.50	4.46	4.12	4.08	3.96	3.91	3.81	3.80	3.70	3.75
total	15.99	16.00	16.00	16.01	15.99	16.00	15.97	16.05	16.05	16.03	16.03	16.03	16.04	16.02	16.03
X_{Mg}	0.18	0.18	0.19	0.18	0.18	0.18	0.17	0.27	0.28	0.30	0.31	0.33	0.34	0.35	0.34
Grs	7.2	6.7	5.9	5.9	5.8	6.0	6.6	4.0	3.6	3.5	3.3	3.6	3.5	3.6	3.7
Alm	74.0	74.3	74.5	75.2	75.3	75.4	75.9	68.2	67.5	65.8	65.1	63.5	63.0	61.8	62.1
Sps	2.2	2.2	2.1	2.3	2.1	2.5	2.2	2.3	2.2	1.9	1.8	1.6	1.5	1.5	1.5
Prp	16.7	16.8	17.6	16.6	16.8	16.1	15.4	25.5	26.6	28.7	29.8	31.3	32.0	33.2	32.7

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe
Rock type	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss
Sample	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	**230-E-98**	230-E-98	230-E-98	230-E-98	230-E-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 1
Point	16	17	20	22	25	29	30	32	35	36	37	**38**	39	41	43	46
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	←	←	←	←	←	←	←	←	←	←	←	**core**	→	→	→	→
SiO_2	38.66	38.41	38.19	38.45	38.14	38.54	38.79	38.40	38.73	38.43	38.75	**38.93**	38.56	38.46	38.87	38.78
TiO_2	0.01	0.04	0.04	0.01	0.02	0.01	0.05	0.06	0.05	0.09	0.09	**0.07**	0.05	0.09	0.01	0.04
Al_2O_3	22.12	22.13	21.87	22.22	22.21	22.35	22.19	22.18	22.23	22.06	22.48	**22.15**	22.11	22.40	22.20	22.32
Cr_2O_3	0.02	0.00	0.00	0.06	0.00	0.04	0.00	0.00	0.02	0.03	0.02	**0.01**	0.00	0.02	0.00	0.03
Fe_2O_3	0.65	0.65	0.62	0.62	0.61	0.61	0.61	0.60	0.60	0.61	0.61	**0.61**	0.61	0.61	0.61	0.61
MgO	8.93	9.03	9.13	9.61	9.88	10.26	10.30	10.19	10.18	10.38	10.42	**10.39**	10.42	10.38	10.32	10.05
CaO	1.30	1.25	1.37	1.26	1.25	1.31	1.20	1.23	1.18	1.18	1.20	**1.18**	1.17	1.09	1.14	1.12
MnO	0.62	0.60	0.63	0.61	0.60	0.57	0.58	0.58	0.56	0.55	0.56	**0.56**	0.60	0.57	0.58	0.58
FeO	28.63	28.60	27.51	27.50	26.95	26.80	26.77	26.50	26.48	26.70	26.71	**26.79**	26.79	27.00	26.86	26.93
total	100.95	100.70	99.37	100.35	99.66	100.48	100.47	99.74	100.03	100.02	100.83	**100.67**	100.32	100.62	100.59	100.46
Formula (O=24)																
Si	5.93	5.91	5.93	5.91	5.89	5.89	5.93	5.91	5.94	5.90	5.90	**5.94**	5.91	5.88	5.93	5.93
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	**0.01**	0.01	0.01	0.00	0.00
Al	4.00	4.01	4.01	4.02	4.04	4.03	4.00	4.02	4.02	3.99	4.03	**3.98**	3.99	4.03	3.99	4.02
Cr	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Fe^{3+}	0.07	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	**0.07**	0.07	0.07	0.07	0.07
Mg	2.04	2.07	2.11	2.20	2.27	2.34	2.35	2.34	2.33	2.38	2.36	**2.36**	2.38	2.36	2.35	2.29
Ca	0.21	0.21	0.23	0.21	0.21	0.21	0.20	0.20	0.19	0.19	0.19	**0.19**	0.19	0.18	0.19	0.18
Mn	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.08	0.07	0.07	0.07	**0.07**	0.08	0.07	0.08	0.08
Fe^{2+}	3.68	3.68	3.58	3.54	3.48	3.43	3.42	3.41	3.39	3.43	3.40	**3.42**	3.43	3.45	3.43	3.44
total	16.03	16.04	16.02	16.04	16.05	16.05	16.03	16.04	16.01	16.05	16.04	**16.03**	16.06	16.06	16.03	16.02
X_{Mg}	0.36	0.36	0.37	0.38	0.40	0.41	0.41	0.41	0.41	0.41	0.41	**0.41**	0.41	0.41	0.41	0.40
Grs	3.6	3.4	3.8	3.4	3.4	3.5	3.3	3.4	3.2	3.2	3.2	**3.2**	3.2	2.9	3.1	3.1
Alm	61.1	61.0	59.6	58.7	57.6	56.6	56.7	56.6	56.7	56.5	56.4	**56.5**	56.4	56.9	56.8	57.5
Sps	1.3	1.3	1.4	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	**1.2**	1.3	1.2	1.2	1.3
Prp	34.0	34.3	35.2	36.6	37.6	38.6	38.8	38.8	38.8	39.1	39.2	**39.1**	39.1	39.0	38.9	38.2

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss
Sample	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	**230-E-98**	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 3	grt 3
Point	49	50	58	67	68	69	77	78	83	**87**	88	89	90	1	3
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	late Grt4	late Grt4
Position	→	→	→	→	→	→	→	→	→	→	→	→	rim	rim	←
SiO_2	38.84	38.75	38.78	38.50	38.67	38.71	38.27	38.27	37.93	**38.10**	37.87	37.82	37.94	37.91	37.71
TiO_2	0.04	0.00	0.02	0.06	0.06	0.05	0.03	0.12	0.07	**0.00**	0.03	0.00	0.00	0.01	0.03
Al_2O_3	22.28	22.43	22.26	22.05	22.33	22.18	21.98	22.01	21.80	**21.76**	21.39	21.69	21.93	21.47	21.36
Cr_2O_3	0.00	0.00	0.06	0.02	0.00	0.04	0.00	0.00	0.01	**0.03**	0.00	0.01	0.00	0.04	0.08
Fe_2O_3	0.61	0.62	0.63	0.64	0.64	0.64	0.68	0.68	0.71	**0.71**	0.72	0.72	0.72	0.74	0.72
MgO	10.29	10.04	9.53	9.27	9.14	8.82	7.61	7.77	7.16	**6.67**	6.65	6.56	6.29	5.37	5.89
CaO	1.18	1.22	1.17	1.30	1.28	1.35	1.41	1.37	1.33	**1.36**	1.37	1.40	1.36	1.53	1.45
MnO	0.52	0.58	0.66	0.63	0.64	0.62	0.75	0.72	0.87	**0.87**	0.94	0.91	0.97	1.06	1.01
FeO	26.78	27.18	27.80	28.38	28.17	28.29	30.15	30.02	31.10	**31.17**	31.68	31.82	31.59	32.64	31.95
total	100.55	100.82	100.91	100.86	100.94	100.69	100.88	100.96	100.97	**100.66**	100.64	100.93	100.80	100.77	100.19
Formula (O=24)															
Si	5.93	5.91	5.93	5.91	5.92	5.95	5.93	5.92	5.90	**5.95**	5.94	5.91	5.93	5.97	5.95
Ti	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.01	**0.00**	0.00	0.00	0.00	0.00	0.00
Al	4.01	4.03	4.01	3.99	4.03	4.01	4.01	4.01	4.00	**4.00**	3.95	4.00	4.04	3.98	3.97
Cr	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.01
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	**0.08**	0.08	0.08	0.08	0.09	0.09
Mg	2.34	2.28	2.17	2.12	2.09	2.02	1.76	1.79	1.66	**1.55**	1.55	1.53	1.47	1.26	1.39
Ca	0.19	0.20	0.19	0.21	0.21	0.22	0.23	0.23	0.22	**0.23**	0.23	0.23	0.23	0.26	0.25
Mn	0.07	0.07	0.09	0.08	0.08	0.08	0.10	0.09	0.11	**0.12**	0.13	0.12	0.13	0.14	0.13
Fe^{2+}	3.42	3.47	3.55	3.64	3.61	3.63	3.91	3.88	4.05	**4.07**	4.15	4.16	4.13	4.30	4.22
total	16.03	16.04	16.02	16.05	16.02	16.00	16.02	16.02	16.04	**16.01**	16.04	16.04	16.01	16.00	16.01
X_{Mg}	0.41	0.40	0.38	0.37	0.37	0.36	0.31	0.32	0.29	**0.28**	0.27	0.27	0.26	0.23	0.25
Grs	3.2	3.3	3.2	3.5	3.5	3.7	3.9	3.8	3.7	**3.8**	3.8	3.9	3.8	4.3	4.1
Alm	56.8	57.6	59.2	60.1	60.3	61.0	65.2	64.8	67.0	**68.2**	68.5	68.9	69.4	72.1	70.5
Sps	1.1	1.2	1.4	1.4	1.4	1.3	1.6	1.6	1.9	**1.9**	2.1	2.0	2.2	2.4	2.2
Prp	38.9	37.9	36.2	35.0	34.8	33.9	29.3	29.9	27.5	**26.0**	25.6	25.3	24.6	21.1	23.2

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt-Sil gneiss	Grt-Sil gneiss
Sample	230-E-98	230-E-98	230-E-98	230-E-98	**230-E-98**	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-F-98	230-F-98
Profile	grt 3	grt 3	grt 3	grt 3	**grt 3**	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 1	grt 1
Point	5	6	7	8	**9**	10	11	13	14	15	16	19	20	1	2
Texture	late Grt4	late Grt4	late Grt4	late Grt4	**late Grt4**	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	matrix Grt2	matrix Grt2
Position	←	←	←	←	←	core	→	→	→	→	→	→	rim	rim	←
SiO_2	37.67	37.15	37.37	37.83	**37.86**	37.74	37.65	37.56	37.75	37.73	37.34	37.43	37.59	37.72	37.48
TiO_2	0.09	0.01	0.05	0.02	**0.04**	0.05	0.08	0.00	0.00	0.06	0.05	0.00	0.03	0.03	0.02
Al_2O_3	21.35	21.38	21.24	21.51	**21.40**	21.68	21.35	21.18	21.59	21.61	21.53	21.35	21.44	21.76	21.82
Cr_2O_3	0.05	0.08	0.09	0.05	**0.02**	0.07	0.04	0.03	0.02	0.04	0.04	0.00	0.01	0.00	0.03
Fe_2O_3	0.73	0.73	0.72	0.73	**0.72**	0.72	0.72	0.72	0.73	0.72	0.73	0.75	0.78	0.75	0.74
MgO	6.09	5.98	6.12	6.30	**6.14**	6.26	6.10	6.00	5.95	5.87	5.75	4.80	4.39	5.80	5.71
CaO	1.42	1.33	1.35	1.34	**1.32**	1.31	1.37	1.41	1.45	1.34	1.38	1.41	1.45	1.18	1.23
MnO	0.99	1.01	1.03	1.10	**0.95**	1.01	1.03	1.01	1.06	1.03	1.05	1.07	1.12	1.03	1.10
FeO	32.04	32.00	31.64	32.14	**31.85**	31.94	31.95	31.72	32.38	31.93	32.21	33.21	34.37	33.01	32.76
total	100.42	99.66	99.61	101.03	**100.31**	100.77	100.28	99.63	100.92	100.31	100.09	100.03	101.18	101.26	100.89
Formula (O=24)															
Si	5.93	5.91	5.93	5.92	**5.96**	5.92	5.94	5.96	5.92	5.94	5.91	5.96	5.94	5.91	5.89
Ti	0.01	0.00	0.01	0.00	**0.01**	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
Al	3.97	4.01	3.97	3.97	**3.97**	4.01	3.97	3.96	3.99	4.01	4.02	4.00	4.00	4.02	4.04
Cr	0.01	0.01	0.01	0.01	**0.00**	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	**0.09**	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	1.43	1.42	1.45	1.47	**1.44**	1.46	1.44	1.42	1.39	1.38	1.36	1.14	1.04	1.35	1.34
Ca	0.24	0.23	0.23	0.23	**0.22**	0.22	0.23	0.24	0.24	0.23	0.23	0.24	0.25	0.20	0.21
Mn	0.13	0.14	0.14	0.15	**0.13**	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.14	0.15
Fe^{2+}	4.22	4.25	4.20	4.21	**4.19**	4.19	4.21	4.21	4.25	4.21	4.27	4.42	4.54	4.33	4.31
total	16.03	16.04	16.03	16.04	**16.01**	16.03	16.02	16.01	16.03	16.00	16.03	16.00	16.01	16.03	16.03
X_{Mg}	0.25	0.25	0.26	0.26	**0.26**	0.26	0.25	0.25	0.25	0.25	0.24	0.20	0.19	0.24	0.24
Grs	4.0	3.8	3.8	3.7	**3.7**	3.7	3.8	4.0	4.0	3.8	3.9	4.1	4.1	3.3	3.4
Alm	70.1	70.5	69.8	69.6	**70.1**	69.7	70.0	70.1	70.5	70.7	71.1	74.4	76.1	71.9	71.8
Sps	2.2	2.2	2.3	2.4	**2.1**	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.5	2.3	2.4
Prp	23.7	23.5	24.1	24.3	**24.1**	24.4	23.8	23.6	23.1	23.2	22.6	19.2	17.3	22.5	22.3

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	**Grt-Sil gneiss**	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss
Sample	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	**230-F-98**	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	4	5	8	9	11	12	**13**	18	22	24	29	30	33	34	38	43
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	core
SiO_2	37.52	37.68	37.61	37.63	37.65	37.78	**37.71**	37.75	37.67	37.62	37.59	37.58	37.66	37.91	38.01	38.11
TiO_2	0.03	0.04	0.01	0.00	0.04	0.05	**0.04**	0.03	0.00	0.01	0.00	0.04	0.00	0.01	0.06	0.04
Al_2O_3	21.57	21.64	21.75	21.61	21.69	21.76	**21.55**	21.70	21.63	21.65	21.65	21.70	21.57	21.53	21.65	21.69
Cr_2O_3	0.00	0.00	0.03	0.02	0.03	0.01	**0.00**	0.00	0.00	0.02	0.05	0.05	0.05	0.02	0.03	0.04
Fe_2O_3	0.75	0.73	0.73	0.72	0.73	0.73	**0.72**	0.71	0.72	0.74	0.73	0.73	0.72	0.72	0.72	0.71
MgO	5.82	6.02	6.14	6.12	6.26	6.44	**6.41**	6.65	6.31	5.99	6.14	6.26	6.51	6.69	6.60	6.71
CaO	1.16	1.16	1.19	1.15	1.17	1.08	**1.06**	1.08	1.21	1.14	1.21	1.19	1.15	1.17	1.12	1.11
MnO	1.13	1.05	1.08	1.15	1.12	1.07	**1.15**	1.11	1.11	1.05	1.17	1.14	1.05	1.14	1.09	1.08
FeO	33.15	32.05	32.26	31.87	32.22	32.05	**31.63**	31.48	31.96	32.43	32.00	32.12	31.76	31.69	31.70	31.44
total	101.14	100.37	100.78	100.25	100.91	100.96	**100.27**	100.51	100.60	100.63	100.54	100.81	100.47	100.87	100.97	100.94
Formula (O=24)																
Si	5.90	5.93	5.90	5.93	5.90	5.91	**5.93**	5.92	5.92	5.92	5.91	5.90	5.92	5.93	5.94	5.94
Ti	0.00	0.00	0.00	0.00	0.01	0.01	**0.00**	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01
Al	4.00	4.02	4.02	4.01	4.01	4.01	**4.00**	4.01	4.00	4.01	4.01	4.01	3.99	3.97	3.99	3.99
Cr	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00
Fe^{3+}	0.09	0.09	0.09	0.09	0.09	0.09	**0.08**	0.08	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08
Mg	1.36	1.41	1.44	1.44	1.46	1.50	**1.50**	1.56	1.48	1.40	1.44	1.46	1.53	1.56	1.54	1.56
Ca	0.20	0.20	0.20	0.19	0.20	0.18	**0.18**	0.18	0.20	0.19	0.20	0.20	0.19	0.20	0.19	0.19
Mn	0.15	0.14	0.14	0.15	0.15	0.14	**0.15**	0.15	0.15	0.14	0.16	0.15	0.14	0.15	0.14	0.14
Fe^{2+}	4.36	4.22	4.24	4.20	4.23	4.19	**4.16**	4.13	4.20	4.27	4.21	4.22	4.17	4.15	4.14	4.10
total	16.05	16.01	16.04	16.02	16.04	16.03	**16.02**	16.03	16.04	16.03	16.03	16.04	16.04	16.04	16.02	16.01
X_{Mg}	0.24	0.25	0.25	0.25	0.26	0.26	**0.27**	0.27	0.26	0.25	0.25	0.26	0.27	0.27	0.27	0.28
Grs	3.2	3.3	3.3	3.2	3.2	3.0	**3.0**	3.0	3.4	3.2	3.4	3.3	3.2	3.2	3.1	3.1
Alm	71.8	70.7	70.4	70.2	70.0	69.7	**69.4**	68.7	69.7	71.1	70.0	69.9	69.2	68.5	68.9	68.5
Sps	2.5	2.4	2.4	2.6	2.5	2.3	**2.6**	2.4	2.4	2.3	2.6	2.5	2.3	2.5	2.4	2.4
Prp	22.5	23.7	23.9	24.0	24.3	24.9	**25.1**	25.9	24.5	23.4	24.0	24.3	25.3	25.8	25.6	26.1

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe*
Rock type	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	**Grt-Sil gneiss**
Sample	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	**230-F-98**
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**
Point	47	52	55	58	60	63	66	69	71	72	73	78	79	81	82	**83**
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**Grt4 tim**
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	37.91	37.45	37.79	37.88	37.86	37.92	37.91	37.91	37.95	38.01	37.97	37.85	37.84	37.77	37.81	**38.10**
TiO_2	0.05	0.00	0.00	0.02	0.01	0.00	0.04	0.04	0.04	0.03	0.00	0.02	0.05	0.04	0.02	**0.00**
Al_2O_3	21.66	21.62	21.86	21.72	21.63	21.80	21.54	21.84	21.79	21.82	21.63	21.69	21.81	21.55	21.69	**21.82**
Cr_2O_3	0.00	0.07	0.00	0.02	0.01	0.03	0.00	0.00	0.04	0.00	0.00	0.00	0.03	0.04	0.08	**0.00**
Fe_2O_3	0.72	0.73	0.72	0.71	0.71	0.70	0.71	0.71	0.72	0.71	0.72	0.72	0.72	0.73	0.73	**0.74**
MgO	6.78	6.13	6.57	6.69	6.82	6.77	6.93	6.67	6.61	6.62	6.62	6.26	6.44	6.19	6.37	**6.00**
CaO	1.11	1.22	1.17	1.06	1.09	1.14	1.02	1.15	1.07	1.07	1.14	1.08	1.11	1.21	1.23	**1.24**
MnO	1.07	1.07	1.06	1.04	1.06	1.03	1.03	1.02	0.99	1.06	1.08	1.09	1.02	1.09	1.04	**1.08**
FeO	31.78	32.19	31.81	31.43	31.43	31.06	31.36	31.42	31.88	31.09	31.84	31.90	31.90	32.14	32.14	**32.49**
total	101.07	100.47	100.98	100.57	100.63	100.46	100.54	100.77	101.09	100.41	100.99	100.61	100.91	100.73	101.11	**101.47**
Formula (O=24)																
Si	5.92	5.90	5.91	5.93	5.93	5.93	5.94	5.92	5.92	5.95	5.93	5.94	5.92	5.93	5.91	**5.939**
Ti	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.000**
Al	3.98	4.02	4.03	4.01	3.99	4.02	3.97	4.02	4.01	4.02	3.98	4.01	4.02	3.99	4.00	**4.009**
Cr	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	**0.000**
Fe^{3+}	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	**0.086**
Mg	1.58	1.44	1.53	1.56	1.59	1.58	1.62	1.55	1.54	1.54	1.54	1.46	1.50	1.45	1.49	**1.394**
Ca	0.18	0.21	0.20	0.18	0.18	0.19	0.17	0.19	0.18	0.18	0.19	0.18	0.19	0.20	0.21	**0.208**
Mn	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.14	0.13	0.14	0.14	**0.142**
Fe^{2+}	4.15	4.24	4.16	4.12	4.11	4.06	4.11	4.10	4.16	4.07	4.16	4.19	4.17	4.22	4.20	**4.236**
total	16.04	16.04	16.04	16.02	16.03	16.01	16.03	16.02	16.03	15.99	16.03	16.01	16.02	16.03	16.04	**16.014**
X_{Mg}	0.28	0.25	0.27	0.27	0.28	0.28	0.28	0.27	0.27	0.28	0.27	0.26	0.26	0.26	0.26	**0.25**
Grs	3.1	3.4	3.3	3.0	3.0	3.2	2.8	3.2	3.0	3.0	3.2	3.0	3.1	3.4	3.4	**3.5**
Alm	68.6	70.4	69.0	68.7	68.2	68.1	68.1	68.6	69.3	68.6	68.9	70.0	69.6	70.1	69.7	**70.8**
Sps	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.4	2.4	2.4	2.2	2.4	2.3	**2.4**
Prp	26.1	23.9	25.4	26.0	26.4	26.5	26.8	25.9	25.6	26.0	25.6	24.5	25.0	24.1	24.6	**23.3**

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss
Sample	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3
Point	85	89	91	92	94	1	2	3	4	6	8	9	10
Texture	Grt4 tim	Grt4 tim	Grt4 tim	Grt4 tim	Grt4 tim	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4	late Grt4
Position	→	→	→	→	rim	rim	←	←	core	→	→	→	rim
SiO_2	37.41	37.81	37.42	37.34	37.07	37.51	37.77	37.50	37.98	37.39	37.63	37.76	37.86
TiO_2	0.01	0.00	0.01	0.04	0.02	0.04	0.06	0.05	0.06	0.11	0.07	0.07	0.04
Al_2O_3	21.73	21.38	21.76	21.42	21.21	21.41	21.54	21.48	21.61	21.48	21.49	21.49	21.58
Cr_2O_3	0.06	0.02	0.02	0.06	0.05	0.08	0.06	0.09	0.08	0.07	0.07	0.05	0.09
Fe_2O_3	0.74	0.75	0.77	0.78	0.80	0.73	0.74	0.73	0.73	0.74	0.74	0.73	0.73
MgO	5.59	5.40	5.20	4.90	3.62	5.65	6.00	6.07	6.01	6.09	5.87	5.91	5.61
CaO	1.27	1.19	1.16	1.19	1.24	1.13	0.98	0.93	0.96	0.92	0.89	0.90	1.22
MnO	1.01	1.01	0.98	1.06	1.23	1.21	1.16	1.20	1.11	1.21	1.16	1.13	1.22
FeO	32.69	33.25	33.81	34.29	35.38	32.40	32.81	32.26	32.35	32.56	32.49	32.12	32.25
total	100.50	100.82	101.11	101.08	100.62	100.16	101.11	100.31	100.89	100.57	100.41	100.17	100.60
Formula (O=24)													
Si	5.91	5.96	5.90	5.91	5.93	5.94	5.92	5.92	5.95	5.90	5.94	5.96	5.96
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Al	4.04	3.97	4.04	3.99	4.00	3.99	3.98	4.00	3.99	3.99	3.99	4.00	4.00
Cr	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Fe^{3+}	0.09	0.09	0.09	0.09	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Mg	1.31	1.27	1.22	1.16	0.86	1.33	1.40	1.43	1.40	1.43	1.38	1.39	1.31
Ca	0.21	0.20	0.20	0.20	0.21	0.19	0.16	0.16	0.16	0.16	0.15	0.15	0.21
Mn	0.13	0.13	0.13	0.14	0.17	0.16	0.15	0.16	0.15	0.16	0.16	0.15	0.16
Fe^{2+}	4.32	4.38	4.46	4.54	4.73	4.29	4.30	4.26	4.24	4.30	4.29	4.24	4.24
total	16.02	16.01	16.04	16.04	16.01	16.01	16.03	16.03	16.00	16.04	16.01	15.99	15.99
X_{Mg}	0.23	0.22	0.22	0.20	0.15	0.24	0.25	0.25	0.25	0.25	0.24	0.25	0.24
Grs	3.6	3.4	3.3	3.3	3.6	3.2	2.7	2.6	2.7	2.6	2.5	2.6	3.5
Alm	72.2	73.2	74.2	75.2	79.2	71.8	71.4	70.9	71.2	71.1	71.8	71.4	71.6
Sps	2.2	2.2	2.2	2.4	2.8	2.7	2.6	2.7	2.5	2.7	2.6	2.5	2.7
Prp	22.0	21.2	20.3	19.1	14.4	22.3	23.3	23.8	23.6	23.7	23.1	23.4	22.2

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99
Profile	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 1	grt 1	grt 1	grt 1
Point	1	2	3	4	5	6	8	12	15	21	24	2	5	7	10
Texture	Grt2 in Opx2	Grt2 in Opx2	Grt2 in Opx2	Grt2 in Opx2	Grt2 in Opx2	Grt2 in Opx2	Grt2 in Opx2	Grt2 in Opx2	Grt2 in Opx2	Grt2 in Opx2	Grt2 in Opx2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	rim	←	←	←	←	←	←	core	→	→	rim	rim	←	←	←
SiO_2	38.54	39.17	38.84	39.08	39.35	38.92	38.99	39.34	39.20	39.14	39.69	38.07	38.28	38.19	38.30
TiO_2	0.00	0.00	0.04	0.00	0.05	0.03	0.07	0.00	0.02	0.02	0.00	0.00	0.00	0.03	0.00
Al_2O_3	22.31	22.52	22.58	22.78	22.73	22.85	22.97	22.49	22.94	22.77	22.76	22.05	22.05	21.85	22.19
Cr_2O_3	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.02	0.04	0.03
Fe_2O_3	0.59	0.59	0.59	0.59	0.59	0.59	0.58	0.58	0.58	0.59	0.59	0.64	0.65	0.65	0.64
MgO	10.84	11.17	11.41	11.28	11.46	11.48	11.65	11.51	11.64	11.37	11.16	8.87	9.08	9.24	9.36
CaO	1.49	1.29	1.17	1.16	1.16	1.15	1.10	1.18	1.11	1.10	1.19	1.34	1.18	1.11	0.97
MnO	0.57	0.51	0.53	0.58	0.59	0.53	0.56	0.60	0.52	0.50	0.48	0.81	0.79	0.72	0.73
FeO	26.08	26.07	26.20	25.98	25.89	26.01	25.53	25.55	25.38	25.87	26.11	28.37	28.81	28.64	28.21
total	100.44	101.33	101.39	101.44	101.80	101.55	101.45	101.26	101.39	101.36	101.99	100.15	100.85	100.46	100.41
Formula (O=24)															
Si	5.88	5.91	5.86	5.88	5.90	5.86	5.86	5.92	5.89	5.89	5.94	5.90	5.89	5.90	5.90
Ti	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.01	4.00	4.02	4.04	4.02	4.05	4.07	3.99	4.06	4.04	4.01	4.03	4.00	3.98	4.03
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.07
Mg	2.47	2.51	2.57	2.53	2.56	2.57	2.61	2.58	2.61	2.55	2.49	2.05	2.08	2.13	2.15
Ca	0.24	0.21	0.19	0.19	0.19	0.19	0.18	0.19	0.18	0.18	0.19	0.22	0.19	0.18	0.16
Mn	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.07	0.06	0.06	0.11	0.10	0.09	0.10
Fe^{2+}	3.33	3.29	3.31	3.27	3.25	3.27	3.21	3.22	3.19	3.26	3.27	3.68	3.71	3.70	3.63
total	16.08	16.05	16.09	16.06	16.05	16.08	16.07	16.05	16.05	16.05	16.02	16.05	16.07	16.07	16.05
X_{Mg}	0.43	0.43	0.44	0.44	0.44	0.44	0.45	0.45	0.45	0.44	0.43	0.36	0.36	0.36	0.37
Grs	4.0	3.4	3.1	3.1	3.1	3.0	2.9	3.1	3.0	2.9	3.2	3.7	3.2	3.0	2.7
Alm	54.5	54.2	53.9	54.0	53.5	53.7	52.9	53.0	52.8	53.9	54.4	60.7	60.9	60.6	60.2
Sps	1.2	1.1	1.1	1.2	1.2	1.1	1.2	1.3	1.1	1.1	1.0	1.8	1.7	1.6	1.6
Prp	40.3	41.3	41.9	41.7	42.2	42.2	43.0	42.6	43.2	42.2	41.4	33.8	34.2	34.8	35.6

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	12	14	15	18	20	24	27	29	34	36	38	39	40	41	44	45	
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	
Position	←	←	←	←	←	←	←	←	←	←	core	→	→	→	→	→	
SiO_2	38.75	38.15	38.28	38.68	38.70	38.87	38.45	38.82	38.75	38.87	38.81	38.59	38.88	38.51	38.40	38.89	
TiO_2	0.02	0.03	0.02	0.01	0.01	0.01	0.04	0.05	0.04	0.06	0.06	0.05	0.03	0.06	0.04	0.02	
Al_2O_3	22.30	21.89	22.08	22.04	22.23	22.20	22.34	22.39	22.18	22.31	22.21	22.28	22.24	21.84	22.23	22.26	
Cr_2O_3	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.02	0.01	0.00	0.00	
Fe_2O_3	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.62	0.62	0.62	0.62	0.60	0.61	0.62	0.61	0.62	
MgO	9.45	9.42	9.51	9.52	9.79	9.81	10.04	10.20	10.32	10.40	10.41	10.43	10.48	10.31	10.41	10.44	
CaO	0.99	1.01	1.03	1.05	0.94	0.96	0.83	0.85	0.94	0.92	0.81	0.87	0.83	0.89	0.87	0.90	
MnO	0.74	0.75	0.69	0.62	0.61	0.60	0.57	0.49	0.54	0.51	0.51	0.63	0.57	0.57	0.58	0.68	
FeO	27.83	27.67	27.74	27.78	27.77	27.73	27.69	27.46	27.26	27.15	27.27	26.62	26.85	27.42	27.01	27.36	
total	100.72	99.54	99.98	100.32	100.68	100.81	100.58	100.88	100.64	100.86	100.69	100.07	100.50	100.24	100.16	101.18	
Formula (O=24)																	
Si	5.93	5.92	5.91	5.95	5.93	5.94	5.89	5.92	5.92	5.92	5.92	5.91	5.93	5.92	5.89	5.91	
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.00	
Al	4.02	4.00	4.02	3.99	4.01	4.00	4.03	4.02	3.99	4.00	3.99	4.03	4.00	3.96	4.02	3.99	
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
Mg	2.16	2.18	2.19	2.18	2.23	2.23	2.29	2.32	2.35	2.36	2.37	2.38	2.38	2.36	2.38	2.37	
Ca	0.16	0.17	0.17	0.17	0.15	0.16	0.14	0.14	0.15	0.15	0.13	0.14	0.14	0.15	0.14	0.15	
Mn	0.10	0.10	0.09	0.08	0.08	0.08	0.07	0.06	0.07	0.07	0.07	0.08	0.07	0.07	0.08	0.09	
Fe^{2+}	3.56	3.59	3.58	3.57	3.56	3.54	3.55	3.50	3.48	3.46	3.48	3.41	3.43	3.52	3.47	3.48	
total	16.01	16.04	16.04	16.02	16.03	16.02	16.05	16.03	16.04	16.04	16.04	16.03	16.03	16.06	16.06	16.05	
X_{Mg}	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.40	0.41	0.40	0.41	0.41	0.40	0.41	0.40	
Grs	2.7	2.8	2.8	2.9	2.6	2.6	2.3	2.3	2.5	2.5	2.2	2.4	2.2	2.4	2.4	2.4	
Alm	59.6	59.5	59.4	59.5	59.0	58.9	58.6	58.2	57.5	57.3	57.6	56.7	56.9	57.7	57.1	57.2	
Sps	1.6	1.6	1.5	1.3	1.3	1.3	1.2	1.0	1.2	1.1	1.1	1.4	1.2	1.2	1.2	1.4	
Prp	36.1	36.1	36.3	36.3	37.1	37.2	37.9	38.5	38.8	39.1	39.2	39.6	39.6	38.7	39.3	38.9	

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	46	48	50	51	52	54	55	57	58	60	62	67	68	69	72	73
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	38.56	38.41	38.76	38.76	38.63	38.89	38.71	38.39	38.86	38.59	38.67	38.48	38.63	38.41	38.32	38.43
TiO_2	0.01	0.02	0.01	0.01	0.02	0.01	0.02	0.05	0.01	0.02	0.01	0.03	0.03	0.01	0.04	0.01
Al_2O_3	22.39	22.16	22.28	22.36	22.48	22.37	22.25	22.25	22.35	22.29	22.33	22.06	22.09	22.09	21.98	22.18
Cr_2O_3	0.03	0.00	0.00	0.00	0.01	0.02	0.00	0.03	0.02	0.00	0.03	0.01	0.00	0.00	0.00	0.00
Fe_2O_3	0.62	0.62	0.63	0.63	0.61	0.62	0.62	0.63	0.63	0.63	0.63	0.62	0.64	0.63	0.64	0.64
MgO	10.26	10.27	10.14	10.01	10.07	9.77	9.94	9.90	9.62	9.33	9.35	9.46	9.39	9.43	9.33	9.32
CaO	0.89	0.79	0.88	0.92	0.94	1.00	1.08	0.96	1.12	1.31	1.18	0.89	0.96	0.88	0.97	0.94
MnO	0.54	0.51	0.54	0.58	0.60	0.61	0.66	0.59	0.60	0.61	0.66	0.57	0.70	0.67	0.69	0.71
FeO	27.20	27.24	27.71	27.56	26.90	27.48	27.16	27.75	27.66	27.66	27.66	27.40	28.38	27.99	28.16	28.42
total	100.48	100.02	100.93	100.83	100.26	100.76	100.42	100.54	100.86	100.44	100.51	99.52	100.82	100.10	100.13	100.65
Formula (O=24)																
Si	5.90	5.91	5.91	5.92	5.91	5.94	5.93	5.89	5.93	5.93	5.93	5.95	5.93	5.93	5.92	5.91
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.04	4.02	4.01	4.02	4.06	4.03	4.02	4.02	4.02	4.03	4.04	4.02	3.99	4.02	4.00	4.02
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Mg	2.34	2.35	2.31	2.28	2.30	2.22	2.27	2.26	2.19	2.14	2.14	2.18	2.15	2.17	2.15	2.13
Ca	0.15	0.13	0.14	0.15	0.15	0.16	0.18	0.16	0.18	0.22	0.19	0.15	0.16	0.15	0.16	0.16
Mn	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.08	0.08	0.08	0.09	0.07	0.09	0.09	0.09	0.09
Fe^{2+}	3.48	3.50	3.54	3.52	3.44	3.51	3.48	3.56	3.53	3.55	3.55	3.54	3.64	3.61	3.64	3.65
total	16.04	16.05	16.05	16.03	16.02	16.01	16.03	16.05	16.02	16.02	16.01	16.00	16.04	16.03	16.04	16.04
X_{Mg}	0.40	0.40	0.39	0.39	0.40	0.39	0.39	0.39	0.38	0.38	0.38	0.38	0.37	0.38	0.37	0.37
Grs	2.4	2.2	2.4	2.5	2.6	2.7	2.9	2.6	3.1	3.6	3.2	2.5	2.6	2.4	2.7	2.6
Alm	57.7	57.9	58.4	58.4	57.7	58.7	57.9	58.8	59.0	59.4	59.5	59.6	60.3	60.1	60.3	60.5
Sps	1.2	1.1	1.2	1.2	1.3	1.3	1.4	1.3	1.3	1.3	1.4	1.2	1.5	1.5	1.5	1.5
Prp	38.8	38.9	38.1	37.8	38.5	37.2	37.7	37.4	36.6	35.7	35.8	36.7	35.6	36.1	35.6	35.4

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	**Epembe**	Epembe	Epembe	**Epembe**	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	**Opx-Sil gneiss**	Opx-Sil gneiss	Opx-Sil gneiss	**Opx-Sil gneiss**	Opx-Sil gneiss	**Opx-Sil gneiss**	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	**458-4-99**	458-4-99	458-5-00	**458-5-00**	458-9-00	**458-9-00**	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	**grt 1**	grt 1	grt 1	**grt 1**	grt 1	**grt 1**	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3	grt 3
Point	**74**	75	59	**4**	106	**4**	1	2	3	5	6	7	8
Texture	**matrix Grt2**	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	**matrix Grt2**	Grt1 in Pl2	Grt1 in Pl2	Grt1 in Pl2	Grt1 in Pl2	Grt1 in Pl2	Grt1 in Pl2	Grt1 in Pl2
Position	→	rim	core	**rim**	core	**rim**	rim	←	←	←	←	←	core
SiO_2	**38.56**	38.34	38.56	**38.41**	39.87	**38.76**	38.82	39.29	38.85	38.89	39.02	38.83	38.79
TiO_2	**0.05**	0.09	0.02	**0.07**	0.10	**0.03**	0.01	0.03	0.00	0.07	0.04	0.02	0.04
Al_2O_3	**22.13**	22.12	22.03	**22.05**	22.84	**21.87**	22.13	22.19	22.17	22.24	22.16	22.34	21.95
Cr_2O_3	**0.00**	0.01	0.00	**0.02**	0.02	**0.03**	0.00	0.00	0.00	0.05	0.03	0.04	0.00
Fe_2O_3	**0.64**	0.64	0.65	**0.67**	0.56	**0.64**	0.59	0.58	0.59	0.59	0.59	0.60	0.59
MgO	**9.26**	9.32	9.64	**8.75**	11.54	**9.35**	10.28	10.17	10.39	10.30	10.29	10.26	10.11
CaO	**0.97**	0.94	0.81	**0.68**	1.03	**0.88**	1.75	1.66	1.53	1.42	1.36	1.41	1.34
MnO	**0.60**	0.69	0.56	**0.70**	0.46	**0.67**	0.65	0.63	0.72	0.67	0.72	0.72	0.61
FeO	**28.30**	28.24	28.54	**29.74**	24.61	**28.12**	25.96	25.46	26.00	26.18	26.04	26.27	25.97
total	**100.51**	100.39	100.80	**101.09**	101.03	**100.34**	100.18	100.02	100.26	100.41	100.25	100.47	99.40
Formula (O=24)													
Si	**5.93**	5.91	5.92	**5.91**	5.97	**5.96**	5.94	6.00	5.94	5.94	5.96	5.93	5.97
Ti	**0.01**	0.01	0.00	**0.01**	0.01	**0.00**	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Al	**4.01**	4.02	3.98	**4.00**	4.03	**3.97**	3.99	3.99	3.99	4.00	3.99	4.02	3.98
Cr	**0.00**	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Fe^{3+}	**0.07**	0.07	0.07	**0.08**	0.06	**0.07**	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Mg	**2.12**	2.14	2.21	**2.01**	2.58	**2.14**	2.34	2.31	2.37	2.34	2.34	2.33	2.32
Ca	**0.16**	0.16	0.13	**0.11**	0.17	**0.14**	0.29	0.27	0.25	0.23	0.22	0.23	0.22
Mn	**0.08**	0.09	0.07	**0.09**	0.06	**0.09**	0.08	0.08	0.09	0.09	0.09	0.09	0.08
Fe^{2+}	**3.64**	3.64	3.66	**3.83**	3.08	**3.62**	3.32	3.25	3.32	3.34	3.33	3.35	3.35
total	**16.02**	16.04	16.04	16.04	15.97	**16.01**	16.03	15.97	16.03	16.02	16.01	16.03	16.00
X_{Mg}	**0.37**	0.37	0.38	**0.34**	0.46	**0.37**	0.41	0.42	0.42	0.41	0.41	0.41	0.41
Grs	**2.7**	2.6	2.2	**1.9**	2.8	**2.4**	4.8	4.6	4.2	3.9	3.7	3.8	3.7
Alm	**60.7**	60.4	60.3	**63.4**	52.4	**60.4**	55.0	54.9	55.1	55.7	55.6	55.8	56.1
Sps	**1.3**	1.5	1.2	**1.5**	1.0	**1.5**	1.4	1.4	1.6	1.4	1.6	1.5	1.3
Prp	**35.4**	35.5	36.3	**33.2**	43.8	**35.8**	38.8	39.1	39.2	39.0	39.1	38.8	38.9

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	**Opx-Grt**	Opx-Grt	**Opx-Grt**	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt
	rock	rock	rock	rock	**rock**	rock	**rock**	rock	rock	rock	rock	rock	rock	rock	rock
Sample	700-1-00	700-1-00	700-1-00	700-1-00	**700-1-00**	700-1-00	**700-1-00**	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	grt 3	grt 3	grt 3	grt 3	**grt 3**	grt 3	**grt 1**	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	10	11	12	13	**14**	15	**1**	3	4	5	6	8	9	10	11
Texture	Grt1 in Pl2	Grt1 in Pl2	Grt1 in Pl2	Grt1 in Pl2	**Grt1 in Pl2**	Grt1 in Pl2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	rim	**rim**	←	←	←	←	←	←	←	←
SiO_2	38.76	38.53	38.55	38.54	**38.54**	38.33	**39.20**	38.90	39.39	39.30	39.26	39.06	39.28	39.26	39.31
TiO_2	0.05	0.05	0.03	0.03	**0.03**	0.00	**0.09**	0.07	0.04	0.05	0.05	0.03	0.28	0.06	0.04
Al_2O_3	22.29	21.88	22.05	21.98	**22.08**	22.00	**22.19**	22.26	22.35	22.22	22.22	22.29	22.53	22.11	22.29
Cr_2O_3	0.03	0.03	0.05	0.00	**0.01**	0.04	**0.03**	0.03	0.04	0.02	0.03	0.01	0.01	0.02	0.05
Fe_2O_3	0.59	0.59	0.59	0.59	**0.59**	0.58	**0.59**	0.58	0.58	0.58	0.56	0.56	0.55	0.56	0.54
MgO	10.43	10.32	10.31	10.21	**10.44**	10.11	**10.63**	11.11	11.02	11.51	11.78	11.81	11.91	12.15	12.15
CaO	1.34	1.40	1.37	1.41	**1.55**	1.62	**1.15**	1.11	1.19	1.09	1.12	1.16	1.24	1.24	1.30
MnO	0.76	0.74	0.78	0.78	**0.68**	0.64	**0.63**	0.65	0.56	0.50	0.55	0.53	0.50	0.56	0.51
FeO	26.10	25.97	26.01	26.01	**25.85**	25.67	**25.92**	25.51	25.61	25.63	24.56	24.87	24.38	24.89	23.78
total	100.34	99.51	99.74	99.56	**99.78**	98.99	**100.43**	100.21	100.79	100.89	100.14	100.34	100.69	100.86	99.97
Formula (O=24)															
Si	5.92	5.94	5.93	5.94	**5.92**	5.93	**5.96**	5.93	5.96	5.94	5.95	5.92	5.92	5.92	5.95
Ti	0.01	0.01	0.00	0.00	**0.00**	0.00	**0.01**	0.01	0.00	0.01	0.01	0.00	0.03	0.01	0.00
Al	4.01	3.97	4.00	3.99	**4.00**	4.01	**3.98**	4.00	3.98	3.96	3.97	3.98	4.00	3.93	3.98
Cr	0.00	0.00	0.01	0.00	**0.00**	0.00	**0.00**	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
Fe^{3+}	0.07	0.07	0.07	0.07	**0.07**	0.07	**0.07**	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06
Mg	2.37	2.37	2.36	2.34	**2.39**	2.33	**2.41**	2.52	2.49	2.59	2.66	2.67	2.67	2.73	2.74
Ca	0.22	0.23	0.23	0.23	**0.26**	0.27	**0.19**	0.18	0.19	0.18	0.18	0.19	0.20	0.20	0.21
Mn	0.10	0.10	0.10	0.10	**0.09**	0.08	**0.08**	0.08	0.07	0.06	0.07	0.07	0.06	0.07	0.07
Fe^{2+}	3.33	3.35	3.34	3.35	**3.32**	3.32	**3.30**	3.25	3.24	3.24	3.11	3.15	3.07	3.14	3.01
total	16.03	16.03	16.03	16.03	**16.04**	16.02	**16.00**	16.03	16.01	16.04	16.02	16.05	16.02	16.07	16.02
X_{Mg}	0.42	0.41	0.41	0.41	**0.42**	0.41	**0.42**	0.44	0.43	0.44	0.46	0.46	0.47	0.47	0.48
Grs	3.6	3.8	3.7	3.9	**4.2**	4.5	**3.1**	3.0	3.2	2.9	3.0	3.1	3.3	3.3	3.5
Alm	55.3	55.4	55.4	55.6	**54.8**	55.3	**55.2**	53.8	54.1	53.4	51.7	51.9	51.1	51.1	49.9
Sps	1.6	1.6	1.7	1.7	**1.5**	1.4	**1.4**	1.4	1.2	1.1	1.2	1.1	1.1	1.2	1.1
Prp	39.4	39.2	39.1	38.9	**39.5**	38.8	**40.3**	41.8	41.5	42.7	44.2	43.9	44.5	44.5	45.5

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	12	13	14	16	17	18	20	21	22	23	24	25	27	28	30	33	
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	
SiO_2	39.33	39.60	39.53	39.57	39.51	39.63	39.57	39.49	39.56	40.05	39.36	39.62	39.58	39.84	40.03	39.52	
TiO_2	0.04	0.02	0.03	0.00	0.00	0.03	0.04	0.11	0.01	0.11	0.03	0.06	0.06	0.03	0.00	0.03	
Al_2O_3	22.42	22.58	22.25	22.51	22.77	22.59	22.50	22.44	22.67	22.74	22.45	22.68	22.49	22.45	22.61	22.55	
Cr_2O_3	0.04	0.03	0.00	0.01	0.00	0.06	0.01	0.02	0.00	0.00	0.00	0.01	0.01	0.07	0.05	0.00	
Fe_2O_3	0.53	0.54	0.53	0.52	0.52	0.53	0.50	0.51	0.51	0.51	0.50	0.51	0.50	0.51	0.51	0.51	
MgO	12.05	12.60	12.61	12.75	12.92	13.06	13.57	13.06	13.49	13.37	13.51	13.45	13.43	13.32	13.29	13.07	
CaO	1.57	1.21	1.31	1.20	1.21	1.25	1.23	1.29	1.24	1.26	1.28	1.33	1.25	1.24	1.28	1.29	
MnO	0.47	0.50	0.46	0.44	0.44	0.48	0.49	0.48	0.42	0.45	0.39	0.44	0.40	0.45	0.38	0.34	
FeO	23.58	23.71	23.52	23.00	22.94	23.17	22.17	22.67	22.37	22.33	22.23	22.49	22.10	22.46	22.31	22.56	
total	100.02	100.79	100.24	99.99	100.30	100.80	100.08	100.09	100.27	100.81	99.75	100.57	99.83	100.36	100.45	99.88	
Formula (O=24)																	
Si	5.95	5.94	5.96	5.96	5.93	5.93	5.93	5.94	5.92	5.96	5.92	5.92	5.94	5.96	5.97	5.95	
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	
Al	3.99	3.99	3.95	3.99	4.03	3.98	3.98	3.98	4.00	3.99	3.98	3.99	3.98	3.96	3.98	4.00	
Cr	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	
Fe^{3+}	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Mg	2.71	2.81	2.83	2.86	2.89	2.91	3.03	2.93	3.01	2.96	3.03	3.00	3.01	2.97	2.96	2.93	
Ca	0.25	0.19	0.21	0.19	0.19	0.20	0.20	0.21	0.20	0.20	0.21	0.21	0.20	0.20	0.21	0.21	
Mn	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.05	0.06	0.05	0.06	0.05	0.04	
Fe^{2+}	2.98	2.97	2.96	2.90	2.88	2.90	2.78	2.85	2.80	2.78	2.80	2.81	2.78	2.81	2.78	2.84	
total	16.02	16.04	16.04	16.02	16.03	16.05	16.04	16.03	16.05	16.01	16.05	16.05	16.03	16.02	16.01	16.02	
X_{Mg}	0.48	0.49	0.49	0.50	0.50	0.50	0.52	0.51	0.52	0.52	0.52	0.52	0.52	0.51	0.52	0.51	
Grs	4.2	3.2	3.5	3.2	3.2	3.3	3.3	3.4	3.3	3.3	3.4	3.5	3.3	3.3	3.4	3.5	
Alm	49.6	49.2	48.9	48.2	47.8	47.7	45.8	47.1	46.2	46.3	46.0	46.3	46.0	46.6	46.4	47.1	
Sps	1.0	1.1	1.0	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.8	0.9	0.8	0.9	0.8	0.7	
Prp	45.2	46.6	46.7	47.6	48.0	48.0	49.9	48.4	49.6	49.4	49.8	49.3	49.8	49.2	49.3	48.7	

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	34	35	36	37	38	39	41	42	43	44	45	46	47	48	49	50	
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	
SiO_2	39.48	39.80	39.74	40.07	39.64	40.05	39.83	39.62	39.71	39.47	39.67	39.50	39.56	39.38	39.16	38.84	
TiO_2	0.02	0.03	0.06	0.06	0.05	0.04	0.01	0.04	0.01	0.05	0.04	0.03	0.04	0.03	0.01	0.01	
Al_2O_3	22.56	22.46	22.20	22.57	22.39	22.67	22.58	22.41	22.57	22.33	22.71	22.47	21.97	22.32	22.01	22.22	
Cr_2O_3	0.05	0.01	0.02	0.05	0.00	0.00	0.00	0.03	0.00	0.06	0.08	0.03	0.02	0.05	0.03	0.02	
Fe_2O_3	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.53	0.54	0.53	0.53	0.54	0.55	0.55	0.59	
MgO	13.04	13.19	12.83	13.07	12.75	12.77	12.63	12.90	12.61	12.63	12.50	12.52	12.40	12.13	11.89	10.50	
CaO	1.27	1.35	1.34	1.27	1.38	1.29	1.29	1.30	1.28	1.28	1.31	1.26	1.30	1.32	1.26	1.42	
MnO	0.42	0.48	0.44	0.46	0.41	0.49	0.45	0.41	0.45	0.48	0.46	0.49	0.56	0.65	0.50	0.58	
FeO	22.65	22.56	23.01	22.85	23.08	23.07	23.04	22.92	23.57	23.64	23.53	23.48	23.61	24.12	24.37	26.06	
total	100.01	100.38	100.15	100.93	100.22	100.91	100.35	100.14	100.74	100.47	100.83	100.32	99.99	100.54	99.77	100.25	
Formula (O=24)																	
Si	5.94	5.96	5.98	5.97	5.96	5.97	5.97	5.95	5.95	5.94	5.94	5.94	5.98	5.94	5.96	5.93	
Ti	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	
Al	4.00	3.96	3.94	3.96	3.97	3.98	3.99	3.97	3.98	3.96	4.01	3.99	3.91	3.97	3.95	4.00	
Cr	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	
Fe^{3+}	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	
Mg	2.92	2.94	2.88	2.90	2.86	2.84	2.82	2.89	2.82	2.83	2.79	2.81	2.79	2.73	2.70	2.39	
Ca	0.21	0.22	0.22	0.20	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.21	0.21	0.20	0.23	
Mn	0.05	0.06	0.06	0.06	0.05	0.06	0.06	0.05	0.06	0.06	0.06	0.06	0.07	0.08	0.06	0.08	
Fe^{2+}	2.85	2.82	2.89	2.85	2.90	2.88	2.89	2.88	2.95	2.97	2.95	2.95	2.99	3.04	3.10	3.33	
total	16.03	16.03	16.02	16.01	16.02	16.00	16.00	16.02	16.03	16.04	16.02	16.03	16.02	16.04	16.04	16.03	
X_{Mg}	0.51	0.51	0.50	0.50	0.50	0.50	0.49	0.50	0.49	0.49	0.49	0.49	0.48	0.47	0.47	0.42	
Grs	3.4	3.6	3.6	3.4	3.7	3.4	3.5	3.5	3.4	3.4	3.5	3.4	3.5	3.5	3.4	3.9	
Alm	47.2	46.7	47.9	47.4	48.1	48.1	48.3	47.8	49.0	49.0	49.1	49.0	49.3	50.2	51.1	55.2	
Sps	0.9	1.0	0.9	1.0	0.9	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.2	1.4	1.1	1.3	
Prp	48.5	48.7	47.6	48.3	47.4	47.4	47.2	47.9	46.7	46.6	46.5	46.6	46.1	45.0	44.4	39.7	

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	
Position	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	
SiO_2	39.48	39.67	39.51	39.29	39.67	39.05	39.93	39.96	39.79	39.72	39.66	39.84	39.66	39.74	39.57	39.58	
TiO_2	0.01	0.02	0.08	0.05	0.06	0.00	0.07	0.03	0.02	0.03	0.02	0.04	0.03	0.03	0.06	0.03	
Al_2O_3	22.59	22.26	22.46	22.17	22.56	22.35	22.59	22.51	22.66	22.67	22.48	22.53	22.71	22.65	22.52	22.58	
Cr_2O_3	0.02	0.05	0.06	0.07	0.06	0.05	0.01	0.01	0.04	0.06	0.01	0.02	0.04	0.01	0.01	0.01	
Fe_2O_3	0.54	0.53	0.52	0.52	0.52	0.51	0.51	0.52	0.51	0.51	0.51	0.51	0.49	0.49	0.50	0.50	
MgO	12.09	12.47	12.84	12.72	13.13	12.84	13.08	13.27	13.40	13.44	13.48	13.61	13.75	13.73	13.54	13.68	
CaO	1.30	1.25	1.22	1.32	1.29	1.27	1.32	1.32	1.33	1.33	1.30	1.31	1.29	1.29	1.28	1.30	
MnO	0.57	0.50	0.49	0.52	0.47	0.43	0.47	0.49	0.39	0.36	0.39	0.41	0.42	0.43	0.42	0.46	
FeO	23.90	23.25	23.00	23.13	23.01	22.54	22.49	22.79	22.45	22.30	22.60	22.39	21.68	21.71	21.95	21.91	
total	100.50	99.98	100.18	99.79	100.77	99.04	100.46	100.89	100.60	100.42	100.44	100.66	100.06	100.08	99.83	100.04	
Formula (O=24)																	
Si	5.94	5.98	5.94	5.94	5.93	5.93	5.97	5.96	5.94	5.94	5.93	5.94	5.93	5.94	5.94	5.93	
Ti	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	
Al	4.01	3.96	3.98	3.95	3.97	4.00	3.98	3.95	3.99	3.99	3.96	3.96	4.00	3.99	3.98	3.99	
Cr	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	
Fe^{3+}	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Mg	2.71	2.80	2.88	2.87	2.93	2.91	2.91	2.95	2.98	2.99	3.01	3.02	3.06	3.06	3.03	3.06	
Ca	0.21	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	
Mn	0.07	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	
Fe^{2+}	3.01	2.93	2.89	2.93	2.88	2.86	2.81	2.84	2.80	2.79	2.83	2.79	2.71	2.71	2.76	2.75	
total	16.02	16.01	16.03	16.04	16.04	16.03	16.01	16.03	16.04	16.03	16.05	16.04	16.03	16.03	16.03	16.04	
X_{Mg}	0.47	0.49	0.50	0.50	0.50	0.50	0.51	0.51	0.52	0.52	0.52	0.52	0.53	0.53	0.52	0.53	
Grs	3.5	3.4	3.2	3.5	3.4	3.4	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.4	3.4	3.4	
Alm	50.1	48.9	48.0	48.2	47.4	47.5	46.9	46.9	46.3	46.2	46.4	45.9	44.9	45.0	45.6	45.3	
Sps	1.2	1.1	1.0	1.1	1.0	0.9	1.0	1.0	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	
Prp	45.2	46.7	47.7	47.2	48.2	48.2	48.6	48.6	49.3	49.6	49.3	49.8	50.8	50.7	50.1	50.4	

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	68	69	70	71	72	73	75	76	78	79	80	81	82	83	84	85	
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	
Position	←	←	←	←	←	←	←	←	←	←	core	→	→	→	→	→	
SiO_2	39.83	40.55	39.79	40.01	40.14	39.91	39.62	39.92	39.75	40.17	39.30	40.11	39.78	40.12	40.00	40.11	
TiO_2	0.06	0.02	0.06	0.01	0.06	0.03	0.04	0.03	0.04	0.00	0.05	0.04	0.10	0.02	0.04	0.07	
Al_2O_3	22.72	22.76	22.66	22.66	22.56	22.49	22.65	22.75	22.36	22.77	22.63	22.75	22.65	23.03	22.70	22.80	
Cr_2O_3	0.02	0.03	0.03	0.04	0.00	0.00	0.04	0.04	0.00	0.03	0.04	0.06	0.01	0.05	0.02	0.02	
Fe_2O_3	0.50	0.50	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.50	0.49	0.50	0.50	0.49	0.50	0.49	
MgO	13.79	14.08	13.67	13.92	13.72	13.70	13.77	13.73	13.86	13.99	13.82	13.96	13.87	13.89	13.99	13.86	
CaO	1.37	1.28	1.33	1.33	1.27	1.36	1.34	1.27	1.30	1.36	1.36	1.25	1.34	1.33	1.31	1.32	
MnO	0.44	0.39	0.51	0.45	0.44	0.38	0.36	0.48	0.45	0.42	0.43	0.43	0.45	0.43	0.43	0.47	
FeO	22.23	22.00	21.60	21.82	21.55	21.55	21.57	21.48	21.45	21.92	21.83	22.04	21.90	21.63	21.85	21.77	
total	100.96	101.60	100.13	100.74	100.22	99.89	99.88	100.19	99.70	101.15	99.93	101.14	100.59	100.99	100.83	100.90	
Formula (O=24)																	
Si	5.92	5.97	5.95	5.95	5.98	5.97	5.93	5.95	5.96	5.94	5.90	5.94	5.93	5.94	5.94	5.95	
Ti	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	
Al	3.98	3.95	3.99	3.97	3.96	3.97	4.00	4.00	3.95	3.97	4.00	3.97	3.98	4.02	3.97	3.98	
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	
Fe^{3+}	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.06	0.05	0.06	0.06	
Mg	3.06	3.09	3.04	3.08	3.05	3.06	3.07	3.05	3.10	3.09	3.09	3.08	3.08	3.06	3.10	3.06	
Ca	0.22	0.20	0.21	0.21	0.20	0.22	0.21	0.20	0.21	0.22	0.22	0.20	0.21	0.21	0.21	0.21	
Mn	0.05	0.05	0.06	0.06	0.06	0.05	0.05	0.06	0.06	0.05	0.05	0.05	0.06	0.05	0.05	0.06	
Fe^{2+}	2.76	2.71	2.70	2.71	2.69	2.70	2.70	2.68	2.69	2.71	2.74	2.73	2.73	2.68	2.71	2.70	
total	16.06	16.03	16.02	16.04	16.00	16.01	16.03	16.01	16.03	16.04	16.07	16.04	16.05	16.02	16.04	16.03	
X_{Mg}	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.54	0.53	0.53	0.53	0.53	0.53	0.53	0.53	
Grs	3.6	3.3	3.5	3.5	3.4	3.6	3.6	3.4	3.5	3.6	3.6	3.3	3.5	3.5	3.4	3.5	
Alm	45.4	44.8	44.8	44.7	44.8	44.8	44.8	44.7	44.4	44.7	44.9	45.0	44.9	44.6	44.7	44.8	
Sps	0.9	0.8	1.1	0.9	0.9	0.8	0.8	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	
Prp	50.2	51.1	50.6	50.8	50.9	50.8	50.9	50.9	51.2	50.9	50.6	50.8	50.7	51.0	51.0	50.8	

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe
Rock type	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	**Opx-Grt rock**	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	**700-1-00**	700-1-00	700-1-00	700-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	**grt 1**	grt 1	grt 1	grt 1
Point	86	87	88	89	90	91	92	93	94	95	96	97	**98**	99	100	101
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	**matrix Grt2**	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	40.33	40.26	39.82	40.21	39.82	40.05	39.92	39.72	40.25	39.76	40.04	39.50	**39.97**	40.04	39.76	39.89
TiO_2	0.04	0.05	0.02	0.07	0.00	0.04	0.01	0.06	0.02	0.01	0.04	0.03	**0.02**	0.05	0.01	0.03
Al_2O_3	22.98	22.75	22.89	22.41	22.78	22.65	22.67	22.76	22.74	22.60	22.71	22.45	**22.48**	22.85	22.54	22.64
Cr_2O_3	0.02	0.03	0.03	0.02	0.05	0.03	0.00	0.01	0.03	0.02	0.03	0.02	**0.00**	0.00	0.00	0.03
Fe_2O_3	0.49	0.49	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.49	0.51	0.48	**0.48**	0.49	0.50	0.49
MgO	14.04	14.01	13.84	13.97	14.03	13.79	13.61	13.86	13.82	13.75	13.72	13.73	**13.93**	13.92	13.68	13.96
CaO	1.29	1.29	1.34	1.30	1.29	1.35	1.30	1.34	1.29	1.26	1.29	1.29	**1.31**	1.34	1.29	1.33
MnO	0.32	0.43	0.46	0.45	0.37	0.42	0.41	0.45	0.34	0.44	0.39	0.37	**0.45**	0.38	0.45	0.42
FeO	21.72	21.68	21.61	21.72	21.70	21.98	21.94	22.12	22.10	21.83	22.33	21.36	**21.20**	21.70	22.16	21.73
total	101.23	100.97	100.49	100.63	100.52	100.80	100.36	100.82	101.09	100.15	101.05	99.24	**99.83**	100.77	100.39	100.51
Formula (O=24)																
Si	5.95	5.96	5.93	5.98	5.93	5.95	5.96	5.91	5.96	5.94	5.94	5.95	**5.98**	5.94	5.94	5.94
Ti	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	**0.00**	0.01	0.00	0.00
Al	4.00	3.97	4.02	3.93	3.99	3.97	3.99	3.99	3.97	3.98	3.97	3.98	**3.96**	4.00	3.97	3.97
Cr	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00
Fe^{3+}	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	**0.05**	0.05	0.06	0.06
Mg	3.09	3.09	3.07	3.09	3.11	3.05	3.03	3.07	3.05	3.06	3.03	3.08	**3.10**	3.08	3.05	3.10
Ca	0.20	0.20	0.21	0.21	0.20	0.21	0.21	0.21	0.20	0.20	0.21	0.21	**0.21**	0.21	0.21	0.21
Mn	0.04	0.05	0.06	0.06	0.05	0.05	0.05	0.06	0.04	0.06	0.05	0.05	**0.06**	0.05	0.06	0.05
Fe^{2+}	2.68	2.68	2.69	2.70	2.70	2.73	2.74	2.75	2.74	2.73	2.77	2.69	**2.65**	2.69	2.77	2.71
total	16.02	16.02	16.03	16.02	16.05	16.03	16.02	16.06	16.02	16.04	16.04	16.03	**16.01**	16.03	16.05	16.04
X_{Mg}	0.54	0.54	0.53	0.53	0.54	0.53	0.53	0.53	0.53	0.53	0.52	0.53	**0.54**	0.53	0.52	0.53
Grs	3.4	3.4	3.5	3.4	3.4	3.5	3.4	3.5	3.4	3.3	3.4	3.4	**3.5**	3.5	3.4	3.5
Alm	44.6	44.5	44.6	44.6	44.5	45.1	45.4	45.1	45.4	45.1	45.7	44.6	**44.0**	44.6	45.5	44.6
Sps	0.7	0.9	1.0	0.9	0.8	0.9	0.9	0.9	0.7	0.9	0.8	0.8	**1.0**	0.8	0.9	0.9
Prp	51.4	51.2	50.9	51.1	51.3	50.5	50.3	50.4	50.5	50.6	50.1	51.1	**51.5**	51.0	50.1	51.1

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	102	104	105	106	107	108	111	112	113	114	115	116	117	118	119	120	
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
SiO_2	39.87	39.81	39.63	39.90	40.02	39.71	39.89	39.53	39.80	39.66	39.55	39.29	39.51	39.43	39.42	39.83	
TiO_2	0.00	0.03	0.02	0.04	0.00	0.03	0.02	0.02	0.04	0.01	0.03	0.02	0.07	0.06	0.03	0.04	
Al_2O_3	22.65	22.68	22.73	22.78	22.57	22.62	22.81	22.51	22.64	22.78	22.43	22.49	22.77	22.53	22.64	22.69	
Cr_2O_3	0.02	0.03	0.01	0.00	0.03	0.07	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.02	0.00	0.01	
Fe_2O_3	0.49	0.51	0.50	0.50	0.50	0.51	0.50	0.51	0.50	0.51	0.50	0.51	0.50	0.51	0.50	0.52	
MgO	13.43	13.59	13.61	13.69	13.64	13.45	13.67	13.33	13.53	13.42	13.37	13.05	13.44	13.37	13.32	13.31	
CaO	1.31	1.38	1.28	1.31	1.27	1.33	1.33	1.31	1.27	1.34	1.24	1.26	1.24	1.33	1.27	1.32	
MnO	0.42	0.49	0.40	0.40	0.39	0.43	0.46	0.36	0.43	0.43	0.45	0.50	0.43	0.33	0.45	0.44	
FeO	21.73	22.29	21.97	22.14	22.21	22.29	22.18	22.33	22.16	22.45	22.05	22.47	22.16	22.29	21.94	22.79	
total	99.93	100.80	100.12	100.76	100.63	100.42	100.87	99.88	100.37	100.59	99.66	99.59	100.12	99.86	99.56	100.93	
Formula (O=24)																	
Si	5.97	5.93	5.93	5.93	5.96	5.94	5.93	5.94	5.94	5.92	5.95	5.93	5.92	5.93	5.93	5.93	
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	
Al	4.00	3.98	4.01	3.99	3.96	3.98	4.00	3.99	3.99	4.01	3.98	4.00	4.02	3.99	4.02	3.98	
Cr	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fe^{3+}	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Mg	3.00	3.02	3.04	3.03	3.03	3.00	3.03	2.99	3.01	2.99	3.00	2.94	3.00	3.00	2.99	2.96	
Ca	0.21	0.22	0.21	0.21	0.20	0.21	0.21	0.21	0.20	0.21	0.20	0.20	0.20	0.21	0.20	0.21	
Mn	0.05	0.06	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.06	0.06	0.05	0.04	0.06	0.06	
Fe^{2+}	2.72	2.78	2.75	2.75	2.77	2.79	2.76	2.81	2.77	2.80	2.77	2.84	2.78	2.80	2.76	2.84	
total	16.00	16.05	16.04	16.04	16.03	16.04	16.04	16.03	16.03	16.05	16.03	16.04	16.03	16.04	16.03	16.04	
X_{Mg}	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.51	0.52	0.52	0.52	0.51	
Grs	3.5	3.6	3.4	3.5	3.4	3.5	3.5	3.5	3.4	3.5	3.3	3.4	3.3	3.5	3.4	3.5	
Alm	45.5	45.7	45.5	45.5	45.7	46.1	45.5	46.4	45.8	46.3	46.0	47.0	46.0	46.3	45.9	46.8	
Sps	0.9	1.0	0.8	0.8	0.8	0.9	1.0	0.7	0.9	0.9	0.9	1.1	0.9	0.7	1.0	0.9	
Prp	50.1	49.7	50.3	50.2	50.1	49.5	50.0	49.4	49.9	49.3	49.7	48.6	49.8	49.5	49.7	48.8	

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

Table A.6.2.1 (continued): Representative EMP analyses of garnet

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1	grt 1
Point	123	124	125	126	127	129	130	131	132	133	135	136	137	140	141
Texture	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2	matrix Grt2
Position	→	→	→	→	→	→	→	→	→	→	→	→	→	→	rim
SiO_2	39.81	39.74	39.87	39.42	39.35	39.58	39.24	39.51	39.52	39.62	39.59	39.25	39.30	39.15	39.07
TiO_2	0.02	0.05	0.06	0.02	0.02	0.05	0.04	0.00	0.07	0.04	0.04	0.03	0.01	0.05	0.05
Al_2O_3	22.63	22.37	22.66	22.43	22.47	22.52	22.69	22.73	22.27	22.56	22.52	22.55	22.38	22.07	22.31
Cr_2O_3	0.00	0.01	0.00	0.04	0.04	0.00	0.06	0.04	0.00	0.04	0.05	0.00	0.04	0.02	0.04
Fe_2O_3	0.51	0.51	0.52	0.51	0.51	0.52	0.52	0.51	0.51	0.52	0.53	0.54	0.55	0.56	0.56
MgO	13.53	13.27	13.31	13.22	13.32	13.33	13.35	13.15	12.82	12.61	12.56	12.61	12.35	11.85	11.73
CaO	1.31	1.32	1.28	1.23	1.26	1.25	1.31	1.31	1.25	1.27	1.15	1.24	1.17	1.20	1.10
MnO	0.45	0.42	0.44	0.44	0.46	0.42	0.43	0.40	0.43	0.47	0.46	0.45	0.47	0.46	0.48
FeO	22.62	22.42	22.89	22.35	22.60	22.72	22.73	22.60	22.56	22.93	23.51	23.81	24.31	24.70	24.90
total	100.88	100.11	101.03	99.66	100.04	100.39	100.35	100.24	99.43	100.05	100.41	100.47	100.57	100.06	100.24
Formula (O=24)															
Si	5.93	5.96	5.94	5.94	5.92	5.93	5.89	5.92	5.97	5.96	5.95	5.91	5.92	5.95	5.93
Ti	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01
Al	3.97	3.95	3.98	3.98	3.98	3.98	4.01	4.02	3.97	4.00	3.99	4.00	3.98	3.95	3.99
Cr	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01
Fe^{3+}	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Mg	3.00	2.97	2.95	2.97	2.99	2.98	2.99	2.94	2.89	2.83	2.81	2.83	2.77	2.68	2.65
Ca	0.21	0.21	0.20	0.20	0.20	0.20	0.21	0.21	0.20	0.20	0.18	0.20	0.19	0.20	0.18
Mn	0.06	0.05	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
Fe^{2+}	2.82	2.81	2.85	2.82	2.84	2.85	2.85	2.83	2.85	2.88	2.95	3.00	3.06	3.14	3.16
total	16.05	16.03	16.04	16.03	16.06	16.05	16.07	16.04	16.01	16.00	16.02	16.06	16.05	16.04	16.04
X_{Mg}	0.52	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.49	0.49	0.49	0.48	0.46	0.46
Grs	3.4	3.5	3.4	3.3	3.3	3.3	3.4	3.5	3.4	3.4	3.1	3.3	3.1	3.2	2.9
Alm	46.3	46.5	47.0	46.6	46.7	46.8	46.7	47.0	47.6	48.3	49.1	49.3	50.4	51.7	52.2
Sps	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.8	0.9	1.0	1.0	0.9	1.0	1.0	1.0
Prp	49.4	49.1	48.7	49.2	49.0	49.0	48.9	48.7	48.2	47.3	46.8	46.5	45.6	44.2	43.8

*: analysis used for geothermobarometry
Fe^{3+} = 2% (Fe^{tot})

A.6.2.2 Biotite

Table A.6.2.2: Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue*	Orue
Rock type	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	**Grt-Crd-Bt gneiss**	Grt-Crd-Bt gneiss
Sample	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	**103-A-98**	103-A-98
Profile	bt1	bt1	bt1	bt1	bt1	bt2	bt2	bt2	bt2	bt3	bt3	bt3	bt3	bt3	**bt4**	bt4
Point	1	2	3	4	5	1	2	3	5	1	2	3	4	6	**1**	2
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	**matrix Bt2**	matrix Bt2
SiO_2	32.23	31.08	31.39	32.30	32.69	33.56	33.29	32.32	30.01	33.01	33.22	32.96	33.01	33.13	**32.28**	31.79
TiO_2	3.60	3.53	3.36	2.58	3.07	4.49	4.51	4.86	4.71	3.92	4.02	3.81	3.73	3.49	**3.85**	3.96
Al_2O_3	17.62	16.99	17.29	18.13	18.49	17.67	17.52	17.19	16.71	17.43	17.34	17.39	17.35	18.05	**18.35**	17.83
Cr_2O_3	0.23	0.23	0.22	0.21	0.25	0.20	0.18	0.18	0.16	0.20	0.13	0.20	0.22	0.21	**0.23**	0.26
MgO	6.38	6.44	6.53	7.44	6.75	6.28	5.60	5.66	7.36	5.65	5.64	5.76	6.17	6.38	**5.50**	6.44
CaO	0.29	0.29	0.27	0.17	0.21	0.29	0.29	1.03	1.84	0.26	0.28	0.26	0.22	0.23	**0.07**	0.46
MnO	0.11	0.10	0.16	0.09	0.16	0.11	0.13	0.04	0.14	0.03	0.09	0.07	0.08	0.11	**0.10**	0.10
FeO	22.23	22.80	22.58	22.27	22.18	22.04	22.08	21.37	21.46	22.55	22.56	22.86	23.26	22.62	**25.09**	24.99
BaO	0.00	0.08	0.09	0.04	0.00	0.10	0.02	0.00	0.00	0.01	0.11	0.08	0.06	0.11	**0.04**	0.04
NiO	0.13	0.00	0.00	0.01	0.01	0.03	0.06	0.00	0.04	0.13	0.00	0.03	0.03	0.03	**0.02**	0.00
Na_2O	0.19	0.24	0.22	0.14	0.17	0.21	0.20	0.16	0.12	0.18	0.23	0.20	0.17	0.24	**0.08**	0.05
K_2O	6.04	5.83	5.84	6.22	6.64	6.58	6.91	5.83	5.00	6.71	6.77	6.78	6.65	6.54	**8.87**	7.66
F	0.00	0.30	0.00	0.13	0.03	0.11	0.26	0.00	0.18	0.00	0.15	0.08	0.22	0.00	**0.45**	0.30
Cl	0.23	0.24	0.25	0.23	0.25	0.25	0.23	0.30	0.26	0.24	0.32	0.27	0.29	0.30	**0.25**	0.21
Sum	89.27	88.13	88.20	89.98	90.89	91.90	91.27	88.94	87.98	90.31	90.84	90.75	91.47	91.42	**95.18**	94.08
O=F	0.00	-0.12	0.00	-0.06	-0.01	-0.04	-0.11	0.00	-0.07	0.00	-0.06	-0.03	-0.09	0.00	**-0.19**	-0.12
O=Cl	-0.05	-0.05	-0.06	-0.05	-0.06	-0.06	-0.05	-0.07	-0.06	-0.05	-0.07	-0.06	-0.07	-0.07	**-0.06**	-0.05
Total	89.21	87.95	88.15	89.87	90.83	91.80	91.11	88.87	87.85	90.25	90.70	90.66	91.31	91.35	**94.94**	93.91
Formula (O=22)																
Si	5.29	5.20	5.24	5.25	5.26	5.34	5.34	5.30	5.01	5.37	5.37	5.35	5.32	5.32	**5.10**	5.07
Al^{IV}	2.71	2.80	2.76	2.75	2.74	2.66	2.66	2.70	2.99	2.63	2.63	2.65	2.68	2.68	**2.90**	2.93
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00
Al^{VI}	0.69	0.55	0.64	0.72	0.77	0.65	0.66	0.62	0.30	0.71	0.68	0.67	0.61	0.73	**0.53**	0.42
Cr	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.02	0.03	0.03	0.03	**0.03**	0.03
Ti	0.44	0.44	0.42	0.32	0.37	0.54	0.54	0.60	0.59	0.48	0.49	0.47	0.45	0.42	**0.46**	0.47
Fe^{2+tot}	3.05	3.19	3.15	3.03	2.99	2.93	2.96	2.93	3.00	3.07	3.05	3.10	3.13	3.04	**3.32**	3.33
Mn	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.00	0.01	0.01	0.01	0.01	**0.01**	0.01
Mg	1.56	1.61	1.62	1.80	1.62	1.49	1.34	1.38	1.83	1.37	1.36	1.39	1.48	1.53	**1.30**	1.53
Ni	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	**0.00**	0.00
Sum VI	5.81	5.84	5.88	5.92	5.81	5.64	5.56	5.57	5.77	5.67	5.61	5.67	5.72	5.75	**5.64**	5.80
Ba	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	**0.00**	0.00
Ca	0.05	0.05	0.05	0.03	0.04	0.05	0.05	0.18	0.33	0.05	0.05	0.05	0.04	0.04	**0.01**	0.08
Na	0.06	0.08	0.07	0.05	0.05	0.06	0.06	0.05	0.04	0.06	0.07	0.06	0.05	0.07	**0.02**	0.01
K	1.26	1.24	1.24	1.29	1.36	1.33	1.42	1.22	1.06	1.39	1.40	1.40	1.37	1.34	**1.79**	1.56
Sum XII	1.38	1.38	1.37	1.37	1.45	1.45	1.53	1.45	1.43	1.49	1.52	1.52	1.46	1.46	**1.83**	1.65
	15.18	15.21	15.25	15.28	15.26	15.10	15.08	15.02	15.21	15.16	15.13	15.19	15.18	15.21	**15.47**	15.45
F	0.00	0.16	0.00	0.07	0.01	0.05	0.13	0.00	0.09	0.00	0.08	0.04	0.11	0.00	**0.23**	0.15
Cl	0.06	0.07	0.07	0.06	0.07	0.07	0.06	0.08	0.07	0.07	0.09	0.07	0.08	0.08	**0.07**	0.06
X_{Mg}	0.34	0.33	0.34	0.37	0.35	0.34	0.31	0.32	0.38	0.31	0.31	0.31	0.32	0.33	**0.28**	0.31

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue*	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Crd-Bt gneiss	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	**Grt-Bt-Sill leucosome**	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome
Sample	103-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	**219-A-98**	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98
Profile	bt4	bt2	bt2	bt2	bt3	bt3	bt3	**bt3**	bt3	bt 8	bt 8	bt 8	bt 10	bt 10	bt 10	bt 10	bt 10
Point	3	1	2	3	1	2	3	**4**	5	1	2	3	1	2	3	4	
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	**matrix Bt2**	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2
SiO_2	31.55	35.71	34.90	34.50	35.43	34.00	34.86	**35.58**	35.33	36.66	35.28	36.98	34.77	34.37	34.96	34.50	
TiO_2	3.48	3.65	3.98	4.04	3.37	3.99	4.15	**4.27**	3.27	2.82	2.83	2.92	2.97	2.91	2.96	2.86	
Al_2O_3	18.27	21.33	19.46	18.89	18.84	17.62	18.42	**19.03**	17.88	18.33	18.60	19.69	17.83	17.67	18.02	17.94	
Cr_2O_3	0.18	0.03	0.03	0.02	0.01	0.00	0.03	**0.05**	0.02	0.00	0.01	0.02	0.02	0.00	0.02	0.01	
MgO	6.99	7.32	8.17	7.51	9.16	8.33	8.46	**7.77**	8.99	8.38	8.69	8.90	8.33	8.48	8.74	8.52	
CaO	0.51	0.00	0.00	0.00	0.02	0.15	0.07	**0.02**	0.11	0.08	0.05	0.03	0.01	0.00	0.00	0.00	
MnO	0.21	0.16	0.22	0.24	0.20	0.18	0.16	**0.22**	0.19	0.18	0.12	0.15	0.17	0.22	0.21	0.19	
FeO	25.84	16.56	18.79	20.55	19.15	19.30	20.28	**19.97**	20.49	18.33	19.73	18.54	21.75	21.32	21.36	21.31	
BaO	0.04	0.00	0.00	0.00	0.00	0.00	0.00	**0.02**	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.00	
NiO	0.06	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	
Na_2O	0.05	0.17	0.06	0.13	0.11	0.20	0.22	**0.14**	0.06	0.09	0.18	0.13	0.17	0.18	0.16	0.13	
K_2O	7.38	9.86	9.69	9.32	9.63	9.20	9.57	**9.49**	9.38	8.81	9.05	9.20	9.53	9.81	9.51	9.80	
F	0.13	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	
Cl	0.20	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	
Sum	94.90	94.78	95.30	95.20	95.90	92.96	96.22	**96.56**	95.73	93.66	94.52	96.53	95.54	94.98	95.93	95.25	
O=F	-0.05	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	
O=Cl	-0.04	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	
Total	94.80	94.78	95.30	95.20	95.90	92.96	96.22	**96.56**	95.73	93.66	94.52	96.53	95.54	94.98	95.93	95.25	
Formula (O=22)																	
Si	5.00	5.38	5.31	5.30	5.36	5.34	5.30	**5.36**	5.39	5.61	5.42	5.49	5.37	5.35	5.36	5.34	
Al^{IV}	3.00	2.62	2.69	2.70	2.64	2.66	2.70	**2.64**	2.61	2.39	2.58	2.51	2.63	2.65	2.64	2.66	
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	
Al^{VI}	0.41	1.17	0.80	0.72	0.72	0.60	0.60	**0.74**	0.61	0.92	0.79	0.94	0.61	0.59	0.61	0.62	
Cr	0.02	0.00	0.00	0.00	0.00	0.00	0.00	**0.01**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Ti	0.41	0.41	0.46	0.47	0.38	0.47	0.47	**0.48**	0.38	0.32	0.33	0.33	0.34	0.34	0.34	0.33	
Fe^{2+tot}	3.43	2.09	2.39	2.64	2.42	2.54	2.58	**2.52**	2.62	2.35	2.53	2.30	2.81	2.77	2.74	2.76	
Mn	0.03	0.02	0.03	0.03	0.03	0.02	0.02	**0.03**	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	
Mg	1.65	1.64	1.85	1.72	2.07	1.95	1.92	**1.74**	2.05	1.91	1.99	1.97	1.92	1.97	2.00	1.97	
Ni	0.01																
Sum VI	5.97	5.34	5.53	5.59	5.62	5.58	5.60	**5.52**	5.68	5.53	5.65	5.56	5.70	5.69	5.72	5.70	
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Ca	0.09	0.00	0.00	0.00	0.00	0.02	0.01	**0.00**	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	
Na	0.02	0.05	0.02	0.04	0.03	0.06	0.06	**0.04**	0.02	0.03	0.05	0.04	0.05	0.05	0.05	0.04	
K	1.49	1.89	1.88	1.83	1.86	1.84	1.86	**1.82**	1.83	1.72	1.77	1.74	1.88	1.95	1.86	1.94	
Sum XII	1.60	1.94	1.90	1.87	1.89	1.93	1.93	**1.87**	1.86	1.76	1.83	1.78	1.93	2.00	1.91	1.97	
	15.56	15.28	15.43	15.45	15.52	15.51	15.53	**15.39**	15.54	15.28	15.48	15.35	15.63	15.69	15.63	15.67	
F	0.06	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	
Cl	0.05	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	
X_{Mg}	0.33	0.44	0.44	0.39	0.46	0.43	0.43	**0.41**	0.44	0.45	0.44	0.46	0.41	0.41	0.42	0.42	

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome
Sample	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98
Profile	bt 10	bt 10	bt 10	bt 10	bt 13	bt 14	bt 14	bt 14	bt 15	bt 15	bt 16	bt 16	bt 16	bt 16	bt 16	bt 17
Point	5	6	7	8	1	1	2	3	1	2	1	2	3	4	5	1
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2
SiO_2	36.27	34.36	34.09	34.30	35.39	36.09	35.46	34.95	34.40	34.29	34.23	34.64	34.57	34.43	34.62	34.49
TiO_2	2.90	3.14	3.09	2.83	3.31	3.28	3.38	3.54	3.19	3.06	3.50	3.42	3.38	3.32	3.68	4.13
Al_2O_3	18.95	17.82	17.32	17.71	18.87	18.89	19.06	19.13	17.88	18.10	17.97	18.36	18.20	18.34	18.19	18.69
Cr_2O_3	0.00	0.04	0.00	0.02	0.03	0.02	0.00	0.03	0.03	0.00	0.00	0.02	0.02	0.02	0.00	0.00
MgO	9.33	8.42	8.42	8.63	8.29	8.94	8.77	8.46	7.78	7.83	8.43	8.56	8.59	8.36	8.15	7.92
CaO	0.09	0.00	0.00	0.02	0.01	0.02	0.05	0.02	0.00	0.01	0.08	0.14	0.08	0.13	0.11	0.06
MnO	0.23	0.27	0.18	0.17	0.08	0.10	0.17	0.14	0.23	0.19	0.20	0.19	0.14	0.18	0.20	0.18
FeO	20.89	21.66	21.54	22.60	19.33	17.28	18.60	18.93	21.40	20.54	20.22	20.22	19.56	20.32	20.46	20.25
BaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Na_2O	0.26	0.16	0.08	0.04	0.04	0.06	0.15	0.19	0.12	0.11	0.23	0.19	0.31	0.17	0.19	0.15
K_2O	9.15	9.73	9.40	9.59	9.33	9.32	9.50	9.41	9.64	9.48	9.13	9.29	9.14	9.01	9.29	9.60
F	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cl	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Sum	98.07	95.59	94.12	95.90	94.65	93.99	95.13	94.80	94.66	93.60	93.99	95.01	93.98	94.28	94.90	95.46
O=F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
O=Cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	98.07	95.59	94.12	95.90	94.65	93.99	95.13	94.80	94.66	93.60	93.99	95.01	93.98	94.28	94.90	95.46
Formula (O=22)																
Si	5.39	5.31	5.35	5.30	5.42	5.50	5.39	5.34	5.36	5.37	5.33	5.33	5.36	5.34	5.34	5.29
Al^{IV}	2.61	2.69	2.65	2.70	2.58	2.50	2.61	2.66	2.64	2.63	2.67	2.67	2.64	2.66	2.66	2.71
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.70	0.56	0.55	0.53	0.82	0.89	0.80	0.79	0.64	0.72	0.63	0.66	0.68	0.69	0.65	0.67
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.32	0.36	0.36	0.33	0.38	0.38	0.39	0.41	0.37	0.36	0.41	0.40	0.39	0.39	0.43	0.48
Fe^{2+tot}	2.59	2.80	2.83	2.92	2.47	2.20	2.36	2.42	2.79	2.69	2.63	2.60	2.54	2.63	2.64	2.60
Mn	0.03	0.03	0.02	0.02	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.02
Mg	2.06	1.94	1.97	1.99	1.89	2.03	1.99	1.93	1.81	1.83	1.96	1.96	1.98	1.93	1.88	1.81
Ni																
Sum VI	5.71	5.71	5.73	5.80	5.58	5.51	5.57	5.57	5.65	5.63	5.65	5.65	5.62	5.66	5.62	5.57
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.01	0.02	0.02	0.01
Na	0.08	0.05	0.03	0.01	0.01	0.02	0.04	0.06	0.03	0.03	0.07	0.06	0.09	0.05	0.06	0.04
K	1.73	1.92	1.88	1.89	1.82	1.81	1.84	1.84	1.92	1.90	1.81	1.82	1.81	1.78	1.83	1.88
Sum XII	1.82	1.97	1.91	1.91	1.83	1.83	1.89	1.89	1.95	1.93	1.90	1.90	1.91	1.85	1.90	1.93
	15.54	15.68	15.64	15.70	15.41	15.34	15.46	15.47	15.60	15.56	15.55	15.55	15.53	15.52	15.52	15.51
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X_{Mg}	0.44	0.41	0.41	0.40	0.43	0.48	0.46	0.44	0.39	0.40	0.43	0.43	0.44	0.42	0.42	0.41

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	219-A	219-A	219-A	219-A	219-A	219-A	219-A	Orue
Rock type	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill leucosome	Grt-Bt-Sill gneiss
Sample	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	246-A-98
Profile	bt 6	bt 6	bt 7	bt 7	bt 8	bt 8	bt1	bt2	bt2	bt3	bt3	bt3	bt3	bt5	bt6
Point	1	2	1	2	1	2	1	1	2	1	2	3	4	1	1
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	matrix Bt2
SiO_2	34.98	34.12	34.29	35.65	34.38	36.01	34.73	36.89	37.06	36.76	35.78	36.01	36.19	35.87	34.68
TiO_2	2.96	3.01	2.92	3.03	3.18	3.55	2.44	0.62	1.02	0.92	0.87	0.88	0.89	1.29	3.74
Al_2O_3	18.45	18.08	18.33	18.93	18.61	19.23	19.00	20.10	20.17	20.13	19.72	20.87	19.33	19.37	17.91
Cr_2O_3	0.00	0.01	0.00	0.04	0.04	0.03	0.01	0.02	0.00	0.00	0.02	0.01	0.00	0.00	0.02
MgO	8.37	8.00	8.17	8.42	8.17	7.72	9.36	10.01	9.32	10.21	10.44	9.89	10.33	9.22	8.07
CaO	0.03	0.03	0.03	0.08	0.02	0.14	0.05	0.09	0.07	0.11	0.08	0.03	0.12	0.07	0.07
MnO	0.16	0.16	0.21	0.14	0.18	0.22	0.15	0.09	0.08	0.09	0.09	0.15	0.13	0.10	0.08
FeO	20.50	21.18	20.18	19.17	20.04	19.32	19.17	16.72	15.93	16.22	16.47	16.40	17.43	17.97	21.02
BaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.03	0.00	0.08	0.04	0.02	0.00
NiO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Na_2O	0.09	0.04	0.11	0.14	0.16	0.13	0.15	0.07	0.10	0.12	0.11	0.12	0.08	0.12	0.18
K_2O	9.45	9.52	9.31	9.13	9.85	9.31	9.14	8.36	8.85	8.95	8.87	9.42	8.36	8.91	9.17
F	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cl	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Sum	94.97	94.14	93.55	94.72	94.64	95.65	94.20	92.98	92.66	93.54	92.44	93.85	92.91	92.94	94.94
O=F	-	-	-	-	-	-	- -	-	-	-	-	-	-		-
O=Cl	-	-	-	-	-	-	- -	-	-	-	-	-	-		-
Total	94.97	94.14	93.55	94.72	94.64	95.65	94.20	92.98	92.66	93.54	92.44	93.85	92.91	92.94	94.94
Formula (O=22)															
Si	5.38	5.34	5.36	5.44	5.32	5.45	5.35	5.61	5.64	5.57	5.50	5.46	5.55	5.53	5.36
Al^{IV}	2.62	2.66	2.64	2.56	2.68	2.55	2.65	2.39	2.36	2.43	2.50	2.54	2.45	2.47	2.64
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.73	0.67	0.74	0.85	0.72	0.87	0.80	1.21	1.27	1.16	1.08	1.19	1.04	1.05	0.62
Cr	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.34	0.35	0.34	0.35	0.37	0.40	0.28	0.07	0.12	0.10	0.10	0.10	0.10	0.15	0.44
Fe^{2+tot}	2.64	2.77	2.64	2.45	2.60	2.44	2.47	2.13	2.03	2.05	2.12	2.08	2.23	2.32	2.72
Mn	0.02	0.02	0.03	0.02	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01
Mg	1.92	1.86	1.90	1.92	1.89	1.74	2.15	2.27	2.12	2.30	2.39	2.24	2.36	2.12	1.86
Ni															
Sum VI	5.65	5.68	5.66	5.58	5.60	5.49	5.72	5.69	5.54	5.63	5.71	5.63	5.75	5.65	5.64
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.00	0.00	0.00	0.01	0.00	0.02	0.01	0.02	0.01	0.02	0.01	0.00	0.02	0.01	0.01
Na	0.03	0.01	0.03	0.04	0.05	0.04	0.05	0.02	0.03	0.03	0.03	0.03	0.02	0.04	0.05
K	1.86	1.90	1.86	1.78	1.95	1.80	1.80	1.62	1.72	1.73	1.74	1.82	1.64	1.75	1.81
Sum XII	1.89	1.92	1.89	1.83	2.00	1.86	1.85	1.66	1.76	1.78	1.79	1.87	1.68	1.80	1.87
	15.54	15.60	15.55	15.42	15.60	15.35	15.57	15.34	15.30	15.42	15.49	15.50	15.43	15.45	15.51
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X_{Mg}	0.42	0.40	0.42	0.44	0.42	0.42	0.47	0.52	0.51	0.53	0.53	0.52	0.51	0.48	0.41

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue*	Orue
Rock type	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	**Grt-Bt-Sill gneiss**	Grt-Bt-Sill gneiss
Sample	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	**246-A-98**	246-A-98
Profile	bt6	bt6	bt6	bt6	bt6	bt4	bt4	bt4	bt7	bt7	bt7	bt7	bt7	bt7	**bt7**	bt7
Point	2	3	4	5	6	1	2	3	1	2	3	4	5	6	**7**	8
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	**matrix Bt2**	matrix Bt2
SiO_2	34.90	34.73	35.03	34.62	34.59	35.66	33.62	33.37	34.66	34.32	34.22	34.58	34.72	34.71	**34.64**	34.62
TiO_2	3.91	2.72	3.90	3.41	3.02	2.77	3.72	3.32	3.51	3.52	3.65	3.33	3.28	3.46	**3.54**	3.28
Al_2O_3	17.76	18.61	17.62	17.64	17.50	18.21	18.72	17.69	17.87	17.94	17.72	17.59	17.64	17.90	**17.35**	17.48
Cr_2O_3	0.03	0.03	0.00	0.03	0.00	0.00	0.04	0.04	0.00	0.00	0.02	0.04	0.02	0.03	**0.05**	0.04
MgO	7.87	8.80	7.82	8.30	8.77	8.67	7.33	7.46	7.34	7.30	7.18	7.11	7.21	7.28	**7.22**	7.47
CaO	0.08	0.01	0.02	0.01	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
MnO	0.11	0.08	0.12	0.09	0.11	0.13	0.16	0.14	0.10	0.13	0.12	0.10	0.09	0.17	**0.15**	0.12
FeO	21.60	20.64	21.44	21.13	21.26	19.91	21.35	22.36	21.81	22.22	21.63	22.09	21.97	22.17	**22.20**	21.71
BaO	0.02	0.00	0.00	0.04	0.04	0.00	0.03	0.00	0.02	0.00	0.00	0.00	0.08	0.00	**0.00**	0.01
NiO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.
Na_2O	0.20	0.16	0.20	0.16	0.14	0.12	0.06	0.09	0.10	0.11	0.07	0.03	0.12	0.10	**0.12**	0.07
K_2O	9.32	9.43	9.56	9.32	9.46	9.39	9.37	9.63	9.68	9.62	9.55	9.70	9.72	9.47	**9.60**	9.57
F	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.
Cl	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.
Sum	95.80	95.21	95.71	94.75	94.91	94.86	94.41	94.10	95.11	95.15	94.15	94.56	94.83	95.28	**94.86**	94.38
O=F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
O=Cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
Total	95.80	95.21	95.71	94.75	94.91	94.86	94.41	94.10	95.11	95.15	94.15	94.56	94.83	95.28	**94.86**	94.38
Formula (O=22)																
Si	5.36	5.34	5.39	5.37	5.37	5.47	5.25	5.27	5.38	5.34	5.36	5.41	5.41	5.38	**5.40**	5.41
Al^{IV}	2.64	2.66	2.61	2.63	2.63	2.53	2.75	2.73	2.62	2.66	2.64	2.59	2.59	2.62	**2.60**	2.59
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00
Al^{VI}	0.57	0.71	0.58	0.59	0.57	0.76	0.69	0.57	0.65	0.63	0.64	0.65	0.65	0.65	**0.59**	0.63
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	**0.01**	0.01
Ti	0.45	0.31	0.45	0.40	0.35	0.32	0.44	0.39	0.41	0.41	0.43	0.39	0.39	0.40	**0.41**	0.39
Fe^{2+tot}	2.77	2.65	2.76	2.74	2.76	2.55	2.79	2.95	2.83	2.89	2.84	2.89	2.86	2.87	**2.90**	2.84
Mn	0.02	0.01	0.02	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.02	**0.02**	0.02
Mg	1.80	2.02	1.79	1.92	2.03	1.98	1.71	1.76	1.70	1.69	1.68	1.66	1.67	1.68	**1.68**	1.74
Ni																
Sum VI	5.62	5.71	5.60	5.67	5.72	5.63	5.65	5.70	5.60	5.64	5.60	5.60	5.59	5.63	**5.61**	5.62
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Ca	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Na	0.06	0.05	0.06	0.05	0.04	0.04	0.02	0.03	0.03	0.03	0.02	0.01	0.04	0.03	**0.04**	0.02
K	1.83	1.85	1.87	1.84	1.87	1.84	1.87	1.94	1.92	1.91	1.91	1.93	1.93	1.87	**1.91**	1.91
Sum XII	1.90	1.90	1.94	1.90	1.92	1.87	1.89	1.97	1.95	1.94	1.93	1.94	1.98	1.90	**1.95**	1.93
	15.52	15.61	15.53	15.56	15.64	15.50	15.53	15.67	15.55	15.58	15.53	15.55	15.57	15.53	**15.56**	15.55
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
Cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**	-
X_{Mg}	0.39	0.43	0.39	0.41	0.42	0.44	0.38	0.37	0.38	0.37	0.37	0.36	0.37	0.37	**0.37**	0.38

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss
Sample	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98
Profile	bt7	bt7	bt7	bt7	bt8	bt8	bt8	bt8	bt13	bt13	bt13	bt13	bt14	bt14	bt14	bt14
Point	9	10	11	12	1	2	3	4	1	2	3	4	4	5	6	7
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2
SiO_2	34.48	34.34	34.35	34.73	34.61	34.63	34.00	34.33	34.35	35.25	34.11	34.21	33.91	33.92	34.11	34.44
TiO_2	3.79	3.49	3.27	3.04	3.32	3.06	3.04	2.88	3.92	2.99	3.59	3.89	4.20	4.25	4.30	3.91
Al_2O_3	17.29	17.46	17.54	17.46	17.89	18.17	17.88	18.29	17.60	18.60	17.95	17.22	17.60	17.32	17.59	17.35
Cr_2O_3	0.03	0.04	0.06	0.02	0.03	0.04	0.04	0.01	0.00	0.01	0.00	0.00	0.04	0.02	0.04	0.01
MgO	7.30	7.23	7.40	7.62	6.90	7.35	7.31	7.58	7.62	7.91	7.44	7.86	7.35	7.34	7.14	7.44
CaO	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.00
MnO	0.09	0.14	0.14	0.10	0.11	0.14	0.10	0.11	0.05	0.09	0.15	0.11	0.08	0.13	0.08	0.15
FeO	22.21	22.00	21.95	21.79	22.44	21.86	21.43	21.76	20.95	20.60	21.19	20.68	21.29	21.03	20.84	21.15
BaO	0.00	0.00	0.00	0.02	0.00	0.02	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Na_2O	0.08	0.16	0.05	0.11	0.10	0.09	0.20	0.10	0.15	0.17	0.12	0.16	0.13	0.11	0.09	0.11
K_2O	9.57	9.40	9.86	9.51	9.52	9.66	9.54	9.49	9.40	9.36	9.44	9.74	9.54	9.49	9.68	9.83
F	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cl	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Sum	94.85	94.26	94.61	94.41	94.92	95.02	93.62	94.60	94.04	95.00	93.99	93.89	94.15	93.61	93.87	94.38
O=F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
O=Cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	94.85	94.26	94.61	94.41	94.92	95.02	93.62	94.60	94.04	95.00	93.99	93.89	94.15	93.61	93.87	94.38
Formula (O=22)																
Si	5.38	5.38	5.38	5.43	5.39	5.38	5.36	5.35	5.37	5.42	5.34	5.37	5.32	5.34	5.35	5.38
Al^{IV}	2.62	2.62	2.62	2.57	2.61	2.62	2.64	2.65	2.63	2.58	2.66	2.63	2.68	2.66	2.65	2.62
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.56	0.61	0.61	0.64	0.68	0.71	0.69	0.71	0.61	0.79	0.66	0.55	0.57	0.56	0.60	0.58
Cr	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.45	0.41	0.38	0.36	0.39	0.36	0.36	0.34	0.46	0.35	0.42	0.46	0.50	0.50	0.51	0.46
Fe^{2+tot}	2.90	2.89	2.87	2.85	2.92	2.84	2.83	2.84	2.74	2.65	2.78	2.71	2.79	2.77	2.73	2.77
Mn	0.01	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.02	0.01	0.02
Mg	1.70	1.69	1.73	1.78	1.60	1.70	1.72	1.76	1.78	1.81	1.74	1.84	1.72	1.72	1.67	1.73
Ni																
Sum VI	5.62	5.62	5.62	5.64	5.61	5.63	5.61	5.67	5.59	5.61	5.61	5.58	5.59	5.57	5.53	5.56
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.02	0.05	0.02	0.03	0.03	0.03	0.06	0.03	0.05	0.05	0.04	0.05	0.04	0.03	0.03	0.03
K	1.91	1.88	1.97	1.90	1.89	1.91	1.92	1.89	1.87	1.84	1.89	1.95	1.91	1.91	1.94	1.96
Sum XII	1.93	1.93	1.98	1.93	1.92	1.94	1.99	1.92	1.92	1.89	1.93	2.00	1.95	1.94	1.96	1.99
	15.55	15.55	15.61	15.57	15.54	15.57	15.60	15.59	15.51	15.50	15.54	15.58	15.53	15.51	15.50	15.55
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X_{Mg}	0.37	0.37	0.38	0.38	0.35	0.37	0.38	0.38	0.39	0.41	0.38	0.40	0.38	0.38	0.38	0.39

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue*
Rock type	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	Grt-Bt-Sill gneiss	**Grt-Bt-Sill gneiss**
Sample	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	**246-A-98**
Profile	bt14	bt15	bt15	bt2	bt2	bt3	bt3	bt3	bt3	bt4	bt4	bt5	bt5	bt1	**bt1**
Point	8	1	2	1	2	1	2	3	4	1	2	1	2	1	**2**
Texture	matrix Bt2	matrix Bt2	matrix Bt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	**Bt3 on Grt2**
SiO_2	34.38	34.68	35.66	34.03	35.31	34.21	34.36	34.48	34.61	34.63	34.45	34.68	34.23	34.25	**34.32**
TiO_2	4.10	3.74	2.77	1.94	1.98	1.93	1.92	1.90	1.95	2.77	2.96	2.02	2.04	0.92	**1.07**
Al_2O_3	17.20	17.65	18.21	18.43	19.64	18.88	19.13	18.78	19.39	18.91	19.05	19.26	19.05	20.74	**20.29**
Cr_2O_3	0.01	0.06	0.00	0.04	0.06	0.03	0.02	0.02	0.05	0.01	0.00	0.03	0.00	0.00	**0.00**
MgO	7.10	7.46	8.67	8.48	7.84	8.37	8.12	8.14	8.01	7.98	7.88	8.23	8.40	7.44	**7.74**
CaO	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.02	0.02	0.01	0.00	0.02	0.06	0.01	**0.01**
MnO	0.15	0.09	0.13	0.11	0.07	0.05	0.11	0.04	0.05	0.05	0.07	0.06	0.09	0.04	**0.11**
FeO	21.75	20.59	19.91	21.71	20.46	21.16	21.23	21.36	20.95	20.27	20.35	20.45	21.13	21.61	**22.02**
BaO	0.00	0.04	0.00	0.00	0.03	0.00	0.02	0.05	0.02	0.07	0.00	0.00	0.00	0.00	**0.07**
NiO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**
Na_2O	0.14	0.13	0.12	0.09	0.20	0.15	0.18	0.12	0.19	0.13	0.17	0.20	0.12	0.13	**0.19**
K_2O	9.38	9.32	9.39	9.51	9.27	9.50	9.70	9.50	9.63	9.48	9.60	9.58	9.63	9.60	**9.61**
F	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**
Cl	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**
Sum	94.22	93.76	94.86	94.35	94.94	94.28	94.79	94.41	94.87	94.31	94.53	94.53	94.75	94.74	**95.42**
O=F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
O=Cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Total	94.22	93.76	94.86	94.35	94.94	94.28	94.79	94.41	94.87	94.31	94.53	94.53	94.75	94.74	**95.42**
Formula (O=22)															
Si	5.39	5.42	5.47	5.32	5.42	5.33	5.33	5.37	5.35	5.37	5.33	5.36	5.31	5.31	**5.30**
Al^{IV}	2.61	2.58	2.53	2.68	2.58	2.67	2.67	2.63	2.65	2.63	2.67	2.64	2.69	2.69	**2.70**
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**
Al^{VI}	0.57	0.67	0.76	0.72	0.97	0.80	0.83	0.82	0.88	0.82	0.81	0.88	0.80	1.09	**0.99**
Cr	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	**0.00**
Ti	0.48	0.44	0.32	0.23	0.23	0.23	0.22	0.22	0.23	0.32	0.35	0.24	0.24	0.11	**0.12**
Fe^{2+tot}	2.85	2.69	2.55	2.84	2.62	2.76	2.76	2.78	2.71	2.63	2.63	2.65	2.74	2.80	**2.84**
Mn	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**
Mg	1.66	1.74	1.98	1.98	1.79	1.95	1.88	1.89	1.85	1.84	1.82	1.90	1.94	1.72	**1.78**
Ni															
Sum VI	5.58	5.56	5.63	5.78	5.63	5.74	5.71	5.72	5.67	5.62	5.61	5.67	5.73	5.72	**5.75**
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Ca	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	**0.00**
Na	0.04	0.04	0.04	0.03	0.06	0.04	0.05	0.04	0.06	0.04	0.05	0.06	0.04	0.04	**0.06**
K	1.88	1.86	1.84	1.90	1.81	1.89	1.92	1.89	1.90	1.88	1.90	1.89	1.91	1.90	**1.89**
Sum XII	1.92	1.90	1.87	1.93	1.89	1.93	1.97	1.93	1.96	1.92	1.95	1.95	1.95	1.94	**1.95**
	15.50	15.46	15.50	15.71	15.51	15.67	15.68	15.65	15.64	15.54	15.56	15.62	15.68	15.66	**15.71**
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
X_{Mg}	0.37	0.39	0.44	0.41	0.41	0.41	0.41	0.40	0.41	0.41	0.41	0.42	0.41	0.38	**0.39**

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	* **Orue**	Orue	Orue	Orue	Orue
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	**Grt-Sil-Crd rock**	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Bt-Sil gneiss
Sample	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	**302-2-99**	302-2-99	302-2-99	302-2-99	342-3-99
Profile	bt 1	bt 2	bt 2	bt 5	bt 5	bt 5	bt 5	bt 5	bt 5	bt 6	**bt 7**	bt 7	bt 7	bt 7	bt 4
Point	1	2	3	2	4	5	6	7	8	1	**1**	3	4	5	1
Texture	Bt3 on Crd2	Bt3 on Crd2	Bt3 on Crd2	Bt3 on Crd2	Bt3 on Crd2	Bt3 on Crd2	Bt3 on Crd2	Bt3 on Crd2	Bt3 on Crd2	Bt3 on Crd2	**Bt3 on Grt2**	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt1 in Grt1
SiO_2	33.59	34.41	34.63	34.74	34.47	34.52	34.56	34.36	34.42	34.59	**33.62**	34.61	34.66	33.78	34.87
TiO_2	1.46	2.31	2.29	2.32	2.32	2.36	2.41	2.30	2.35	1.73	**1.66**	1.80	1.69	1.69	1.93
Al_2O_3	18.81	18.87	19.02	19.02	18.47	18.63	18.61	18.76	18.59	19.34	**18.98**	18.89	18.84	18.72	18.96
Cr_2O_3	0.00	0.00	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.00	**0.01**	0.04	0.00	0.03	0.00
MgO	10.20	9.72	9.97	9.75	9.88	9.76	9.85	9.76	10.09	9.82	**9.95**	10.82	10.59	9.52	13.83
CaO	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**	0.00	0.03	0.02	0.00
MnO	0.08	0.07	0.04	0.08	0.07	0.07	0.07	0.08	0.05	0.04	**0.07**	0.00	0.04	0.05	0.03
FeO	19.52	19.54	19.71	19.72	20.46	20.23	20.15	20.19	20.28	19.19	**21.25**	19.08	19.20	20.56	15.15
BaO	0.83	0.89	0.84	0.96	0.82	0.91	0.84	0.83	0.88	0.92	**0.94**	0.74	0.93	0.79	0.00
NiO	0.11	0.00	0.06	0.01	0.02	0.00	0.00	0.03	0.04	0.00	**0.02**	0.01	0.03	0.03	0.05
Na_2O	0.27	0.39	0.41	0.42	0.34	0.39	0.41	0.25	0.39	0.34	**0.25**	0.26	0.30	0.09	0.47
K_2O	8.61	8.78	8.77	8.51	8.63	8.54	8.63	8.59	8.59	8.73	**8.19**	8.49	8.56	7.93	8.98
F	0.01	0.08	0.12	0.17	0.00	0.20	0.00	0.00	0.00	0.07	**0.15**	0.13	0.18	0.10	1.34
Cl	0.39	0.38	0.40	0.36	0.35	0.34	0.36	0.36	0.38	0.36	**0.35**	0.40	0.44	0.32	0.04
Sum	93.88	95.43	96.30	96.05	95.83	95.97	95.88	95.52	96.07	95.12	**95.43**	95.28	95.49	93.64	95.63
O=F	0.00	-0.03	-0.05	-0.07	0.00	-0.08	0.00	0.00	0.00	-0.03	**-0.06**	-0.06	-0.08	-0.04	-0.56
O=Cl	-0.09	-0.09	-0.09	-0.08	-0.08	-0.08	-0.08	-0.08	-0.09	-0.08	**-0.08**	-0.09	-0.10	-0.07	-0.01
Total	93.79	95.31	96.16	95.90	95.75	95.81	95.80	95.44	95.98	95.02	**95.29**	95.13	95.31	93.53	95.06
Formula (O=22)															
Si	5.25	5.28	5.27	5.29	5.29	5.28	5.29	5.28	5.26	5.31	**5.20**	5.29	5.30	5.29	5.19
Al^{IV}	2.75	2.72	2.73	2.71	2.71	2.72	2.71	2.72	2.74	2.69	**2.80**	2.71	2.70	2.71	2.81
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00
Al^{VI}	0.72	0.70	0.68	0.70	0.63	0.64	0.65	0.67	0.62	0.81	**0.65**	0.69	0.70	0.74	0.51
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00
Ti	0.17	0.27	0.26	0.27	0.27	0.27	0.28	0.27	0.27	0.20	**0.19**	0.21	0.19	0.20	0.22
Fe^{2+tot}	2.55	2.51	2.51	2.51	2.62	2.59	2.58	2.59	2.59	2.46	**2.75**	2.44	2.46	2.69	1.89
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	0.00	0.01	0.01	0.00
Mg	2.38	2.22	2.26	2.21	2.26	2.22	2.25	2.24	2.30	2.25	**2.29**	2.47	2.41	2.22	3.07
Ni	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01
Sum VI	5.84	5.70	5.72	5.70	5.79	5.73	5.76	5.78	5.79	5.72	**5.90**	5.81	5.77	5.86	5.69
Ba	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.05	0.05	0.06	**0.06**	0.04	0.06	0.05	0.00
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Na	0.08	0.12	0.12	0.12	0.10	0.12	0.12	0.07	0.12	0.10	**0.08**	0.08	0.09	0.03	0.14
K	1.72	1.72	1.70	1.65	1.69	1.67	1.69	1.68	1.68	1.71	**1.61**	1.66	1.67	1.58	1.71
Sum XII	1.85	1.89	1.87	1.84	1.84	1.84	1.86	1.81	1.85	1.87	**1.75**	1.78	1.82	1.66	1.84
	15.69	15.59	15.60	15.54	15.63	15.57	15.61	15.59	15.64	15.59	**15.64**	15.58	15.59	15.53	15.53
F	0.00	0.04	0.06	0.08	0.00	0.10	0.00	0.00	0.00	0.03	**0.07**	0.06	0.09	0.05	0.63
Cl	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.10	0.09	**0.09**	0.10	0.11	0.09	0.01
X_{Mg}	0.48	0.47	0.47	0.47	0.46	0.46	0.47	0.46	0.47	0.48	**0.45**	0.50	0.50	0.45	0.62

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss
Sample	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	**342-3-99**	342-3-99
Profile	bt 4	bt 6	bt 6	bt 6	bt 1	bt 1	bt 1	bt 1	bt 2	bt 2	bt 2	bt 2	bt 2	bt 2	**bt 7**	bt 7
Point	3	1	2	3	2	3	4	5	2	3	5	6	7	9	**1**	5
Texture	Bt1 in Grt1	Bt1 in Grt1	Bt1 in Grt1	Bt1 in Grt1	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	**matrix Bt2**	matrix Bt2
SiO_2	35.86	35.05	35.06	35.33	34.94	34.77	34.86	35.09	35.06	35.30	36.55	35.65	35.22	35.71	**34.82**	37.32
TiO_2	2.00	2.19	2.33	2.31	2.96	2.85	2.88	2.84	2.90	2.97	2.32	2.41	2.56	2.63	**3.17**	2.94
Al_2O_3	19.24	19.82	19.72	19.70	19.71	19.59	19.34	19.40	19.55	19.52	20.46	19.84	19.49	19.97	**19.54**	20.64
Cr_2O_3	0.00	0.02	0.05	0.00	0.03	0.07	0.05	0.04	0.00	0.02	0.02	0.04	0.04	0.05	**0.04**	0.00
MgO	14.20	13.96	13.62	13.58	9.63	9.83	9.74	10.07	9.52	9.73	9.06	10.54	10.69	9.75	**8.76**	8.17
CaO	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	**0.06**	0.00
MnO	0.03	0.10	0.07	0.08	0.07	0.05	0.03	0.03	0.06	0.13	0.03	0.05	0.02	0.08	**0.13**	0.07
FeO	13.80	14.21	13.77	14.10	18.24	18.17	18.19	17.99	18.56	18.25	16.16	16.98	17.84	17.63	**19.32**	16.35
BaO	0.04	0.01	0.03	0.05	0.04	0.07	0.03	0.03	0.03	0.01	0.02	0.00	0.02	0.00	**0.01**	0.00
NiO	0.06	0.03	0.01	0.00	0.09	0.00	0.07	0.04	0.11	0.01	0.00	0.00	0.03	0.00	**0.00**	0.01
Na_2O	0.62	0.38	0.42	0.32	0.13	0.20	0.17	0.16	0.17	0.20	0.19	0.20	0.16	0.19	**0.09**	0.09
K_2O	8.96	9.18	9.45	9.08	9.74	9.59	9.59	9.66	9.56	9.55	9.28	9.68	9.52	9.38	**9.17**	9.42
F	1.50	1.76	1.17	1.54	1.22	1.43	1.18	0.99	1.16	0.83	0.70	1.00	0.59	0.78	**0.51**	0.77
Cl	0.02	0.00	0.03	0.01	0.00	0.04	0.01	0.00	0.01	0.03	0.05	0.02	0.01	0.02	**0.00**	0.01
Sum	96.33	96.71	95.74	96.09	96.78	96.67	96.13	96.33	96.69	96.53	94.82	96.39	96.19	96.19	**95.63**	95.78
O=F	-0.63	-0.74	-0.49	-0.65	-0.51	-0.60	-0.50	-0.42	-0.49	-0.35	-0.29	-0.42	-0.25	-0.33	**-0.22**	-0.32
O=Cl	0.00	0.00	-0.01	0.00	0.00	-0.01	0.00	0.00	0.00	-0.01	-0.01	0.00	0.00	0.00	**0.00**	0.00
Total	95.70	95.97	95.24	95.44	96.27	96.06	95.63	95.91	96.20	96.18	94.52	95.97	95.94	95.86	**95.41**	95.46
Formula (O=22)																
Si	5.25	5.13	5.18	5.19	5.22	5.20	5.24	5.26	5.25	5.28	5.47	5.30	5.28	5.33	**5.28**	5.52
Al^{IV}	2.75	2.87	2.82	2.81	2.78	2.80	2.76	2.74	2.75	2.72	2.53	2.70	2.72	2.67	**2.72**	2.48
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00
Al^{VI}	0.57	0.55	0.62	0.61	0.69	0.65	0.67	0.69	0.69	0.72	1.07	0.78	0.72	0.84	**0.77**	1.12
Cr	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	**0.01**	0.00
Ti	0.22	0.24	0.26	0.26	0.33	0.32	0.33	0.32	0.33	0.33	0.26	0.27	0.29	0.30	**0.36**	0.33
Fe^{2+tot}	1.69	1.74	1.70	1.73	2.28	2.27	2.29	2.25	2.32	2.28	2.02	2.11	2.24	2.20	**2.45**	2.02
Mn	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.01	**0.02**	0.01
Mg	3.10	3.05	3.00	2.98	2.14	2.19	2.18	2.25	2.12	2.17	2.02	2.34	2.39	2.17	**1.98**	1.80
Ni	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Sum VI	5.59	5.60	5.60	5.58	5.47	5.46	5.49	5.52	5.49	5.52	5.38	5.51	5.64	5.51	**5.58**	5.28
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.01**	0.00
Na	0.18	0.11	0.12	0.09	0.04	0.06	0.05	0.05	0.05	0.06	0.05	0.06	0.05	0.05	**0.03**	0.03
K	1.67	1.71	1.78	1.70	1.86	1.83	1.84	1.85	1.83	1.82	1.77	1.84	1.82	1.79	**1.77**	1.78
Sum XII	1.85	1.82	1.91	1.80	1.90	1.89	1.89	1.89	1.88	1.88	1.83	1.89	1.87	1.84	**1.81**	1.80
	15.45	15.42	15.51	15.38	15.37	15.35	15.38	15.42	15.37	15.40	15.21	15.40	15.51	15.35	**15.39**	15.08
F	0.69	0.81	0.55	0.72	0.58	0.68	0.56	0.47	0.55	0.39	0.33	0.47	0.28	0.37	**0.25**	0.36
Cl	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	**0.00**	0.00
X_{Mg}	0.65	0.64	0.64	0.63	0.48	0.49	0.49	0.50	0.48	0.49	0.50	0.53	0.52	0.50	**0.45**	0.47

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	**Orue** *	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	**401-2-99**	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99
Profile	bt 3	bt 3	bt 3	bt 3	bt 3	**bt 1**	bt 1	bt 1	bt 2	bt 2	bt 2	bt 4	bt 4	bt 4	bt 4	bt 4
Point	1	2	3	4	5	**1**	2	3	5	7	8	1	3	4	5	7
Texture	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	**matrix Bt2**	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2
SiO_2	34.29	34.22	34.77	35.25	33.97	**35.19**	36.91	36.03	34.88	35.02	35.16	35.30	35.22	35.30	35.05	35.19
TiO_2	1.73	1.75	1.77	1.58	1.53	**3.24**	2.88	3.17	3.52	3.31	3.39	3.23	3.30	3.32	3.11	3.22
Al_2O_3	19.66	19.63	19.50	21.23	20.43	**18.36**	21.23	19.50	18.19	18.52	18.81	18.33	18.19	18.14	18.03	18.05
Cr_2O_3	0.03	0.04	0.05	0.04	0.00	**0.04**	0.00	0.09	0.01	0.00	0.00	0.00	0.01	0.02	0.08	0.08
MgO	11.06	10.90	11.13	10.60	10.10	**9.82**	8.42	9.86	10.20	10.76	10.29	10.59	10.66	10.53	10.85	10.80
CaO	0.00	0.06	0.00	0.03	0.03	**0.00**	0.02	0.00	0.00	0.01	0.01	0.00	0.00	0.03	0.00	0.00
MnO	0.15	0.07	0.03	0.07	0.06	**0.10**	0.14	0.06	0.14	0.02	0.05	0.09	0.00	0.00	0.07	0.00
FeO	17.57	16.64	16.88	16.56	18.17	**18.67**	15.83	17.18	18.36	17.57	17.90	18.21	17.43	17.86	18.30	18.09
BaO	0.00	0.05	0.00	0.07	0.02	**0.00**	0.06	0.05	0.02	0.05	0.00	0.04	0.01	0.00	0.02	0.00
NiO	0.00	0.02	0.02	0.00	0.03	**0.03**	0.00	0.06	0.00	0.00	0.01	0.06	0.11	0.03	0.02	0.01
Na_2O	0.24	0.36	0.23	0.23	0.21	**0.22**	0.20	0.27	0.19	0.28	0.20	0.27	0.16	0.17	0.19	0.11
K_2O	9.14	9.30	9.29	9.54	8.81	**9.34**	8.52	9.53	9.57	9.57	9.50	9.59	9.84	9.71	9.64	9.56
F	0.96	1.03	0.78	0.92	0.83	**1.11**	0.76	0.96	1.00	1.34	1.20	1.13	1.70	1.33	0.89	1.03
Cl	0.04	0.14	0.05	0.00	0.04	**0.04**	0.01	0.08	0.05	0.00	0.01	0.01	0.03	0.02	0.01	0.03
Sum	94.86	94.20	94.49	96.11	94.23	**96.15**	94.96	96.84	96.13	96.44	96.52	96.85	96.66	96.45	96.27	96.17
O=F	-0.40	-0.43	-0.33	-0.39	-0.35	**-0.47**	-0.32	-0.40	-0.42	-0.57	-0.50	-0.47	-0.72	-0.56	-0.38	-0.43
O=Cl	-0.01	-0.03	-0.01	0.00	-0.01	**-0.01**	0.00	-0.02	-0.01	0.00	0.00	0.00	-0.01	0.00	0.00	-0.01
Total	94.44	93.74	94.15	95.72	93.87	**95.67**	94.64	96.42	95.70	95.87	96.02	96.37	95.93	95.88	95.89	95.73
Formula (O=22)																
Si	5.21	5.22	5.28	5.24	5.19	**5.30**	5.47	5.34	5.26	5.24	5.25	5.28	5.26	5.29	5.28	5.29
Al^{IV}	2.79	2.78	2.72	2.76	2.81	**2.70**	2.53	2.66	2.74	2.76	2.75	2.72	2.74	2.71	2.72	2.71
Sum IV	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.73	0.75	0.77	0.96	0.88	**0.56**	1.18	0.74	0.50	0.51	0.57	0.51	0.46	0.49	0.48	0.49
Cr	0.00	0.00	0.01	0.00	0.00	**0.01**	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Ti	0.20	0.20	0.20	0.18	0.18	**0.37**	0.32	0.35	0.40	0.37	0.38	0.36	0.37	0.37	0.35	0.36
Fe^{2+tot}	2.23	2.12	2.14	2.06	2.32	**2.35**	1.96	2.13	2.32	2.20	2.24	2.28	2.18	2.24	2.31	2.27
Mn	0.02	0.01	0.00	0.01	0.01	**0.01**	0.02	0.01	0.02	0.00	0.01	0.01	0.00	0.00	0.01	0.00
Mg	2.50	2.48	2.52	2.35	2.30	**2.20**	1.86	2.18	2.29	2.40	2.29	2.36	2.37	2.35	2.44	2.42
Ni	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
Sum VI	5.68	5.57	5.64	5.56	5.69	**5.50**	5.34	5.43	5.52	5.48	5.49	5.52	5.40	5.46	5.60	5.56
Ba	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.00	0.01	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.07	0.11	0.07	0.07	0.06	**0.06**	0.06	0.08	0.06	0.08	0.06	0.08	0.05	0.05	0.06	0.03
K	1.77	1.81	1.80	1.81	1.72	**1.79**	1.61	1.80	1.84	1.83	1.81	1.83	1.87	1.85	1.85	1.83
Sum XII	1.84	1.93	1.87	1.88	1.79	**1.86**	1.67	1.88	1.90	1.91	1.87	1.91	1.92	1.91	1.91	1.86
	15.52	15.50	15.51	15.44	15.47	**15.36**	15.01	15.31	15.42	15.39	15.36	15.43	15.32	15.37	15.50	15.42
F	0.46	0.50	0.37	0.43	0.40	**0.53**	0.36	0.45	0.48	0.64	0.57	0.53	0.80	0.63	0.42	0.49
Cl	0.01	0.04	0.01	0.00	0.01	**0.01**	0.00	0.02	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.01
X_{Mg}	0.53	0.54	0.54	0.53	0.50	**0.48**	0.49	0.51	0.50	0.52	0.51	0.51	0.52	0.51	0.51	0.52

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue	Orue	Orue	Orue	Orue		Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	**401-2-99**	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00		679-1-00	679-1-00
Profile	bt 4	bt 6	bt 6	bt 6	bt 5	bt 5	bt 5	**bt 5**	bt 4	bt 4	bt 5	bt 5	bt 5		bt 1	bt 6
Point	9	1	3	5	2	4	5	**7**	1	4	1	4	5		4	3
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	**Bt3 on Grt2**	Bt1 in Pl2	Bt1 in Pl2	Bt1 in Pl2	Bt1 in Pl2	Bt1 in Pl2		matrix Bt2	matrix Bt2
SiO_2	35.47	35.20	35.69	35.87	37.10	37.53	38.20	**37.16**	34.29	33.97	33.91	34.28	34.23		33.66	34.13
TiO_2	3.14	3.47	3.48	3.24	1.75	2.94	2.48	**2.04**	4.25	4.27	3.34	4.08	4.35		3.15	3.20
Al_2O_3	18.16	17.99	18.42	18.96	22.26	21.15	21.04	**20.74**	17.80	18.27	18.38	18.34	18.20		18.91	18.40
Cr_2O_3	0.07	0.00	0.08	0.05	0.03	0.06	0.01	**0.03**	0.02	0.02	0.00	0.01	0.05		0.06	0.05
MgO	10.59	10.51	10.27	10.22	9.01	9.52	9.46	**9.46**	6.38	6.07	6.51	5.99	5.93		7.09	7.12
CaO	0.00	0.00	0.01	0.01	0.00	0.03	0.01	**0.00**	0.00	0.01	0.02	0.00	0.00		0.07	0.01
MnO	0.11	0.10	0.04	0.10	0.08	0.07	0.05	**0.08**	0.22	0.12	0.12	0.10	0.12		0.17	0.12
FeO	18.02	17.97	17.69	17.23	15.38	14.33	14.61	**16.26**	23.27	23.18	23.48	23.14	23.18		23.15	22.56
BaO	0.00	0.08	0.00	0.00	0.00	0.00	0.05	**0.09**	0.21	0.08	0.15	0.09	0.17		0.00	0.09
NiO	0.01	0.03	0.00	0.00	0.00	0.00	0.00	**0.01**	0.02	0.00	0.00	0.00	0.02		0.00	0.03
Na_2O	0.14	0.20	0.26	0.19	0.22	0.23	0.18	**0.17**	0.21	0.21	0.16	0.19	0.19		0.07	0.19
K_2O	9.43	9.58	9.63	9.51	8.46	8.99	9.31	**8.87**	9.57	9.46	9.60	9.80	9.70		9.49	9.63
F	1.55	1.20	1.00	1.28	0.84	1.02	1.19	**0.87**	0.67	0.63	0.53	0.54	0.31		0.65	0.76
Cl	0.00	0.02	0.03	0.05	0.02	0.03	0.02	**0.02**	0.11	0.04	0.03	0.07	0.06		0.05	0.05
Sum	96.68	96.34	96.60	96.71	95.16	95.88	96.60	**95.79**	97.02	96.33	96.23	96.63	96.50		96.52	96.34
O=F	-0.65	-0.50	-0.42	-0.54	-0.35	-0.43	-0.50	**-0.37**	-0.28	-0.26	-0.22	-0.23	-0.13		-0.28	-0.32
O=Cl	0.00	0.00	-0.01	-0.01	0.00	-0.01	0.00	**0.00**	-0.02	-0.01	-0.01	-0.02	-0.01		-0.01	-0.01
Total	96.03	95.83	96.17	96.16	94.80	95.45	96.10	**95.42**	96.71	96.06	96.00	96.38	96.35		96.23	96.01
Formula (O=22)																
Si	5.29	5.29	5.33	5.32	5.46	5.48	5.54	**5.48**	5.27	5.24	5.25	5.28	5.28		5.18	5.26
Al^{IV}	2.71	2.71	2.67	2.68	2.54	2.52	2.46	**2.52**	2.73	2.76	2.75	2.72	2.72		2.82	2.74
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00		8.00	8.00
Al^{VI}	0.49	0.47	0.57	0.64	1.32	1.11	1.13	**1.09**	0.49	0.57	0.61	0.61	0.59		0.61	0.59
Cr	0.01	0.00	0.01	0.01	0.00	0.01	0.00	**0.00**	0.00	0.00	0.00	0.00	0.01		0.01	0.01
Ti	0.35	0.39	0.39	0.36	0.19	0.32	0.27	**0.23**	0.49	0.50	0.39	0.47	0.50		0.36	0.37
Fe^{2+tot}	2.25	2.26	2.21	2.14	1.89	1.75	1.77	**2.01**	2.99	2.99	3.04	2.98	2.99		2.98	2.90
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	0.03	0.02	0.02	0.01	0.02		0.02	0.02
Mg	2.36	2.35	2.28	2.26	1.98	2.07	2.05	**2.08**	1.46	1.40	1.50	1.37	1.36		1.63	1.63
Ni	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Sum VI	5.47	5.49	5.46	5.42	5.39	5.27	5.23	**5.42**	5.47	5.47	5.56	5.45	5.48		5.61	5.53
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.01**	0.01	0.00	0.01	0.01	0.01		0.00	0.01
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00		0.01	0.00
Na	0.04	0.06	0.08	0.05	0.06	0.06	0.05	**0.05**	0.06	0.06	0.05	0.06	0.06		0.02	0.06
K	1.79	1.83	1.83	1.80	1.59	1.67	1.72	**1.67**	1.88	1.86	1.90	1.92	1.91		1.86	1.89
Sum XII	1.84	1.90	1.91	1.86	1.65	1.74	1.78	**1.72**	1.95	1.93	1.96	1.99	1.98		1.90	1.96
	15.31	15.39	15.37	15.28	15.04	15.01	15.01	**15.14**	15.42	15.40	15.52	15.43	15.45		15.51	15.48
F	0.73	0.57	0.47	0.60	0.39	0.47	0.54	**0.41**	0.33	0.31	0.26	0.26	0.15		0.32	0.37
Cl	0.00	0.00	0.01	0.01	0.00	0.01	0.00	**0.00**	0.03	0.01	0.01	0.02	0.02		0.01	0.01
X_{Mg}	0.51	0.51	0.51	0.51	0.51	0.54	0.54	**0.51**	0.33	0.32	0.33	0.32	0.31		0.35	0.36

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue*	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue*	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00
Profile	bt 7	bt 7	bt 7	bt 7	bt 8	bt 8	bt 8	bt 1-1	bt 1-2	bt 1-3	bt 1-7	bt 1-10	bt 3-1	bt 3-3	bt 4-4
Point	1	3	4	5	1	3	4								
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	Bt1 in Grt2	Bt1 in Grt2	Bt1 in Grt2	Bt1 in Grt2	Bt1 in Grt2	matrix Bt2	matrix Bt2	matrix Bt2
SiO_2	**33.87**	34.16	34.29	33.88	34.30	34.52	34.06	34.90	35.74	36.08	35.80	35.84	34.97	**34.69**	35.32
TiO_2	**3.99**	3.84	3.85	3.66	3.37	3.62	3.59	3.97	3.75	3.69	3.65	3.29	3.67	**4.06**	3.39
Al_2O_3	**17.66**	17.92	17.92	18.20	19.01	18.50	18.62	18.26	18.30	18.55	18.64	18.78	17.50	**18.35**	18.09
Cr_2O_3	**0.02**	0.03	0.04	0.05	0.00	0.05	0.03	0.02	0.07	0.01	0.03	0.01	0.05	**0.00**	0.04
MgO	**5.88**	6.33	6.42	6.43	6.32	6.33	6.38	12.90	12.51	12.29	12.36	12.48	10.68	**9.69**	10.46
CaO	**0.01**	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.00	0.00	0.00	0.02	0.03	**0.19**	0.02
MnO	**0.09**	0.06	0.17	0.18	0.11	0.12	0.11	0.03	0.00	0.01	0.03	0.00	0.05	**0.01**	0.01
FeO	**24.19**	23.73	24.01	24.00	22.88	23.15	23.64	15.34	15.05	15.18	14.63	14.59	18.66	**17.96**	17.88
BaO	**0.08**	0.04	0.07	0.04	0.07	0.18	0.11	0.03	0.00	0.05	0.00	0.00	0.00	**0.00**	0.00
NiO	**0.00**	0.01	0.06	0.00	0.07	0.00	0.00	0.00	0.03	0.03	0.00	0.08	0.00	**0.05**	0.00
Na_2O	**0.15**	0.16	0.13	0.10	0.10	0.10	0.08	0.20	0.32	0.24	0.15	0.24	0.14	**0.12**	0.12
K_2O	**9.53**	9.53	9.57	9.09	9.73	9.66	9.43	9.31	9.67	9.69	9.45	9.77	9.02	**9.56**	9.49
F	**0.42**	0.84	0.33	0.77	0.45	0.65	0.57	1.31	1.07	1.05	0.59	1.23	0.89	**0.88**	1.09
Cl	**0.05**	0.05	0.04	0.03	0.01	0.04	0.03	0.03	0.05	0.10	0.05	0.06	0.08	**0.00**	0.02
Sum	**95.92**	96.69	96.89	96.44	96.43	96.89	96.67	96.31	96.55	96.97	95.39	96.37	95.73	**95.57**	95.91
O=F	**-0.18**	-0.35	-0.14	-0.33	-0.19	-0.27	-0.24	-0.55	-0.45	-0.44	-0.25	-0.52	-0.37	**-0.37**	-0.46
O=Cl	**-0.01**	-0.01	-0.01	-0.01	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	-0.02	**0.00**	0.00
Total	**95.73**	96.33	96.75	96.10	96.23	96.61	96.42	95.76	96.09	96.51	95.13	95.84	95.34	**95.19**	95.45
Formula (O=22)															
Si	**5.28**	5.26	5.28	5.23	5.28	5.29	5.24	5.17	5.28	5.30	5.32	5.29	5.29	**5.25**	5.31
Al^{IV}	**2.72**	2.74	2.72	2.77	2.72	2.71	2.76	2.83	2.72	2.70	2.68	2.71	2.71	**2.75**	2.69
Sum IV	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00
Al^{VI}	**0.53**	0.52	0.54	0.54	0.72	0.63	0.62	0.36	0.46	0.51	0.59	0.55	0.41	**0.53**	0.52
Cr	**0.00**	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	**0.00**	0.00
Ti	**0.47**	0.45	0.45	0.43	0.39	0.42	0.42	0.44	0.42	0.41	0.41	0.37	0.42	**0.46**	0.38
Fe^{2+tot}	**3.16**	3.06	3.09	3.10	2.94	2.97	3.04	1.90	1.86	1.86	1.82	1.80	2.36	**2.27**	2.25
Mn	**0.01**	0.01	0.02	0.02	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	**0.00**	0.00
Mg	**1.37**	1.45	1.47	1.48	1.45	1.45	1.46	2.85	2.75	2.69	2.74	2.74	2.41	**2.19**	2.35
Ni	**0.00**	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	**0.01**	0.00
Sum VI	**5.54**	5.49	5.59	5.58	5.53	5.48	5.56	5.56	5.50	5.48	5.57	5.47	5.61	**5.46**	5.51
Ba	**0.00**	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Ca	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.03**	0.00
Na	**0.05**	0.05	0.04	0.03	0.03	0.03	0.02	0.06	0.09	0.07	0.04	0.07	0.04	**0.03**	0.03
K	**1.90**	1.87	1.88	1.79	1.91	1.89	1.85	1.76	1.82	1.82	1.79	1.84	1.74	**1.85**	1.82
Sum XII	**1.95**	1.92	1.92	1.82	1.94	1.93	1.88	1.82	1.91	1.89	1.84	1.91	1.79	**1.91**	1.86
	15.48	15.41	15.51	15.40	15.47	15.41	15.44	15.39	15.41	15.37	15.40	15.38	15.40	**15.37**	15.36
F	**0.21**	0.41	0.16	0.38	0.22	0.31	0.28	0.61	0.50	0.49	0.28	0.57	0.43	**0.42**	0.52
Cl	**0.01**	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02	**0.00**	0.01
X_{Mg}	**0.30**	0.32	0.32	0.32	0.33	0.33	0.32	0.60	0.60	0.59	0.60	0.60	0.51	**0.49**	0.51

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	* **Orue**	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt gneiss
Sample	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	**703-00**	703-00	703-00	703-00	191-A-98
Profile	bt 5-2	bt 5-3	bt 5-4	bt 5-5	bt 6-2	bt 6-4	bt 6-5	bt 7-2	bt 7-5	bt 2-1	**bt 2-2**	bt 2-3	bt 2-4	bt 2-10	bt1
Point															1
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	Bt3 on Grt2	**Bt3 on Grt2**	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt1 in Grt2
SiO_2	35.10	34.46	36.06	35.33	35.14	35.63	35.38	34.90	35.40	35.57	**35.05**	35.35	35.28	35.44	35.72
TiO_2	3.67	3.42	3.04	3.74	3.58	3.30	3.15	3.60	3.32	2.44	**3.06**	3.12	2.94	3.56	3.83
Al_2O_3	18.54	17.71	19.10	17.98	18.15	18.48	18.19	17.38	18.04	18.42	**17.88**	17.95	17.89	18.10	18.28
Cr_2O_3	0.05	0.11	0.07	0.06	0.02	0.02	0.02	0.04	0.01	0.01	**0.02**	0.03	0.03	0.07	0.03
MgO	10.13	10.73	10.55	10.41	10.23	10.36	10.52	10.44	10.37	10.97	**10.63**	10.91	11.20	10.25	11.00
CaO	0.02	0.03	0.00	0.00	0.03	0.03	0.00	0.00	0.01	0.00	**0.00**	0.00	0.00	0.00	0.09
MnO	0.03	0.00	0.00	0.07	0.03	0.00	0.05	0.00	0.07	0.09	**0.00**	0.04	0.05	0.00	0.02
FeO	17.61	17.42	16.67	17.68	18.35	18.30	18.34	18.24	18.63	18.03	**18.79**	18.46	18.34	17.87	17.86
BaO	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.06	**0.00**	0.01	0.00	0.00	0.25
NiO	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.04	**0.00**	0.04	0.03	0.03	n.d.
Na_2O	0.25	0.26	0.18	0.17	0.16	0.26	0.16	0.29	0.12	0.18	**0.17**	0.17	0.15	0.14	0.41
K_2O	9.36	9.23	9.72	9.69	9.11	9.37	9.67	9.10	8.71	9.57	**9.42**	9.73	9.53	9.46	9.05
F	0.79	0.90	0.57	1.10	0.59	0.50	0.80	1.10	0.89	0.81	**0.70**	0.59	1.05	0.45	n.d.
Cl	0.00	0.04	0.01	0.05	0.03	0.10	0.06	0.03	0.09	0.00	**0.02**	0.02	0.02	0.04	n.d.
Sum	95.61	94.37	95.96	96.29	95.42	96.33	96.33	95.12	95.74	96.17	**95.76**	96.44	96.52	95.39	96.53
O=F	-0.33	-0.38	-0.24	-0.46	-0.25	-0.21	-0.33	-0.46	-0.37	-0.34	**-0.30**	-0.25	-0.44	-0.19	-
O=Cl	0.00	-0.01	0.00	-0.01	-0.01	-0.02	-0.01	-0.01	-0.02	0.00	**-0.01**	0.00	0.00	-0.01	-
Total	95.27	93.98	95.72	95.81	95.16	96.09	95.98	94.64	95.34	95.83	**95.46**	96.18	96.07	95.19	96.53
Formula (O=22)															
Si	5.29	5.27	5.38	5.30	5.32	5.34	5.32	5.31	5.33	5.34	**5.31**	5.32	5.29	5.36	5.34
Al^{IV}	2.71	2.73	2.62	2.70	2.68	2.66	2.68	2.69	2.67	2.66	**2.69**	2.68	2.71	2.64	2.66
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00
Al^{VI}	0.58	0.47	0.74	0.48	0.56	0.60	0.54	0.42	0.54	0.60	**0.50**	0.50	0.46	0.59	0.55
Cr	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.01	0.00
Ti	0.42	0.39	0.34	0.42	0.41	0.37	0.36	0.41	0.38	0.28	**0.35**	0.35	0.33	0.41	0.43
Fe^{2+tot}	2.22	2.23	2.08	2.22	2.32	2.29	2.31	2.32	2.35	2.26	**2.38**	2.32	2.30	2.26	2.23
Mn	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.01	**0.00**	0.01	0.01	0.00	0.00
Mg	2.28	2.45	2.35	2.33	2.31	2.31	2.36	2.37	2.33	2.46	**2.40**	2.45	2.51	2.31	2.45
Ni	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	**0.00**	0.01	0.00	0.00	-
Sum VI	5.51	5.56	5.51	5.46	5.60	5.59	5.57	5.53	5.61	5.61	**5.64**	5.63	5.61	5.57	5.67
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01
Ca	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01
Na	0.07	0.08	0.05	0.05	0.05	0.08	0.05	0.09	0.04	0.05	**0.05**	0.05	0.04	0.04	0.12
K	1.80	1.80	1.85	1.86	1.76	1.79	1.85	1.77	1.67	1.83	**1.82**	1.87	1.82	1.82	1.73
Sum XII	1.88	1.89	1.90	1.91	1.81	1.87	1.90	1.85	1.71	1.89	**1.87**	1.92	1.87	1.86	1.87
	15.39	15.44	15.41	15.37	15.41	15.46	15.47	15.38	15.32	15.50	**15.51**	15.55	15.48	15.44	15.54
F	0.38	0.44	0.27	0.52	0.28	0.24	0.38	0.53	0.42	0.38	**0.34**	0.28	0.50	0.22	-
Cl	0.00	0.01	0.00	0.01	0.01	0.02	0.01	0.01	0.02	0.00	**0.01**	0.00	0.00	0.01	-
X_{Mg}	0.51	0.52	0.53	0.51	0.50	0.50	0.51	0.50	0.50	0.52	**0.50**	0.51	0.52	0.51	0.52

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	**Grt-Bt gneiss**	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss
Sample	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	**191-A-98**	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	137-C-98
Profile	bt1	bt2	bt5	bt5	bt6	bt9	bt9	**bt9**	bt10	bt7	bt7	bt8	bt8	bt8	bt 1
Point	3	3	2	4	2	2	4	**5**	1	1	2	1	2	3	1
Texture	Bt1 in Grt2	Bt1 in Grt2	Bt1 in Grt2	Bt1 in Grt2	matrix Bt2	matrix Bt2	matrix Bt2	**matrix Bt2**	matrix Bt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	Bt3 on Grt2	matrix Bt2
SiO_2	36.20	35.92	34.92	34.92	35.34	35.26	35.00	**34.64**	35.49	34.52	34.42	35.50	35.00	35.16	35.10
TiO_2	3.65	2.64	3.02	3.28	4.46	4.06	3.46	**4.41**	3.83	2.24	1.97	1.86	1.77	2.83	1.93
Al_2O_3	18.19	18.35	18.27	17.66	18.05	18.20	18.07	**17.31**	18.09	17.42	18.20	18.19	18.36	17.90	17.29
Cr_2O_3	0.03	0.01	0.02	0.02	0.06	0.09	0.04	**0.12**	0.05	0.00	0.03	0.01	0.03	0.00	0.03
MgO	11.38	12.28	10.44	9.90	9.15	8.58	9.57	**8.58**	9.27	10.14	9.88	10.45	10.13	9.83	8.76
CaO	0.04	0.00	0.01	0.03	0.01	0.00	0.00	**0.04**	0.04	0.03	0.00	0.00	0.00	0.04	0.00
MnO	0.04	0.02	0.02	0.00	0.06	0.02	0.03	**0.02**	0.00	0.10	0.04	0.04	0.03	0.02	0.19
FeO	17.42	16.47	19.13	20.01	19.55	20.13	20.47	**21.33**	19.61	21.11	21.35	20.64	20.43	20.04	22.52
BaO	0.26	0.15	0.29	0.17	0.20	0.18	0.32	**0.25**	0.26	0.11	0.17	0.10	0.10	0.28	0.21
NiO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Na_2O	0.44	0.24	0.43	0.36	0.17	0.12	0.18	**0.15**	0.21	0.13	0.08	0.07	0.06	0.15	0.16
K_2O	9.17	8.86	9.11	8.82	9.53	9.56	9.46	**9.33**	9.16	9.41	9.49	9.46	9.47	9.39	9.31
F	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cl	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Sum	96.82	94.93	95.65	95.17	96.57	96.19	96.59	**96.19**	96.01	95.20	95.62	96.33	95.39	95.66	95.49
O=F	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-
O=Cl	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-
Total	96.82	94.93	95.65	95.17	96.57	96.19	96.59	**96.19**	96.01	95.20	95.62	96.33	95.39	95.66	95.49
Formula (O=22)															
Si	5.38	5.40	5.31	5.35	5.33	5.36	5.31	**5.31**	5.38	5.34	5.30	5.39	5.37	5.37	5.44
Al^{IV}	2.62	2.60	2.69	2.65	2.67	2.64	2.69	**2.69**	2.62	2.66	2.70	2.61	2.63	2.63	2.56
Sum IV	8.00	8.00	8.00	8.00	8.00			**8.00**							8.00
Al^{VI}	0.56	0.65	0.59	0.54	0.55	0.61	0.55	**0.44**	0.61	0.51	0.61	0.64	0.68	0.60	0.60
Cr	0.00	0.00	0.00	0.00	0.01	0.01	0.00	**0.01**	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.41	0.30	0.35	0.38	0.51	0.46	0.39	**0.51**	0.44	0.26	0.23	0.21	0.20	0.33	0.23
Fe^{2+tot}	2.16	2.07	2.43	2.56	2.47	2.56	2.60	**2.73**	2.48	2.73	2.75	2.62	2.62	2.56	2.92
Mn	0.01	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**	0.00	0.01	0.01	0.01	0.00	0.00	0.02
Mg	2.52	2.75	2.37	2.26	2.06	1.94	2.17	**1.96**	2.09	2.34	2.27	2.36	2.32	2.24	2.02
Ni	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-
Sum VI	5.66	5.78	5.74	5.75	5.59	5.59	5.71	**5.66**	5.63	5.86	5.86	5.84	5.83	5.73	5.80
Ba	0.01	0.01	0.02	0.01	0.01	0.01	0.02	**0.02**	0.02	0.01	0.01	0.01	0.01	0.02	0.01
Ca	0.01	0.00	0.00	0.01	0.00	0.00	0.00	**0.01**	0.01	0.00	0.00	0.00	0.00	0.01	0.00
Na	0.13	0.07	0.13	0.11	0.05	0.03	0.05	**0.05**	0.06	0.04	0.02	0.02	0.02	0.05	0.05
K	1.74	1.70	1.77	1.72	1.83	1.85	1.83	**1.82**	1.77	1.86	1.86	1.83	1.85	1.83	1.84
Sum XII	1.89	1.78	1.91	1.85	1.90	1.90	1.90	**1.89**	1.85	1.91	1.90	1.86	1.88	1.90	1.90
	15.55	15.56	15.65	15.59	15.49	7.49	7.62	**15.55**	7.48	7.76	7.76	7.70	7.70	7.63	15.70
F	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-
Cl	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-
X_{Mg}	0.54	0.57	0.49	0.47	0.45	0.43	0.45	**0.42**	0.46	0.46	0.45	0.47	0.47	0.47	0.41

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Orue	**Orue***	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt gneiss	**Grt-Bt gneiss**	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss
Sample	137-C-98	**137-C-98**	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98
Profile	bt 2	**bt 3**	bt 3	bt 4	bt 4	bt 5	bt 5	bt 6	bt 6
Point	3	**6**	7	4	10	1	10	1	4
Texture	matrix Bt2	**matrix Bt2**	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2
SiO_2	34.64	**35.32**	35.24	35.03	35.27	35.21	34.94	34.76	33.71
TiO_2	2.02	**2.10**	2.06	2.19	2.17	2.11	2.07	2.17	1.91
Al_2O_3	17.08	**16.97**	17.15	16.67	17.22	16.86	16.79	16.70	16.44
Cr_2O_3	0.01	**0.07**	0.03	0.04	0.07	0.12	0.03	0.09	0.00
MgO	8.93	**9.24**	8.86	8.69	8.46	8.77	8.81	8.81	8.42
CaO	0.00	**0.00**	0.00	0.02	0.01	0.02	0.00	0.01	0.04
MnO	0.14	**0.25**	0.18	0.21	0.16	0.25	0.18	0.22	0.23
FeO	22.44	**22.32**	21.84	22.68	21.60	23.24	22.77	22.70	24.01
BaO	0.09	**0.20**	0.21	0.25	0.14	0.18	0.26	0.14	0.23
NiO	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Na_2O	0.15	**0.06**	0.13	0.23	0.06	0.05	0.13	0.04	0.05
K_2O	9.09	**9.49**	9.17	9.03	9.47	9.38	9.12	9.04	8.59
F	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cl	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Sum	94.60	**96.02**	94.88	95.02	94.63	96.18	95.08	94.66	93.62
O=F	-	**-**	-	-	-	-	-	-	-
O=Cl	-	**-**	-	-	-	-	-	-	-
Total	94.60	**96.02**	94.88	95.02	94.63	96.18	95.08	94.66	93.62
Formula (O=22)									
Si	5.42	**5.44**	5.47	5.46	5.49	5.44	5.45	5.44	5.38
Al^{IV}	2.58	**2.56**	2.53	2.54	2.51	2.56	2.55	2.56	2.62
Sum IV	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.56	**0.53**	0.61	0.53	0.65	0.51	0.53	0.52	0.47
Cr	0.00	**0.01**	0.00	0.00	0.01	0.01	0.00	0.01	0.00
Ti	0.24	**0.24**	0.24	0.26	0.25	0.25	0.24	0.25	0.23
Fe^{2+tot}	2.93	**2.88**	2.84	2.96	2.81	3.00	2.97	2.97	3.21
Mn	0.02	**0.03**	0.02	0.03	0.02	0.03	0.02	0.03	0.03
Mg	2.08	**2.12**	2.05	2.02	1.96	2.02	2.05	2.06	2.00
Ni	-	**-**	-	-	-	-	-	-	-
Sum VI	5.84	**5.81**	5.77	5.79	5.71	5.83	5.82	5.84	5.94
Ba	0.01	**0.01**	0.01	0.02	0.01	0.01	0.02	0.01	0.01
Ca	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Na	0.05	**0.02**	0.04	0.07	0.02	0.01	0.04	0.01	0.02
K	1.81	**1.87**	1.82	1.80	1.88	1.85	1.81	1.80	1.75
Sum XII	1.86	**1.90**	1.87	1.88	1.91	1.88	1.87	1.83	1.79
	15.70	**15.71**	15.64	15.68	15.62	15.70	15.69	15.67	15.73
F	-	**-**	-	-	-	-	-	-	-
Cl	-	**-**	-	-	-	-	-	-	-
X_{Mg}	0.42	**0.42**	0.42	0.41	0.41	0.40	0.41	0.41	0.38

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	* **Epembe**	Epembe	Epembe	* **Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	**Grt-opx metagranit.**	Grt-opx metagranit.	Grt-opx metagranit.	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock
Sample	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	**646-1-00**	646-1-00	646-1-00	**614-1-99**	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	bt1	bt1	bt3	bt1	bt1	**bt 1**	bt 1	bt 1	**bt 2**	bt 3	bt 3	bt 5	bt 5	bt 5	bt 5
Point	1	2	1	2	3	**3**	7	10	**2**	4	5	1	2	4	5
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	**Bt4 on Opx2**	Bt4 on Opx2	Bt4 on Opx2	**matrix Bt2**	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2
SiO_2	36.19	36.16	35.83	35.61	36.04	**39.17**	46.19	47.27	**36.33**	37.30	37.42	38.11	38.14	37.28	37.29
TiO_2	5.13	5.48	4.93	3.95	4.15	**3.12**	2.34	2.45	**5.50**	4.69	4.79	4.48	4.22	4.62	4.59
Al_2O_3	13.75	13.71	13.93	13.48	13.70	**14.50**	12.68	12.07	**14.55**	14.23	14.61	14.31	14.48	14.54	14.62
Cr_2O_3	0.11	0.12	0.21	0.22	0.26	**0.00**	0.07	0.01	**0.00**	0.00	0.01	0.04	0.00	0.00	0.05
MgO	12.21	12.17	10.57	11.88	11.88	**13.64**	12.66	11.55	**13.84**	15.92	15.86	16.84	16.77	16.44	16.15
CaO	0.00	0.00	0.00	0.00	0.01	**0.07**	0.03	0.20	**0.00**	0.01	0.00	0.00	0.00	0.00	0.00
MnO	0.04	0.05	0.09	0.12	0.07	**0.03**	0.02	0.01	**0.06**	0.03	0.08	0.00	0.06	0.07	0.05
FeO	17.87	17.80	20.10	19.70	19.67	**15.67**	13.59	14.17	**14.52**	12.86	12.85	12.01	11.73	12.00	11.90
BaO	0.20	0.21	0.24	0.11	0.21	**0.45**	0.29	0.44	**0.64**	0.70	0.55	0.54	0.41	0.62	0.69
NiO	n.d.	n.d.	n.d.	n.d.	n.d.	**0.00**	0.04	0.03	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Na_2O	0.11	0.16	0.06	0.09	0.02	**0.12**	0.03	0.21	**0.15**	0.24	0.17	0.22	0.21	0.19	0.23
K_2O	9.38	9.34	9.26	9.35	9.36	**7.96**	6.68	6.68	**8.97**	9.24	9.26	9.26	9.17	9.17	9.31
F	n.d.	n.d.	n.d.	n.d.	n.d.	**0.70**	0.31	0.35	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cl	n.d.	n.d.	n.d.	n.d.	n.d.	**0.01**	0.00	0.01	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Sum	98.93	99.19	99.06	98.42	99.23	**95.42**	94.92	95.42	**94.57**	95.22	95.59	95.81	95.19	94.92	94.85
O=F	-	-	-	-	-	**-0.29**	-0.13	-0.15	**-**	-	-	-	-	-	-
O=Cl	-	-	-	-	-	**0.00**	0.00	0.00	**-**	-	-	-	-	-	-
Total	98.93	99.19	99.06	98.42	99.23	**95.13**	94.78	95.27	**94.57**	95.22	95.59	95.81	95.19	94.92	94.85
Formula (O=22)															
Si	5.53	5.52	5.53	5.53	5.54	**5.80**	6.62	6.75	**5.49**	5.55	5.54	5.60	5.62	5.54	5.55
Al^{IV}	2.47	2.47	2.47	2.47	2.46	**2.20**	1.38	1.25	**2.51**	2.45	2.46	2.40	2.38	2.46	2.45
Ti	0.00	0.02	0.00	0.00	0.00	**0**	0	0	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Sum IV	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.01	0.00	0.06	0.00	0.02	**0.32**	0.76	0.78	**0.08**	0.05	0.09	0.08	0.14	0.08	0.11
Cr	0.01	0.01	0.03	0.03	0.03	**0.00**	0.01	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.01
Ti	0.59	0.61	0.57	0.46	0.48	**0.35**	0.25	0.26	**0.63**	0.53	0.53	0.49	0.47	0.52	0.51
Fe^{2+tot}	2.29	2.27	2.59	2.56	2.53	**1.94**	1.63	1.69	**1.83**	1.60	1.59	1.48	1.45	1.49	1.48
Mn	0.01	0.01	0.01	0.02	0.01	**0.00**	0.00	0.00	**0.01**	0.00	0.01	0.00	0.01	0.01	0.01
Mg	2.78	2.77	2.43	2.75	2.72	**3.01**	2.70	2.46	**3.12**	3.53	3.50	3.69	3.68	3.64	3.58
Ni	-	-	-	-	-	**0.00**	0.00	0.00	**-**	-	-	-	-	-	-
Sum VI	5.69	5.67	5.69	5.82	5.79	**5.62**	5.35	5.20	**5.67**	5.72	5.72	5.74	5.74	5.74	5.70
Ba	0.01	0.01	0.01	0.01	0.01	**0.03**	0.02	0.02	**0.04**	0.04	0.03	0.03	0.02	0.04	0.04
Ca	0.00	0.00	0.00	0.00	0.00	**0.01**	0.00	0.03	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.03	0.05	0.02	0.03	0.01	**0.03**	0.01	0.06	**0.05**	0.07	0.05	0.06	0.06	0.06	0.07
K	1.83	1.82	1.82	1.85	1.84	**1.50**	1.22	1.22	**1.73**	1.75	1.75	1.74	1.72	1.74	1.77
Sum XII	1.88	1.88	1.86	1.89	1.86	**1.57**	1.25	1.33	**1.81**	1.86	1.83	1.83	1.81	1.83	1.87
Total	15.56	15.55	15.54	15.70	15.65	**15.20**	14.60	14.53	**15.48**	15.58	15.55	15.57	15.55	15.57	15.57
F	-	-	-	-	-	**0.33**	0.14	0.16	**-**	-	-	-	-	-	-
Cl	-	-	-	-	-	**0.00**	0.00	0.00	**-**	-	-	-	-	-	-
X_{Mg}	0.55	0.55	0.48	0.52	0.52	**0.61**	0.62	0.59	**0.63**	0.69	0.69	0.71	0.72	0.71	0.71

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	**Qtz-rich**	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich
	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	**Grt-Opx rock**	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	**614-1-99**	614-1-99	587-4-99	587-4-99	587-4-99	587-4-99
Profile	bt 6	bt 6	bt 7	bt 9	bt 9	bt 10	bt 11	bt 11	bt 1	**bt 1**	bt 1	bt 1	bt 1	bt 1	bt 1
Point	3	4	3	5	10	3	1	2	1	**2**	3	2	3	5	6
Texture	matrix Bt2	matrix Bt2	matrix Bt2	Bt4 on Crd-Opx s.	Bt4 on Crd-Opx s.	Bt4 on Crd-Opx s.	Bt4 on Crd-Opx s.	Bt4 on Crd-Opx s.	Bt4 on Opx2	**Bt4 on Opx2**	Bt4 on Opx2	Bt4+Grt4 on Crd3	Bt4+Grt4 on Crd3	Bt4+Grt4 on Crd3	Bt4+Grt4 on Crd3
SiO_2	37.33	37.79	37.46	37.76	37.74	37.32	38.02	37.19	39.00	**38.70**	39.47	36.07	35.82	36.13	35.90
TiO_2	4.57	4.34	4.05	4.56	4.79	4.33	3.88	3.89	3.22	**3.35**	3.39	4.93	4.66	4.61	4.70
Al_2O_3	14.48	14.55	14.61	14.31	14.33	14.50	14.89	14.80	14.27	**14.82**	14.24	14.91	15.32	15.30	15.26
Cr_2O_3	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	**0.01**	0.01	0.00	0.00	0.00	0.02
MgO	16.25	16.39	17.12	17.13	16.99	16.60	16.96	16.66	19.20	**18.81**	18.90	13.61	13.67	13.87	13.55
CaO	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.00	**0.00**	0.00	0.00	0.01	0.02	0.00
MnO	0.00	0.04	0.01	0.07	0.01	0.01	0.01	0.02	0.03	**0.00**	0.03	0.03	0.02	0.03	0.00
FeO	12.51	11.69	11.06	10.87	11.16	12.13	11.94	12.20	9.78	**9.70**	9.99	14.74	14.08	14.71	14.76
BaO	0.67	0.66	0.80	0.50	0.66	0.70	0.44	0.47	0.27	**0.63**	0.45	0.08	0.01	0.22	0.32
NiO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	0.00	0.06	0.00	0.00
Na_2O	0.23	0.18	0.20	0.19	0.22	0.29	0.21	0.25	0.26	**0.23**	0.26	0.15	0.13	0.09	0.07
K_2O	9.16	9.36	9.49	9.20	9.38	8.90	9.11	9.12	9.25	**9.05**	9.32	9.33	9.38	9.60	9.34
F	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	0.84	0.62	0.75	0.90
Cl	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	0.49	0.53	0.56	0.55
Sum	95.20	95.00	94.79	94.60	95.28	94.80	95.46	94.62	95.26	**95.31**	96.06	95.17	94.31	95.88	95.35
O=F	-	-	-	-	-	-	-	-	-	**-**	-	-0.35	-0.26	-0.32	-0.38
O=Cl	-	-	-	-	-	-	-	-	-	**-**	-	-0.11	-0.12	-0.13	-0.12
Total	95.20	95.00	94.79	94.60	95.28	94.80	95.46	94.62	95.26	**95.31**	96.06	94.71	93.93	95.44	94.85
Formula (O=22)															
Si	5.54	5.60	5.56	5.59	5.57	5.55	5.59	5.54	5.68	**5.64**	5.71	5.42	5.42	5.40	5.39
Al^{IV}	2.46	2.40	2.44	2.41	2.43	2.45	2.41	2.46	2.32	**2.36**	2.29	2.58	2.58	2.60	2.61
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.08	0.14	0.12	0.09	0.06	0.09	0.17	0.14	0.12	**0.18**	0.13	0.06	0.15	0.09	0.09
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Ti	0.51	0.48	0.45	0.51	0.53	0.48	0.43	0.44	0.35	**0.37**	0.37	0.56	0.53	0.52	0.53
Fe^{2+tot}	1.55	1.45	1.37	1.35	1.38	1.51	1.47	1.52	1.19	**1.18**	1.21	1.85	1.78	1.84	1.85
Mn	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Mg	3.60	3.62	3.79	3.78	3.74	3.68	3.72	3.70	4.17	**4.08**	4.07	3.05	3.08	3.09	3.04
Ni	-	-	-	-	-	-	-	-	-	**-**	-	0.00	0.01	0.00	0.00
Sum VI	5.74	5.70	5.73	5.73	5.70	5.77	5.78	5.79	5.84	**5.81**	5.79	5.52	5.55	5.54	5.52
Ba	0.04	0.04	0.05	0.03	0.04	0.04	0.03	0.03	0.02	**0.04**	0.03	0.00	0.00	0.01	0.02
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Na	0.07	0.05	0.06	0.05	0.06	0.08	0.06	0.07	0.07	**0.07**	0.07	0.04	0.04	0.03	0.02
K	1.73	1.77	1.80	1.74	1.77	1.69	1.71	1.73	1.72	**1.68**	1.72	1.79	1.81	1.83	1.79
Sum XII	1.84	1.86	1.90	1.82	1.87	1.82	1.79	1.83	1.81	**1.78**	1.82	1.84	1.85	1.87	1.83
Total	15.58	15.56	15.64	15.55	15.57	15.58	15.58	15.63	15.64	**15.60**	15.61	15.36	15.40	15.42	15.34
F	-	-	-	-	-	-	-	-	-	**-**	-	0.40	0.30	0.35	0.43
Cl	-	-	-	-	-	-	-	-	-	**-**	-	0.13	0.14	0.14	0.14
X_{Mg}	0.70	0.71	0.73	0.74	0.73	0.71	0.72	0.71	0.78	**0.78**	0.77	0.62	0.63	0.63	0.62

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	* **Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	* **Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	**587-4-99**	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	458-3-99	458-3-99	**458-3-99**	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99
Profile	**bt 1**	bt 2	bt 7	bt 1	bt 4	bt 4	bt 1	bt 3	**bt 3**	bt 3	bt 1	bt 2	bt 2	bt 1
Point	**7**	1	3	1	1	2	1	4	**5**	8	2	1	4	1
Texture	**Bt4+Grt4 on Crd3**	Bt4+Sil4 on Crd3	Bt4+Sil4 on Crd3	Bt4+Sil4 on Crd3	Bt4+Sil4 on Crd3	Bt4+Sil4 on Crd3	Bt4 on Crd-Opx s.	Bt4 on Crd-Opx s.	**Bt4 on Crd-Opx s.**	Bt4 on Crd-Opx s.	Bt4 on Crd-Opx s.	Bt4 on Opx2	Bt4 on Opx2	Bt4 on Opx2
SiO_2	**35.95**	35.70	35.56	35.77	36.23	37.35	37.09	37.34	**37.30**	37.16	38.25	37.85	38.07	37.64
TiO_2	**4.58**	4.34	5.05	4.14	3.38	3.70	4.79	5.04	**5.06**	5.17	3.58	4.66	4.72	5.39
Al_2O_3	**15.56**	15.02	15.80	16.39	14.94	15.27	15.06	14.59	**14.83**	14.84	16.81	15.38	15.32	14.56
Cr_2O_3	**0.02**	0.01	0.05	0.06	0.00	0.00	0.16	0.12	**0.17**	0.12	0.08	0.16	0.20	0.14
MgO	**13.45**	14.78	14.35	12.91	17.49	17.60	16.49	16.29	**15.65**	15.98	16.66	16.95	17.17	16.43
CaO	**0.03**	0.01	0.01	0.00	0.13	0.05	0.00	0.00	**0.00**	0.03	0.03	0.00	0.02	0.00
MnO	**0.00**	0.05	0.03	0.03	0.03	0.06	0.00	0.00	**0.00**	0.03	0.00	0.03	0.00	0.07
FeO	**14.64**	13.72	14.87	15.89	10.78	10.85	11.46	11.80	**11.79**	11.94	10.62	11.13	10.97	10.78
BaO	**0.45**	0.53	0.49	0.59	1.81	0.52	0.39	0.28	**0.34**	0.27	0.12	0.00	0.10	0.41
NiO	**0.00**	0.01	0.00	0.00	0.00	0.02	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.
Na_2O	**0.15**	0.23	0.15	0.14	0.15	0.16	0.14	0.21	**0.17**	0.22	0.24	0.26	0.33	0.18
K_2O	**9.37**	9.29	7.99	9.18	8.47	9.11	9.50	9.43	**9.36**	9.47	9.18	9.22	9.27	9.29
F	**0.53**	1.76	0.66	0.37	0.97	1.07	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.
Cl	**0.56**	0.30	0.44	0.42	0.24	0.28	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.
Sum	**95.30**	95.73	95.44	95.88	94.62	96.04	95.06	95.09	**94.67**	95.22	95.56	95.64	96.16	94.87
O=F	**-0.22**	-0.74	-0.28	-0.15	-0.41	-0.45	-	-	-	-	-	-	-	-
O=Cl	**-0.13**	-0.07	-0.10	-0.09	-0.05	-0.06	-	-	-	-	-	-	-	-
Total	**94.95**	94.92	95.07	95.63	94.16	95.52	95.06	95.09	**94.67**	95.22	95.56	95.64	96.16	94.87
Formula (O=22)														
Si	**5.41**	5.33	5.31	5.37	5.41	5.45	5.49	5.53	**5.54**	5.50	5.55	5.52	5.52	5.55
Al^{IV}	**2.59**	2.64	2.69	2.63	2.59	2.55	2.51	2.47	**2.46**	2.50	2.45	2.48	2.48	2.45
Ti	**0.00**	0.03	0.00	0.00	0.00	0.00								
Sum IV	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00
Al^{VI}	**0.17**	0.00	0.08	0.27	0.05	0.08	0.11	0.07	**0.14**	0.09	0.43	0.17	0.14	0.09
Cr	**0.00**	0.00	0.01	0.01	0.00	0.00	0.02	0.01	**0.02**	0.01	0.01	0.02	0.02	0.02
Ti	**0.52**	0.42	0.57	0.47	0.38	0.41	0.53	0.56	**0.57**	0.58	0.39	0.51	0.52	0.60
Fe^{2+tot}	**1.84**	1.71	1.86	2.00	1.35	1.32	1.42	1.46	**1.47**	1.48	1.29	1.36	1.33	1.33
Mn	**0.00**	0.01	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.01
Mg	**3.02**	3.29	3.19	2.89	3.90	3.83	3.64	3.59	**3.47**	3.52	3.60	3.69	3.71	3.61
Ni	**0.00**	0.00	0.00	0.00	0.00	0.00	-	-	-	-	-	-	-	-
Sum VI	**5.55**	5.43	5.71	5.63	5.67	5.64	5.72	5.70	**5.65**	5.68	5.72	5.74	5.73	5.65
Ba	**0.03**	0.03	0.03	0.03	0.11	0.03	0.02	0.02	**0.02**	0.02	0.01	0.00	0.01	0.02
Ca	**0.00**	0.00	0.00	0.00	0.02	0.01	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Na	**0.04**	0.07	0.04	0.04	0.04	0.05	0.04	0.06	**0.05**	0.06	0.07	0.07	0.09	0.05
K	**1.80**	1.77	1.52	1.76	1.62	1.70	1.79	1.78	**1.77**	1.79	1.70	1.72	1.72	1.75
Sum XII	**1.87**	1.87	1.59	1.83	1.78	1.78	1.85	1.86	**1.84**	1.87	1.78	1.79	1.82	1.82
Total	**15.42**	15.30	15.30	15.47	15.46	15.42	15.57	15.55	**15.50**	15.55	15.50	15.53	15.54	15.47
F	**0.25**	0.83	0.31	0.17	0.46	0.50	-	-	-	-	-	-	-	-
Cl	**0.14**	0.07	0.11	0.11	0.06	0.07	-	-	-	-	-	-	-	-
X_{Mg}	**0.62**	0.66	0.63	0.59	0.74	0.74	0.72	0.71	**0.70**	0.70	0.74	0.73	0.74	0.73

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Epembe	Epembe	Epembe*	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx	Grt-Opx	**Grt-Opx**	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx
	gneiss	gneiss	**gneiss**	gneiss	gneiss	gneiss	gneiss	gneiss	gneiss	gneiss	gneiss	gneiss	gneiss	gneiss	gneiss
Sample	634-00	634-00	**634-00**	634-00	634-00	634-00	634-00	634-00	634-00	634-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00
Profile	bt 1	bt 1	**bt 2**	bt 2	bt 2	bt 4	bt 4	bt 4	bt 4	bt 4	bt 4	bt 4	bt 5	bt 5	bt 1
Point	3	7	**7**	9	11	1	2	3	5	10	3	4	1	4	1
Texture	Bt4 on	Bt4 on	**Bt4 on**	Bt4 on	Bt4 on	Bt4	Bt4	Bt4	Bt4	Bt4	Bt1	Bt1	Bt1	Bt1	Bt2
	Crd-Opx s.	Crd-Opx s.	**Crd-Opx s.**	Crd-Opx s.	Crd-Opx s.	on Opx2	on Opx2	on Opx2	on Opx2	on Opx2	in Grt2	in Grt2	in Grt2	in Grt2	matrix
SiO_2	36.36	36.53	**37.00**	36.38	36.61	38.47	37.80	37.46	38.01	37.28	36.71	36.04	36.60	37.00	36.77
TiO_2	4.40	4.27	**4.78**	4.63	4.80	2.54	2.82	2.96	2.89	2.93	4.97	4.27	4.93	4.82	4.74
Al_2O_3	14.42	14.47	**14.36**	14.60	14.55	14.56	14.43	14.48	14.33	14.74	13.82	13.57	14.23	13.97	13.85
Cr_2O_3	0.03	0.00	**0.04**	0.02	0.05	0.08	0.13	0.06	0.10	0.11	0.13	0.07	0.03	0.06	0.06
MgO	15.42	15.21	**14.79**	15.01	14.98	19.20	18.54	18.13	18.78	17.91	16.10	16.77	15.16	15.25	12.91
CaO	0.03	0.03	**0.00**	0.00	0.00	0.03	0.00	0.05	0.00	0.02	0.01	0.00	0.01	0.00	0.06
MnO	0.02	0.05	**0.00**	0.03	0.03	0.10	0.06	0.00	0.08	0.00	0.01	0.00	0.00	0.01	0.10
FeO	13.08	13.54	**14.19**	13.80	13.75	10.03	10.59	10.48	10.18	10.51	11.70	11.17	13.31	12.94	16.64
BaO	1.34	1.15	**1.58**	1.23	1.35	1.13	1.54	1.86	1.11	1.73	0.99	0.91	0.83	0.77	0.82
NiO	0.00	0.03	**0.02**	0.08	0.00	0.00	0.03	0.06	0.04	0.01	0.06	0.01	0.05	0.05	0.00
Na_2O	0.12	0.11	**0.18**	0.18	0.11	0.26	0.31	0.22	0.22	0.26	0.18	0.08	0.17	0.11	0.05
K_2O	9.00	8.99	**9.00**	9.01	9.05	9.00	8.93	8.66	9.06	8.89	9.30	9.38	9.18	9.35	9.32
F	2.05	1.92	**1.84**	1.72	1.44	2.45	2.40	2.18	2.25	2.63	1.92	1.75	1.91	2.01	1.75
Cl	0.12	0.14	**0.16**	0.11	0.14	0.13	0.08	0.09	0.07	0.15	0.14	0.11	0.12	0.10	0.17
Sum	96.38	96.44	**97.94**	96.80	96.86	97.99	97.66	96.67	97.11	97.17	96.03	94.12	96.52	96.43	97.22
O=F	-0.86	-0.81	**-0.78**	-0.72	-0.60	-1.03	-1.01	-0.92	-0.95	-1.11	-0.81	-0.74	-0.80	-0.85	-0.74
O=Cl	-0.03	-0.03	**-0.04**	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.03	-0.03	-0.03	-0.03	-0.02	-0.04
Total	95.50	95.61	**97.13**	96.05	96.22	96.93	96.63	95.73	96.15	96.03	95.18	93.36	95.69	95.56	96.44
Formula (O=22)															
Si	5.38	5.41	**5.42**	5.38	5.41	5.49	5.45	5.46	5.48	5.41	5.42	5.42	5.40	5.45	5.48
Al^{IV}	2.52	2.52	**2.48**	2.54	2.53	2.45	2.45	2.49	2.44	2.52	2.41	2.41	2.48	2.43	2.43
Ti	0.10	0.07	**0.10**	0.08	0.06	0.06	0.10	0.05	0.08	0.07	0.17	0.17	0.12	0.12	0.09
Sum IV	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	**0.00**	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
Ti	0.39	0.41	**0.43**	0.44	0.48	0.21	0.21	0.27	0.24	0.25	0.38	0.31	0.42	0.42	0.44
Fe^{2+tot}	1.62	1.68	**1.74**	1.71	1.70	1.20	1.28	1.28	1.23	1.28	1.44	1.41	1.64	1.60	2.07
Mn	0.00	0.01	**0.00**	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
Mg	3.40	3.36	**3.23**	3.31	3.30	4.09	3.99	3.94	4.04	3.88	3.54	3.76	3.34	3.35	2.86
Ni	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.00
Sum VI	5.42	5.45	**5.41**	5.47	5.49	5.52	5.50	5.50	5.53	5.42	5.39	5.49	5.41	5.38	5.39
Ba	0.08	0.07	**0.09**	0.07	0.08	0.06	0.09	0.11	0.06	0.10	0.06	0.05	0.05	0.04	0.05
Ca	0.00	0.01	**0.00**	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Na	0.03	0.03	**0.05**	0.05	0.03	0.07	0.09	0.06	0.06	0.07	0.05	0.02	0.05	0.03	0.01
K	1.70	1.70	**1.68**	1.70	1.71	1.64	1.64	1.61	1.67	1.65	1.75	1.80	1.73	1.76	1.77
Sum XII	1.82	1.80	**1.82**	1.82	1.82	1.78	1.82	1.79	1.79	1.82	1.86	1.88	1.83	1.83	1.84
Total	15.24	15.25	**15.23**	15.29	15.30	15.29	15.32	15.29	15.32	15.24	15.25	15.37	15.24	15.21	15.23
F	0.96	0.90	**0.85**	0.80	0.67	1.11	1.09	1.01	1.03	1.21	0.90	0.83	0.89	0.94	0.82
Cl	0.03	0.04	**0.04**	0.03	0.03	0.03	0.02	0.02	0.02	0.04	0.04	0.03	0.03	0.02	0.04
X_{Mg}	0.68	0.67	**0.65**	0.66	0.66	0.77	0.76	0.76	0.77	0.75	0.71	0.73	0.67	0.68	0.58

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Epembe	* **Epembe**	Epembe	Epembe	* **Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss
Sample	690-2-00	**690-2-00**	690-2-00	690-2-00	**690-2-00**	690-2-00	690-2-00	690-2-00	690-2-00	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98
Profile	bt 2	**bt 2**	bt 3	bt 3	**bt 8**	bt 8	bt 8	bt 8	bt 8	bt 2	bt26	bt20	bt25	bt25	bt25
Point	1	**2**	1	2	**1**	2	5	7	8			2	1	2	3
Texture	Bt2 matrix	**Bt2 matrix**	Bt2 matrix	Bt2 matrix	**Bt4+Gr4 on Opx2**	Bt4+Gr4 on Opx2	Bt4+Gr4 on Opx2	Bt4+Gr4 on Opx2	Bt4+Gr4 on Opx2	Bt1 in Grt2	Bt1 in Grt2	Bt1 in Grt2	Bt1 in Qtz2	Bt1 in Qtz2	Bt1 in Qtz2
SiO_2	36.20	**36.06**	35.96	35.83	**37.06**	37.02	37.32	37.14	37.23	38.52	36.18	36.12	36.18	36.67	35.65
TiO_2	5.01	**5.01**	5.21	4.99	**4.94**	4.85	4.91	4.65	4.69	6.00	5.15	4.08	6.49	6.69	6.50
Al_2O_3	13.82	**13.77**	13.70	14.05	**13.49**	13.56	13.41	13.34	13.26	15.33	16.27	16.02	14.25	14.32	14.25
Cr_2O_3	0.01	**0.00**	0.12	0.07	**0.09**	0.00	0.08	0.08	0.05	0.04	0.00	0.00	0.03	0.10	0.07
MgO	11.87	**11.80**	12.29	12.14	**14.17**	14.19	14.39	14.81	14.28	18.46	14.02	12.17	11.97	11.96	11.78
CaO	0.02	**0.00**	0.03	0.00	**0.01**	0.00	0.00	0.00	0.02	0.01	0.01	0.01	0.00	0.02	0.00
MnO	0.08	**0.10**	0.02	0.00	**0.00**	0.02	0.05	0.07	0.03	0.04	0.01	0.06	0.07	0.04	0.04
FeO	17.70	**18.26**	17.84	18.10	**15.60**	15.06	14.77	15.21	15.04	8.05	14.25	17.18	16.77	17.01	16.45
BaO	0.89	**0.81**	0.98	0.93	**0.49**	0.58	0.09	0.00	0.23	0.00	0.00	0.00	0.01	0.00	0.00
NiO	0.02	**0.03**	0.00	0.01	**0.05**	0.07	0.03	0.00	0.00	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Na_2O	0.02	**0.13**	0.07	0.09	**0.11**	0.13	0.05	0.10	0.12	0.38	0.19	0.12	0.15	0.15	0.11
K_2O	9.17	**9.36**	9.27	9.41	**9.40**	9.42	9.63	9.64	9.57	9.30	9.61	9.35	9.51	9.55	9.35
F	1.49	**1.53**	1.48	1.43	**2.34**	2.07	1.97	2.18	2.08	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cl	0.15	**0.15**	0.11	0.12	**0.12**	0.14	0.09	0.12	0.12	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Sum	96.44	**97.00**	97.09	97.15	**97.87**	97.11	96.76	97.33	96.71	96.12	95.69	95.13	95.41	96.51	94.19
O=F	-0.63	**-0.64**	-0.62	-0.60	**-0.98**	-0.87	-0.83	-0.92	-0.88	-	-	-	-	-	-
O=Cl	-0.03	**-0.03**	-0.02	-0.03	**-0.03**	-0.03	-0.02	-0.03	-0.03	-	-	-	-	-	-
Total	95.78	**96.33**	96.44	96.52	**96.85**	96.21	95.91	96.39	95.81	96.12	95.69	95.13	95.41	96.51	94.19
Formula (O=22)															
Si	5.47	**5.44**	5.41	5.39	**5.44**	5.47	5.51	5.46	5.51	5.51	5.38	5.47	5.47	5.48	5.46
Al^{IV}	2.46	**2.45**	2.43	2.49	**2.33**	2.36	2.33	2.31	2.31	2.49	2.62	2.53	2.53	2.52	2.54
Ti	0.07	**0.12**	0.16	0.11	**0.22**	0.17	0.16	0.23	0.18	0.00	0.00	0.00	0.00	0.00	0.00
Sum IV	8.00	**8.00**	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.09	0.23	0.32	0.01	0.00	0.03
Cr	0.00	**0.00**	0.01	0.01	**0.01**	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01
Ti	0.50	**0.45**	0.43	0.45	**0.32**	0.37	0.38	0.29	0.35	0.65	0.58	0.46	0.74	0.75	0.75
Fe^{2+tot}	2.23	**2.30**	2.24	2.28	**1.92**	1.86	1.82	1.87	1.86	0.96	1.77	2.17	2.12	2.13	2.11
Mn	0.01	**0.01**	0.00	0.00	**0.00**	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Mg	2.67	**2.65**	2.76	2.73	**3.10**	3.13	3.16	3.25	3.15	3.94	3.11	2.75	2.70	2.66	2.69
Ni	0.00	**0.00**	0.00	0.00	**0.01**	0.01	0.00	0.00	0.00	-	-	-	-	-	-
Sum VI	5.42	**5.42**	5.45	5.46	**5.36**	5.37	5.39	5.42	5.37	5.65	5.68	5.72	5.58	5.56	5.58
Ba	0.05	**0.05**	0.06	0.05	**0.03**	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.01	**0.04**	0.02	0.03	**0.03**	0.04	0.01	0.03	0.03	0.11	0.05	0.04	0.04	0.04	0.03
K	1.77	**1.80**	1.78	1.81	**1.76**	1.78	1.81	1.81	1.81	1.70	1.82	1.81	1.83	1.82	1.83
Sum XII	1.83	**1.88**	1.86	1.89	**1.82**	1.85	1.83	1.84	1.86	1.80	1.88	1.84	1.88	1.87	1.86
Total	15.25	**15.31**	15.31	15.35	**15.18**	15.21	15.22	15.26	15.23	15.45	15.56	15.56	15.46	15.43	15.44
F	0.71	**0.73**	0.70	0.68	**1.09**	0.97	0.92	1.01	0.97	-	-	-	-	-	-
Cl	0.04	**0.04**	0.03	0.03	**0.03**	0.03	0.02	0.03	0.03	-	-	-	-	-	-
X_{Mg}	0.54	**0.54**	0.55	0.54	**0.62**	0.63	0.63	0.63	0.63	0.80	0.64	0.56	0.56	0.56	0.56

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe
Rock type	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**	Grt gneiss
Sample	230-E-98	230-E-98	230-E-98	230-E-98	**230-E-98**	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	**230-E-98**	230-E-98
Profile	bt1	bt8	bt9	bt11	**bt21**	bt23	bt28	bt29	bt30	bt27	bt14	bt18	bt18	**bt 1**	bt1
Point	2	2	2	1	**2**	1	3	3	4	1	1	3	4	**1**	2
Texture	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	**matrix Bt2**	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	matrix Bt2	Bt4 on Crd-Opx	Bt4 on Crd-Opx	Bt4 on Crd-Opx	**Bt4 at Grt4**	Bt4 at Grt4
SiO_2	36.90	35.91	35.78	36.21	**35.97**	35.95	35.72	35.79	35.46	35.99	36.86	37.46	37.73	**36.14**	36.38
TiO_2	5.43	5.61	5.93	5.22	**5.89**	5.70	5.18	5.57	5.89	5.46	5.04	4.06	4.13	**5.39**	5.14
Al_2O_3	15.50	15.70	15.76	16.21	**15.51**	15.96	15.69	15.56	15.36	15.59	16.28	16.17	16.43	**15.56**	15.38
Cr_2O_3	0.06	0.06	0.04	0.09	**0.11**	0.04	0.05	0.05	0.02	0.09	0.08	0.04	0.08	**0.03**	0.07
MgO	12.78	11.76	11.63	12.32	**11.42**	11.54	11.90	11.82	11.00	11.82	15.11	16.59	16.67	**12.18**	12.62
CaO	0.00	0.00	0.01	0.00	**0.00**	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	**0.01**	0.00
MnO	0.06	0.01	0.02	0.03	**0.03**	0.08	0.04	0.01	0.00	0.04	0.04	0.01	0.01	**0.04**	0.07
FeO	14.93	16.24	15.42	16.38	**17.04**	16.68	17.37	17.90	18.07	17.40	12.55	11.00	11.05	**16.79**	15.85
BaO	0.00	0.03	0.00	0.07	**0.00**	0.00	0.35	0.44	0.49	0.12	0.05	0.00	0.00	**0.02**	0.08
NiO	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.
Na_2O	0.17	0.19	0.14	0.12	**0.14**	0.15	0.10	0.10	0.04	0.16	0.15	0.12	0.16	**0.14**	0.10
K_2O	9.34	9.63	9.48	9.58	**9.78**	9.69	9.48	9.61	9.41	9.54	9.63	9.64	9.56	**9.68**	9.56
F	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.
Cl	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	**n.d.**	n.d.
Sum	95.17	95.15	94.20	96.23	**95.88**	95.79	95.87	96.85	95.74	96.20	95.79	95.08	95.80	**95.97**	95.23
O=F	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**	-
O=Cl	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**	-
Total	95.17	95.15	94.20	96.23	**95.88**	95.79	95.87	96.85	95.74	96.20	95.79	95.08	95.80	**95.97**	95.23
Formula															
Si	5.52	5.43	5.44	5.41	**5.42**	5.41	5.40	5.37	5.39	5.41	5.42	5.50	5.49	**5.43**	5.48
Al^{IV}	2.48	2.57	2.56	2.59	**2.58**	2.59	2.60	2.63	2.61	2.59	2.58	2.50	2.51	**2.57**	2.52
Ti	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Sum IV	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00
Al^{VI}	0.25	0.22	0.26	0.26	**0.17**	0.24	0.19	0.13	0.14	0.17	0.25	0.30	0.31	**0.18**	0.21
Cr	0.01	0.01	0.00	0.01	**0.01**	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	**0.00**	0.01
Ti	0.61	0.64	0.68	0.59	**0.67**	0.64	0.59	0.63	0.67	0.62	0.56	0.45	0.45	**0.61**	0.58
Fe^{2+tot}	1.87	2.05	1.96	2.04	**2.15**	2.10	2.20	2.25	2.30	2.19	1.54	1.35	1.34	**2.11**	2.00
Mn	0.01	0.00	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**	0.01
Mg	2.85	2.65	2.63	2.74	**2.56**	2.59	2.68	2.65	2.49	2.65	3.31	3.63	3.62	**2.73**	2.83
Ni	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**	-
Sum VI	5.59	5.57	5.53	5.64	**5.57**	5.58	5.67	5.66	5.61	5.64	5.67	5.73	5.73	**5.64**	5.63
Ba	0.00	0.00	0.00	0.00	**0.00**	0.00	0.02	0.03	0.03	0.01	0.00	0.00	0.00	**0.00**	0.00
Ca	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Na	0.05	0.05	0.04	0.04	**0.04**	0.04	0.03	0.03	0.01	0.05	0.04	0.03	0.05	**0.04**	0.03
K	1.78	1.86	1.84	1.82	**1.88**	1.86	1.83	1.84	1.83	1.83	1.81	1.81	1.77	**1.85**	1.84
Sum XII	1.83	1.91	1.88	1.86	**1.92**	1.90	1.88	1.90	1.87	1.88	1.85	1.84	1.82	**1.90**	1.87
Total	15.42	15.49	15.41	15.51	**15.49**	15.48	15.54	15.55	15.48	15.52	15.53	15.57	15.55	**15.53**	15.50
F	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**	-
Cl	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**	-
X_{Mg}	0.60	0.56	0.57	0.57	**0.54**	0.55	0.55	0.54	0.52	0.55	0.68	0.73	0.73	**0.56**	0.59

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	**Grt-Sil gneiss**	Grt-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	**230-F-98**	230-F-98	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-9-00	458-9-00
Profile	bt1	bt 1	bt 1	bt 2	bt2	**bt 1**	bt 1	bt 2	bt 2	bt 2	bt 1	bt 4	bt 2	bt 2	
Point	2	3	4	1	2	**1**	4	2	3	4	4	2	3	4	
Texture	Bt1 in Grt2	Bt4 on Crd-Opx	Bt4 on Crd-Opx	Bt4 on Crd-Opx	Bt4 at Grt4	**Bt4 at Grt4**	Bt4 at Grt4	Bt4 on Grt2	Bt4 on Grt2	Bt4 on Grt2	Bt4 on Grt2	Bt4 on Grt2	Bt1in Grt2	Bt1in Grt2	
SiO_2	38.91	36.06	36.07	35.90	36.15	**35.61**	35.64	36.18	36.54	35.89	38.74	37.73	38.39	38.20	
TiO_2	4.29	4.69	4.81	4.70	4.75	**4.95**	4.83	4.70	4.52	4.28	2.76	4.48	3.85	4.01	
Al_2O_3	16.16	15.61	15.68	15.59	15.49	**15.33**	15.28	14.20	14.56	13.84	15.30	15.42	14.74	14.73	
Cr_2O_3	0.03	0.03	0.00	0.03	0.04	**0.02**	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
MgO	18.38	12.97	12.97	12.47	12.15	**12.31**	12.43	18.08	18.33	18.19	21.08	19.18	20.58	20.58	
CaO	0.00	0.00	0.00	0.00	0.03	**0.03**	0.02	0.00	0.00	0.00	0.00	0.00	0.03	0.03	
MnO	0.06	0.02	0.03	0.02	0.03	**0.04**	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.07	
FeO	8.28	16.77	16.37	17.09	17.81	**16.65**	16.52	9.06	9.46	9.79	7.25	8.38	6.70	6.72	
BaO	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	1.67	1.46	1.44	1.11	1.53	1.10	1.27	
NiO	n.d.	n.d.	n.d.	n.d.	n.d.	**0.00**	0.05	0.00	0.00	0.00	0.00	0.00	0.03	0.03	
Na_2O	0.39	0.12	0.13	0.06	0.07	**0.15**	0.14	0.00	0.00	0.00	0.00	0.00	0.26	0.29	
K_2O	9.28	9.52	9.62	9.71	9.30	**9.27**	9.35	9.03	9.11	8.67	8.86	9.07	9.14	9.12	
F	n.d.	n.d.	n.d.	n.d.	n.d.	**0.58**	0.67	2.60	1.96	2.35	2.99	2.25	2.36	2.44	
Cl	n.d.	n.d.	n.d.	n.d.	n.d.	**0.14**	0.15	0.00	0.00	0.00	0.00	0.00	0.05	0.03	
Sum	95.78	95.79	95.68	95.57	95.83	**95.09**	95.15	95.53	95.95	94.45	98.09	98.04	97.24	97.54	
O=F	-	-	-	-	-	**-**	-	-1.09	-0.83	-0.99	-1.26	-0.95	-0.99	-1.03	
O=Cl	-	-	-	-	-	**-**	-	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	
Total	95.78	95.79	95.68	95.57	95.83	**95.09**	95.15	94.43	95.12	93.46	96.83	97.09	96.24	96.50	
Formula (O=22)															
Si	5.58	5.42	5.42	5.43	5.45	**5.39**	5.39	5.32	5.35	5.34	5.43	5.35	5.44	5.41	
Al^{IV}	2.42	2.58	2.58	2.58	2.55	**2.61**	2.61	2.46	2.51	2.43	2.53	2.58	2.46	2.46	
Ti	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.22	0.14	0.23	0.04	0.06	0.10	0.13	
Sum IV	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	
Al^{VI}	0.30	0.19	0.20	0.20	0.20	**0.13**	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cr	0.00	0.00	0.00	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Ti	0.46	0.53	0.54	0.53	0.54	**0.56**	0.55	0.30	0.36	0.25	0.25	0.41	0.31	0.29	
Fe^{2+tot}	0.99	2.11	2.06	2.16	2.25	**2.11**	2.09	1.11	1.16	1.22	0.85	1.00	0.79	0.80	
Mn	0.01	0.00	0.00	0.00	0.00	**0.01**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Mg	3.93	2.91	2.91	2.81	2.73	**2.78**	2.80	3.96	4.00	4.04	4.40	4.06	4.35	4.34	
Ni	n.d.	n.d.	n.d.	n.d.	n.d.	**0.00**	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sum VI	5.69	5.74	5.71	5.71	5.72	**5.59**	5.58	5.38	5.51	5.51	5.50	5.47	5.46	5.45	
Ba	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.10	0.08	0.08	0.06	0.08	0.06	0.07	
Ca	0.00	0.00	0.00	0.00	0.01	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Na	0.11	0.03	0.04	0.02	0.02	**0.05**	0.04	0.00	0.00	0.00	0.00	0.00	0.07	0.08	
K	1.70	1.83	1.84	1.87	1.79	**1.79**	1.81	1.69	1.70	1.65	1.58	1.64	1.65	1.65	
Sum XII	1.81	1.86	1.88	1.89	1.82	**1.84**	1.85	1.79	1.78	1.73	1.65	1.73	1.79	1.80	
Total	15.50	15.60	15.59	15.60	15.54	**15.43**	15.43	15.17	15.30	15.24	15.15	15.19	15.25	15.25	
F	-	-	-	-	-	**-**	-	1.21	0.91	1.10	1.33	1.01	1.06	1.09	
Cl	-	-	-	-	-	**-**	-	0.00	0.00	0.00	0.00	0.00	0.01	0.01	
X_{Mg}	0.80	0.58	0.59	0.57	0.55	**0.57**	0.57	0.78	0.78	0.77	0.84	0.80	0.85	0.85	

*: analysis used for geothermobarometry

Table A.6.2.2 (continued): Representative EMP analyses of biotite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	458-9-00	458-9-00	458-9-00	458-9-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	bt 2	bt 1	bt 1	bt 1	bt 2	bt 2	bt 2	bt 1	bt 1	bt 1
Point	5	1	2	4	3	4	5	3	4	5
Texture	Bt1in Grt2	Bt4 on Grt2	Bt4 on Grt2	Bt4 on Grt2	Bt4 on Spl2	Bt4 on Spl2	Bt4 on Spl2	Bt1in Grt2	Bt1in Grt2	Bt1in Grt2
SiO_2	38.30	37.73	37.21	37.60	37.44	37.83	38.25	37.35	38.04	37.90
TiO_2	3.86	4.36	4.55	4.46	4.52	4.48	4.59	3.92	3.85	3.87
Al_2O_3	14.96	14.47	14.52	14.84	14.75	15.01	15.08	15.04	14.73	14.77
Cr_2O_3	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.03
MgO	19.90	17.55	17.92	17.44	19.80	19.73	20.06	18.75	18.98	18.84
CaO	0.03	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.00	0.01
MnO	0.00	0.02	0.01	0.00	0.04	0.02	0.07	0.06	0.01	0.00
FeO	7.90	9.71	9.95	9.96	7.50	7.37	6.62	9.38	8.60	9.44
BaO	1.14	1.33	1.38	1.32	1.09	0.93	0.95	0.57	0.52	0.62
NiO	0.00	0.03	0.05	0.03	0.00	0.02	0.05	0.00	0.04	0.00
Na_2O	0.27	0.19	0.23	0.23	0.15	0.25	0.21	0.23	0.20	0.22
K_2O	8.61	8.99	9.15	9.14	9.29	9.18	9.52	9.20	9.33	9.32
F	2.47	2.03	2.32	2.39	2.39	2.35	2.05	2.01	2.30	1.68
Cl	0.02	0.03	0.06	0.04	0.04	0.04	0.05	0.04	0.02	0.03
Sum	97.45	96.43	97.34	97.43	97.01	97.22	97.51	96.57	96.61	96.72
O=F	-1.04	-0.86	-0.98	-1.01	-1.01	-0.99	-0.86	-0.85	-0.97	-0.71
O=Cl	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	-0.01
Total	96.41	95.57	96.35	96.42	96.00	96.22	96.64	95.72	95.63	96.01
Formula (O=22)										
Si	5.43	5.48	5.37	5.41	5.35	5.38	5.41	5.38	5.45	5.46
Al^{IV}	2.50	2.47	2.47	2.52	2.49	2.51	2.51	2.56	2.49	2.51
Ti	0.08	0.05	0.15	0.07	0.16	0.11	0.08	0.06	0.06	0.04
Sum IV	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.34	0.43	0.34	0.41	0.32	0.37	0.41	0.36	0.36	0.38
Fe^{2+tot}	0.94	1.18	1.20	1.20	0.90	0.88	0.78	1.13	1.03	1.14
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00
Mg	4.20	3.80	3.86	3.74	4.22	4.18	4.23	4.03	4.06	4.04
Ni	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Sum VI	5.47	5.41	5.41	5.35	5.44	5.43	5.44	5.54	5.45	5.56
Ba	0.06	0.08	0.08	0.07	0.06	0.05	0.05	0.03	0.03	0.04
Ca	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.07	0.05	0.06	0.06	0.04	0.07	0.06	0.06	0.05	0.06
K	1.56	1.66	1.69	1.68	1.69	1.66	1.72	1.69	1.71	1.71
Sum XII	1.70	1.79	1.83	1.81	1.80	1.79	1.83	1.79	1.79	1.81
Total	15.17	15.20	15.23	15.17	15.24	15.22	15.27	15.33	15.24	15.37
F	1.10	0.93	1.06	1.09	1.08	1.06	0.92	0.92	1.04	0.76
Cl	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
X_{Mg}	0.82	0.76	0.76	0.76	0.82	0.83	0.84	0.78	0.80	0.78

*: analysis used for geothermobarometry

A.6.2.3 Cordierite

Table A.6.2.3: Representative EMP analyses of cordierite

	*								*						
Rock unit	**Orue**	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue**	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	**Grt-Crd-Bt gneiss**	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	**Grt-Sil-Crd rock**	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock
Sample	**103-A-98**	103-A-98	103-A-98	103-A-98	103-A-98	302-2-99	302-2-99	302-2-99	**302-2-99**	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99
Profile	**crd 1**	crd 1	crd 2	crd 2	crd 2	crd 1	crd 1	crd 1	**crd 1**	crd 1	crd 1	crd 1	crd 2	crd 2	crd 2
Point	**1**	2	3	11	12	1	2	6	**10**	16	17	20	1	11	19
Texture	**matrix Crd2 pinitized**	matrix Crd2 pinitized	matrix Crd2 pinitized	matrix Crd2 pinitized	matrix Crd2 pinitized	matrix Crd2	matrix Crd2	matrix Crd2	**matrix Crd2**	matrix Crd2	matrix Crd2	matrix Crd2	matrix Crd2	matrix Crd2	matrix Crd2
Position						rim	←	←	**core**	→	→	rim	rim	core	rim
SiO_2	**45.60**	45.45	42.76	44.11	44.37	47.73	47.60	47.92	**48.55**	47.83	48.04	48.28	48.19	48.33	48.25
TiO_2	**0.04**	0.08	0.06	0.07	0.00	0.00	0.01	0.00	**0.01**	0.03	0.02	0.03	0.00	0.00	0.00
Al_2O_3	**31.08**	30.58	32.09	31.34	31.25	32.84	32.51	32.99	**32.95**	32.73	33.13	32.85	32.57	32.98	32.90
MgO	**2.56**	2.76	2.60	2.46	2.31	8.59	8.59	8.60	**8.58**	8.33	8.60	8.81	8.82	8.81	8.93
CaO	**0.10**	0.04	0.13	0.00	0.04	0.00	0.04	0.01	**0.05**	0.01	0.00	0.02	0.02	0.05	0.00
MnO	**0.02**	0.02	0.04	0.05	0.06	0.15	0.13	0.14	**0.14**	0.17	0.04	0.15	0.16	0.08	0.17
FeO	**6.33**	6.47	7.91	5.96	5.59	7.38	7.50	7.77	**7.75**	7.36	7.59	6.71	7.19	7.51	7.41
Na_2O	**0.21**	0.03	0.43	0.09	0.10	0.30	0.24	0.25	**0.23**	0.60	0.26	0.56	0.34	0.27	0.19
K_2O	**9.55**	9.25	8.81	10.68	10.63	0.00	0.00	0.02	**0.02**	0.00	0.01	0.01	0.01	0.03	0.01
Total	**95.50**	94.69	94.80	94.76	94.33	97.00	96.61	97.69	**98.28**	97.06	97.67	97.41	97.30	98.04	97.87
Formula (O=18)															
Si	**5.08**	5.09	4.84	4.98	5.02	4.97	4.98	4.96	**4.99**	4.98	4.97	4.99	5.00	4.98	4.98
Ti	**0.00**	0.01	0.00	0.01	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Al	**4.08**	4.04	4.28	4.17	4.17	4.03	4.01	4.03	**3.99**	4.02	4.04	4.00	3.98	4.00	4.00
Mg	**0.42**	0.46	0.44	0.41	0.39	1.33	1.34	1.33	**1.32**	1.29	1.32	1.36	1.36	1.35	1.37
Ca	**0.01**	0.01	0.02	0.00	0.00	0.00	0.00	0.00	**0.01**	0.00	0.00	0.00	0.00	0.01	0.00
Mn	**0.00**	0.00	0.00	0.00	0.01	0.01	0.01	0.01	**0.01**	0.01	0.00	0.01	0.01	0.01	0.02
Fe^{2+}	**0.59**	0.61	0.75	0.56	0.53	0.64	0.66	0.67	**0.67**	0.64	0.66	0.58	0.62	0.65	0.64
Na	**0.04**	0.01	0.09	0.02	0.02	0.06	0.05	0.05	**0.05**	0.12	0.05	0.11	0.07	0.05	0.04
K	**1.36**	1.32	1.27	1.54	1.53	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Total	**11.58**	11.54	11.70	11.70	11.67	11.05	11.04	11.05	**11.03**	11.07	11.04	11.06	11.05	11.05	11.04
X_{Mg}	**0.42**	0.43	0.37	0.42	0.42	0.67	0.67	0.66	**0.66**	0.67	0.67	0.70	0.69	0.68	0.68

*: analysis used for geothermobarometry

Table A.6.2.3 (continued): Representative EMP analyses of cordierite

Rock unit	Orue	Orue	Orue	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock
Sample	302-2-99	302-2-99	302-2-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	**614-1-99**	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	crd 5	crd 5	crd 5	crd 1	crd 1	crd 1	crd 1	crd 1	crd 2	**crd 2**	crd 2	crd 8	crd 6	crd 6	crd 6
Point	1	12	19	1	2	3	4	6	2	**3**	5	1	1	2	6
Texture	matrix Crd2	matrix Crd2	matrix Crd2	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx-Spl s.	**Crd3 in Crd-Opx-Spl s.**	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx s. cont. Grt2	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.
Position	rim	core	rim												
SiO_2	47.79	48.14	47.90	49.45	49.52	49.51	49.49	49.60	49.65	**49.45**	49.65	49.33	49.10	48.99	48.52
TiO_2	0.03	0.01	0.01	0.01	0.00	0.04	0.00	0.01	0.00	**0.00**	0.00	0.02	0.03	0.00	0.04
Al_2O_3	32.88	32.92	32.67	33.54	33.61	33.59	33.47	33.94	33.57	**33.57**	33.64	33.61	33.67	33.37	33.14
MgO	9.02	8.95	8.84	11.31	10.96	11.06	11.07	11.24	11.11	**10.79**	10.99	11.14	10.78	10.56	10.26
CaO	0.02	0.01	0.05	0.02	0.01	0.03	0.01	0.02	0.02	**0.01**	0.00	0.03	0.03	0.00	0.01
MnO	0.14	0.17	0.13	0.09	0.06	0.02	0.00	0.04	0.01	**0.05**	0.01	0.08	0.00	0.04	0.05
FeO	7.26	7.54	7.69	3.92	4.59	4.46	4.44	4.28	4.60	**4.53**	4.36	4.56	4.78	5.13	5.80
Na_2O	0.14	0.15	0.18	0.07	0.06	0.13	0.05	0.08	0.06	**0.07**	0.10	0.06	0.06	0.05	0.09
K_2O	0.00	0.01	0.00	0.00	0.01	0.03	0.02	0.00	0.00	**0.00**	0.03	0.02	0.00	0.00	0.01
Total	97.27	97.88	97.47	98.40	98.83	98.86	98.54	99.22	99.01	**98.46**	98.78	98.84	98.45	98.14	97.92
Formula (O=18)															
Si	4.96	4.97	4.97	4.99	4.99	4.98	4.99	4.97	4.99	**4.99**	4.99	4.97	4.97	4.98	4.96
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Al	4.02	4.00	3.99	3.99	3.99	3.98	3.98	4.01	3.98	**4.00**	3.99	3.99	4.01	4.00	4.00
Mg	1.39	1.38	1.37	1.70	1.65	1.66	1.66	1.68	1.66	**1.62**	1.65	1.67	1.63	1.60	1.56
Ca	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Mn	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	**0.00**	0.00	0.01	0.00	0.00	0.00
Fe^{2+}	0.63	0.65	0.67	0.33	0.39	0.38	0.37	0.36	0.39	**0.38**	0.37	0.38	0.40	0.44	0.50
Na	0.03	0.03	0.04	0.01	0.01	0.03	0.01	0.02	0.01	**0.01**	0.02	0.01	0.01	0.01	0.02
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Total	11.04	11.04	11.05	11.03	11.03	11.04	11.02	11.03	11.03	**11.02**	11.02	11.04	11.03	11.03	11.05
X_{Mg}	0.69	0.68	0.67	0.84	0.81	0.82	0.82	0.82	0.81	**0.81**	0.82	0.81	0.80	0.79	0.76

*: analysis used for geothermobarometry

Table A.6.2.3 (continued): Representative EMP analyses of cordierite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich	**Qtz-rich**	Qtz-rich	Qtz-rich	**Qtz-rich**	Qtz-rich	Qtz-rich	Qtz-rich	Qtz-rich
	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	**Grt-Opx rock**	Grt-Opx rock	Grt-Opx rock	**Grt-Opx rock**	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock	Grt-Opx rock
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	**614-1-99**	614-1-99	614-1-99	**614-1-99**	614-1-99	614-1-99	614-1-99	614-1-99
Profile	crd 6	crd 6	crd 6	crd 6	crd 7	crd 6	crd 5	**crd 5**	crd 1	crd 2	**crd 2**	crd 2	crd 9	crd 9	crd 9
Point	8	13	14	15	2	1	2	**1**	3	1	**4**	5	1	4	7
Texture	Crd3 in	Crd3 in	Crd3 in	Crd3 in	Crd3 in	Crd3 in	Crd3 in	**Crd3 in**	Crd3 in	Crd3 in	**Crd3 in**	Crd3 in	Crd3 on	Crd3 on	Crd3 on
	Crd-Opx s.	Crd-Opx s.	Crd-Opx s.	Crd-Opx s.	Crd-Opx s.	Crd-Opx s.	Crd-Opx s.	**Crd-Opx s.**	Crd-Opx s.	Crd-Opx s.	**Crd-Opx s.**	Crd-Opx s.	Opx2	Opx2	Opx2
Position								**matrix**	at Grt4	at Grt4	**at Grt4**	at Grt4			
SiO_2	48.77	48.58	48.58	48.42	48.06	48.57	48.31	**48.11**	49.18	48.96	**48.92**	49.04	49.09	48.82	48.93
TiO_2	0.01	0.01	0.06	0.00	0.00	0.00	0.00	**0.00**	0.01	0.05	**0.00**	0.02	0.02	0.00	0.00
Al_2O_3	33.13	33.01	33.32	33.16	33.12	33.37	33.29	**33.17**	33.43	33.20	**33.25**	33.71	33.31	33.08	33.15
MgO	9.99	9.74	10.06	10.22	9.89	9.50	9.52	**9.46**	9.75	9.74	**9.68**	9.51	10.94	10.48	10.44
CaO	0.00	0.00	0.03	0.00	0.00	0.04	0.01	**0.00**	0.02	0.05	**0.05**	0.05	0.00	0.24	0.00
MnO	0.08	0.09	0.01	0.05	0.07	0.10	0.08	**0.14**	0.00	0.06	**0.10**	0.03	0.03	0.04	0.00
FeO	5.97	6.00	5.83	5.76	6.23	6.51	6.87	**7.30**	6.18	6.42	**6.58**	6.25	4.65	4.77	5.06
Na_2O	0.06	0.04	0.09	0.07	0.08	0.05	0.08	**0.06**	0.11	0.13	**0.09**	0.06	0.03	0.09	0.03
K_2O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.02**	0.00	0.00	**0.01**	0.01	0.02	0.04	0.00
Total	98.01	97.47	97.97	97.69	97.43	98.13	98.17	**98.26**	98.68	98.60	**98.69**	98.67	98.11	97.54	97.61
Formula (O=18)															
Si	4.98	4.99	4.96	4.96	4.95	4.97	4.95	**4.94**	4.99	4.98	**4.98**	4.98	4.98	4.99	5.00
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Al	3.99	4.00	4.01	4.01	4.02	4.02	4.02	**4.02**	4.00	3.98	**3.99**	4.03	3.98	3.98	3.99
Mg	1.52	1.49	1.53	1.56	1.52	1.45	1.45	**1.45**	1.48	1.48	**1.47**	1.44	1.66	1.60	1.59
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.01	**0.01**	0.01	0.00	0.03	0.00
Mn	0.01	0.01	0.00	0.00	0.01	0.01	0.01	**0.01**	0.00	0.01	**0.01**	0.00	0.00	0.00	0.00
Fe^{2+}	0.51	0.52	0.50	0.49	0.54	0.56	0.59	**0.63**	0.52	0.55	**0.56**	0.53	0.39	0.41	0.43
Na	0.01	0.01	0.02	0.01	0.02	0.01	0.02	**0.01**	0.02	0.03	**0.02**	0.01	0.01	0.02	0.01
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Total	11.03	11.01	11.03	11.04	11.05	11.02	11.04	**11.06**	11.02	11.03	**11.03**	11.01	11.03	11.03	11.01
X_{Mg}	0.75	0.74	0.75	0.76	0.74	0.72	0.71	**0.70**	0.74	0.73	**0.72**	0.73	0.81	0.80	0.79

*: analysis used for geothermobarometry

Table A.6.2.3 (continued): Representative EMP analyses of cordierite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss
Sample	614-1-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	**587-4-99**	587-4-99	458-3-99	**458-3-99**	458-3-99	**458-3-99**	458-3-99
Profile	crd 9	crd 1	crd 1	crd 1	crd 1	crd 1	crd 5	**crd 5**	crd 5	crd 1	**crd 1**	crd 1	**crd 1**	crd 2
Point	10	1	4	6	7	10	1	**3**	5	1	**4**	1	**3**	3
Texture	Crd3 on Opx2	matrix Crd2	matrix Crd2	matrix Crd2	matrix Crd2	matrix Crd2	matrix Crd2 at Grt4	**matrix Crd2 at Grt4**	matrix Crd2 at Grt4	Crd3 in Crd-Opx-Spl s.	**Crd3 in Crd-Opx-Spl s.**	Crd3 in Crd-Opx s.	**Crd3 in Crd-Opx s.**	Crd3 in Crd-Opx s.
Position														
SiO_2	48.75	48.88	49.09	48.83	48.87	49.10	49.23	**49.17**	48.83	49.55	**49.57**	49.40	**49.63**	49.39
TiO_2	0.01	0.00	0.02	0.00	0.00	0.00	0.00	**0.01**	0.00	0.02	**0.00**	0.00	**0.00**	0.02
Al_2O_3	33.36	33.37	33.53	33.41	33.35	33.75	33.67	**33.61**	33.54	33.68	**33.65**	33.58	**33.50**	34.00
MgO	10.39	9.88	9.93	9.91	10.15	10.34	10.74	**10.70**	10.86	11.35	**11.63**	11.12	**11.19**	11.29
CaO	0.00	0.00	0.00	0.01	0.01	0.00	0.02	**0.00**	0.04	0.03	**0.03**	0.01	**0.02**	0.00
MnO	0.09	0.07	0.09	0.05	0.00	0.00	0.00	**0.05**	0.01	0.04	**0.03**	0.07	**0.00**	0.04
FeO	4.91	5.77	5.61	5.86	5.69	5.11	4.94	**4.88**	4.78	2.93	**3.08**	3.76	**3.93**	3.73
Na_2O	0.06	0.17	0.26	0.27	0.22	0.15	0.17	**0.11**	0.11	0.42	**0.36**	0.42	**0.44**	0.28
K_2O	0.02	0.00	0.02	0.00	0.00	0.03	0.02	**0.01**	0.01	0.00	**0.02**	0.03	**0.03**	0.00
Total	97.59	98.15	98.54	98.34	98.29	98.49	98.78	**98.54**	98.19	98.01	**98.36**	98.38	**98.72**	98.75
Formula (O=18)														
Si	4.98	4.98	4.98	4.97	4.98	4.97	4.97	**4.97**	4.96	5.00	**4.99**	4.98	**4.99**	4.96
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	**0.00**	0.00
Al	4.02	4.01	4.01	4.01	4.00	4.03	4.01	**4.01**	4.01	4.00	**3.99**	3.99	**3.97**	4.03
Mg	1.58	1.50	1.50	1.50	1.54	1.56	1.62	**1.61**	1.64	1.71	**1.74**	1.67	**1.68**	1.69
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	**0.00**	0.00
Mn	0.01	0.01	0.01	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.01	**0.00**	0.00
Fe^{2+}	0.42	0.49	0.48	0.50	0.48	0.43	0.42	**0.41**	0.41	0.25	**0.26**	0.32	**0.33**	0.31
Na	0.01	0.03	0.05	0.05	0.04	0.03	0.03	**0.02**	0.02	0.08	**0.07**	0.08	**0.08**	0.06
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	**0.00**	0.00
Total	11.02	11.03	11.04	11.05	11.05	11.03	11.05	**11.03**	11.05	11.04	**11.06**	11.06	**11.06**	11.05
X_{Mg}	0.79	0.75	0.76	0.75	0.76	0.78	0.80	**0.80**	0.80	0.87	**0.87**	0.84	**0.84**	0.84

*: analysis used for geothermobarometry

Table A.6.2.3 (continued): Representative EMP analyses of cordierite

Rock unit	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt gneiss
Sample	458-3-99	458-3-99	634-00	634-00	**634-00**	634-00	634-00	634-00	**634-00**	634-00	634-00	634-00	634-00	230-E-98
Profile	crd 4	crd 1	crd 1	crd 2	**crd 2**	crd 2	crd 4	crd 4	**crd 4**	crd 4	crd 5	crd 5	crd 5	crd
Point	1	4	2	1	**3**	5	1	6	**8**	9	1	16	32	7
Texture	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	**Crd3 in Crd-Opx s.**	Crd3 in Crd-Opx s.	Crd3 in Spl-Crd s.	Crd3 in Spl-Crd s.	**Crd3 in Spl-Crd s.**	Crd3 in Spl-Crd s.	Crd3 on Opx2	Crd3 on Opx2	Crd3 on Opx2	Crd3 in corona on Spl1
Position														
SiO_2	49.16	48.53	49.08	48.82	**49.21**	48.89	49.08	49.27	**48.63**	49.40	48.98	49.27	49.05	49.14
TiO_2	0.03	0.00	0.03	0.04	**0.00**	0.00	0.00	0.01	**0.00**	0.01	0.04	0.00	0.01	0.00
Al_2O_3	33.58	33.18	33.35	33.36	**33.37**	33.63	33.50	33.32	**33.31**	33.50	33.45	33.39	33.55	33.81
MgO	11.50	10.56	10.10	10.14	**9.90**	9.87	10.91	10.75	**10.66**	10.71	10.47	10.42	10.51	10.12
CaO	0.00	0.03	0.02	0.02	**0.01**	0.03	0.03	0.03	**0.02**	0.02	0.00	0.00	0.03	0.03
MnO	0.08	0.07	0.12	0.07	**0.14**	0.04	0.10	0.02	**0.02**	0.00	0.04	0.11	0.04	0.03
FeO	3.08	4.28	4.94	5.27	**5.50**	5.52	4.56	4.69	**4.89**	4.58	4.85	4.89	4.86	5.75
Na_2O	0.49	0.39	0.28	0.27	**0.28**	0.25	0.18	0.26	**0.26**	0.26	0.24	0.23	0.22	0.34
K_2O	0.00	0.00	0.02	0.00	**0.00**	0.03	0.00	0.02	**0.02**	0.01	0.04	0.02	0.03	0.01
Total	97.92	97.04	97.93	97.99	**98.41**	98.25	98.35	98.36	**97.80**	98.49	98.10	98.33	98.30	99.24
Formula (O=18)														
Si	4.97	4.98	5.00	4.98	**5.00**	4.98	4.97	4.99	**4.96**	4.99	4.98	5.00	4.98	4.96
Ti	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Al	4.00	4.01	4.00	4.01	**4.00**	4.03	4.00	3.98	**4.01**	3.99	4.01	3.99	4.01	4.02
Mg	1.73	1.61	1.53	1.54	**1.50**	1.50	1.65	1.62	**1.62**	1.61	1.59	1.58	1.59	1.52
Ca	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Mn	0.01	0.01	0.01	0.01	**0.01**	0.00	0.01	0.00	**0.00**	0.00	0.00	0.01	0.00	0.00
Fe^{2+}	0.26	0.37	0.42	0.45	**0.47**	0.47	0.39	0.40	**0.42**	0.39	0.41	0.41	0.41	0.49
Na	0.10	0.08	0.06	0.05	**0.05**	0.05	0.03	0.05	**0.05**	0.05	0.05	0.04	0.04	0.07
K	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Total	11.07	11.06	11.03	11.04	**11.03**	11.03	11.05	11.05	**11.06**	11.04	11.04	11.03	11.04	11.06
X_{Mg}	0.87	0.81	0.78	0.77	**0.76**	0.76	0.81	0.80	**0.80**	0.81	0.79	0.79	0.79	0.76

*: analysis used for geothermobarometry

Table A.6.2.3 (continued): Representative EMP analyses of cordierite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe *	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**	Grt gneiss	Grt gneiss	Grt gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss
Sample	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	**230-E-98**	230-E-98	230-E-98	230-E-98	230-F-98	230-F-98	230-F-98	230-F-98
Profile	crd	crd	crd 3	crd 4	crd 1	crd 1	**crd 1**	crd 5	crd 5	crd 6	crd 1	crd 2	crd 2	crd 2
Point	8	10	2	4	3	4	**5**	2	3	1	8	1	2	10
Texture	Crd3 in corona	Crd3 in corona	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	**Crd3 in Crd-Opx s. matrix**	Crd3 in Spl-Crd s.	Crd3 in Spl-Crd s.	Crd3 in Spl-Crd s.	Crd3 in corona	Crd3 in corona	Crd3 in corona	Crd3 in corona
Position	on Spl1	on Spl1	at Grt2	at Grt2				in Grt2	in Grt2	in Grt2	on Spl2	on Spl2	on Spl2	on Spl1
SiO_2	49.05	48.86	49.13	48.83	49.22	48.48	**48.20**	48.91	48.69	48.50	48.47	48.58	48.87	49.26
TiO_2	0.00	0.00	0.04	0.00	0.02	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.01	0.06
Al_2O_3	33.50	33.32	33.53	33.23	32.97	33.28	**33.10**	33.68	33.41	33.32	33.09	32.88	33.06	33.11
MgO	9.83	9.65	9.95	9.82	9.74	9.56	**9.31**	10.11	10.06	10.06	9.06	9.13	9.07	9.58
CaO	0.07	0.00	0.03	0.00	0.02	0.04	**0.00**	0.03	0.01	0.00	0.00	0.04	0.03	0.01
MnO	0.02	0.05	0.07	0.08	0.07	0.04	**0.11**	0.00	0.03	0.02	0.14	0.09	0.14	0.07
FeO	5.66	5.61	5.71	5.94	6.25	6.27	**6.41**	5.19	4.90	5.23	6.73	7.05	6.86	6.52
Na_2O	0.32	0.45	0.37	0.23	0.10	0.15	**0.16**	0.31	0.39	0.38	0.34	0.21	0.16	0.24
K_2O	0.01	0.03	0.02	0.02	0.01	0.00	**0.00**	0.00	0.01	0.02	0.00	0.01	0.00	0.02
Total	98.45	97.97	98.84	98.15	98.39	97.83	**97.28**	98.23	97.50	97.52	97.83	97.98	98.19	98.86
Formula (O=18)														
Si	4.99	4.99	4.98	4.99	5.01	4.97	**4.97**	4.97	4.98	4.97	4.99	4.99	5.01	5.00
Ti	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	4.01	4.01	4.00	4.00	3.96	4.02	**4.03**	4.03	4.03	4.02	4.01	3.98	3.99	3.96
Mg	1.49	1.47	1.50	1.49	1.48	1.46	**1.43**	1.53	1.53	1.54	1.39	1.40	1.38	1.45
Ca	0.01	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	0.00	0.00	0.01	0.01	0.01	0.00	**0.01**	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Fe^{2+}	0.48	0.48	0.48	0.51	0.53	0.54	**0.55**	0.44	0.42	0.45	0.58	0.61	0.59	0.55
Na	0.06	0.09	0.07	0.05	0.02	0.03	**0.03**	0.06	0.08	0.07	0.07	0.04	0.03	0.05
K	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.04	11.05	11.05	11.04	11.01	11.03	**11.03**	11.04	11.04	11.06	11.04	11.04	11.02	11.03
X_{Mg}	0.76	0.75	0.76	0.75	0.74	0.73	**0.72**	0.78	0.79	0.77	0.71	0.70	0.70	0.72

*: analysis used for geothermobarometry

Table A.6.2.3 (continued): Representative EMP analyses of cordierite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	**Grt-Sil gneiss**	Grt-Sil gneiss	**Grt-Sil gneiss**	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	**230-F-98**	230-F-98	**230-F-98**	230-F-98	230-F-98	230-F-98	458-4-99	458-4-99
Profile	crd 2	crd 2	crd 2	crd 2	crd 2	crd 2	**crd 2**	crd 1	**crd 1**	crd 1	crd 1	crd 1	crd 3	crd 3
Point	11	5	6	8	4	2	**3**	1	**4**	3	8	5	1	3
Texture	Crd3 in corona	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	**Crd3 in Crd-Opx s. matrix**	Crd3 in corona	**Crd3 in corona**	Crd3 in corona	Crd3 in Spl-Crd s.	Crd3 in Spl-Crd s.	Crd3 in Crd-OpxSpr sympl.	Crd3 in Crd-OpxSpr sympl.
Position	on Spl1	at Grt2						on Grt-Sil	**on Grt-Sil**	on Grt-Sil	on Grt-Sil	on Grt-Sil		
SiO_2	48.88	49.46	48.93	49.19	49.14	49.03	**48.86**	48.47	**48.43**	49.38	48.21	49.06	48.03	48.09
TiO_2	0.01	0.00	0.00	0.00	0.00	0.04	**0.00**	0.00	**0.00**	0.00	0.01	0.00	0.03	0.02
Al_2O_3	33.63	33.55	33.31	33.22	33.42	32.97	**33.02**	32.95	**32.79**	33.34	33.07	33.35	33.62	33.42
MgO	9.56	10.00	9.81	9.53	9.60	9.55	**9.28**	9.24	**9.25**	9.88	9.34	9.46	11.47	11.56
CaO	0.04	0.02	0.00	0.03	0.02	0.01	**0.00**	0.01	**0.04**	0.00	0.03	0.17	0.03	0.01
MnO	0.08	0.02	0.12	0.10	0.07	0.07	**0.11**	0.10	**0.09**	0.03	0.04	0.08	0.06	0.05
FeO	6.48	5.97	6.17	6.56	6.61	6.90	**6.79**	6.80	**6.97**	6.28	6.75	6.49	3.46	3.03
Na_2O	0.16	0.20	0.26	0.23	0.13	0.13	**0.23**	0.20	**0.21**	0.28	0.20	0.20	0.04	0.04
K_2O	0.01	0.00	0.01	0.04	0.00	0.00	**0.00**	0.01	**0.00**	0.00	0.01	0.01	0.00	0.02
Total	98.85	99.22	98.60	98.89	98.98	98.71	**98.28**	97.78	**97.77**	99.20	97.66	98.83	96.74	96.25
Formula (O=18)														
Si	4.97	4.99	4.98	5.00	4.99	5.00	**5.00**	4.99	**4.99**	4.99	4.97	4.99	4.92	4.94
Ti	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Al	4.03	3.99	4.00	3.98	4.00	3.96	**3.98**	4.00	**3.98**	3.97	4.02	4.00	4.06	4.05
Mg	1.45	1.50	1.49	1.44	1.45	1.45	**1.42**	1.42	**1.42**	1.49	1.43	1.43	1.75	1.77
Ca	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.02	0.00	0.00
Mn	0.01	0.00	0.01	0.01	0.01	0.01	**0.01**	0.01	**0.01**	0.00	0.00	0.01	0.01	0.00
Fe^{2+}	0.55	0.50	0.52	0.56	0.56	0.59	**0.58**	0.59	**0.60**	0.53	0.58	0.55	0.30	0.26
Na	0.03	0.04	0.05	0.04	0.02	0.02	**0.05**	0.04	**0.04**	0.05	0.04	0.04	0.01	0.01
K	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Total	11.04	11.03	11.05	11.04	11.03	11.03	**11.03**	11.04	**11.04**	11.05	11.05	11.04	11.05	11.04
X_{Mg}	0.72	0.75	0.74	0.72	0.72	0.71	**0.71**	0.71	**0.70**	0.74	0.71	0.72	0.86	0.87

*: analysis used for geothermobarometry

Table A.6.2.3 (continued): Representative EMP analyses of cordierite

	*							*						
Rock unit	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	**Opx-Sil gneiss**	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	**Opx-Sil gneiss**	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	**458-4-99**	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	**458-4-99**	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99
Profile	**crd 10**	crd 10	crd 10	cdr 1	cdr 1	cdr 1	crd 4	**crd 4**	crd 4	crd 4	crd 4	crd 8	crd 8	crd 8
Point	**2**	7	8	1	3	4	6	**7**	29	35	36	3	6	18
Texture	**Crd3 in Crd-OpxSpl sympl.**	Crd3 in Crd-OpxSpl sympl.	Crd3 in Crd-OpxSpl sympl.	Crd3 in Crd-Spr s. on Opx-Sil	Crd3 in Crd-Spr s. on Opx-Sil	Crd3 in Crd-Spr s. on Opx-Sil	Crd3 in Crd-Opx s. matrix	**Crd3 in Crd-Opx s.** →	Crd3 in Crd-Opx s. →	Crd3 in Crd-Opx s. →	Crd3 in Crd-Opx s. at Grt2	Crd3 in Spl-Crd s. on Spr2	Crd3 in Spl-Crd s. on Spr2	Crd3 in Spl-Crd s. on Spr2
Position														
SiO_2	**50.00**	49.00	49.00	49.24	49.84	49.29	49.40	**49.51**	49.71	49.66	49.48	49.73	50.02	49.95
TiO_2	**0.00**	0.00	0.01	0.01	0.00	0.00	0.02	**0.02**	0.00	0.03	0.00	0.00	0.00	0.00
Al_2O_3	**34.50**	34.14	34.21	33.71	33.78	33.40	34.00	**33.68**	34.11	33.77	33.93	33.61	33.92	33.85
MgO	**11.75**	11.92	12.09	11.69	11.73	11.96	11.35	**11.23**	11.31	11.58	11.79	11.33	11.35	11.40
CaO	**0.04**	0.03	0.03	0.03	0.03	0.02	0.04	**0.05**	0.01	0.02	0.00	0.01	0.00	0.00
MnO	**0.02**	0.00	0.04	0.00	0.00	0.09	0.06	**0.04**	0.04	0.00	0.00	0.00	0.07	0.02
FeO	**3.41**	3.21	3.03	3.20	3.32	3.59	4.15	**4.22**	4.28	3.84	3.67	4.01	3.99	3.99
Na_2O	**0.06**	0.06	0.08	0.08	0.09	0.08	0.06	**0.05**	0.07	0.03	0.04	0.08	0.12	0.08
K_2O	**0.00**	0.01	0.01	0.00	0.00	0.00	0.00	**0.00**	0.00	0.05	0.02	0.02	0.00	0.00
Total	**100.06**	99.13	99.25	97.96	98.79	98.44	99.08	**98.79**	99.53	98.98	98.91	98.79	99.47	99.29
Formula (O=18)														
Si	**4.97**	4.96	4.96	4.97	4.99	4.97	4.95	**4.98**	4.96	4.98	4.96	4.99	4.99	4.99
Ti	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Al	**4.02**	4.01	4.02	4.01	3.99	3.97	4.02	**3.99**	4.01	3.99	4.01	3.98	3.99	3.99
Mg	**1.73**	1.77	1.79	1.76	1.75	1.80	1.70	**1.68**	1.68	1.73	1.76	1.70	1.69	1.70
Ca	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Mn	**0.00**	0.00	0.00	0.00	0.00	0.01	0.01	**0.00**	0.00	0.00	0.00	0.00	0.01	0.00
Fe^{2+}	**0.28**	0.27	0.25	0.27	0.28	0.30	0.35	**0.35**	0.36	0.32	0.31	0.34	0.33	0.33
Na	**0.01**	0.01	0.02	0.02	0.02	0.02	0.01	**0.01**	0.01	0.01	0.01	0.01	0.02	0.01
K	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.01	0.00	0.00	0.00	0.00
Total	**11.02**	11.04	11.04	11.03	11.02	11.06	11.04	**11.03**	11.04	11.03	11.04	11.02	11.03	11.02
X_{Mg}	**0.86**	0.87	0.88	0.87	0.86	0.86	0.83	**0.83**	0.82	0.84	0.85	0.83	0.84	0.84

*: analysis used for geothermobarometry

Table A.6.2.3 (continued): Representative EMP analyses of cordierite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	**Opx-Sil gneiss**	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	**Opx-Sil gneiss**	Opx-Sil gneiss
Sample	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	**458-5-00**	458-5-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	**458-9-00**	458-9-00
Profile	crd 1	crd 1	crd 1	crd 1	crd 1	crd 2	**crd 2**	crd 2	crd 3	crd 3	crd 3	crd 3	crd 3	**crd 4**	crd 2
Point	1	2	3	4	5	1	**2**	9	1	2	3	4	8	**3**	9
Texture	Crd3 in Crd-Spr s.	Crd3 in Crd-Spr s.	Crd3 in Crd-Spr s.	Crd3 in Crd-Spr s.	Crd3 in Crd-Spr s.	Crd3 in Crd-Opx s.	**Crd3 in Crd-Opx s.**	Crd3 in Crd-Opx s.	Crd3 in Crd-Spr s.	Crd3 in Crd-Spr s.	Crd3 in Crd-Spr s.	Crd3 in Crd-Spr s.	Crd3 in Crd-Spr s.	**Crd3 Crd-Opx sympl.**	Crd3 Crd-Opx sympl.
Position	on Grt-Sil	on Grt-Sil	on Grt-Sil	on Grt-Sil	on Grt-Sil				on Grt-Sil	on Grt-Sil	on Grt-Sil	on Grt-Sil	on Grt-Sil		
SiO_2	49.53	50.03	49.93	49.45	49.71	49.32	**48.95**	49.12	49.62	49.19	49.09	49.48	49.09	**49.47**	49.41
TiO_2	0.01	0.00	0.01	0.00	0.00	0.03	**0.00**	0.02	0.00	0.01	0.00	0.00	0.02	**0.00**	0.01
Al_2O_3	34.13	33.67	34.03	34.20	33.94	33.93	**33.53**	33.76	33.50	33.69	33.47	33.35	33.53	**33.57**	33.54
MgO	11.04	11.11	11.68	11.11	11.07	10.69	**10.29**	10.57	11.13	11.10	10.98	10.86	11.06	**11.49**	11.29
CaO	0.01	0.00	0.01	0.03	0.04	0.01	**0.02**	0.01	0.01	0.01	0.01	0.01	0.00	**0.02**	0.01
MnO	0.05	0.00	0.00	0.08	0.03	0.07	**0.03**	0.00	0.05	0.04	0.05	0.05	0.03	**0.03**	0.02
FeO	3.60	3.65	3.70	3.71	3.58	4.73	**5.09**	5.04	3.86	3.82	3.71	3.93	3.79	**4.15**	3.72
Na_2O	0.30	0.23	0.18	0.17	0.23	0.18	**0.20**	0.14	0.20	0.21	0.18	0.20	0.18	**0.15**	0.17
K_2O	0.04	0.01	0.05	0.02	0.02	0.00	**0.00**	0.00	0.01	0.01	0.02	0.01	0.01	**0.00**	0.02
Total	98.71	98.69	99.58	98.77	98.60	98.95	**98.11**	98.67	98.38	98.09	97.50	97.91	97.71	**98.88**	98.17
Formula (O=18)															
Si	4.97	5.02	4.97	4.96	4.99	4.97	**4.98**	4.97	5.00	4.97	4.99	5.01	4.98	**4.97**	4.99
Ti	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Al	4.04	3.98	3.99	4.05	4.02	4.03	**4.02**	4.02	3.98	4.02	4.01	3.98	4.01	**3.98**	3.99
Mg	1.65	1.66	1.73	1.66	1.66	1.60	**1.56**	1.59	1.67	1.67	1.66	1.64	1.67	**1.72**	1.70
Ca	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Mn	0.00	0.00	0.00	0.01	0.00	0.01	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Fe^{2+}	0.30	0.31	0.31	0.31	0.30	0.40	**0.43**	0.43	0.33	0.32	0.32	0.33	0.32	**0.35**	0.31
Na	0.06	0.04	0.03	0.03	0.04	0.03	**0.04**	0.03	0.04	0.04	0.03	0.04	0.04	**0.03**	0.03
K	0.01	0.00	0.01	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Total	11.04	11.01	11.05	11.03	11.02	11.04	**11.03**	11.04	11.03	11.04	11.02	11.02	11.03	**11.05**	11.03
X_{Mg}	0.85	0.84	0.85	0.84	0.85	0.80	**0.78**	0.79	0.84	0.84	0.84	0.83	0.84	**0.83**	0.84

*: analysis used for geothermobarometry

Table A.6.2.3 (continued): Representative EMP analyses of cordierite

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	**Opx-Grt rock**	Opx-Grt rock	Opx-Grt rock
Sample	458-9-00	458-9-00	458-9-00	458-9-00	700-100	700-100	700-100	700-100	700-100	700-100	700-100	**700-100**	700-100	700-100
Profile	crd 2	crd 4	crd 4	crd 5	crd 3	crd 3	crd 3	crd 4	crd 4	crd 1	crd 1	**crd 2**	crd 2	crd 2
Point	10	1	2	5	2	3	4	1	4	2	5	**1**	2	5
Texture Position	Crd3 Crd-Opx sympl.	Crd3 corona on Spr2	Crd3 corona on Spr2	Crd3 corona on Spr2	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx-Spl s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	**Crd3 in Crd-Opx s.**	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.
SiO_2	48.42	49.36	49.47	49.27	50.26	50.22	49.65	49.72	50.01	49.75	49.34	**49.01**	49.23	49.56
TiO_2	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.04	**0.00**	0.02	0.03
Al_2O_3	32.69	33.64	33.79	33.11	34.09	34.35	33.91	33.49	33.95	33.72	33.69	**33.40**	33.32	33.59
MgO	10.98	11.45	11.23	10.84	12.14	12.00	12.31	12.05	11.95	11.04	11.39	**10.98**	11.11	11.17
CaO	0.04	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.02	0.00	0.00	**0.03**	0.00	0.02
MnO	0.06	0.04	0.02	0.00	0.03	0.00	0.00	0.00	0.04	0.04	0.00	**0.05**	0.05	0.04
FeO	3.70	3.52	3.56	4.05	2.74	2.86	2.68	2.77	2.82	3.88	3.54	**4.03**	3.99	3.85
Na_2O	0.17	0.18	0.17	0.25	0.13	0.19	0.17	0.14	0.14	0.18	0.15	**0.16**	0.15	0.18
K_2O	0.06	0.03	0.02	0.01	0.03	0.02	0.01	0.02	0.01	0.00	0.02	**0.00**	0.02	0.02
Total	96.13	98.24	98.26	97.54	99.43	99.64	98.74	98.18	98.96	98.62	98.17	**97.65**	97.89	98.46
Formula (O=18)														
Si	5.00	4.98	4.99	5.01	4.99	4.98	4.96	5.00	4.99	5.00	4.98	**4.98**	4.99	4.99
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Al	3.98	4.00	4.01	3.97	3.99	4.01	4.00	3.97	3.99	4.00	4.01	**4.00**	3.98	3.99
Mg	1.69	1.72	1.69	1.64	1.80	1.77	1.83	1.81	1.78	1.65	1.71	**1.66**	1.68	1.68
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Fe^{2+}	0.32	0.30	0.30	0.34	0.23	0.24	0.22	0.23	0.23	0.33	0.30	**0.34**	0.34	0.32
Na	0.03	0.03	0.03	0.05	0.03	0.04	0.03	0.03	0.03	0.04	0.03	**0.03**	0.03	0.04
K	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Total	11.03	11.04	11.02	11.03	11.03	11.04	11.05	11.03	11.03	11.02	11.03	**11.03**	11.03	11.03
X_{Mg}	0.84	0.85	0.85	0.83	0.89	0.88	0.89	0.89	0.88	0.84	0.85	**0.83**	0.83	0.84

*: analysis used for geothermobarometry

A.6.2.4 Staurolite

Table A.6.2.4: Representative EMP analyses of staurolite

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock
Sample	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99
Profile	st 1	st 3	st 3	st 5	st 5	st 6	st 6	st 8	st 2	st 2	st 2	st 4	st 9	st 9	st 9
Point	5	2	3	4	7	1	3	2	1	3	5	10	1	3	4
Texture	St1 in Crd2	St1 in Crd2	St1 in Crd2	St1 in Crd2	St1 in Crd2	St1 in Crd2	St1 in Crd2	St1 in Sil2	St3 on Crd2	St3 on Crd2	St3 on Crd2	matrix	St3 on Sil2	St3 on Sil2	St3 on Sil2
SiO_2	27.61	26.65	26.74	26.32	26.50	26.97	28.05	27.16	27.12	27.37	27.48	27.97	27.62	27.31	27.05
TiO_2	0.22	0.58	0.59	0.68	0.70	0.36	0.28	0.57	0.37	0.42	0.48	0.34	0.56	0.64	0.60
Al_2O_3	55.20	54.62	54.88	54.11	55.38	55.95	55.94	54.99	55.80	55.82	55.68	54.74	55.39	54.55	54.82
Cr_2O_3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MgO	1.39	1.50	1.73	1.80	1.59	1.42	1.44	1.53	1.51	1.59	1.76	1.55	1.36	1.50	1.65
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MnO	0.24	0.18	0.20	0.18	0.14	0.18	0.28	0.17	0.18	0.14	0.17	0.19	0.38	0.26	0.24
FeO	11.78	12.90	12.75	12.33	12.32	11.77	11.25	12.07	12.00	12.19	12.19	12.28	11.50	12.13	12.19
CuO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ZnO	1.04	0.70	1.05	1.05	1.20	1.04	1.30	1.32	1.06	1.00	0.98	0.82	1.64	1.38	1.46
Total	97.48	97.13	97.94	96.46	97.83	97.69	98.54	97.81	98.04	98.52	98.74	97.90	98.43	97.77	98.01
Formula (O=23)															
Si	3.82	3.73	3.71	3.71	3.68	3.73	3.84	3.77	3.74	3.76	3.77	3.86	3.80	3.79	3.75
Al^{IV}	0.18	0.27	0.29	0.29	0.32	0.27	0.16	0.23	0.26	0.24	0.23	0.14	0.20	0.21	0.25
Al^{VI}	8.84	8.73	8.70	8.69	8.74	8.85	8.85	8.75	8.82	8.79	8.76	8.77	8.78	8.72	8.71
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.02	0.06	0.06	0.07	0.07	0.04	0.03	0.06	0.04	0.04	0.05	0.04	0.06	0.07	0.06
Mg	0.29	0.31	0.36	0.38	0.33	0.29	0.29	0.32	0.31	0.33	0.36	0.32	0.28	0.31	0.34
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.04	0.03	0.03
Fe^{2+}	1.37	1.51	1.48	1.45	1.43	1.36	1.29	1.40	1.39	1.40	1.40	1.42	1.32	1.41	1.41
Cu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zn	0.11	0.07	0.11	0.11	0.12	0.11	0.13	0.14	0.11	0.10	0.10	0.08	0.17	0.14	0.15
Total	14.65	14.71	14.73	14.73	14.72	14.67	14.63	14.68	14.68	14.68	14.69	14.65	14.65	14.68	14.71
X_{Mg}	0.17	0.17	0.19	0.20	0.19	0.17	0.18	0.18	0.18	0.19	0.20	0.18	0.17	0.18	0.19

A.6.2.5 Clinopyroxene

Table A.6.2.5: Representative EMP analyses of clinopyroxene

Rock Unit	Orue	Orue	Orue	**Orue***	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	**Grt-Cpx amphibolite**	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite
Sample	191-B-98	191-B-98	191-B-98	**191-B-98**	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98
Profile	cpx1	cpx1	cpx1	**cpx1**	cpx1	cpx1	cpx1	cpx1	cpx1	cpx2	cpx2	cpx2	cpx3	cpx3	cpx3
Point	1	2	7	**11**	12	15	22	24	25	1	29	39	1	18	36
Texture	matrix Cpx2	matrix Cpx2	matrix Cpx2	**matrix Cpx2**	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2
Position	rim	←	←	←	core	→	→	→	rim	rim	core	rim	rim	core	rim
SiO_2	50.94	50.56	51.13	**51.40**	50.91	50.92	51.10	50.53	51.23	50.91	50.95	51.55	51.22	51.04	50.76
TiO_2	0.12	0.15	0.13	**0.16**	0.13	0.17	0.15	0.14	0.13	0.14	0.14	0.10	0.13	0.16	0.14
Al_2O_3	0.92	1.16	1.26	**1.15**	1.23	1.21	1.17	1.18	1.08	1.13	1.45	0.93	1.00	1.00	0.99
Cr_2O_3	0.00	0.00	0.02	**0.00**	0.01	0.00	0.00	0.00	0.02	0.03	0.00	0.02	0.00	0.02	0.00
Fe_2O_3	1.06	1.09	1.33	**0.29**	1.11	0.24	0.40	1.04	0.93	0.72	0.45	1.34	0.72	0.61	0.85
FeO	14.46	14.51	13.72	**15.03**	14.79	15.31	15.03	14.63	14.85	14.45	16.12	14.38	14.29	14.65	14.60
MnO	0.39	0.39	0.23	**0.32**	0.38	0.31	0.41	0.29	0.36	0.29	0.35	0.32	0.29	0.32	0.32
MgO	9.77	9.68	9.82	**10.02**	9.68	9.58	9.59	9.79	10.04	9.76	9.80	10.27	10.01	9.68	9.96
CaO	21.99	21.76	22.54	**21.71**	21.44	21.46	21.66	21.46	21.50	22.04	20.25	21.80	22.07	21.98	21.46
Na_2O	0.12	0.12	0.20	**0.13**	0.24	0.18	0.20	0.15	0.16	0.12	0.17	0.17	0.15	0.17	0.14
K_2O	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.00	0.00	0.00	0.00
Total	99.78	99.42	100.38	**100.21**	99.91	99.38	99.72	99.21	100.27	99.63	99.80	100.89	99.86	99.64	99.23
Formula (O=6)															
Si	1.96	1.96	1.96	**1.97**	1.96	1.97	1.97	1.96	1.96	1.96	1.97	1.96	1.97	1.97	1.97
Al^{IV}	0.04	0.04	0.04	**0.03**	0.04	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.03	0.03	0.03
Al^{VI}	0.01	0.01	0.01	**0.02**	0.02	0.03	0.02	0.01	0.01	0.02	0.03	0.00	0.01	0.02	0.01
Ti	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.03	0.03	0.04	**0.01**	0.03	0.01	0.01	0.03	0.03	0.02	0.01	0.04	0.02	0.02	0.02
Fe^{2+}	0.47	0.47	0.44	**0.48**	0.48	0.50	0.48	0.47	0.48	0.47	0.52	0.46	0.46	0.47	0.47
Mn	0.01	0.01	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mg	0.56	0.56	0.56	**0.57**	0.56	0.55	0.55	0.57	0.57	0.56	0.56	0.58	0.57	0.56	0.57
Ca	0.91	0.90	0.92	**0.89**	0.88	0.89	0.90	0.89	0.88	0.91	0.84	0.89	0.91	0.91	0.89
Na	0.01	0.01	0.01	**0.01**	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
K	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.55	0.54	0.56	**0.54**	0.54	0.53	0.53	0.54	0.55	0.55	0.51	0.56	0.56	0.54	0.55
aegirine	0.9	0.9	1.5	**0.9**	1.8	0.7	1.2	1.1	1.2	0.9	1.3	1.3	1.1	1.3	1.1
Ca-tschermaks	0.7	1.1	1.3	**2.2**	1.7	2.6	2.4	1.3	1.3	1.6	3.2	0.5	1.4	1.5	1.2
jadeite	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
diopside	50.2	49.4	52.0	**47.6**	47.4	46.0	46.9	48.6	48.3	49.6	42.4	50.5	50.3	48.8	48.9
hedenbergite	41.7	41.6	40.8	**40.1**	40.7	41.3	41.2	40.7	40.1	41.2	39.1	39.7	40.3	41.5	40.3
enstatite	3.5	3.8	2.5	**5.0**	4.5	4.9	4.4	4.5	5.0	3.7	7.3	4.5	3.9	3.7	4.7
ferrosilite	2.9	3.2	2.0	**4.2**	3.8	4.4	3.9	3.7	4.1	3.0	6.7	3.5	3.1	3.2	3.9
wollastonite	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*: analysis used for geothermobarometry

Table A.6.2.5 (continued): Representative EMP analyses of clinopyroxene

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	**Grt-Cpx granulite**	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	**311-1-99**	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99
Profile	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	**cpx 1**	cpx 1	cpx 1	cpx 2	cpx 2	cpx 2
Point	2	6	11	13	14	23	25	29	30	**34**	36	44	1	6	13
Texture	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	**matrix Cpx2**	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2
Position	rim	←	←	←	←	core	→	→	→	→	→	rim	rim	←	core
SiO_2	51.29	51.40	52.06	51.93	51.32	51.20	51.19	51.44	51.76	**51.65**	51.41	51.52	51.24	51.02	51.37
TiO_2	0.21	0.22	0.15	0.16	0.14	0.25	0.26	0.19	0.26	**0.16**	0.22	0.20	0.20	0.12	0.24
Al_2O_3	2.36	2.02	1.78	1.76	1.47	2.15	2.30	1.77	2.09	**1.99**	2.13	1.90	2.56	3.13	2.40
Cr_2O_3	0.07	0.04	0.05	0.04	0.04	0.03	0.02	0.04	0.01	**0.00**	0.01	0.02	0.05	0.02	0.03
Fe_2O_3	2.79	2.29	1.58	2.29	3.54	2.63	3.07	2.64	1.88	**1.85**	2.62	2.02	2.05	1.44	2.07
FeO	6.85	7.17	7.54	6.69	5.87	6.83	6.73	6.94	7.54	**7.79**	6.95	7.51	7.05	7.18	7.57
MnO	0.14	0.20	0.11	0.18	0.20	0.19	0.17	0.16	0.15	**0.22**	0.17	0.20	0.13	0.20	0.18
MgO	13.05	13.11	13.39	13.57	13.57	13.11	13.19	13.35	13.25	**12.93**	13.13	13.11	13.15	12.88	13.07
CaO	22.67	22.58	22.61	22.78	22.86	22.44	22.56	22.44	22.59	**22.64**	22.53	22.37	22.61	22.89	22.24
Na_2O	0.47	0.43	0.40	0.42	0.41	0.48	0.46	0.44	0.41	**0.39**	0.49	0.44	0.40	0.30	0.45
K_2O	0.02	0.00	0.01	0.02	0.02	0.02	0.01	0.00	0.00	**0.00**	0.00	0.01	0.01	0.02	0.01
Total	99.92	99.45	99.69	99.83	99.41	99.34	99.94	99.41	99.93	**99.64**	99.65	99.27	99.43	99.20	99.61
Formula (O=6)															
Si	1.92	1.93	1.95	1.94	1.93	1.93	1.92	1.93	1.93	**1.94**	1.93	1.94	1.92	1.92	1.93
Al^{IV}	0.08	0.07	0.05	0.06	0.07	0.07	0.08	0.07	0.07	**0.06**	0.07	0.06	0.08	0.08	0.07
Al^{VI}	0.02	0.02	0.03	0.02	0.00	0.02	0.02	0.01	0.03	**0.03**	0.02	0.02	0.04	0.06	0.03
Ti	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	**0.00**	0.01	0.01	0.01	0.00	0.01
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.08	0.06	0.04	0.06	0.10	0.07	0.09	0.07	0.05	**0.05**	0.07	0.06	0.06	0.04	0.06
Fe^{2+}	0.21	0.23	0.24	0.21	0.18	0.21	0.21	0.22	0.24	**0.24**	0.22	0.24	0.22	0.23	0.24
Mn	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.00	**0.01**	0.01	0.01	0.00	0.01	0.01
Mg	0.73	0.73	0.75	0.76	0.76	0.74	0.74	0.75	0.74	**0.72**	0.73	0.74	0.74	0.72	0.73
Ca	0.91	0.91	0.91	0.91	0.92	0.90	0.90	0.90	0.90	**0.91**	0.91	0.90	0.91	0.92	0.89
Na	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	**0.03**	0.04	0.03	0.03	0.02	0.03
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.77	0.77	0.76	0.78	0.80	0.77	0.78	0.77	0.76	**0.75**	0.77	0.76	0.77	0.76	0.75
aegirine	3.5	3.2	2.9	3.1	3.1	3.6	3.4	3.3	3.0	**2.9**	3.7	3.3	3.0	2.2	3.3
Ca-tschermaks	2.4	2.2	2.7	1.8	0.0	2.2	1.7	1.2	2.7	**2.8**	2.2	2.4	3.7	5.7	3.4
jadeite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	0.0	0.0
diopside	70.4	69.6	67.7	71.7	77.0	70.3	71.4	71.0	67.8	**67.2**	69.9	67.8	68.5	66.9	66.3
hedenbergite	20.8	21.4	21.4	19.8	18.7	20.5	20.4	20.7	21.7	**22.7**	20.7	21.8	20.6	20.9	21.5
enstatite	2.2	2.8	4.0	2.8	1.0	2.7	2.3	2.9	3.7	**3.2**	2.7	3.6	3.3	3.2	4.1
ferrosilite	0.7	0.9	1.3	0.8	0.2	0.8	0.7	0.9	1.2	**1.1**	0.8	1.2	1.0	1.0	1.3
wollastonite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	0.0	0.0

*: analysis used for geothermobarometry

Table A.6.2.5 (continued): Representative EMP analyses of clinopyroxene

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	230-B-98	230-B-98	230-B-98	230-B-98
Profile	cpx 2	cpx 2	cpx 3	cpx 3	cpx 3	cpx4	cpx4	cpx4	cpx4	cpx4	cpx 1	cpx 1	cpx 1	cpx 1
Point	20	25	1	5	10	1	3	4	6	8	1	2	3	4
Texture	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2
Position	→	rim	rim	core	rim	rim	←	core	→	rim	rim	←	←	←
SiO_2	51.18	50.10	51.20	51.27	51.45	51.60	51.15	50.18	50.18	51.11	51.32	51.08	50.80	50.49
TiO_2	0.23	0.40	0.26	0.21	0.23	0.15	0.22	0.29	0.50	0.25	0.27	0.32	0.28	0.31
Al_2O_3	2.51	3.33	2.47	2.11	2.09	2.37	3.03	3.79	3.80	2.49	1.74	1.80	2.06	2.11
Cr_2O_3	0.06	0.00	0.02	0.02	0.00	0.00	0.03	0.00	0.00	0.03	0.06	0.13	0.13	0.13
Fe_2O_3	2.20	3.42	2.77	3.02	2.38	3.05	1.46	2.83	2.73	2.98	0.98	0.94	1.94	1.69
FeO	7.38	7.01	7.15	6.72	7.10	6.87	8.33	7.08	7.50	6.87	11.48	11.67	10.80	11.39
MnO	0.15	0.17	0.21	0.16	0.19	0.13	0.19	0.25	0.18	0.26	0.25	0.28	0.31	0.29
MgO	12.88	12.51	12.87	13.23	13.05	13.18	12.70	12.26	12.27	12.92	12.07	11.64	11.72	11.58
CaO	22.46	22.19	22.49	22.61	22.50	22.60	21.76	22.29	21.80	22.65	20.85	21.31	21.69	21.00
Na_2O	0.46	0.51	0.50	0.45	0.50	0.51	0.49	0.55	0.63	0.46	0.34	0.29	0.26	0.30
K_2O	0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.02	0.02	0.04	0.00	0.00	0.01
Total	99.51	99.64	99.95	99.78	99.50	100.47	99.38	99.52	99.60	100.04	99.38	99.46	99.99	99.29
Formula (O=6)														
Si	1.92	1.89	1.92	1.92	1.93	1.92	1.92	1.89	1.89	1.91	1.95	1.95	1.93	1.93
Al^{IV}	0.08	0.11	0.08	0.08	0.07	0.08	0.08	0.11	0.11	0.09	0.05	0.05	0.07	0.07
Al^{VI}	0.03	0.03	0.03	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.03	0.03	0.02	0.02
Ti	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Cr	0.00	0.00	0.00	0.00	0.00	0.09	0.04	0.08	0.08	0.08	0.00	0.00	0.00	0.00
Fe^{3+}	0.06	0.10	0.08	0.09	0.07	0.21	0.26	0.22	0.24	0.22	0.03	0.03	0.06	0.05
Fe^{2+}	0.23	0.22	0.22	0.21	0.22	0.00	0.01	0.01	0.01	0.01	0.37	0.37	0.34	0.36
Mn	0.00	0.01	0.01	0.00	0.01	0.73	0.71	0.69	0.69	0.72	0.01	0.01	0.01	0.01
Mg	0.72	0.70	0.72	0.74	0.73	0.90	0.88	0.90	0.88	0.91	0.68	0.66	0.66	0.66
Ca	0.90	0.89	0.90	0.91	0.91	0.04	0.04	0.04	0.05	0.03	0.85	0.87	0.88	0.86
Na	0.03	0.04	0.04	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02
K	0.00	0.00	0.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.76	0.76	0.76	0.78	0.77	0.77	0.73	0.76	0.74	0.77	0.65	0.64	0.66	0.64
aegirine	3.4	3.9	3.8	3.4	3.8	3.8	3.6	4.1	4.7	3.4	2.5	2.2	2.0	2.3
Ca-tschermaks	3.5	3.4	2.7	1.5	2.5	2.4	5.8	5.7	5.6	2.3	3.0	2.7	1.9	2.4
jadeite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
diopside	67.3	68.2	68.7	71.8	69.0	69.9	60.5	65.5	63.0	70.6	54.1	54.7	58.6	55.2
hedenbergite	21.6	21.4	21.4	20.5	21.1	20.5	22.2	21.2	21.6	21.1	28.8	30.8	30.3	30.5
enstatite	3.2	2.4	2.6	2.2	2.8	2.7	5.7	2.6	3.8	2.0	7.6	6.2	4.8	6.2
ferrosilite	1.0	0.7	0.8	0.6	0.9	0.8	2.1	0.9	1.3	0.6	4.0	3.5	2.5	3.4
wollastonite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*: analysis used for geothermobarometry

Table A.6.2.5 (continued): Representative EMP analyses of clinopyroxene

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite
Sample	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98
Profile	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1
Point	5	6	7	8	9	11	12	13	14	15	16	19	21	22	24	26
Texture	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2
Position	←	←	←	←	←	←	←	←	←	←	core	→	→	→	→	→
SiO_2	50.51	50.25	49.98	50.45	50.54	50.41	50.26	50.28	50.66	50.34	50.39	50.39	51.00	50.79	50.60	50.62
TiO_2	0.29	0.25	0.30	0.32	0.32	0.36	0.29	0.23	0.31	0.27	0.30	0.29	0.23	0.24	0.30	0.23
Al_2O_3	2.27	2.41	2.30	2.45	2.55	2.53	2.46	2.41	2.26	2.48	2.37	2.13	1.95	2.10	2.29	2.01
Cr_2O_3	0.06	0.11	0.09	0.07	0.12	0.08	0.11	0.13	0.07	0.10	0.08	0.09	0.10	0.12	0.07	0.12
Fe_2O_3	2.23	2.27	3.02	2.69	2.45	1.93	2.89	2.78	2.68	2.46	1.96	2.15	1.73	2.06	2.38	3.22
FeO	11.26	10.35	11.21	10.78	11.21	10.60	11.46	10.19	10.77	10.52	10.45	10.27	10.63	10.86	10.58	9.42
MnO	0.32	0.32	0.31	0.30	0.28	0.23	0.31	0.26	0.30	0.32	0.30	0.38	0.23	0.32	0.28	0.27
MgO	11.62	11.48	11.66	11.60	11.44	11.36	11.73	11.33	11.75	11.60	11.33	11.44	11.65	11.62	11.84	11.89
CaO	21.03	21.70	20.46	21.20	21.27	21.86	20.49	21.90	21.51	21.52	21.81	22.01	21.95	21.69	21.47	22.17
Na_2O	0.29	0.30	0.33	0.37	0.34	0.33	0.31	0.35	0.28	0.29	0.35	0.27	0.30	0.27	0.26	0.31
K_2O	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.01	0.02	0.00
Total	99.90	99.44	99.67	100.22	100.52	99.68	100.30	99.86	100.60	99.91	99.34	99.43	99.80	100.06	100.11	100.26
Formula (O=6)																
Si	1.92	1.92	1.91	1.91	1.91	1.92	1.91	1.91	1.91	1.91	1.92	1.92	1.93	1.93	1.92	1.91
Al^{IV}	0.08	0.08	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.08	0.08	0.07	0.07	0.08	0.09
Al^{VI}	0.02	0.02	0.01	0.02	0.02	0.03	0.02	0.02	0.01	0.02	0.03	0.02	0.02	0.02	0.02	0.00
Ti	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.06	0.07	0.09	0.08	0.07	0.06	0.08	0.08	0.08	0.07	0.06	0.06	0.05	0.06	0.07	0.09
Fe^{2+}	0.36	0.33	0.36	0.34	0.35	0.34	0.36	0.32	0.34	0.33	0.33	0.33	0.34	0.34	0.34	0.30
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mg	0.66	0.65	0.66	0.65	0.64	0.64	0.66	0.64	0.66	0.66	0.64	0.65	0.66	0.66	0.67	0.67
Ca	0.86	0.89	0.84	0.86	0.86	0.89	0.83	0.89	0.87	0.88	0.89	0.90	0.89	0.88	0.87	0.90
Na	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.65	0.66	0.65	0.66	0.65	0.66	0.65	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.67	0.69
aegirine	2.2	2.3	2.5	2.8	2.6	2.5	2.4	2.7	2.1	2.2	2.7	2.1	2.2	2.0	2.0	2.4
Ca-tschermaks	2.2	2.4	1.1	2.0	2.4	3.0	1.6	1.9	1.3	2.2	2.9	1.8	2.3	2.0	1.8	0.2
jadeite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
diopside	55.9	59.2	56.0	57.3	55.9	58.0	55.0	60.2	58.9	58.6	58.4	60.6	58.9	58.3	58.9	64.8
hedenbergite	30.4	29.9	30.2	29.9	30.7	30.4	30.2	30.4	30.3	29.8	30.2	30.6	30.2	30.6	29.5	28.8
enstatite	6.0	4.1	6.6	5.3	5.4	4.0	7.0	3.2	4.9	4.7	3.9	3.3	4.3	4.7	5.2	2.6
ferrosilite	3.3	2.1	3.6	2.8	3.0	2.1	3.9	1.6	2.5	2.4	2.0	1.7	2.2	2.5	2.6	1.2
wollastonite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*: analysis used for geothermobarometry

Table A.6.2.5 (continued): Representative EMP analyses of clinopyroxene

	*														
Rock Unit	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	**Two-Px granulite**	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite
Sample	**230-B-98**	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98
Profile	**cpx 1**	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1
Point	**27**	29	30	31	32	33	1	2	6	8	9	10	11	12	13
Texture	**matrix Cpx2**	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2
Position	→	→	→	→	→	rim	rim	←	←	←	←	←	←	←	←
SiO_2	**50.13**	50.20	50.49	50.71	51.19	51.24	51.53	51.29	51.00	50.30	50.83	50.20	50.28	50.67	50.32
TiO_2	**0.24**	0.59	0.32	0.36	0.28	0.22	0.12	0.14	0.18	0.24	0.27	0.27	0.28	0.28	0.29
Al_2O_3	**2.15**	2.32	2.27	2.15	1.87	1.59	0.96	1.45	1.91	2.41	2.09	2.23	2.25	2.27	2.13
Cr_2O_3	**0.13**	0.08	0.08	0.07	0.13	0.08	0.05	0.06	0.07	0.04	0.08	0.12	0.07	0.11	0.10
Fe_2O_3	**2.78**	2.55	2.35	1.71	1.18	1.23	1.19	1.16	1.83	1.54	1.86	2.97	2.21	1.81	2.16
FeO	**11.72**	11.71	10.44	11.52	11.33	11.28	10.43	11.33	10.73	11.54	10.54	10.81	11.33	10.87	10.42
MnO	**0.30**	0.28	0.25	0.27	0.31	0.28	0.26	0.32	0.27	0.25	0.27	0.29	0.32	0.31	0.25
MgO	**11.82**	11.48	11.52	11.69	11.57	11.51	11.99	11.64	11.57	11.95	11.49	11.63	11.36	11.55	11.39
CaO	**20.14**	20.68	21.65	21.09	21.49	21.94	22.23	21.52	22.05	20.02	22.05	21.20	21.18	21.38	21.74
Na_2O	**0.28**	0.34	0.36	0.28	0.35	0.28	0.25	0.32	0.27	0.33	0.32	0.28	0.29	0.36	0.35
K_2O	**0.00**	0.01	0.01	0.00	0.02	0.00	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.01
Total	**99.69**	100.24	99.74	99.85	99.71	99.64	99.02	99.23	99.89	98.64	99.79	100.01	99.56	99.61	99.14
Formula (O=6)															
Si	**1.91**	1.91	1.92	1.93	1.94	1.95	1.97	1.96	1.93	1.93	1.93	1.91	1.92	1.93	1.92
Al^{IV}	**0.09**	0.09	0.08	0.07	0.06	0.05	0.03	0.04	0.07	0.07	0.07	0.09	0.08	0.07	0.08
Al^{VI}	**0.01**	0.01	0.02	0.02	0.03	0.02	0.01	0.02	0.02	0.04	0.02	0.01	0.02	0.03	0.02
Ti	**0.01**	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cr	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	**0.08**	0.07	0.07	0.05	0.03	0.04	0.03	0.03	0.05	0.04	0.05	0.08	0.06	0.05	0.06
Fe^{2+}	**0.37**	0.37	0.33	0.37	0.36	0.36	0.33	0.36	0.34	0.37	0.33	0.34	0.36	0.35	0.33
Mn	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mg	**0.67**	0.65	0.65	0.66	0.65	0.65	0.68	0.66	0.65	0.68	0.65	0.66	0.65	0.65	0.65
Ca	**0.82**	0.84	0.88	0.86	0.87	0.89	0.91	0.88	0.90	0.82	0.90	0.86	0.87	0.87	0.89
Na	**0.02**	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03
K	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	**0.64**	0.64	0.66	0.64	0.65	0.65	0.67	0.65	0.66	0.65	0.66	0.66	0.64	0.65	0.66
aegirine	**2.1**	2.6	2.7	2.1	2.6	2.1	1.9	2.4	2.1	2.5	2.4	2.1	2.2	2.7	2.6
Ca-tschermaks	**1.0**	1.1	2.1	2.3	2.9	2.1	1.0	2.3	2.1	3.9	2.4	0.8	2.1	2.9	2.1
jadeite	**0.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
diopside	**54.5**	55.0	58.9	55.2	55.5	57.3	61.3	56.2	59.1	51.9	59.1	58.8	56.0	56.5	59.2
hedenbergite	**30.3**	31.5	29.9	30.5	30.5	31.5	30.0	30.7	30.7	28.1	30.4	30.6	31.3	29.8	30.4
enstatite	**7.8**	6.3	4.2	6.3	5.5	4.5	3.9	5.5	4.0	8.9	3.7	5.0	5.4	5.3	3.8
ferrosilite	**4.3**	3.6	2.1	3.5	3.0	2.5	1.9	3.0	2.1	4.8	1.9	2.6	3.0	2.8	1.9
wollastonite	**0.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*: analysis used for geothermobarometry

Table A.6.2.5 (continued): Representative EMP analyses of clinopyroxene

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite
Sample	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98
Profile	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 1	cpx 2
Point	14	15	16	17	18	19	20	21	22	23	24	25	26	30	1
Texture	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2
Position	←	core	→	→	→	→	→	→	→	→	→	→	→	rim	rim
SiO_2	50.59	50.87	50.97	51.79	51.65	50.90	51.40	51.20	51.14	51.21	50.54	50.56	50.95	51.37	51.78
TiO_2	0.24	0.26	0.17	0.11	0.13	0.16	0.16	0.20	0.26	0.23	0.26	0.22	0.21	0.11	0.06
Al_2O_3	2.19	1.98	1.56	1.00	1.41	1.70	1.43	1.43	1.63	1.69	1.80	1.86	1.75	1.08	1.06
Cr_2O_3	0.12	0.12	0.10	0.10	0.09	0.18	0.08	0.10	0.15	0.13	0.09	0.09	0.08	0.09	0.11
Fe_2O_3	1.54	1.53	2.41	1.42	0.32	2.19	1.24	1.47	1.42	1.09	2.18	2.28	1.59	0.84	1.68
FeO	11.02	10.85	10.02	10.31	11.80	10.61	10.96	11.01	10.81	11.76	10.24	10.45	10.68	10.63	10.27
MnO	0.29	0.30	0.28	0.23	0.28	0.25	0.25	0.28	0.29	0.26	0.22	0.26	0.26	0.25	0.28
MgO	11.27	11.32	11.73	12.15	11.79	11.59	11.76	11.75	11.64	11.76	11.97	11.90	11.56	12.01	12.26
CaO	21.75	22.03	22.25	22.29	21.65	21.94	22.02	21.89	21.87	21.44	21.07	21.38	22.06	21.99	22.15
Na_2O	0.31	0.33	0.30	0.27	0.23	0.30	0.26	0.24	0.32	0.22	0.36	0.26	0.28	0.22	0.25
K_2O	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.04	0.00	0.01	0.02
Total	99.32	99.57	99.79	99.67	99.35	99.82	99.57	99.57	99.53	99.78	98.79	99.31	99.44	98.60	99.91
Formula (O=6)															
Si	1.93	1.94	1.94	1.96	1.97	1.93	1.95	1.95	1.95	1.95	1.93	1.93	1.94	1.97	1.96
Al^{IV}	0.07	0.06	0.06	0.04	0.03	0.07	0.05	0.05	0.05	0.05	0.07	0.07	0.06	0.03	0.04
Al^{VI}	0.03	0.03	0.01	0.01	0.03	0.01	0.02	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.01
Ti	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.04	0.04	0.07	0.04	0.01	0.06	0.04	0.04	0.04	0.03	0.06	0.07	0.05	0.02	0.05
Fe^{2+}	0.35	0.35	0.32	0.33	0.38	0.34	0.35	0.35	0.34	0.37	0.33	0.33	0.34	0.34	0.32
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mg	0.64	0.64	0.66	0.69	0.67	0.66	0.67	0.67	0.66	0.67	0.68	0.68	0.66	0.69	0.69
Ca	0.89	0.90	0.91	0.91	0.88	0.89	0.90	0.89	0.89	0.87	0.86	0.87	0.90	0.90	0.90
Na	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.65	0.65	0.68	0.68	0.64	0.66	0.66	0.66	0.66	0.64	0.68	0.67	0.66	0.67	0.68
aegirine	2.3	2.5	2.3	2.0	0.9	2.2	2.0	1.8	2.4	1.6	2.7	2.0	2.1	1.6	1.9
Ca-tschermaks	3.1	2.6	0.5	0.8	3.1	1.1	1.8	1.3	1.9	2.2	1.6	1.3	2.0	1.6	0.6
jadeite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
diopside	56.7	57.9	62.8	61.9	55.3	60.1	58.6	58.9	58.5	55.4	59.0	59.7	59.2	59.9	62.1
hedenbergite	31.1	31.2	30.1	29.5	31.0	30.9	30.7	31.0	30.5	31.1	28.3	29.4	30.7	29.7	29.2
enstatite	4.4	3.8	2.9	4.0	6.2	3.7	4.5	4.6	4.4	6.1	5.6	5.1	3.9	4.7	4.3
ferrosilite	2.4	2.0	1.4	1.9	3.5	1.9	2.4	2.4	2.3	3.4	2.7	2.5	2.0	2.3	2.0
wollastonite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*: analysis used for geothermobarometry

Table A.6.2.5 (continued): Representative EMP analyses of clinopyroxene

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe
Rock type	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	**Two-Px granulite**	Two-Px granulite	Two-Px granulite
Sample	230-B-98	230-B-98	230-B-98	230-B-98	434-2-99	434-2-99	434-2-99	**434-2-99**	434-2-99	434-2-99
Profile	cpx 2	cpx 2	cpx 2	cpx 2	cpx 1	cpx 1	cpx 1	**cpx 1**	cpx 1	cpx 1
Point	5	12	14	25	1	4	14	**24**	26	29
Texture	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	matrix Cpx2	**matrix Cpx2**	matrix Cpx2	matrix Cpx2
Position	←	core	→	rim	rim	←	core	→	→	rim
SiO_2	50.69	51.27	50.48	49.75	51.51	51.78	51.52	**50.86**	50.85	51.20
TiO_2	0.21	0.17	0.17	0.15	0.21	0.36	0.43	**0.26**	0.17	0.30
Al_2O_3	1.98	1.47	1.60	1.80	1.90	2.16	2.16	**1.78**	1.61	1.90
Cr_2O_3	0.08	0.11	0.10	0.12	0.11	0.07	0.12	**0.11**	0.11	0.07
Fe_2O_3	1.54	1.22	1.77	3.64	0.89	0.55	0.18	**1.66**	1.56	1.32
FeO	11.50	11.11	11.27	10.37	10.58	11.16	10.70	**13.73**	17.16	12.13
MnO	0.24	0.24	0.30	0.24	0.22	0.22	0.27	**0.37**	0.42	0.42
MgO	11.38	11.55	11.65	12.05	12.30	12.86	11.91	**12.62**	13.00	12.23
CaO	21.50	21.99	21.16	20.68	21.49	20.59	21.79	**18.15**	15.01	19.97
Na_2O	0.26	0.28	0.23	0.20	0.33	0.34	0.39	**0.26**	0.19	0.33
K_2O	0.02	0.02	0.00	0.03	0.00	0.00	0.02	**0.00**	0.04	0.01
Total	99.39	99.42	98.72	99.03	99.53	100.07	99.48	**99.81**	100.09	99.87
Formula (O=6)										
Si	1.94	1.95	1.94	1.91	1.95	1.95	1.95	**1.94**	1.94	1.94
Al^{IV}	0.06	0.05	0.06	0.08	0.05	0.05	0.05	**0.06**	0.06	0.06
Al^{VI}	0.02	0.02	0.01	0.00	0.03	0.04	0.05	**0.02**	0.02	0.03
Ti	0.01	0.00	0.00	0.00	0.01	0.01	0.01	**0.01**	0.00	0.01
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Fe^{3+}	0.04	0.03	0.05	0.11	0.03	0.02	0.01	**0.05**	0.04	0.04
Fe^{2+}	0.37	0.35	0.36	0.33	0.33	0.35	0.34	**0.44**	0.55	0.38
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	0.01	0.01
Mg	0.65	0.66	0.67	0.69	0.69	0.72	0.67	**0.72**	0.74	0.69
Ca	0.88	0.90	0.87	0.85	0.87	0.83	0.88	**0.74**	0.61	0.81
Na	0.02	0.02	0.02	0.02	0.02	0.02	0.03	**0.02**	0.01	0.02
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00
X_{Mg}	0.64	0.65	0.65	0.67	0.67	0.67	0.66	**0.62**	0.57	0.64
aegirine	1.9	2.1	1.8	1.6	2.4	1.6	0.5	**2.0**	1.4	2.5
Ca-tschermaks	2.5	2.0	1.3	0.0	3.5	4.2	4.8	**1.7**	1.5	2.7
jadeite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0
diopside	55.7	57.9	57.1	60.3	57.0	53.7	57.1	**46.1**	35.4	51.4
hedenbergite	31.6	31.3	31.0	29.1	27.5	26.2	28.8	**28.2**	26.2	28.6
enstatite	5.2	4.3	5.7	6.1	6.5	9.6	5.9	**13.7**	20.4	9.5
ferrosilite	3.0	2.3	3.1	2.9	3.1	4.7	3.0	**8.4**	15.1	5.3
wollastonite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0

*: analysis used for geothermobarometry

A.6.2.6 Orthopyroxene

Table A.6.2.6: Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite
Sample	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98
Profile	opx 3	opx 3	opx 3	opx 3	opx 3	opx 3	opx 3	opx 3	opx 4	opx 4	opx 4	opx 5	opx 5	opx 5	opx 5
Point	1	5	21	22	34	39	41	45	1	10	19	1	3	5	7
Texture	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix Cpx-free	Opx2 matrix with Cpx2	Opx2 matrix with Cpx2	Opx2 matrix with Cpx2	Opx2 matrix with Cpx2
Position	rim	←	←	core	→	→	→	rim	rim	core	rim	rim	←	←	core
SiO_2	50.77	50.54	50.80	50.74	50.90	50.90	50.82	51.24	51.09	50.95	50.90	50.69	50.72	50.46	50.11
TiO_2	0.11	0.08	0.05	0.06	0.10	0.14	0.11	0.09	0.12	0.15	0.10	0.11	0.11	0.09	0.09
Al_2O_3	0.63	0.64	0.76	0.79	0.60	0.70	0.70	0.64	0.57	0.74	0.62	0.62	0.71	0.80	0.66
Cr_2O_3	0.05	0.03	0.07	0.08	0.04	0.05	0.06	0.04	0.01	0.00	0.02	0.04	0.05	0.04	0.05
Fe_2O_3	1.11	1.84	1.43	1.28	1.36	1.77	1.65	1.00	0.02	1.12	0.65	0.57	1.80	2.22	1.69
FeO	28.24	27.73	27.79	27.72	27.25	27.30	27.35	28.28	28.92	28.00	28.53	29.83	29.11	28.95	28.07
MnO	0.62	0.63	0.54	0.63	0.65	0.56	0.62	0.62	0.70	0.63	0.67	0.65	0.61	0.66	0.61
MgO	17.42	17.55	17.76	17.80	17.78	17.77	17.47	17.81	17.05	17.44	17.19	16.31	16.70	16.66	16.39
CaO	0.65	0.64	0.54	0.51	1.06	1.11	1.34	0.52	0.77	0.93	0.79	0.83	0.93	0.82	1.24
Na_2O	0.01	0.01	0.02	0.00	0.00	0.01	0.01	0.01	0.04	0.03	0.02	0.02	0.01	0.01	0.11
K_2O	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00
Total	99.62	99.70	99.76	99.60	99.73	100.32	100.14	100.24	99.30	99.99	99.47	99.68	100.76	100.73	99.02
Formula (O=6)															
T															
Si	1.97	1.96	1.96	1.96	1.96	1.95	1.96	1.97	1.98	1.96	1.97	1.97	1.95	1.95	1.96
Al^{IV}	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.04	0.03
Fe^{3+}	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01
M1															
Al^{VI}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.03	0.00	0.03	0.02	0.02	0.04	0.05	0.04
Fe^{2+}	0.46	0.45	0.45	0.45	0.45	0.44	0.45	0.46	0.48	0.46	0.47	0.49	0.47	0.47	0.47
Mg	0.51	0.51	0.51	0.51	0.52	0.51	0.51	0.51	0.50	0.51	0.50	0.48	0.48	0.48	0.49
M2															
Fe^{2+}	0.45	0.45	0.45	0.45	0.43	0.43	0.43	0.45	0.46	0.44	0.46	0.48	0.47	0.47	0.45
Mg	0.50	0.50	0.51	0.51	0.50	0.50	0.49	0.51	0.48	0.49	0.49	0.47	0.48	0.48	0.47
Mn	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ca	0.03	0.03	0.02	0.02	0.04	0.05	0.06	0.02	0.03	0.04	0.03	0.03	0.04	0.03	0.05
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.52	0.53	0.53	0.53	0.54	0.54	0.53	0.53	0.51	0.53	0.52	0.49	0.51	0.51	0.51
Al^{tot}	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

		*										*		
Rock unit	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe
Rock type	Two-Px granulite	**Two-Px granulite**	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	**Two-Px granulite**	Two-Px granulite	Two-Px granulite
Sample	230-B-98	**230-B-98**	230-B-98	230-B-98	230-B-98	230-B-98	434-2-99	434-2-99	434-2-99	434-2-99	434-2-99	**434-2-99**	434-2-99	434-2-99
Profile	opx 5	**opx 5**	opx 5	opx 6	opx 6	opx 6	opx 1	opx 1	opx 1	opx 2	opx 2	**opx 2**	opx 2	opx 2
Point	8	**12**	15	1	5	11	3	8	19	3	4	**5**	8	12
Texture	Opx2 matrix with Cpx2	**Opx2 matrix with Cpx2**	Opx2 matrix with Cpx2	Opx2 matrix with Cpx2	Opx2 matrix with Cpx2	Opx2 matrix with Cpx2	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	**Opx2 matrix**	Opx2 matrix	Opx2 matrix
Position	→	→	rim	rim	core	rim	rim	core	rim	rim	←	←	←	core
SiO_2	50.61	**50.16**	50.25	51.29	50.45	50.76	48.89	48.63	48.70	49.60	50.12	**49.48**	49.74	49.65
TiO_2	0.09	**0.06**	0.11	0.06	0.18	0.09	0.11	0.07	0.07	0.10	0.12	**0.00**	0.09	0.11
Al_2O_3	0.76	**0.76**	0.69	0.66	0.73	0.57	0.84	1.01	1.07	1.33	1.17	**1.14**	1.08	1.21
Cr_2O_3	0.04	**0.03**	0.01	0.02	0.03	0.09	0.04	0.09	0.04	0.02	0.06	**0.09**	0.09	0.05
Fe_2O_3	1.02	**2.06**	0.96	0.25	1.41	1.05	3.81	4.24	3.70	2.42	1.77	**3.17**	2.25	2.42
FeO	29.43	**28.06**	29.52	29.99	29.92	29.84	26.87	25.56	27.08	27.78	28.52	**27.41**	27.72	28.04
MnO	0.59	**0.66**	0.63	0.59	0.70	0.66	0.62	0.47	0.52	0.60	0.52	**0.60**	0.45	0.61
MgO	16.58	**16.33**	16.24	16.61	16.14	16.50	16.31	16.42	16.29	16.60	16.92	**16.77**	16.58	16.31
CaO	0.73	**1.61**	0.79	0.88	0.75	0.63	1.26	2.07	1.06	0.93	0.57	**0.91**	1.26	1.20
Na_2O	0.02	**0.03**	0.02	0.01	0.03	0.01	0.08	0.05	0.06	0.05	0.02	**0.02**	0.05	0.04
K_2O	0.00	**0.01**	0.01	0.00	0.02	0.01	0.01	0.03	0.02	0.03	0.01	**0.01**	0.02	0.00
Total	99.87	**99.76**	99.21	100.37	100.34	100.19	98.83	98.64	98.62	99.45	99.80	**99.58**	99.31	99.64
Formula (O=6)														
T														
Si	1.96	**1.95**	1.97	1.98	1.96	1.97	1.92	1.91	1.92	1.93	1.94	**1.93**	1.94	1.93
Al^{IV}	0.03	**0.03**	0.03	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.05	**0.05**	0.05	0.06
Fe^{3+}	0.00	**0.01**	0.00	0.00	0.01	0.01	0.04	0.04	0.03	0.01	0.00	**0.02**	0.01	0.01
M1														
Al^{VI}	0.00	**0.00**	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Ti	0.00	**0.00**	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Cr	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Fe^{3+}	0.03	**0.05**	0.03	0.01	0.03	0.02	0.08	0.08	0.08	0.06	0.05	**0.07**	0.06	0.06
Fe^{2+}	0.48	**0.47**	0.49	0.49	0.49	0.49	0.44	0.42	0.44	0.45	0.46	**0.44**	0.45	0.46
Mg	0.48	**0.48**	0.48	0.49	0.47	0.48	0.48	0.49	0.47	0.48	0.49	**0.48**	0.48	0.48
M2														
Fe^{2+}	0.47	**0.45**	0.48	0.47	0.48	0.48	0.44	0.42	0.45	0.45	0.47	**0.45**	0.45	0.45
Mg	0.48	**0.46**	0.47	0.47	0.46	0.47	0.48	0.48	0.48	0.48	0.49	**0.49**	0.48	0.47
Mn	0.02	**0.02**	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	**0.02**	0.01	0.02
Ca	0.03	**0.07**	0.03	0.04	0.03	0.03	0.05	0.09	0.04	0.04	0.02	**0.04**	0.05	0.05
Na	0.00	**0.00**	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
K	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Total	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00
X_{Mg}	0.50	**0.51**	0.50	0.50	0.49	0.50	0.52	0.53	0.52	0.52	0.51	**0.52**	0.52	0.51
Al^{tot}	0.03	**0.03**	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.06	0.05	**0.05**	0.05	0.06

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Grt-Opx metagranit.	**Grt-Opx metagranit.**	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.
Sample	434-2-99	434-2-99	434-2-99	434-2-99	646-1-00	**646-1-00**	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00
Profile	opx 2	opx 2	opx 2	opx 2	opx 1	**opx 1**	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 2	opx 2
Point	16	17	19	20	1	**2**	6	7	10	12	14	18	20	1	10
Texture	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	**Opx2 matrix**	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix
Position	→	→	→	rim	rim	←	←	←	core	→	→	→	rim	rim	←
SiO_2	50.01	50.06	49.69	49.85	48.42	**48.29**	48.19	48.16	48.38	48.36	48.56	48.92	49.23	49.05	48.70
TiO_2	0.07	0.06	0.08	0.19	0.07	**0.09**	0.06	0.07	0.06	0.02	0.07	0.04	0.05	0.03	0.06
Al_2O_3	1.02	1.09	1.17	1.25	5.51	**5.75**	6.03	5.89	5.77	5.72	5.54	4.99	4.09	5.41	5.73
Cr_2O_3	0.08	0.05	0.05	0.03	0.06	**0.02**	0.01	0.00	0.00	0.01	0.05	0.05	0.03	0.06	0.05
Fe_2O_3	1.61	2.17	2.48	1.41	1.65	**0.99**	1.37	1.74	1.70	1.37	1.92	1.46	0.79	1.85	2.06
FeO	28.74	28.70	28.71	28.78	25.99	**26.57**	25.61	25.39	25.60	25.79	25.35	25.62	26.31	24.60	23.72
MnO	0.67	0.50	0.62	0.56	0.27	**0.22**	0.25	0.29	0.24	0.25	0.23	0.25	0.23	0.26	0.23
MgO	16.17	16.47	16.24	16.05	17.65	**17.23**	17.72	17.79	17.88	17.69	17.98	18.11	17.97	18.62	19.08
CaO	1.19	0.92	0.66	1.21	0.11	**0.11**	0.17	0.17	0.14	0.18	0.17	0.14	0.13	0.17	0.20
Na_2O	0.02	0.03	0.08	0.06	0.02	**0.04**	0.00	0.01	0.00	0.01	0.06	0.04	0.04	0.09	0.01
K_2O	0.00	0.00	0.01	0.01	0.02	**0.04**	0.00	0.00	0.00	0.02	0.02	0.00	0.01	0.02	0.06
Total	99.57	100.05	99.78	99.39	99.76	**99.35**	99.41	99.51	99.77	99.42	99.94	99.62	98.87	100.16	99.88
Formula (O=6)															
T															
Si	1.95	1.94	1.94	1.95	1.85	**1.85**	1.84	1.84	1.84	1.85	1.85	1.87	1.90	1.85	1.84
Al^{IV}	0.05	0.05	0.05	0.05	0.15	**0.15**	0.16	0.16	0.16	0.15	0.15	0.13	0.10	0.15	0.16
Fe^{3+}	0.00	0.01	0.01	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.00	0.00	0.00	0.00	0.10	**0.11**	0.11	0.11	0.10	0.11	0.10	0.09	0.08	0.10	0.10
Ti	0.00	0.00	0.00	0.01	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.04	0.06	0.06	0.04	0.05	**0.03**	0.04	0.05	0.05	0.04	0.05	0.04	0.02	0.05	0.06
Fe^{2+}	0.47	0.47	0.46	0.48	0.38	**0.40**	0.38	0.37	0.38	0.38	0.37	0.38	0.40	0.36	0.35
Mg	0.48	0.48	0.47	0.47	0.47	**0.46**	0.47	0.47	0.47	0.47	0.47	0.48	0.49	0.49	0.50
M2															
Fe^{2+}	0.46	0.47	0.47	0.46	0.45	**0.46**	0.44	0.44	0.44	0.44	0.43	0.44	0.44	0.42	0.40
Mg	0.46	0.48	0.47	0.46	0.54	**0.53**	0.54	0.55	0.55	0.54	0.55	0.55	0.54	0.56	0.58
Mn	0.02	0.02	0.02	0.02	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ca	0.05	0.04	0.03	0.05	0.00	**0.00**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Na	0.00	0.00	0.01	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
K	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.50	0.51	0.50	0.50	0.55	**0.54**	0.55	0.56	0.55	0.55	0.56	0.56	0.55	0.57	0.59
Al^{tot}	0.05	0.05	0.05	0.06	0.25	**0.26**	0.27	0.27	0.26	0.26	0.25	0.22	0.19	0.24	0.26

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock
Sample	646-1-00	646-1-00	646-1-00	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99
Profile	opx 2	opx 2	opx 2	opx 1	opx 1	opx 1	**opx 1**	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 8
Point	15	17	29	1	2	4	**6**	7	9	10	13	14	16	17	1
Texture	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	**Opx2 matrix**	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix
Position	core	→	rim	rim	←	←	←	←	core	→	→	→	→	rim	rim
SiO_2	48.69	49.04	49.27	48.76	48.44	48.63	**48.09**	47.96	47.99	47.75	48.20	47.89	48.54	50.58	50.85
TiO_2	0.06	0.08	0.05	0.12	0.16	0.18	**0.20**	0.22	0.14	0.16	0.16	0.18	0.16	0.14	0.12
Al_2O_3	5.38	5.35	5.22	5.73	7.31	7.25	**8.15**	8.35	9.06	8.71	8.60	8.18	7.46	4.31	3.72
Cr_2O_3	0.04	0.04	0.02	0.03	0.00	0.02	**0.00**	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Fe_2O_3	1.91	1.12	0.17	1.32	1.00	0.83	**1.21**	1.20	1.43	2.00	1.20	2.04	1.27	0.13	0.65
FeO	24.07	24.82	25.78	22.63	22.48	22.08	**21.09**	20.39	20.69	20.34	20.52	20.18	21.57	23.45	22.73
MnO	0.28	0.24	0.22	0.23	0.22	0.18	**0.13**	0.16	0.16	0.14	0.18	0.14	0.17	0.16	0.22
MgO	18.94	18.69	18.37	19.71	19.76	20.15	**20.40**	20.66	20.52	20.49	20.72	20.70	20.18	20.64	21.10
CaO	0.12	0.14	0.12	0.16	0.09	0.11	**0.07**	0.12	0.05	0.10	0.06	0.11	0.11	0.16	0.18
Na_2O	0.00	0.03	0.01	0.04	0.00	0.00	**0.00**	0.00	0.00	0.03	0.01	0.01	0.07	0.00	0.03
K_2O	0.00	0.00	0.01	0.00	0.01	0.01	**0.00**	0.00	0.01	0.00	0.00	0.01	0.02	0.02	0.01
Total	99.48	99.55	99.25	98.74	99.48	99.44	**99.33**	99.07	100.08	99.72	99.66	99.43	99.55	99.59	99.60
Formula (O=6)															
T															
Si	1.85	1.86	1.88	1.85	1.82	1.82	**1.80**	1.79	1.78	1.78	1.79	1.79	1.82	1.90	1.91
Al^{IV}	0.15	0.14	0.12	0.15	0.18	0.18	**0.20**	0.21	0.22	0.22	0.21	0.21	0.18	0.10	0.09
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.09	0.10	0.11	0.11	0.14	0.14	**0.16**	0.16	0.17	0.16	0.17	0.15	0.14	0.09	0.07
Ti	0.00	0.00	0.00	0.00	0.00	0.01	**0.01**	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.05	0.03	0.01	0.04	0.03	0.02	**0.03**	0.03	0.04	0.06	0.03	0.06	0.04	0.00	0.02
Fe^{2+}	0.35	0.37	0.39	0.33	0.32	0.32	**0.30**	0.28	0.28	0.28	0.28	0.28	0.31	0.35	0.34
Mg	0.50	0.49	0.49	0.52	0.50	0.51	**0.51**	0.51	0.50	0.50	0.51	0.51	0.51	0.55	0.57
M2															
Fe^{2+}	0.41	0.42	0.43	0.39	0.39	0.38	**0.36**	0.35	0.36	0.35	0.35	0.35	0.37	0.38	0.37
Mg	0.58	0.56	0.55	0.60	0.60	0.61	**0.63**	0.64	0.63	0.64	0.64	0.64	0.62	0.60	0.61
Mn	0.01	0.01	0.01	0.01	0.01	0.01	**0.00**	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01
Ca	0.00	0.01	0.00	0.01	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Na	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
K	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.58	0.57	0.56	0.61	0.61	0.62	**0.63**	0.64	0.64	0.64	0.64	0.65	0.63	0.61	0.62
Al^{tot}	0.24	0.24	0.23	0.26	0.32	0.32	**0.36**	0.37	0.40	0.38	0.38	0.36	0.33	0.19	0.16

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

									*			*			*
Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	**Epembe**	Epembe	Epembe	**Epembe**
Rock type	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx rock**
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	**614-1-99**	614-1-99	614-1-99	**614-1-99**	614-1-99	614-1-99	**614-1-99**
Profile	opx 8	opx 8	opx 8	opx 8	opx 8	opx 8	opx 1	opx 1	**opx 1**	opx 2	opx 2	**opx 2**	opx 1	opx 1	**opx 1**
Point	3	4	7	9	16	17	2	4	**5**	5	4	**1**	1	4	**5**
Texture	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	**Opx3 in Crd-Opx-Spl s.**	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	**Opx3 in Crd-Opx s.**	Opx3 in Crd-Opx s.	Opx3 in Crd-Opx s.	**Opx3 in Crd-Opx s. with Grt4**
Position	←	←	core	→	→	rim									
SiO_2	49.17	48.10	48.02	48.29	49.54	50.56	51.37	50.42	**50.39**	50.15	50.40	**49.76**	50.02	49.75	**49.87**
TiO_2	0.17	0.17	0.22	0.21	0.12	0.13	0.06	0.15	**0.10**	0.03	0.05	**0.07**	0.08	0.07	**0.07**
Al_2O_3	6.46	7.54	8.51	8.25	5.23	2.71	3.59	4.39	**4.69**	5.27	5.15	**3.30**	2.26	2.27	**2.74**
Cr_2O_3	0.00	0.02	0.01	0.01	0.00	0.01	0.00	0.03	**0.00**	0.00	0.02	**0.00**	0.01	0.00	**0.00**
Fe_2O_3	0.92	2.31	1.15	1.87	1.37	1.71	0.67	1.45	**0.68**	2.34	0.81	**0.93**	0.84	2.43	**1.40**
FeO	21.52	20.34	20.46	20.41	22.29	22.71	22.10	21.44	**22.46**	20.46	21.88	**27.64**	27.79	26.99	**28.01**
MnO	0.22	0.21	0.22	0.16	0.25	0.25	0.15	0.11	**0.14**	0.15	0.17	**0.31**	0.36	0.33	**0.38**
MgO	20.65	20.72	20.55	20.78	20.56	21.02	21.84	21.51	**21.05**	21.83	21.37	**17.61**	17.63	17.76	**17.45**
CaO	0.10	0.13	0.11	0.13	0.11	0.12	0.13	0.14	**0.17**	0.14	0.12	**0.11**	0.11	0.16	**0.15**
Na_2O	0.06	0.00	0.03	0.03	0.01	0.00	0.03	0.08	**0.00**	0.06	0.00	**0.02**	0.04	0.08	**0.00**
K_2O	0.00	0.00	0.03	0.00	0.00	0.01	0.02	0.02	**0.01**	0.01	0.02	**0.00**	0.00	0.00	**0.03**
Total	99.25	99.55	99.32	100.15	99.47	99.24	99.96	99.74	**99.69**	100.44	99.98	**99.74**	99.14	99.82	**100.09**
Formula (O=6)															
T															
Si	1.84	1.80	1.79	1.79	1.86	1.91	1.91	1.88	**1.88**	1.85	1.87	**1.91**	1.94	1.91	**1.92**
Al^{IV}	0.16	0.20	0.21	0.21	0.14	0.09	0.09	0.12	**0.12**	0.15	0.13	**0.09**	0.06	0.09	**0.08**
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
M1															
Al^{VI}	0.13	0.13	0.17	0.15	0.09	0.03	0.07	0.07	**0.09**	0.08	0.10	**0.06**	0.04	0.02	**0.04**
Ti	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
Fe^{3+}	0.03	0.06	0.03	0.05	0.04	0.05	0.02	0.04	**0.02**	0.07	0.02	**0.03**	0.02	0.07	**0.04**
Fe^{2+}	0.31	0.28	0.29	0.28	0.33	0.35	0.33	0.32	**0.33**	0.29	0.32	**0.43**	0.44	0.42	**0.43**
Mg	0.53	0.52	0.51	0.51	0.54	0.57	0.58	0.56	**0.55**	0.56	0.56	**0.48**	0.50	0.49	**0.48**
M2															
Fe^{2+}	0.36	0.35	0.35	0.35	0.37	0.37	0.36	0.35	**0.37**	0.34	0.36	**0.46**	0.46	0.45	**0.46**
Mg	0.62	0.64	0.63	0.64	0.61	0.61	0.63	0.63	**0.62**	0.65	0.63	**0.52**	0.52	0.53	**0.52**
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	**0.00**	0.00	0.01	**0.01**	0.01	0.01	**0.01**
Ca	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	**0.01**	0.01	0.00	**0.00**	0.00	0.01	**0.01**
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	**0.00**	0.00	0.00	**0.00**	0.00	0.01	**0.00**
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	**4.00**	4.00	4.00	**4.00**
X_{Mg}	0.63	0.64	0.64	0.64	0.62	0.62	0.64	0.64	**0.63**	0.66	0.64	**0.53**	0.53	0.54	**0.53**
Al^{tot}	0.29	0.33	0.37	0.36	0.23	0.12	0.16	0.19	**0.21**	0.23	0.23	**0.15**	0.10	0.10	**0.12**

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99
Profile	opx 2	opx 8	opx 6	opx 3	opx 3	opx 2	opx 2	opx 2	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1
Point	4	3	1	1	2	2	3	5	1	3	4	6	10	13
Texture	Opx3 in Crd-Opx s. with Grt4	Opx5 on Bt4	Opx5 on Bt4	Opx5 on Bt4	Opx5 on Bt4	Opx1 in Grt2	Opx1 in Grt2	Opx1 in Grt2	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix
Position						rim	core	rim	rim	←	←	←	core	→
SiO_2	49.20	50.32	50.12	49.60	50.31	50.80	50.42	50.61	48.26	48.19	47.31	47.54	47.63	47.80
TiO_2	0.07	0.07	0.09	0.07	0.04	0.03	0.02	0.05	0.03	0.06	0.09	0.08	0.09	0.07
Al_2O_3	3.91	2.34	2.47	2.38	2.16	4.00	4.16	3.78	6.74	6.89	6.97	7.08	7.31	7.11
Cr_2O_3	0.00	0.01	0.02	0.00	0.03	0.00	0.02	0.00	0.02	0.05	0.03	0.03	0.02	0.00
Fe_2O_3	1.40	1.62	0.68	1.40	0.94	2.20	2.16	2.23	1.66	1.47	2.35	1.97	1.47	1.60
FeO	26.66	25.14	28.54	28.07	27.92	20.46	20.16	19.30	25.36	25.63	24.88	25.07	25.41	25.54
MnO	0.35	0.29	0.39	0.34	0.36	0.16	0.13	0.16	0.18	0.30	0.14	0.23	0.15	0.19
MgO	17.81	19.36	17.29	17.31	17.70	22.47	22.40	22.94	17.93	17.75	17.63	17.68	17.55	17.58
CaO	0.09	0.12	0.13	0.08	0.09	0.03	0.07	0.06	0.05	0.07	0.07	0.07	0.06	0.06
Na_2O	0.00	0.03	0.02	0.00	0.05	0.01	0.00	0.03	0.04	0.00	0.02	0.00	0.02	0.01
K_2O	0.02	0.00	0.00	0.00	0.01	0.02	0.01	0.02	0.01	0.01	0.00	0.01	0.00	0.01
Total	99.51	99.28	99.75	99.25	99.61	100.16	99.53	99.16	100.27	100.41	99.50	99.76	99.71	99.98
Formula (O=6)														
T														
Si	1.89	1.92	1.93	1.92	1.94	1.88	1.88	1.89	1.83	1.82	1.81	1.81	1.81	1.82
Al^{IV}	0.11	0.08	0.07	0.08	0.06	0.12	0.12	0.11	0.17	0.18	0.19	0.19	0.19	0.18
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1														
Al^{VI}	0.07	0.03	0.04	0.03	0.04	0.06	0.06	0.05	0.13	0.13	0.12	0.13	0.14	0.14
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.04	0.05	0.02	0.04	0.03	0.06	0.06	0.06	0.05	0.04	0.07	0.06	0.04	0.05
Fe^{2+}	0.41	0.39	0.45	0.44	0.44	0.30	0.29	0.28	0.36	0.37	0.36	0.36	0.36	0.37
Mg	0.48	0.53	0.48	0.48	0.50	0.58	0.58	0.60	0.46	0.46	0.45	0.45	0.45	0.45
M2														
Fe^{2+}	0.45	0.41	0.47	0.47	0.46	0.34	0.33	0.32	0.44	0.44	0.44	0.44	0.44	0.44
Mg	0.53	0.57	0.51	0.52	0.52	0.66	0.66	0.67	0.55	0.55	0.55	0.55	0.55	0.55
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.01
Ca	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.54	0.58	0.52	0.52	0.53	0.66	0.66	0.68	0.56	0.55	0.56	0.56	0.55	0.55
Al^{tot}	0.18	0.11	0.11	0.11	0.10	0.17	0.18	0.17	0.30	0.31	0.31	0.32	0.33	0.32

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

		*												
Rock unit	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	587-4-99	**587-4-99**	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99
Profile	opx 1	**opx 1**	opx 1	opx 7	opx 7	opx 7	opx 2	opx 2	opx 2	opx 1	opx 1	opx 1	opx 1	opx 1
Point	15	**17**	20	1	10	18	1	6	15	1	4	9	10	13
Texture	Opx2 matrix	**Opx2 matrix**	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix
Position	→	→	rim	rim	core	rim	rim	core	rim	rim	←	←	←	←
SiO_2	47.83	**48.02**	47.49	48.59	48.57	48.58	48.05	47.73	48.87	48.52	48.53	47.98	48.27	47.84
TiO_2	0.07	**0.04**	0.03	0.08	0.01	0.11	0.16	0.08	0.05	0.14	0.13	0.12	0.11	0.16
Al_2O_3	7.36	**7.27**	6.91	7.15	7.01	6.33	6.70	7.23	6.86	6.80	7.77	7.86	8.17	8.68
Cr_2O_3	0.03	**0.02**	0.00	0.00	0.02	0.00	0.01	0.02	0.02	0.16	0.18	0.14	0.14	0.08
Fe_2O_3	1.55	**1.63**	1.65	2.53	1.93	1.87	1.32	2.25	1.35	2.22	1.06	2.55	1.15	1.98
FeO	25.31	**25.78**	25.70	20.72	21.58	21.62	23.10	22.17	23.14	20.23	20.34	18.69	19.10	18.48
MnO	0.29	**0.26**	0.24	0.17	0.09	0.09	0.12	0.08	0.21	0.25	0.22	0.21	0.17	0.13
MgO	17.66	**17.57**	17.30	20.73	20.40	20.45	19.23	19.46	19.67	20.98	20.96	21.49	21.56	21.59
CaO	0.06	**0.07**	0.02	0.05	0.02	0.02	0.08	0.05	0.05	0.10	0.14	0.10	0.09	0.07
Na_2O	0.02	**0.00**	0.00	0.06	0.01	0.00	0.00	0.03	0.00	0.03	0.01	0.03	0.00	0.03
K_2O	0.00	**0.01**	0.00	0.01	0.01	0.01	0.01	0.00	0.03	0.00	0.00	0.00	0.02	0.01
Total	100.17	**100.67**	99.33	100.08	99.66	99.08	98.78	99.11	100.23	99.43	99.33	99.16	98.77	99.05
Formula (O=6)														
T														
Si	1.81	**1.81**	1.82	1.81	1.82	1.83	1.83	1.81	1.83	1.81	1.81	1.79	1.80	1.78
Al^{IV}	0.19	**0.19**	0.18	0.19	0.18	0.17	0.17	0.19	0.17	0.19	0.19	0.21	0.20	0.22
Fe^{3+}	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1														
Al^{VI}	0.14	**0.14**	0.13	0.12	0.13	0.11	0.13	0.13	0.13	0.11	0.15	0.13	0.16	0.16
Ti	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Fe^{3+}	0.04	**0.05**	0.05	0.07	0.05	0.05	0.04	0.06	0.04	0.06	0.03	0.07	0.03	0.06
Fe^{2+}	0.36	**0.37**	0.37	0.29	0.30	0.31	0.33	0.31	0.33	0.29	0.29	0.26	0.27	0.25
Mg	0.45	**0.45**	0.45	0.52	0.51	0.52	0.50	0.49	0.50	0.53	0.53	0.53	0.54	0.53
M2														
Fe^{2+}	0.44	**0.45**	0.45	0.36	0.37	0.37	0.40	0.39	0.39	0.35	0.35	0.32	0.33	0.32
Mg	0.55	**0.54**	0.54	0.63	0.62	0.63	0.59	0.61	0.60	0.64	0.64	0.66	0.66	0.67
Mn	0.01	**0.01**	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00
Ca	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Na	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.55	**0.55**	0.55	0.64	0.63	0.63	0.60	0.61	0.60	0.65	0.65	0.67	0.67	0.68
Al^{tot}	0.33	**0.32**	0.31	0.31	0.31	0.28	0.30	0.32	0.30	0.30	0.34	0.35	0.36	0.38

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99
Profile	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 2	opx 2	opx 2	opx 4	opx 4
Point	17	20	25	27	33	38	39	41	49	50	1	4	50	1	12
Texture	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix
Position	←	←	core	→	→	→	→	→	→	rim	rim	core	rim	rim	core
SiO_2	47.71	47.56	47.07	47.44	47.44	47.31	47.34	47.95	47.59	47.83	48.17	45.42	47.93	47.91	46.77
TiO_2	0.12	0.16	0.15	0.12	0.17	0.23	0.22	0.19	0.13	0.16	0.17	0.19	0.18	0.09	0.15
Al_2O_3	9.54	9.65	10.40	10.08	10.42	10.52	10.59	9.40	9.45	9.53	8.88	11.91	9.30	7.80	10.62
Cr_2O_3	0.13	0.11	0.10	0.11	0.11	0.11	0.13	0.22	0.10	0.10	0.15	0.20	0.09	0.15	0.12
Fe_2O_3	1.32	2.03	1.86	1.35	2.39	2.54	1.46	1.82	1.74	1.72	1.56	3.87	2.61	2.78	2.88
FeO	18.37	17.95	17.86	18.23	17.42	17.52	18.18	18.06	18.34	18.85	19.02	17.03	18.18	18.14	16.96
MnO	0.19	0.13	0.19	0.19	0.18	0.18	0.15	0.15	0.14	0.19	0.18	0.18	0.14	0.20	0.11
MgO	21.61	21.70	21.43	21.43	21.86	21.82	21.47	21.90	21.57	21.43	21.54	20.77	21.81	21.69	21.70
CaO	0.06	0.05	0.10	0.07	0.11	0.11	0.08	0.09	0.07	0.08	0.10	0.08	0.08	0.08	0.11
Na_2O	0.00	0.04	0.01	0.03	0.04	0.01	0.02	0.03	0.00	0.00	0.00	0.03	0.04	0.06	0.04
K_2O	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.04	0.01	0.00	0.00	0.02	0.00	0.01
Total	99.05	99.39	99.18	99.03	100.13	100.34	99.62	99.81	99.19	99.91	99.76	99.68	100.38	98.89	99.47
Formula (O=6)															
T															
Si	1.77	1.76	1.74	1.76	1.74	1.73	1.74	1.76	1.76	1.76	1.78	1.68	1.76	1.79	1.72
Al^{IV}	0.23	0.24	0.26	0.24	0.26	0.27	0.26	0.24	0.24	0.24	0.22	0.32	0.24	0.21	0.28
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.18	0.18	0.20	0.20	0.19	0.18	0.20	0.17	0.18	0.18	0.16	0.20	0.16	0.13	0.19
Ti	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Fe^{3+}	0.04	0.06	0.05	0.04	0.07	0.07	0.04	0.05	0.05	0.05	0.04	0.11	0.07	0.08	0.08
Fe^{2+}	0.25	0.24	0.24	0.25	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.22	0.24	0.25	0.22
Mg	0.52	0.52	0.51	0.51	0.51	0.51	0.51	0.52	0.52	0.51	0.52	0.47	0.52	0.53	0.50
M2															
Fe^{2+}	0.32	0.31	0.32	0.32	0.30	0.31	0.32	0.31	0.32	0.33	0.33	0.31	0.31	0.32	0.30
Mg	0.67	0.68	0.67	0.67	0.68	0.68	0.67	0.68	0.67	0.66	0.66	0.68	0.67	0.67	0.69
Mn	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.00
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.68	0.68	0.68	0.68	0.69	0.69	0.68	0.68	0.68	0.67	0.67	0.69	0.68	0.68	0.70
Al^{tot}	0.42	0.42	0.45	0.44	0.45	0.45	0.46	0.41	0.41	0.41	0.39	0.52	0.40	0.34	0.46

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

					*							*			
Rock unit	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	458-3-99	458-3-99	458-3-99	458-3-99	**458-3-99**	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	458-3-99	**458-3-99**	458-3-99	458-3-99	458-3-99
Profile	opx 4	opx 5	opx 5	opx 5	**opx 5**	opx 5	opx 5	opx 5	opx 1	opx 1	opx 1	**opx 1**	opx 1	opx 7	opx 7
Point	20	1	2	4	**5**	6	7	8	1	2	3	**4**	5	1	2
Texture	Opx2 matrix	Opx2 matr. +Grt2	Opx2 matr. +Grt2	Opx2 matr. +Grt2	**Opx2 matr. +Grt2**	Opx2 matr. +Grt2	Opx2 matr. +Grt2	Opx2 matr. +Grt2	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	**Opx3 in Crd-Opx-Spl s.**	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx s.	Opx3 in Crd-Opx s.
Position	rim	rim	←	←	**core**	→	→	rim							
SiO_2	47.25	49.77	49.56	48.29	**48.40**	48.23	49.07	49.29	51.66	49.75	50.12	**50.88**	50.28	51.06	50.35
TiO_2	0.10	0.10	0.09	0.11	**0.16**	0.15	0.12	0.14	0.11	0.06	0.13	**0.08**	0.08	0.07	0.10
Al_2O_3	8.32	4.89	5.35	7.41	**7.89**	7.75	6.58	5.91	5.30	5.35	5.05	**5.04**	4.95	4.78	4.71
Cr_2O_3	0.18	0.12	0.14	0.20	**0.14**	0.14	0.12	0.08	0.00	0.00	0.08	**0.00**	0.01	0.22	0.26
Fe_2O_3	3.15	1.68	1.70	1.83	**1.43**	2.30	1.58	1.45	1.06	1.51	1.83	**1.67**	2.43	0.58	0.99
FeO	18.16	21.28	21.44	21.12	**21.79**	20.60	21.76	21.77	18.90	18.60	18.33	**18.72**	17.93	20.92	20.94
MnO	0.21	0.23	0.29	0.26	**0.24**	0.26	0.28	0.28	0.17	0.19	0.13	**0.16**	0.13	0.15	0.27
MgO	21.28	21.15	21.02	20.33	**20.09**	20.45	20.53	20.66	23.96	22.65	23.16	**23.37**	23.45	22.33	21.73
CaO	0.09	0.09	0.11	0.12	**0.11**	0.14	0.10	0.10	0.07	0.12	0.08	**0.12**	0.10	0.09	0.10
Na_2O	0.04	0.06	0.00	0.01	**0.01**	0.07	0.00	0.01	0.00	0.05	0.04	**0.04**	0.05	0.03	0.04
K_2O	0.01	0.01	0.01	0.00	**0.00**	0.00	0.01	0.04	0.04	0.05	0.03	**0.04**	0.03	0.03	0.01
Total	98.78	99.36	99.73	99.68	**100.26**	100.08	100.14	99.73	101.26	98.32	98.98	**100.13**	99.44	100.25	99.49
Formula (O=6)															
T															
Si	1.77	1.87	1.85	1.81	**1.80**	1.79	1.83	1.84	1.87	1.86	1.86	**1.87**	1.86	1.88	1.88
Al^{IV}	0.23	0.13	0.15	0.19	**0.20**	0.21	0.17	0.16	0.13	0.14	0.14	**0.13**	0.14	0.12	0.12
Fe^{3+}	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00
M1															
Al^{VI}	0.14	0.08	0.09	0.13	**0.15**	0.13	0.12	0.11	0.10	0.10	0.08	**0.09**	0.07	0.09	0.08
Ti	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00
Cr	0.01	0.00	0.00	0.01	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.01	0.01
Fe^{3+}	0.09	0.05	0.05	0.05	**0.04**	0.06	0.04	0.04	0.03	0.04	0.05	**0.05**	0.07	0.02	0.03
Fe^{2+}	0.25	0.31	0.31	0.30	**0.30**	0.29	0.31	0.31	0.27	0.27	0.26	**0.27**	0.26	0.30	0.31
Mg	0.52	0.55	0.54	0.51	**0.50**	0.51	0.52	0.53	0.60	0.59	0.60	**0.60**	0.60	0.58	0.57
M2															
Fe^{2+}	0.32	0.36	0.36	0.36	**0.37**	0.35	0.37	0.37	0.30	0.31	0.30	**0.31**	0.30	0.34	0.35
Mg	0.67	0.63	0.63	0.62	**0.61**	0.63	0.62	0.62	0.69	0.67	0.68	**0.68**	0.69	0.65	0.64
Mn	0.01	0.01	0.01	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.00	**0.01**	0.00	0.00	0.01
Ca	0.00	0.00	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00
K	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00
X_{Mg}	0.68	0.64	0.64	0.63	**0.62**	0.64	0.63	0.63	0.69	0.68	0.69	**0.69**	0.70	0.66	0.65
Al^{tot}	0.37	0.22	0.24	0.33	**0.35**	0.34	0.29	0.26	0.23	0.24	0.22	**0.22**	0.22	0.21	0.21

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	458-3-99	**458-3-99**	458-3-99	458-3-99	458-3-99	458-3-99	634-00	634-00	634-00	634-00	634-00	634-00	634-00	634-00	634-00
Profile	opx 11	**opx 13**	opx 13	opx 16	opx 16	opx 16	opx 7	opx 7	opx 7	opx 7	opx 7	opx 7	opx 7	opx 7	opx 7
Point	3	**1**	2	1	2	3	1	6	9	20	24	25	26	39	41
Texture	Opx3 in Crd-Opx s.	**Opx3 in Crd-Opx s.**	Opx3 in Crd-Opx s.	Opx5 on Bt4	Opx5 on Bt4	Opx5 on Bt4	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix
Position							rim	←	←	←	←	←	core	→	→
SiO_2	50.00	**49.67**	49.54	50.78	51.10	50.16	48.11	47.49	46.37	47.10	47.01	46.95	47.45	47.51	46.86
TiO_2	0.02	**0.11**	0.16	0.10	0.12	0.10	0.13	0.20	0.22	0.13	0.17	0.18	0.20	0.16	0.27
Al_2O_3	4.68	**4.11**	3.90	3.06	2.88	3.61	8.40	9.49	9.92	9.83	9.96	9.76	9.82	10.48	10.03
Cr_2O_3	0.16	**0.03**	0.00	0.03	0.07	0.08	0.11	0.06	0.06	0.09	0.08	0.09	0.05	0.07	0.10
Fe_2O_3	1.07	**1.15**	1.14	1.51	0.84	1.22	1.32	1.31	2.61	1.13	1.35	2.00	0.91	1.41	1.47
FeO	20.35	**22.57**	22.84	21.43	21.98	21.85	21.72	21.03	19.87	20.44	20.74	20.45	21.29	20.17	20.22
MnO	0.21	**0.21**	0.21	0.24	0.24	0.27	0.17	0.12	0.19	0.21	0.15	0.19	0.18	0.21	0.17
MgO	21.88	**20.45**	20.22	21.70	21.66	21.15	19.86	20.04	19.42	19.99	19.72	19.89	19.80	20.41	20.03
CaO	0.09	**0.13**	0.12	0.13	0.16	0.16	0.06	0.08	0.70	0.10	0.09	0.11	0.11	0.07	0.07
Na_2O	0.02	**0.02**	0.03	0.06	0.04	0.01	0.06	0.00	0.01	0.00	0.04	0.02	0.00	0.02	0.02
K_2O	0.03	**0.03**	0.04	0.01	0.05	0.07	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.01
Total	98.50	**98.48**	98.18	99.06	99.14	98.65	99.95	99.81	99.37	99.03	99.31	99.63	99.84	100.53	99.25
Formula (O=6)															
T															
Si	1.88	**1.89**	1.89	1.91	1.92	1.90	1.79	1.77	1.74	1.76	1.76	1.75	1.77	1.75	1.75
Al^{IV}	0.12	**0.11**	0.11	0.09	0.08	0.10	0.21	0.23	0.26	0.24	0.24	0.25	0.23	0.25	0.25
Fe^{3+}	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.09	**0.07**	0.07	0.05	0.05	0.06	0.16	0.18	0.18	0.20	0.20	0.18	0.20	0.20	0.19
Ti	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.01
Cr	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.03	**0.03**	0.03	0.04	0.02	0.03	0.04	0.04	0.07	0.03	0.04	0.06	0.03	0.04	0.04
Fe^{2+}	0.30	**0.34**	0.35	0.32	0.33	0.33	0.30	0.29	0.27	0.28	0.28	0.28	0.29	0.27	0.27
Mg	0.58	**0.55**	0.55	0.58	0.59	0.57	0.49	0.49	0.47	0.49	0.48	0.48	0.48	0.48	0.48
M2															
Fe^{2+}	0.34	**0.38**	0.38	0.35	0.36	0.36	0.38	0.37	0.35	0.36	0.37	0.36	0.37	0.35	0.36
Mg	0.65	**0.61**	0.60	0.63	0.62	0.62	0.61	0.63	0.61	0.63	0.62	0.63	0.62	0.64	0.63
Mn	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01
Ca	0.00	**0.01**	0.00	0.01	0.01	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.66	**0.62**	0.61	0.64	0.64	0.63	0.62	0.63	0.64	0.64	0.63	0.63	0.62	0.64	0.64
Al^{tot}	0.21	**0.18**	0.18	0.14	0.13	0.16	0.37	0.42	0.44	0.43	0.44	0.43	0.43	0.45	0.44

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

	*								*							
Rock unit	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	**634-00**	634-00	634-00	634-00	634-00	634-00	634-00	634-00	**634-00**	634-00	634-00	634-00	634-00	634-00	634-00	634-00
Profile	**opx 7**	opx 7	opx 7	opx 7	opx 9	opx 9	opx 9	opx 5	**opx 5**	opx 5	opx 5	opx 5	opx 5	opx 5	opx 5	opx 5
Point	**49**	57	59	60	2	16	50	1	**4**	6	10	11	13	18	19	
Texture	**Opx2 matrix**	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx3 in Opx-Pl c.	**Opx3 in Opx-Pl c.**	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	
Position	→	→	→	rim	rim	core	rim	rim	←	←	core	→	→	→	→	
SiO_2	**46.80**	47.30	47.99	48.81	48.39	46.84	47.25	48.35	**47.50**	47.39	47.09	47.67	46.51	47.55	48.05	
TiO_2	**0.16**	0.18	0.17	0.12	0.10	0.20	0.16	0.15	**0.16**	0.18	0.12	0.17	0.18	0.14	0.17	
Al_2O_3	**9.70**	8.81	7.44	4.89	7.55	10.02	9.81	5.93	**7.51**	7.65	8.09	8.55	8.45	7.39	6.57	
Cr_2O_3	**0.08**	0.10	0.11	0.08	0.06	0.04	0.10	0.05	**0.00**	0.08	0.02	0.03	0.03	0.07	0.06	
Fe_2O_3	**1.46**	1.64	0.90	1.74	0.93	3.07	1.65	0.61	**0.32**	0.88	1.13	1.44	2.36	1.35	0.85	
FeO	**21.27**	24.01	24.14	23.76	22.51	18.70	20.54	26.06	**25.81**	24.86	25.02	24.89	24.17	24.82	25.22	
MnO	**0.24**	0.36	0.26	0.31	0.25	0.23	0.20	0.32	**0.29**	0.38	0.39	0.35	0.26	0.32	0.22	
MgO	**19.35**	17.90	18.40	19.03	19.66	20.80	20.03	17.58	**17.21**	17.61	17.21	17.75	17.42	17.69	17.76	
CaO	**0.07**	0.10	0.14	0.17	0.11	0.09	0.07	0.13	**0.12**	0.14	0.12	0.12	0.16	0.09	0.12	
Na_2O	**0.00**	0.07	0.03	0.06	0.00	0.02	0.03	0.01	**0.00**	0.00	0.04	0.03	0.02	0.04	0.08	
K_2O	**0.00**	0.00	0.00	0.02	0.00	0.02	0.02	0.03	**0.00**	0.00	0.03	0.00	0.03	0.02	0.00	
Total	**99.11**	100.46	99.58	98.99	99.57	100.02	99.84	99.23	**98.93**	99.16	99.25	100.99	99.58	99.48	99.09	
Formula (O=6)																
T																
Si	**1.76**	1.78	1.82	1.86	1.82	1.73	1.76	1.85	**1.82**	1.81	1.80	1.79	1.77	1.81	1.84	
Al^{IV}	**0.24**	0.22	0.18	0.14	0.18	0.27	0.24	0.15	**0.18**	0.19	0.20	0.21	0.23	0.19	0.16	
Fe^{3+}	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	
M1																
Al^{VI}	**0.19**	0.17	0.15	0.08	0.15	0.17	0.19	0.12	**0.16**	0.15	0.16	0.16	0.15	0.14	0.13	
Ti	**0.00**	0.01	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**	0.01	0.00	0.00	0.01	0.00	0.00	
Cr	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	
Fe^{3+}	**0.04**	0.05	0.03	0.05	0.03	0.09	0.05	0.02	**0.01**	0.03	0.03	0.04	0.07	0.04	0.02	
Fe^{2+}	**0.29**	0.33	0.35	0.36	0.32	0.25	0.28	0.39	**0.38**	0.36	0.36	0.35	0.34	0.36	0.37	
Mg	**0.47**	0.44	0.47	0.51	0.50	0.49	0.48	0.47	**0.45**	0.45	0.44	0.44	0.44	0.45	0.47	
M2																
Fe^{2+}	**0.38**	0.42	0.42	0.40	0.39	0.33	0.36	0.45	**0.45**	0.43	0.44	0.43	0.43	0.43	0.44	
Mg	**0.61**	0.56	0.57	0.58	0.60	0.66	0.63	0.54	**0.54**	0.55	0.54	0.55	0.55	0.55	0.55	
Mn	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	
Ca	**0.00**	0.00	0.01	0.01	0.00	0.00	0.00	0.01	**0.00**	0.01	0.00	0.00	0.01	0.00	0.00	
Na	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.01	
K	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	
Total	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	
X_{Mg}	**0.62**	0.57	0.58	0.59	0.61	0.66	0.63	0.55	**0.54**	0.56	0.55	0.56	0.56	0.56	0.56	
Al^{tot}	**0.43**	0.39	0.33	0.22	0.33	0.44	0.43	0.27	**0.34**	0.34	0.36	0.38	0.38	0.33	0.30	

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

					*									*	
Rock unit	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss
Sample	634-00	634-00	634-00	634-00	**634-00**	634-00	634-00	634-00	634-00	690-2-00	690-2-00	690-2-00	690-2-00	**690-2-00**	690-2-00
Profile	opx 5	opx 6	opx 6	opx 1	**opx 1**	opx 8	opx 10	opx 10	opx 10	opx 2	opx 2	opx 2	**opx 4**	opx 4	
Point	20	1	15	3	**4**	7	1	2	3	1	17	39	**1**	6	
Texture	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Crd-Opx s.	**Opx3 in Crd-Opx s.**	Opx5 on Bt4	Opx5 on Bt4	Opx5 on Bt4	Opx5 on Bt4	Opx2 matrix	Opx2 matrix	Opx2 matrix	**Opx2 matrix**	Opx2 matrix	
Position	rim	rim	core							rim	core	rim	**rim**	←	
SiO_2	48.48	48.43	47.42	50.03	**50.19**	49.75	50.78	51.17	51.61	48.71	48.10	48.76	**48.26**	48.47	
TiO_2	0.19	0.15	0.20	0.07	**0.12**	0.06	0.08	0.08	0.04	0.06	0.19	0.19	**0.12**	0.09	
Al_2O_3	5.71	4.92	7.62	2.82	**2.86**	3.44	2.78	2.35	2.34	2.81	3.25	2.65	**2.95**	3.19	
Cr_2O_3	0.03	0.05	0.08	0.02	**0.00**	0.02	0.08	0.06	0.10	0.04	0.08	0.00	**0.00**	0.04	
Fe_2O_3	0.11	1.76	0.92	1.52	**0.66**	1.31	1.03	1.83	0.92	1.15	1.72	0.43	**1.57**	1.63	
FeO	25.67	25.33	25.19	26.60	**26.86**	25.89	23.43	23.46	24.13	31.58	31.22	31.78	**31.80**	31.12	
MnO	0.33	0.30	0.32	0.33	**0.29**	0.39	0.25	0.28	0.24	0.44	0.39	0.45	**0.46**	0.51	
MgO	17.92	18.04	17.51	18.41	**18.35**	18.45	20.68	20.88	20.65	14.56	14.39	14.57	**14.12**	14.55	
CaO	0.14	0.17	0.12	0.10	**0.15**	0.18	0.11	0.09	0.15	0.25	0.25	0.21	**0.20**	0.27	
Na_2O	0.00	0.01	0.00	0.00	**0.02**	0.03	0.02	0.04	0.08	0.00	0.02	0.00	**0.03**	0.02	
K_2O	0.02	0.01	0.00	0.03	**0.01**	0.00	0.00	0.00	0.01	0.00	0.00	0.01	**0.01**	0.01	
Total	98.60	99.15	99.37	99.91	**99.49**	99.50	99.23	100.25	100.27	99.59	99.60	99.05	**99.51**	99.89	
Formula (O=6)															
T															
Si	1.86	1.86	1.81	1.91	**1.92**	1.90	1.92	1.92	1.94	1.92	1.89	1.93	**1.91**	1.90	
Al^{IV}	0.14	0.14	0.19	0.09	**0.08**	0.10	0.08	0.08	0.06	0.08	0.11	0.07	**0.09**	0.10	
Fe^{3+}	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	
M1															
Al^{VI}	0.12	0.08	0.15	0.04	**0.05**	0.06	0.04	0.02	0.04	0.05	0.04	0.05	**0.04**	0.05	
Ti	0.01	0.00	0.01	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.01	0.01	**0.00**	0.00	
Cr	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	
Fe^{3+}	0.00	0.05	0.03	0.04	**0.02**	0.04	0.03	0.05	0.03	0.03	0.05	0.01	**0.05**	0.05	
Fe^{2+}	0.39	0.38	0.36	0.41	**0.42**	0.40	0.36	0.36	0.37	0.50	0.49	0.51	**0.51**	0.49	
Mg	0.48	0.48	0.45	0.51	**0.51**	0.50	0.56	0.56	0.56	0.41	0.40	0.42	**0.40**	0.41	
M2															
Fe^{2+}	0.44	0.43	0.44	0.44	**0.44**	0.43	0.38	0.38	0.39	0.54	0.54	0.54	**0.54**	0.53	
Mg	0.54	0.55	0.54	0.54	**0.54**	0.55	0.60	0.60	0.59	0.44	0.44	0.44	**0.43**	0.44	
Mn	0.01	0.01	0.01	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.02	**0.02**	0.02	
Ca	0.01	0.01	0.00	0.00	**0.01**	0.01	0.00	0.00	0.01	0.01	0.01	0.01	**0.01**	0.01	
Na	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01	0.00	0.00	0.00	**0.00**	0.00	
K	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	
Total	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	
X_{Mg}	0.55	0.56	0.55	0.55	**0.55**	0.56	0.61	0.61	0.60	0.45	0.45	0.45	**0.44**	0.45	
Al^{tot}	0.26	0.22	0.34	0.13	**0.13**	0.15	0.12	0.10	0.10	0.13	0.15	0.12	**0.14**	0.15	

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

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Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	**Epembe**
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**
Sample	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	**690-2-00**	690-2-00	230-E-98	230-E-98	**230-E-98**
Profile	opx 4	opx 4	opx 4	opx 1	opx 1	opx 1	opx 3	opx 3	opx 3	**opx 3**	opx 3	opx 9	opx 14	**opx6**
Point	15	23	30	1	18	35	1	4	6	**13**	14			
Texture	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	**Opx3 in Opx-Pl c.**	Opx3 in Opx-Pl c.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	**Crd3 in Crd-Opx s.**
Position	core	→	rim	rim	core	rim	rim	←	core	→	rim	worm-like	worm-like	**worm-like**
SiO_2	48.43	48.60	48.02	48.94	48.99	48.45	48.87	48.73	48.69	**48.19**	48.19	48.02	49.33	**49.52**
TiO_2	0.18	0.13	0.12	0.07	0.00	0.10	0.09	0.11	0.07	**0.37**	0.06	0.08	0.08	**0.05**
Al_2O_3	3.23	3.01	2.74	2.57	3.50	3.00	2.51	2.69	2.63	**2.99**	3.16	5.08	3.63	**3.89**
Cr_2O_3	0.06	0.00	0.04	0.04	0.02	0.01	0.04	0.03	0.06	**0.04**	0.01	0.02	0.02	**0.08**
Fe_2O_3	1.16	1.21	2.67	1.00	1.22	1.84	0.92	2.03	1.56	**1.81**	2.25	3.17	1.86	**0.00**
FeO	31.76	31.28	30.43	30.76	31.27	30.17	31.24	30.79	30.98	**31.05**	30.92	24.26	27.75	**28.64**
MnO	0.50	0.46	0.49	0.38	0.39	0.42	0.40	0.46	0.41	**0.48**	0.34	0.21	0.28	**0.09**
MgO	14.23	14.61	14.80	15.13	14.86	15.15	14.91	15.02	14.85	**14.47**	14.58	18.26	17.32	**16.62**
CaO	0.28	0.27	0.18	0.24	0.22	0.21	0.22	0.23	0.22	**0.24**	0.23	0.04	0.11	**0.20**
Na_2O	0.02	0.02	0.00	0.03	0.03	0.03	0.00	0.01	0.03	**0.07**	0.03	0.09	0.00	**0.02**
K_2O	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.02	**0.02**	0.01	0.05	0.01	**0.01**
Total	99.85	99.59	99.50	99.17	100.49	99.38	99.20	100.10	99.52	**99.74**	99.78	99.28	100.38	**99.11**
Formula (O=6)														
T														
Si	1.90	1.91	1.89	1.92	1.90	1.90	1.92	1.91	1.91	**1.89**	1.89	1.84	1.89	**1.92**
Al^{IV}	0.10	0.09	0.11	0.08	0.10	0.10	0.08	0.09	0.09	**0.11**	0.11	0.16	0.11	**0.08**
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
M1														
Al^{VI}	0.05	0.05	0.02	0.04	0.06	0.04	0.04	0.03	0.04	**0.03**	0.04	0.07	0.05	**0.09**
Ti	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.01**	0.00	0.00	0.00	**0.00**
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**
Fe^{3+}	0.03	0.04	0.08	0.03	0.04	0.05	0.03	0.06	0.05	**0.05**	0.07	0.09	0.05	**0.00**
Fe^{2+}	0.50	0.50	0.48	0.49	0.49	0.48	0.50	0.49	0.49	**0.49**	0.48	0.36	0.42	**0.44**
Mg	0.40	0.41	0.42	0.43	0.41	0.43	0.43	0.42	0.42	**0.41**	0.41	0.48	0.47	**0.46**
M2														
Fe^{2+}	0.54	0.53	0.52	0.52	0.53	0.51	0.53	0.52	0.53	**0.53**	0.53	0.42	0.47	**0.48**
Mg	0.43	0.44	0.45	0.46	0.45	0.46	0.45	0.45	0.45	**0.44**	0.45	0.56	0.52	**0.50**
Mn	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.01	**0.02**	0.01	0.01	0.01	**0.01**
Ca	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	0.01	0.00	0.00	**0.00**
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.01**	0.00	0.01	0.00	**0.00**
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	**4.00**
X_{Mg}	0.44	0.45	0.46	0.47	0.46	0.47	0.46	0.47	0.46	**0.45**	0.46	0.57	0.53	**0.51**
Al^{tot}	0.15	0.14	0.13	0.12	0.16	0.14	0.12	0.12	0.12	**0.14**	0.15	0.23	0.16	**0.18**

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt gneiss	Grt gneiss	Grt-Sil gneiss	Grt-Sil gneiss	**Grt-Sil gneiss**	Grt-Sil gneiss	Grt-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	230-E-98	230-E-98	230-F-98	230-F-98	**230-F-98**	230-F-98	230-F-98	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99
Profile	opx 4	opx 11	opx 1	opx 1	**opx 1**	opx 2	opx 2	opx 21	opx 21	opx 21	opx 21	opx 21	opx 21	opx 21	opx 21
Point			3	5	**6**	1	2	1	2	5	12	13	22	29	32
Texture	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	**Crd3 in Crd-Opx s.**	Crd3 in Crd-Opx s.	Crd3 in Crd-Opx s.	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix
Position	block-like	block-like	worm-like	worm-like	**worm-like**	block-like	block-like	rim	←	←	←	←	core	→	→
SiO_2	49.86	50.38	49.35	48.75	**49.08**	49.54	50.12	50.67	48.64	47.48	47.33	47.19	47.25	47.45	48.18
TiO_2	0.10	0.09	0.10	0.08	**0.11**	0.06	0.09	0.11	0.15	0.17	0.17	0.21	0.21	0.22	0.16
Al_2O_3	3.72	2.66	3.56	4.15	**4.14**	3.08	3.26	6.48	9.30	11.12	11.46	11.30	11.86	10.89	10.48
Cr_2O_3	0.05	0.00	0.03	0.14	**0.08**	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Fe_2O_3	0.98	0.92	1.17	0.90	**0.72**	0.65	0.87	1.93	2.27	2.63	2.31	2.73	2.80	2.34	2.78
FeO	27.94	28.13	28.49	28.26	**28.82**	29.52	27.93	18.72	17.95	17.02	17.23	16.84	16.79	17.18	17.45
MnO	0.27	0.29	0.24	0.25	**0.31**	0.32	0.25	0.13	0.11	0.16	0.09	0.15	0.14	0.24	0.09
MgO	17.53	17.71	16.89	16.60	**16.57**	16.44	17.74	23.41	22.53	22.21	21.97	21.94	22.18	22.12	22.48
CaO	0.14	0.15	0.06	0.09	**0.08**	0.11	0.08	0.08	0.05	0.09	0.07	0.12	0.10	0.06	0.10
Na_2O	0.02	0.03	0.04	0.03	**0.00**	0.00	0.02	0.00	0.00	0.01	0.03	0.08	0.02	0.00	0.00
K_2O	0.01	0.01	0.03	0.01	**0.02**	0.00	0.03	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.01
Total	100.60	100.36	99.95	99.26	**99.92**	99.75	100.39	101.55	100.99	100.90	100.69	100.57	101.36	100.50	101.72
Formula (O=6)															
T															
Si	1.90	1.93	1.90	1.89	**1.89**	1.92	1.91	1.83	1.77	1.72	1.72	1.72	1.70	1.73	1.74
Al^{IV}	0.10	0.07	0.10	0.11	**0.11**	0.08	0.09	0.17	0.23	0.28	0.28	0.28	0.30	0.27	0.26
Fe^{3+}	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.07	0.05	0.06	0.08	**0.08**	0.06	0.06	0.11	0.16	0.20	0.21	0.20	0.21	0.20	0.18
Ti	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00
Cr	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.03	0.03	0.03	0.03	**0.02**	0.02	0.03	0.05	0.06	0.07	0.06	0.07	0.08	0.06	0.08
Fe^{2+}	0.43	0.44	0.44	0.43	**0.44**	0.46	0.43	0.26	0.24	0.22	0.22	0.22	0.21	0.22	0.22
Mg	0.48	0.49	0.46	0.45	**0.45**	0.46	0.49	0.58	0.53	0.51	0.50	0.50	0.50	0.51	0.52
M2															
Fe^{2+}	0.46	0.46	0.48	0.48	**0.49**	0.49	0.46	0.31	0.31	0.30	0.30	0.30	0.30	0.30	0.30
Mg	0.52	0.52	0.51	0.50	**0.50**	0.49	0.52	0.69	0.69	0.69	0.69	0.69	0.70	0.69	0.69
Mn	0.01	0.01	0.01	0.01	**0.01**	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Ca	0.01	0.01	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
K	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.53	0.53	0.51	0.51	**0.51**	0.50	0.53	0.69	0.69	0.70	0.69	0.70	0.70	0.70	0.70
Al^{tot}	0.17	0.12	0.16	0.19	**0.19**	0.14	0.15	0.28	0.40	0.48	0.49	0.48	0.50	0.47	0.44

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99
Profile	opx 21	opx 21	opx 20	opx 20	opx 20	opx 6	opx 6	opx 6	opx 7	opx 7	opx 7	opx 7	opx 7	opx 7	opx 7
Point	33	34	1	7	10	1	25	40	1	5	7	8	12	14	15
Texture	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2b in Spr-Opx i.	Opx2b in Spr-Opx i.	Opx2b in Spr-Opx i.	Opx2b in Spr-Opx i.	Opx2b in Spr-Opx i.	Opx2b in Spr-Opx i.	Opx2b in Spr-Opx i.
Position	→	rim	rim	core	rim	rim	core	rim	rim	←	←	core	→	→	rim
SiO_2	48.39	48.84	47.87	47.52	48.21	47.77	47.91	49.18	49.46	48.87	48.80	48.53	49.25	49.23	48.67
TiO_2	0.14	0.13	0.17	0.20	0.20	0.13	0.16	0.15	0.15	0.15	0.14	0.17	0.18	0.15	0.18
Al_2O_3	10.17	9.38	10.31	11.68	11.45	9.33	11.30	9.13	8.57	9.49	9.62	9.41	9.27	9.12	9.34
Cr_2O_3	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.06	0.04	0.01	0.00	0.01	0.02	0.03	0.02
Fe_2O_3	2.10	2.86	2.05	2.39	2.26	2.31	1.91	1.91	1.13	2.04	2.52	1.34	1.93	2.08	1.88
FeO	17.59	17.27	17.29	17.15	17.51	17.09	17.36	17.80	16.83	16.24	15.55	16.71	16.71	16.45	16.62
MnO	0.09	0.10	0.25	0.14	0.16	0.08	0.13	0.15	0.13	0.14	0.06	0.17	0.09	0.11	0.03
MgO	22.56	23.01	22.31	22.16	22.48	22.40	22.29	22.88	23.67	23.42	23.50	22.89	23.54	23.63	23.14
CaO	0.07	0.10	0.05	0.06	0.07	0.06	0.08	0.10	0.08	0.12	0.12	0.20	0.06	0.10	0.10
Na_2O	0.00	0.00	0.00	0.03	0.00	0.01	0.02	0.02	0.00	0.06	0.18	0.05	0.05	0.04	0.08
K_2O	0.02	0.02	0.01	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.02	0.07	0.02	0.00	0.00
Total	101.12	101.71	100.31	101.32	102.33	99.20	101.18	101.41	100.06	100.53	100.50	99.54	101.11	100.95	100.04
Formula (O=6)															
T															
Si	1.75	1.76	1.75	1.71	1.72	1.76	1.73	1.78	1.80	1.77	1.76	1.78	1.77	1.77	1.77
Al^{IV}	0.25	0.24	0.25	0.29	0.28	0.24	0.27	0.22	0.20	0.23	0.24	0.22	0.23	0.23	0.23
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.18	0.16	0.19	0.21	0.21	0.17	0.21	0.16	0.16	0.17	0.17	0.18	0.17	0.16	0.17
Ti	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.06	0.08	0.06	0.06	0.06	0.06	0.05	0.05	0.03	0.06	0.07	0.04	0.05	0.06	0.05
Fe^{2+}	0.23	0.23	0.23	0.22	0.22	0.23	0.22	0.24	0.23	0.22	0.20	0.23	0.22	0.22	0.22
Mg	0.52	0.54	0.52	0.50	0.51	0.54	0.51	0.54	0.57	0.55	0.55	0.55	0.55	0.56	0.55
M2															
Fe^{2+}	0.30	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.28	0.28	0.27	0.28	0.28	0.28	0.28
Mg	0.69	0.70	0.69	0.69	0.69	0.70	0.69	0.69	0.71	0.71	0.71	0.70	0.71	0.71	0.71
Mn	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.71	0.72	0.73	0.71	0.72	0.72	0.71
Al^{tot}	0.43	0.40	0.44	0.50	0.48	0.41	0.48	0.39	0.37	0.40	0.41	0.41	0.39	0.39	0.40

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99
Profile	opx 14	opx 14	opx 14	opx 14	opx 14	opx 1	opx 1	opx 1	opx 1	opx 17	opx 17	opx 17	opx 8	opx 9	opx 11
Point	2	7	10	18	23	1	2	3	5	1	2	3			
Texture	Opx2b in Opx-Grt i.	Opx2b in Opx-Grt i.	Opx2b in Opx-Grt i.	Opx2b in Opx-Grt i.	Opx2b in Opx-Grt i.	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx3 in Crd-Opx-Spr s.	Opx3 in Crd-Opx-Spr s.	Opx3 in Crd-Opx-Spr s.
Position	rim	←	core	→	rim cont. Grt2	rim	core	core	rim	rim	core	rim			
SiO_2	46.61	46.56	46.55	47.97	47.56	49.04	48.96	48.93	49.46	49.38	49.91	48.89	47.42	47.48	49.04
TiO_2	0.16	0.16	0.14	0.13	0.19	0.11	0.17	0.18	0.13	0.12	0.09	0.15	0.15	0.15	0.12
Al_2O_3	7.15	8.58	8.71	7.75	7.25	6.64	7.46	7.58	6.90	7.59	7.06	8.37	7.92	7.12	7.06
Cr_2O_3	0.00	0.03	0.00	0.02	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.01	0.00	0.00	0.04
Fe_2O_3	6.69	5.92	5.62	4.60	5.18	3.31	3.12	3.41	3.68	2.06	2.09	2.91	2.34	2.67	1.63
FeO	15.41	15.41	16.29	17.30	17.24	16.10	16.74	16.81	16.09	18.70	18.88	18.36	17.10	17.06	18.37
MnO	0.16	0.07	0.13	0.14	0.16	0.14	0.11	0.06	0.15	0.12	0.13	0.22	0.07	0.18	0.21
MgO	22.44	22.50	21.91	22.27	22.09	23.73	23.45	23.33	24.06	22.54	22.66	22.36	22.18	22.15	22.46
CaO	0.09	0.09	0.07	0.10	0.09	0.09	0.04	0.07	0.10	0.08	0.11	0.11	0.11	0.11	0.07
Na_2O	0.04	0.03	0.05	0.04	0.04	0.02	0.00	0.03	0.00	0.01	0.05	0.00	0.00	0.01	0.01
K_2O	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.02	0.01	0.00
Total	98.75	99.34	99.47	100.35	99.80	99.18	100.05	100.40	100.60	100.60	100.98	101.39	97.29	96.94	99.01
Formula (O=6)															
T															
Si	1.74	1.73	1.73	1.77	1.76	1.81	1.79	1.79	1.80	1.81	1.82	1.78	1.79	1.80	1.82
Al^{IV}	0.26	0.27	0.27	0.23	0.24	0.19	0.21	0.21	0.20	0.19	0.18	0.22	0.21	0.20	0.18
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.06	0.10	0.11	0.10	0.08	0.10	0.11	0.11	0.09	0.13	0.12	0.14	0.14	0.12	0.13
Ti	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.19	0.17	0.16	0.13	0.14	0.09	0.09	0.09	0.10	0.06	0.06	0.08	0.07	0.08	0.05
Fe^{2+}	0.21	0.20	0.21	0.23	0.23	0.22	0.23	0.23	0.22	0.26	0.26	0.25	0.24	0.24	0.26
Mg	0.54	0.53	0.51	0.53	0.53	0.59	0.57	0.56	0.58	0.55	0.56	0.53	0.55	0.56	0.56
M2															
Fe^{2+}	0.27	0.28	0.29	0.30	0.30	0.27	0.28	0.29	0.27	0.32	0.31	0.31	0.30	0.30	0.31
Mg	0.71	0.72	0.70	0.69	0.69	0.72	0.71	0.71	0.72	0.68	0.67	0.68	0.69	0.69	0.68
Mn	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.72	0.72	0.71	0.70	0.70	0.72	0.71	0.71	0.73	0.68	0.68	0.68	0.70	0.70	0.69
Al^{tot}	0.32	0.37	0.38	0.34	0.32	0.29	0.32	0.33	0.30	0.33	0.30	0.36	0.35	0.32	0.31

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99
Profile	opx23	opx23	opx23	opx23	opx23	opx23	opx23	opx23	opx23	opx23	opx25	opx25	opx26	opx26	opx24
Point	1	2	3	9	10	13	15	17	18	20	2	3	1	2	14
Texture	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Opx-Pl c.	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx s.
Position	rim	←	←	←	core	→	→	→	→	rim					
SiO_2	49.01	48.91	49.44	49.66	49.16	49.09	49.26	49.45	49.47	50.30	48.62	48.24	50.98	50.88	50.83
TiO_2	0.09	0.10	0.10	0.15	0.12	0.12	0.16	0.11	0.11	0.13	0.06	0.08	0.09	0.12	0.09
Al_2O_3	7.25	7.16	7.13	7.49	7.80	7.70	7.89	7.63	7.23	6.59	4.27	5.06	5.54	5.34	3.50
Cr_2O_3	0.03	0.00	0.02	0.04	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Fe_2O_3	1.71	1.07	1.48	1.34	2.06	2.59	1.91	1.95	1.73	1.39	5.32	5.29	1.41	0.54	0.49
FeO	19.47	19.63	19.70	18.70	18.16	17.86	18.15	18.49	18.62	18.83	17.86	17.91	19.58	19.64	23.57
MnO	0.08	0.18	0.22	0.14	0.09	0.12	0.14	0.17	0.11	0.15	0.22	0.14	0.16	0.07	0.18
MgO	21.83	21.67	21.95	22.74	22.75	22.81	22.69	22.70	22.65	23.08	22.37	22.09	22.98	23.03	20.74
CaO	0.10	0.09	0.12	0.10	0.07	0.12	0.07	0.07	0.12	0.10	0.08	0.08	0.09	0.14	0.07
Na_2O	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.00	0.03	0.05	0.05	0.00	0.01
K_2O	0.01	0.00	0.00	0.01	0.03	0.02	0.00	0.00	0.02	0.00	0.00	0.05	0.01	0.03	0.00
Total	99.60	98.81	100.16	100.37	100.25	100.45	100.31	100.58	100.06	100.57	98.82	98.99	100.88	99.80	99.48
Formula (O=6)															
T															
Si	1.82	1.82	1.82	1.82	1.80	1.80	1.80	1.81	1.82	1.84	1.83	1.81	1.86	1.87	1.91
Al^{IV}	0.18	0.18	0.18	0.18	0.20	0.20	0.20	0.19	0.18	0.16	0.17	0.19	0.14	0.13	0.09
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.13	0.14	0.13	0.14	0.14	0.13	0.14	0.13	0.13	0.12	0.02	0.04	0.10	0.10	0.07
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.05	0.03	0.04	0.04	0.06	0.07	0.05	0.05	0.05	0.04	0.15	0.15	0.04	0.01	0.01
Fe^{2+}	0.27	0.28	0.28	0.26	0.25	0.24	0.25	0.25	0.26	0.26	0.26	0.25	0.28	0.28	0.36
Mg	0.54	0.55	0.55	0.56	0.55	0.55	0.55	0.56	0.56	0.58	0.57	0.56	0.58	0.59	0.56
M2															
Fe^{2+}	0.33	0.33	0.33	0.31	0.31	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.39
Mg	0.66	0.66	0.66	0.68	0.69	0.69	0.68	0.68	0.68	0.68	0.68	0.68	0.67	0.67	0.61
Mn	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.01
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.67	0.66	0.67	0.68	0.69	0.69	0.69	0.69	0.68	0.69	0.69	0.69	0.68	0.68	0.61
Al^{tot}	0.32	0.31	0.31	0.32	0.34	0.33	0.34	0.33	0.31	0.28	0.19	0.22	0.24	0.23	0.16

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	**Opx-Sil gneiss**	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-4-99	458-4-99	458-4-99	**458-4-99**	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00
Profile	opx24	opx24	opx24	**opx24**	opx 2	opx 2	opx 2	opx 2	opx 2	opx 2	opx 2	opx 2	opx 2	opx 2	opx 1
Point	15	16	21	**24**	1	2	7	8	13	26	28	33	36	40	1
Texture	Opx3 in Crd-Opx s.	Opx3 in Crd-Opx s.	Opx3 in Crd-Opx s.	**Opx3 in Crd-Opx s.**	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2b in Grt2
Position					rim	←	←	←	←	core	→	→	→	rim	rim
SiO_2	50.48	51.04	50.28	**50.49**	47.11	47.82	48.19	48.03	47.69	48.32	47.92	47.86	48.09	48.31	49.80
TiO_2	0.05	0.08	0.05	**0.06**	0.11	0.17	0.14	0.15	0.19	0.16	0.13	0.16	0.16	0.14	0.14
Al_2O_3	3.47	3.92	4.32	**5.29**	9.24	9.42	9.87	10.16	10.30	10.11	10.43	9.88	9.77	9.02	5.93
Cr_2O_3	0.00	0.00	0.00	**0.02**	0.02	0.02	0.01	0.00	0.00	0.02	0.00	0.00	0.01	0.01	0.00
Fe_2O_3	1.60	1.10	0.69	**0.00**	2.30	1.70	1.71	0.92	1.19	0.59	1.39	1.18	0.99	1.01	1.34
FeO	22.93	23.19	22.84	**23.61**	19.24	19.14	18.93	19.65	19.32	19.10	18.61	19.14	19.43	20.27	22.01
MnO	0.16	0.16	0.18	**0.20**	0.10	0.10	0.13	0.23	0.16	0.16	0.12	0.14	0.09	0.20	0.16
MgO	20.75	21.05	20.62	**20.04**	20.76	21.31	21.62	21.03	21.05	21.61	21.66	21.33	21.33	20.93	21.03
CaO	0.07	0.07	0.12	**0.07**	0.06	0.08	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.08	0.01
Na_2O	0.05	0.03	0.05	**0.04**	0.00	0.00	0.01	0.02	0.02	0.01	0.00	0.00	0.01	0.00	0.00
K_2O	0.00	0.02	0.03	**0.00**	0.01	0.02	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Total	99.56	100.66	99.18	**99.82**	98.94	99.77	100.70	100.25	100.01	100.14	100.32	99.74	99.93	99.97	100.41
Formula (O=6)															
T															
Si	1.90	1.90	1.89	**1.89**	1.76	1.77	1.76	1.76	1.76	1.77	1.75	1.76	1.77	1.79	1.85
Al^{IV}	0.10	0.10	0.11	**0.11**	0.24	0.23	0.24	0.24	0.24	0.23	0.25	0.24	0.23	0.21	0.15
Fe^{3+}	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.05	0.07	0.09	**0.12**	0.17	0.18	0.19	0.20	0.20	0.21	0.20	0.19	0.19	0.18	0.11
Ti	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.05	0.03	0.02	**0.00**	0.06	0.05	0.05	0.03	0.03	0.02	0.04	0.03	0.03	0.03	0.04
Fe^{2+}	0.34	0.34	0.34	**0.35**	0.26	0.26	0.25	0.26	0.26	0.26	0.25	0.26	0.26	0.28	0.32
Mg	0.55	0.55	0.55	**0.53**	0.50	0.51	0.51	0.50	0.50	0.52	0.51	0.51	0.51	0.51	0.54
M2															
Fe^{2+}	0.38	0.38	0.38	**0.39**	0.34	0.33	0.33	0.34	0.34	0.33	0.32	0.33	0.34	0.35	0.37
Mg	0.61	0.61	0.61	**0.59**	0.65	0.66	0.67	0.65	0.65	0.66	0.67	0.66	0.66	0.64	0.63
Mn	0.01	0.01	0.01	**0.01**	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01
Ca	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	**3.99**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.62	0.62	0.62	**0.60**	0.66	0.66	0.67	0.66	0.66	0.67	0.67	0.67	0.66	0.65	0.63
Al^{tot}	0.15	0.17	0.19	**0.23**	0.41	0.41	0.42	0.44	0.45	0.44	0.45	0.43	0.42	0.39	0.26

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	**Opx-Sil gneiss**	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	458-5-00	**458-5-00**	458-5-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00
Profile	opx 1	opx 1	opx 1	opx 1	opx 4	opx 4	**opx 3**	opx 3	opx 3	opx 3	opx 3	opx 3	opx 3	opx 1
Point	5	13	16	18	3	5	**1**	2	1	2	3	4	5	1
Texture	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx3 in Crd-Opx s.	Opx3 in Crd-Opx s.	**Opx3 in Crd-Opx s.**	Opx3 in Crd-Opx s.	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx2b in Grt2	Opx2 matrix
Position	←	core	→	rim					rim	←	core	→	rim	rim
SiO_2	49.03	48.61	49.42	49.75	50.75	51.04	**50.66**	49.98	48.88	49.49	48.76	49.53	49.62	47.80
TiO_2	0.12	0.20	0.11	0.11	0.05	0.08	**0.05**	0.08	0.15	0.15	0.14	0.14	0.14	0.15
Al_2O_3	6.37	7.20	6.54	5.30	3.52	3.41	**4.09**	3.63	6.68	6.98	6.97	6.76	6.43	9.01
Cr_2O_3	0.02	0.01	0.01	0.01	0.08	0.02	**0.05**	0.02	0.00	0.05	0.01	0.00	0.01	0.07
Fe_2O_3	2.76	2.08	1.77	1.86	0.42	0.28	**0.17**	1.27	2.53	1.69	2.20	1.65	2.62	1.90
FeO	21.15	22.34	22.10	20.72	23.85	24.27	**24.47**	23.65	19.25	20.12	19.70	19.97	18.20	19.30
MnO	0.13	0.20	0.10	0.16	0.26	0.20	**0.31**	0.26	0.17	0.19	0.18	0.21	0.12	0.17
MgO	20.91	19.99	20.73	21.69	20.35	20.38	**19.90**	20.00	21.79	21.72	21.49	21.90	22.97	20.98
CaO	0.06	0.05	0.03	0.03	0.07	0.10	**0.09**	0.11	0.05	0.03	0.08	0.05	0.08	0.06
Na_2O	0.02	0.01	0.00	0.00	0.05	0.04	**0.05**	0.03	0.05	0.05	0.03	0.02	0.02	0.08
K_2O	0.00	0.00	0.00	0.00	0.02	0.04	**0.04**	0.04	0.01	0.00	0.00	0.00	0.00	0.00
Total	100.58	100.69	100.79	99.62	99.43	99.84	**99.89**	99.06	99.56	100.48	99.55	100.22	100.19	99.52
Formula (O=6)														
T														
Si	1.82	1.81	1.83	1.85	1.91	1.92	**1.91**	1.90	1.82	1.82	1.81	1.83	1.82	1.77
Al^{IV}	0.18	0.19	0.17	0.15	0.09	0.08	**0.09**	0.10	0.18	0.18	0.19	0.17	0.18	0.23
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1														
Al^{VI}	0.10	0.12	0.12	0.09	0.07	0.07	**0.09**	0.06	0.11	0.12	0.12	0.12	0.10	0.17
Ti	0.00	0.01	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.08	0.06	0.05	0.05	0.01	0.01	**0.00**	0.04	0.07	0.05	0.06	0.05	0.07	0.05
Fe^{2+}	0.30	0.31	0.31	0.30	0.36	0.37	**0.37**	0.36	0.27	0.28	0.28	0.28	0.25	0.26
Mg	0.52	0.50	0.52	0.56	0.55	0.55	**0.54**	0.54	0.55	0.54	0.54	0.55	0.57	0.51
M2														
Fe^{2+}	0.36	0.38	0.37	0.35	0.39	0.40	**0.40**	0.39	0.33	0.34	0.34	0.34	0.31	0.34
Mg	0.63	0.61	0.62	0.65	0.59	0.59	**0.58**	0.59	0.66	0.65	0.65	0.66	0.69	0.65
Mn	0.00	0.01	0.00	0.00	0.01	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.00	0.01
Ca	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.01
K	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.64	0.61	0.63	0.65	0.60	0.60	**0.59**	0.60	0.67	0.66	0.66	0.66	0.69	0.66
Al^{tot}	0.28	0.32	0.29	0.23	0.16	0.15	**0.18**	0.16	0.29	0.30	0.31	0.29	0.28	0.39

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00
Profile	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 2	opx 2	opx 2	opx 2	opx 2	opx 2
Point	2	6	8	11	16	17	19	23	25	1	2	6	15	18	19
Texture	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix
Position	←	←	←	core	→	→	→	→	core	rim	←	←	←	core	→
SiO_2	47.90	47.52	47.70	47.58	47.45	47.56	47.78	47.66	47.58	47.99	48.26	48.74	47.39	46.77	47.21
TiO_2	0.16	0.13	0.15	0.22	0.16	0.15	0.17	0.13	0.15	0.17	0.13	0.12	0.17	0.12	0.15
Al_2O_3	9.13	9.65	9.80	10.31	10.16	10.21	10.54	10.41	10.39	8.33	8.82	9.03	10.54	10.89	10.47
Cr_2O_3	0.00	0.02	0.00	0.00	0.06	0.02	0.06	0.02	0.03	0.04	0.00	0.00	0.03	0.01	0.00
Fe_2O_3	0.74	1.84	1.71	1.85	1.77	1.92	1.16	1.94	1.56	0.85	0.92	1.00	1.49	2.00	1.65
FeO	19.95	18.95	18.87	18.32	18.41	18.29	19.10	18.10	18.59	20.68	20.38	19.73	19.03	18.26	18.67
MnO	0.09	0.17	0.08	0.14	0.12	0.12	0.11	0.10	0.10	0.12	0.15	0.11	0.11	0.09	0.11
MgO	20.77	21.12	21.36	21.54	21.42	21.56	21.23	21.66	21.29	20.47	20.73	21.46	21.07	21.00	21.10
CaO	0.08	0.08	0.09	0.09	0.08	0.08	0.09	0.07	0.09	0.06	0.09	0.10	0.09	0.06	0.09
Na_2O	0.05	0.01	0.01	0.02	0.01	0.01	0.03	0.04	0.06	0.03	0.05	0.03	0.00	0.04	0.02
K_2O	0.00	0.00	0.02	0.02	0.00	0.02	0.00	0.01	0.02	0.00	0.02	0.01	0.00	0.00	0.00
Total	98.87	99.50	99.79	100.11	99.65	99.95	100.27	100.15	99.86	98.75	99.55	100.33	99.91	99.25	99.46
Formula (O=6)															
T															
Si	1.79	1.76	1.76	1.75	1.75	1.75	1.75	1.75	1.75	1.80	1.79	1.79	1.75	1.73	1.75
Al^{IV}	0.21	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.20	0.21	0.21	0.25	0.27	0.25
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1															
Al^{VI}	0.19	0.18	0.19	0.19	0.19	0.19	0.21	0.20	0.20	0.17	0.18	0.18	0.20	0.21	0.20
Ti	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.02	0.05	0.05	0.05	0.05	0.05	0.03	0.05	0.04	0.02	0.03	0.03	0.04	0.06	0.05
Fe^{2+}	0.28	0.26	0.25	0.24	0.25	0.24	0.25	0.24	0.25	0.29	0.28	0.27	0.25	0.24	0.25
Mg	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.51	0.50	0.51	0.51	0.52	0.50	0.49	0.50
M2															
Fe^{2+}	0.35	0.33	0.33	0.32	0.32	0.32	0.33	0.32	0.32	0.36	0.35	0.34	0.33	0.33	0.33
Mg	0.64	0.66	0.66	0.67	0.67	0.67	0.66	0.67	0.66	0.63	0.64	0.65	0.66	0.67	0.66
Mn	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.65	0.67	0.67	0.68	0.67	0.68	0.66	0.68	0.67	0.64	0.64	0.66	0.66	0.67	0.67
Al^{tot}	0.40	0.42	0.43	0.45	0.44	0.44	0.46	0.45	0.45	0.37	0.39	0.39	0.46	0.48	0.46

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

Rock unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	**Opx-Sil gneiss**	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	**458-9-00**	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Profile	opx 2	opx 2	opx 2	opx 2	opx 4	opx 5	opx 5	opx 5	**opx5**	opx 9	opx 9	opx 9	opx 10	opx 10
Point	20	25	27	30	11	1	2	3	**4**	1	6	8	1	2
Texture	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx2 matrix	Opx3 in Crd-Opx s.	Opx3 in Crd-Opx s.	Opx3 in Crd-Opx s.	Opx3 in Crd-Opx s.	**Opx3 in Crd-Opx s.**	Opx1 incl. Pl2	Opx1 incl. Pl2	Opx1 incl. Pl2	Opx1 incl. Pl2	Opx1 incl. Pl2
Position	→	→	→	rim						rim	core	rim	rim	←
SiO_2	47.02	47.12	47.26	46.86	50.96	51.29	51.17	51.25	**50.54**	47.65	47.57	47.91	48.13	47.46
TiO_2	0.15	0.19	0.21	0.21	0.09	0.09	0.06	0.09	**0.03**	0.18	0.21	0.22	0.09	0.15
Al_2O_3	10.62	10.78	10.50	10.74	3.78	4.88	4.60	4.02	**4.71**	9.80	10.13	9.71	8.67	9.48
Cr_2O_3	0.03	0.02	0.02	0.05	0.05	0.00	0.00	0.00	**0.00**	0.00	0.02	0.00	0.06	0.03
Fe_2O_3	2.77	1.73	0.83	2.24	0.32	0.97	0.19	0.27	**0.00**	1.91	2.28	1.18	2.38	2.62
FeO	17.63	18.37	18.94	18.53	22.49	20.99	21.79	22.22	**22.83**	17.60	17.58	18.06	18.88	18.44
MnO	0.12	0.14	0.09	0.13	0.16	0.11	0.11	0.13	**0.08**	0.15	0.16	0.15	0.19	0.19
MgO	21.39	21.16	21.01	20.99	21.47	22.47	22.01	21.80	**20.82**	21.92	22.02	21.86	21.50	21.29
CaO	0.07	0.07	0.08	0.06	0.06	0.09	0.08	0.08	**0.08**	0.07	0.06	0.10	0.14	0.07
Na_2O	0.08	0.04	0.02	0.01	0.00	0.03	0.00	0.01	**0.01**	0.05	0.00	0.04	0.01	0.04
K_2O	0.00	0.00	0.00	0.00	0.03	0.02	0.03	0.02	**0.02**	0.00	0.00	0.00	0.04	0.00
Total	99.87	99.62	98.95	99.83	99.40	100.94	100.04	99.89	**99.12**	99.32	100.03	99.22	100.07	99.77
Formula (O=6)														
T														
Si	1.73	1.74	1.75	1.73	1.91	1.88	1.90	1.91	**1.90**	1.76	1.74	1.77	1.78	1.75
Al^{IV}	0.27	0.26	0.25	0.27	0.09	0.12	0.10	0.09	**0.10**	0.24	0.26	0.23	0.22	0.25
Fe^{3+}	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
M1														
Al^{VI}	0.19	0.21	0.21	0.20	0.08	0.09	0.10	0.08	**0.11**	0.18	0.18	0.19	0.15	0.17
Ti	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	**0.00**	0.00	0.01	0.01	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.08	0.05	0.02	0.06	0.01	0.03	0.01	0.01	**0.00**	0.05	0.06	0.03	0.07	0.07
Fe^{2+}	0.23	0.24	0.25	0.24	0.34	0.30	0.32	0.33	**0.34**	0.24	0.23	0.24	0.26	0.25
Mg	0.50	0.50	0.50	0.49	0.57	0.58	0.58	0.58	**0.55**	0.52	0.52	0.53	0.52	0.51
M2														
Fe^{2+}	0.31	0.32	0.33	0.33	0.37	0.34	0.35	0.36	**0.38**	0.31	0.31	0.31	0.33	0.32
Mg	0.68	0.67	0.66	0.66	0.62	0.65	0.64	0.63	**0.61**	0.68	0.69	0.68	0.66	0.66
Mn	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01	0.01
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01	0.00
Na	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00
X_{Mg}	0.68	0.67	0.66	0.67	0.63	0.66	0.64	0.64	**0.62**	0.69	0.69	0.68	0.67	0.67
Al^{tot}	0.46	0.47	0.46	0.47	0.17	0.21	0.20	0.18	**0.21**	0.43	0.44	0.42	0.38	0.41

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

				*											*
Rock unit	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**
Rock type	Opx-Grt	Opx-Grt	Opx-Grt	**Opx-Grt**	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	Opx-Grt	**Opx-Grt**
	rock	rock	rock	**rock**	rock	rock	rock	rock	rock	rock	rock	rock	rock	rock	**rock**
Sample	700-1-00	700-1-00	700-1-00	**700-1-00**	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	**700-1-00**
Profile	opx 10	opx 10	opx 10	**opx 10**	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	opx 1	**opx 1**
Point	3	4	5	**8**	1	4	6	10	24	33	42	52	55	56	**59**
Texture	Opx1	Opx1	Opx1	**Opx1**	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	**Opx2**
	incl. Pl2	incl. Pl2	incl. Pl2	**incl. Pl2**	matrix	matrix	matrix	matrix	matrix	matrix	matrix	matrix	matrix	matrix	**matrix**
Position	←	core	→	**rim**	rim	←	←	←	←	core	→	→	→	→	→
SiO_2	47.71	47.70	47.71	**48.25**	48.57	48.10	47.60	47.32	47.78	47.82	48.40	47.84	46.85	47.38	**47.62**
TiO_2	0.16	0.15	0.11	**0.13**	0.18	0.14	0.15	0.13	0.20	0.16	0.17	0.14	0.26	0.24	**0.18**
Al_2O_3	9.93	10.13	9.70	**8.98**	8.10	10.80	10.84	10.59	10.26	10.61	10.51	10.81	11.16	11.28	**10.18**
Cr_2O_3	0.03	0.05	0.06	**0.03**	0.04	0.00	0.01	0.00	0.00	0.07	0.01	0.00	0.05	0.02	**0.05**
Fe_2O_3	2.42	0.61	2.25	**1.34**	1.18	0.73	1.83	2.09	2.02	0.93	0.77	1.39	2.35	1.91	**1.01**
FeO	18.40	19.49	18.36	**19.49**	18.74	17.57	16.67	16.29	16.85	17.24	17.80	17.00	16.61	16.67	**17.89**
MnO	0.20	0.18	0.14	**0.14**	0.16	0.11	0.13	0.10	0.15	0.13	0.16	0.07	0.14	0.06	**0.11**
MgO	21.60	20.88	21.64	**21.28**	22.00	22.33	22.51	22.50	22.55	22.34	22.40	22.45	21.95	22.39	**21.87**
CaO	0.07	0.08	0.04	**0.09**	0.09	0.04	0.10	0.10	0.09	0.10	0.10	0.04	0.07	0.07	**0.07**
Na_2O	0.00	0.04	0.01	**0.03**	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.04	0.06	0.03	**0.00**
K_2O	0.01	0.02	0.01	**0.00**	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	**0.01**
Total	100.53	99.32	100.03	**99.76**	99.07	99.86	99.85	99.13	99.90	99.40	100.33	99.79	99.49	100.08	**98.99**
Formula (O=6)															
T															
Si	1.75	1.77	1.75	**1.78**	1.80	1.75	1.74	1.74	1.75	1.75	1.76	1.75	1.72	1.73	**1.76**
Al^{IV}	0.25	0.23	0.25	**0.22**	0.20	0.25	0.26	0.26	0.25	0.25	0.24	0.25	0.28	0.27	**0.24**
Fe^{3+}	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
M1															
Al^{VI}	0.18	0.21	0.18	**0.17**	0.15	0.22	0.20	0.20	0.19	0.21	0.21	0.21	0.20	0.21	**0.20**
Ti	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	**0.01**
Cr	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fe^{3+}	0.07	0.02	0.06	**0.04**	0.03	0.02	0.05	0.06	0.06	0.03	0.02	0.04	0.06	0.05	**0.03**
Fe^{2+}	0.24	0.26	0.24	**0.27**	0.26	0.23	0.22	0.21	0.22	0.23	0.24	0.22	0.22	0.22	**0.24**
Mg	0.51	0.50	0.51	**0.52**	0.55	0.53	0.52	0.53	0.53	0.53	0.53	0.52	0.51	0.52	**0.52**
M2															
Fe^{2+}	0.32	0.34	0.32	**0.34**	0.32	0.30	0.29	0.29	0.29	0.30	0.31	0.30	0.29	0.29	**0.31**
Mg	0.67	0.65	0.67	**0.65**	0.67	0.69	0.70	0.71	0.70	0.69	0.69	0.70	0.69	0.70	**0.68**
Mn	0.01	0.01	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Ca	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Na	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
K	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**
X_{Mg}	0.68	0.66	0.68	**0.66**	0.68	0.69	0.71	0.71	0.70	0.70	0.69	0.70	0.70	0.71	**0.69**
Al^{tot}	0.43	0.44	0.42	**0.39**	0.35	0.46	0.47	0.46	0.44	0.46	0.45	0.47	0.48	0.48	**0.44**

*: analysis used for geothermobarometry

Table A.6.2.6 (continued): Representative EMP analyses of orthopyroxene

				*										*	
Rock unit	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe
Rock type	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	**Opx-Grt rock**	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	**Opx-Grt rock**	Opx-Grt rock
Sample	700-1-00	700-1-00	700-1-00	**700-1-00**	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	**700-1-00**	700-1-00
Profile	opx 1	opx 8	opx 8	**opx 8**	opx 8	opx 8	opx 8	opx 8	opx 8	opx 5	Spl3-3	Spl3-15	Spl3-29	**opx 3**	opx 4
Point	60	2	10	**14**	15	16	17	19	20	12				**8**	2
Texture	Opx2 matrix	Opx3 Opx-Pl c.	Opx3 Opx-Pl c.	**Opx3 Opx-Pl c.**	Opx3 Opx-Pl c.	Opx3 Opx-Pl c.	Opx3 Opx-Pl c.	Opx3 Opx-Pl c.	Opx3 Opx-Pl c.	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	Opx3 in Crd-Opx-Spl s.	**Opx3 in Crd-Opx s.**	Opx3 in Crd-Opx s.
Position	rim	rim	←	←	core	→	→	→	rim						
SiO_2	49.16	49.99	48.76	**49.01**	49.03	49.01	48.82	49.89	49.96	50.86	50.44	51.53	51.43	**50.96**	50.96
TiO_2	0.17	0.12	0.12	**0.16**	0.11	0.09	0.06	0.13	0.09	0.10	0.06	0.05	0.09	**0.02**	0.10
Al_2O_3	8.04	6.32	7.39	**7.96**	7.86	8.32	7.74	6.82	6.23	5.81	6.61	5.10	6.70	**5.26**	4.55
Cr_2O_3	0.03	0.03	0.03	**0.01**	0.04	0.02	0.02	0.01	0.05	0.01	0.00	0.01	0.00	**0.06**	0.01
Fe_2O_3	0.63	1.17	1.98	**1.72**	1.92	1.29	2.13	0.95	1.71	2.89	2.41	0.95	1.59	**0.44**	0.00
FeO	19.11	19.27	18.13	**18.04**	17.98	18.55	17.55	18.80	18.51	14.59	14.67	15.96	15.27	**21.88**	23.02
MnO	0.16	0.19	0.16	**0.16**	0.18	0.20	0.17	0.21	0.18	0.17	0.10	0.15	0.07	**0.13**	0.17
MgO	22.11	22.57	22.41	**22.55**	22.59	22.34	22.67	22.80	22.96	25.73	25.58	25.55	25.94	**21.61**	21.52
CaO	0.13	0.09	0.10	**0.10**	0.11	0.08	0.08	0.08	0.11	0.08	0.00	0.00	0.00	**0.11**	0.09
Na_2O	0.02	0.02	0.01	**0.04**	0.03	0.00	0.04	0.00	0.02	0.04	0.00	0.00	0.00	**0.06**	0.00
K_2O	0.01	0.01	0.00	**0.00**	0.00	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.00	**0.01**	0.00
Total	99.56	99.77	99.08	**99.75**	99.86	99.91	99.28	99.69	99.81	100.32	99.86	99.31	101.09	**100.53**	100.41
Formula (O=6)															
T															
Si	1.81	1.84	1.81	**1.80**	1.80	1.80	1.80	1.84	1.84	1.84	1.82	1.88	1.84	**1.88**	1.90
Al^{IV}	0.19	0.16	0.19	**0.20**	0.20	0.20	0.20	0.16	0.16	0.16	0.18	0.12	0.16	**0.12**	0.10
Fe^{3+}	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
M1															
Al^{VI}	0.16	0.12	0.13	**0.15**	0.14	0.16	0.14	0.13	0.11	0.08	0.11	0.09	0.12	**0.11**	0.11
Ti	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Cr	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Fe^{3+}	0.02	0.03	0.06	**0.05**	0.05	0.04	0.06	0.03	0.05	0.08	0.07	0.03	0.04	**0.01**	0.00
Fe^{2+}	0.27	0.27	0.25	**0.25**	0.25	0.25	0.24	0.27	0.26	0.20	0.20	0.23	0.21	**0.32**	0.32
Mg	0.55	0.57	0.56	**0.55**	0.55	0.55	0.56	0.57	0.58	0.63	0.63	0.65	0.63	**0.56**	0.57
M2															
Fe^{2+}	0.32	0.32	0.31	**0.31**	0.30	0.31	0.30	0.31	0.31	0.24	0.24	0.26	0.25	**0.36**	0.37
Mg	0.67	0.67	0.68	**0.68**	0.68	0.68	0.69	0.68	0.68	0.75	0.75	0.74	0.75	**0.63**	0.63
Mn	0.00	0.01	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	**0.00**	0.01
Ca	0.01	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Na	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
K	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Total	4.00	4.00	4.00	**4.00**	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	**4.00**	4.00
X_{Mg}	0.67	0.68	0.69	**0.69**	0.69	0.68	0.70	0.68	0.69	0.76	0.76	0.74	0.75	**0.64**	0.64
Al^{tot}	0.35	0.27	0.32	**0.34**	0.34	0.36	0.34	0.30	0.27	0.25	0.28	0.22	0.28	**0.23**	0.20

*: analysis used for geothermobarometry

A.6.2.7 Amphibole

Table A.6.2.7: Representative EMP analyses of amphibole

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite
Sample	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98
Profile	am6	am6	am6	am1	am1	am1	am1	am1	am1	am1	am1	am1	am1	am1	am1
Point	1	2	5	1	2	5	6	8	9	10	11	12	13	14	17
Texture	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2
Position	rim	core	rim	rim	←	←	←	←	←	←	←	←	←	core	→
SiO_2	44.12	43.74	43.82	44.26	43.87	43.12	43.10	42.85	42.99	42.97	42.61	42.80	42.37	42.66	42.69
TiO_2	1.66	1.69	1.65	1.58	1.54	1.66	1.71	1.73	1.81	1.80	1.74	1.74	1.76	1.76	1.72
Al_2O_3	10.22	10.23	9.87	10.05	10.13	10.54	10.61	10.98	10.88	11.23	11.09	11.16	11.12	11.06	11.05
Cr_2O_3	0.05	0.00	0.04	0.04	0.06	0.00	0.02	0.04	0.00	0.02	0.06	0.05	0.06	0.00	0.00
Fe_2O_3	2.83	1.93	3.22	1.70	2.13	2.87	2.26	2.09	2.49	1.64	2.50	2.58	2.00	2.39	2.33
FeO	16.57	17.38	16.49	18.32	17.94	17.58	18.43	18.12	18.16	18.32	18.27	17.78	18.07	18.05	17.79
MgO	9.44	8.92	9.35	8.52	8.50	8.26	7.99	8.10	7.99	8.04	7.85	8.10	8.06	8.02	8.19
MnO	0.16	0.17	0.17	0.17	0.21	0.17	0.16	0.25	0.23	0.21	0.17	0.21	0.23	0.19	0.24
CaO	11.44	11.49	11.18	11.63	11.46	10.95	11.33	11.50	11.22	11.51	11.25	11.25	11.47	11.31	11.33
Na_2O	1.03	1.18	1.06	1.06	1.05	1.18	1.07	1.08	1.15	1.23	1.13	1.11	1.24	1.14	1.19
K_2O	0.96	0.94	0.95	0.92	0.94	0.97	1.08	1.06	1.01	1.05	1.07	1.03	1.00	1.03	1.02
Total	98.47	97.67	97.77	98.24	97.82	97.30	97.77	97.82	97.94	98.03	97.72	97.81	97.38	97.63	97.54
Formula (O=23)															
Si	6.59	6.61	6.60	6.66	6.63	6.56	6.55	6.50	6.51	6.50	6.48	6.48	6.46	6.48	6.49
Al^{IV}	1.41	1.39	1.40	1.34	1.37	1.44	1.45	1.50	1.49	1.50	1.52	1.52	1.54	1.52	1.51
Sum T	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.39	0.43	0.35	0.44	0.43	0.45	0.44	0.46	0.45	0.50	0.47	0.48	0.46	0.47	0.47
Ti	0.19	0.19	0.19	0.18	0.18	0.19	0.20	0.20	0.21	0.20	0.20	0.20	0.20	0.20	0.20
Cr	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00
Fe^{3+}	0.32	0.22	0.37	0.19	0.24	0.33	0.26	0.24	0.28	0.19	0.29	0.29	0.23	0.27	0.27
Mg	2.10	2.01	2.10	1.91	1.92	1.87	1.81	1.83	1.80	1.81	1.78	1.83	1.83	1.82	1.85
Fe^{2+}	2.07	2.20	2.08	2.31	2.27	2.23	2.34	2.30	2.30	2.32	2.32	2.25	2.30	2.29	2.26
Mn	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.02	0.03
Sum M1	5.09	5.06	5.10	5.05	5.07	5.09	5.07	5.07	5.08	5.05	5.08	5.08	5.06	5.08	5.08
Ca	1.83	1.86	1.80	1.87	1.86	1.78	1.84	1.87	1.82	1.87	1.83	1.83	1.87	1.84	1.84
Na	0.08	0.08	0.09	0.07	0.08	0.12	0.08	0.06	0.10	0.08	0.09	0.09	0.06	0.08	0.08
Sum M4	1.91	1.94	1.90	1.95	1.93	1.91	1.93	1.93	1.92	1.95	1.92	1.92	1.94	1.92	1.92
Na	0.22	0.27	0.22	0.24	0.23	0.22	0.23	0.26	0.24	0.28	0.25	0.23	0.31	0.26	0.27
K	0.18	0.18	0.18	0.18	0.18	0.19	0.21	0.21	0.20	0.20	0.21	0.20	0.19	0.20	0.20
Sum A	0.40	0.45	0.40	0.41	0.41	0.41	0.44	0.46	0.44	0.48	0.45	0.43	0.50	0.46	0.47
Total	15.40	15.45	15.40	15.41	15.41	15.41	15.44	15.46	15.44	15.48	15.45	15.43	15.50	15.46	15.47
X_{Mg}	0.50	0.48	0.50	0.45	0.46	0.46	0.44	0.44	0.44	0.44	0.43	0.45	0.44	0.44	0.45

*: analysis used for geothermobarometry

Table A.6.2.7 (continued): Representative EMP analyses of amphibole

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite
Sample	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98
Profile	am1	am1	am1	am1	am1	am1	am1	am1							
Point	19	20	21	22	24	26	27	30							
Texture	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	matrix Hbl2	Hbl3 on Grt2	Hbl3 on Grt2	Hbl3 on Grt2	Hbl3 on Grt2	Hbl3 on Grt2	Hbl3 on Grt2	Hbl3 on Grt2
Position	→	→	→	→	→	→	→	rim	matrix\rim	→	→	→	rim/Grt	rim	←
SiO_2	42.74	43.20	42.87	42.84	42.84	42.93	43.33	44.16	43.43	43.01	42.69	43.41	43.28	43.66	42.75
TiO_2	1.57	1.56	1.58	1.64	1.59	1.56	1.62	1.35	1.65	1.70	1.60	1.66	1.63	1.48	1.62
Al_2O_3	10.83	10.67	10.65	10.70	10.49	10.41	10.53	10.06	10.33	11.00	11.06	10.63	11.18	10.51	11.17
Cr_2O_3	0.03	0.01	0.04	0.02	0.00	0.01	0.03	0.00	0.03	0.01	0.02	0.05	0.02	0.01	0.04
Fe_2O_3	2.49	2.33	1.83	1.86	2.65	3.75	2.38	2.16	2.08	2.05	2.66	2.24	1.70	1.53	2.57
FeO	17.85	17.91	18.59	18.26	18.17	17.52	17.89	17.57	17.64	18.08	17.65	17.48	16.60	18.29	17.95
MgO	8.25	8.35	8.13	8.19	8.14	8.22	8.35	8.73	8.37	8.11	8.13	8.55	8.88	8.36	7.98
MnO	0.18	0.22	0.26	0.17	0.23	0.19	0.18	0.21	0.23	0.21	0.17	0.16	0.17	0.14	0.22
CaO	11.36	11.51	11.78	11.56	11.41	10.88	11.53	11.50	11.29	11.29	11.12	11.44	11.47	11.72	11.25
Na_2O	1.18	1.04	1.14	1.18	1.05	1.03	0.92	1.02	1.09	1.26	1.16	1.01	1.05	1.04	1.12
K_2O	0.98	1.00	0.98	0.96	1.01	1.03	0.98	0.84	0.86	1.04	1.06	0.95	1.02	0.96	1.02
Total	97.46	97.80	97.83	97.37	97.57	97.53	97.75	97.60	96.98	97.74	97.31	97.59	97.01	97.70	97.69
Formula (O=23)															
Si	6.50	6.54	6.52	6.53	6.52	6.53	6.56	6.67	6.61	6.52	6.50	6.57	6.55	6.61	6.49
Al^{IV}	1.50	1.46	1.48	1.47	1.48	1.47	1.44	1.33	1.39	1.48	1.50	1.43	1.45	1.39	1.51
Sum T	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.45	0.45	0.43	0.45	0.41	0.39	0.44	0.46	0.46	0.49	0.48	0.46	0.55	0.49	0.49
Ti	0.18	0.18	0.18	0.19	0.18	0.18	0.18	0.15	0.19	0.19	0.18	0.19	0.19	0.17	0.19
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Fe^{3+}	0.29	0.27	0.21	0.21	0.30	0.43	0.27	0.25	0.24	0.23	0.30	0.26	0.19	0.17	0.29
Mg	1.87	1.89	1.84	1.86	1.85	1.86	1.89	1.96	1.90	1.83	1.84	1.93	2.00	1.89	1.80
Fe^{2+}	2.27	2.27	2.36	2.33	2.31	2.23	2.27	2.22	2.25	2.29	2.25	2.21	2.10	2.32	2.28
Mn	0.02	0.03	0.03	0.02	0.03	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.03
Sum M1	5.08	5.08	5.06	5.06	5.09	5.12	5.08	5.07	5.07	5.07	5.09	5.07	5.05	5.05	5.08
Ca	1.85	1.87	1.92	1.89	1.86	1.77	1.87	1.86	1.84	1.83	1.81	1.85	1.86	1.90	1.83
Na	0.07	0.06	0.02	0.05	0.05	0.11	0.05	0.07	0.09	0.10	0.10	0.07	0.09	0.05	0.09
Sum M4	1.92	1.92	1.94	1.94	1.91	1.88	1.92	1.93	1.93	1.93	1.91	1.93	1.95	1.95	1.92
Na	0.28	0.25	0.31	0.30	0.26	0.20	0.22	0.23	0.23	0.27	0.24	0.22	0.22	0.26	0.24
K	0.19	0.19	0.19	0.19	0.20	0.20	0.19	0.16	0.17	0.20	0.20	0.18	0.20	0.19	0.20
Sum A	0.47	0.44	0.50	0.48	0.45	0.40	0.41	0.39	0.40	0.47	0.45	0.41	0.42	0.44	0.44
Total	15.47	15.44	15.50	15.48	15.45	15.40	15.41	15.39	15.40	15.47	15.45	15.41	15.42	15.44	15.44
X_{Mg}	0.45	0.45	0.44	0.44	0.44	0.46	0.45	0.47	0.46	0.44	0.45	0.47	0.49	0.45	0.44

*: analysis used for geothermobarometry

Table A.6.2.7 (continued): Representative EMP analyses of amphibole

			*											*	
Rock Unit	Orue	Orue	**Orue**	Orue	Orue	Orue	Orue	Orue	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe
Rock type	Grt-Cpx amphibolite	Grt-Cpx amphibolite	**Grt-Cpx amphibolite**	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx amphibolite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	**Grt-Cpx granulite**	Grt-Cpx granulite
Sample	191-B-98	191-B-98	**191-B-98**	191-B-98	191-B-98	191-B-98	191-B-98	191-B-98	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	**311-1-99**	311-1-99
Profile									am 1	am 1	am 1	am 1	am 1	**am 1**	am 1
Point									1	2	3	4	5	**6**	7
Texture	Hbl3 on Grt2	Hbl3 on Grt2	**Hbl3 on Grt2**	Hbl3 on Grt2	Hbl3 on Grt2	Hbl3 on Grt2	Hbl3 on Grt2	Hbl3 on Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	**Hbl1 in Grt2**	Hbl1 in Grt2
Position	←	←	**core**	→	→	→	→	rim	rim	←	←	←	←	←	←
SiO_2	42.76	42.35	**42.55**	42.42	42.73	42.54	43.27	43.12	39.69	39.13	39.47	39.33	39.37	**39.38**	39.30
TiO_2	1.66	1.81	**1.85**	1.87	1.66	1.50	1.70	2.48	3.48	3.56	3.68	3.66	3.49	**3.73**	3.47
Al_2O_3	11.21	11.48	**11.40**	11.12	11.15	11.20	10.76	10.17	16.14	15.95	15.95	16.20	16.24	**16.14**	16.10
Cr_2O_3	0.01	0.01	**0.03**	0.05	0.01	0.04	0.03	0.00	0.00	0.05	0.02	0.05	0.02	**0.00**	0.05
Fe_2O_3	2.27	2.03	**1.83**	2.41	2.67	3.12	1.83	0.48	1.02	0.58	0.54	0.73	1.28	**0.67**	0.87
FeO	17.97	18.16	**18.27**	18.01	17.64	17.58	18.10	19.16	11.27	11.84	11.59	11.78	11.58	**12.06**	11.91
MgO	8.08	7.96	**7.78**	7.96	8.22	8.26	8.21	8.12	11.02	10.73	10.79	10.69	10.70	**10.54**	10.51
MnO	0.23	0.22	**0.18**	0.21	0.20	0.18	0.17	0.20	0.00	0.05	0.00	0.00	0.04	**0.06**	0.02
CaO	11.39	11.55	**11.40**	11.23	11.31	11.28	11.42	12.01	11.09	11.13	11.07	11.15	10.96	**11.13**	10.99
Na_2O	1.14	1.15	**1.14**	1.22	1.11	1.16	1.16	1.12	2.74	2.90	2.77	2.73	2.80	**2.76**	2.78
K_2O	1.05	1.06	**1.01**	1.01	1.01	1.00	0.99	0.91	0.85	0.83	0.80	0.87	0.83	**0.86**	0.86
Total	97.78	97.78	**97.44**	97.49	97.69	97.86	97.64	97.77	97.29	96.75	96.68	97.18	97.31	**97.35**	96.85
Formula (O=23)															
Si	6.49	6.43	**6.48**	6.46	6.48	6.45	6.56	6.55	5.88	5.85	5.89	5.85	5.85	**5.86**	5.87
Al^{IV}	1.51	1.57	**1.52**	1.54	1.52	1.55	1.44	1.45	2.12	2.15	2.11	2.15	2.15	**2.14**	2.13
Sum T	8.00	8.00	**8.00**	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	**8.00**	8.00
Al^{VI}	0.49	0.49	**0.52**	0.46	0.47	0.45	0.48	0.38	0.70	0.67	0.70	0.69	0.69	**0.68**	0.70
Ti	0.19	0.21	**0.21**	0.21	0.19	0.17	0.19	0.28	0.39	0.40	0.41	0.41	0.39	**0.42**	0.39
Cr	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	**0.00**	0.01
Fe^{3+}	0.26	0.23	**0.21**	0.28	0.31	0.36	0.21	0.05	0.11	0.07	0.06	0.08	0.14	**0.07**	0.10
Mg	1.83	1.80	**1.77**	1.81	1.86	1.87	1.86	1.84	2.43	2.39	2.40	2.37	2.37	**2.34**	2.34
Fe^{2+}	2.28	2.31	**2.33**	2.29	2.24	2.23	2.29	2.44	1.40	1.48	1.45	1.47	1.44	**1.50**	1.49
Mn	0.03	0.03	**0.02**	0.03	0.03	0.02	0.02	0.03	0.00	0.01	0.00	0.00	0.01	**0.01**	0.00
Sum M1	5.07	5.07	**5.06**	5.08	5.09	5.10	5.06	5.02	5.03	5.02	5.02	5.02	5.04	**5.02**	5.03
Ca	1.85	1.88	**1.86**	1.83	1.84	1.83	1.85	1.96	1.76	1.78	1.77	1.78	1.74	**1.77**	1.76
Na	0.08	0.05	**0.08**	0.09	0.08	0.07	0.09	0.03	0.21	0.20	0.21	0.20	0.22	**0.20**	0.21
Sum M4	1.93	1.93	**1.94**	1.92	1.91	1.90	1.94	1.98	1.97	1.98	1.98	1.98	1.96	**1.98**	1.97
Na	0.26	0.28	**0.25**	0.27	0.25	0.27	0.25	0.30	0.58	0.64	0.59	0.59	0.59	**0.59**	0.59
K	0.20	0.20	**0.20**	0.20	0.19	0.19	0.19	0.18	0.16	0.16	0.15	0.17	0.16	**0.16**	0.16
Sum A	0.46	0.49	**0.45**	0.47	0.44	0.47	0.45	0.48	0.74	0.80	0.74	0.75	0.75	**0.75**	0.76
Total	15.46	15.49	**15.45**	15.47	15.44	15.47	15.45	15.48	15.74	15.80	15.74	15.75	15.75	**15.75**	15.76
X_{Mg}	0.44	0.44	**0.43**	0.44	0.45	0.46	0.45	0.43	0.64	0.62	0.62	0.62	0.62	**0.61**	0.61

*: analysis used for geothermobarometry

Table A.6.2.7 (continued): Representative EMP analyses of amphibole

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99
Profile	am 1	am 1	am 1	am 1	am 1	am 1	am 1	am 1	am 1	am 1	am 1	am 1	am 1	am 1	am 1
Point	8	9	10	11	12	13	14	15	1	2	3	4	5	1	2
Texture	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl1 in Grt2	Hbl3 in Hbl	Hbl3 in Hbl
Position	core	→	→	→	→	→	→	rim	rim	←	core	→	rim	Pl intergr.	Pl intergr.
SiO_2	39.39	39.83	39.65	39.78	39.63	39.37	39.20	39.65	41.99	41.19	41.42	40.72	41.25	43.45	43.20
TiO_2	3.57	3.53	3.45	3.42	3.57	3.42	3.47	3.18	0.97	0.98	1.00	1.03	0.94	1.56	1.72
Al_2O_3	15.97	15.88	16.05	15.99	16.04	16.07	16.06	16.00	16.42	16.56	17.00	16.88	16.21	11.22	11.02
Cr_2O_3	0.07	0.05	0.03	0.04	0.02	0.03	0.06	0.00	0.02	0.00	0.02	0.05	0.06	0.07	0.03
Fe_2O_3	0.85	1.09	1.46	0.80	1.05	1.25	1.36	1.79	2.39	2.25	1.88	2.40	2.69	3.06	2.82
FeO	11.89	11.71	11.30	11.60	11.34	11.40	11.04	11.45	6.12	7.38	7.79	7.42	6.93	11.14	11.27
MgO	10.73	10.81	10.97	10.77	10.94	10.96	10.94	10.72	14.27	13.22	12.77	12.99	13.58	12.74	12.42
MnO	0.04	0.03	0.02	0.02	0.05	0.00	0.04	0.06	0.05	0.05	0.03	0.02	0.10	0.11	0.11
CaO	10.98	10.98	10.91	10.93	10.92	10.91	10.99	11.12	11.18	10.98	10.85	10.94	10.99	11.72	11.45
Na_2O	2.98	2.84	2.86	2.86	2.86	3.02	2.69	2.41	2.77	2.80	2.81	2.78	2.79	2.02	2.00
K_2O	0.85	0.76	0.79	0.81	0.82	0.77	0.80	0.80	0.97	1.03	1.06	0.99	1.00	0.11	0.15
Total	97.31	97.50	97.49	97.01	97.23	97.20	96.65	97.17	97.15	96.43	96.63	96.21	96.54	97.20	96.20
Formula (O=23)															
Si	5.86	5.90	5.87	5.91	5.88	5.85	5.85	5.89	6.08	6.05	6.06	6.00	6.05	6.42	6.45
Al^{IV}	2.14	2.10	2.13	2.09	2.12	2.15	2.15	2.11	1.92	1.95	1.94	2.00	1.95	1.58	1.55
Sum T	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.66	0.67	0.67	0.72	0.69	0.67	0.68	0.70	0.88	0.91	0.99	0.92	0.85	0.38	0.39
Ti	0.40	0.39	0.38	0.38	0.40	0.38	0.39	0.36	0.11	0.11	0.11	0.11	0.10	0.17	0.19
Cr	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00
Fe^{3+}	0.10	0.12	0.16	0.09	0.12	0.14	0.15	0.20	0.26	0.25	0.21	0.27	0.30	0.34	0.32
Mg	2.38	2.39	2.42	2.39	2.42	2.43	2.43	2.37	3.08	2.89	2.79	2.85	2.97	2.81	2.76
Fe^{2+}	1.48	1.45	1.40	1.44	1.41	1.42	1.38	1.42	0.74	0.91	0.95	0.91	0.85	1.38	1.41
Mn	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01
Sum M1	5.03	5.03	5.05	5.02	5.03	5.04	5.04	5.06	5.07	5.07	5.06	5.08	5.08	5.10	5.09
Ca	1.75	1.74	1.73	1.74	1.74	1.74	1.76	1.77	1.73	1.73	1.70	1.73	1.73	1.86	1.83
Na	0.22	0.22	0.22	0.23	0.23	0.22	0.20	0.17	0.19	0.20	0.24	0.20	0.19	0.05	0.08
Sum M4	1.97	1.97	1.95	1.98	1.97	1.96	1.96	1.94	1.93	1.93	1.94	1.92	1.92	1.90	1.91
Na	0.64	0.59	0.60	0.59	0.59	0.65	0.58	0.52	0.58	0.59	0.55	0.59	0.60	0.53	0.50
K	0.16	0.14	0.15	0.15	0.16	0.15	0.15	0.15	0.18	0.19	0.20	0.19	0.19	0.02	0.03
Sum A	0.80	0.73	0.75	0.74	0.75	0.79	0.73	0.67	0.76	0.79	0.75	0.78	0.79	0.55	0.53
Total	15.80	15.73	15.75	15.74	15.75	15.79	15.73	15.67	15.76	15.79	15.75	15.78	15.79	15.55	15.53
X_{Mg}	0.62	0.62	0.63	0.62	0.63	0.63	0.64	0.63	0.81	0.76	0.74	0.76	0.78	0.67	0.66

*: analysis used for geothermobarometry

Table A.6.2.7 (continued): Representative EMP analyses of amphibole

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99
Profile	am 1	am 1	am 1	am 2	am 2	am 2	am 2	am 2	am 2	am 2	am 2	am 2	am 2	am 3	am 3
Point	3	4	5	1	2	3	4	5	6	7	8	9	10	1	2
Texture	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl
Position	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.
SiO_2	43.12	42.58	42.48	41.60	41.45	40.93	41.33	41.00	41.25	41.09	40.83	40.85	41.11	41.56	40.65
TiO_2	1.64	1.89	1.65	1.04	1.27	1.34	1.41	1.45	1.54	1.42	1.53	1.56	1.60	1.31	1.25
Al_2O_3	11.29	11.69	11.76	13.80	13.83	14.17	14.10	13.91	13.97	13.98	14.10	13.91	13.79	13.82	13.35
Cr_2O_3	0.06	0.04	0.04	0.10	0.12	0.16	0.12	0.11	0.13	0.05	0.04	0.08	0.04	0.04	0.06
Fe_2O_3	3.06	3.07	3.11	4.23	4.13	4.39	3.83	3.96	4.30	4.29	4.03	4.16	3.45	4.15	3.84
FeO	11.32	11.97	11.54	8.44	9.05	9.01	9.51	9.34	9.04	9.14	9.50	9.27	9.73	9.79	9.05
MgO	12.41	11.83	12.10	13.18	12.90	12.61	12.55	12.56	12.63	12.65	12.28	12.35	12.32	12.32	12.32
MnO	0.14	0.13	0.17	0.19	0.20	0.18	0.21	0.20	0.22	0.21	0.21	0.19	0.26	0.26	0.13
CaO	11.55	11.29	11.46	11.07	11.13	11.02	11.24	11.10	10.99	11.14	11.01	10.88	11.14	11.05	10.73
Na_2O	2.03	2.26	2.20	2.55	2.54	2.46	2.48	2.51	2.42	2.36	2.42	2.42	2.45	2.43	2.35
K_2O	0.14	0.14	0.16	0.33	0.40	0.41	0.40	0.37	0.39	0.42	0.43	0.40	0.40	0.39	0.39
Total	96.76	96.88	96.67	96.53	97.01	96.67	97.18	96.50	96.88	96.74	96.37	96.05	96.28	97.13	94.11
Formula (O=23)															
Si	6.41	6.35	6.34	6.15	6.12	6.07	6.10	6.10	6.10	6.09	6.09	6.10	6.13	6.15	6.18
Al^{IV}	1.59	1.65	1.66	1.85	1.88	1.93	1.90	1.90	1.90	1.91	1.91	1.90	1.87	1.85	1.82
Sum T	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.39	0.40	0.41	0.56	0.53	0.55	0.56	0.54	0.54	0.54	0.56	0.55	0.55	0.56	0.57
Ti	0.18	0.21	0.19	0.12	0.14	0.15	0.16	0.16	0.17	0.16	0.17	0.17	0.18	0.15	0.14
Cr	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.01
Fe^{3+}	0.34	0.34	0.35	0.47	0.46	0.49	0.43	0.44	0.48	0.48	0.45	0.47	0.39	0.46	0.44
Mg	2.75	2.63	2.69	2.91	2.84	2.79	2.76	2.78	2.79	2.80	2.73	2.75	2.74	2.72	2.79
Fe^{2+}	1.41	1.49	1.44	1.04	1.12	1.12	1.17	1.16	1.12	1.13	1.18	1.16	1.21	1.21	1.15
Mn	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.02
Sum M1	5.10	5.10	5.10	5.13	5.13	5.14	5.12	5.13	5.14	5.14	5.13	5.13	5.11	5.13	5.12
Ca	1.84	1.80	1.83	1.75	1.76	1.75	1.78	1.77	1.74	1.77	1.76	1.74	1.78	1.75	1.75
Na	0.06	0.10	0.07	0.11	0.11	0.11	0.10	0.11	0.12	0.10	0.11	0.13	0.11	0.12	0.13
Sum M4	1.90	1.90	1.90	1.87	1.87	1.86	1.88	1.87	1.86	1.86	1.87	1.87	1.89	1.87	1.88
Na	0.52	0.55	0.57	0.62	0.62	0.60	0.61	0.62	0.57	0.58	0.59	0.57	0.60	0.58	0.57
K	0.03	0.03	0.03	0.06	0.08	0.08	0.08	0.07	0.07	0.08	0.08	0.08	0.08	0.07	0.07
Sum A	0.55	0.58	0.60	0.68	0.70	0.68	0.68	0.69	0.65	0.66	0.67	0.65	0.68	0.65	0.64
Total	15.55	15.58	15.60	15.68	15.70	15.68	15.68	15.69	15.65	15.66	15.67	15.65	15.68	15.65	15.64
X_{Mg}	0.66	0.64	0.65	0.74	0.72	0.71	0.70	0.71	0.71	0.71	0.70	0.70	0.69	0.69	0.71

*: analysis used for geothermobarometry

Table A.6.2.7 (continued): Representative EMP analyses of amphibole

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99
Profile	am 3	am 3	am 3	am 3	am 3	am 3	am 3	am 3	am 1	am 1	am 1	am 1	am 1	am 2	am 2
Point	3	4	5	6	7	8	9	10	1	2	3	4	5	1	2
Texture	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl	Hbl3 in Hbl
Position	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl intergr.	Pl sympl.	Pl sympl.	Pl sympl.	Pl sympl.	Pl sympl.	Pl sympl.	Pl sympl.
SiO_2	41.35	41.64	43.07	41.68	41.83	41.53	41.96	42.17	42.50	42.10	42.54	42.41	42.42	42.60	41.95
TiO_2	1.34	1.15	1.21	1.36	1.46	1.54	1.56	1.64	1.14	1.23	1.14	1.20	1.16	0.93	0.91
Al_2O_3	13.76	13.44	12.73	13.20	13.29	13.24	13.09	12.70	13.15	12.82	13.01	12.88	12.73	12.97	13.19
Cr_2O_3	0.04	0.07	0.01	0.05	0.09	0.02	0.05	0.04	0.14	0.11	0.07	0.13	0.12	0.09	0.06
Fe_2O_3	4.36	4.52	4.00	3.24	3.60	3.47	3.25	2.84	3.83	3.93	3.95	3.80	4.18	4.13	4.37
FeO	9.56	9.44	9.19	10.44	10.03	10.33	10.68	10.62	9.96	10.12	9.66	10.23	9.57	9.99	9.58
MgO	12.51	12.74	13.19	12.28	12.36	12.46	12.35	12.58	12.74	12.62	12.82	12.65	12.86	12.71	12.66
MnO	0.22	0.17	0.19	0.14	0.19	0.18	0.17	0.17	0.18	0.15	0.15	0.18	0.16	0.15	0.13
CaO	11.27	11.18	11.26	11.47	11.18	11.48	11.52	11.58	11.28	11.32	11.33	11.33	11.25	11.19	11.04
Na_2O	2.20	2.34	2.17	2.21	2.21	2.33	2.28	2.33	2.46	2.30	2.19	2.41	2.18	2.42	2.43
K_2O	0.43	0.39	0.30	0.36	0.53	0.38	0.38	0.35	0.32	0.31	0.30	0.29	0.29	0.30	0.28
Total	97.05	97.07	97.33	96.43	96.74	96.94	97.29	97.02	97.67	97.00	97.17	97.51	96.92	97.48	96.59
Formula (O=23)															
Si	6.12	6.16	6.31	6.21	6.21	6.17	6.21	6.25	6.24	6.24	6.27	6.25	6.27	6.27	6.23
Al^{IV}	1.88	1.84	1.69	1.79	1.79	1.83	1.79	1.75	1.76	1.76	1.73	1.75	1.73	1.73	1.77
Sum T	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.52	0.50	0.51	0.53	0.54	0.48	0.49	0.47	0.52	0.48	0.53	0.49	0.49	0.52	0.54
Ti	0.15	0.13	0.13	0.15	0.16	0.17	0.17	0.18	0.13	0.14	0.13	0.13	0.13	0.10	0.10
Cr	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.02	0.01	0.01	0.02	0.01	0.01	0.01
Fe^{3+}	0.49	0.50	0.44	0.36	0.40	0.39	0.36	0.32	0.42	0.44	0.44	0.42	0.46	0.46	0.49
Mg	2.76	2.81	2.88	2.73	2.73	2.76	2.72	2.78	2.79	2.79	2.82	2.78	2.83	2.79	2.80
Fe^{2+}	1.18	1.17	1.13	1.30	1.24	1.28	1.32	1.32	1.22	1.25	1.19	1.26	1.18	1.23	1.19
Mn	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Sum M1	5.14	5.14	5.12	5.10	5.11	5.11	5.10	5.09	5.12	5.12	5.12	5.12	5.13	5.13	5.14
Ca	1.79	1.77	1.77	1.83	1.78	1.83	1.83	1.84	1.77	1.80	1.79	1.79	1.78	1.76	1.76
Na	0.08	0.09	0.11	0.06	0.11	0.06	0.07	0.07	0.11	0.08	0.09	0.09	0.09	0.11	0.11
Sum M4	1.86	1.86	1.88	1.90	1.89	1.89	1.90	1.91	1.88	1.88	1.88	1.88	1.87	1.87	1.86
Na	0.56	0.58	0.51	0.57	0.53	0.61	0.58	0.60	0.59	0.58	0.54	0.60	0.54	0.58	0.59
K	0.08	0.07	0.06	0.07	0.10	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.06	0.05
Sum A	0.64	0.66	0.57	0.64	0.63	0.68	0.65	0.67	0.65	0.64	0.60	0.65	0.59	0.64	0.65
Total	15.64	15.66	15.57	15.64	15.63	15.68	15.65	15.67	15.65	15.64	15.60	15.65	15.59	15.64	15.65
X_{Mg}	0.70	0.71	0.72	0.68	0.69	0.68	0.67	0.68	0.70	0.69	0.70	0.69	0.71	0.69	0.70

*: analysis used for geothermobarometry

Table A.6.2.7 (continued): Representative EMP analyses of amphibole

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.
Sample	311-1-99	311-1-99	434-2-99	434-2-99	434-2-99	434-2-99	434-2-99	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98
Profile	am 2	am 2	am 1	am 1	am 1	am 1	am 1	am1	am1	am1	am1	am1	am1	am1
Point	3	4	1	2	3	4	5	1	2	3	4	5	6	7
Texture	Hbl3 in Hbl	Hbl3 in Hbl	Cum4 on	Cum4 on	Cum4 on	Cum4 on	Cum4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on
Position	Pl sympl.	Pl sympl.	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2
SiO_2	42.26	42.14	52.77	52.61	52.76	52.82	52.79	50.68	50.00	51.28	50.72	51.87	49.78	50.78
TiO_2	0.91	0.87	0.08	0.10	0.08	0.07	0.05	0.01	0.06	0.04	0.00	0.05	0.04	0.03
Al_2O_3	13.27	13.29	1.00	1.15	0.95	0.76	0.86	2.13	2.41	1.49	2.25	1.73	2.52	1.69
Cr_2O_3	0.07	0.16	0.05	0.02	0.04	0.05	0.02	0.04	0.07	0.07	0.05	0.07	0.07	0.05
Fe_2O_3	4.24	4.57	1.25	0.94	0.78	0.68	0.86	1.91	2.37	2.39	0.95	1.84	2.96	2.90
FeO	9.75	9.60	22.58	22.92	23.53	23.76	23.16	16.79	16.35	16.47	17.66	16.78	16.30	15.77
MgO	12.73	12.70	16.61	16.37	16.35	16.37	16.70	11.89	11.94	12.08	11.67	12.30	11.93	12.34
MnO	0.12	0.12	0.50	0.50	0.38	0.51	0.43	0.22	0.22	0.16	0.22	0.23	0.23	0.21
CaO	11.23	11.03	2.08	2.01	1.76	1.66	1.79	12.15	12.09	11.83	12.57	12.23	12.07	11.75
Na_2O	2.40	2.50	0.19	0.15	0.12	0.06	0.06	0.17	0.15	0.08	0.20	0.15	0.14	0.11
K_2O	0.27	0.25	0.05	0.04	0.03	0.03	0.04	0.08	0.12	0.07	0.12	0.10	0.09	0.08
Total	97.25	97.22	97.17	96.81	96.78	96.76	96.76	96.06	95.79	95.96	96.41	97.35	96.13	95.70
Formula														
Si	6.23	6.22	7.81	7.82	7.85	7.87	7.84	7.64	7.57	7.72	7.64	7.70	7.52	7.66
Al^{IV}	1.77	1.78	0.19	0.18	0.15	0.13	0.16	0.36	0.43	0.28	0.36	0.30	0.48	0.34
Sum T	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.54	0.53	-0.02	0.02	0.01	0.00	-0.01	0.02	0.00	-0.01	0.04	0.00	-0.03	-0.04
Ti	0.10	0.10	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00
Cr	0.01	0.02	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Fe^{3+}	0.47	0.51	0.14	0.10	0.09	0.08	0.10	0.22	0.27	0.27	0.11	0.21	0.34	0.33
Mg	2.80	2.79	3.66	3.62	3.63	3.63	3.70	2.67	2.69	2.71	2.62	2.72	2.69	2.78
Fe^{2+}	1.20	1.18	2.80	2.85	2.93	2.96	2.88	2.12	2.07	2.07	2.23	2.08	2.06	1.99
Mn	0.02	0.02	0.06	0.06	0.05	0.06	0.05	0.03	0.03	0.02	0.03	0.03	0.03	0.03
Sum M1	5.13	5.14	6.66	6.67	6.71	6.74	6.73	5.06	5.08	5.08	5.03	5.06	5.10	5.09
Ca	1.77	1.74	0.33	0.32	0.28	0.26	0.29	1.96	1.96	1.91	2.03	1.95	1.95	1.90
Na	0.09	0.11	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.03
Sum M4	1.87	1.86	0.36	0.33	0.29	0.26	0.29	1.96	1.96	1.93	2.03	1.95	1.95	1.93
Na	0.59	0.60	0.03	0.03	0.03	0.02	0.02	0.05	0.04	0.00	0.06	0.04	0.04	0.00
K	0.05	0.05	0.01	0.01	0.00	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.01
Sum A	0.64	0.65	0.04	0.04	0.03	0.02	0.02	0.06	0.07	0.01	0.08	0.06	0.06	0.01
Total	15.64	15.65	15.05	15.04	15.03	15.03	15.04	15.09	15.11	15.02	15.14	15.07	15.11	15.04
X_{Mg}	0.70	0.70	0.57	0.56	0.55	0.55	0.56	0.56	0.57	0.57	0.54	0.57	0.57	0.58

*: analysis used for geothermobarometry

Table A.6.2.7 (continued): Representative EMP analyses of amphibole

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.
Sample	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98
Profile	am1	am1	am1	am1	am1	am1	am1	am1	am1	am1	am1	am1
Point	8	9	10	1	2	3	4	5	6	7	8	9
Texture	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on	Act4 on
Position	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2	Opx2
SiO_2	50.53	51.55	49.88	53.16	52.29	51.77	52.11	52.49	50.54	51.09	51.16	52.02
TiO_2	0.00	0.07	0.03	0.04	0.00	0.05	0.02	0.01	0.04	0.05	0.00	0.02
Al_2O_3	2.22	1.52	2.80	1.30	1.79	1.84	1.50	1.66	2.37	2.36	2.14	1.68
Cr_2O_3	0.00	0.10	0.04	0.07	0.11	0.06	0.04	0.01	0.07	0.09	0.00	0.07
Fe_2O_3	0.97	0.89	2.09	1.01	0.00	0.13	0.00	0.30	3.04	1.15	0.77	0.23
FeO	17.55	17.95	17.05	17.76	18.89	18.77	18.60	18.63	16.31	17.83	17.95	18.67
MgO	11.78	11.66	11.78	12.07	11.21	11.49	11.44	11.55	11.85	11.41	11.71	11.50
MnO	0.20	0.18	0.22	0.17	0.30	0.27	0.19	0.21	0.24	0.25	0.31	0.21
CaO	12.70	12.42	12.42	12.33	12.99	12.86	12.63	12.60	11.81	12.38	12.79	12.72
Na_2O	0.15	0.13	0.23	0.09	0.19	0.17	0.15	0.18	0.11	0.18	0.16	0.14
K_2O	0.09	0.07	0.16	0.08	0.10	0.15	0.11	0.09	0.07	0.07	0.09	0.10
Total	96.18	96.54	96.70	98.08	97.87	97.55	96.81	97.73	96.44	96.86	97.06	97.37
Formula (O=23)												
Si	7.63	7.75	7.51	7.83	7.77	7.72	7.81	7.79	7.59	7.66	7.66	7.76
Al^{IV}	0.37	0.25	0.49	0.17	0.23	0.28	0.19	0.21	0.41	0.34	0.34	0.24
Sum T	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Al^{VI}	0.03	0.02	0.00	0.05	0.08	0.05	0.07	0.08	0.01	0.07	0.04	0.06
Ti	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
Cr	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.01
Fe^{3+}	0.11	0.10	0.24	0.11	0.00	0.01	0.00	0.03	0.34	0.13	0.09	0.03
Mg	2.65	2.61	2.64	2.65	2.48	2.55	2.55	2.56	2.65	2.55	2.61	2.56
Fe^{2+}	2.22	2.26	2.15	2.19	2.35	2.34	2.33	2.31	2.05	2.23	2.25	2.33
Mn	0.03	0.02	0.03	0.02	0.04	0.03	0.02	0.03	0.03	0.03	0.04	0.03
Sum M1	5.03	5.03	5.07	5.03	4.96	5.00	4.99	5.01	5.10	5.04	5.02	5.01
Ca	2.05	2.00	2.00	1.94	2.07	2.06	2.03	2.00	1.90	1.99	2.05	2.03
Na	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sum M4	2.05	2.00	2.00	1.97	2.07	2.06	2.03	2.00	1.90	1.99	2.05	2.03
Na	0.04	0.04	0.07	0.00	0.05	0.05	0.04	0.05	0.03	0.05	0.05	0.04
K	0.02	0.01	0.03	0.02	0.02	0.03	0.02	0.02	0.01	0.01	0.02	0.02
Sum A	0.06	0.05	0.10	0.02	0.07	0.08	0.07	0.07	0.04	0.07	0.06	0.06
Total	15.15	15.08	15.17	15.02	15.10	15.14	15.09	15.08	15.04	15.09	15.14	15.10
X_{Mg}	0.54	0.54	0.55	0.55	0.51	0.52	0.52	0.53	0.56	0.53	0.54	0.52

*: analysis used for geothermobarometry

A.6.2.8 Sapphirine

Table A.6.2.8: Representative EMP analyses of sapphirine

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99
Analyses	spr 12	spr 12	spr 13	spr 6	spr 6	spr 6	spr 6	spr 6	spr 7	spr 7	spr 7	spr 5	spr 5	spr 5	spr 5
Point	1	2	2	1	5	10	12	15	1	2	4	1	4	2	9
Texture	Spr2b in Grt2	Spr2b in Grt2	Spr2b in Grt2	Spr2b in Opx-Spr i. on Opx2a rim	Spr2b in Opx-Spr i. on Opx2a ←	Spr2b in Opx-Spr i. on Opx2a core	Spr2b in Opx-Spr i. on Opx2a →	Spr2b in Opx-Spr i. on Opx2a rim	Spr3 in Crd-Opx-Spr s.	Spr3 in Crd-Opx-Spr s.	Spr3 in Crd-Opx-Spr s.	Spr3 in Crd-Spr s. on Opx-Sil	Spr3 in Crd-Spr s. on Opx-Sil	Spr3 in Crd-Spr s. on Opx-Sil	Spr3 in Crd-Spr s. on Opx-Sil
Position															
SiO_2	13.14	13.15	12.76	13.69	14.14	14.29	14.28	13.77	12.82	13.02	13.17	13.42	13.70	13.48	13.53
TiO_2	0.06	0.10	0.12	0.08	0.09	0.09	0.07	0.05	0.06	0.05	0.09	0.07	0.08	0.02	0.05
Al_2O_3	61.92	61.66	62.50	60.88	60.08	59.59	60.16	61.36	61.70	60.89	61.34	61.01	60.69	61.25	60.22
Cr_2O_3	0.04	0.02	0.04	0.03	0.01	0.03	0.00	0.02	0.03	0.03	0.00	0.00	0.00	0.02	0.00
Fe_2O_3	2.19	2.48	2.29	1.83	1.74	1.49	1.57	2.28	1.48	1.07	1.41	1.95	1.38	2.13	2.01
MgO	15.66	15.86	15.37	16.30	16.15	15.92	16.10	16.49	15.41	15.28	15.54	15.40	14.98	16.01	15.46
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MnO	0.04	0.02	0.03	0.00	0.00	0.07	0.10	0.05	0.05	0.03	0.04	0.04	0.10	0.02	0.04
FeO	7.90	7.61	8.10	7.35	8.21	8.66	8.35	7.29	7.71	8.01	7.99	8.56	9.55	7.66	8.36
ZnO	0.00	0.05	0.00	0.11	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
NiO	0.04	0.01	0.00	0.00	0.04	0.00	0.00	0.05	0.00	0.01	0.01	0.06	0.04	0.00	0.12
total	100.99	100.97	101.20	100.27	100.46	100.13	100.71	101.37	99.25	98.38	99.59	100.50	100.50	100.59	99.80
Formula (O=20)															
Si	1.56	1.56	1.51	1.63	1.69	1.71	1.70	1.63	1.55	1.58	1.58	1.61	1.64	1.60	1.63
Al^{IV}	4.44	4.44	4.49	4.37	4.31	4.29	4.30	4.37	4.45	4.42	4.42	4.39	4.36	4.40	4.37
Al^{VI}	4.23	4.20	4.26	4.19	4.14	4.13	4.15	4.16	4.31	4.31	4.27	4.21	4.22	4.20	4.18
Ti	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.20	0.22	0.20	0.16	0.16	0.13	0.14	0.20	0.13	0.10	0.13	0.18	0.12	0.19	0.18
Mg	2.77	2.81	2.72	2.90	2.87	2.85	2.86	2.90	2.77	2.77	2.78	2.75	2.68	2.84	2.78
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00
Fe^{2+}	0.78	0.76	0.80	0.73	0.82	0.87	0.83	0.72	0.78	0.81	0.80	0.86	0.96	0.76	0.84
Zn	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ni	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
total	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
X_{Mg}	0.78	0.79	0.77	0.80	0.78	0.77	0.77	0.80	0.78	0.77	0.78	0.76	0.74	0.79	0.77

Table A.6.2.8 (continued): Representative EMP analyses of sapphirine

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	458-5-00	458-5-00	458-5-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00
Analyses	spr 1	spr 1	spr 1	spr 2	spr 2	spr 2	spr 2	spr 2	spr 2	spr 2	spr 2	spr 2	spr 2	spr 1	spr 1	spr 1
Point	1	2	3	1	2	5	10	13	24	41	44	45	4	5	8	
Texture	Spr3 in Crd-Spr s. on Grt-Sil	Spr3 in Crd-Spr s. on Grt-Sil	Spr3 in Crd-Spr s. on Grt-Sil	Spr2a matrix	Spr2a matrix	Spr2a matrix	Spr2a matrix	Spr2a matrix	Spr2a matrix	Spr2a matrix	Spr2a matrix	Spr2a matrix	Spr3 in Crd-Spr s. on Grt-Sil	Spr3 in Crd-Spr s. on Grt-Sil	Spr3 in Crd-Spr s. on Grt-Sil	
Position				rim	←	←	←	core	→	→	→	rim				
SiO_2	13.11	13.45	13.64	13.07	13.46	14.05	14.05	13.92	14.22	13.98	14.18	13.67	13.58	13.48	13.05	
TiO_2	0.07	0.03	0.09	0.03	0.06	0.15	0.08	0.14	0.09	0.05	0.05	0.06	0.07	0.04	0.01	
Al_2O_3	61.79	60.24	60.43	61.69	59.76	58.93	58.43	57.99	58.64	58.57	59.52	60.21	60.08	60.69	60.74	
Cr_2O_3	0.02	0.02	0.00	0.05	0.00	0.00	0.06	0.02	0.00	0.02	0.01	0.00	0.02	0.05	0.01	
Fe_2O_3	1.51	1.28	1.72	1.46	1.59	1.84	2.16	1.88	1.57	1.86	1.19	1.25	1.97	1.57	1.62	
MgO	15.35	15.05	15.49	14.97	15.13	15.11	15.26	14.78	14.96	14.77	15.02	15.01	15.62	15.57	15.11	
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MnO	0.04	0.08	0.01	0.09	0.08	0.01	0.06	0.05	0.06	0.07	0.07	0.05	0.09	0.02	0.06	
FeO	8.28	8.89	8.64	8.80	8.78	9.75	9.31	9.87	9.97	9.86	9.95	9.39	8.09	8.18	8.33	
ZnO	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.08	0.00	0.00	0.14	0.08	0.00	
NiO	0.06	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.05	0.05	0.04	0.00	0.00	0.00	0.00	
total	100.22	99.07	100.07	100.17	98.85	99.83	99.42	98.65	99.60	99.30	100.02	99.65	99.65	99.66	98.92	
Formula (O=20)																
Si	1.57	1.63	1.64	1.57	1.64	1.70	1.71	1.71	1.73	1.70	1.71	1.65	1.64	1.62	1.58	
Al^{IV}	4.43	4.37	4.36	4.43	4.36	4.30	4.29	4.29	4.27	4.30	4.29	4.35	4.36	4.38	4.42	
Al^{VI}	4.28	4.24	4.19	4.29	4.21	4.11	4.07	4.09	4.11	4.12	4.17	4.22	4.17	4.23	4.27	
Ti	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fe^{3+}	0.14	0.12	0.16	0.13	0.15	0.17	0.20	0.17	0.14	0.17	0.11	0.11	0.18	0.14	0.15	
Mg	2.74	2.72	2.77	2.68	2.74	2.73	2.76	2.70	2.71	2.68	2.70	2.70	2.81	2.79	2.73	
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mn	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	
Fe^{2+}	0.83	0.90	0.87	0.88	0.89	0.99	0.95	1.01	1.01	1.00	1.00	0.95	0.82	0.82	0.85	
Zn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	
Ni	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
total	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	
X_{Mg}	0.77	0.75	0.76	0.75	0.75	0.73	0.75	0.73	0.73	0.73	0.73	0.74	0.77	0.77	0.76	

A.6.2.9 Spinel

Table A.6.2.9: Representative EMP analyses of spinel

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss
Sample	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	614-1-99	458-3-99	458-3-99	458-3-99	634-00	634-00	**634-00**	634-00	634-00
Analysis	spl 1	spl 1	spl 1	spl 1	spl 2	spl 2	spl 2	spl 2	spl 1	spl 1	spl 1	spl 1	spl 1	**spl 1**	spl 1	spl 3
Point	1	6	7	10	1	2	4	5	2	4	5	10	14	**15**	24	14
Texture	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Spl-Crd	Spl3 in Spl-Crd	**Spl3 in Spl-Crd s.**	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.
SiO_2	0.04	0.00	0.02	0.04	0.05	0.11	0.08	0.08	0.11	0.08	0.00	0.09	0.11	**0.09**	0.11	0.15
TiO_2	0.01	0.00	0.00	0.02	0.04	0.02	0.03	0.00	0.03	0.03	0.03	0.02	0.00	**0.00**	0.00	0.03
Al_2O_3	61.57	61.81	61.87	61.39	61.69	61.81	62.35	61.92	60.44	60.71	61.23	60.47	60.37	**60.67**	60.36	60.58
Cr_2O_3	0.03	0.03	0.00	0.02	0.04	0.04	0.05	0.00	0.60	0.65	0.67	0.15	0.17	**0.16**	0.23	0.13
Fe_2O_3	1.90	1.95	1.83	1.44	1.29	0.82	1.06	1.49	1.94	2.43	1.76	1.39	1.54	**1.08**	1.13	1.22
MgO	10.25	10.23	10.04	9.97	9.32	9.46	9.59	9.79	10.94	11.73	11.63	8.41	8.33	**8.19**	7.65	7.44
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
MnO	0.06	0.04	0.03	0.07	0.04	0.03	0.00	0.10	0.01	0.08	0.03	0.02	0.08	**0.05**	0.08	0.05
FeO	24.94	24.99	25.61	25.19	26.19	25.74	26.19	25.51	23.69	22.55	22.95	27.22	27.41	**27.69**	28.41	28.95
ZnO	1.15	1.29	1.01	1.06	1.60	1.75	1.54	1.53	0.86	0.84	0.66	1.31	1.29	**1.17**	1.23	1.41
NiO	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.02	0.01	0.06	0.01	0.08	0.03	**0.08**	0.13	0.13
total	99.95	100.39	100.42	99.20	100.25	99.79	100.89	100.44	98.62	99.16	98.95	99.17	99.32	**99.19**	99.32	100.06
Formula (O=4)																
B																
Si	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Al	1.96	1.96	1.96	1.97	1.97	1.98	1.97	1.97	1.94	1.93	1.95	1.96	1.96	**1.97**	1.97	1.96
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	**0.00**	0.01	0.00
Fe^{3+}	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.03	0.04	0.05	0.04	0.03	0.03	**0.02**	0.02	0.03
A																
Mg	0.41	0.41	0.40	0.40	0.38	0.38	0.38	0.39	0.44	0.47	0.47	0.35	0.34	**0.34**	0.32	0.31
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
Fe^{2+}	0.56	0.56	0.58	0.57	0.59	0.58	0.59	0.57	0.54	0.51	0.52	0.63	0.63	**0.64**	0.66	0.67
Zn	0.02	0.03	0.02	0.02	0.03	0.04	0.03	0.03	0.02	0.02	0.01	0.03	0.03	**0.02**	0.03	0.03
Ni	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00
total	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	**3.00**	3.00	3.00
X_{Mg}	0.42	0.42	0.41	0.41	0.39	0.40	0.39	0.41	0.45	0.48	0.47	0.36	0.35	**0.35**	0.32	0.31
Hercynite	54.3	54.2	55.8	55.7	57.7	57.3	57.5	55.9	51.2	47.6	49.2	61.0	61.2	**62.4**	64.1	64.9
Spinel	41.3	41.0	40.3	40.5	37.6	38.2	38.3	39.3	44.4	47.2	46.8	34.5	34.1	**33.6**	31.5	30.4
Magnetite	1.9	2.0	1.9	1.5	1.3	0.8	1.1	1.5	2.0	2.5	1.8	1.4	1.6	**1.1**	1.2	1.3
Chromite	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6	0.7	0.7	0.2	0.2	**0.2**	0.2	0.1
Gahnite	2.3	2.6	2.0	2.1	3.2	3.5	3.0	3.0	1.7	1.7	1.3	2.7	2.6	**2.4**	2.5	2.8

*: analysis used for geothermobarometry

Table A.6.2.9 (continued): Representative EMP analyses of spinel

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**	Grt gneiss	Grt gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss
Sample	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	**230-E-98**	230-E-98	230-E-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98
Analysis	spl 2	spl 2	spl 3	spl	spl	**spl**	spl	spl	spl	spl	spl	spl 1	spl 1	spl 1	spl 1	spl 1
Point	1	2	1	4	5	**8**	9	10	1	2	3	5	6	7	8	9
Texture	Spl1 in Grt2	Spl1 in Grt2	Spl1 in Grt2	Spl1 in Grt2	Spl1 in Grt2	**Spl3 in Spl-Crd s.**	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.	Spl1 in Grt2	Spl1 in Grt2	Spl1 in Grt2	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl2 matrix
SiO_2	0.00	0.00	0.00	0.00	0.00	**0.00**	0.02	0.04	0.01	0.02	0.00	0.00	0.01	0.00	0.01	0.00
TiO_2	0.00	0.02	0.00	0.02	0.04	**0.04**	0.04	0.00	0.03	0.01	0.00	0.02	0.01	0.00	0.02	0.00
Al_2O_3	57.40	56.97	58.33	58.23	57.94	**59.57**	59.92	59.68	57.84	57.41	57.93	56.28	56.85	56.19	56.32	56.66
Cr_2O_3	1.34	1.26	1.27	0.47	0.49	**0.13**	0.14	0.15	0.25	0.26	0.25	0.63	0.54	0.54	0.59	0.65
Fe_2O_3	2.74	3.15	2.60	3.20	3.69	**2.02**	2.15	2.39	3.93	4.41	3.41	4.19	3.80	4.23	4.15	3.68
MgO	6.17	5.35	6.54	6.34	6.46	**7.60**	7.54	7.40	5.58	5.68	5.47	4.82	5.00	4.87	4.71	4.83
CaO	0.04	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00
MnO	0.05	0.13	0.11	0.08	0.07	**0.07**	0.04	0.06	0.08	0.10	0.07	0.08	0.16	0.15	0.16	0.14
FeO	27.21	28.36	27.04	27.44	27.11	**27.08**	27.54	27.67	29.70	29.37	29.78	30.36	29.97	29.86	30.25	30.18
ZnO	4.55	4.60	4.54	4.30	4.52	**2.53**	2.57	2.52	3.22	3.20	3.27	3.24	3.35	3.40	3.42	3.30
NiO	0.00	0.08	0.05	0.08	0.05	**0.06**	0.00	0.09	0.05	0.12	0.00	0.00	0.05	0.09	0.07	0.06
total	99.49	99.92	100.46	100.16	100.36	**99.11**	99.96	99.99	100.73	100.61	100.18	99.62	99.75	99.31	99.70	99.51
Formula (O=4)																
B																
Si	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ti	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	1.91	1.90	1.92	1.92	1.91	**1.95**	1.95	1.95	1.91	1.90	1.92	1.89	1.91	1.90	1.90	1.91
Cr	0.03	0.03	0.03	0.01	0.01	**0.00**	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Fe^{3+}	0.06	0.07	0.05	0.07	0.08	**0.04**	0.04	0.05	0.08	0.09	0.07	0.09	0.08	0.09	0.09	0.08
A																
Mg	0.26	0.23	0.27	0.26	0.27	**0.32**	0.31	0.30	0.23	0.24	0.23	0.21	0.21	0.21	0.20	0.21
Ca	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{2+}	0.64	0.67	0.63	0.64	0.63	**0.63**	0.64	0.64	0.70	0.69	0.70	0.73	0.71	0.72	0.72	0.72
Zn	0.09	0.10	0.09	0.09	0.09	**0.05**	0.05	0.05	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Ni	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	3.00	3.00	3.00	3.00	3.00	**3.00**	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
X_{Mg}	0.29	0.25	0.30	0.29	0.30	**0.33**	0.33	0.32	0.25	0.26	0.25	0.22	0.23	0.23	0.22	0.22
Hercynite	59.9	62.4	59.0	60.3	58.9	**60.6**	61.1	61.4	65.1	64.0	66.2	67.2	66.5	66.3	67.0	67.3
Spinel	26.0	22.6	27.2	26.5	27.0	**31.6**	31.1	30.5	23.3	23.8	23.0	20.5	21.2	20.8	20.1	20.5
Magnetite	2.9	3.4	2.7	3.4	3.9	**2.1**	2.2	2.5	4.2	4.7	3.6	4.5	4.1	4.6	4.5	4.0
Chromite	1.5	1.4	1.4	0.5	0.5	**0.1**	0.2	0.2	0.3	0.3	0.3	0.7	0.6	0.6	0.7	0.7
Gahnite	9.5	9.6	9.3	8.9	9.3	**5.2**	5.2	5.1	6.7	6.6	6.8	6.8	7.0	7.2	7.2	7.0

*: analysis used for geothermobarometry

Table A.6.2.9 (continued): Representative EMP analyses of spinel

Rock Unit	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	**Grt-Sil gneiss**	Grt-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	230-F-98	230-F-98	230-F-98	230-F-98	**230-F-98**	230-F-98	458-4-99	458-4-99	458-4-99	458-4-99	458-5-00	458-5-00	458-9-00	458-9-00	458-9-00
Analysis	spl 1	spl 1	spl 1	spl 2	**spl 2**	spl 2	spl 2	spl 3	spl 3	spl 3	spl 1	spl 1	spl 1	spl 1	spl 1
Point	2	4	6	1	**2**	3	1	1	2	3	1	2	2	4	15
Texture	Spl2 matrix	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.	**Spl3 in Spl-Crd s.**	Spl3 in Spl-Crd s.	Spl3 in Crd-Opx-Spl s.	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.	Spl3 in Spl-Crd s.
SiO_2	0.00	0.05	0.00	0.01	**0.04**	0.00	1.02	1.19	1.35	1.06	0.00	0.01	0.00	0.18	0.05
TiO_2	0.03	0.04	0.01	0.04	**0.01**	0.04	0.00	0.01	0.00	0.00	0.02	0.00	0.04	0.00	0.02
Al_2O_3	58.21	55.43	55.12	55.28	**54.92**	54.95	59.60	62.60	62.49	61.88	60.40	59.80	60.77	60.63	59.64
Cr_2O_3	0.59	0.78	0.88	0.95	**0.94**	1.01	0.00	0.00	0.00	0.06	0.03	0.00	0.00	0.02	0.04
Fe_2O_3	2.49	4.43	4.68	4.45	**5.08**	4.93	2.49	0.00	0.00	0.51	2.82	2.64	1.78	1.27	1.95
MgO	5.89	4.51	4.46	4.40	**4.46**	4.49	7.59	11.61	11.54	11.78	9.08	8.62	9.01	8.99	7.50
CaO	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MnO	0.18	0.05	0.13	0.06	**0.07**	0.05	0.10	0.06	0.02	0.11	0.17	0.12	0.10	0.13	0.11
FeO	28.44	31.90	31.93	32.09	**32.03**	32.02	29.50	25.44	25.31	25.03	27.47	27.67	27.23	27.40	29.25
ZnO	3.64	1.74	1.53	1.66	**1.51**	1.59	n.d.	0.37	0.25	0.20	0.03	0.20	0.25	0.25	0.25
NiO	0.08	0.02	0.04	0.04	**0.09**	0.02	n.d.	0.00	0.00	0.05	0.03	0.00	0.08	0.04	0.05
total	99.55	98.95	98.78	98.97	**99.15**	99.10	100.30	101.28	100.96	100.67	100.03	99.04	99.25	98.91	98.85
Formula (O=4)															
B															
Si	0.00	0.00	0.00	0.00	**0.00**	0.00	0.03	0.03	0.04	0.03	0.00	0.00	0.00	0.01	0.00
Ti	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	1.93	1.88	1.88	1.88	**1.87**	1.87	1.92	1.94	1.94	1.93	1.94	1.95	1.96	1.96	1.96
Cr	0.01	0.02	0.02	0.02	**0.02**	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.05	0.10	0.10	0.10	**0.11**	0.11	0.05	0.00	0.00	0.01	0.06	0.05	0.04	0.03	0.04
A															
Mg	0.25	0.19	0.19	0.19	**0.19**	0.19	0.31	0.46	0.45	0.47	0.37	0.35	0.37	0.37	0.31
Ca	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{2+}	0.67	0.77	0.77	0.77	**0.77**	0.77	0.67	0.56	0.56	0.55	0.63	0.64	0.62	0.63	0.68
Zn	0.08	0.04	0.03	0.04	**0.03**	0.03	n.d.	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Ni	0.00	0.00	0.00	0.00	**0.00**	0.00	n.d.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	3.00	3.00	3.00	3.00	**3.00**	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
X_{Mg}	0.27	0.20	0.20	0.20	**0.20**	0.20	0.31	0.45	0.45	0.46	0.37	0.36	0.37	0.37	0.31
Hercynite	63.7	71.0	71.0	71.3	**70.6**	70.6	65.8	54.6	54.9	53.4	59.6	61.1	60.4	61.2	65.9
Spinel	24.8	19.4	19.2	18.9	**19.2**	19.3	31.4	44.5	44.6	45.3	36.9	35.5	36.8	36.6	31.1
Magnetite	2.6	4.8	5.1	4.8	**5.5**	5.3	2.6	0.0	0.0	0.5	2.9	2.7	1.8	1.3	2.0
Chromite	0.7	0.9	1.0	1.1	**1.1**	1.1	n.d.	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Gahnite	7.6	3.7	3.3	3.5	**3.2**	3.4	n.d.	0.7	0.5	0.4	0.1	0.4	0.5	0.5	0.5

*: analysis used for geothermobarometry

Table A.6.2.9 (continued): Representative EMP analyses of spinel

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock
Sample	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00	700-1-00
Analysis	spl 4	spl 4	spl 4	spl 1	spl 1	spl 1	spl 1	spl 1	spl 2	spl 2	spl 2	spl 2	spl 2	spl 3	spl 3
Point	1	3	4	7	10	11	13	15	5	6	12	13	15	4	21
Texture	Spl1 in Grt2	Spl1 in Grt2	Spl1 in Grt2	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl2 matrix	Spl3 in Crd-Opx-Spl s.	Spl3 in Crd-Opx-Spl s.
SiO_2	0.02	0.05	0.03	0.02	0.02	0.01	0.11	0.00	0.00	0.04	0.03	0.00	0.03	1.59	2.53
TiO_2	0.03	0.01	0.02	0.00	0.01	0.05	0.04	0.05	0.00	0.00	0.05	0.01	0.03	0.01	0.00
Al_2O_3	60.44	60.94	60.90	59.72	59.51	60.04	60.38	60.60	58.98	58.55	58.33	58.77	59.23	62.14	60.15
Cr_2O_3	0.31	0.34	0.34	0.34	0.31	0.32	0.30	0.33	0.33	0.38	0.37	0.37	0.41	0.09	0.13
Fe_2O_3	2.13	2.16	2.12	1.96	2.32	2.31	1.23	1.35	2.50	2.37	3.20	2.89	2.40	0.00	0.00
MgO	10.44	10.59	10.51	8.51	8.77	8.85	8.75	8.91	7.97	7.74	7.95	8.08	8.21	13.76	12.28
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MnO	0.06	0.00	0.01	0.05	0.02	0.07	0.04	0.05	0.10	0.10	0.02	0.02	0.03	0.07	0.07
FeO	18.44	18.43	18.41	21.72	20.99	21.00	21.43	21.00	22.05	22.12	22.02	21.84	21.44	22.13	24.12
ZnO	7.50	7.61	7.74	7.00	7.29	7.54	7.27	7.46	7.36	7.35	7.40	7.46	7.83	0.54	0.65
NiO	0.02	0.11	0.07	0.02	0.08	0.08	0.03	0.08	0.00	0.03	0.07	0.06	0.06	0.00	0.00
total	99.38	100.23	100.16	99.34	99.30	100.27	99.57	99.84	99.30	98.67	99.42	99.51	99.66	100.34	99.92
Formula (O=4)															
B															
Si	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.07
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	1.95	1.95	1.95	1.95	1.94	1.94	1.96	1.96	1.94	1.94	1.92	1.93	1.94	1.92	1.88
Cr	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Fe^{3+}	0.04	0.04	0.04	0.04	0.05	0.05	0.03	0.03	0.05	0.05	0.07	0.06	0.05	0.00	0.00
A															
Mg	0.43	0.43	0.43	0.35	0.36	0.36	0.36	0.36	0.33	0.32	0.33	0.34	0.34	0.54	0.49
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{2+}	0.42	0.42	0.42	0.50	0.49	0.48	0.49	0.48	0.51	0.52	0.51	0.51	0.50	0.48	0.54
Zn	0.15	0.15	0.16	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.01	0.01
Ni	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.99
X_{Mg}	0.50	0.51	0.50	0.41	0.43	0.43	0.42	0.43	0.39	0.38	0.39	0.40	0.41	0.53	0.48
Hercynite	39.5	39.2	39.2	47.9	45.9	45.3	47.5	46.3	48.4	49.1	47.5	47.4	46.7	46.7	51.6
Spinel	42.6	42.8	42.5	35.2	36.2	36.2	35.9	36.5	33.2	32.4	33.1	33.6	34.0	52.0	46.9
Magnetite	2.2	2.2	2.2	2.0	2.4	2.4	1.3	1.4	2.6	2.5	3.4	3.0	2.5	0.0	0.0
Chromite	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.1	0.1
Gahnite	15.1	15.2	15.5	14.3	14.9	15.3	14.8	15.1	15.2	15.3	15.3	15.3	16.1	1.0	1.2

*: analysis used for geothermobarometry

A.6.2.10 Ilmenite, magnetite, rutile, and sillimanite

Table A.6.2.10: Representative EMP analyses of ilmenite, magnetite, rutile, and sillimanite

Mineral	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Ilmenite	Mineral	Magnetite
Rock Unit	Orue	Orue	Orue	Orue	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Rock Unit	Orue
Rock type	Grt-Sil-Crd	Grt-Sil-Crd	Grt-Crd-Bt	Grt-Cpx	Two-Px	Grt-Cpx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt-Opx	Grt gneiss	Grt gneiss	Grt-Sil	Grt-Sil	Rock type	Grt-Sil-Crd
	rock	rock	gneiss	amph.	granulite	granulite	metagranit.	rock	rock	rock	rock	gneiss	gneiss	gneiss	gneiss			gneiss	gneiss		rock
Sample	302-2-99	302-2-99	103-A-98	191-B-98	230-B-98	311-1-99	646-1-00	614-1-99	614-1-99	614-1-99	587-4-99	458-3-99	690-2-00	690-2-00	230-E-98	230-E-98	230-F-98	230-F-98		Sample	302-2-99
Point	Ilm1	ilm4	ilm1	ilm1	ilm2	ilm1	ilm 1	ilm 2	ilm7	ilm1-2	ilm 1	ilm 2	ilm1	ilm 2	ilm 1	ilm 4	ilm 3	ilm 1		Point	Mag3
	1	2	3	7	3	3	1	2	1	2	4	2	2	3	2	2	2	2			mt 3-5
Texture	Ilm1	Ilm2	Ilm2	Ilm2	Ilm2	Ilm2	Ilm2	Ilm1	Ilm2	Ilm3 in	Ilm2	Ilm2	Ilm1	Ilm2	Ilm1	Ilm2	Ilm1	Ilm3 in		Texture	Mag2
	in Grt2	matrix	matrix	matrix	matrix	matrix	matrix	in Grt2	matrix	Crd-Opx s.	matrix	matrix	in Grt2	matrix	in Grt2	matrix	in Spl2	Crd-Spl s.			matrix
SiO_2	0.02	0.15	0.03	0.00	0.00	0.03	0.09	0.02	0.04	0.00	0.00	0.00	0.05	0.02	0.00	0.00	0.02	0.02		SiO_2	0.00
TiO_2	51.51	50.83	53.26	52.42	50.39	52.09	51.86	52.74	52.78	52.20	53.24	52.90	52.68	52.61	51.59	53.01	52.28	52.28		TiO_2	0.01
Al_2O_3	0.09	0.13	0.04	0.00	0.04	0.00	0.02	0.05	0.02	0.09	0.06	0.03	0.05	0.05	0.04	0.07	0.05	0.05		Al_2O_3	0.12
Cr_2O_3	0.00	0.00	0.08	0.03	0.08	0.00	0.08	0.00	0.00	0.00	0.01	0.11	0.06	0.02	0.02	0.07	0.06	0.06		Cr_2O_3	0.02
Fe_2O_3	1.18	1.32	0.00	0.00	4.25	1.27	0.31	0.68	0.00	0.94	0.00	0.00	0.00	0.00	2.09	0.00	0.57	0.54		Fe_2O_3	62.34
MgO	0.00	0.02	0.02	0.10	0.03	0.00	0.14	0.34	0.15	0.16	0.25	0.22	0.20	0.06	0.24	0.03	0.16	0.16		MgO	0.00
MnO	3.27	1.39	2.30	0.86	1.28	3.85	0.34	1.88	2.10	0.37	0.43	1.77	0.41	0.83	0.87	1.20	0.78	0.78		MnO	0.00
FeO	43.04	44.48	44.66	45.93	43.98	42.96	46.18	44.96	44.97	46.26	46.94	45.13	46.67	46.04	45.12	46.31	45.99	46.01		FeO	37.41
Total	99.09	98.32	100.39	99.34	100.03	100.20	99.01	100.68	100.06	100.02	100.92	100.16	100.12	99.63	99.97	100.68	99.91	99.91		Total	99.90
Formula (O=6)																				Formula (O=4)	
A-Position																				*A-Position*	
Si	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Si	0.00
Ti	1.97	1.96	2.01	2.00	1.92	1.98	1.99	1.98	2.00	1.98	2.00	2.00	2.00	2.00	1.96	2.00	1.99	1.99		Mg	0.00
Al	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Mn	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00		Fe^{2+}	1.00
Fe^{3+}	0.05	0.05	0.00	0.00	0.16	0.05	0.01	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.08	0.00	0.02	0.02		Sum	1.00
Sum	2.03	2.03	2.02	2.00	2.08	2.02	2.01	2.01	2.00	2.02	2.00	2.01	2.00	2.01	2.04	2.00	2.01	2.01		*B-Position*	
B-Position																				Ti	0.00
Mg	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.03	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.00	0.01	0.01		Al	0.01
Mn	0.14	0.06	0.10	0.04	0.05	0.17	0.02	0.08	0.09	0.02	0.02	0.08	0.02	0.04	0.04	0.05	0.03	0.03		Cr	0.00
Fe^{2+}	1.83	1.91	1.87	1.95	1.86	1.81	1.97	1.88	1.89	1.95	1.96	1.90	1.97	1.95	1.90	1.94	1.94	1.94		Fe^{3+}	1.99
Sum	1.97	1.97	1.97	1.99	1.92	1.98	1.99	1.99	2.00	1.98	2.00	1.99	2.00	1.99	1.96	1.99	1.99	1.99		Sum	2.00
Total	4.00	4.00	3.99	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00		Total	3.00
Ilmenite	90.8	94.4	95.0	97.8	93.1	90.6	98.4	94.1	94.9	97.7	98.2	95.4	98.4	98.0	95.3	97.3	97.2	97.2			
Hematite	2.2	2.5	0.0	0.0	4.0	1.2	0.3	0.6	0.0	0.9	0.0	0.0	0.0	0.0	2.0	0.0	0.5	0.5			
Pyrophanithe	7.0	3.0	5.0	1.9	2.7	8.2	0.7	4.0	4.5	0.8	0.9	3.8	0.9	1.8	1.9	2.6	1.7	1.7			
Geikielithe	0.0	0.1	0.1	0.4	0.1	0.0	0.5	1.3	0.6	0.6	0.9	0.8	0.7	0.2	0.9	0.1	0.6	0.6			

Table A.6.2.10 (continued): Representative EMP analyses of ilmenite, magnetite, rutile, and sillimanite

Mineral	Rutile	Rutile	Rutile	Rutile	Rutile	Rutile	Rutile	Rutile
Rock Unit	Orue	Orue	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Sil-Crd rock	Grt-Bt-Sil gneiss	Grt-Cpx granulite	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Grt gneiss	Grt-Sil gneiss	Opx-Sil gneiss
Sample	302-2-99	342-2-99	311-1-99	614-1-99	587-4-99	230-E-98	230-F-98	458-4-99
Profile	rt 1	rt1	rt 1	rt2	rt2	rt4	rt 1	rt1
Point	8	2	1	2	1	1	4	2
Texture	Rt1 in Grt2	Rt1 in Grt2	Rt1 in Grt2	Rt1 in Grt2	Rt2 matrix	Rt1 in Grt2	Rt2 matrix	Rt2 matrix
SiO_2	0.05	0.01	0.00	0.00	0.03	0.04	0.01	0.00
TiO_2	98.83	99.04	99.50	96.31	99.01	97.27	98.67	96.28
Al_2O_3	0.09	0.04	0.06	0.39	0.09	0.10	0.10	0.34
Cr_2O_3	0.50	0.04	0.08	0.04	0.05	0.08	0.15	0.03
FeO	0.64	0.30	0.44	0.96	0.76	0.57	0.09	1.44
MgO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
MnO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
CaO	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Total	100.11	99.44	100.09	97.70	99.94	98.06	99.01	98.09
Formula (O=4)								
Si	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ti	1.98	2.00	1.99	1.98	1.99	1.99	1.99	1.97
Al	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01
Cr	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.01	0.01	0.01	0.02	0.01	0.01	0.00	0.03
Mg	-	-	-	-	-	-	-	-
Mn	-	-	-	-	-	-	-	-
Ca	-	-	-	-	-	-	-	-
Total	2.01	2.00	2.01	2.01	2.00	2.00	2.00	2.01

Mineral	Sillimanite	Sillimanite	Sillimanite	Sillimanite	Sillimanite	Sillimanite	Sillimanite
Rock Unit	Orue	Orue	Orue	Orue	Epembe	Epembe	Epembe
Rock type	Grt-Bt-Sil leucos.	Grt-Bt-Sil gneiss	Grt-Sil-Crd rock	Grt-Bt-Sil gneiss	Qtz-rich Grt-Opx rock	Grt-Sil gneiss	Opx-Sil gneiss
Sample	219-A-98	246-A-98	302-2-99	342-2-99	587-4-99	230-F-98	458-4-99
Profile	sil1-3	sil2-4	sil1-3	sil2-2	sil1-1	sil1-3	sil1-3
Point							
Texture	Sil2 matrix	Sil2 matrix	Sil2 matrix	Sil2 matrix	Sil2 matrix	Sil2 matrix	Sil2 matrix
SiO_2	36.42	36.69	36.92	36.97	37.07	36.78	37.07
TiO_2	0.01	0.04	0.00	0.03	0.02	0.01	0.06
Al_2O_3	61.64	62.71	62.60	62.87	63.24	62.75	62.89
Cr_2O_3	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
FeO	0.47	0.30	0.66	0.26	0.62	0.36	0.53
MgO	0.02	0.02	0.02	0.00	0.00	0.00	0.03
MnO	0.00	0.00	0.00	0.01	0.02	0.00	0.00
CaO	0.06	0.00	0.00	0.00	0.00	0.00	0.00
Total	98.61	99.75	100.20	100.12	100.96	99.90	100.58
Formula (O=20)							
Si	4.00	3.98	3.99	3.99	3.98	3.98	3.99
Ti	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	7.97	8.01	7.97	8.00	7.99	8.00	7.97
Cr	-	-	-	-	-	-	-
Fe	0.04	0.03	0.06	0.02	0.06	0.03	0.05
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.02	12.02	12.02	12.01	12.03	12.02	12.02

A.6.2.11 Plagioclase

Table A.6.2.11: Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue**	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	**Grt-Crd-Bt gneiss**	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Crd-Bt gneiss	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome
Sample	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	103-A-98	**103-A-98**	103-A-98	103-A-98	103-A-98	103-A-98	219-A-98	219-A-98
Profile	pl 2	pl 2	pl 2	pl 2	pl 2	pl 2	pl 2	pl 2	**pl 2**	pl 2	pl 2	pl 2	pl 2	pl1	pl1
Point	1	2	5	6	7	8	10	11	**12**	13	15	16	18	1	2
Texture	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	**matrix Pl2**	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	rim	←	←	←	←	←	core	→	→	→	→	→	rim	rim	←
SiO_2	60.96	61.27	62.00	61.05	61.22	61.46	60.82	61.51	**60.99**	60.70	60.97	60.88	60.12	63.64	63.44
Al_2O_3	24.08	24.38	24.35	24.22	24.17	24.04	24.25	24.69	**24.26**	24.17	24.37	24.41	24.34	22.64	22.42
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.04	0.00
CaO	5.70	5.63	5.58	5.46	5.44	5.53	5.70	5.79	**5.66**	5.68	5.63	5.74	5.91	3.50	3.50
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.00	0.03	0.01	0.00	0.05	0.00	0.01	0.06	**0.00**	0.08	0.00	0.05	0.02	0.02	0.05
BaO	0.04	0.03	0.05	0.03	0.00	0.01	0.09	0.02	**0.04**	0.05	0.00	0.00	0.10	0.05	0.00
Na_2O	8.36	8.15	8.07	8.50	8.50	8.35	8.28	8.38	**8.24**	8.39	8.22	8.27	8.31	9.76	9.54
K_2O	0.33	0.37	0.45	0.45	0.46	0.49	0.36	0.27	**0.28**	0.28	0.35	0.31	0.26	0.10	0.09
Total	99.47	99.86	100.50	99.70	99.85	99.88	99.51	100.72	**99.48**	99.35	99.54	99.67	99.06	99.73	99.04
Formula (O=8)															
Si	2.73	2.73	2.74	2.72	2.73	2.74	2.72	2.72	**2.72**	2.72	2.72	2.72	2.70	2.82	2.83
Al	1.27	1.28	1.27	1.27	1.27	1.26	1.28	1.28	**1.28**	1.28	1.28	1.28	1.29	1.18	1.18
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.27	0.27	0.26	0.26	0.26	0.26	0.27	0.27	**0.27**	0.27	0.27	0.27	0.28	0.17	0.17
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.72	0.70	0.69	0.74	0.73	0.72	0.72	0.72	**0.71**	0.73	0.71	0.72	0.72	0.84	0.82
K	0.02	0.02	0.03	0.03	0.03	0.03	0.02	0.02	**0.02**	0.02	0.02	0.02	0.01	0.01	0.01
Total	5.01	5.00	4.99	5.02	5.02	5.01	5.01	5.01	**5.00**	5.02	5.00	5.01	5.02	5.01	5.00
Ab	71.24	70.82	70.39	71.94	71.97	71.19	70.86	71.24	**71.27**	71.53	71.09	71.00	70.65	82.93	82.70
Or	1.85	2.11	2.61	2.49	2.57	2.73	2.02	1.49	**1.59**	1.59	2.01	1.76	1.43	0.56	0.54
An	26.84	27.02	26.91	25.51	25.46	26.05	26.97	27.22	**27.07**	26.78	26.89	27.23	27.74	16.43	16.76
Cs	0.07	0.05	0.09	0.05	0.00	0.02	0.16	0.04	**0.07**	0.09	0.00	0.00	0.17	0.08	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

	*														
Rock Unit	**Orue**	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	**Grt-Bt-Sil leucosome**	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil leucosome	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	**219-A-98**	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	219-A-98	246-A-98	246-A-98	246-A-98
Profile	**pl1**	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl2	pl2	pl2
Point	**3**	4	7	9	10	13	15	16	17	18	19	20	1	3	7
Texture	**matrix Pl2**	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	←	←	←	←	core	→	→	→	→	→	→	rim	rim	←	←
SiO_2	**63.33**	63.78	62.98	63.68	63.08	63.19	64.26	63.81	63.89	63.42	63.89	63.33	62.23	62.13	63.49
Al_2O_3	**22.40**	22.48	22.51	22.80	22.88	22.50	22.41	22.60	22.65	22.65	22.54	22.61	23.34	23.19	23.45
MgO	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	**3.75**	3.57	3.62	3.62	3.71	3.62	3.63	3.73	3.73	3.55	3.36	3.54	4.67	4.71	4.64
MnO	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	**0.00**	0.04	0.01	0.00	0.03	0.01	0.07	0.05	0.04	0.01	0.04	0.02	0.04	0.07	0.02
BaO	**0.05**	0.09	0.08	0.01	0.08	0.10	0.00	0.02	0.10	0.01	0.02	0.00	0.00	0.00	0.00
Na_2O	**9.38**	9.44	9.51	9.28	9.41	9.33	9.46	9.55	9.53	9.54	9.40	9.54	8.96	8.86	8.87
K_2O	**0.21**	0.19	0.23	0.25	0.17	0.20	0.23	0.23	0.26	0.22	0.30	0.20	0.08	0.28	0.20
Total	**99.12**	99.58	98.95	99.65	99.36	98.95	100.05	99.99	100.19	99.40	99.55	99.24	99.32	99.24	100.67
Formula (O=8)															
Si	**2.82**	2.83	2.81	2.82	2.81	2.82	2.83	2.82	2.82	2.82	2.83	2.82	2.77	2.78	2.79
Al	**1.18**	1.17	1.19	1.19	1.20	1.18	1.16	1.18	1.18	1.19	1.18	1.19	1.23	1.22	1.21
Mg	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	**0.18**	0.17	0.17	0.17	0.18	0.17	0.17	0.18	0.18	0.17	0.16	0.17	0.22	0.23	0.22
Mn	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	**0.81**	0.81	0.82	0.80	0.81	0.81	0.81	0.82	0.81	0.82	0.81	0.82	0.77	0.77	0.76
K	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01
Total	**5.00**	5.00	5.01	4.99	5.01	5.00	4.99	5.01	5.01	5.01	4.99	5.01	5.00	5.01	4.99
Ab	**80.90**	81.73	81.43	81.07	81.23	81.22	81.44	81.17	80.90	81.91	82.05	82.04	77.29	76.07	76.69
Or	**1.16**	1.06	1.31	1.44	0.95	1.17	1.30	1.30	1.42	1.22	1.72	1.15	0.48	1.60	1.13
An	**17.85**	17.06	17.13	17.48	17.68	17.43	17.26	17.49	17.52	16.86	16.19	16.80	22.23	22.33	22.18
Cs	**0.09**	0.15	0.14	0.01	0.13	0.18	0.00	0.03	0.16	0.01	0.04	0.00	0.00	0.00	0.00
Total	**100.00**	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	**Orue** *	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock
Sample	246-A-98	246-A-98	**246-A-98**	246-A-98	246-A-98	246-A-98	246-A-98	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99
Profile	pl2	pl2	**pl2**	pl2	pl2	pl2	pl2	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3
Point	8	13	**18**	19	24	25	27	1	2	4	5	6	8	9	15
Texture	matrix Pl2	matrix Pl2	**matrix Pl2**	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	←	←	**core**	→	→	→	rim	rim	←	←	←	←	←	←	←
SiO_2	62.43	62.36	**63.25**	61.99	62.54	62.14	62.14	61.10	61.04	61.50	61.50	61.15	61.31	61.33	61.12
Al_2O_3	22.80	23.07	**23.39**	23.08	23.00	22.96	22.78	24.17	24.00	23.91	24.28	23.96	23.97	24.03	24.21
MgO	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
CaO	4.60	4.69	**4.50**	4.64	4.54	4.67	4.51	5.54	5.42	5.33	5.42	5.33	5.22	5.27	5.19
MnO	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.04	0.04	**0.08**	0.00	0.01	0.03	0.04	0.14	0.06	0.06	0.07	0.06	0.10	0.20	0.07
BaO	0.00	0.04	**0.00**	0.01	0.04	0.00	0.09	0.04	0.08	0.00	0.02	0.13	0.05	0.00	0.00
Na_2O	8.91	8.73	**9.07**	8.83	8.50	8.70	9.02	8.50	8.60	8.66	8.49	8.70	8.70	8.41	8.67
K_2O	0.26	0.23	**0.10**	0.09	0.17	0.12	0.07	0.04	0.07	0.12	0.05	0.05	0.04	0.04	0.06
Total	99.03	99.14	**100.38**	98.63	98.80	98.63	98.65	99.53	99.27	99.58	99.82	99.38	99.38	99.30	99.33
Formula (O=8)															
Si	2.79	2.78	**2.79**	2.78	2.80	2.79	2.79	2.73	2.73	2.74	2.73	2.73	2.74	2.74	2.73
Al	1.20	1.21	**1.22**	1.22	1.21	1.21	1.21	1.27	1.27	1.26	1.27	1.26	1.26	1.26	1.27
Mg	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.22	0.22	**0.21**	0.22	0.22	0.22	0.22	0.26	0.26	0.25	0.26	0.26	0.25	0.25	0.25
Mn	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Ba	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.77	0.76	**0.77**	0.77	0.74	0.76	0.78	0.74	0.75	0.75	0.73	0.75	0.75	0.73	0.75
K	0.02	0.01	**0.01**	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Total	5.00	4.99	**5.00**	5.00	4.97	4.99	5.00	5.01	5.01	5.01	5.00	5.01	5.01	4.99	5.01
Ab	76.68	76.06	**78.05**	77.11	76.40	76.57	77.90	73.32	73.79	74.10	73.71	74.31	74.86	74.09	74.87
Or	1.47	1.32	**0.57**	0.51	0.98	0.70	0.40	0.21	0.39	0.68	0.26	0.30	0.22	0.26	0.36
An	21.85	22.56	**21.39**	22.37	22.55	22.73	21.55	26.40	25.68	25.23	26.00	25.17	24.83	25.65	24.77
Cs	0.00	0.06	**0.00**	0.01	0.08	0.00	0.15	0.07	0.14	0.00	0.03	0.22	0.09	0.00	0.00
Total	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue***	Orue	Orue	Orue	Orue
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	**Grt-Sil-Crd rock**	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock
Sample	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	302-2-99	**302-2-99**	302-2-99	302-2-99	302-2-99	302-2-99
Profile	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	**pl 3**	pl 3	pl 3	pl 3	pl 3
Point	16	17	19	21	22	23	24	26	27	29	30	**31**	32	33	34	35
Texture	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	**matrix Pl2**	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	←	←	←	core	→	→	→	→	→	→	→	→	→	→	→	→
SiO_2	61.37	61.13	61.01	60.97	60.95	61.14	61.16	60.95	59.95	60.64	60.80	**60.66**	60.67	60.99	61.68	61.47
Al_2O_3	23.94	24.00	24.03	24.11	24.30	24.49	24.19	24.52	24.82	24.39	24.72	**24.71**	24.48	24.51	24.09	24.10
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
CaO	5.50	5.48	5.54	5.52	5.60	5.38	5.61	5.93	6.21	5.74	5.86	**6.20**	5.95	5.90	5.40	5.39
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
FeO	0.02	0.06	0.07	0.01	0.00	0.08	0.01	0.02	0.07	0.01	0.01	**0.00**	0.03	0.06	0.07	0.00
BaO	0.06	0.05	0.00	0.01	0.00	0.04	0.06	0.02	0.00	0.10	0.00	**0.03**	0.04	0.00	0.00	0.01
Na_2O	8.43	8.45	8.49	8.54	8.42	8.36	8.41	8.51	8.15	8.22	8.27	**8.13**	8.40	8.49	8.46	8.51
K_2O	0.08	0.10	0.06	0.07	0.05	0.12	0.05	0.05	0.06	0.27	0.10	**0.08**	0.07	0.06	0.07	0.04
Total	99.40	99.26	99.19	99.21	99.31	99.60	99.49	100.00	99.26	99.37	99.76	**99.81**	99.63	100.00	99.77	99.53
Formula (O=8)																
Si	2.74	2.73	2.73	2.73	2.72	2.72	2.73	2.71	2.69	2.71	2.71	**2.70**	2.71	2.71	2.74	2.74
Al	1.26	1.27	1.27	1.27	1.28	1.29	1.27	1.29	1.31	1.29	1.30	**1.30**	1.29	1.28	1.26	1.27
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ca	0.26	0.26	0.27	0.26	0.27	0.26	0.27	0.28	0.30	0.28	0.28	**0.30**	0.28	0.28	0.26	0.26
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Na	0.73	0.73	0.74	0.74	0.73	0.72	0.73	0.73	0.71	0.71	0.71	**0.70**	0.73	0.73	0.73	0.74
K	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.01	**0.00**	0.00	0.00	0.00	0.00
Total	5.00	5.00	5.01	5.01	5.00	5.00	5.00	5.02	5.01	5.01	5.00	**5.00**	5.01	5.01	4.99	5.00
Ab	73.08	73.13	73.25	73.40	72.94	73.17	72.79	71.97	70.13	70.93	71.44	**69.99**	71.56	72.02	73.65	73.90
Or	0.45	0.55	0.35	0.37	0.26	0.70	0.29	0.28	0.35	1.52	0.56	**0.45**	0.40	0.33	0.39	0.23
An	26.36	26.23	26.40	26.21	26.81	26.06	26.81	27.71	29.53	27.37	27.99	**29.50**	27.98	27.65	25.96	25.85
Cs	0.11	0.09	0.00	0.02	0.00	0.07	0.10	0.04	0.00	0.18	0.00	**0.06**	0.06	0.00	0.00	0.02
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Sil-Crd rock	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	302-2-99	302-2-99	302-2-99	302-2-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99	342-3-99
Profile	pl 3	pl 3	pl 3	pl 3	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1
Point	36	37	39	40	1	2	4	7	8	9	10	11	12	13	14
Texture	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	→	→	→	rim	rim	←	←	←	←	←	←	←	←	core	→
SiO_2	61.16	61.09	61.38	61.47	62.18	61.43	61.49	61.52	61.56	61.60	61.61	61.49	61.46	61.46	62.29
Al_2O_3	23.94	23.73	24.03	24.17	23.73	23.89	23.89	24.09	23.94	24.05	24.00	24.04	23.87	23.63	24.04
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	5.43	5.66	5.19	5.43	5.11	4.95	4.97	5.06	4.92	4.87	5.01	5.00	4.91	5.01	4.88
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.00	0.02	0.00	0.06	0.07	0.04	0.03	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00
BaO	0.00	0.00	0.06	0.00	0.00	0.05	0.04	0.04	0.02	0.02	0.00	0.00	0.00	0.00	0.00
Na_2O	8.70	8.73	8.52	8.51	8.78	8.75	8.87	8.77	8.58	8.85	8.77	8.75	8.57	8.72	8.64
K_2O	0.05	0.02	0.07	0.06	0.15	0.19	0.19	0.15	0.20	0.24	0.26	0.18	0.21	0.18	0.14
Total	99.27	99.25	99.25	99.69	100.03	99.29	99.48	99.63	99.26	99.66	99.64	99.46	99.02	99.00	99.99
Formula (O=8)															
Si	2.73	2.73	2.74	2.73	2.76	2.74	2.74	2.74	2.75	2.74	2.74	2.74	2.75	2.75	2.76
Al	1.26	1.25	1.27	1.27	1.24	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.25	1.25
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.26	0.27	0.25	0.26	0.24	0.24	0.24	0.24	0.24	0.23	0.24	0.24	0.24	0.24	0.23
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.75	0.76	0.74	0.73	0.75	0.76	0.77	0.76	0.74	0.76	0.76	0.76	0.74	0.76	0.74
K	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	5.01	5.02	5.00	5.00	5.01	5.01	5.02	5.01	5.00	5.02	5.01	5.01	5.00	5.01	4.99
Ab	74.15	73.51	74.47	73.71	75.01	75.32	75.48	75.12	75.01	75.60	74.90	75.22	75.04	75.13	75.59
Or	0.29	0.13	0.39	0.32	0.87	1.07	1.07	0.86	1.17	1.37	1.47	1.04	1.20	1.01	0.83
An	25.56	26.36	25.04	25.97	24.13	23.51	23.38	23.96	23.78	23.00	23.63	23.74	23.76	23.86	23.58
Cs	0.00	0.00	0.10	0.00	0.00	0.09	0.07	0.07	0.04	0.03	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	**Orue** *	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	342-3-99	342-3-99	**342-3-99**	342-3-99	342-3-99	342-3-99	342-3-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99
Profile	pl 1	pl 1	**pl 1**	pl 1	pl 1	pl 1	pl 1	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3
Point	15	17	**18**	20	21	22	24	1	2	3	4	5	6	7	8
Texture	matrix Pl2	matrix Pl2	**matrix Pl2**	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	→	→	→	→	→	→	rim	rim	←	←	←	←	←	←	←
SiO_2	61.40	61.33	**61.57**	61.48	61.59	61.39	61.45	62.41	62.25	61.73	61.64	62.68	62.10	62.45	62.66
Al_2O_3	23.65	23.82	**24.02**	23.73	24.08	23.94	24.14	24.14	24.08	24.24	23.95	24.04	23.68	23.86	23.93
MgO	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	4.89	5.07	**4.95**	4.97	5.00	4.91	4.90	5.39	5.30	5.48	5.25	5.20	5.18	5.21	5.08
MnO	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.00	0.01	**0.00**	0.00	0.02	0.00	0.03	0.02	0.00	0.01	0.03	0.00	0.03	0.00	0.01
BaO	0.00	0.00	**0.11**	0.00	0.02	0.00	0.02	0.00	0.07	0.01	0.02	0.04	0.01	0.02	0.00
Na_2O	8.90	8.79	**8.70**	8.63	8.70	8.72	8.86	8.69	8.80	8.41	8.71	8.63	8.39	8.40	8.51
K_2O	0.17	0.20	**0.24**	0.22	0.21	0.20	0.19	0.12	0.15	0.16	0.18	0.20	0.27	0.25	0.24
Total	99.01	99.22	**99.58**	99.03	99.63	99.15	99.59	100.76	100.64	100.03	99.77	100.79	99.66	100.21	100.41
Formula (O=8)															
Si	2.75	2.74	**2.74**	2.75	2.74	2.74	2.74	2.75	2.75	2.74	2.74	2.76	2.76	2.76	2.76
Al	1.25	1.26	**1.26**	1.25	1.26	1.26	1.27	1.25	1.25	1.27	1.26	1.25	1.24	1.24	1.24
Mg	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.23	0.24	**0.24**	0.24	0.24	0.23	0.23	0.25	0.25	0.26	0.25	0.24	0.25	0.25	0.24
Mn	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.77	0.76	**0.75**	0.75	0.75	0.76	0.77	0.74	0.75	0.72	0.75	0.74	0.72	0.72	0.73
K	0.01	0.01	**0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01
Total	5.02	5.02	**5.01**	5.00	5.01	5.01	5.02	5.00	5.01	5.00	5.01	4.99	4.99	4.99	4.99
Ab	75.99	74.97	**74.93**	74.91	74.96	75.45	75.77	73.97	74.32	72.83	74.23	74.16	73.40	73.37	74.19
Or	0.96	1.14	**1.34**	1.24	1.21	1.11	1.06	0.65	0.85	0.91	1.01	1.10	1.53	1.44	1.35
An	23.05	23.89	**23.54**	23.85	23.79	23.44	23.14	25.38	24.72	26.26	24.72	24.68	25.06	25.15	24.47
Cs	0.00	0.00	**0.19**	0.00	0.04	0.00	0.03	0.00	0.11	0.01	0.04	0.06	0.02	0.04	0.00
Total	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	Orue	Orue	* **Orue**	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	401-2-99	401-2-99	401-2-99	401-2-99	**401-2-99**	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	401-2-99	679-1-00	679-1-00	679-1-00	679-1-00
Profile	pl 3	pl 3	pl 3	pl 3	**pl 3**	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3
Point	9	10	12	13	**14**	15	16	17	18	19	20	1	2	3	4
Texture	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	**matrix Pl2**	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	←	core	→	→	→	→	→	→	→	→	rim	rim	←	←	←
SiO_2	61.58	62.23	61.94	62.12	**62.38**	61.72	61.78	61.66	61.52	61.85	61.55	61.47	61.24	61.45	61.29
Al_2O_3	23.99	23.66	23.63	23.70	**23.80**	23.96	24.03	23.92	24.07	24.19	24.29	24.07	24.11	24.24	23.42
MgO	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
CaO	5.21	5.06	5.33	5.14	**5.07**	5.30	5.46	5.36	5.44	5.59	5.42	5.14	5.26	5.14	5.12
MnO	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.00	0.03	0.03	0.00	**0.03**	0.04	0.00	0.04	0.02	0.05	0.00	0.04	0.05	0.00	0.04
BaO	0.00	0.00	0.06	0.00	**0.05**	0.04	0.00	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Na_2O	8.42	8.48	8.25	8.53	**8.62**	8.58	8.39	8.66	8.24	8.25	8.39	8.67	8.70	8.49	8.94
K_2O	0.26	0.25	0.24	0.28	**0.26**	0.22	0.26	0.27	0.23	0.19	0.16	0.17	0.17	0.21	0.19
Total	99.45	99.69	99.48	99.77	**100.19**	99.85	99.91	99.94	99.52	100.11	99.81	99.55	99.54	99.54	99.00
Formula (O=8)															
Si	2.74	2.76	2.76	2.76	**2.76**	2.74	2.74	2.74	2.74	2.74	2.73	2.74	2.73	2.74	2.75
Al	1.26	1.24	1.24	1.24	**1.24**	1.26	1.26	1.25	1.26	1.26	1.27	1.26	1.27	1.27	1.24
Mg	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.25	0.24	0.25	0.24	**0.24**	0.25	0.26	0.26	0.26	0.27	0.26	0.25	0.25	0.25	0.25
Mn	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.73	0.73	0.71	0.73	**0.74**	0.74	0.72	0.75	0.71	0.71	0.72	0.75	0.75	0.73	0.78
K	0.01	0.01	0.01	0.02	**0.01**	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	5.00	4.99	4.98	5.00	**5.00**	5.00	5.00	5.01	4.99	4.99	5.00	5.01	5.02	5.00	5.02
Ab	73.39	74.16	72.58	73.82	**74.30**	73.59	72.49	73.34	72.31	72.01	73.02	74.60	74.21	74.02	75.18
Or	1.51	1.42	1.40	1.57	**1.46**	1.21	1.45	1.53	1.32	1.06	0.90	0.94	0.98	1.23	1.06
An	25.10	24.43	25.91	24.60	**24.15**	25.13	26.06	25.08	26.37	26.93	26.07	24.46	24.81	24.75	23.76
Cs	0.00	0.00	0.11	0.00	**0.09**	0.07	0.00	0.05	0.00	0.00	0.01	0.00	0.01	0.00	0.00
Total	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

											*				
Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue**	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	679-1-00	**679-1-00**	679-1-00	703-00	703-00	703-00
Profile	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	**pl 3**	pl 3	pl 2	pl 2	pl 2
Point	5	7	8	10	12	13	14	16	17	18	**19**	20	3	5	6
Texture	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	**matrix Pl2**	matrix Pl2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2
Position	←	←	←	core	→	→	→	→	→	→	→	rim	rim	←	core
SiO_2	61.21	61.72	61.57	61.60	61.96	61.60	61.62	61.64	61.64	61.47	**61.66**	61.59	61.35	61.78	60.51
Al_2O_3	24.12	24.29	23.72	23.94	23.86	23.89	24.01	23.85	24.31	23.82	**23.94**	24.01	24.46	24.52	24.34
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
CaO	5.22	5.29	5.13	5.10	5.11	5.15	5.10	5.18	5.29	5.12	**5.28**	5.12	5.77	5.56	5.70
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
FeO	0.02	0.01	0.06	0.04	0.02	0.00	0.02	0.03	0.00	0.06	**0.04**	0.06	0.04	0.05	0.06
BaO	0.00	0.03	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	**0.00**	0.04	0.00	0.03	0.01
Na_2O	8.80	8.32	8.64	8.93	8.56	8.54	8.59	8.79	8.59	8.53	**8.54**	8.49	8.37	8.23	8.14
K_2O	0.15	0.21	0.16	0.12	0.15	0.24	0.19	0.19	0.25	0.22	**0.22**	0.15	0.15	0.27	0.28
Total	99.53	99.86	99.31	99.72	99.68	99.42	99.53	99.68	100.08	99.22	**99.69**	99.45	100.13	100.43	99.04
Formula (O=8)															
Si	2.73	2.74	2.75	2.74	2.75	2.75	2.74	2.74	2.73	2.75	**2.74**	2.75	2.72	2.73	2.72
Al	1.27	1.27	1.25	1.26	1.25	1.26	1.26	1.25	1.27	1.25	**1.26**	1.26	1.28	1.28	1.29
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ca	0.25	0.25	0.25	0.24	0.24	0.25	0.24	0.25	0.25	0.25	**0.25**	0.24	0.27	0.26	0.27
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Na	0.76	0.72	0.75	0.77	0.74	0.74	0.74	0.76	0.74	0.74	**0.74**	0.73	0.72	0.70	0.71
K	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	0.01	0.01	0.02	0.02
Total	5.02	4.99	5.00	5.02	4.99	5.00	5.00	5.01	5.01	5.00	**5.00**	5.00	5.00	4.99	5.00
Ab	74.68	73.06	74.58	75.52	74.53	73.98	74.48	74.62	73.56	74.16	**73.61**	74.33	71.81	71.64	70.93
Or	0.84	1.23	0.88	0.66	0.87	1.37	1.07	1.08	1.41	1.25	**1.27**	0.84	0.85	1.55	1.58
An	24.48	25.65	24.48	23.82	24.59	24.65	24.45	24.30	25.03	24.58	**25.12**	24.76	27.34	26.76	27.47
Cs	0.00	0.06	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	**0.00**	0.07	0.00	0.05	0.02
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00
Profile	pl 2	pl 2	pl 2	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6
Point	7	8	9	1	2	3	4	5	6	7	8	9	10	11	12
Texture	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	→	→	rim	rim	←	←	←	←	←	←	←	←	←	←	core
SiO_2	60.84	61.54	61.44	62.60	62.04	61.81	61.79	61.50	61.40	60.73	60.42	61.08	61.23	60.88	61.41
Al_2O_3	24.52	24.57	24.73	23.79	24.14	24.22	24.61	24.48	24.56	24.38	24.46	24.31	24.60	24.71	24.61
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	5.83	5.65	5.52	4.86	5.04	5.44	5.48	5.60	5.74	5.77	5.88	5.77	5.80	5.86	5.83
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.01	0.09	0.12	0.12	0.05	0.02	0.02	0.07	0.05	0.01	0.00	0.04	0.02	0.01	0.00
BaO	0.00	0.01	0.07	0.01	0.00	0.00	0.00	0.07	0.00	0.07	0.02	0.00	0.03	0.00	0.03
Na_2O	7.93	8.44	8.82	8.76	8.67	8.45	8.47	8.35	8.41	8.20	8.28	8.11	8.30	8.50	8.19
K_2O	0.26	0.26	0.17	0.28	0.28	0.26	0.19	0.21	0.29	0.21	0.24	0.22	0.24	0.24	0.11
Total	99.39	100.56	100.87	100.43	100.23	100.20	100.57	100.27	100.44	99.37	99.30	99.53	100.22	100.20	100.18
Formula (O=8)															
Si	2.72	2.72	2.71	2.76	2.75	2.74	2.73	2.72	2.72	2.72	2.71	2.72	2.72	2.70	2.72
Al	1.29	1.28	1.29	1.24	1.26	1.26	1.28	1.28	1.28	1.29	1.29	1.28	1.29	1.29	1.28
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.28	0.27	0.26	0.23	0.24	0.26	0.26	0.27	0.27	0.28	0.28	0.28	0.28	0.28	0.28
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.69	0.72	0.75	0.75	0.74	0.73	0.72	0.72	0.72	0.71	0.72	0.70	0.71	0.73	0.70
K	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Total	4.99	5.01	5.03	5.00	5.01	5.00	5.00	5.00	5.01	5.00	5.01	4.99	5.01	5.02	4.99
Ab	70.04	71.92	73.57	75.29	74.48	72.65	72.89	71.98	71.43	71.03	70.81	70.88	71.15	71.45	71.29
Or	1.49	1.46	0.91	1.59	1.59	1.47	1.05	1.21	1.63	1.22	1.35	1.28	1.35	1.31	0.64
An	28.47	26.60	25.41	23.10	23.93	25.88	26.05	26.68	26.95	27.62	27.81	27.84	27.45	27.24	28.03
Cs	0.00	0.02	0.11	0.02	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.05	0.00	0.04
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	**Orue** *	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	**Grt-Bt-Sil gneiss**	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss
Sample	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	**703-00**	137-C-98	137-C-98	137-C-98	137-C-98
Profile	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	pl 6	**pl 6**	pl 3	pl 3	pl 3	pl 3
Point	14	15	16	17	18	19	20	21	23	24	**25**	3	4	5	6
Texture	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	**matrix Pl2**	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	→	→	→	→	→	→	→	→	→	→	**rim**	rim	←	←	←
SiO_2	61.28	61.27	61.60	61.70	61.96	61.76	61.84	62.08	62.86	62.38	**62.17**	59.11	59.74	59.77	60.19
Al_2O_3	23.94	24.53	24.34	24.26	24.09	23.78	24.05	23.84	23.78	23.41	**23.63**	24.84	25.02	24.22	24.47
MgO	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
CaO	5.64	5.54	5.50	5.49	5.29	5.06	4.97	4.77	4.53	4.59	**4.58**	6.69	6.65	6.20	6.35
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
FeO	0.06	0.04	0.02	0.02	0.03	0.00	0.10	0.02	0.01	0.04	**0.10**	0.11	0.12	0.10	0.06
BaO	0.03	0.00	0.00	0.05	0.00	0.00	0.00	0.06	0.04	0.00	**0.04**	0.07	0.00	0.14	0.00
Na_2O	8.25	8.52	8.65	8.68	8.71	8.91	8.66	9.02	8.91	8.80	**8.96**	7.86	7.83	7.08	8.17
K_2O	0.18	0.17	0.21	0.16	0.20	0.21	0.19	0.10	0.08	0.11	**0.15**	0.09	0.09	1.49	0.09
Total	99.37	100.07	100.32	100.38	100.27	99.73	99.81	99.88	100.21	99.32	**99.64**	98.76	99.44	98.98	99.33
Formula (O=8)															
Si	2.74	2.72	2.73	2.73	2.74	2.75	2.75	2.76	2.77	2.78	**2.76**	2.67	2.68	2.70	2.70
Al	1.26	1.28	1.27	1.27	1.26	1.25	1.26	1.25	1.24	1.23	**1.24**	1.32	1.32	1.29	1.29
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ca	0.27	0.26	0.26	0.26	0.25	0.24	0.24	0.23	0.21	0.22	**0.22**	0.32	0.32	0.30	0.31
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Na	0.71	0.73	0.74	0.75	0.75	0.77	0.75	0.78	0.76	0.76	**0.77**	0.69	0.68	0.62	0.71
K	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	**0.01**	0.01	0.01	0.09	0.00
Total	4.99	5.01	5.01	5.01	5.01	5.02	5.00	5.01	4.99	4.99	**5.01**	5.02	5.01	5.01	5.01
Ab	71.83	72.87	73.15	73.36	74.06	75.22	75.12	76.87	77.66	77.14	**77.23**	67.58	67.70	61.50	69.62
Or	1.00	0.94	1.17	0.90	1.09	1.18	1.07	0.55	0.44	0.62	**0.86**	0.51	0.52	8.50	0.48
An	27.12	26.19	25.68	25.65	24.85	23.60	23.81	22.48	21.83	22.24	**21.83**	31.79	31.78	29.76	29.90
Cs	0.05	0.00	0.00	0.09	0.00	0.00	0.00	0.09	0.07	0.00	**0.07**	0.12	0.00	0.24	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss
Sample	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	137-C-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98
Profile	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	pl1	pl1	pl1	pl1	pl1	pl1	pl1
Point	7	8	9	10	11	12	13	15	2	3	7	8	9	11	12
Texture	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2
Position	←	core	→	→	→	→	→	rim	rim	←	←	←	←	←	←
SiO_2	60.26	60.54	60.50	60.15	60.32	60.23	60.22	59.79	60.82	60.70	60.94	60.41	60.91	60.30	60.59
Al_2O_3	24.48	24.64	24.51	24.88	24.39	24.81	24.99	25.25	24.54	24.64	24.65	24.60	24.75	24.97	24.95
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	6.37	6.28	6.18	6.05	6.12	6.27	6.41	6.74	5.82	6.05	6.08	6.10	6.28	6.21	6.30
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.02	0.00	0.04	0.01	0.07	0.00	0.05	0.06	0.03	0.06	0.00	0.00	0.00	0.00	0.06
BaO	0.03	0.04	0.00	0.03	0.00	0.01	0.03	0.01	0.06	0.10	0.00	0.02	0.10	0.00	0.07
Na_2O	8.33	8.21	8.11	8.04	8.02	8.13	8.09	7.95	8.21	8.25	8.10	7.97	8.04	7.78	7.95
K_2O	0.07	0.07	0.07	0.10	0.11	0.08	0.13	0.10	0.08	0.07	0.09	0.10	0.04	0.13	0.14
Total	99.56	99.77	99.40	99.27	99.02	99.53	99.91	99.88	99.55	99.86	99.87	99.20	100.12	99.40	100.05
Formula (O=8)															
Si	2.70	2.70	2.71	2.69	2.71	2.69	2.68	2.67	2.71	2.70	2.71	2.71	2.70	2.69	2.69
Al	1.29	1.29	1.29	1.31	1.29	1.31	1.31	1.33	1.29	1.29	1.29	1.30	1.30	1.32	1.31
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.31	0.30	0.30	0.29	0.29	0.30	0.31	0.32	0.28	0.29	0.29	0.29	0.30	0.30	0.30
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.72	0.71	0.70	0.70	0.70	0.70	0.70	0.69	0.71	0.71	0.70	0.69	0.69	0.67	0.69
K	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.01
Total	5.02	5.01	5.00	5.00	5.00	5.01	5.01	5.01	5.00	5.01	5.00	4.99	4.99	4.99	5.00
Ab	69.99	69.95	70.10	70.18	69.92	69.79	69.00	67.70	71.44	70.75	70.32	69.85	69.55	68.87	68.92
Or	0.39	0.39	0.38	0.59	0.62	0.44	0.74	0.57	0.46	0.42	0.52	0.58	0.22	0.76	0.79
An	29.57	29.59	29.53	29.17	29.46	29.76	30.21	31.71	27.99	28.67	29.16	29.53	30.05	30.37	30.17
Cs	0.06	0.07	0.00	0.06	0.00	0.02	0.05	0.01	0.11	0.16	0.00	0.04	0.18	0.01	0.12
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss
Sample	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98
Profile	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl2	pl2
Point	13	14	15	16	17	18	19	20	21	22	23	24	25	3	6
Texture	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	matrix Pl2	matrix Pl2
Position	core	→	→	→	→	→	→	→	→	→	→	→	rim	rim	←
SiO_2	61.51	60.67	61.03	61.51	60.74	60.42	60.38	60.40	60.53	60.93	60.65	60.78	60.22	60.97	60.93
Al_2O_3	24.66	24.76	24.38	23.98	24.45	24.71	24.67	24.77	24.75	24.71	24.39	24.98	24.70	24.30	24.32
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	5.50	6.11	5.38	4.98	6.19	6.21	5.89	6.08	6.20	6.14	6.00	6.09	6.21	5.63	5.71
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.03	0.00	0.01	0.04	0.01	0.03	0.00	0.00	0.02	0.02	0.00	0.00	0.08	0.08	0.02
BaO	0.06	0.10	0.04	0.01	0.06	0.03	0.05	0.01	0.03	0.00	0.00	0.06	0.05	0.01	0.02
Na_2O	8.19	7.89	8.13	8.29	7.81	8.06	8.12	7.77	7.84	8.17	7.93	8.15	8.08	8.05	8.00
K_2O	0.24	0.15	0.26	0.24	0.18	0.10	0.11	0.14	0.13	0.11	0.12	0.11	0.06	0.45	0.14
Total	100.19	99.68	99.23	99.04	99.44	99.55	99.22	99.19	99.50	100.09	99.09	100.17	99.40	99.48	99.13
Formula (O=8)															
Si	2.72	2.70	2.73	2.75	2.71	2.70	2.70	2.70	2.70	2.71	2.72	2.70	2.70	2.72	2.73
Al	1.29	1.30	1.28	1.26	1.29	1.30	1.30	1.31	1.30	1.29	1.29	1.31	1.30	1.28	1.28
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.26	0.29	0.26	0.24	0.30	0.30	0.28	0.29	0.30	0.29	0.29	0.29	0.30	0.27	0.27
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.70	0.68	0.70	0.72	0.68	0.70	0.70	0.67	0.68	0.70	0.69	0.70	0.70	0.70	0.69
K	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.03	0.01
Total	4.99	4.99	4.99	4.99	4.99	5.00	5.00	4.98	4.99	5.00	4.99	5.00	5.01	5.00	4.98
Ab	71.84	69.31	72.05	74.02	68.74	69.68	70.87	69.22	69.04	70.21	70.04	70.24	69.84	70.26	71.11
Or	1.39	0.86	1.53	1.41	1.05	0.57	0.65	0.82	0.74	0.62	0.70	0.64	0.36	2.56	0.84
An	26.66	29.66	26.34	24.55	30.11	29.70	28.39	29.94	30.17	29.17	29.26	29.02	29.70	27.16	28.02
Cs	0.11	0.17	0.08	0.01	0.11	0.05	0.08	0.02	0.05	0.00	0.00	0.11	0.09	0.02	0.03
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss	Grt-Bt gneiss
Sample	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98	191-A-98
Profile	pl2	pl2	pl2	pl2	pl2	pl2	pl2	pl2	pl2	pl2
Point	7	8	14	15	17	20	22	24	26	29
Texture	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2	matrix Pl2
Position	←	←	←	core	→	→	→	→	→	rim
SiO_2	60.83	60.97	61.04	60.67	60.70	61.03	60.49	60.74	60.61	59.29
Al_2O_3	24.35	24.25	24.43	24.36	24.35	24.47	24.32	24.62	24.40	25.23
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	5.87	5.79	5.73	5.73	5.64	5.79	5.73	5.81	5.97	6.68
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.02	0.02	0.00	0.01	0.04	0.00	0.02	0.07	0.07	0.13
BaO	0.08	0.03	0.07	0.10	0.05	0.01	0.11	0.02	0.00	0.05
Na_2O	7.91	7.93	8.08	8.13	8.19	8.11	8.02	8.26	8.12	7.40
K_2O	0.12	0.11	0.18	0.14	0.12	0.15	0.33	0.07	0.07	0.15
Total	99.17	99.09	99.52	99.14	99.07	99.55	99.02	99.58	99.23	98.91
Formula (O=8)										
Si	2.72	2.73	2.72	2.72	2.72	2.72	2.72	2.71	2.71	2.67
Al	1.28	1.28	1.28	1.29	1.29	1.29	1.29	1.29	1.29	1.34
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.28	0.28	0.27	0.28	0.27	0.28	0.28	0.28	0.29	0.32
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.69	0.69	0.70	0.71	0.71	0.70	0.70	0.71	0.70	0.65
K	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.00	0.00	0.01
Total	4.98	4.98	4.99	5.00	5.00	4.99	5.00	5.00	5.00	4.99
Ab	70.35	70.76	71.02	71.27	71.90	71.13	70.17	71.70	70.84	66.09
Or	0.69	0.65	1.03	0.81	0.66	0.84	1.91	0.41	0.38	0.86
An	28.82	28.55	27.83	27.75	27.36	28.02	27.73	27.87	28.78	32.96
Cs	0.14	0.05	0.12	0.18	0.08	0.01	0.19	0.03	0.00	0.08
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite
Sample	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98	230-B-98
Profile	pl1	pl1	pl1	pl2	pl2	pl2	pl2	pl2	pl2	pl2	pl2	pl2	pl2	pl2	pl2
Point	1	2	4	2	3	6	13	13	14	15	16	17	19	21	24
Texture	Pl1 in Opx2	Pl1 in Opx2	Pl1 in Opx2	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix
Position	rim	core	rim	rim	←	←	←	←	←	core	→	→	→	→	→
SiO_2	51.58	50.91	51.66	54.21	53.85	54.58	54.58	54.56	54.39	54.25	54.48	54.12	54.44	53.91	54.18
Al_2O_3	30.55	30.78	30.68	28.74	28.62	28.67	28.51	28.70	28.65	28.54	28.76	28.49	28.68	28.66	28.56
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
CaO	13.43	13.72	13.09	11.53	11.25	11.37	11.17	11.14	11.17	11.29	11.28	11.22	11.43	11.52	11.27
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.30	0.18	0.20	0.21	0.21	0.16	0.18	0.15	0.09	0.13	0.06	0.12	0.30	0.12	0.28
BaO	0.03	0.01	0.02	0.00	0.01	0.00	0.00	0.09	0.00	0.00	0.01	0.04	0.00	0.00	0.03
Na_2O	3.98	3.57	4.04	5.06	5.17	4.81	5.18	5.09	5.15	5.07	4.93	5.11	4.95	5.00	5.11
K_2O	0.11	0.16	0.18	0.20	0.19	0.23	0.27	0.25	0.27	0.27	0.26	0.26	0.23	0.25	0.18
Total	99.97	99.34	99.88	99.94	99.30	99.83	99.88	99.98	99.72	99.55	99.77	99.36	100.01	99.46	99.67
Formula (O=8)															
Si	2.35	2.33	2.35	2.45	2.45	2.47	2.47	2.47	2.46	2.46	2.46	2.46	2.46	2.45	2.46
Al	1.64	1.66	1.65	1.53	1.54	1.53	1.52	1.53	1.53	1.53	1.53	1.53	1.53	1.54	1.53
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.65	0.67	0.64	0.56	0.55	0.55	0.54	0.54	0.54	0.55	0.55	0.55	0.55	0.56	0.55
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.35	0.32	0.36	0.44	0.46	0.42	0.45	0.45	0.45	0.45	0.43	0.45	0.43	0.44	0.45
K	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.02	0.01	0.02	0.01	0.01	0.01
Total	5.01	5.00	5.01	5.01	5.01	4.99	5.01	5.00	5.01	5.01	4.99	5.01	5.00	5.01	5.01
Ab	34.65	31.71	35.47	43.75	44.90	42.78	44.92	44.53	44.76	44.14	43.49	44.49	43.39	43.36	44.55
Or	0.61	0.93	1.03	1.13	1.08	1.35	1.53	1.44	1.56	1.56	1.50	1.51	1.31	1.44	1.06
An	64.69	67.33	63.46	55.12	54.00	55.86	53.55	53.87	53.69	54.30	54.99	53.93	55.30	55.20	54.34
Cs	0.05	0.02	0.03	0.00	0.02	0.00	0.00	0.16	0.00	0.00	0.02	0.07	0.00	0.00	0.06
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Two-Px granulite	Grt-Cpx granulite
Sample	230-B-98	230-B-98	434-2-99	434-2-99	434-2-99	434-2-99	434-2-99	434-2-99	434-2-99	434-2-99	434-2-99	434-2-99	434-2-99	311-1-99
Profile	pl2	pl2	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl1	pl 3
Point	26	28	2	3	8	11	12	16	19	20	21	26	29	1
Texture	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl1 in Grt2
Position	→	rim	rim	←	←	←	←	core	→	→	→	→	rim	rim
SiO_2	53.92	50.24	53.29	52.92	52.85	52.78	53.31	53.10	53.23	53.37	52.87	52.69	53.01	56.47
Al_2O_3	28.80	31.33	29.65	29.47	29.62	29.56	29.58	29.69	30.08	29.57	29.46	29.44	29.66	27.35
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	11.52	14.21	12.14	12.31	12.33	12.12	12.01	12.05	12.21	12.04	12.17	12.11	12.20	9.41
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.18	0.22	0.15	0.08	0.09	0.04	0.03	0.03	0.10	0.09	0.03	0.05	0.19	0.20
BaO	0.01	0.02	0.02	0.01	0.01	0.06	0.00	0.00	0.02	0.00	0.00	0.00	0.04	0.05
Na_2O	4.89	3.53	4.64	4.72	4.69	4.72	4.75	4.77	4.65	4.73	4.63	4.68	4.67	6.32
K_2O	0.18	0.11	0.08	0.10	0.15	0.12	0.12	0.13	0.13	0.15	0.13	0.13	0.11	0.08
Total	99.51	99.63	99.97	99.60	99.74	99.40	99.80	99.77	100.43	99.95	99.30	99.10	99.87	99.88
Formula (O=8)														
Si	2.45	2.30	2.41	2.41	2.40	2.41	2.42	2.41	2.40	2.42	2.41	2.41	2.41	2.54
Al	1.54	1.69	1.58	1.58	1.59	1.59	1.58	1.59	1.60	1.58	1.58	1.59	1.59	1.45
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.56	0.70	0.59	0.60	0.60	0.59	0.58	0.59	0.59	0.58	0.59	0.59	0.59	0.45
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.43	0.31	0.41	0.42	0.41	0.42	0.42	0.42	0.41	0.42	0.41	0.41	0.41	0.55
K	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Total	5.00	5.01	5.00	5.01	5.02	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01
Ab	42.95	30.81	40.67	40.70	40.39	40.99	41.40	41.45	40.50	41.17	40.48	40.86	40.62	54.58
Or	1.06	0.60	0.48	0.57	0.87	0.69	0.69	0.71	0.76	0.87	0.77	0.74	0.61	0.46
An	55.97	68.56	58.83	58.72	58.73	58.22	57.91	57.84	58.70	57.96	58.75	58.41	58.70	44.88
Cs	0.02	0.03	0.03	0.02	0.01	0.10	0.00	0.00	0.04	0.00	0.00	0.00	0.06	0.08
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	**Grt-Cpx granulite**	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	**311-1-99**	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99
Profile	pl 3	pl 3	pl 3	pl 3	pl 3	pl 3	**pl 4**	pl 4	pl 4	pl 4	pl 4	pl 4	pl 4	pl 2	pl 3	pl 4
Point	2	3	4	5	6	7	**1**	4	5	6	7	9	10			
Texture	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	**Pl1 in Grt2**	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Cpx2	Pl1 in Cpx2	Pl1 in Cpx2
Position	←	←	core	→	→	rim	**rim**	←	←	core	→	→	rim	rim	←	core
SiO_2	57.32	57.75	57.46	58.03	58.83	58.29	**56.52**	58.35	58.34	58.79	58.41	58.12	57.79	53.16	52.90	53.90
Al_2O_3	26.56	26.07	26.25	26.35	25.80	26.07	**26.75**	25.96	25.71	25.53	25.54	25.78	26.15	29.19	29.39	28.66
MgO	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	8.46	8.14	8.26	8.13	7.75	8.08	**8.92**	7.79	7.37	7.47	7.57	7.88	8.07	11.68	11.88	11.12
MnO	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.20	0.23	0.15	0.10	0.13	0.25	**0.31**	0.10	0.14	0.09	0.06	0.08	0.13	0.23	0.17	0.19
BaO	0.10	0.12	0.06	0.10	0.02	0.02	**0.12**	0.12	0.09	0.08	0.06	0.12	0.12	0.00	0.00	0.01
Na_2O	6.57	6.82	7.03	6.90	7.38	7.04	**6.25**	7.09	7.22	7.12	7.13	6.88	6.94	4.90	4.94	5.24
K_2O	0.09	0.10	0.13	0.11	0.15	0.16	**0.20**	0.27	0.31	0.25	0.26	0.21	0.21	0.01	0.03	0.06
Total	99.30	99.24	99.35	99.71	100.05	99.91	**99.07**	99.68	99.17	99.33	99.03	99.08	99.41	99.17	99.30	99.16
Formula (O=8)																
Si	2.59	2.61	2.59	2.60	2.63	2.61	**2.56**	2.62	2.63	2.64	2.64	2.62	2.61	2.42	2.41	2.45
Al	1.41	1.39	1.40	1.39	1.36	1.38	**1.43**	1.37	1.37	1.35	1.36	1.37	1.39	1.57	1.58	1.54
Mg	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.41	0.39	0.40	0.39	0.37	0.39	**0.43**	0.38	0.36	0.36	0.37	0.38	0.39	0.57	0.58	0.54
Mn	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.01	0.01	0.01	0.00	0.00	0.01	**0.01**	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Ba	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.57	0.60	0.62	0.60	0.64	0.61	**0.55**	0.62	0.63	0.62	0.62	0.60	0.61	0.43	0.44	0.46
K	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	0.02	0.02	0.01	0.02	0.01	0.01	0.00	0.00	0.00
Total	5.00	5.00	5.02	5.00	5.01	5.01	**5.00**	5.01	5.01	5.00	5.00	5.00	5.01	5.01	5.02	5.01
Ab	57.99	59.79	60.10	60.07	62.75	60.61	**55.14**	61.16	62.71	62.33	61.98	60.35	60.04	43.16	42.85	45.84
Or	0.53	0.57	0.75	0.63	0.81	0.91	**1.18**	1.50	1.75	1.42	1.51	1.23	1.21	0.05	0.16	0.36
An	41.30	39.42	39.03	39.13	36.40	38.44	**43.47**	37.14	35.39	36.11	36.40	38.21	38.55	56.79	56.99	53.78
Cs	0.17	0.22	0.11	0.17	0.04	0.04	**0.21**	0.20	0.15	0.14	0.11	0.21	0.20	0.00	0.00	0.01
Total	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe***	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Cpx granulite	**Grt-Cpx granulite**	Grt-Cpx granulite
Sample	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	311-1-99	**311-1-99**	311-1-99
Profile	pl 5	pl 6	pl 1	pl 1	pl 1	pl 2	pl 2	pl 2	pl 1	pl 1	pl 1	pl 2	pl 2	**pl 2**	pl 2
Point			1	2	3	1	2	3	1	2	3	1	2	**4**	7
Texture	Pl1 in Cpx2	Pl1 in Cpx2	Pl3 in Hbl-Pl i.	Pl3 in Hbl-Pl i.	Pl3 in Hbl-Pl i.	Pl3 in Hbl-Pl i.	Pl3 in Hbl-Pl i.	Pl3 in Hbl-Pl i.	Pl3 in Hbl-Pl s.	Pl3 in Hbl-Pl s.	Pl3 in Hbl-Pl s.	Pl3 in Hbl-Pl s.	Pl3 in Hbl-Pl s.	**Pl3 in Hbl-Pl s.**	Pl3 in Hbl-Pl s.
Position	→	rim													
SiO_2	54.41	52.96	53.65	53.94	53.92	54.68	55.25	55.01	53.35	53.24	52.51	53.26	53.24	**53.55**	54.00
Al_2O_3	28.34	29.49	29.15	28.83	28.97	28.26	28.00	27.95	29.50	29.70	29.89	28.80	28.98	**29.33**	28.69
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
CaO	10.96	12.04	11.49	11.40	11.46	10.44	10.47	10.42	12.09	12.25	12.48	11.77	11.74	**11.48**	11.48
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
FeO	0.28	0.18	0.16	0.15	0.19	0.21	0.16	0.12	0.15	0.17	0.25	0.17	0.22	**0.16**	0.18
BaO	0.00	0.05	0.02	0.00	0.00	0.00	0.01	0.01	0.00	0.04	0.04	0.00	0.00	**0.06**	0.00
Na_2O	5.27	4.71	5.10	5.13	5.04	5.76	5.65	5.65	4.79	4.85	4.50	4.93	4.87	**5.02**	5.23
K_2O	0.04	0.03	0.03	0.03	0.04	0.03	0.00	0.01	0.01	0.04	0.07	0.02	0.06	**0.03**	0.01
Total	99.30	99.45	99.60	99.48	99.62	99.39	99.55	99.17	99.90	100.29	99.74	98.94	99.10	**99.63**	99.59
Formula (O=8)															
Si	2.47	2.41	2.44	2.45	2.45	2.48	2.50	2.50	2.42	2.41	2.39	2.44	2.43	**2.43**	2.45
Al	1.52	1.58	1.56	1.54	1.55	1.51	1.49	1.50	1.58	1.58	1.60	1.55	1.56	**1.57**	1.53
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Ca	0.53	0.59	0.56	0.55	0.56	0.51	0.51	0.51	0.59	0.59	0.61	0.58	0.57	**0.56**	0.56
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Fe	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	**0.01**	0.01
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Na	0.46	0.42	0.45	0.45	0.44	0.51	0.50	0.50	0.42	0.42	0.40	0.44	0.43	**0.44**	0.46
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Total	5.00	5.01	5.01	5.01	5.00	5.02	5.00	5.00	5.01	5.02	5.01	5.01	5.01	**5.01**	5.01
Ab	46.44	41.38	44.47	44.79	44.19	49.88	49.39	49.48	41.71	41.59	39.31	43.08	42.75	**44.03**	45.18
Or	0.23	0.16	0.15	0.19	0.23	0.19	0.02	0.04	0.05	0.24	0.39	0.09	0.33	**0.18**	0.07
An	53.33	58.38	55.35	55.02	55.58	49.93	50.58	50.46	58.25	58.10	60.24	56.83	56.92	**55.68**	54.76
Cs	0.00	0.09	0.03	0.00	0.00	0.00	0.02	0.02	0.00	0.07	0.06	0.00	0.00	**0.11**	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Cpx granulite	Grt-Cpx granulite	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.
Sample	311-1-99	311-1-99	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98
Profile	pl 2	pl 2	pl4	pl4	pl4	pl4	pl4	pl1	pl1	pl1	pl1	pl1	pl1	pl1
Point	8	10	1	4	5	6	10	1	2	8	12	15	17	18	21
Texture	Pl3 in Hbl-Pl s.	Pl3 in Hbl-Pl s.	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix
Position			rim	←	core	→	rim	rim	←	←	←	core	→	→	→
SiO_2	53.87	54.15	56.24	56.68	56.31	56.66	56.46	56.25	56.57	56.43	56.60	57.08	56.59	56.13	56.84
Al_2O_3	28.54	28.49	27.68	27.47	27.22	27.53	27.42	27.43	26.98	27.40	27.39	27.47	27.30	27.36	27.36
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	11.05	10.76	9.44	9.30	9.45	9.41	9.70	9.54	9.44	9.43	9.25	9.40	9.57	9.62	9.31
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.14	0.22	0.23	0.08	0.10	0.09	0.17	0.09	0.08	0.03	0.10	0.08	0.11	0.07	0.04
BaO	0.03	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.05	0.00
Na_2O	5.48	5.36	5.91	5.92	6.10	6.13	6.17	6.24	6.10	6.06	6.31	6.01	6.06	6.11	6.25
K_2O	0.02	0.05	0.21	0.32	0.31	0.28	0.25	0.22	0.22	0.27	0.22	0.27	0.19	0.20	0.25
Total	99.12	99.03	99.71	99.77	99.50	100.11	100.17	99.76	99.39	99.68	99.86	100.30	99.80	99.55	100.06
Formula (O=8)															
Si	2.46	2.47	2.53	2.55	2.54	2.54	2.54	2.54	2.56	2.54	2.55	2.55	2.55	2.54	2.55
Al	1.53	1.53	1.47	1.46	1.45	1.46	1.45	1.46	1.44	1.46	1.45	1.45	1.45	1.46	1.45
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.54	0.53	0.46	0.45	0.46	0.45	0.47	0.46	0.46	0.46	0.45	0.45	0.46	0.47	0.45
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.48	0.47	0.52	0.52	0.53	0.53	0.54	0.55	0.53	0.53	0.55	0.52	0.53	0.54	0.54
K	0.00	0.00	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.02	0.01	0.01	0.01
Total	5.02	5.01	5.00	4.99	5.01	5.00	5.01	5.01	5.00	5.00	5.01	4.99	5.00	5.01	5.00
Ab	47.26	47.26	52.49	52.54	52.90	53.24	52.77	53.54	53.26	52.88	54.53	52.78	52.81	52.82	54.07
Or	0.10	0.31	1.21	1.87	1.78	1.57	1.41	1.23	1.23	1.54	1.25	1.56	1.10	1.16	1.41
An	52.60	52.43	46.30	45.59	45.28	45.15	45.82	45.22	45.51	45.47	44.22	45.66	46.10	45.94	44.52
Cs	0.04	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.09	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	**Grt-Opx metagranit.***	Grt-Opx metagranit.	Grt-Opx metagranit.	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock
Sample	206-B-98	206-B-98	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	646-1-00	**646-1-00**	646-1-00	646-1-00	614-1-99	614-1-99	614-1-99
Profile	pl1	pl1	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1	**pl 1**	pl 1	pl 1	pl 1	pl 1	pl 1
Point	27	30	9	13	15	17	19	21	**22**	24	25	1	2	3
Texture	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	**Pl2 matrix**	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix
Position	→	rim	rim	←	core	→	→	→	→	→	rim	rim	←	←
SiO_2	56.53	55.69	57.96	57.77	58.18	58.11	58.14	58.22	**58.37**	58.10	57.53	58.30	57.33	58.82
Al_2O_3	27.52	27.70	25.96	25.82	25.72	25.81	25.80	25.78	**25.63**	25.60	26.25	25.68	25.22	25.24
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.35	0.00
CaO	9.76	10.14	7.97	7.87	7.80	7.92	7.98	7.79	**7.70**	7.95	8.16	7.43	6.94	6.97
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
FeO	0.12	0.00	0.05	0.05	0.07	0.02	0.00	0.05	**0.04**	0.03	0.00	0.15	1.06	0.08
BaO	0.02	0.00	0.09	0.13	0.05	0.01	0.05	0.07	**0.04**	0.04	0.03	0.00	0.00	0.05
Na_2O	6.09	5.72	6.90	6.96	6.99	7.10	6.85	7.05	**7.08**	7.01	6.66	7.23	7.32	7.70
K_2O	0.21	0.14	0.15	0.15	0.16	0.13	0.15	0.12	**0.13**	0.15	0.15	0.03	0.07	0.03
Total	100.25	99.39	99.08	98.75	98.96	99.11	98.97	99.08	**99.00**	98.87	98.78	98.82	98.30	98.88
Formula (O=8)														
Si	2.54	2.52	2.62	2.62	2.63	2.62	2.62	2.63	**2.63**	2.63	2.60	2.63	2.62	2.65
Al	1.46	1.48	1.38	1.38	1.37	1.37	1.37	1.37	**1.36**	1.36	1.40	1.37	1.36	1.34
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.02	0.00
Ca	0.47	0.49	0.39	0.38	0.38	0.38	0.39	0.38	**0.37**	0.39	0.40	0.36	0.34	0.34
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.01	0.04	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Na	0.53	0.50	0.60	0.61	0.61	0.62	0.60	0.62	**0.62**	0.61	0.58	0.63	0.65	0.67
K	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	0.01	0.01	0.00	0.00	0.00
Total	5.01	5.00	5.00	5.00	5.00	5.01	4.99	5.00	**5.00**	5.00	4.99	5.00	5.03	5.01
Ab	52.41	50.08	60.41	60.87	61.26	61.37	60.24	61.59	**61.93**	60.91	59.08	63.65	65.34	66.51
Or	1.16	0.82	0.85	0.88	0.90	0.76	0.86	0.69	**0.77**	0.85	0.88	0.19	0.41	0.16
An	46.40	49.10	38.57	38.02	37.75	37.85	38.81	37.60	**37.23**	38.16	39.98	36.16	34.25	33.25
Cs	0.03	0.00	0.17	0.23	0.09	0.02	0.08	0.13	**0.08**	0.07	0.06	0.00	0.00	0.08
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

			*							*				
Rock Unit	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe
Rock type	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	**Qtz-rich Grt-Opx rock**	Qtz-rich Grt-Opx rock	Qtz-rich Grt-Opx rock	Grt-Opx gneiss	Grt-Opx gneiss
Sample	614-1-99	614-1-99	**614-1-99**	614-1-99	587-4-99	587-4-99	587-4-99	587-4-99	587-4-99	**587-4-99**	587-4-99	587-4-99	458-3-99	458-3-99
Profile	pl 1	pl 1	**pl 1**	pl 1	pl 2	pl 2	pl 2	pl 2	pl 2	**pl 2**	pl 2	pl 2	pl 5	pl 5
Point	5	6	**7**	9	3	4	13	15	21	**22**	23	30	1	2
Texture	Pl2 matrix	Pl2 matrix	**Pl2 matrix**	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	**Pl2 matrix**	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix
Position	core	→	→	rim	rim	←	←	core	→	→	→	rim	rim	←
SiO_2	58.19	59.59	**59.54**	59.49	58.00	58.10	57.78	57.79	58.50	**58.65**	58.27	58.47	57.40	57.77
Al_2O_3	24.35	24.74	**24.67**	25.23	25.96	25.94	26.22	26.19	26.05	**25.76**	25.85	25.84	26.50	26.12
MgO	0.98	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.01
CaO	5.98	6.65	**6.54**	6.84	7.66	7.54	8.32	7.91	7.53	**7.43**	7.57	7.46	8.31	8.13
MnO	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
FeO	1.62	0.10	**0.00**	0.05	0.05	0.00	0.03	0.05	0.02	**0.04**	0.03	0.06	0.17	0.13
BaO	0.01	0.00	**0.07**	0.07	0.03	0.00	0.00	0.07	0.02	**0.06**	0.07	0.04	0.04	0.03
Na_2O	7.51	7.90	**7.71**	7.99	7.31	7.04	6.98	7.14	7.51	**7.33**	7.23	7.21	6.54	6.63
K_2O	0.06	0.06	**0.06**	0.09	0.16	0.17	0.14	0.05	0.12	**0.16**	0.14	0.18	0.24	0.24
Total	98.68	99.04	**98.59**	99.76	99.16	98.79	99.46	99.19	99.75	**99.43**	99.15	99.26	99.19	99.05
Formula (O=8)														
Si	2.65	2.68	**2.69**	2.66	2.62	2.63	2.60	2.61	2.62	**2.63**	2.63	2.63	2.59	2.61
Al	1.30	1.31	**1.31**	1.33	1.38	1.38	1.39	1.39	1.38	**1.36**	1.37	1.37	1.41	1.39
Mg	0.07	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ca	0.29	0.32	**0.32**	0.33	0.37	0.36	0.40	0.38	0.36	**0.36**	0.37	0.36	0.40	0.39
Mn	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Fe	0.06	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.01	0.00
Ba	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Na	0.66	0.69	**0.67**	0.69	0.64	0.62	0.61	0.62	0.65	**0.64**	0.63	0.63	0.57	0.58
K	0.00	0.00	**0.00**	0.01	0.01	0.01	0.01	0.00	0.01	**0.01**	0.01	0.01	0.01	0.01
Total	5.03	5.01	**5.00**	5.02	5.02	5.00	5.01	5.01	5.02	**5.01**	5.01	5.00	5.00	4.99
Ab	69.21	68.00	**67.77**	67.44	62.74	62.22	59.81	61.78	63.88	**63.43**	62.77	62.93	57.91	58.73
Or	0.35	0.36	**0.36**	0.52	0.91	0.96	0.81	0.31	0.69	**0.92**	0.78	1.06	1.37	1.42
An	30.43	31.64	**31.76**	31.93	36.30	36.82	39.38	37.80	35.39	**35.54**	36.34	35.94	40.65	39.80
Cs	0.01	0.00	**0.12**	0.11	0.05	0.00	0.00	0.12	0.04	**0.10**	0.11	0.08	0.07	0.05
Total	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

			*					*						
Rock Unit	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	458-3-99	458-3-99	**458-3-99**	458-3-99	458-3-99	458-3-99	458-3-99	**458-3-99**	634-00	634-00	634-00	634-00	634-00	634-00
Profile	pl 5	pl 5	**pl 5**	pl 5	pl 5	pl 2	pl 2	**pl 3-2**	pl 5	pl 5	pl 5	pl 5	pl 5	pl 3
Point	4	6	**10**	11	15	1	3	**2**	1	4	8	9	18	1
Texture	Pl2 matrix	Pl2 matrix	**Pl2 matrix**	Pl2 matrix	Pl2 matrix	Pl3 in Crd-Opx s.	Pl3 in Crd-Opx s.	**Pl3 in Crd-Opx s.**	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl1 in Grt2	Pl2 matrix
Position	←	core	→	→	rim				rim	←	core	→	rim	rim
SiO_2	57.46	58.40	**58.52**	58.42	57.74	52.40	53.92	**57.19**	54.16	54.07	53.49	53.67	54.43	59.94
Al_2O_3	26.27	26.48	**26.05**	26.01	26.00	30.01	29.09	**26.69**	28.64	28.71	29.02	29.11	28.38	24.61
MgO	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
CaO	8.12	7.89	**7.53**	7.57	7.77	12.33	11.57	**0.24**	10.86	11.08	11.26	11.30	10.98	6.32
MnO	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.07	0.10	**0.02**	0.03	0.06	0.19	0.27	**8.39**	0.19	0.13	0.12	0.10	0.14	0.17
BaO	0.04	0.00	**0.00**	0.06	0.08	0.05	0.00	**0.07**	0.00	0.00	0.01	0.00	0.03	0.01
Na_2O	6.77	6.97	**7.12**	6.94	7.05	4.69	5.08	**6.50**	5.17	5.12	4.85	4.93	5.18	7.93
K_2O	0.28	0.22	**0.27**	0.12	0.18	0.17	0.10	**0.27**	0.16	0.16	0.14	0.15	0.18	0.27
Total	99.00	100.07	**99.51**	99.15	98.89	99.85	100.03	**99.35**	99.18	99.28	98.89	99.25	99.31	99.23
Formula (O=8)														
Si	2.60	2.61	**2.63**	2.63	2.61	2.38	2.44	**2.58**	2.46	2.46	2.44	2.44	2.47	2.69
Al	1.40	1.39	**1.38**	1.38	1.39	1.61	1.55	**1.42**	1.54	1.54	1.56	1.56	1.52	1.30
Mg	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.39	0.38	**0.36**	0.36	0.38	0.60	0.56	**0.01**	0.53	0.54	0.55	0.55	0.53	0.30
Mn	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	**0.00**	0.00	0.00	0.01	0.01	**0.41**	0.01	0.01	0.00	0.00	0.01	0.01
Ba	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.59	0.60	**0.62**	0.61	0.62	0.41	0.45	**0.57**	0.46	0.45	0.43	0.43	0.46	0.69
K	0.02	0.01	**0.02**	0.01	0.01	0.01	0.01	**0.02**	0.01	0.01	0.01	0.01	0.01	0.02
Total	5.01	5.00	**5.00**	4.99	5.01	5.02	5.01	**5.00**	5.00	5.00	5.00	5.00	5.00	5.01
Ab	59.12	60.75	**62.13**	61.89	61.43	40.36	43.99	**40.94**	45.83	45.14	43.44	43.73	45.57	68.35
Or	1.63	1.27	**1.56**	0.71	1.04	0.95	0.58	**57.37**	0.93	0.94	0.84	0.86	1.04	1.55
An	39.18	37.98	**36.32**	37.28	37.40	58.61	55.42	**1.56**	53.23	53.92	55.70	55.41	53.34	30.09
Cs	0.07	0.00	**0.00**	0.11	0.14	0.09	0.00	**0.13**	0.00	0.00	0.02	0.00	0.04	0.01
Total	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

						*				*					
Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	634-00	634-00	634-00	634-00	634-00	**634-00**	634-00	634-00	634-00	**634-00**	634-00	634-00	634-00	634-00	634-00
Profile	pl 3	pl 3	pl 3	pl 3	pl 3	**pl 3**	pl 3	pl 3	pl 2	**pl 2**	pl 2	pl 2	pl 2	pl 2	pl 2
Point	3	7	10	12	17	**20**	22	24	1	**2**	3	5	6	7	8
Texture	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	**Pl2 matrix**	Pl2 matrix	Pl2 matrix	Pl3 in Opx-Pl c. at Grt2	**Pl3 in Opx-Pl c.**	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.
Position	←	←	←	core	→	→	→	rim		←	←	←	to	→	→
SiO_2	60.38	60.52	61.01	60.20	60.75	**60.70**	60.92	60.16	60.54	**60.86**	60.33	60.39	60.23	60.17	60.15
Al_2O_3	24.50	24.39	24.54	24.52	24.20	**24.03**	23.72	24.84	24.43	**24.31**	24.29	24.64	24.36	24.63	24.54
MgO	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
CaO	6.11	6.16	5.94	6.16	5.97	**5.94**	5.64	6.55	5.89	**5.80**	5.77	5.91	6.01	6.11	6.18
MnO	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
FeO	0.07	0.00	0.02	0.00	0.01	**0.00**	0.11	0.09	0.15	**0.09**	0.18	0.08	0.11	0.13	0.17
BaO	0.07	0.10	0.11	0.13	0.08	**0.10**	0.12	0.03	0.00	**0.00**	0.00	0.02	0.12	0.00	0.12
Na_2O	7.88	7.90	7.96	7.96	7.97	**8.05**	8.16	7.62	8.39	**8.11**	8.36	8.31	8.10	8.20	8.07
K_2O	0.24	0.32	0.27	0.34	0.33	**0.23**	0.17	0.23	0.11	**0.12**	0.07	0.07	0.07	0.08	0.10
Total	99.25	99.39	99.85	99.32	99.29	**99.05**	98.84	99.51	99.51	**99.28**	99.00	99.42	99.00	99.33	99.33
Formula (O=8)															
Si	2.71	2.71	2.72	2.70	2.72	**2.72**	2.74	2.69	2.71	**2.72**	2.71	2.70	2.71	2.70	2.70
Al	1.29	1.29	1.29	1.30	1.28	**1.27**	1.26	1.31	1.29	**1.28**	1.29	1.30	1.29	1.30	1.30
Mg	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Ca	0.29	0.30	0.28	0.30	0.29	**0.29**	0.27	0.31	0.28	**0.28**	0.28	0.28	0.29	0.29	0.30
Mn	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.01	**0.00**	0.01	0.00	0.00	0.01	0.01
Ba	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00
Na	0.68	0.69	0.69	0.69	0.69	**0.70**	0.71	0.66	0.73	**0.70**	0.73	0.72	0.71	0.71	0.70
K	0.01	0.02	0.02	0.02	0.02	**0.01**	0.01	0.01	0.01	**0.01**	0.00	0.00	0.00	0.00	0.01
Total	5.00	5.00	4.99	5.01	5.00	**5.00**	4.99	4.99	5.02	**4.99**	5.01	5.01	5.00	5.01	5.01
Ab	68.91	68.51	69.55	68.51	69.32	**70.01**	71.52	66.85	71.60	**71.19**	72.11	71.47	70.46	70.51	69.69
Or	1.40	1.84	1.55	1.95	1.86	**1.30**	0.97	1.32	0.59	**0.66**	0.39	0.39	0.41	0.46	0.58
An	29.56	29.49	28.70	29.31	28.68	**28.52**	27.30	31.78	27.81	**28.14**	27.50	28.11	28.92	29.03	29.52
Cs	0.13	0.17	0.20	0.23	0.13	**0.17**	0.21	0.04	0.00	**0.00**	0.00	0.03	0.21	0.00	0.20
Total	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss
Sample	634-00	634-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00
Profile	pl 2	pl 2	pl 8	pl 8	pl 8	pl 8	pl 8	pl 2	pl 2	pl 2	pl 2	pl 2	pl 3	pl 3	pl 3
Point	9	10	1	2	3	4	5	1	6	8	9	12	1	2	3
Texture	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl1 in Grt2 rim	Pl1 in Grt2 rim	Pl1 in Grt2 rim	Pl1 in Grt2 rim	Pl1 in Grt2 rim	Pl1 in Grt2 core	Pl1 in Grt2 core	Pl1 in Grt2 core	Pl1 in Grt2 core	Pl1 in Grt2 core	Pl2 matrix	Pl2 matrix	Pl2 matrix
Position	→	at Qtz2	rim	←	core	→	rim	rim	←	core	→	rim	rim	←	←
SiO_2	59.98	59.61	54.22	54.71	54.62	54.75	54.56	52.44	52.80	53.03	52.98	52.86	56.76	56.24	57.02
Al_2O_3	24.53	24.59	27.95	28.17	28.07	28.04	28.04	29.41	29.51	29.07	28.76	29.30	26.68	26.94	26.29
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
CaO	6.05	6.47	10.38	10.48	10.29	10.51	10.55	11.65	12.03	11.84	11.41	11.81	9.05	9.14	8.53
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.14	0.21	0.27	0.10	0.08	0.17	0.28	0.17	0.03	0.06	0.23	0.06	0.23	0.28	0.16
BaO	0.00	0.03	0.10	0.06	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.00	0.00	0.08	0.08
Na_2O	8.07	7.93	5.37	5.43	5.38	5.50	5.36	4.67	4.42	4.53	4.84	4.76	6.34	5.99	5.66
K_2O	0.08	0.08	0.16	0.19	0.22	0.15	0.17	0.17	0.22	0.17	0.18	0.22	0.28	0.58	1.39
Total	98.85	98.91	98.45	99.14	98.66	99.12	98.96	98.52	99.02	98.74	98.43	99.01	99.34	99.24	99.13
Formula (O=8)															
Si	2.70	2.69	2.48	2.49	2.49	2.49	2.49	2.41	2.41	2.43	2.43	2.42	2.57	2.55	2.59
Al	1.30	1.31	1.51	1.51	1.51	1.50	1.51	1.59	1.59	1.57	1.56	1.58	1.42	1.44	1.41
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.29	0.31	0.51	0.51	0.50	0.51	0.52	0.57	0.59	0.58	0.56	0.58	0.44	0.44	0.42
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.70	0.69	0.48	0.48	0.48	0.49	0.47	0.42	0.39	0.40	0.43	0.42	0.56	0.53	0.50
K	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.08
Total	5.01	5.01	5.00	5.00	5.00	5.01	5.00	5.01	5.00	4.99	5.01	5.01	5.01	5.01	5.00
Ab	70.37	68.58	47.83	47.81	48.00	48.23	47.40	41.62	39.44	40.49	42.99	41.63	55.01	52.39	50.06
Or	0.48	0.45	0.92	1.08	1.27	0.89	1.00	0.98	1.27	1.01	1.06	1.26	1.59	3.33	8.11
An	29.15	30.92	51.08	51.00	50.72	50.88	51.60	57.37	59.29	58.45	55.96	57.11	43.40	44.14	41.69
Cs	0.00	0.05	0.17	0.11	0.00	0.00	0.00	0.03	0.00	0.05	0.00	0.00	0.00	0.14	0.14
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

			*								*				
Rock Unit	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	Grt-Opx gneiss	**Grt-Opx gneiss**	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss
Sample	690-2-00	690-2-00	**690-2-00**	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	690-2-00	**690-2-00**	230-E-98	230-E-98	230-E-98	230-E-98
Profile	pl 3	pl 3	**pl 3**	pl 3	pl 5	pl 5	pl 5	pl 5	pl 5	pl 5	**pl 5**	pl 1	pl 1	pl 1	pl 1
Point	7	9	**11**	12	1	3	9	12	16	17	**19**	1	2	3	4
Texture	Pl2 matrix	Pl2 matrix	**Pl2 matrix**	Pl2 matrix	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	**Pl3 in Opx-Pl c.**	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix
Position	core	→	→	rim	at Grt2	←	←	to	→	→	**at Qtz2**	rim	←	←	←
SiO_2	57.38	57.24	**57.46**	56.95	55.55	54.89	55.59	55.78	55.90	56.23	**56.15**	57.26	57.56	57.31	58.04
Al_2O_3	25.79	26.36	**26.37**	26.08	27.97	27.92	27.41	27.39	27.28	27.36	**27.10**	26.80	26.36	26.61	26.59
MgO	0.00	0.00	**0.00**	0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
CaO	8.00	8.35	**8.53**	8.45	10.02	10.03	9.85	9.69	9.41	9.44	**9.20**	8.75	8.39	8.50	8.15
MnO	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
FeO	0.07	0.02	**0.13**	0.22	0.17	0.10	0.07	0.11	0.05	0.03	**0.15**	0.22	0.10	0.07	0.08
BaO	0.19	0.00	**0.00**	0.00	0.00	0.01	0.00	0.04	0.09	0.03	**0.07**	0.02	0.00	0.00	0.00
Na_2O	5.53	6.42	**6.74**	6.72	5.87	5.78	5.99	5.89	5.98	6.17	**6.03**	6.66	6.93	6.73	7.08
K_2O	2.19	0.41	**0.14**	0.15	0.18	0.16	0.18	0.25	0.30	0.31	**0.31**	0.09	0.10	0.11	0.14
Total	99.15	98.79	**99.36**	98.56	99.76	98.89	99.10	99.15	99.01	99.56	**99.02**	99.80	99.43	99.32	100.08
Formula (O=8)															
Si	2.61	2.59	**2.59**	2.59	2.51	2.50	2.52	2.53	2.54	2.54	**2.55**	2.57	2.59	2.58	2.60
Al	1.38	1.41	**1.40**	1.40	1.49	1.50	1.47	1.46	1.46	1.46	**1.45**	1.42	1.40	1.41	1.40
Mg	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ca	0.39	0.41	**0.41**	0.41	0.48	0.49	0.48	0.47	0.46	0.46	**0.45**	0.42	0.40	0.41	0.39
Mn	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Fe	0.00	0.00	**0.00**	0.01	0.01	0.00	0.00	0.00	0.00	0.00	**0.01**	0.01	0.00	0.00	0.00
Ba	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Na	0.49	0.56	**0.59**	0.59	0.51	0.51	0.53	0.52	0.53	0.54	**0.53**	0.58	0.61	0.59	0.61
K	0.13	0.02	**0.01**	0.01	0.01	0.01	0.01	0.01	0.02	0.02	**0.02**	0.01	0.01	0.01	0.01
Total	5.01	5.00	**5.01**	5.01	5.01	5.01	5.01	5.00	5.00	5.01	**5.00**	5.01	5.01	5.01	5.01
Ab	48.39	56.81	**58.37**	58.48	50.91	50.58	51.83	51.60	52.45	53.21	**53.22**	57.62	59.58	58.53	60.62
Or	12.60	2.39	**0.81**	0.87	1.04	0.93	1.05	1.42	1.75	1.74	**1.82**	0.52	0.58	0.62	0.80
An	38.68	40.80	**40.83**	40.65	48.05	48.49	47.12	46.91	45.64	45.01	**44.84**	41.84	39.83	40.84	38.58
Cs	0.33	0.00	**0.00**	0.00	0.00	0.01	0.00	0.07	0.16	0.05	**0.12**	0.03	0.00	0.00	0.00
Total	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

				*				*		*				
Rock Unit	Epembe	Epembe	Epembe	**Epembe**	Epembe	Epembe	Epembe	**Epembe**	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe
Rock type	Grt gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**	Grt gneiss	Grt gneiss	Grt gneiss	**Grt gneiss**	Grt-Sil gneiss	**Grt-Sil gneiss**	Grt-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss
Sample	230-E-98	230-E-98	230-E-98	**230-E-98**	230-E-98	230-E-98	230-E-98	**230-E-98**	230-F-98	**230-F-98**	230-F-98	458-4-99	458-4-99	458-4-99
Profile	pl 1	pl 1	pl 1	**pl 1**	pl 1	pl 2	pl 2	**pl 2**	pl 1	**pl 1**	pl 1	pl1	pl1	pl1
Point	5	7	8	**9**	10	2	3	**4**	1	**7**	10	3	4	5
Texture	Pl2	Pl2	Pl2	**Pl2**	Pl2	Pl3	Pl3	**Pl3**	Pl3	**Pl3**	Pl3	Pl1	Pl1	Pl1
	matrix	matrix	matrix	**matrix**	matrix	corona	corona	**corona**	on Sil2	**on Sil2**	on Sil2	in Opx2	in Opx2	in Opx2
Position	core	→	→	→	rim	on Grt2	on Grt2	**on Grt2**				rim	core	rim
SiO_2	58.08	57.93	58.08	**57.97**	57.36	57.35	57.25	**57.49**	56.53	**59.05**	58.65	56.48	56.52	56.19
Al_2O_3	26.29	26.61	26.54	**26.52**	26.36	26.69	26.56	**26.61**	26.91	**25.71**	25.61	26.64	26.34	26.67
MgO	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.00
CaO	8.33	8.31	8.36	**8.20**	8.39	8.51	8.41	**8.51**	9.05	**7.42**	7.35	8.50	8.75	8.60
MnO	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.00
FeO	0.03	0.09	0.04	**0.07**	0.16	0.13	0.06	**0.00**	0.10	**0.00**	0.00	0.07	0.08	0.24
BaO	0.00	0.00	0.09	**0.07**	0.00	0.00	0.01	**0.00**	0.00	**0.09**	0.00	0.00	0.03	0.06
Na_2O	6.87	7.18	6.86	**6.98**	6.68	6.79	6.86	**6.70**	6.50	**7.34**	7.58	6.47	6.64	6.61
K_2O	0.17	0.11	0.12	**0.11**	0.09	0.09	0.16	**0.09**	0.08	**0.10**	0.10	0.10	0.12	0.12
Total	99.76	100.23	100.10	**99.92**	99.03	99.56	99.32	**99.39**	99.16	**99.70**	99.30	98.25	98.48	98.48
Formula (O=8)														
Si	2.61	2.59	2.60	**2.60**	2.59	2.58	2.58	**2.59**	2.56	**2.64**	2.64	2.57	2.58	2.56
Al	1.39	1.40	1.40	**1.40**	1.40	1.42	1.41	**1.41**	1.44	**1.36**	1.36	1.43	1.41	1.43
Mg	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.00
Ca	0.40	0.40	0.40	**0.39**	0.41	0.41	0.41	**0.41**	0.44	**0.36**	0.35	0.41	0.43	0.42
Mn	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	**0.00**	0.01	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.01
Ba	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	**0.00**	0.00	0.00	0.00	0.00
Na	0.60	0.62	0.59	**0.61**	0.59	0.59	0.60	**0.58**	0.57	**0.64**	0.66	0.57	0.59	0.58
K	0.01	0.01	0.01	**0.01**	0.01	0.01	0.01	**0.00**	0.00	**0.01**	0.01	0.01	0.01	0.01
Total	5.00	5.02	5.00	**5.01**	5.00	5.01	5.01	**5.00**	5.01	**5.00**	5.02	5.00	5.01	5.02
Ab	59.29	60.61	59.23	**60.16**	58.71	58.76	59.09	**58.46**	56.25	**63.67**	64.72	57.61	57.42	57.70
Or	0.95	0.62	0.69	**0.64**	0.51	0.52	0.88	**0.50**	0.46	**0.59**	0.58	0.57	0.69	0.67
An	39.76	38.77	39.91	**39.08**	40.78	40.73	40.01	**41.03**	43.29	**35.58**	34.70	41.81	41.84	41.52
Cs	0.00	0.00	0.16	**0.12**	0.00	0.00	0.02	**0.01**	0.00	**0.15**	0.00	0.00	0.06	0.11
Total	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	**100.00**	100.00	**100.00**	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

															*
Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe**
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	**Opx-Sil gneiss**	
Sample	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-4-99	458-5-00	458-5-00	458-5-00	**458-5-00**	
Profile	pl 3	pl 3	pl 3	pl 3	pl 3	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1	pl 1	**pl3**	
Point	1	3	7	12	15	1	5	9	22	26	1	5	10	**1**	
Texture	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl2 matrix	Pl2 matrix	Pl2 matrix	**Pl3 corona**	
Position	rim	←	core	→	rim	at Opx3	←	to	→	at Qtz2	rim	core	rim	**on Grt2**	
SiO_2	56.18	56.87	57.75	58.36	56.81	58.06	58.47	59.26	58.78	59.55	61.79	61.66	61.78	**61.08**	
Al_2O_3	27.50	27.12	26.40	26.45	27.51	25.81	25.79	25.62	25.38	25.34	24.35	24.28	24.28	**24.32**	
MgO	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	
CaO	9.59	8.92	8.37	8.45	9.36	8.10	7.87	7.47	7.24	6.96	5.50	5.48	5.50	**5.65**	
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	
FeO	0.23	0.18	0.07	0.08	0.21	0.14	0.07	0.03	0.03	0.00	0.26	0.18	0.20	**0.16**	
BaO	0.07	0.03	0.00	0.06	0.03	0.14	0.06	0.15	0.11	0.08	0.07	0.02	0.04	**0.00**	
Na_2O	6.23	6.29	7.04	6.80	6.26	6.87	7.12	7.33	7.51	7.60	8.74	8.61	8.47	**8.45**	
K_2O	0.11	0.14	0.16	0.13	0.09	0.24	0.12	0.24	0.23	0.21	0.07	0.08	0.03	**0.09**	
Total	99.91	99.81	99.79	100.32	100.27	99.37	99.50	100.10	99.26	99.73	100.78	100.29	100.31	**99.73**	
Formula (O=8)															
Si	2.53	2.56	2.59	2.60	2.54	2.62	2.63	2.65	2.65	2.66	2.73	2.73	2.73	**2.72**	
Al	1.46	1.44	1.40	1.39	1.45	1.37	1.37	1.35	1.35	1.34	1.27	1.27	1.27	**1.28**	
Mg	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	
Ca	0.46	0.43	0.40	0.40	0.45	0.39	0.38	0.36	0.35	0.33	0.26	0.26	0.26	**0.27**	
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	
Fe	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	**0.01**	
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	
Na	0.54	0.55	0.61	0.59	0.54	0.60	0.62	0.63	0.66	0.66	0.75	0.74	0.73	**0.73**	
K	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	**0.00**	
Total	5.01	5.00	5.02	5.00	5.00	5.00	5.00	5.00	5.01	5.00	5.02	5.01	5.00	**5.01**	
Ab	53.63	55.59	59.81	58.78	54.46	59.54	61.56	62.95	64.29	65.53	73.83	73.63	73.39	**72.67**	
Or	0.62	0.83	0.88	0.73	0.54	1.39	0.68	1.35	1.27	1.18	0.37	0.46	0.19	**0.49**	
An	45.64	43.53	39.30	40.39	44.96	38.82	37.64	35.45	34.26	33.15	25.67	25.88	26.34	**26.84**	
Cs	0.11	0.05	0.00	0.10	0.05	0.25	0.11	0.25	0.18	0.14	0.13	0.03	0.08	**0.00**	
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	**Epembe** *	Epembe	Epembe	Epembe	Epembe
Rock type	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Sil gneiss	**Opx-Sil gneiss**	Opx-Sil gneiss	Opx-Sil gneiss	Opx-Grt rock	Opx-Grt rock
Sample	458-5-00	458-5-00	458-5-00	458-5-00	458-9-00	458-9-00	458-9-00	458-9-00	458-9-00	**458-9-00**	458-9-00	458-9-00	700-1-00	700-1-00
Profile	pl3	pl3	pl3	pl3	pl 1	pl 1	pl 1	pl 2	pl 2	**pl 2**	pl 2	pl 2	pl 3	pl 3
Point	2	3	4	5	1	16	35	1	2	**4**	9	10	1	5
Texture	Pl3 corona	Pl3 corona	Pl3 corona	Pl3 corona	Pl2 matrix	Pl2 matrix	Pl2 matrix	Pl3 corona	Pl3 corona	**Pl3 corona**	Pl3 corona	Pl3 corona	Pl2 matrix	Pl2 matrix
Position	on Grt2	on Grt2	on Grt2	on Grt2	rim	core	rim	on Grt2	on Grt2	**on Grt2**	on Grt2	on Grt2	rim	←
SiO_2	60.66	60.65	61.32	61.05	59.12	59.45	58.91	58.94	59.08	**59.58**	59.35	58.98	57.70	58.37
Al_2O_3	24.36	24.31	24.47	24.08	25.01	24.98	25.29	25.41	25.25	**25.36**	25.08	25.26	26.17	25.67
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
CaO	5.65	5.90	5.83	5.92	7.14	6.92	7.21	7.14	7.24	**7.19**	7.11	7.23	8.27	7.77
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
FeO	0.13	0.11	0.23	0.13	0.07	0.06	0.09	0.19	0.15	**0.10**	0.11	0.12	0.07	0.11
BaO	0.00	0.04	0.00	0.01	0.11	0.09	0.19	0.01	0.00	**0.00**	0.07	0.01	0.03	0.00
Na_2O	8.47	8.50	8.20	8.44	7.43	7.51	7.18	7.41	7.44	**7.57**	7.46	7.24	6.64	6.94
K_2O	0.06	0.05	0.08	0.09	0.34	0.33	0.25	0.08	0.06	**0.08**	0.08	0.09	0.29	0.28
Total	99.33	99.56	100.13	99.70	99.21	99.33	99.13	99.17	99.22	**99.89**	99.26	98.91	99.17	99.14
Formula (O=8)														
Si	2.71	2.71	2.72	2.72	2.66	2.67	2.65	2.65	2.66	**2.66**	2.67	2.66	2.60	2.63
Al	1.28	1.28	1.28	1.27	1.33	1.32	1.34	1.35	1.34	**1.33**	1.33	1.34	1.39	1.36
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ca	0.27	0.28	0.28	0.28	0.34	0.33	0.35	0.34	0.35	**0.34**	0.34	0.35	0.40	0.38
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	**0.00**	0.00	0.00	0.00	0.00
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Na	0.73	0.74	0.71	0.73	0.65	0.65	0.63	0.65	0.65	**0.66**	0.65	0.63	0.58	0.61
K	0.00	0.00	0.00	0.01	0.02	0.02	0.01	0.00	0.00	**0.00**	0.00	0.01	0.02	0.02
Total	5.01	5.02	5.00	5.01	5.01	5.00	4.99	5.00	5.00	**5.00**	5.00	4.99	5.00	5.00
Ab	72.80	72.02	71.45	71.70	63.93	64.90	63.16	64.94	64.82	**65.26**	65.11	64.10	58.21	60.76
Or	0.33	0.29	0.48	0.49	1.93	1.85	1.46	0.44	0.32	**0.48**	0.48	0.51	1.67	1.62
An	26.87	27.62	28.07	27.79	33.95	33.08	35.04	34.61	34.86	**34.27**	34.29	35.38	40.08	37.62
Cs	0.00	0.07	0.00	0.02	0.19	0.16	0.33	0.01	0.00	**0.00**	0.12	0.01	0.04	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**100.00**	100.00	100.00	100.00	100.00

*: analysis used for geothermobarometry

Table A.6.2.11 (continued): Representative EMP analyses of plagioclase

		*					*	
Rock Unit	Epembe	**Epembe**	Epembe	Epembe	Epembe	Epembe	**Epembe**	Epembe
Rock type	Opx-Grt rock	**Opx-Grt rock**	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	Opx-Grt rock	**Opx-Grt rock**	Opx-Grt rock
Sample	700-1-00	**700-1-00**	700-1-00	700-1-00	700-1-00	700-1-00	**700-1-00**	700-1-00
Profile	pl 3	**pl 3**	pl 3	pl 2	pl 2	pl 2	**pl 2**	pl 2
Point	10	**18**	20	1	3	6	**18**	25
Texture	Pl2 matrix	**Pl2 matrix**	Pl2 matrix	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	Pl3 in Opx-Pl c.	**Pl3 in Opx-Pl c.**	Pl3 in Opx-Pl c.
Position	core	→	rim	rim	←	core	→	rim
SiO_2	58.23	**58.30**	58.53	58.67	59.00	58.56	**58.94**	57.68
Al_2O_3	25.96	**26.08**	25.60	25.31	25.57	25.53	**25.76**	26.41
MgO	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00
CaO	7.77	**8.00**	7.82	7.40	7.45	7.39	**7.53**	8.31
MnO	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00
FeO	0.04	**0.05**	0.17	0.12	0.10	0.07	**0.03**	0.12
BaO	0.04	**0.05**	0.07	0.00	0.07	0.11	**0.10**	0.04
Na_2O	7.01	**6.89**	7.11	7.16	7.24	7.48	**7.22**	6.93
K_2O	0.32	**0.30**	0.32	0.11	0.15	0.11	**0.14**	0.08
Total	99.37	**99.67**	99.61	98.77	99.57	99.25	**99.72**	99.57
Formula (O=8)								
Si	2.62	**2.62**	2.63	2.65	2.65	2.64	**2.64**	2.59
Al	1.38	**1.38**	1.36	1.35	1.35	1.36	**1.36**	1.40
Mg	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00
Ca	0.37	**0.38**	0.38	0.36	0.36	0.36	**0.36**	0.40
Mn	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00
Fe	0.00	**0.00**	0.01	0.00	0.00	0.00	**0.00**	0.00
Ba	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	0.00
Na	0.61	**0.60**	0.62	0.63	0.63	0.65	**0.63**	0.60
K	0.02	**0.02**	0.02	0.01	0.01	0.01	**0.01**	0.00
Total	5.01	**5.00**	5.01	4.99	5.00	5.01	**5.00**	5.01
Ab	60.83	**59.79**	61.00	63.23	63.14	64.18	**62.83**	59.82
Or	1.84	**1.74**	1.78	0.66	0.86	0.60	**0.77**	0.47
An	37.26	**38.39**	37.10	36.11	35.89	35.03	**36.22**	39.64
Cs	0.06	**0.08**	0.11	0.00	0.12	0.19	**0.17**	0.07
Total	100.00	**100.00**	100.00	100.00	100.00	100.00	**100.00**	100.00

*: analysis used for geothermobarometry

A.6.2.12 Alkalifeldspar

Table A.6.2.12: Representative EMP analyses of alkalifeldspar

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil leucos.	Grt-Bt-Sil leucos.	Grt-Bt-Sil leucos.	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	219-A-98	219-A-98	219-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98
Profile	kfs 1	kfs 1	kfs 1	kfs1	kfs1	kfs1	kfs1	kfs1	kfs2	kfs2	kfs2	kfs2	kfs2	kfs2	kfs2
Point	5	7	19	2	5	7	8	9	3	5	6	7	9	10	11
Texture	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2
SiO_2	63.56	69.19	63.86	63.30	63.32	63.62	63.18	63.39	63.14	63.57	62.89	63.46	63.79	68.17	60.89
Al_2O_3	18.42	20.58	18.76	18.70	18.72	18.66	18.68	18.43	18.97	18.90	18.64	18.62	19.33	20.16	17.96
MgO	0.03	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.02	0.00	0.00	0.01	0.00	0.01	0.00
CaO	0.02	0.21	0.01	0.06	0.04	0.07	0.06	0.10	0.11	0.10	0.13	0.06	0.06	0.12	0.06
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.01	0.02	0.01	0.04	0.00	0.07	0.02	0.06	0.00	0.00	0.05	0.03	0.00	0.04	0.01
BaO	0.53	0.08	0.59	0.53	0.38	0.51	0.61	0.57	0.52	0.43	0.68	0.54	0.49	0.00	0.49
Na_2O	0.78	10.44	0.75	1.01	0.73	1.11	0.87	0.99	0.91	1.12	0.91	0.98	0.83	11.65	0.83
K_2O	15.44	2.09	15.37	15.38	15.41	14.77	15.19	14.98	14.86	14.85	15.08	14.88	15.33	0.50	14.83
Total	98.78	102.60	99.36	99.02	98.59	98.81	98.62	98.51	98.54	98.97	98.37	98.56	99.84	100.65	95.06
Formula (O=8)															
Si	2.98	2.97	2.98	2.97	2.97	2.98	2.97	2.98	2.96	2.97	2.97	2.98	2.96	2.97	2.97
Al	1.02	1.04	1.03	1.03	1.04	1.03	1.04	1.02	1.05	1.04	1.04	1.03	1.06	1.04	1.03
Sum	4.00	4.01	4.01	4.00	4.01	4.00	4.00	4.00	4.01	4.01	4.00	4.01	4.01	4.00	4.00
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
Na	0.07	0.87	0.07	0.09	0.07	0.10	0.08	0.09	0.08	0.10	0.08	0.09	0.08	0.98	0.08
K	0.92	0.11	0.91	0.92	0.92	0.88	0.91	0.90	0.89	0.88	0.91	0.89	0.91	0.03	0.92
Sum	1.01	0.99	0.99	1.03	1.00	1.00	1.01	1.01	0.99	1.00	1.01	0.99	0.99	1.02	1.01
Total	5.01	5.00	5.00	5.02	5.01	5.00	5.01	5.01	5.00	5.01	5.01	5.00	5.01	5.02	5.02
Ab	7.01	87.42	6.86	8.96	6.65	10.15	7.86	8.95	8.41	10.14	8.24	8.96	7.54	96.73	7.76
Or	91.92	11.49	91.99	89.80	92.48	88.59	90.72	89.48	90.05	88.56	89.88	89.77	91.28	2.75	91.02
An	0.10	0.95	0.06	0.29	0.18	0.33	0.30	0.52	0.56	0.52	0.65	0.28	0.29	0.53	0.30
Cs	0.97	0.14	1.09	0.96	0.69	0.93	1.12	1.05	0.98	0.78	1.24	0.99	0.89	0.00	0.92
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table A.6.2.12 (continued): Representative EMP analyses of alkalifeldspar

Rock Unit	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue	Orue
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss
Sample	246-A-98	246-A-98	246-A-98	246-A-98	246-A-98	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00	703-00
Profile	kfs2	kfs2	kfs2	kfs1	kfs1	kfs 7	kfs 7	kfs 7	kfs 7	kfs 7	kfs 7	kfs 7	kfs 7	kfs 7	kfs 7
Point	12	13	14	13	19	1	2	3	5	7	8	9	10	11	12
Texture	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2
SiO_2	63.27	63.39	63.51	62.77	63.17	63.34	63.42	63.10	63.26	63.81	62.68	63.76	63.33	63.76	63.40
Al_2O_3	18.78	18.79	18.81	19.00	18.66	18.84	18.90	19.23	19.20	19.16	18.75	19.08	18.99	19.03	19.06
MgO	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00
CaO	0.07	0.05	0.05	0.05	0.00	0.01	0.01	0.05	0.07	0.08	0.04	0.16	0.06	0.00	0.04
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.00	0.00	0.01	0.00	0.00	0.09	0.04	0.00	0.07	0.04	0.00	0.18	0.00	0.00	0.01
BaO	0.56	0.43	0.57	0.60	0.63	0.47	0.46	0.46	0.51	0.47	0.62	0.45	0.58	0.46	0.65
Na_2O	0.88	0.78	0.77	0.92	0.61	0.94	0.68	0.86	0.90	0.86	0.55	0.68	0.66	0.47	0.47
K_2O	15.20	15.60	15.58	15.08	15.51	15.12	15.34	15.11	15.23	15.37	15.69	15.41	15.65	15.68	15.81
Total	98.75	99.06	99.30	98.41	98.58	98.81	98.85	98.82	99.26	99.78	98.33	99.73	99.28	99.40	99.44
Formula (O=8)															
Si	2.97	2.97	2.97	2.96	2.97	2.97	2.97	2.95	2.95	2.96	2.96	2.96	2.96	2.97	2.96
Al	1.04	1.04	1.04	1.05	1.04	1.04	1.04	1.06	1.06	1.05	1.04	1.04	1.05	1.04	1.05
Sum	4.01	4.00	4.00	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Ba	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Na	0.08	0.07	0.07	0.08	0.06	0.09	0.06	0.08	0.08	0.08	0.05	0.06	0.06	0.04	0.04
K	0.91	0.93	0.93	0.91	0.93	0.90	0.92	0.90	0.91	0.91	0.95	0.91	0.93	0.93	0.94
Sum	1.00	1.01	1.01	1.00	1.00	1.00	0.99	0.99	1.01	1.00	1.01	1.00	1.01	0.98	1.00
Total	5.01	5.02	5.01	5.01	5.00	5.01	5.00	5.01	5.01	5.01	5.01	5.00	5.01	5.00	5.01
Ab	8.01	6.99	6.86	8.40	5.61	8.56	6.27	7.90	8.14	7.70	5.00	6.22	5.97	4.35	4.24
Or	90.62	91.97	91.84	90.27	93.22	90.55	92.81	90.99	90.57	91.06	93.69	92.17	92.69	94.79	94.36
An	0.35	0.26	0.27	0.23	0.00	0.03	0.06	0.26	0.36	0.38	0.18	0.80	0.29	0.01	0.21
Cs	1.02	0.78	1.03	1.09	1.17	0.87	0.86	0.85	0.92	0.86	1.14	0.82	1.05	0.85	1.18
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table A.6.2.12 (continued): Representative EMP analyses of alkalifeldspar

Rock Unit	Orue	Orue	Orue	Orue	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Bt-Sil gneiss	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt-Opx metagranit.	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss
Sample	703-00	703-00	703-00	703-00	206-B-98	206-B-98	206-B-98	206-B-98	206-B-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98
Profile	kfs 7	kfs 7	kfs 7	kfs 7	pl6	pl6	pl6	pl6	pl6	kfs2	kfs2	kfs2	kfs2	kfs2
Point	15	18	19	20	1	2	3	4	5	2	3	4	6	7
Texture	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2
SiO_2	64.71	63.26	63.92	64.38	63.15	63.11	63.34	63.17	63.07	63.76	64.00	63.79	63.67	64.08
Al_2O_3	19.70	19.26	19.40	19.36	18.93	19.09	19.08	18.92	18.65	18.60	18.74	18.75	18.82	18.77
MgO	0.01	0.03	0.00	0.00	0.10	0.03	0.03	0.02	0.16	0.00	0.01	0.04	0.00	0.00
CaO	0.16	0.05	0.04	0.01	0.04	0.07	0.16	0.03	0.00	0.05	0.04	0.06	0.04	0.03
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.00	0.02	0.04	0.02	0.40	0.22	0.14	0.12	0.65	0.00	0.04	0.09	0.00	0.00
BaO	0.47	0.42	0.53	0.57	1.31	1.23	1.13	1.25	1.13	0.65	0.66	0.63	0.48	0.67
Na_2O	1.01	0.90	0.81	0.49	0.93	0.88	1.02	0.80	0.75	1.43	1.58	1.69	1.52	0.97
K_2O	14.75	15.09	15.43	15.96	14.61	14.88	14.56	14.99	14.51	14.11	14.16	13.61	14.14	14.90
Total	100.80	99.03	100.17	100.78	99.47	99.50	99.44	99.29	98.92	98.60	99.24	98.66	98.68	99.43
Formula (O=8)														
Si	2.96	2.95	2.95	2.96	2.95	2.95	2.96	2.96	2.96	2.98	2.98	2.98	2.97	2.98
Al	1.06	1.06	1.06	1.05	1.04	1.05	1.05	1.04	1.03	1.03	1.03	1.03	1.04	1.03
Sum	4.02	4.01	4.01	4.01	4.00	4.00	4.00	4.00	3.99	4.01	4.00	4.01	4.01	4.01
Mg	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Ca	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Ba	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Na	0.09	0.08	0.07	0.04	0.08	0.08	0.09	0.07	0.07	0.13	0.14	0.15	0.14	0.09
K	0.86	0.90	0.91	0.94	0.87	0.89	0.87	0.90	0.87	0.84	0.84	0.81	0.84	0.88
Sum	0.97	0.99	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	0.98	0.99	0.99
Total	4.99	5.01	5.01	5.00	5.00	5.01	5.00	5.00	4.99	4.99	5.00	4.99	5.00	4.99
Ab	9.24	8.25	7.30	4.37	8.57	8.00	9.32	7.29	7.10	13.16	14.29	15.68	13.88	8.91
Or	89.10	90.71	91.52	94.54	88.77	89.37	87.80	90.23	90.72	85.36	84.29	82.83	85.04	89.69
An	0.80	0.27	0.20	0.06	0.21	0.35	0.79	0.16	0.00	0.27	0.21	0.33	0.20	0.16
Cs	0.86	0.78	0.97	1.03	2.45	2.28	2.09	2.31	2.18	1.21	1.21	1.17	0.89	1.24
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table A.6.2.12 (continued): Representative EMP analyses of alkalifeldspar

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss
Sample	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-E-98	230-F-98	230-F-98	230-F-98	230-F-98
Profile	kfs2	kfs2	kfs2	kfs2	kfs2	kfs2	kfs2	kfs1	kfs1	kfs1	kfs1	kfs 1	kfs 1	kfs 1	kfs 1
Point	8	10	14	15	16	21	22	2	3	4	5	1	2	3	4
Texture	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2
SiO_2	64.06	67.59	63.82	64.10	64.09	63.50	63.66	64.36	63.48	64.03	63.57	64.86	64.40	64.69	64.29
Al_2O_3	18.75	20.03	18.71	18.68	18.68	18.69	18.81	18.75	18.75	18.72	18.78	18.54	18.73	18.54	18.45
MgO	0.03	0.00	0.00	0.01	0.00	0.00	0.02	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.03
CaO	0.02	0.36	0.06	0.06	0.04	0.04	0.09	0.00	0.04	0.04	0.00	0.00	0.20	0.03	0.00
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.00	0.00	0.02	0.00	0.09	0.01	0.00	0.05	0.03	0.00	0.03	0.01	0.02	0.00	0.00
BaO	0.54	0.26	0.73	0.61	0.59	0.65	0.66	1.39	1.28	1.31	1.36	0.32	0.30	0.33	0.43
Na_2O	1.58	9.13	1.79	1.10	1.11	1.55	1.67	2.10	1.52	1.38	1.34	1.06	1.44	0.78	0.62
K_2O	14.12	3.29	13.77	14.97	14.97	14.38	13.78	13.36	14.12	13.89	14.34	15.30	14.26	15.55	15.71
Total	99.11	100.65	98.89	99.52	99.57	98.81	98.69	100.02	99.23	99.38	99.43	100.08	99.34	99.92	99.54
Formula (O=8)															
Si	2.98	2.97	2.98	2.98	2.98	2.97	2.97	2.98	2.97	2.98	2.97	2.99	2.98	2.99	2.99
Al	1.03	1.04	1.03	1.02	1.02	1.03	1.04	1.02	1.03	1.03	1.03	1.01	1.02	1.01	1.01
Sum	4.01	4.01	4.00	4.00	4.00	4.00	4.01	4.00	4.00	4.01	4.00	4.00	4.00	4.00	4.00
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Na	0.14	0.78	0.16	0.10	0.10	0.14	0.15	0.19	0.14	0.12	0.12	0.09	0.13	0.07	0.06
K	0.84	0.18	0.82	0.89	0.89	0.86	0.82	0.79	0.84	0.82	0.85	0.90	0.84	0.92	0.93
Sum	0.99	0.98	1.00	1.00	1.00	1.01	0.99	1.00	1.01	0.98	1.00	1.00	0.99	0.99	1.00
Total	5.00	4.99	5.00	5.00	5.00	5.01	5.00	5.00	5.01	4.98	5.00	5.00	4.99	5.00	5.00
Ab	14.39	79.07	16.26	9.90	10.01	13.85	15.26	18.77	13.70	12.80	12.16	9.49	13.11	7.00	5.60
Or	84.53	18.76	82.11	88.71	88.74	84.78	83.06	78.70	83.75	84.54	85.34	89.94	85.36	92.25	93.60
An	0.08	1.72	0.30	0.29	0.18	0.19	0.46	0.02	0.21	0.21	0.00	0.00	0.99	0.16	0.00
Cs	1.00	0.45	1.33	1.10	1.07	1.17	1.23	2.51	2.34	2.45	2.49	0.57	0.54	0.60	0.79
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table A.6.2.12 (continued): Representative EMP analyses of alkalifeldspar

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss
Sample	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98
Profile	kfs 2	kfs 2	kfs 2	kfs 2	kfs 2	kfs 2	kfs 2	kfs 1	kfs 1	kfs 1	kfs 1	kfs 1	kfs 1	kfs 1	kfs 1
Point	1	2	3	4	5	6	7	5	6	7	13	14	15	16	18
Texture	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2
SiO_2	64.81	64.77	64.58	64.18	64.73	64.02	64.69	63.53	62.98	63.91	64.44	64.18	64.17	64.41	64.25
Al_2O_3	18.70	18.70	18.61	19.10	18.71	18.98	18.51	20.02	20.37	19.47	18.92	18.85	18.77	18.90	18.76
MgO	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.03	0.02	0.01
CaO	0.21	0.10	0.08	0.58	0.05	0.43	0.01	1.39	1.93	0.87	0.07	0.04	0.09	0.09	0.11
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.00	0.01	0.00	0.00	0.02	0.01	0.02	0.00	0.04	0.00	0.00	0.00	0.02	0.00	0.04
BaO	0.28	0.36	0.31	0.32	0.31	0.19	0.27	0.24	0.23	0.27	0.33	0.31	0.31	0.31	0.24
Na_2O	2.56	1.96	1.95	1.67	1.88	1.70	0.60	3.59	3.87	2.64	2.19	1.37	1.68	2.36	1.85
K_2O	12.85	13.75	13.91	13.81	14.22	14.22	15.88	10.49	9.73	12.19	13.37	14.83	14.04	13.07	13.80
Total	99.42	99.65	99.44	99.65	99.93	99.53	99.97	99.26	99.16	99.35	99.32	99.59	99.11	99.16	99.05
Formula (O=8)															
Si	2.98	2.99	2.99	2.96	2.98	2.96	2.99	2.92	2.89	2.94	2.98	2.97	2.98	2.98	2.98
Al	1.02	1.02	1.01	1.04	1.02	1.04	1.01	1.08	1.10	1.06	1.03	1.03	1.03	1.03	1.03
Sum	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.01	4.00	4.00	4.01	4.00
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.01	0.00	0.00	0.03	0.00	0.02	0.00	0.07	0.10	0.04	0.00	0.00	0.00	0.00	0.01
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00
Na	0.23	0.18	0.17	0.15	0.17	0.15	0.05	0.32	0.34	0.24	0.20	0.12	0.15	0.21	0.17
K	0.76	0.81	0.82	0.81	0.84	0.84	0.94	0.61	0.57	0.72	0.79	0.88	0.83	0.77	0.82
Sum	1.00	1.00	1.00	1.00	1.01	1.02	1.00	1.01	1.02	1.00	0.99	1.01	1.00	0.99	0.99
Total	5.00	5.00	5.00	5.00	5.01	5.02	5.00	5.01	5.01	5.00	5.00	5.01	5.00	5.00	5.00
Ab	22.91	17.63	17.41	14.97	16.62	14.97	5.36	31.72	33.97	23.59	19.76	12.21	15.26	21.28	16.74
Or	75.56	81.23	81.66	81.59	82.57	82.62	94.12	61.07	56.24	71.63	79.28	87.06	83.72	77.69	82.27
An	1.01	0.49	0.38	2.87	0.26	2.07	0.03	6.79	9.38	4.29	0.37	0.18	0.45	0.45	0.55
Cs	0.51	0.65	0.55	0.57	0.55	0.34	0.49	0.43	0.41	0.49	0.59	0.56	0.57	0.57	0.44
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table A.6.2.12 (continued): Representative EMP analyses of alkalifeldspar

Rock Unit	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe	Epembe
Rock type	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss	Grt-Sil gneiss
Sample	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98	230-F-98
Profile	kfs 1	kfs 1	kfs 2	kfs 2	kfs 2	kfs 2	kfs 2	kfs 2	kfs 2	kfs 2	kfs 2
Point	21	26	1	7	13	17	19	21	22	24	29
Texture	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2	matrix Kfs2
SiO_2	63.02	64.44	64.16	63.51	64.08	64.10	64.23	63.80	60.65	61.93	63.79
Al_2O_3	20.28	19.02	18.90	19.77	18.84	18.93	18.71	18.97	23.59	21.43	19.06
MgO	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
CaO	1.70	0.25	0.02	1.14	0.28	0.31	0.06	0.26	5.48	3.06	0.43
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FeO	0.02	0.04	0.00	0.02	0.01	0.00	0.00	0.00	0.02	0.00	0.05
BaO	0.22	0.29	0.40	0.19	0.27	0.25	0.17	0.30	0.08	0.20	0.43
Na_2O	3.44	1.64	1.70	2.23	1.88	1.48	1.45	1.14	6.00	4.12	1.73
K_2O	10.60	13.87	14.18	12.35	13.64	14.09	14.49	14.59	3.70	8.56	13.63
Total	99.30	99.54	99.36	99.22	99.00	99.15	99.10	99.05	99.52	99.29	99.15
Formula (O=8)											
Si	2.90	2.97	2.97	2.93	2.97	2.97	2.98	2.97	2.74	2.84	2.96
Al	1.10	1.03	1.03	1.08	1.03	1.03	1.02	1.04	1.26	1.16	1.04
Sum	4.00	4.01	4.01	4.01	4.00	4.01	4.01	4.01	4.00	4.00	4.00
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ca	0.08	0.01	0.00	0.06	0.01	0.02	0.00	0.01	0.27	0.15	0.02
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ba	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
Na	0.31	0.15	0.15	0.20	0.17	0.13	0.13	0.10	0.53	0.37	0.16
K	0.62	0.82	0.84	0.73	0.81	0.83	0.86	0.87	0.21	0.50	0.81
Sum	1.02	0.98	1.00	0.99	1.00	0.99	0.99	0.99	1.01	1.02	1.00
Total	5.02	4.99	5.01	4.99	5.00	4.99	5.00	5.00	5.00	5.02	5.00
Ab	30.20	14.98	15.27	20.19	16.95	13.48	13.13	10.39	52.27	35.88	15.70
Or	61.16	83.24	83.88	73.74	81.15	84.52	86.28	87.73	21.22	49.05	81.34
An	8.25	1.25	0.12	5.73	1.40	1.54	0.28	1.33	26.37	14.72	2.17
Cs	0.38	0.53	0.73	0.34	0.49	0.46	0.31	0.55	0.14	0.35	0.79
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00