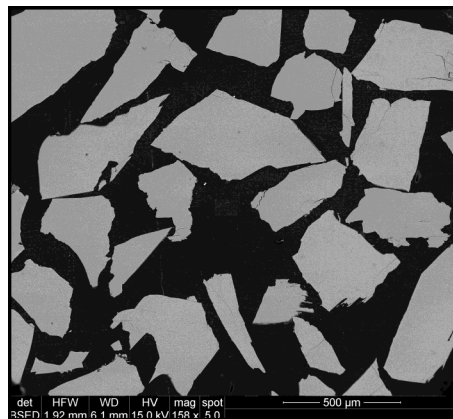




Smithsonian
National Museum of Natural History

Augite, NMNH 122142

* Preferred values			
SiO ₂ :	50.73	SiO ₂ :	50.73
Al ₂ O ₃ :	7.86	Al ₂ O ₃ :	8.73
Fe ₂ O ₃ :	3.69	Fe ₂ O ₃ :	1.08
FeO:	3.45	FeO:	5.37
MgO:	16.65	MgO:	16.65
CaO:	15.82	CaO:	15.82
Na ₂ O:	1.27	Na ₂ O:	1.27
K ₂ O:	0.00	K ₂ O:	0.00
TiO ₂ :	0.74	TiO ₂ :	0.74
MnO:	0.13	MnO:	0.13
H ₂ O:	0.04	H ₂ O:	0.04
TOTAL	100.38	TOTAL	100.56



Size fractions available:

0.42 mm - 0.25 mm
0.3 mm - 0.25 mm
0.18 mm - 0.13 mm
> 0.3 mm

Analyst: B. Wiik, Finland Geologic Survey.

Source: Kakanui, New Zealand

Standard Specifics:

Impurities: rare - grains with lower Na, Al and more Fe, Mg, Ca
Impurities: common - calcite and barite

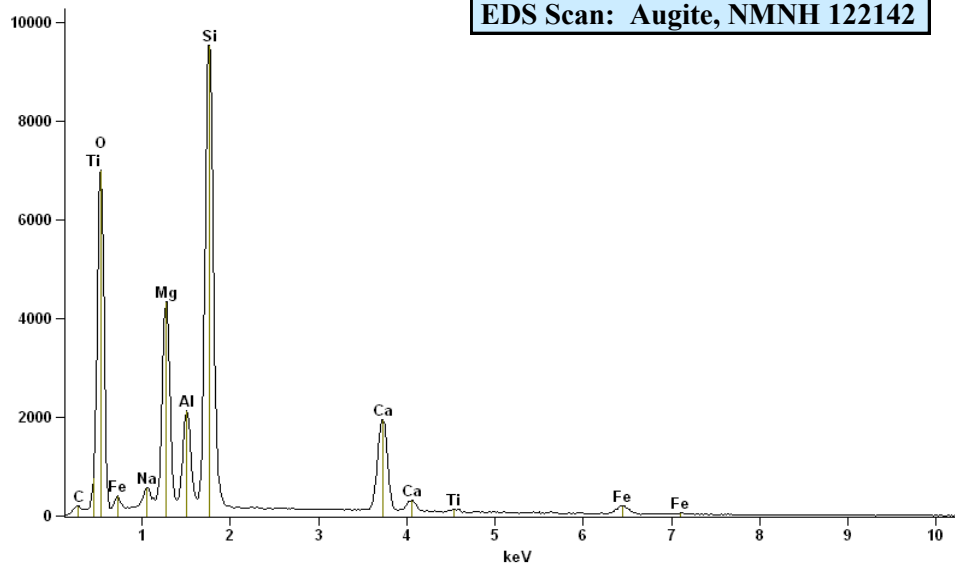
NOTE:

The original published composition was apparently done in Finland (Jarosewich et al, 1980). The **preferred working value** above was distributed by Gene Jarosewich. We do not know when the sample was reanalyzed.

Full scale counts: 9526

EDS2[K:augitel]

EDS Scan: Augite, NMNH 122142



References:

Jarosewich, E., Nelen, J. A., and Norberg, J. A. (1980) Reference Samples for Electron Microprobe Analysis. *Geostandards Newsletter* 4, p. 43-47.

Mason, B. and Allen, R.O. (1973) Minor and trace elements in augite, hornblende and pyrop megacrysts from Kakanui, New Zealand; *New Zealand Journal of Geology and Geophysics*, 16(4): 935-947.

Mason, B. (1966) Pyrope, augite and hornblende from Kakanui, New Zealand. *J. Geol. Geophys.* 9 (4), p. 474-480.