

Appendix 1 Bulk chemical composition of the Nijikai Tuff (sample no. 09081301)

Sample No. 09081301	
SiO ₂	75.34
TiO ₂	0.30
Al ₂ O ₃	12.68
Fe ₂ O ₃	1.85
MnO	0.07
MgO	0.71
CaO	2.69
Na ₂ O	2.48
K ₂ O	2.50
P ₂ O ₅	0.04
Total(wt%)	98.66
FeO*/MgO	2.35
K ₂ O+Na ₂ O	5.05
Mg#	43.17
Sc (ppm)	7
V	20
Cr	7
Co	4
Ni	4
Zn	45
Ga	13
Rb	53
Sr	165
Y	22
Zr	115
Nb	5.3
Ba	616
La	13.9
Ce	29.3
Pr	3.38
Nd	14.4
Sm	3.85
Eu	1.09
Gd	3.23
Tb	0.58
Dy	3.48
Ho	0.69
Er	2.02
Tm	0.32
Yb	2.32
Lu	0.35
Hf	3.08
Pb	13.1
Th	5.38
U	1.75

Determined by XRF (Philips PW2400) set in Hirosaki University and LA-ICP-MS

(VG Excel connected to MicroProbe II) set in IES. The detail methods were described in Tani et al. (2002) and Orihashi and Hirata (2003), respectively.

文献

- Orihashi, Y., Nakai, S. and Hirata, T., 2008, U–Pb age determinations for seven standard zircons by ICP – Mass Spectrometry coupled with frequency quintupled Nd-YAG ($\lambda = 213$ nm) laser ablation system: Comparison with LA-ICP-MS zircon analyses with a NIST glass reference material. *Resour. Geol.*, **58**, 101–123.
- 谷 建一郎・折橋裕二・中田節也, 2002, ガラスビードを用いた蛍光X線分析装置によるケイ酸塩岩石の主・微量成分分析: 3倍・6倍・11倍希釈ガラスビード法の分析精度の評価. 東京大学地震研究所技術研究報告書, 8, 26–36. [Tani, K., Orihashi, Y. and Nakada, S., 2002, Major and] trace components analysis of silicate rocks by X-ray fluorescence spectrometer using fused glass beads: Evaluation of analytical precision of three, six, eleven times dilution fused glass beads methods. *Technical Research Report, Earthquake Research Institute, Univeristy of Tokyo*, **8**, 26–36.