K409 NBS/NIST Glass (never issued because it was not homogeneous/two phase)

Original “nominal composition” SiO_2 55, Al_2O_3 15, FeO 20, Na_2O 10 wt%

Two phases: ~800 nm Fe_3O_4 magnetite (EBSD determination 11/17/13, P. Gopon) crystals

Intersitial glass by EPMA (J Fournelle, 1/8/07) with oxygen analyzed

SiO_2 56.58 wt%
Al_2O_3 15.10 wt%
Fe_2O_3 17.49 wt%
Na_2O 9.82 wt%
TiO_2 .03 wt%
MnO .18 wt%
MgO .05 wt%
CaO .11 wt%
excess O -.14 wt%
Total 99.23 wt%

Si 26.45 wt%
Al 7.99 wt%
Fe 12.24 wt%
Na 7.29 wt%
Ti 0.02 wt%
Mn 0.14 wt%
Mg 0.03 wt%
Ca 0.08 wt%
O 45.00 wt%
Total 99.23 wt%