Elimination of Aliasing in LA–ICP–MS by Alignment of Laser and Mass Spectrometer

Supplementary Material

Supplementary Figure 1



Time resolved plots showing average single-pulse response from configurations A and B (see text). Both have been measured using mass 232 Th on SRM612 with a 40 µm spot. To aid comparison of the response times, each plot has been normalised to the same area and then scaled so the peak intensity of the slowest response has a value of 1.

Total Pb	38.57 (µg/g)	±0.2 (95% C.I.)
²⁰⁷ Pb/ ²⁰⁶ Pb	0.90745	±0.00004 (2 S.D.)
²⁰⁸ Pb/ ²⁰⁶ Pb	2.1651	±0.0001 (2 S.D.)
²⁰⁶ Pb/ ²⁰⁴ Pb	17.099	±0.003 (2 S.D.)
²⁰⁷ Pb/ ²⁰⁴ Pb	15.516	±0.002 (2 S.D.)
²⁰⁸ Pb/ ²⁰⁴ Pb	37.020	±0.007 (2 S.D.)

SRM612 Lead Composition

Total lead concentration from Jochum et al. 2011 and lead isotope ratios from Baker et al. 2004.

Total Pb	86.6% (g/g)	
²⁰⁷ Pb/ ²⁰⁶ Pb	0.8491	±0.0002 (2se)
²⁰⁸ Pb/ ²⁰⁶ Pb	2.0822	±0.0007 (2se)
²⁰⁶ Pb/ ²⁰⁴ Pb	18.4577	±0.0195 (2se)
²⁰⁷ Pb/ ²⁰⁴ Pb	15.6472	±0.0152 (2se)

Mt. Murchison Galena Lead Composition

²⁰⁸ Pb/ ²⁰⁴ Pb	38.4006	±0.0384 (2se)

Total lead concentration is the stoichiometric value and lead isotope ratios are from in-house analysis of this material.