²⁰⁶Ph (a) (d) (e) (e) (f) (e) (e) (f) (q) (a) (a) MS99033 Anorthosite xenolith in Beaver Bay Diabase (Beaver Bay Complex)

% err

0.066

0.040

0.047

Radiogenic Isotope Ratios

% err

0.118

0.087

238

0.184584

0.184583

0.184579

0 184557

²⁰⁷Ph

2351

1.93250

1.93235

.93191

Isotopic Ages

²⁰⁷Ph

235

1092.35

1092.20

²⁰⁷Ph

²⁰⁶Ph

1093.13

weighted mean 206Pb/238U age = 1091.83 ± 0.21 (0.37) [1.15] Ma (2s); MSWD = 0.41 (n=6)

1093.27 1.31

1092.72 0.93

1092 30 1 11

corr.

0.856

0.886

% err coef.

0.046 0.974

0.046 0.948 ²⁰⁶Pb

238

1091.96 0.46

1091.94 0.46

1092 41 0.79 **1091.97 0.77**

1091 98 0 66 1091.82 0.55

0.56

z3	1.863	3.3407	0.9992	519	0.22	22932	0.565	0.0759415	0.044	1.93139	0.086	0.184538	0.046	0.950	1092.63	0.89	1092.02	0.58	1091.72	0.47
z6	0.978	0.8594	0.9978	154	0.16	8164	0.296	0.0759062	0.059	1.93015	0.101	0.184504	0.055	0.878	1091.70	1.19	1091.59	0.68	1091.54	0.55
z5	0.971	1.3031	0.9983	196	0.19	10381	0.294	0.0759732	0.056	1.93131	0.095	0.184453	0.050	0.891	1093.46	1.12	1091.99	0.64	1091.26	0.50
z2	0.909	1.7688	0.9985	229	0.22	12318	0.276	0.0759373	0.053	1.93029	0.093	0.184443	0.049	0.910	1092.52	1.06	1091.64	0.62	1091.20	0.49

(a) z1, z2 etc. are labels for single zircon fragments annealed and chemically abraded after Mattinson (2005); bold indicates analyses used in weighted mean calculations.

²⁰⁷Pb

0.0759607

0.0759449

0.0759289

(b) Model Th/U ratio iteratively calculated from the radiogenic 208Pb/206Pb ratio and 206Pb/238U age.

Table DR2. Zircon chemical abrasion IDTIMS U-Pb isotopic data Compositional Parameters

mol %

0.9977

0.9997

0.9985

0.9986

1133 0.18

309 0.81 ²⁰⁶Pb

²⁰⁴Ph

7696

59449

12367

12587

(pg)

²⁰⁸Ph

0.286

0.306

0.738

0.305

²⁰⁶Pb*

x10⁻¹³ mol

0.8673

6.9857

6.7175

1 4490

Sample

0.944

1.010

2.435

1 008

z4

z8

(c) Pb* and Pbc represent radiogenic and common Pb, respectively; mol % 206Pb* with respect to radiogenic, blank and initial common Pb.

(d) Measured ratio corrected for spike and fractionation only. Fractionation estimated at 0.18 (Daly) or 0.10 (Faraday) ± 0.02 %/a.m.u. based on analysis of NBS-981 & 982.

(e) Corrected for fractionation, spike, and common Pb; all common Pb was assumed to be procedural blank: 206Pb/204Pb = 18.60 ± 0.72%; 207Pb/204Pb = 15.69 ± 0.62%; 208Pb/204Pb = 38.51 ± 0.74% (all uncertainties 1-sigma). Isotope dilution measurements made with the ET535 spike (Condon et al., 2015).

(f) Errors are 2-sigma, propagated using the algorithms of Schmitz and Schoene (2007).

(g) Calculations are based on the decay constants of Jaffey et al. (1971). All ratios and ages corrected for initial 230Th/238U disequilibrium with Th/U [magma] = 3.