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New constraints on the pre-Permian continental crust growth of Central Asia (West Junggar, China) by U-Pb and Hf isotopic data from detrital zircon.

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ABSTRACT

In-situ U–Pb geochronology of detrital zircons from various Palaeozoic sedimentary rocks of West Junggar accretionary complexes (Central Asia) suggests two distinct episodes of arc magmatism, and an evolution in three steps: i) Ordovician-Silurian subduction generating juvenile arc crust; ii) Late Silurian subduction jamming, erosion and intraplate magmatism, iii) development of two new opposed Devonian-Carboniferous subductions recycling the Early Palaeozoic crust. Zircon Hf isotopes document three pre-Permian episodes of mantle-derived magmatic input into the crust: 1) Neoproterozoic (850-550 Ma), 2) Early Palaeozoic (530-450 Ma) and 3) Late Palaeozoic (380-320 Ma). Zircons also record the recycling of Neoproterozoic and Early Palaeozoic juvenile crusts during the Early and Late Palaeozoic. These data support a model of episodic continental crust growth in Central Asia.

Introduction

Accretionary orogens are major sites of continental crust growth (Cawood and Buchan, 2007), with addition of juvenile magma, and accretion of oceanic and exotic materials (Rudnick, 1990; Condie, 2000; Jahn, 2004). Deciphering the origin of materials is critical to constrain continental growth; therefore, accretionary orogens have been extensively studied (e.g. Kusky et al., 1997; Kroner et al., 2007; Cawood et al., 2009; Isozaki et al., 2010).

Eurasia was partly formed by the huge Altaids collage, with numerous accreted terranes (Sengör et al.; 1993, Fig 1a). During the Palaeozoic, large volumes of juvenile crust were produced (Sengör et al., 1993; Jahn, 2004); however, the timing of continental crust growth is debated (Xiao et al., 2010). In West Junggar (western Altaids), the positive $\epsilon_{\text{Nd}}(t)$ values of Permian granitoids reveal a mantle origin and subsequent differentiation of underplated magmas (Han et al., 1999; Chen and Jahn, 2004; Chen and Arakawa, 2005; Chen et al., 2010b). Alternatively, melting of the Early Palaeozoic juvenile lower crust was proposed (Hu et al., 2000; Chen and Arakawa, 2005; Su et al., 2006; Geng et al., 2009). Post-collisional setting is generally admitted (Han et al., 1999; Chen and Jahn, 2004) but oceanic subduction was recently forwarded (Geng et al., 2009). Permian magmatism obviously contributed to the Late Palaeozoic vertical growth of the continental crust. These studies pointed out the juvenile character of the Palaeozoic basement, but constraints on the pre-Permian evolution are lacking.

Several models for the pre-Permian terrane amalgamation in West Junggar are available (Wang et al., 2003; Buckman and Aitchison, 2004; Xiao et al., 2008), but timing and geometry remain uncertain. Several elements are apparently lacking (Early Palaeozoic arcs), or are poorly documented (e.g. the Laba unit). Mélange zones and major strike-slip faults separate the Palaeozoic terranes and hinder their original relationships. Therefore, exploring the provenance of sediments could be an effective method for reconstructing a reasonable pattern.

We report zircon U-Pb ages and Hf isotopic data from West Junggar accretionary complexes. Since zircons preserve the initial characteristics of their host magmas, U-Pb geochronology and Hf isotopes

reveal the juvenile or contaminated character of their source. Provenance of detrital grains may be used to track continental growth processes (Condie et al., 2005). This method has been applied to Precambrian orogens (Griffin et al., 2004; Wu et al., 2007), but remains rare for Phanerozoic collages (e.g. Willner et al., 2008; Bahlburg et al., 2009), especially in the Altaids (Long et al., 2007; Sun et al., 2008). The direct investigation on subduction complex rocks could provide time constraints on magmatism and estimate the relative involvement of juvenile material versus crust recycling.

Geological setting and sampling

West Junggar, at the Kazakh-Chinese border separates into two parts along the Hueshentaolege Valley (Fig. 1b). To the north, Middle Ordovician ashes, Late Ordovician conglomerate, Early Silurian shales and Middle Silurian volcanic rocks are exposed in the Sharburt and Xiemisitai Mountains (Mu et al., 1986; Feng et al., 1989; BGMRXUAR, 1993). The Hongguleleng ophiolitic mélange containing Cambrian-Ordovician mafic rocks (Zhang and Huang, 1992; Jian et al., 2005) extends toward the Tarbagatay Mountains (Zhu and Xu, 2006). Early Palaeozoic rocks correlate with the Chingiz-Tarbagatay and the Maikan-Kyziltas belts (Degtyarev et al., 2011). 420-400 Ma A-type granites intrude the volcanic rocks of the Xiemisitai Mountains, but their emplacement setting is uncertain (Chen et al., 2010a). Late Silurian to Carboniferous sedimentary rocks cover the Early Palaeozoic rocks (Wei et al., 2009). In the Sawuer Mountains, Carboniferous I-type granites (Han et al., 2006; Zhou et al., 2008; Chen et al., 2010a; 2010b) intrude Middle Devonian to mid-Carboniferous volcanic rocks (Shen et al., 2008). The Sawuer arc is related to the Devonian-Carboniferous subduction of the Ob-Zaisan Ocean, closed in the Late Carboniferous (Buslov et al., 2001).

For the southern part of West Junggar, we follow the tectonostratigraphic terranes subdivision of Buckman and Aitchison (2004). In the Tangbale area, Early Silurian turbidites (Mu et al., 1986) are thrust over the Tangbale ophiolitic mélange that contains Cambrian-Ordovician gabbros (Kwon et al., 1989; Zhang and Huang, 1992; Jian et al., 2005), Middle Ordovician radiolarian cherts (Buckman and

Aitchison, 2001) and Ordovician blueschists (Zhang, 1997). Buckman and Aitchison (2004) described undated calk-alkaline diorite (Suyuenka Complex), postdated by Early Silurian turbidites. Ordovician-assigned metamorphosed terrestrial clastic rocks compose the Laba Terrane (Feng et al., 1989; Zhang et al., 1993). The Mayila Terrane comprises Early to Middle Silurian sedimentary units (Mu et al., 1986) and the Mayila ophiolitic mélange with Silurian radiolarian chert (Li, 1994) and pyroxenite (Jian et al., 2005). Both Mayila and Tangbale terranes may correlate with the Agadyr-Tekurmas-North Balkash accretionary complexes in Kazakhstan (Degtyarev, 2011).

Unconformable Devonian turbidites overlie the Mayila mélange (BGMRXUAR, 1965). The Toli Terrane displays Middle Devonian to Carboniferous arc volcanic rocks and granodiorite (Jin and Xu, 1997; Buckman and Aitchison, 2004). To the southeast, Carboniferous turbidites (Jin and Li, 1999), tuffs (Zhang et al., 2011) and greywackes (Guo et al., 2010; Choulet et al., in press) are thrust over ophiolitic mélanges, with Devonian oceanic crust remnants (Zhang and Huang, 1992; Xu et al., 2006; Gu et al., 2009) and radiolarian chert (Zhu et al., 1987). Carboniferous intrusions like the Baogutu porphyry (Shen et al., 2009), and adakites (Geng et al., 2009; 2011; Tang, 2010; Yin et al., 2010) suggest Carboniferous ridge subduction. Late Palaeozoic units belong to the Kazakh orocline (Abrajevitch et al., 2008). Post-mélange (Chen and Guo, 2010) A- and I-type granitoids (305-240 Ma) were ascribed a post-collisional setting (Chen and Jahn, 2004; Chen and Arakawa, 2005; Han et al., 2006), although Geng et al. (2009) proposed a suprasubduction setting. The Early Permian molasse postdates accretionary processes (BGMRXUAR, 1993).

Although remarkable stratigraphic localities are documented in West Junggar (BGMRXUAR, 1993), the lack of palaeontological data leaves some sedimentary units undated (e.g. clastic rocks from the Laba terrane). Therefore, twelve detrital rock samples were collected throughout West Junggar for detrital zircons analysis. Table 1 presents sample location, detailed petrography and stratigraphic assignments. Two hornblende-bearing granites (DJ259 and DJ303) from the Sawuer Mountains were also collected for U-Pb dating and Hf isotopes, because they represent potential sources of detrital zircons.

U-Pb Geochronology

Cathodoluminescence (CL) imaging, and simultaneous determination of U-Pb and Lu-Hf isotopes were carried out at the Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing (IGGCAS). Sample preparation and analytical procedure are described in Wu et al. (2010).

CL images reveal growth and sector zoning, suggesting igneous origin for the detrital zircons. Euhedral, unrounded grains indicate a relatively short transport (Fig. 2).

U-Pb dating of detrital zircons

Computation of U, Th and Pb isotopic ratios yields concordant ages (Fig. 3). All ages range from 300 to 600 Ma, whilst only one Early Proterozoic (1894 ± 19 Ma) zircon was found (Table 2 and 3). Statistically, this occurrence is meaningless and might be due to sample contamination. Therefore, this grain will not be considered further in the discussion. All samples, except DJ15 display one single age population (Fig. 4).

Samples DJ46, DJ87, DJ89, DJ108 and DJ192 from the Mayila and Tangbale terranes show an Early Silurian maximum deposition age and Ordovician peak population (Fig. 4a and 4b). Sample DJ83 displays a Middle Devonian maximum deposition age and a Late Ordovician peak population (Fig. 4a; Table 2). Samples DJ98 and DJ188 from Mayila also present Devonian maximum deposition ages (Fig. 4b; Table 2), but Late Silurian to Early Devonian zircon sources.

Such source ages are similar to those of samples DJ325 and DJ149 (Fig. 4c; Table 2). Late Carboniferous turbidites from Sawuer and Karamay Units display an Early Carboniferous peak population with, for DJ15, a subsidiary Middle Silurian peak (Fig. 4c; Table 2).

U-Pb dating of magmatic zircons

Zircons extracted from the Sawuer granites exhibit prismatic shape and growth zoning (Fig. 5a). Sample DJ259 displays eighteen concordant ages ranging from 327 Ma to 353 Ma, with a Concordia age (Ludwig, 1998) of 339 ± 1 Ma (Fig. 5b; Table 4). Twenty-four grains from sample DJ303 yield concordant ages ranging from 331 Ma to 355 Ma, with a Concordia age of 344 ± 1 Ma (Fig. 5b; Table 4).

Zircon Lu-Hf isotope data

Lu-Hf isotope data were obtained from 13 out of 14 samples (Table 5). ϵ Hf values of detrital zircons fluctuate from +5 to +19. As the crust of West Junggar evolved from an immature arc (Buckman and Aitchison, 2004), two-stage Hf model ages (T_{DM}^{LC}), using the Lu/Hf ratio (0.022) of the lower mafic crust (Amelin et al., 1999), are proposed (Table 5). Only five Devonian-Carboniferous detrital zircons have Late Palaeozoic model ages. 30% and 60% of the grains display Cambrian-Ordovician and Neoproterozoic Hf model ages, respectively (Fig. 6). 33% of the Early Palaeozoic detrital zircons display Palaeozoic Hf model ages, but the other grains present Precambrian model ages (850 - 550 Ma) (Fig. 6; Table 5). ϵ Hf values of Carboniferous zircons from the two Sawuer granites vary between +11 and +16. Only three grains show Devonian-Carboniferous model ages (Fig. 6), other zircons have Cambrian-Ordovician (25%) and Neoproterozoic (75%) model ages (Table 5).

Discussion

Maximum ages of sedimentation

The detrital zircon data set has three characteristics: i) only one Precambrian grain; ii) narrow population peaks; and, iii) consistent maximum sedimentary age and main population peak age (Table 2). Andesite clasts (Fig. 7) and positive ϵ Hf(t) values of zircons indicate that volcaniclastic greywacke

probably accumulated in the arc vicinity. Therefore, maximum deposition age closely mirrors the timing of arc magmatism. The similar U-Pb and stratigraphic ages (BGMRXUAR, 1993) of samples DJ87, DJ89, DJ149, and DJ325 support this postulate.

The Tangbale mélange was ascribed to Ordovician, but DJ46 greywacke block has an Early Silurian maximum deposition age. The Early Silurian ages of microconglomerate and greywacke blocks (DJ108 and DJ192) of the Mayila mélange are consistent with the Silurian ages of chert and pyroxenite blocks (Li, 1994; Jian et al., 2005). The incorporation of sedimentary rocks into the mélanges closely follows sedimentation because Silurian turbidites overlie it (Feng et al., 1989). The Early Devonian maximum deposition age of mafic sandstone DJ83 questions the Ordovician assignment of the Laba Terrane.

Middle to Late Devonian greywacke (DJ98 and DJ188) belongs to the sporadic molasse postdating the Mayila mélange (BGMRXUAR, 1965). Samples DJ15 and DJ329, previously assigned to the Early Carboniferous (BGMRXUAR, 1993) show Late Carboniferous maximum deposition ages consistent with the age of interlayered tuffs (Zhang et al., 2011).

Zircon provenance

Single zircon populations infer that local rocks principally supplied detrital zircons. Because of similar U-Pb age spectra and Hf isotopic signatures, the Sawuer arc represented by samples DJ259 and DJ303, is a potential source of the Carboniferous detrital zircons (Fig. 6).

In contrast with Kazakhstan, there is no Early Devonian magmatic arc in West Junggar (Windley et al., 2007); therefore, a possible local source for Late Silurian to Early Devonian zircons is the alkaline plutons of Xiemisitai Mountains (Chen et al., 2010a).

Zircon populations with age peaks at 426 and 424 Ma could derive from the Middle Silurian arc rocks of Sharburt Mountains (Feng et al., 1989). In Tangbale and Mayila, undated diorites of the Suyuenka complex (Buckman and Aitchison, 2004) could be potential sources. Zircons could also reasonably come from Early Palaeozoic units, suspected upon geochemical evidence (e.g. Chen and

Jahn, 2004), but hidden below Late Palaeozoic sediments. These Early Palaeozoic units may represent the eastern extension of the Ordovician Baydaulet-Aqbastau volcanic arc (Degtyarev, 2011) exposed in Kazakhstan (Fig. 8).

A polycyclic model for West Junggar

These new data support the polycyclic evolution of West Junggar, proposed by Buckman and Aitchison (2004). Ordovician to Middle Silurian subduction contributed to the formation of juvenile arc crust. The slight diachronism between Mayila and Tangbale areas (Fig. 9) suggests either two subduction zones (Buckman and Aitchison, 2004), or migration of a single one (Wang et al., 2003).

Subduction complexes were docked to the Chingiz-Tarbagatay margin. Lower Devonian terrigenous sediments (Feng et al., 1989) record an episode of erosion in response to collision. Late Silurian to Early Devonian A-type granite emplacement (Chen et al., 2010; Fig. 9) suggests an uplift of the asthenosphere that may be related to post-accretion slab break-off, back-arc, or intra-arc rifting.

Late Devonian-Early Carboniferous magmatic rocks replaced Early Palaeozoic rocks that initially supplied the basins. These rocks compose the Barliek and Sawuer arcs that ensue from two opposed new subduction zones (Filippova et al., 2001; Fig. 8). The final amalgamation occurred during the Late Carboniferous-Early Permian, due to the combined effect of oceanic closure and oroclinal bending (Abrajevitch et al., 2008; Choulet et al., 2011).

Crustal evolution of West Junggar and implication for the Altaids

The $\epsilon\text{Hf(t)}$ values close to the DM, with similar U-Pb ages and Hf model ages, imply a juvenile origin for several Palaeozoic zircons (Fig. 6). In contrast, grains with older model ages mirror the recycling of a pre-existing juvenile crust, during Palaeozoic magmatism (Fig. 6).

Numerous Palaeozoic zircons show Neoproterozoic Hf model ages that suggest provenance from a moderately evolved continental crust (Table 5). Considering the location of West Junggar in Palaeozoic time (Filippova et al., 2001), Kazakhstan is the most likely provenance for remote grains, conveyed towards the accretionary prism along the trench axis (Von Huene, 1974). However, this hypothesis contradicts the morphological and geochronological characteristics of the zircons population, which support a local origin. Although Precambrian rocks are neither exposed in West Junggar, nor inferred from zircon geochronology, a significant involvement of Precambrian primitive crustal materials in the formation of Palaeozoic arc magmas may be regarded. The Neoproterozoic model ages coincide with the break-up of Rodinia (Hoffman, 1999; Kheraskova et al., 2003; Zhang et al., 2010) and the emplacement of ophiolites in Central Asia (Khain et al., 2003). Heinhorst et al. (2000) and Kröner et al. (2007; 2008) observed a similar contamination of Palaeozoic rocks by Neoproterozoic juvenile material in Central Kazakhstan.

Our data suggest three pre-Permian magmatic episodes: 1) Neoproterozoic (850-550 Ma), 2) Cambro-Ordovician (530-450 Ma), and 3) Late Devonian-Carboniferous (380-320 Ma). Crustal growth terminates with the major Permian intraplate episode (Jahn, 2004). Results support episodic crust growth in West Junggar, like in Mongolia (Kovalenko et al., 2004), with lateral and vertical growth, but recycling of juvenile crust is seemingly a dominant process.

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FIGURE CAPTIONS

Table 1 Detrital sample localities and detailed petrographic analysis. Abbreviations: amph.: amphibole, and.: andesite, bas.: basalt, cc.: calcite, chl.: chlorite, cpx.: clinopyroxene, ep.: epidote, fsp.: feldspar (K-feldspar and plagioclase), FTO: Fe-Ti oxydes, LF: lithic fragments, Opx.: orthopyroxene, qz.: quartz. L.: Lower, M.: Middle, U.: Upper. Carb.: Carboniferous, Dev.: Devonian, Ord.: Ordovician, Sil. Silurian. Stratigraphic age and Formation are from BGMRXUAR (1993). *: For southern West Junggar, terrane assignment is from Buckman and Aitchinson (2004). **: BGMRXUAR (1993) assign these rocks to Late Devonian Tarbagatay Formation (Toli Sheet) or, alternatively, to Early Devonian (Bayanhe Sheet). The Ordovician age of the Laba terrane is uncertain and does not rely on palaeontological or radiometric evidence.

Table 2 Data summary. *: The age statistics were calculated by Age Pick software package of the Arizona University (<http://www.geo.arizona.edu/alc/Analysis%20Tools.htm>). †: N is the number of individual analyses taken into account for the age peak calculations, N_0 is the total number of analyses. For sample DJ188, mineral separation only provided 39 grains. Though this value is much below the threshold of 59 defined by Dodson et al. (1988), we chose to keep this sample as it represents the unconformable molasse deposits lying over the Mayila mélange.

Table 3 La-ICPMS U-Pb detrital zircon data. *: Degree of discordance.

Table 4 La-ICPMS U-Pb magmatic zircon data.

Table 5 Hf isotopic data on zircon. *: $^{206}\text{Pb}/^{238}\text{U}$ ages.

$$\left(\frac{^{176}\text{Hf}}{^{177}\text{Hf}} \right)_i = \left(\frac{^{176}\text{Hf}}{^{177}\text{Hf}} \right)_{\text{SAMPLE}} - \left[\left(\frac{^{176}\text{Lu}}{^{177}\text{Hf}} \right)_{\text{SAMPLE}} \left(e^{\frac{\lambda t}{1000}} - 1 \right) \right]$$

$$\varepsilon_{\text{Hf}}(t) = 10^4 \times \left[\frac{\left(\frac{^{176}\text{Hf}}{^{177}\text{Hf}} \right)_{\text{SAMPLE}} - \left(\frac{^{176}\text{Lu}}{^{177}\text{Hf}} \right)_{\text{SAMPLE}} \left(e^{\frac{\lambda t}{1000}} - 1 \right)}{\left(\frac{^{176}\text{Hf}}{^{177}\text{Hf}} \right)_{\text{CHUR}} - \left(\frac{^{176}\text{Lu}}{^{177}\text{Hf}} \right)_{\text{CHUR}} \left(e^{\frac{\lambda t}{1000}} - 1 \right)} - 1 \right]$$

$$T_{DM} = \frac{1}{\lambda} \times \ln \left(1 + \left[\frac{\left(\frac{^{176}Hf}{^{177}Hf} \right)_{SAMPLE} - \left(\frac{^{176}Hf}{^{177}Hf} \right)_{DM}}{\left(\frac{^{176}Lu}{^{177}Hf} \right)_{SAMPLE} - \left(\frac{^{176}Lu}{^{177}Hf} \right)_{DM}} \right] \right)$$

$$T_{DM}^C = \frac{t}{1000} + \left[\frac{1}{\lambda} \times \ln \left(1 + \left[\frac{\left(\frac{^{176}Hf}{^{177}Hf} \right)_{SAMPLE} - \left(\left(\frac{^{176}Hf}{^{177}Hf} \right)_{DM} - \left[\left(\frac{^{176}Lu}{^{177}Hf} \right)_{DM} \left(e^{\frac{\lambda t}{1000}} - 1 \right) \right] \right]}{\left(\frac{^{176}Lu}{^{177}Hf} \right)_C - \left(\frac{^{176}Lu}{^{177}Hf} \right)_{DM}} \right] \right) \right]$$

$$T_{DM}^{LC} = \frac{t}{1000} + \left[\frac{1}{\lambda} \times \ln \left(1 + \left[\frac{\left(\frac{^{176}Hf}{^{177}Hf} \right)_{SAMPLE} - \left(\left(\frac{^{176}Hf}{^{177}Hf} \right)_{DM} - \left[\left(\frac{^{176}Lu}{^{177}Hf} \right)_{DM} \left(e^{\frac{\lambda t}{1000}} - 1 \right) \right] \right]}{\left(\frac{^{176}Lu}{^{177}Hf} \right)_{LC} - \left(\frac{^{176}Lu}{^{177}Hf} \right)_{DM}} \right] \right) \right]$$

$$\lambda = 1.865 \times 10^{-11} \text{ yr}^{-1} \text{ (Scherer et al., 2001)}, \left(\frac{^{176}Hf}{^{177}Hf} \right)_{CHUR} = 0.282772, \left(\frac{^{176}Lu}{^{177}Hf} \right)_{CHUR} = 0.0332,$$

$$\left(\frac{^{176}Hf}{^{177}Hf} \right)_{DM} = 0.28325, \left(\frac{^{176}Lu}{^{177}Hf} \right)_{DM} = 0.0384, \left(\frac{^{176}Lu}{^{177}Hf} \right)_C = 0.015, \left(\frac{^{176}Lu}{^{177}Hf} \right)_{LC} = 0.022$$

C: Average continental crust, CHUR: Chondritic Uniform Reservoir DM: Depleted Mantle.

Figure 1 a) Simplified map of northwestern Eurasia, indicating the Altaids and the location of West Junggar (WJG) within the collage, b) Tectonic map of West Junggar Mountains, modified after Feng et al. (1989), BGMRXUAR(1993), and Buckman and Aitchinson, (2004) showing the location of detrital zircon samples (Open diamond). Numbers in open circles refer to the ophiolitic mélanges mentioned in the text. 1: Tangbale mélange; 2: Mayila mélange; 3 Hongguleleng mélange; 4: Dalabute mélange; 5 Baijantan mélange; 6: Kokeshentan mélange. Black diamonds indicate Early Palaeozoic arc volcanic rocks (Feng et al., 1989; Buckman and Aitchinson, 2004).

Figure 2 CL images of selected representative detrital zircon grains from dated samples (greywacke, sandstone). For sample location, see Figure 1b and Table 1.

Figure 3 Concordia plots for detrital zircon grains from dated samples.

Figure 4 a, b and c: relative probability diagrams for detrital zircon $^{206}\text{Pb}/^{238}\text{U}$ ages from West Junggar units. The Early Proterozoic age obtained on a sole zircon from sample DJ83 is not shown.

Figure 5 a: CL images of selected representative magmatic zircon grains from Sawuer granites. b: Concordia plots for magmatic zircon grains from Sawuer granites and average Concordia age (Ludwig, 1998).

Figure 6 Plot of $\epsilon\text{Hf(t)}$ vs $^{206}\text{Pb}/^{238}\text{U}$ ages. Positive $\epsilon\text{Hf(t)}$ values indicate juvenile origin for zircons. Three episodes of mantle-derived magma input into the crust can be distinguished: 1) Late Palaeozoic, 2) Early Palaeozoic and 3) Neoproterozoic, but Early and Late Palaeozoic reworking of this new juvenile crust is also inferred. Two-stage Hf model ages ($T_{\text{DM}}^{\text{LC}}$), using a Lu/Hf ratio equal to 0.022, typical of the mafic crust (Amelin et al., 1999) were calculated, because they mirror a realistic estimate of the extraction time from a immature island arc crust. DM and CHUR notations correspond to the Depleted Mantle and Chondritic Uniform Reservoir, respectively. Details regarding initial Hf ratios and model age computation are in Table 5. Squares and diamonds correspond to detrital zircons and magmatic grains from Sawuer granites, respectively.

Figure 7 Microphotographs of andesite clasts from a) Sharburt Mountains (sample DJ325) and b) Dalabute Valley (Sample DJ15). Note the fluidal texture underlined by the alignment of altered plagioclase microlites.

Figure 8 a: Tectonic map illustrating the relationships between West Junggar and neighbouring areas. Originally, Ob-Zaisan and Junggar-Balkash Ocean separated West Junggar from Altai and North Tianshan, respectively; therefore these two areas are unlikely sources for the detrital zircons of our data set. Abbreviations: A: Arkalyk, Al: Alataw, BA: Baidaulet-Akbastau, BC: Bozchekul-Chingiz, Bo: Bole, CANTF: Chingiz-Alakol-North Tianshan Fault, CKF: Central Kazakhstan Fault, CT: Chingiz-Tarbagatay, DF: Dalabute Fault, IGSZ: Irtysh-Gornotsaev Fault Zone, Hg Hongguleleng mélange, IVB: Inner Volcanic Belt, Ma-Ta: Mayila-Tangbale mélange, MK: Maikan-Kyziltas mélange, MTF: Main Tianshan Fault, NB: Nord Balkash mélange, NTS: North Tianshan, OVB : Outer Volcanic Belt, S: Sawuer, Z: Zharma. 5: b: synoptic chart of magmatic events in West Junggar

and Eastern Kazakhstan, adapted from Feng et al., (1989), Windley et al., (2007), Chen et al., (2010a) and Degtyarev (2011). This diagram illustrates the potential provenance of detrital zircons.

Figure 9 Synoptic chart showing population peak ages and maximum ages of sedimentation of detrital zircon samples and crystallization ages of magmatic samples. On the right, the major magmatic and sedimentary episodes, described by Feng et al. (1989), BGMRXUAR (1993), Buckman and Aitchison, (2004), and Chen et al. (2010a) are represented. Dashed lines figure the uncertainty of magmatic and sedimentary events through time.

Table 1

| Sample | Coordinates | Lithology | Detailed petrography | Stratigraphic assignement | Stratigraphic age | Sampling environment |
|--------|--------------------------|------------------------|--|---|------------------------|-------------------------------------|
| DJ46 | 45.4307°N ; 84.0212°E | Greywacke (CS) | Qz. (40%), fsp. (40%), LF (10%, chert), ep., cpx, chl | Ebinur - Kekesayi Terrane * (Tangbale Mélange) | U. Ord. - L. Sil. | Block within ophiolitic mélange |
| DJ83 | 45.2346°N ; 83.9952°E | Green sandstone (CS) | Qz. (55%), fsp. (15%), LF (15%, chert + bas.) | Laba Terrane * (Labahe Formation) | Ord. ? | Massive schistose detrital serie |
| DJ87 | 45.2819°N ; 83.8031°E | Greywacke (CS) | Fsp. (50%), qz. (20%), LF (15%, bas. + and.), chl. (15%) | Ebinur - Kekesayi Terrane * (Qiargaye Formation) | U. Ord. - L. Sil. | Turbidites |
| DJ89 | 45.2587°N ; 83.7424°E | Microconglomerate (CS) | Qz. (50%), LF (25%, and.), fsp. (15%), chl. (5%), amph. | Ebinur - Kekesayi Terrane * (Qiargaye Formation) | U. Ord. - L. Sil. | Turbidites |
| DJ98 | 45.6551°N ; 82.9492°E | Sandstone (CS) | Qz (70%), fsp. (20%), LF (5%, and.), cc., FTO. | Toli Terrane * (Barliek Formation) | L. Dev. - U. Dev. | Broken serie |
| DJ108 | 45.6640°N ; 83.2337°E | Microconglomerate (CS) | Qz (60%), fsp. (30%), LF (5%, and.), opx., cpx., ep., chl. | Mayila Terrane * (Mayila Mélange) | M. Sil. - U.Sil. | Block within ophiolitic mélange |
| DJ188 | 45.3624°N ; 82.7874°E | Microconglomerate (CS) | Qz, Fsp., LF | Mayila Terrane * | M. Sil. - U.Sil. | Detrital serie |
| DJ192 | 45.4079°N ; 82.7640°E | Greywacke (CS) | LF (40%, bas. + chert), fsp. (25%), qz. (15%), cpx. (10%), FTO (10%) | Mayila Terrane * | M. Sil. - U.Sil. | Block within ophiolitic mélange |
| DJ15 | 45.7214°N ; 84.4593°E | Greywacke (CS) | Fsp. (30%), LF (30%, and.), qz. (25%), chl. (15%) | Karamay Terrane * | L. Carb. - U. Carb. | Turbidites |
| DJ149 | 46.0789°N ; 84.0098°E | Greywacke (CS) | Fsp. (60%), LF (15%, and.), qz. (15%), chl. (10%) | Toli Terrane * | L. Dev. - U. Dev. | Volcanosedimentary serie |
| DJ325 | 46.8107°N ; 86.6885°E | Greywacke (CS) | Fsp. (40%), LF (25%, and.), qz. (20%), chl. (10%) | Hujiersite Formation ** | M. Dev. | Detrital serie |
| DJ329 | 47.0640°N ; 86.5972°E | Greywacke (CS) | Fsp. (50%), qz. (20%), LF (20%, bas. + and.), FTO (10%) | Heishantou ** | L. Carb. | Turbidites |

Table 2

| Sample | Units | Coordinates | Youngest age* | Main population (N/N ₀)† | Other populations (N/N ₀) |
|--------|--------------------|-----------------------|---------------|---|--|
| DJ46 | Tangbale | 45.4307°N ; 84.0212°E | 439 ± 12 Ma | 464 ± 4 Ma (60/61) | - |
| DJ83 | Tangbale | 45.2346°N ; 83.9952°E | 398 ± 8 Ma | 445 ± 5 Ma (47/51) | - |
| DJ87 | Tangbale | 45.2819°N ; 83.8031°E | 437 ± 8 Ma | 468 ± 5 Ma (38/57) | - |
| DJ89 | Tangbale | 45.2587°N ; 83.7424°E | 434 ± 6 Ma | 476 ± 7 Ma (39/60) | - |
| DJ98 | Mayila | 45.6551°N ; 82.9492°E | 395 ± 9 Ma | 415 ± 6 Ma (51/59) | - |
| DJ108 | Mayila | 45.6640°N ; 83.2337°E | 440 ± 10 Ma | 460 ± 5 Ma (51/58) | - |
| DJ188 | Mayila | 45.3624°N ; 82.7874°E | 379 ± 10 Ma | 413 ± 5 Ma (32/39) | - |
| DJ192 | Mayila | 45.4079°N ; 82.7640°E | 429 ± 10 Ma | 453 ± 3 Ma (58/66) | - |
| DJ15 | West Karamay | 45.7214°N ; 84.4593°E | 304 ± 13 Ma | 322 ± 6 Ma (33/62) | 426 ± 13 Ma (13/62) |
| DJ149 | Barliek | 46.0789°N ; 84.0098°E | 373 ± 11 Ma | 402 ± 7 Ma (47/50) | - |
| DJ325 | Chingiz-Tarbagatay | 46.8107°N ; 86.6885°E | 388 ± 10 Ma | 424 ± 4 Ma (36/48) | - |
| DJ329 | Sawuer | 47.0640°N ; 86.5972°E | 307 ± 8 Ma | 332 ± 3 Ma (62/78) | - |

Table 3

| Analysis No. | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | | |
|--------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----|-------|
| | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | | |
| DJ46 (n=61) | | | | | | | | | | | | | | | | | | |
| 1 | DJ46 01 | 0.0557 | 29 | 0.5487 | 485 | 0.0715 | 32 | 0.0255 | 29 | 442 | 112 | 444 | 32 | 445 | 19 | 509 | 57 | -0.7 |
| 2 | DJ46 02 | 0.0565 | 13 | 0.5902 | 251 | 0.0758 | 18 | 0.0222 | 15 | 471 | 46 | 471 | 16 | 471 | 11 | 443 | 29 | 0.07 |
| 3 | DJ46 04 | 0.0568 | 45 | 0.6260 | 839 | 0.0800 | 54 | 0.0339 | 59 | 482 | 175 | 494 | 52 | 496 | 32 | 673 | 116 | -2.98 |
| 4 | DJ46 06 | 0.0559 | 21 | 0.5538 | 366 | 0.0719 | 25 | 0.0182 | 23 | 448 | 87 | 448 | 24 | 448 | 15 | 365 | 46 | 0.25 |
| 5 | DJ46 07 | 0.0564 | 20 | 0.5912 | 370 | 0.0761 | 26 | 0.0260 | 20 | 467 | 79 | 472 | 24 | 473 | 15 | 519 | 40 | -1.36 |
| 6 | DJ46 08 | 0.0558 | 10 | 0.5501 | 190 | 0.0716 | 15 | 0.0218 | 9 | 444 | 44 | 445 | 12 | 445 | 9 | 437 | 17 | -0.29 |
| 7 | DJ46 09 | 0.0562 | 12 | 0.5743 | 219 | 0.0742 | 17 | 0.0224 | 15 | 460 | 40 | 461 | 14 | 461 | 10 | 449 | 30 | -0.14 |
| 8 | DJ46 10 | 0.0566 | 20 | 0.5914 | 360 | 0.0758 | 24 | 0.0229 | 24 | 476 | 75 | 472 | 23 | 471 | 14 | 458 | 48 | 1.01 |
| 9 | DJ46 11 | 0.0561 | 17 | 0.5702 | 300 | 0.0738 | 21 | 0.0211 | 20 | 456 | 62 | 458 | 19 | 459 | 13 | 422 | 39 | -0.49 |
| 10 | DJ46 12 | 0.0567 | 7 | 0.6024 | 158 | 0.0772 | 14 | 0.0223 | 9 | 478 | 29 | 479 | 10 | 479 | 8 | 446 | 18 | -0.22 |
| 11 | DJ46 13 | 0.0561 | 13 | 0.5788 | 245 | 0.0749 | 18 | 0.0225 | 12 | 457 | 53 | 464 | 16 | 465 | 11 | 449 | 23 | -1.91 |
| 12 | DJ46 14 | 0.0567 | 14 | 0.6029 | 268 | 0.0772 | 20 | 0.0241 | 16 | 479 | 54 | 479 | 17 | 479 | 12 | 482 | 31 | -0.1 |
| 13 | DJ46 15 | 0.0560 | 8 | 0.5578 | 152 | 0.0723 | 13 | 0.0228 | 9 | 450 | 27 | 450 | 10 | 450 | 8 | 455 | 17 | 0.09 |
| 14 | DJ46 16 | 0.0564 | 16 | 0.5868 | 299 | 0.0755 | 21 | 0.0213 | 12 | 467 | 64 | 469 | 19 | 469 | 13 | 426 | 24 | -0.39 |
| 15 | DJ46 17 | 0.0568 | 15 | 0.6054 | 292 | 0.0774 | 21 | 0.0223 | 15 | 483 | 55 | 481 | 18 | 480 | 12 | 445 | 29 | 0.71 |
| 16 | DJ46 18 | 0.0561 | 13 | 0.5648 | 247 | 0.0730 | 18 | 0.0217 | 12 | 457 | 54 | 455 | 16 | 454 | 11 | 433 | 24 | 0.57 |
| 17 | DJ46 19 | 0.0557 | 17 | 0.5408 | 291 | 0.0705 | 21 | 0.0227 | 17 | 440 | 65 | 439 | 19 | 439 | 12 | 453 | 33 | 0.18 |
| 18 | DJ46 20 | 0.0565 | 4 | 0.5873 | 97 | 0.0755 | 11 | 0.0211 | 4 | 470 | 15 | 469 | 6 | 469 | 7 | 422 | 8 | 0.26 |
| 19 | DJ46 21 | 0.0565 | 28 | 0.5938 | 508 | 0.0762 | 34 | 0.0220 | 21 | 473 | 104 | 473 | 32 | 473 | 20 | 441 | 42 | -0.01 |
| 20 | DJ46 22 | 0.0557 | 8 | 0.5442 | 162 | 0.0709 | 14 | 0.0205 | 8 | 441 | 33 | 441 | 11 | 441 | 8 | 411 | 15 | -0.1 |
| 21 | DJ46 23 | 0.0567 | 29 | 0.6136 | 536 | 0.0785 | 36 | 0.0279 | 34 | 481 | 99 | 486 | 34 | 487 | 21 | 556 | 66 | -1.26 |
| 22 | DJ46 24 | 0.0560 | 10 | 0.5577 | 187 | 0.0722 | 15 | 0.0210 | 11 | 454 | 38 | 450 | 12 | 449 | 9 | 420 | 22 | 1.07 |
| 23 | DJ46 25 | 0.0566 | 11 | 0.5980 | 217 | 0.0767 | 17 | 0.0247 | 13 | 476 | 43 | 476 | 14 | 476 | 10 | 493 | 25 | -0.1 |
| 24 | DJ46 26 | 0.0561 | 9 | 0.5687 | 179 | 0.0735 | 15 | 0.0228 | 11 | 456 | 34 | 457 | 12 | 457 | 9 | 455 | 22 | -0.23 |
| 25 | DJ46 27 | 0.0562 | 11 | 0.5676 | 206 | 0.0732 | 16 | 0.0205 | 10 | 461 | 41 | 456 | 13 | 456 | 10 | 410 | 19 | 1.34 |
| 26 | DJ46 28 | 0.0565 | 13 | 0.5614 | 231 | 0.0722 | 17 | 0.0220 | 14 | 470 | 49 | 452 | 15 | 449 | 10 | 441 | 28 | 4.65 |
| 27 | DJ46 29 | 0.0567 | 14 | 0.6022 | 274 | 0.0771 | 20 | 0.0229 | 15 | 479 | 51 | 479 | 17 | 479 | 12 | 457 | 29 | 0.13 |
| 28 | DJ46 30 | 0.0564 | 10 | 0.5871 | 202 | 0.0755 | 16 | 0.0223 | 14 | 469 | 40 | 469 | 13 | 469 | 9 | 446 | 27 | -0.01 |
| 29 | DJ46 31 | 0.0567 | 17 | 0.5858 | 311 | 0.0749 | 22 | 0.0229 | 20 | 481 | 59 | 468 | 20 | 466 | 13 | 457 | 39 | 3.23 |
| 30 | DJ46 32 | 0.0566 | 17 | 0.5907 | 309 | 0.0758 | 22 | 0.0201 | 16 | 475 | 68 | 471 | 20 | 471 | 13 | 402 | 32 | 0.93 |
| 31 | DJ46 33 | 0.0560 | 11 | 0.5547 | 204 | 0.0719 | 16 | 0.0201 | 8 | 450 | 44 | 448 | 13 | 448 | 10 | 403 | 17 | 0.63 |
| 32 | DJ46 34 | 0.0561 | 5 | 0.5675 | 118 | 0.0733 | 12 | 0.0221 | 6 | 458 | 19 | 456 | 8 | 456 | 7 | 442 | 12 | 0.3 |
| 33 | DJ46 35 | 0.0563 | 9 | 0.5749 | 177 | 0.0741 | 15 | 0.0209 | 9 | 464 | 35 | 461 | 11 | 461 | 9 | 418 | 19 | 0.72 |
| 34 | DJ46 36 | 0.0559 | 11 | 0.5552 | 199 | 0.0721 | 15 | 0.0208 | 13 | 447 | 43 | 448 | 13 | 449 | 9 | 416 | 25 | -0.34 |
| 35 | DJ46 37 | 0.0572 | 23 | 0.6320 | 439 | 0.0802 | 30 | 0.0260 | 20 | 498 | 86 | 497 | 27 | 497 | 18 | 519 | 39 | 0.19 |
| 36 | DJ46 38 | 0.0562 | 17 | 0.5716 | 303 | 0.0738 | 22 | 0.0204 | 15 | 459 | 66 | 459 | 20 | 459 | 13 | 407 | 30 | 0.11 |
| 37 | DJ46 39 | 0.0564 | 14 | 0.5860 | 259 | 0.0753 | 19 | 0.0232 | 18 | 469 | 52 | 468 | 17 | 468 | 11 | 464 | 35 | 0.27 |
| 38 | DJ46 40 | 0.0559 | 12 | 0.5599 | 225 | 0.0726 | 17 | 0.0219 | 13 | 449 | 46 | 451 | 15 | 452 | 10 | 438 | 26 | -0.73 |
| 39 | DJ46 41 | 0.0562 | 10 | 0.5730 | 192 | 0.0739 | 15 | 0.0210 | 12 | 461 | 39 | 460 | 12 | 460 | 9 | 420 | 24 | 0.3 |
| 40 | DJ46 42 | 0.0568 | 10 | 0.6090 | 203 | 0.0778 | 16 | 0.0232 | 12 | 484 | 37 | 483 | 13 | 483 | 10 | 463 | 24 | 0.32 |
| 41 | DJ46 43 | 0.0563 | 6 | 0.5806 | 136 | 0.0748 | 13 | 0.0229 | 8 | 464 | 25 | 465 | 9 | 465 | 8 | 457 | 16 | -0.16 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|--------------|---------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 42 | DJ46 44 | 0.0561 | 15 | 0.5699 | 277 | 0.0736 | 20 | 0.0251 | 16 | 458 | 61 | 458 | 18 | 458 | 12 | 500 | 32 | -0.11 |
| 43 | DJ46 45 | 0.0563 | 8 | 0.5799 | 157 | 0.0747 | 14 | 0.0243 | 10 | 465 | 31 | 464 | 10 | 464 | 8 | 485 | 20 | 0.27 |
| 44 | DJ46 46 | 0.0563 | 12 | 0.5772 | 223 | 0.0744 | 17 | 0.0219 | 14 | 462 | 46 | 463 | 14 | 463 | 10 | 438 | 28 | -0.11 |
| 45 | DJ46 47 | 0.0563 | 12 | 0.5788 | 220 | 0.0746 | 17 | 0.0213 | 12 | 463 | 46 | 464 | 14 | 464 | 10 | 426 | 23 | -0.06 |
| 46 | DJ46 48 | 0.0563 | 13 | 0.5745 | 241 | 0.0740 | 18 | 0.0219 | 13 | 463 | 50 | 461 | 16 | 460 | 11 | 438 | 26 | 0.57 |
| 47 | DJ46 50 | 0.0563 | 10 | 0.5816 | 202 | 0.0749 | 16 | 0.0233 | 12 | 466 | 42 | 465 | 13 | 465 | 9 | 465 | 23 | 0.09 |
| 48 | DJ46 51 | 0.0565 | 6 | 0.5935 | 128 | 0.0761 | 13 | 0.0221 | 5 | 473 | 23 | 473 | 8 | 473 | 7 | 441 | 10 | 0.03 |
| 49 | DJ46 52 | 0.0562 | 6 | 0.5707 | 135 | 0.0737 | 13 | 0.0212 | 9 | 458 | 25 | 458 | 9 | 459 | 8 | 423 | 18 | -0.05 |
| 50 | DJ46 53 | 0.0563 | 26 | 0.5803 | 458 | 0.0748 | 31 | 0.0240 | 30 | 463 | 87 | 465 | 29 | 465 | 18 | 479 | 60 | -0.43 |
| 51 | DJ46 54 | 0.0562 | 11 | 0.5696 | 208 | 0.0735 | 16 | 0.0203 | 11 | 462 | 44 | 458 | 13 | 457 | 10 | 407 | 22 | 1.1 |
| 52 | DJ46 55 | 0.0567 | 15 | 0.6057 | 286 | 0.0775 | 21 | 0.0219 | 14 | 479 | 64 | 481 | 18 | 481 | 12 | 438 | 28 | -0.45 |
| 53 | DJ46 56 | 0.0572 | 22 | 0.6352 | 415 | 0.0806 | 27 | 0.0224 | 25 | 498 | 80 | 499 | 26 | 500 | 16 | 449 | 49 | -0.41 |
| 54 | DJ46 57 | 0.0566 | 13 | 0.5990 | 255 | 0.0767 | 19 | 0.0216 | 12 | 477 | 50 | 477 | 16 | 476 | 11 | 431 | 23 | 0.15 |
| 55 | DJ46 58 | 0.0566 | 10 | 0.5986 | 195 | 0.0767 | 16 | 0.0218 | 10 | 475 | 38 | 476 | 12 | 477 | 9 | 435 | 20 | -0.3 |
| 56 | DJ46 59 | 0.0564 | 10 | 0.5801 | 203 | 0.0746 | 16 | 0.0213 | 9 | 469 | 44 | 465 | 13 | 464 | 10 | 426 | 17 | 1.07 |
| 57 | DJ46 60 | 0.0562 | 5 | 0.5749 | 105 | 0.0742 | 11 | 0.0210 | 7 | 461 | 18 | 461 | 7 | 461 | 7 | 420 | 14 | -0.13 |
| 58 | DJ46 61 | 0.0565 | 6 | 0.5918 | 133 | 0.0759 | 13 | 0.0219 | 8 | 473 | 24 | 472 | 8 | 472 | 8 | 437 | 16 | 0.33 |
| 59 | DJ46 62 | 0.0558 | 29 | 0.5649 | 498 | 0.0734 | 33 | 0.0253 | 44 | 444 | 112 | 455 | 32 | 457 | 20 | 506 | 86 | -2.99 |
| 60 | DJ46 63 | 0.0562 | 8 | 0.5769 | 161 | 0.0744 | 14 | 0.0213 | 10 | 462 | 31 | 462 | 10 | 462 | 8 | 426 | 20 | -0.16 |
| 61 | DJ46 64 | 0.0561 | 11 | 0.5685 | 213 | 0.0735 | 16 | 0.0230 | 15 | 455 | 46 | 457 | 14 | 457 | 10 | 459 | 30 | -0.53 |

DJ83 (n=51)

| | | | | | | | | | | | | | | | | | | |
|----|---------|--------|----|--------|-----|--------|----|--------|----|-----|----|-----|----|-----|----|-----|----|------|
| 1 | DJ83 02 | 0.0557 | 23 | 0.5412 | 400 | 0.0704 | 28 | 0.0173 | 19 | 442 | 92 | 439 | 26 | 439 | 17 | 346 | 38 | 0.7 |
| 2 | DJ83 03 | 0.0554 | 19 | 0.5300 | 323 | 0.0694 | 24 | 0.0164 | 16 | 427 | 76 | 432 | 21 | 432 | 14 | 330 | 31 | -1.3 |
| 3 | DJ83 04 | 0.0562 | 5 | 0.5772 | 90 | 0.0744 | 15 | 0.0209 | 4 | 462 | 20 | 463 | 6 | 463 | 9 | 418 | 9 | -0.2 |
| 4 | DJ83 05 | 0.0554 | 10 | 0.5245 | 202 | 0.0687 | 19 | 0.0177 | 8 | 427 | 39 | 428 | 13 | 428 | 11 | 354 | 16 | -0.4 |
| 5 | DJ83 06 | 0.0558 | 6 | 0.5504 | 69 | 0.0715 | 14 | 0.0188 | 3 | 445 | 24 | 445 | 5 | 445 | 9 | 375 | 6 | 0.0 |
| 6 | DJ83 07 | 0.0561 | 9 | 0.5642 | 201 | 0.0729 | 19 | 0.0185 | 9 | 456 | 35 | 454 | 13 | 454 | 11 | 370 | 17 | 0.6 |
| 7 | DJ83 08 | 0.0554 | 8 | 0.5254 | 159 | 0.0687 | 17 | 0.0182 | 7 | 429 | 32 | 429 | 11 | 428 | 10 | 365 | 14 | 0.0 |
| 8 | DJ83 09 | 0.0558 | 17 | 0.5664 | 320 | 0.0735 | 24 | 0.0293 | 21 | 446 | 68 | 456 | 21 | 457 | 14 | 584 | 42 | -2.7 |
| 9 | DJ83 10 | 0.0561 | 10 | 0.5652 | 200 | 0.0731 | 18 | 0.0200 | 9 | 456 | 41 | 455 | 13 | 455 | 11 | 400 | 18 | 0.2 |
| 10 | DJ83 11 | 0.0558 | 7 | 0.5506 | 153 | 0.0715 | 17 | 0.0199 | 7 | 445 | 26 | 445 | 10 | 445 | 10 | 399 | 15 | -0.2 |
| 11 | DJ83 12 | 0.0550 | 6 | 0.5054 | 116 | 0.0666 | 15 | 0.0186 | 5 | 411 | 22 | 415 | 8 | 416 | 9 | 372 | 10 | -1.3 |
| 12 | DJ83 13 | 0.0560 | 9 | 0.5590 | 199 | 0.0724 | 19 | 0.0204 | 10 | 451 | 37 | 451 | 13 | 451 | 11 | 409 | 20 | 0.1 |
| 13 | DJ83 14 | 0.0556 | 7 | 0.5371 | 143 | 0.0700 | 16 | 0.0192 | 7 | 437 | 23 | 437 | 9 | 436 | 10 | 385 | 14 | 0.1 |
| 14 | DJ83 15 | 0.0559 | 6 | 0.5571 | 135 | 0.0723 | 16 | 0.0212 | 7 | 448 | 22 | 450 | 9 | 450 | 10 | 423 | 14 | -0.5 |
| 15 | DJ83 16 | 0.0554 | 14 | 0.5214 | 248 | 0.0683 | 20 | 0.0200 | 12 | 427 | 56 | 426 | 17 | 426 | 12 | 399 | 24 | 0.2 |
| 16 | DJ83 17 | 0.0564 | 14 | 0.5911 | 290 | 0.0759 | 23 | 0.0283 | 19 | 470 | 55 | 472 | 19 | 472 | 14 | 564 | 38 | -0.5 |
| 17 | DJ83 18 | 0.0556 | 6 | 0.5364 | 139 | 0.0699 | 16 | 0.0198 | 7 | 436 | 27 | 436 | 9 | 436 | 10 | 395 | 14 | -0.1 |
| 18 | DJ83 19 | 0.0558 | 13 | 0.5473 | 246 | 0.0711 | 21 | 0.0220 | 14 | 443 | 51 | 443 | 16 | 443 | 12 | 439 | 28 | -0.1 |
| 19 | DJ83 20 | 0.0558 | 18 | 0.5537 | 331 | 0.0719 | 25 | 0.0278 | 20 | 444 | 75 | 447 | 22 | 448 | 15 | 554 | 39 | -0.9 |
| 20 | DJ83 21 | 0.0557 | 6 | 0.5433 | 120 | 0.0707 | 15 | 0.0209 | 7 | 442 | 23 | 441 | 8 | 440 | 9 | 417 | 14 | 0.3 |
| 21 | DJ83 22 | 0.0556 | 10 | 0.5289 | 197 | 0.0690 | 18 | 0.0229 | 12 | 436 | 41 | 431 | 13 | 430 | 11 | 457 | 23 | 1.4 |
| 22 | DJ83 23 | 0.0557 | 10 | 0.5378 | 206 | 0.0700 | 19 | 0.0229 | 12 | 439 | 42 | 437 | 14 | 436 | 11 | 458 | 23 | 0.5 |

| Analysis No. | | Ratios | | | | | | | | | Age (Ma) | | | | | | Disc* (%) | |
|--------------|---------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 23 | DJ83 24 | 0.0557 | 6 | 0.5416 | 125 | 0.0705 | 16 | 0.0194 | 7 | 441 | 24 | 439 | 8 | 439 | 9 | 389 | 13 | 0.5 |
| 24 | DJ83 25 | 0.0563 | 14 | 0.5753 | 281 | 0.0740 | 22 | 0.0220 | 18 | 465 | 59 | 461 | 18 | 460 | 13 | 441 | 36 | 1.0 |
| 25 | DJ83 26 | 0.0555 | 6 | 0.5326 | 138 | 0.0695 | 16 | 0.0197 | 6 | 433 | 25 | 434 | 9 | 433 | 10 | 393 | 12 | -0.1 |
| 26 | DJ83 27 | 0.0559 | 8 | 0.5567 | 178 | 0.0722 | 18 | 0.0201 | 8 | 448 | 35 | 449 | 12 | 449 | 11 | 402 | 16 | -0.3 |
| 27 | DJ83 28 | 0.0558 | 6 | 0.5460 | 121 | 0.0710 | 15 | 0.0249 | 8 | 442 | 23 | 442 | 8 | 442 | 9 | 497 | 16 | 0.0 |
| 28 | DJ83 29 | 0.0561 | 15 | 0.5594 | 292 | 0.0723 | 23 | 0.0226 | 18 | 454 | 60 | 451 | 19 | 450 | 14 | 452 | 35 | 0.9 |
| 29 | DJ83 30 | 0.0558 | 5 | 0.5492 | 118 | 0.0713 | 15 | 0.0197 | 5 | 444 | 20 | 444 | 8 | 444 | 9 | 394 | 9 | -0.1 |
| 30 | DJ83 31 | 0.0563 | 6 | 0.5789 | 142 | 0.0746 | 17 | 0.0210 | 7 | 463 | 25 | 464 | 9 | 464 | 10 | 419 | 15 | -0.1 |
| 31 | DJ83 32 | 0.0562 | 11 | 0.5743 | 220 | 0.0741 | 19 | 0.0217 | 11 | 460 | 46 | 461 | 14 | 461 | 12 | 434 | 23 | -0.1 |
| 32 | DJ83 33 | 0.0563 | 9 | 0.5738 | 197 | 0.0739 | 19 | 0.0219 | 12 | 463 | 37 | 460 | 13 | 460 | 11 | 438 | 24 | 0.6 |
| 33 | DJ83 34 | 0.0559 | 22 | 0.5566 | 404 | 0.0721 | 30 | 0.0242 | 21 | 450 | 90 | 449 | 26 | 449 | 18 | 483 | 42 | 0.1 |
| 34 | DJ83 35 | 0.0555 | 6 | 0.5283 | 125 | 0.0690 | 15 | 0.0200 | 6 | 432 | 23 | 431 | 8 | 430 | 9 | 399 | 11 | 0.4 |
| 35 | DJ83 36 | 0.0558 | 6 | 0.5470 | 135 | 0.0711 | 16 | 0.0206 | 7 | 442 | 24 | 443 | 9 | 443 | 10 | 412 | 15 | -0.2 |
| 36 | DJ83 37 | 0.0558 | 6 | 0.5497 | 145 | 0.0714 | 16 | 0.0212 | 8 | 444 | 26 | 445 | 9 | 445 | 10 | 424 | 16 | -0.1 |
| 37 | DJ83 38 | 0.0557 | 13 | 0.5420 | 246 | 0.0705 | 20 | 0.0218 | 14 | 440 | 49 | 440 | 16 | 439 | 12 | 437 | 27 | 0.0 |
| 38 | DJ83 39 | 0.0564 | 26 | 0.5863 | 477 | 0.0753 | 34 | 0.0331 | 37 | 469 | 97 | 469 | 31 | 468 | 20 | 658 | 72 | 0.2 |
| 39 | DJ83 40 | 0.0558 | 22 | 0.5537 | 393 | 0.0719 | 29 | 0.0279 | 27 | 446 | 87 | 447 | 26 | 447 | 17 | 556 | 53 | -0.5 |
| 40 | DJ83 41 | 0.0566 | 10 | 0.5959 | 222 | 0.0763 | 20 | 0.0215 | 14 | 477 | 40 | 475 | 14 | 474 | 12 | 430 | 27 | 0.6 |
| 41 | DJ83 42 | 0.1159 | 13 | 5.4728 | 648 | 0.3421 | 69 | 0.0941 | 19 | 1894 | 19 | 1896 | 10 | 1897 | 33 | 1818 | 35 | -0.2 |
| 42 | DJ83 43 | 0.0564 | 7 | 0.5825 | 161 | 0.0749 | 17 | 0.0233 | 9 | 468 | 28 | 466 | 10 | 465 | 10 | 465 | 18 | 0.5 |
| 43 | DJ83 44 | 0.0549 | 5 | 0.4932 | 83 | 0.0651 | 13 | 0.0180 | 3 | 407 | 20 | 407 | 6 | 407 | 8 | 361 | 7 | -0.1 |
| 44 | DJ83 45 | 0.0563 | 6 | 0.5782 | 141 | 0.0744 | 17 | 0.0254 | 9 | 464 | 23 | 463 | 9 | 463 | 10 | 507 | 18 | 0.1 |
| 45 | DJ83 46 | 0.0563 | 6 | 0.5785 | 143 | 0.0745 | 17 | 0.0255 | 10 | 465 | 21 | 463 | 9 | 463 | 10 | 508 | 20 | 0.3 |
| 46 | DJ83 47 | 0.0565 | 12 | 0.5923 | 249 | 0.0760 | 21 | 0.0221 | 16 | 472 | 49 | 472 | 16 | 472 | 13 | 443 | 31 | 0.0 |
| 47 | DJ83 48 | 0.0553 | 6 | 0.5196 | 133 | 0.0681 | 15 | 0.0219 | 8 | 423 | 24 | 425 | 9 | 425 | 9 | 437 | 15 | -0.6 |
| 48 | DJ83 49 | 0.0547 | 5 | 0.4800 | 64 | 0.0636 | 13 | 0.0185 | 3 | 398 | 21 | 398 | 4 | 398 | 8 | 370 | 6 | 0.1 |
| 49 | DJ83 50 | 0.0557 | 10 | 0.5444 | 210 | 0.0708 | 19 | 0.0237 | 11 | 441 | 44 | 441 | 14 | 441 | 11 | 473 | 21 | -0.1 |
| 50 | DJ83 51 | 0.0559 | 10 | 0.5533 | 202 | 0.0718 | 19 | 0.0198 | 11 | 448 | 39 | 447 | 13 | 447 | 11 | 396 | 21 | 0.2 |
| 51 | DJ83 52 | 0.0557 | 6 | 0.5383 | 126 | 0.0701 | 16 | 0.0221 | 8 | 439 | 21 | 437 | 8 | 437 | 9 | 441 | 15 | 0.4 |

DJ87 (n=57)

| | | | | | | | | | | | | | | | | | | |
|----|---------|--------|----|--------|-----|--------|----|--------|----|-----|----|-----|----|-----|----|-----|----|-------|
| 1 | DJ87 02 | 0.0581 | 18 | 0.6671 | 383 | 0.0832 | 27 | 0.0400 | 39 | 535 | 66 | 519 | 23 | 515 | 16 | 793 | 77 | 3.75 |
| 2 | DJ87 04 | 0.0561 | 4 | 0.5698 | 81 | 0.0736 | 13 | 0.0220 | 5 | 458 | 16 | 458 | 5 | 458 | 8 | 440 | 10 | -0.1 |
| 3 | DJ87 05 | 0.0563 | 8 | 0.5789 | 176 | 0.0746 | 16 | 0.0217 | 9 | 463 | 33 | 464 | 11 | 464 | 10 | 433 | 18 | -0.08 |
| 4 | DJ87 06 | 0.0571 | 4 | 0.6302 | 91 | 0.0800 | 14 | 0.0254 | 5 | 496 | 16 | 496 | 6 | 496 | 8 | 507 | 10 | -0.01 |
| 5 | DJ87 07 | 0.0566 | 5 | 0.5953 | 128 | 0.0763 | 14 | 0.0240 | 9 | 475 | 22 | 474 | 8 | 474 | 9 | 479 | 17 | 0.25 |
| 6 | DJ87 08 | 0.0564 | 9 | 0.5787 | 188 | 0.0745 | 17 | 0.0232 | 12 | 467 | 36 | 464 | 12 | 463 | 10 | 464 | 24 | 0.79 |
| 7 | DJ87 09 | 0.0565 | 5 | 0.5860 | 116 | 0.0753 | 14 | 0.0233 | 6 | 471 | 20 | 468 | 7 | 468 | 8 | 465 | 11 | 0.59 |
| 8 | DJ87 10 | 0.0561 | 4 | 0.5658 | 86 | 0.0732 | 13 | 0.0228 | 5 | 456 | 17 | 455 | 6 | 455 | 8 | 456 | 10 | 0.07 |
| 9 | DJ87 11 | 0.0559 | 4 | 0.5539 | 95 | 0.0719 | 13 | 0.0222 | 6 | 449 | 17 | 448 | 6 | 447 | 8 | 444 | 12 | 0.34 |
| 10 | DJ87 12 | 0.0560 | 4 | 0.5595 | 98 | 0.0725 | 13 | 0.0215 | 6 | 450 | 17 | 451 | 6 | 451 | 8 | 430 | 11 | -0.22 |
| 11 | DJ87 13 | 0.0560 | 6 | 0.5561 | 129 | 0.0720 | 14 | 0.0236 | 9 | 453 | 23 | 449 | 8 | 448 | 8 | 470 | 19 | 1.04 |
| 12 | DJ87 14 | 0.0565 | 6 | 0.5861 | 141 | 0.0753 | 15 | 0.0197 | 7 | 471 | 20 | 468 | 9 | 468 | 9 | 393 | 14 | 0.77 |
| 13 | DJ87 15 | 0.0561 | 5 | 0.5663 | 123 | 0.0732 | 14 | 0.0230 | 8 | 456 | 22 | 456 | 8 | 456 | 8 | 460 | 15 | -0.01 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|--------------|---------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 14 | DJ87 16 | 0.0561 | 6 | 0.5663 | 134 | 0.0732 | 14 | 0.0208 | 9 | 458 | 22 | 456 | 9 | 455 | 9 | 417 | 17 | 0.51 |
| 15 | DJ87 17 | 0.0567 | 6 | 0.5980 | 147 | 0.0765 | 15 | 0.0239 | 9 | 480 | 24 | 476 | 9 | 475 | 9 | 478 | 17 | 1.13 |
| 16 | DJ87 18 | 0.0561 | 5 | 0.5663 | 101 | 0.0732 | 13 | 0.0222 | 7 | 457 | 20 | 456 | 7 | 455 | 8 | 445 | 13 | 0.3 |
| 17 | DJ87 19 | 0.0558 | 7 | 0.5431 | 154 | 0.0707 | 15 | 0.0200 | 8 | 443 | 30 | 440 | 10 | 440 | 9 | 400 | 15 | 0.66 |
| 18 | DJ87 20 | 0.0571 | 7 | 0.6268 | 161 | 0.0797 | 16 | 0.0236 | 9 | 494 | 23 | 494 | 10 | 494 | 10 | 471 | 17 | 0.04 |
| 19 | DJ87 21 | 0.0566 | 5 | 0.6003 | 124 | 0.0769 | 14 | 0.0234 | 8 | 477 | 20 | 477 | 8 | 478 | 9 | 468 | 16 | -0.07 |
| 20 | DJ87 22 | 0.0566 | 7 | 0.5948 | 163 | 0.0762 | 16 | 0.0228 | 10 | 476 | 28 | 474 | 10 | 474 | 9 | 456 | 19 | 0.54 |
| 21 | DJ87 23 | 0.0570 | 6 | 0.6207 | 136 | 0.0790 | 15 | 0.0237 | 8 | 492 | 23 | 490 | 9 | 490 | 9 | 474 | 16 | 0.41 |
| 22 | DJ87 24 | 0.0566 | 10 | 0.5931 | 218 | 0.0761 | 18 | 0.0203 | 11 | 475 | 42 | 473 | 14 | 473 | 11 | 405 | 23 | 0.62 |
| 23 | DJ87 25 | 0.0567 | 4 | 0.6028 | 80 | 0.0771 | 13 | 0.0220 | 3 | 481 | 17 | 479 | 5 | 479 | 8 | 440 | 7 | 0.43 |
| 24 | DJ87 26 | 0.0563 | 7 | 0.5780 | 160 | 0.0744 | 16 | 0.0206 | 10 | 465 | 28 | 463 | 10 | 463 | 9 | 412 | 19 | 0.49 |
| 25 | DJ87 27 | 0.0566 | 11 | 0.5937 | 232 | 0.0761 | 19 | 0.0219 | 11 | 474 | 43 | 473 | 15 | 473 | 11 | 438 | 22 | 0.32 |
| 26 | DJ87 28 | 0.0567 | 5 | 0.6019 | 114 | 0.0770 | 14 | 0.0212 | 6 | 479 | 19 | 478 | 7 | 478 | 8 | 424 | 12 | 0.28 |
| 27 | DJ87 29 | 0.0557 | 6 | 0.5433 | 129 | 0.0708 | 14 | 0.0217 | 9 | 438 | 22 | 441 | 8 | 441 | 8 | 434 | 17 | -0.61 |
| 28 | DJ87 30 | 0.0556 | 5 | 0.5373 | 105 | 0.0701 | 13 | 0.0204 | 5 | 436 | 19 | 437 | 7 | 437 | 8 | 408 | 9 | -0.28 |
| 29 | DJ87 31 | 0.0561 | 5 | 0.5654 | 121 | 0.0731 | 14 | 0.0218 | 7 | 456 | 22 | 455 | 8 | 455 | 8 | 436 | 14 | 0.35 |
| 30 | DJ87 32 | 0.0562 | 5 | 0.5752 | 105 | 0.0742 | 13 | 0.0234 | 6 | 461 | 18 | 461 | 7 | 461 | 8 | 468 | 11 | -0.08 |
| 31 | DJ87 33 | 0.0572 | 5 | 0.6351 | 117 | 0.0805 | 15 | 0.0228 | 6 | 499 | 18 | 499 | 7 | 499 | 9 | 455 | 12 | -0.01 |
| 32 | DJ87 34 | 0.0563 | 5 | 0.5812 | 108 | 0.0748 | 14 | 0.0197 | 7 | 465 | 20 | 465 | 7 | 465 | 8 | 394 | 13 | 0.05 |
| 33 | DJ87 35 | 0.0564 | 5 | 0.5864 | 110 | 0.0754 | 14 | 0.0230 | 7 | 469 | 20 | 469 | 7 | 468 | 8 | 459 | 13 | 0.1 |
| 34 | DJ87 36 | 0.0569 | 8 | 0.6163 | 176 | 0.0786 | 17 | 0.0236 | 10 | 488 | 29 | 488 | 11 | 488 | 10 | 471 | 19 | 0.04 |
| 35 | DJ87 37 | 0.0566 | 16 | 0.6009 | 320 | 0.0770 | 24 | 0.0233 | 21 | 476 | 67 | 478 | 20 | 478 | 14 | 466 | 42 | -0.59 |
| 36 | DJ87 38 | 0.0560 | 6 | 0.5594 | 127 | 0.0725 | 14 | 0.0228 | 9 | 452 | 22 | 451 | 8 | 451 | 8 | 455 | 17 | 0.23 |
| 37 | DJ87 39 | 0.0566 | 11 | 0.5939 | 227 | 0.0761 | 19 | 0.0224 | 14 | 476 | 45 | 473 | 14 | 473 | 11 | 447 | 27 | 0.59 |
| 38 | DJ87 40 | 0.0571 | 6 | 0.6220 | 143 | 0.0791 | 15 | 0.0248 | 10 | 494 | 23 | 491 | 9 | 491 | 9 | 496 | 19 | 0.71 |
| 39 | DJ87 41 | 0.0567 | 6 | 0.6045 | 152 | 0.0774 | 16 | 0.0260 | 9 | 479 | 23 | 480 | 10 | 480 | 9 | 520 | 19 | -0.26 |
| 40 | DJ87 42 | 0.0561 | 6 | 0.5658 | 144 | 0.0731 | 15 | 0.0239 | 10 | 457 | 25 | 455 | 9 | 455 | 9 | 477 | 20 | 0.39 |
| 41 | DJ87 43 | 0.0573 | 7 | 0.6356 | 175 | 0.0805 | 17 | 0.0237 | 10 | 502 | 26 | 500 | 11 | 499 | 10 | 472 | 19 | 0.6 |
| 42 | DJ87 44 | 0.0563 | 4 | 0.5777 | 96 | 0.0745 | 13 | 0.0212 | 6 | 463 | 18 | 463 | 6 | 463 | 8 | 423 | 11 | 0.12 |
| 43 | DJ87 45 | 0.0572 | 4 | 0.6376 | 91 | 0.0808 | 14 | 0.0269 | 6 | 500 | 17 | 501 | 6 | 501 | 8 | 537 | 12 | -0.19 |
| 44 | DJ87 46 | 0.0568 | 5 | 0.6138 | 121 | 0.0784 | 15 | 0.0253 | 8 | 484 | 19 | 486 | 8 | 486 | 9 | 505 | 17 | -0.56 |
| 45 | DJ87 47 | 0.0568 | 7 | 0.6085 | 164 | 0.0778 | 16 | 0.0242 | 11 | 482 | 27 | 483 | 10 | 483 | 10 | 484 | 21 | -0.2 |
| 46 | DJ87 48 | 0.0570 | 13 | 0.6240 | 280 | 0.0794 | 22 | 0.0328 | 16 | 490 | 53 | 492 | 18 | 493 | 13 | 652 | 32 | -0.51 |
| 47 | DJ87 49 | 0.0565 | 6 | 0.5884 | 132 | 0.0756 | 15 | 0.0208 | 7 | 471 | 22 | 470 | 8 | 470 | 9 | 416 | 14 | 0.38 |
| 48 | DJ87 50 | 0.0573 | 9 | 0.6447 | 201 | 0.0816 | 18 | 0.0258 | 12 | 503 | 32 | 505 | 12 | 506 | 11 | 514 | 23 | -0.63 |
| 49 | DJ87 51 | 0.0563 | 5 | 0.5782 | 115 | 0.0745 | 14 | 0.0230 | 7 | 463 | 20 | 463 | 7 | 463 | 8 | 460 | 13 | 0.04 |
| 50 | DJ87 52 | 0.0565 | 7 | 0.5904 | 152 | 0.0758 | 15 | 0.0227 | 9 | 471 | 26 | 471 | 10 | 471 | 9 | 454 | 18 | -0.16 |
| 51 | DJ87 53 | 0.0570 | 5 | 0.6206 | 117 | 0.0790 | 14 | 0.0235 | 7 | 490 | 19 | 490 | 7 | 490 | 9 | 470 | 14 | -0.05 |
| 52 | DJ87 54 | 0.0570 | 5 | 0.6256 | 135 | 0.0795 | 15 | 0.0258 | 8 | 493 | 20 | 493 | 8 | 493 | 9 | 514 | 17 | -0.06 |
| 53 | DJ87 55 | 0.0571 | 5 | 0.6271 | 108 | 0.0796 | 14 | 0.0253 | 7 | 496 | 18 | 494 | 7 | 494 | 9 | 504 | 13 | 0.49 |
| 54 | DJ87 56 | 0.0580 | 10 | 0.6737 | 243 | 0.0843 | 20 | 0.0242 | 17 | 529 | 37 | 523 | 15 | 522 | 12 | 483 | 33 | 1.47 |
| 55 | DJ87 57 | 0.0568 | 4 | 0.6081 | 89 | 0.0777 | 13 | 0.0227 | 5 | 482 | 17 | 482 | 6 | 482 | 8 | 453 | 10 | -0.03 |
| 56 | DJ87 58 | 0.0569 | 8 | 0.6189 | 189 | 0.0789 | 17 | 0.0257 | 11 | 487 | 30 | 489 | 12 | 490 | 10 | 512 | 21 | -0.58 |
| 57 | DJ87 59 | 0.0564 | 4 | 0.5872 | 90 | 0.0755 | 13 | 0.0226 | 5 | 469 | 17 | 469 | 6 | 469 | 8 | 452 | 9 | 0.06 |

| Analysis No. | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | | |
|--------------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|----|-------|
| | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | | |
| DJ89 (n=60) | | | | | | | | | | | | | | | | | | |
| 1 | DJ89 01 | 0.0565 | 5 | 0.5909 | 109 | 0.0758 | 12 | 0.0206 | 6 | 473 | 19 | 471 | 7 | 471 | 7 | 412 | 12 | 0.38 |
| 2 | DJ89 02 | 0.0568 | 5 | 0.6050 | 115 | 0.0773 | 12 | 0.0246 | 8 | 482 | 20 | 480 | 7 | 480 | 7 | 491 | 15 | 0.37 |
| 3 | DJ89 03 | 0.0563 | 5 | 0.5812 | 116 | 0.0748 | 12 | 0.0242 | 6 | 465 | 19 | 465 | 7 | 465 | 7 | 483 | 12 | -0.17 |
| 4 | DJ89 04 | 0.0574 | 5 | 0.6463 | 130 | 0.0817 | 13 | 0.0235 | 6 | 505 | 21 | 506 | 8 | 506 | 8 | 469 | 12 | -0.3 |
| 5 | DJ89 05 | 0.0565 | 8 | 0.5938 | 171 | 0.0762 | 15 | 0.0219 | 11 | 473 | 28 | 473 | 11 | 473 | 9 | 437 | 22 | -0.01 |
| 6 | DJ89 06 | 0.0567 | 7 | 0.5993 | 158 | 0.0767 | 14 | 0.0239 | 8 | 479 | 27 | 477 | 10 | 476 | 8 | 477 | 17 | 0.6 |
| 7 | DJ89 07 | 0.0569 | 7 | 0.6138 | 155 | 0.0782 | 14 | 0.0241 | 9 | 487 | 26 | 486 | 10 | 485 | 8 | 481 | 17 | 0.34 |
| 8 | DJ89 08 | 0.0571 | 8 | 0.6300 | 172 | 0.0799 | 15 | 0.0231 | 7 | 497 | 30 | 496 | 11 | 496 | 9 | 461 | 14 | 0.22 |
| 9 | DJ89 09 | 0.0556 | 4 | 0.5359 | 85 | 0.0699 | 10 | 0.0199 | 5 | 435 | 14 | 436 | 6 | 436 | 6 | 398 | 10 | -0.14 |
| 10 | DJ89 11 | 0.0560 | 5 | 0.5625 | 107 | 0.0728 | 11 | 0.0216 | 5 | 454 | 17 | 453 | 7 | 453 | 7 | 432 | 9 | 0.23 |
| 11 | DJ89 12 | 0.0575 | 7 | 0.6535 | 163 | 0.0825 | 15 | 0.0235 | 8 | 510 | 25 | 511 | 10 | 511 | 9 | 469 | 15 | -0.25 |
| 12 | DJ89 13 | 0.0562 | 4 | 0.5748 | 80 | 0.0741 | 11 | 0.0211 | 4 | 461 | 14 | 461 | 5 | 461 | 6 | 421 | 9 | 0.09 |
| 13 | DJ89 14 | 0.0571 | 8 | 0.6288 | 176 | 0.0798 | 15 | 0.0261 | 12 | 497 | 30 | 495 | 11 | 495 | 9 | 521 | 24 | 0.41 |
| 14 | DJ89 15 | 0.0560 | 4 | 0.5616 | 86 | 0.0727 | 11 | 0.0209 | 4 | 454 | 15 | 453 | 6 | 452 | 6 | 418 | 8 | 0.39 |
| 15 | DJ89 16 | 0.0570 | 6 | 0.6153 | 145 | 0.0783 | 13 | 0.0243 | 8 | 490 | 26 | 487 | 9 | 486 | 8 | 484 | 16 | 0.7 |
| 16 | DJ89 17 | 0.0564 | 5 | 0.5868 | 124 | 0.0755 | 12 | 0.0214 | 7 | 468 | 21 | 469 | 8 | 469 | 7 | 428 | 14 | -0.28 |
| 17 | DJ89 18 | 0.0567 | 4 | 0.6029 | 95 | 0.0771 | 11 | 0.0222 | 5 | 479 | 16 | 479 | 6 | 479 | 7 | 443 | 10 | 0.01 |
| 18 | DJ89 19 | 0.0563 | 5 | 0.5777 | 104 | 0.0744 | 11 | 0.0232 | 6 | 464 | 19 | 463 | 7 | 463 | 7 | 463 | 11 | 0.33 |
| 19 | DJ89 20 | 0.0557 | 5 | 0.5386 | 107 | 0.0702 | 11 | 0.0207 | 7 | 439 | 20 | 438 | 7 | 437 | 7 | 415 | 14 | 0.48 |
| 20 | DJ89 21 | 0.0561 | 4 | 0.5693 | 86 | 0.0736 | 11 | 0.0192 | 4 | 457 | 14 | 458 | 6 | 458 | 6 | 384 | 9 | -0.12 |
| 21 | DJ89 22 | 0.0565 | 5 | 0.5955 | 108 | 0.0764 | 12 | 0.0216 | 7 | 473 | 17 | 474 | 7 | 474 | 7 | 432 | 13 | -0.3 |
| 22 | DJ89 23 | 0.0570 | 10 | 0.6447 | 220 | 0.0821 | 17 | 0.0226 | 12 | 490 | 39 | 505 | 14 | 508 | 10 | 451 | 23 | -4.05 |
| 23 | DJ89 24 | 0.0557 | 10 | 0.5411 | 187 | 0.0705 | 15 | 0.0235 | 11 | 440 | 39 | 439 | 12 | 439 | 9 | 470 | 21 | 0.24 |
| 24 | DJ89 26 | 0.0570 | 5 | 0.6174 | 126 | 0.0786 | 13 | 0.0232 | 6 | 490 | 22 | 488 | 8 | 488 | 8 | 463 | 12 | 0.36 |
| 25 | DJ89 27 | 0.0560 | 9 | 0.5692 | 182 | 0.0737 | 15 | 0.0222 | 9 | 453 | 37 | 458 | 12 | 458 | 9 | 444 | 18 | -1.3 |
| 26 | DJ89 28 | 0.0560 | 4 | 0.5650 | 100 | 0.0731 | 11 | 0.0228 | 7 | 454 | 17 | 455 | 7 | 455 | 7 | 455 | 13 | -0.34 |
| 27 | DJ89 29 | 0.0565 | 4 | 0.5917 | 100 | 0.0759 | 11 | 0.0229 | 5 | 473 | 17 | 472 | 6 | 472 | 7 | 458 | 9 | 0.25 |
| 28 | DJ89 30 | 0.0562 | 5 | 0.5747 | 115 | 0.0741 | 12 | 0.0223 | 5 | 461 | 19 | 461 | 7 | 461 | 7 | 446 | 11 | -0.1 |
| 29 | DJ89 31 | 0.0566 | 6 | 0.5963 | 138 | 0.0764 | 13 | 0.0238 | 9 | 476 | 20 | 475 | 9 | 474 | 8 | 475 | 18 | 0.3 |
| 30 | DJ89 32 | 0.0560 | 5 | 0.5618 | 103 | 0.0728 | 11 | 0.0216 | 5 | 451 | 17 | 453 | 7 | 453 | 7 | 432 | 10 | -0.41 |
| 31 | DJ89 33 | 0.0568 | 5 | 0.6062 | 122 | 0.0775 | 12 | 0.0233 | 7 | 482 | 21 | 481 | 8 | 481 | 7 | 465 | 13 | 0.17 |
| 32 | DJ89 34 | 0.0574 | 12 | 0.6471 | 261 | 0.0818 | 20 | 0.0275 | 13 | 506 | 44 | 507 | 16 | 507 | 12 | 549 | 26 | -0.13 |
| 33 | DJ89 35 | 0.0565 | 4 | 0.5892 | 99 | 0.0757 | 11 | 0.0224 | 7 | 471 | 17 | 470 | 6 | 470 | 7 | 449 | 13 | 0.15 |
| 34 | DJ89 36 | 0.0558 | 3 | 0.5496 | 66 | 0.0714 | 10 | 0.0223 | 4 | 445 | 13 | 445 | 4 | 445 | 6 | 446 | 8 | 0.13 |
| 35 | DJ89 37 | 0.0558 | 4 | 0.5454 | 76 | 0.0709 | 10 | 0.0219 | 5 | 443 | 14 | 442 | 5 | 442 | 6 | 438 | 10 | 0.25 |
| 36 | DJ89 38 | 0.0564 | 5 | 0.5802 | 121 | 0.0747 | 12 | 0.0245 | 8 | 466 | 21 | 465 | 8 | 464 | 7 | 489 | 15 | 0.43 |
| 37 | DJ89 39 | 0.0570 | 10 | 0.6257 | 218 | 0.0796 | 17 | 0.0230 | 11 | 493 | 39 | 493 | 14 | 493 | 10 | 460 | 21 | -0.18 |
| 38 | DJ89 40 | 0.0564 | 5 | 0.5875 | 114 | 0.0755 | 12 | 0.0231 | 5 | 470 | 17 | 469 | 7 | 469 | 7 | 461 | 10 | 0.11 |
| 39 | DJ89 41 | 0.0565 | 4 | 0.5903 | 96 | 0.0758 | 11 | 0.0232 | 5 | 472 | 16 | 471 | 6 | 471 | 7 | 463 | 9 | 0.16 |
| 40 | DJ89 42 | 0.0570 | 4 | 0.6189 | 87 | 0.0788 | 11 | 0.0237 | 4 | 490 | 15 | 489 | 5 | 489 | 7 | 474 | 8 | 0.22 |
| 41 | DJ89 43 | 0.0573 | 6 | 0.6420 | 150 | 0.0813 | 14 | 0.0241 | 7 | 503 | 24 | 504 | 9 | 504 | 8 | 481 | 13 | -0.21 |
| 42 | DJ89 44 | 0.0568 | 4 | 0.6061 | 84 | 0.0774 | 11 | 0.0260 | 6 | 484 | 12 | 481 | 5 | 480 | 7 | 519 | 12 | 0.69 |

| Analysis No. | | Ratios | | | | | | | | | | Age (Ma) | | | | | | Disc* (%) |
|--------------|---------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 43 | DJ89 45 | 0.0569 | 16 | 0.6134 | 311 | 0.0782 | 22 | 0.0293 | 19 | 487 | 60 | 486 | 20 | 485 | 13 | 584 | 37 | 0.41 |
| 44 | DJ89 46 | 0.0563 | 4 | 0.5825 | 99 | 0.0751 | 11 | 0.0243 | 7 | 463 | 16 | 466 | 6 | 467 | 7 | 484 | 14 | -0.82 |
| 45 | DJ89 47 | 0.0565 | 4 | 0.5926 | 86 | 0.0760 | 11 | 0.0235 | 5 | 473 | 14 | 473 | 5 | 472 | 7 | 469 | 10 | 0.2 |
| 46 | DJ89 48 | 0.0565 | 5 | 0.5894 | 110 | 0.0757 | 12 | 0.0217 | 5 | 470 | 18 | 470 | 7 | 470 | 7 | 435 | 10 | -0.1 |
| 47 | DJ89 49 | 0.0565 | 4 | 0.5926 | 87 | 0.0760 | 11 | 0.0229 | 6 | 473 | 15 | 473 | 6 | 472 | 7 | 458 | 11 | 0.2 |
| 48 | DJ89 50 | 0.0569 | 5 | 0.6140 | 114 | 0.0782 | 12 | 0.0234 | 6 | 488 | 17 | 486 | 7 | 486 | 7 | 467 | 12 | 0.41 |
| 49 | DJ89 51 | 0.0566 | 4 | 0.5957 | 98 | 0.0763 | 11 | 0.0224 | 6 | 476 | 14 | 474 | 6 | 474 | 7 | 448 | 12 | 0.39 |
| 50 | DJ89 52 | 0.0566 | 3 | 0.5986 | 69 | 0.0767 | 11 | 0.0235 | 4 | 477 | 13 | 476 | 4 | 476 | 6 | 469 | 8 | 0.21 |
| 51 | DJ89 53 | 0.0568 | 3 | 0.6102 | 65 | 0.0778 | 11 | 0.0253 | 4 | 485 | 12 | 484 | 4 | 483 | 6 | 504 | 7 | 0.33 |
| 52 | DJ89 54 | 0.0570 | 18 | 0.6373 | 351 | 0.0811 | 25 | 0.0277 | 20 | 490 | 71 | 501 | 22 | 503 | 15 | 552 | 39 | -2.85 |
| 53 | DJ89 55 | 0.0570 | 5 | 0.6223 | 119 | 0.0791 | 12 | 0.0225 | 6 | 492 | 18 | 491 | 7 | 491 | 7 | 450 | 11 | 0.26 |
| 54 | DJ89 56 | 0.0570 | 5 | 0.6199 | 112 | 0.0789 | 12 | 0.0252 | 8 | 491 | 18 | 490 | 7 | 489 | 7 | 503 | 15 | 0.25 |
| 55 | DJ89 57 | 0.0557 | 6 | 0.5538 | 129 | 0.0721 | 12 | 0.0229 | 7 | 441 | 24 | 447 | 8 | 448 | 7 | 457 | 14 | -1.74 |
| 56 | DJ89 58 | 0.0555 | 3 | 0.5328 | 66 | 0.0696 | 10 | 0.0202 | 3 | 434 | 13 | 434 | 4 | 434 | 6 | 404 | 7 | -0.02 |
| 57 | DJ89 59 | 0.0566 | 4 | 0.5975 | 79 | 0.0765 | 11 | 0.0237 | 4 | 477 | 14 | 476 | 5 | 475 | 6 | 473 | 8 | 0.29 |
| 58 | DJ89 60 | 0.0565 | 8 | 0.5850 | 165 | 0.0751 | 14 | 0.0209 | 10 | 471 | 32 | 468 | 11 | 467 | 8 | 418 | 21 | 0.75 |
| 59 | DJ89 61 | 0.0558 | 5 | 0.5543 | 102 | 0.0720 | 11 | 0.0198 | 6 | 446 | 18 | 448 | 7 | 448 | 7 | 396 | 12 | -0.61 |
| 60 | DJ89 62 | 0.0569 | 9 | 0.6165 | 183 | 0.0785 | 15 | 0.0248 | 9 | 489 | 32 | 488 | 12 | 487 | 9 | 495 | 18 | 0.41 |

DJ98 (n=59)

| | | | | | | | | | | | | | | | | | | |
|----|---------|--------|----|--------|-----|--------|----|--------|----|-----|-----|-----|----|-----|----|-----|----|-------|
| 1 | DJ98 01 | 0.0550 | 4 | 0.4951 | 84 | 0.0654 | 11 | 0.0185 | 5 | 410 | 17 | 408 | 6 | 408 | 7 | 371 | 10 | 0.55 |
| 2 | DJ98 02 | 0.0549 | 8 | 0.4925 | 147 | 0.0652 | 14 | 0.0177 | 8 | 406 | 30 | 407 | 10 | 407 | 8 | 354 | 15 | -0.16 |
| 3 | DJ98 03 | 0.0548 | 6 | 0.4827 | 113 | 0.0640 | 12 | 0.0179 | 5 | 402 | 23 | 400 | 8 | 400 | 7 | 359 | 10 | 0.75 |
| 4 | DJ98 04 | 0.0551 | 7 | 0.5051 | 134 | 0.0665 | 13 | 0.0191 | 7 | 415 | 28 | 415 | 9 | 415 | 8 | 382 | 14 | -0.03 |
| 5 | DJ98 05 | 0.0548 | 5 | 0.4819 | 92 | 0.0638 | 12 | 0.0188 | 5 | 402 | 18 | 399 | 6 | 399 | 7 | 377 | 9 | 0.93 |
| 6 | DJ98 06 | 0.0552 | 13 | 0.5101 | 214 | 0.0671 | 16 | 0.0206 | 10 | 419 | 52 | 419 | 14 | 419 | 10 | 412 | 20 | 0.06 |
| 7 | DJ98 07 | 0.0548 | 6 | 0.4857 | 119 | 0.0643 | 13 | 0.0183 | 6 | 404 | 26 | 402 | 8 | 402 | 8 | 367 | 12 | 0.51 |
| 8 | DJ98 08 | 0.0547 | 6 | 0.4857 | 113 | 0.0644 | 12 | 0.0176 | 5 | 400 | 23 | 402 | 8 | 403 | 7 | 352 | 11 | -0.74 |
| 9 | DJ98 09 | 0.0548 | 7 | 0.4884 | 136 | 0.0647 | 13 | 0.0172 | 7 | 403 | 29 | 404 | 9 | 404 | 8 | 344 | 14 | -0.3 |
| 10 | DJ98 10 | 0.0551 | 7 | 0.5082 | 136 | 0.0669 | 13 | 0.0175 | 6 | 416 | 29 | 417 | 9 | 417 | 8 | 351 | 12 | -0.27 |
| 11 | DJ98 11 | 0.0550 | 12 | 0.4968 | 203 | 0.0655 | 17 | 0.0215 | 10 | 413 | 52 | 410 | 14 | 409 | 10 | 429 | 20 | 0.91 |
| 12 | DJ98 12 | 0.0552 | 6 | 0.5163 | 125 | 0.0679 | 13 | 0.0200 | 5 | 419 | 23 | 423 | 8 | 424 | 8 | 400 | 10 | -1.16 |
| 13 | DJ98 13 | 0.0547 | 8 | 0.4814 | 143 | 0.0638 | 14 | 0.0179 | 7 | 401 | 31 | 399 | 10 | 399 | 8 | 359 | 14 | 0.65 |
| 14 | DJ98 14 | 0.0551 | 4 | 0.5086 | 63 | 0.0669 | 11 | 0.0192 | 3 | 418 | 17 | 418 | 4 | 418 | 7 | 385 | 6 | 0.12 |
| 15 | DJ98 15 | 0.0556 | 4 | 0.5342 | 60 | 0.0697 | 11 | 0.0179 | 3 | 435 | 18 | 435 | 4 | 435 | 7 | 359 | 5 | 0.18 |
| 16 | DJ98 16 | 0.0549 | 26 | 0.5013 | 407 | 0.0662 | 28 | 0.0161 | 20 | 410 | 108 | 413 | 27 | 413 | 17 | 323 | 40 | -0.83 |
| 17 | DJ98 17 | 0.0552 | 8 | 0.5114 | 157 | 0.0672 | 15 | 0.0194 | 7 | 421 | 33 | 419 | 11 | 419 | 9 | 388 | 15 | 0.51 |
| 18 | DJ98 18 | 0.0553 | 5 | 0.5176 | 108 | 0.0679 | 13 | 0.0180 | 6 | 423 | 21 | 424 | 7 | 424 | 8 | 361 | 11 | -0.12 |
| 19 | DJ98 19 | 0.0548 | 5 | 0.4909 | 95 | 0.0650 | 12 | 0.0178 | 5 | 404 | 18 | 406 | 6 | 406 | 7 | 357 | 9 | -0.31 |
| 20 | DJ98 20 | 0.0549 | 14 | 0.4980 | 229 | 0.0658 | 18 | 0.0174 | 9 | 409 | 60 | 410 | 16 | 411 | 11 | 349 | 19 | -0.52 |
| 21 | DJ98 21 | 0.0552 | 5 | 0.5146 | 111 | 0.0676 | 13 | 0.0198 | 5 | 421 | 21 | 422 | 7 | 422 | 8 | 395 | 9 | -0.23 |
| 22 | DJ98 22 | 0.0549 | 5 | 0.4950 | 103 | 0.0654 | 12 | 0.0171 | 5 | 409 | 20 | 408 | 7 | 408 | 7 | 342 | 10 | 0.08 |
| 23 | DJ98 23 | 0.0552 | 5 | 0.5083 | 112 | 0.0668 | 13 | 0.0190 | 6 | 419 | 21 | 417 | 8 | 417 | 8 | 380 | 11 | 0.52 |
| 24 | DJ98 24 | 0.0547 | 6 | 0.4782 | 122 | 0.0635 | 13 | 0.0168 | 5 | 398 | 24 | 397 | 8 | 397 | 8 | 336 | 10 | 0.46 |

| Analysis No. | $^{207}\text{Pb}/^{206}\text{Pb}$ | Ratios | | | | Age (Ma) | | | | | | | | Disc* (%) | | | | |
|--------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|----|-------|
| | | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | | |
| 25 | DJ98 25 | 0.0556 | 13 | 0.5367 | 232 | 0.0701 | 18 | 0.0179 | 9 | 435 | 53 | 436 | 15 | 437 | 11 | 359 | 18 | -0.29 |
| 26 | DJ98 26 | 0.0552 | 4 | 0.5106 | 87 | 0.0672 | 12 | 0.0189 | 4 | 419 | 18 | 419 | 6 | 419 | 7 | 379 | 8 | -0.04 |
| 27 | DJ98 27 | 0.0549 | 6 | 0.4925 | 118 | 0.0651 | 13 | 0.0177 | 6 | 408 | 24 | 407 | 8 | 406 | 8 | 355 | 13 | 0.34 |
| 28 | DJ98 28 | 0.0552 | 4 | 0.5139 | 91 | 0.0675 | 12 | 0.0171 | 4 | 422 | 17 | 421 | 6 | 421 | 7 | 344 | 8 | 0.26 |
| 29 | DJ98 29 | 0.0553 | 4 | 0.5217 | 72 | 0.0684 | 12 | 0.0182 | 3 | 426 | 16 | 426 | 5 | 426 | 7 | 365 | 6 | -0.09 |
| 30 | DJ98 30 | 0.0552 | 4 | 0.5141 | 78 | 0.0675 | 12 | 0.0192 | 3 | 421 | 17 | 421 | 5 | 421 | 7 | 384 | 6 | -0.02 |
| 31 | DJ98 31 | 0.0555 | 6 | 0.5321 | 120 | 0.0695 | 13 | 0.0194 | 5 | 433 | 23 | 433 | 8 | 433 | 8 | 388 | 9 | 0 |
| 32 | DJ98 32 | 0.0554 | 7 | 0.5231 | 136 | 0.0685 | 14 | 0.0188 | 6 | 429 | 26 | 427 | 9 | 427 | 8 | 377 | 12 | 0.46 |
| 33 | DJ98 33 | 0.0566 | 11 | 0.5937 | 233 | 0.0761 | 19 | 0.0202 | 10 | 474 | 43 | 473 | 15 | 473 | 11 | 405 | 20 | 0.22 |
| 34 | DJ98 34 | 0.0552 | 6 | 0.5136 | 129 | 0.0675 | 13 | 0.0184 | 5 | 420 | 24 | 421 | 9 | 421 | 8 | 369 | 10 | -0.15 |
| 35 | DJ98 35 | 0.0546 | 11 | 0.4753 | 182 | 0.0632 | 15 | 0.0183 | 9 | 394 | 42 | 395 | 13 | 395 | 9 | 367 | 18 | -0.19 |
| 36 | DJ98 36 | 0.0549 | 10 | 0.4886 | 172 | 0.0646 | 15 | 0.0191 | 10 | 406 | 40 | 404 | 12 | 404 | 9 | 383 | 19 | 0.65 |
| 37 | DJ98 37 | 0.0550 | 4 | 0.5035 | 69 | 0.0664 | 11 | 0.0187 | 4 | 413 | 17 | 414 | 5 | 414 | 7 | 375 | 8 | -0.18 |
| 38 | DJ98 38 | 0.0552 | 5 | 0.5154 | 104 | 0.0677 | 12 | 0.0195 | 4 | 422 | 19 | 422 | 7 | 422 | 7 | 391 | 8 | -0.15 |
| 39 | DJ98 39 | 0.0551 | 9 | 0.5097 | 174 | 0.0671 | 15 | 0.0205 | 9 | 417 | 40 | 418 | 12 | 418 | 9 | 410 | 18 | -0.22 |
| 40 | DJ98 40 | 0.0551 | 11 | 0.5100 | 193 | 0.0671 | 16 | 0.0200 | 10 | 417 | 43 | 418 | 13 | 419 | 10 | 399 | 19 | -0.27 |
| 41 | DJ98 41 | 0.0547 | 4 | 0.4833 | 85 | 0.0641 | 11 | 0.0166 | 4 | 398 | 17 | 400 | 6 | 401 | 7 | 332 | 8 | -0.6 |
| 42 | DJ98 42 | 0.0554 | 5 | 0.5235 | 97 | 0.0686 | 12 | 0.0192 | 5 | 427 | 16 | 428 | 6 | 428 | 7 | 385 | 9 | -0.21 |
| 43 | DJ98 43 | 0.0551 | 6 | 0.5073 | 121 | 0.0668 | 13 | 0.0180 | 5 | 415 | 23 | 417 | 8 | 417 | 8 | 360 | 11 | -0.46 |
| 44 | DJ98 44 | 0.0551 | 5 | 0.5054 | 95 | 0.0665 | 12 | 0.0184 | 4 | 416 | 18 | 415 | 6 | 415 | 7 | 368 | 9 | 0.15 |
| 45 | DJ98 45 | 0.0553 | 5 | 0.5181 | 95 | 0.0680 | 12 | 0.0195 | 5 | 424 | 20 | 424 | 6 | 424 | 7 | 390 | 9 | -0.08 |
| 46 | DJ98 46 | 0.0552 | 4 | 0.5078 | 87 | 0.0667 | 12 | 0.0184 | 4 | 422 | 18 | 417 | 6 | 416 | 7 | 369 | 7 | 1.44 |
| 47 | DJ98 47 | 0.0548 | 14 | 0.4940 | 230 | 0.0653 | 18 | 0.0202 | 13 | 406 | 55 | 408 | 16 | 408 | 11 | 404 | 27 | -0.57 |
| 48 | DJ98 48 | 0.0548 | 7 | 0.4814 | 128 | 0.0637 | 13 | 0.0170 | 6 | 403 | 27 | 399 | 9 | 398 | 8 | 341 | 12 | 1.15 |
| 49 | DJ98 49 | 0.0555 | 4 | 0.5323 | 79 | 0.0695 | 12 | 0.0181 | 4 | 434 | 17 | 433 | 5 | 433 | 7 | 362 | 7 | 0.09 |
| 50 | DJ98 51 | 0.0548 | 5 | 0.4878 | 95 | 0.0645 | 12 | 0.0174 | 4 | 406 | 20 | 403 | 6 | 403 | 7 | 349 | 8 | 0.69 |
| 51 | DJ98 52 | 0.0550 | 4 | 0.4966 | 87 | 0.0655 | 12 | 0.0175 | 4 | 410 | 17 | 409 | 6 | 409 | 7 | 350 | 8 | 0.24 |
| 52 | DJ98 53 | 0.0552 | 4 | 0.5103 | 90 | 0.0671 | 12 | 0.0181 | 4 | 420 | 18 | 419 | 6 | 418 | 7 | 362 | 8 | 0.26 |
| 53 | DJ98 54 | 0.0549 | 7 | 0.4981 | 137 | 0.0658 | 14 | 0.0205 | 8 | 408 | 29 | 410 | 9 | 411 | 8 | 409 | 15 | -0.67 |
| 54 | DJ98 55 | 0.0560 | 7 | 0.5558 | 151 | 0.0720 | 15 | 0.0197 | 7 | 452 | 25 | 449 | 10 | 448 | 9 | 394 | 14 | 0.76 |
| 55 | DJ98 56 | 0.0552 | 5 | 0.5145 | 54 | 0.0675 | 11 | 0.0184 | 3 | 422 | 19 | 421 | 4 | 421 | 7 | 369 | 5 | 0.03 |
| 56 | DJ98 57 | 0.0551 | 9 | 0.5049 | 173 | 0.0664 | 15 | 0.0193 | 7 | 418 | 39 | 415 | 12 | 414 | 9 | 386 | 15 | 0.84 |
| 57 | DJ98 58 | 0.0556 | 4 | 0.5381 | 77 | 0.0702 | 12 | 0.0186 | 3 | 436 | 18 | 437 | 5 | 437 | 7 | 373 | 6 | -0.22 |
| 58 | DJ98 59 | 0.0556 | 6 | 0.5310 | 131 | 0.0693 | 14 | 0.0206 | 7 | 434 | 23 | 432 | 9 | 432 | 8 | 413 | 14 | 0.56 |
| 59 | DJ98 60 | 0.0553 | 5 | 0.5218 | 95 | 0.0684 | 12 | 0.0175 | 4 | 425 | 17 | 426 | 6 | 427 | 7 | 350 | 8 | -0.45 |

DJ108 (n=58)

| | | | | | | | | | | | | | | | | | | |
|---|----------|--------|---|--------|-----|--------|----|--------|---|-----|----|-----|----|-----|----|-----|----|-------|
| 1 | DJ108 01 | 0.0562 | 5 | 0.5738 | 111 | 0.0740 | 16 | 0.0209 | 7 | 459 | 21 | 460 | 7 | 460 | 10 | 419 | 13 | -0.36 |
| 2 | DJ108 02 | 0.0558 | 9 | 0.5459 | 193 | 0.0709 | 19 | 0.0206 | 9 | 443 | 38 | 442 | 13 | 442 | 11 | 413 | 18 | 0.15 |
| 3 | DJ108 03 | 0.0562 | 6 | 0.5715 | 82 | 0.0736 | 15 | 0.0211 | 5 | 460 | 22 | 459 | 5 | 458 | 9 | 422 | 9 | 0.25 |
| 4 | DJ108 04 | 0.0565 | 6 | 0.5891 | 129 | 0.0755 | 17 | 0.0232 | 7 | 471 | 22 | 470 | 8 | 469 | 10 | 464 | 14 | 0.27 |
| 5 | DJ108 05 | 0.0564 | 6 | 0.5886 | 85 | 0.0755 | 16 | 0.0218 | 4 | 470 | 23 | 470 | 5 | 469 | 9 | 435 | 7 | -0.07 |
| 6 | DJ108 06 | 0.0560 | 6 | 0.5610 | 82 | 0.0726 | 15 | 0.0227 | 5 | 452 | 23 | 452 | 5 | 452 | 9 | 453 | 10 | -0.15 |
| 7 | DJ108 07 | 0.0566 | 6 | 0.6004 | 79 | 0.0768 | 16 | 0.0206 | 4 | 477 | 22 | 477 | 5 | 477 | 9 | 413 | 8 | -0.09 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|--------------|----------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 8 | DJ108 08 | 0.0565 | 6 | 0.5902 | 122 | 0.0756 | 17 | 0.0219 | 6 | 472 | 20 | 471 | 8 | 470 | 10 | 437 | 11 | 0.4 |
| 9 | DJ108 09 | 0.0559 | 5 | 0.5511 | 94 | 0.0714 | 15 | 0.0203 | 5 | 446 | 22 | 446 | 6 | 445 | 9 | 406 | 9 | 0.2 |
| 10 | DJ108 10 | 0.0561 | 6 | 0.5727 | 89 | 0.0739 | 16 | 0.0219 | 5 | 456 | 22 | 460 | 6 | 460 | 9 | 438 | 9 | -1.04 |
| 11 | DJ108 11 | 0.0559 | 6 | 0.5559 | 78 | 0.0720 | 15 | 0.0218 | 4 | 450 | 22 | 449 | 5 | 448 | 9 | 435 | 8 | 0.21 |
| 12 | DJ108 12 | 0.0558 | 6 | 0.5434 | 130 | 0.0706 | 16 | 0.0216 | 8 | 442 | 25 | 441 | 9 | 440 | 10 | 432 | 15 | 0.5 |
| 13 | DJ108 13 | 0.0560 | 5 | 0.5571 | 109 | 0.0721 | 16 | 0.0204 | 5 | 451 | 20 | 450 | 7 | 449 | 9 | 409 | 10 | 0.31 |
| 14 | DJ108 14 | 0.0561 | 6 | 0.5664 | 69 | 0.0731 | 15 | 0.0214 | 4 | 456 | 26 | 456 | 4 | 455 | 9 | 427 | 8 | 0.17 |
| 15 | DJ108 15 | 0.0558 | 5 | 0.5516 | 110 | 0.0716 | 16 | 0.0206 | 6 | 446 | 23 | 446 | 7 | 445 | 9 | 413 | 12 | -0.11 |
| 16 | DJ108 16 | 0.0563 | 5 | 0.5762 | 108 | 0.0742 | 16 | 0.0237 | 7 | 463 | 21 | 462 | 7 | 461 | 10 | 473 | 13 | 0.18 |
| 17 | DJ108 17 | 0.0561 | 7 | 0.5665 | 156 | 0.0732 | 18 | 0.0213 | 9 | 454 | 25 | 456 | 10 | 455 | 11 | 426 | 18 | -0.37 |
| 18 | DJ108 18 | 0.0560 | 5 | 0.5592 | 112 | 0.0724 | 16 | 0.0227 | 6 | 452 | 22 | 451 | 7 | 450 | 10 | 453 | 13 | 0.16 |
| 19 | DJ108 19 | 0.0560 | 6 | 0.5611 | 118 | 0.0725 | 16 | 0.0200 | 5 | 454 | 24 | 452 | 8 | 451 | 10 | 401 | 10 | 0.47 |
| 20 | DJ108 20 | 0.0562 | 5 | 0.5706 | 97 | 0.0736 | 16 | 0.0222 | 6 | 458 | 21 | 458 | 6 | 458 | 9 | 443 | 12 | -0.02 |
| 21 | DJ108 21 | 0.0560 | 5 | 0.5586 | 116 | 0.0723 | 16 | 0.0204 | 7 | 452 | 20 | 451 | 8 | 450 | 10 | 408 | 14 | 0.26 |
| 22 | DJ108 22 | 0.0562 | 6 | 0.5727 | 83 | 0.0738 | 15 | 0.0219 | 5 | 460 | 23 | 460 | 5 | 459 | 9 | 437 | 9 | 0.15 |
| 23 | DJ108 23 | 0.0568 | 6 | 0.6072 | 122 | 0.0775 | 17 | 0.0250 | 8 | 483 | 20 | 482 | 8 | 481 | 10 | 499 | 17 | 0.42 |
| 24 | DJ108 24 | 0.0569 | 6 | 0.6140 | 86 | 0.0782 | 16 | 0.0233 | 4 | 486 | 23 | 486 | 5 | 485 | 10 | 466 | 8 | 0.1 |
| 25 | DJ108 25 | 0.0562 | 5 | 0.5712 | 96 | 0.0736 | 16 | 0.0222 | 6 | 460 | 21 | 459 | 6 | 458 | 9 | 445 | 12 | 0.4 |
| 26 | DJ108 26 | 0.0560 | 5 | 0.5654 | 114 | 0.0731 | 16 | 0.0201 | 5 | 454 | 19 | 455 | 7 | 455 | 10 | 402 | 10 | -0.3 |
| 27 | DJ108 28 | 0.0571 | 6 | 0.6336 | 157 | 0.0804 | 19 | 0.0235 | 7 | 496 | 22 | 498 | 10 | 498 | 11 | 469 | 14 | -0.65 |
| 28 | DJ108 29 | 0.0562 | 6 | 0.5742 | 81 | 0.0741 | 15 | 0.0131 | 2 | 459 | 22 | 461 | 5 | 461 | 9 | 263 | 5 | -0.33 |
| 29 | DJ108 31 | 0.0580 | 6 | 0.6825 | 96 | 0.0853 | 18 | 0.0243 | 5 | 529 | 22 | 528 | 6 | 528 | 11 | 484 | 10 | 0.17 |
| 30 | DJ108 32 | 0.0562 | 6 | 0.5764 | 119 | 0.0743 | 17 | 0.0226 | 6 | 461 | 22 | 462 | 8 | 462 | 10 | 452 | 12 | -0.18 |
| 31 | DJ108 33 | 0.0558 | 6 | 0.5526 | 120 | 0.0717 | 16 | 0.0215 | 7 | 446 | 23 | 447 | 8 | 447 | 10 | 429 | 13 | -0.3 |
| 32 | DJ108 34 | 0.0560 | 6 | 0.5653 | 78 | 0.0731 | 15 | 0.0209 | 5 | 454 | 23 | 455 | 5 | 455 | 9 | 418 | 9 | -0.38 |
| 33 | DJ108 35 | 0.0564 | 5 | 0.5848 | 115 | 0.0752 | 17 | 0.0214 | 7 | 467 | 21 | 468 | 7 | 467 | 10 | 428 | 14 | -0.15 |
| 34 | DJ108 36 | 0.0564 | 6 | 0.5853 | 147 | 0.0752 | 18 | 0.0210 | 6 | 470 | 25 | 468 | 9 | 467 | 11 | 420 | 13 | 0.5 |
| 35 | DJ108 37 | 0.0566 | 5 | 0.5978 | 105 | 0.0766 | 17 | 0.0210 | 5 | 474 | 21 | 476 | 7 | 476 | 10 | 420 | 11 | -0.38 |
| 36 | DJ108 38 | 0.0563 | 6 | 0.5814 | 119 | 0.0748 | 17 | 0.0199 | 8 | 466 | 23 | 465 | 8 | 465 | 10 | 399 | 15 | 0.11 |
| 37 | DJ108 39 | 0.0565 | 5 | 0.5909 | 103 | 0.0758 | 16 | 0.0217 | 6 | 472 | 21 | 471 | 7 | 471 | 10 | 433 | 12 | 0.16 |
| 38 | DJ108 40 | 0.0562 | 6 | 0.5713 | 87 | 0.0737 | 16 | 0.0207 | 5 | 458 | 23 | 459 | 6 | 459 | 9 | 415 | 10 | -0.14 |
| 39 | DJ108 41 | 0.0563 | 6 | 0.5807 | 80 | 0.0748 | 16 | 0.0210 | 5 | 464 | 25 | 465 | 5 | 465 | 9 | 419 | 9 | -0.29 |
| 40 | DJ108 42 | 0.0560 | 6 | 0.5638 | 85 | 0.0729 | 15 | 0.0211 | 5 | 454 | 24 | 454 | 6 | 454 | 9 | 421 | 9 | -0.12 |
| 41 | DJ108 43 | 0.0568 | 8 | 0.6129 | 192 | 0.0782 | 20 | 0.0247 | 8 | 485 | 30 | 485 | 12 | 485 | 12 | 494 | 16 | -0.22 |
| 42 | DJ108 44 | 0.0560 | 6 | 0.5577 | 63 | 0.0723 | 15 | 0.0216 | 4 | 451 | 25 | 450 | 4 | 450 | 9 | 432 | 7 | 0.2 |
| 43 | DJ108 45 | 0.0562 | 5 | 0.5732 | 104 | 0.0739 | 16 | 0.0200 | 5 | 461 | 22 | 460 | 7 | 460 | 10 | 401 | 11 | 0.16 |
| 44 | DJ108 46 | 0.0561 | 6 | 0.5666 | 149 | 0.0732 | 17 | 0.0202 | 7 | 457 | 26 | 456 | 10 | 455 | 10 | 404 | 14 | 0.35 |
| 45 | DJ108 47 | 0.0564 | 6 | 0.5838 | 85 | 0.0751 | 16 | 0.0207 | 4 | 466 | 22 | 467 | 5 | 467 | 9 | 415 | 8 | -0.19 |
| 46 | DJ108 48 | 0.0569 | 6 | 0.6113 | 126 | 0.0780 | 17 | 0.0230 | 6 | 486 | 23 | 484 | 8 | 484 | 10 | 460 | 12 | 0.35 |
| 47 | DJ108 49 | 0.0568 | 9 | 0.6138 | 213 | 0.0784 | 21 | 0.0241 | 13 | 482 | 32 | 486 | 13 | 487 | 12 | 482 | 25 | -1.07 |
| 48 | DJ108 50 | 0.0565 | 6 | 0.5910 | 93 | 0.0759 | 16 | 0.0206 | 4 | 471 | 22 | 472 | 6 | 471 | 10 | 412 | 9 | -0.06 |
| 49 | DJ108 51 | 0.0559 | 5 | 0.5562 | 106 | 0.0722 | 16 | 0.0207 | 6 | 448 | 20 | 449 | 7 | 449 | 10 | 414 | 12 | -0.28 |
| 50 | DJ108 52 | 0.0562 | 9 | 0.5657 | 203 | 0.0730 | 20 | 0.0208 | 11 | 460 | 34 | 455 | 13 | 454 | 12 | 416 | 22 | 1.36 |
| 51 | DJ108 53 | 0.0565 | 6 | 0.5899 | 98 | 0.0758 | 16 | 0.0222 | 6 | 471 | 22 | 471 | 6 | 471 | 10 | 443 | 12 | 0.03 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|--------------|----------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 52 | DJ108 54 | 0.0568 | 10 | 0.6072 | 232 | 0.0776 | 22 | 0.0254 | 14 | 482 | 39 | 482 | 15 | 482 | 13 | 506 | 27 | 0.11 |
| 53 | DJ108 55 | 0.0564 | 6 | 0.5851 | 98 | 0.0752 | 16 | 0.0210 | 6 | 469 | 21 | 468 | 6 | 467 | 10 | 421 | 11 | 0.32 |
| 54 | DJ108 56 | 0.0569 | 7 | 0.6147 | 174 | 0.0784 | 19 | 0.0201 | 9 | 487 | 28 | 486 | 11 | 486 | 11 | 402 | 19 | 0.2 |
| 55 | DJ108 57 | 0.0558 | 5 | 0.5450 | 103 | 0.0709 | 16 | 0.0214 | 6 | 443 | 21 | 442 | 7 | 442 | 9 | 428 | 11 | 0.31 |
| 56 | DJ108 58 | 0.0570 | 6 | 0.6218 | 129 | 0.0791 | 18 | 0.0234 | 7 | 492 | 22 | 491 | 8 | 491 | 11 | 467 | 13 | 0.24 |
| 57 | DJ108 59 | 0.0569 | 6 | 0.6128 | 80 | 0.0782 | 16 | 0.0224 | 4 | 486 | 23 | 485 | 5 | 485 | 10 | 447 | 8 | 0.11 |
| 58 | DJ108 60 | 0.0570 | 6 | 0.6241 | 131 | 0.0794 | 18 | 0.0233 | 6 | 492 | 22 | 492 | 8 | 493 | 11 | 465 | 12 | -0.03 |

DJ188 (n=39)

| | | | | | | | | | | | | | | | | | | |
|----|----------|--------|----|--------|-----|--------|----|--------|----|-----|----|-----|----|-----|----|-----|----|------|
| 1 | DJ188 02 | 0.0558 | 6 | 0.5458 | 73 | 0.0709 | 14 | 0.0214 | 4 | 443 | 23 | 442 | 5 | 442 | 9 | 428 | 7 | 0.2 |
| 2 | DJ188 04 | 0.0553 | 8 | 0.5110 | 155 | 0.0670 | 16 | 0.0222 | 7 | 423 | 29 | 419 | 10 | 418 | 10 | 443 | 14 | 1.0 |
| 3 | DJ188 06 | 0.0559 | 5 | 0.5562 | 99 | 0.0721 | 15 | 0.0250 | 6 | 449 | 20 | 449 | 6 | 449 | 9 | 499 | 12 | -0.1 |
| 4 | DJ188 09 | 0.0556 | 9 | 0.5313 | 183 | 0.0693 | 18 | 0.0202 | 7 | 435 | 37 | 433 | 12 | 432 | 11 | 404 | 14 | 0.6 |
| 5 | DJ188 11 | 0.0542 | 10 | 0.4530 | 172 | 0.0606 | 16 | 0.0184 | 6 | 381 | 47 | 379 | 12 | 379 | 10 | 369 | 12 | 0.4 |
| 6 | DJ188 12 | 0.0548 | 5 | 0.4950 | 107 | 0.0655 | 14 | 0.0210 | 5 | 403 | 21 | 408 | 7 | 409 | 9 | 420 | 10 | -1.6 |
| 7 | DJ188 15 | 0.0562 | 13 | 0.5495 | 245 | 0.0710 | 21 | 0.0244 | 14 | 458 | 50 | 445 | 16 | 442 | 12 | 488 | 28 | 3.7 |
| 8 | DJ188 16 | 0.0554 | 5 | 0.5233 | 100 | 0.0686 | 15 | 0.0200 | 4 | 426 | 20 | 427 | 7 | 427 | 9 | 400 | 8 | -0.3 |
| 9 | DJ188 17 | 0.0552 | 18 | 0.4874 | 293 | 0.0640 | 23 | 0.0161 | 11 | 420 | 76 | 403 | 20 | 400 | 14 | 324 | 22 | 5.0 |
| 10 | DJ188 18 | 0.0551 | 7 | 0.5198 | 141 | 0.0684 | 16 | 0.0202 | 6 | 416 | 26 | 425 | 9 | 427 | 10 | 405 | 12 | -2.6 |
| 11 | DJ188 19 | 0.0550 | 6 | 0.4998 | 63 | 0.0659 | 13 | 0.0189 | 3 | 411 | 23 | 412 | 4 | 412 | 8 | 379 | 6 | -0.2 |
| 12 | DJ188 20 | 0.0552 | 10 | 0.5093 | 189 | 0.0669 | 18 | 0.0194 | 8 | 420 | 41 | 418 | 13 | 418 | 11 | 389 | 16 | 0.6 |
| 13 | DJ188 26 | 0.0550 | 5 | 0.4971 | 98 | 0.0656 | 14 | 0.0196 | 5 | 411 | 21 | 410 | 7 | 410 | 9 | 392 | 9 | 0.5 |
| 14 | DJ188 29 | 0.0560 | 7 | 0.5379 | 159 | 0.0697 | 17 | 0.0240 | 8 | 451 | 30 | 437 | 10 | 434 | 10 | 480 | 16 | 3.8 |
| 15 | DJ188 31 | 0.0557 | 11 | 0.5310 | 215 | 0.0691 | 19 | 0.0226 | 11 | 441 | 46 | 432 | 14 | 431 | 11 | 452 | 21 | 2.4 |
| 16 | DJ188 32 | 0.0554 | 5 | 0.5090 | 71 | 0.0667 | 14 | 0.0196 | 3 | 428 | 23 | 418 | 5 | 416 | 8 | 393 | 7 | 2.8 |
| 17 | DJ188 33 | 0.0549 | 9 | 0.4995 | 171 | 0.0660 | 17 | 0.0195 | 6 | 408 | 37 | 411 | 12 | 412 | 10 | 390 | 12 | -1.1 |
| 18 | DJ188 34 | 0.0556 | 11 | 0.5100 | 203 | 0.0666 | 18 | 0.0210 | 9 | 434 | 42 | 418 | 14 | 416 | 11 | 419 | 18 | 4.5 |
| 19 | DJ188 35 | 0.0545 | 8 | 0.4742 | 154 | 0.0631 | 16 | 0.0193 | 7 | 393 | 33 | 394 | 11 | 394 | 9 | 386 | 13 | -0.2 |
| 20 | DJ188 37 | 0.0549 | 7 | 0.5124 | 148 | 0.0678 | 16 | 0.0199 | 7 | 407 | 29 | 420 | 10 | 423 | 10 | 398 | 13 | -4.1 |
| 21 | DJ188 39 | 0.0546 | 10 | 0.4773 | 187 | 0.0635 | 17 | 0.0197 | 9 | 395 | 44 | 396 | 13 | 397 | 10 | 395 | 17 | -0.2 |
| 22 | DJ188 40 | 0.0543 | 11 | 0.4613 | 191 | 0.0617 | 17 | 0.0204 | 8 | 383 | 44 | 385 | 13 | 386 | 10 | 408 | 15 | -0.8 |
| 23 | DJ188 41 | 0.0548 | 10 | 0.4779 | 175 | 0.0634 | 17 | 0.0178 | 7 | 402 | 42 | 397 | 12 | 396 | 10 | 357 | 14 | 1.6 |
| 24 | DJ188 43 | 0.0544 | 7 | 0.4766 | 144 | 0.0636 | 15 | 0.0190 | 6 | 387 | 31 | 396 | 10 | 398 | 9 | 381 | 12 | -2.7 |
| 25 | DJ188 45 | 0.0551 | 13 | 0.4839 | 230 | 0.0637 | 19 | 0.0201 | 10 | 417 | 56 | 401 | 16 | 398 | 12 | 402 | 21 | 4.7 |
| 26 | DJ188 47 | 0.0550 | 17 | 0.4971 | 292 | 0.0657 | 23 | 0.0186 | 12 | 411 | 72 | 410 | 20 | 410 | 14 | 373 | 24 | 0.4 |
| 27 | DJ188 48 | 0.0550 | 11 | 0.4998 | 201 | 0.0660 | 18 | 0.0232 | 12 | 410 | 45 | 412 | 14 | 412 | 11 | 463 | 24 | -0.4 |
| 28 | DJ188 51 | 0.0558 | 8 | 0.5428 | 170 | 0.0705 | 17 | 0.0233 | 10 | 446 | 30 | 440 | 11 | 439 | 10 | 465 | 20 | 1.5 |
| 29 | DJ188 54 | 0.0552 | 12 | 0.5013 | 212 | 0.0659 | 19 | 0.0190 | 7 | 420 | 47 | 413 | 14 | 411 | 11 | 380 | 13 | 2.3 |
| 30 | DJ188 55 | 0.0549 | 9 | 0.4718 | 167 | 0.0624 | 16 | 0.0198 | 7 | 406 | 35 | 392 | 12 | 390 | 10 | 397 | 15 | 4.1 |
| 31 | DJ188 58 | 0.0552 | 6 | 0.5048 | 126 | 0.0664 | 15 | 0.0225 | 6 | 419 | 25 | 415 | 8 | 414 | 9 | 450 | 12 | 1.1 |
| 32 | DJ188 59 | 0.0556 | 14 | 0.5216 | 253 | 0.0681 | 21 | 0.0206 | 8 | 435 | 59 | 426 | 17 | 425 | 13 | 413 | 15 | 2.5 |
| 33 | DJ188 60 | 0.0565 | 17 | 0.6117 | 346 | 0.0785 | 27 | 0.0245 | 16 | 473 | 62 | 485 | 22 | 487 | 16 | 490 | 32 | -3.1 |
| 34 | DJ188 61 | 0.0553 | 17 | 0.5388 | 314 | 0.0707 | 24 | 0.0233 | 14 | 424 | 67 | 438 | 21 | 440 | 15 | 465 | 28 | -4.1 |
| 35 | DJ188 62 | 0.0550 | 12 | 0.4868 | 205 | 0.0642 | 18 | 0.0177 | 9 | 413 | 45 | 403 | 14 | 401 | 11 | 354 | 18 | 2.9 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|--------------|----------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 36 | DJ188 63 | 0.0546 | 8 | 0.4739 | 155 | 0.0630 | 16 | 0.0199 | 8 | 396 | 37 | 394 | 11 | 394 | 10 | 398 | 15 | 0.6 |
| 37 | DJ188 65 | 0.0550 | 8 | 0.4944 | 162 | 0.0652 | 16 | 0.0201 | 8 | 412 | 33 | 408 | 11 | 407 | 10 | 402 | 15 | 1.2 |
| 38 | DJ188 66 | 0.0552 | 11 | 0.5074 | 208 | 0.0667 | 19 | 0.0193 | 8 | 420 | 43 | 417 | 14 | 416 | 11 | 386 | 16 | 1.1 |
| 39 | DJ188 67 | 0.0552 | 5 | 0.5059 | 94 | 0.0665 | 14 | 0.0189 | 4 | 419 | 20 | 416 | 6 | 415 | 9 | 377 | 9 | 0.9 |

DJ192 (n=66)

| | | | | | | | | | | | | | | | | | | |
|----|----------|--------|----|--------|-----|--------|----|--------|----|-----|----|-----|----|-----|----|-----|----|-------|
| 1 | DJ192 01 | 0.0564 | 5 | 0.5820 | 108 | 0.0749 | 16 | 0.0217 | 6 | 466 | 19 | 466 | 7 | 465 | 10 | 433 | 12 | 0.12 |
| 2 | DJ192 02 | 0.0569 | 6 | 0.6166 | 141 | 0.0785 | 18 | 0.0239 | 7 | 488 | 23 | 488 | 9 | 487 | 11 | 477 | 14 | 0.08 |
| 3 | DJ192 03 | 0.0565 | 8 | 0.5888 | 189 | 0.0755 | 19 | 0.0219 | 12 | 474 | 33 | 470 | 12 | 469 | 11 | 439 | 24 | 0.93 |
| 4 | DJ192 04 | 0.0568 | 13 | 0.6199 | 286 | 0.0791 | 24 | 0.0275 | 22 | 485 | 51 | 490 | 18 | 491 | 14 | 549 | 44 | -1.26 |
| 5 | DJ192 05 | 0.0568 | 6 | 0.6067 | 153 | 0.0775 | 18 | 0.0234 | 9 | 483 | 25 | 481 | 10 | 481 | 11 | 467 | 17 | 0.29 |
| 6 | DJ192 07 | 0.0559 | 8 | 0.5536 | 170 | 0.0718 | 18 | 0.0234 | 9 | 449 | 30 | 447 | 11 | 447 | 11 | 468 | 17 | 0.4 |
| 7 | DJ192 08 | 0.0557 | 15 | 0.5557 | 293 | 0.0723 | 23 | 0.0253 | 18 | 441 | 62 | 449 | 19 | 450 | 14 | 505 | 36 | -2.1 |
| 8 | DJ192 09 | 0.0565 | 7 | 0.5884 | 157 | 0.0756 | 18 | 0.0236 | 9 | 471 | 27 | 470 | 10 | 470 | 11 | 471 | 18 | 0.18 |
| 9 | DJ192 10 | 0.0562 | 5 | 0.5716 | 112 | 0.0738 | 16 | 0.0232 | 6 | 459 | 21 | 459 | 7 | 459 | 10 | 463 | 13 | -0.1 |
| 10 | DJ192 11 | 0.0557 | 5 | 0.5496 | 115 | 0.0716 | 16 | 0.0237 | 8 | 439 | 21 | 445 | 8 | 446 | 9 | 474 | 16 | -1.66 |
| 11 | DJ192 12 | 0.0562 | 6 | 0.5632 | 143 | 0.0727 | 17 | 0.0222 | 9 | 461 | 23 | 454 | 9 | 452 | 10 | 444 | 17 | 1.89 |
| 12 | DJ192 13 | 0.0561 | 5 | 0.5667 | 110 | 0.0732 | 16 | 0.0228 | 7 | 457 | 21 | 456 | 7 | 456 | 9 | 456 | 14 | 0.23 |
| 13 | DJ192 14 | 0.0566 | 6 | 0.5847 | 138 | 0.0749 | 17 | 0.0215 | 9 | 476 | 26 | 467 | 9 | 466 | 10 | 430 | 18 | 2.22 |
| 14 | DJ192 15 | 0.0566 | 18 | 0.5702 | 343 | 0.0731 | 26 | 0.0267 | 22 | 474 | 66 | 458 | 22 | 455 | 16 | 532 | 44 | 4.17 |
| 15 | DJ192 16 | 0.0561 | 5 | 0.5602 | 107 | 0.0725 | 16 | 0.0205 | 6 | 455 | 21 | 452 | 7 | 451 | 9 | 409 | 11 | 0.84 |
| 16 | DJ192 17 | 0.0567 | 10 | 0.5970 | 221 | 0.0764 | 20 | 0.0235 | 12 | 480 | 38 | 475 | 14 | 474 | 12 | 469 | 24 | 1.19 |
| 17 | DJ192 18 | 0.0556 | 5 | 0.5395 | 112 | 0.0704 | 15 | 0.0243 | 8 | 436 | 23 | 438 | 7 | 438 | 9 | 486 | 15 | -0.58 |
| 18 | DJ192 19 | 0.0558 | 6 | 0.5603 | 71 | 0.0728 | 15 | 0.0217 | 4 | 445 | 22 | 452 | 5 | 453 | 9 | 433 | 7 | -1.92 |
| 19 | DJ192 20 | 0.0558 | 6 | 0.5503 | 121 | 0.0715 | 16 | 0.0220 | 7 | 446 | 21 | 445 | 8 | 445 | 10 | 439 | 14 | 0.12 |
| 20 | DJ192 21 | 0.0559 | 5 | 0.5564 | 90 | 0.0722 | 15 | 0.0213 | 4 | 447 | 21 | 449 | 6 | 450 | 9 | 425 | 9 | -0.65 |
| 21 | DJ192 22 | 0.0557 | 6 | 0.5494 | 127 | 0.0715 | 16 | 0.0236 | 9 | 440 | 21 | 445 | 8 | 445 | 10 | 472 | 17 | -1.29 |
| 22 | DJ192 23 | 0.0560 | 6 | 0.5537 | 84 | 0.0717 | 15 | 0.0210 | 5 | 452 | 19 | 447 | 5 | 447 | 9 | 419 | 9 | 1.14 |
| 23 | DJ192 24 | 0.0560 | 8 | 0.5587 | 172 | 0.0724 | 18 | 0.0223 | 11 | 452 | 31 | 451 | 11 | 450 | 11 | 445 | 22 | 0.25 |
| 24 | DJ192 25 | 0.0560 | 7 | 0.5619 | 158 | 0.0728 | 17 | 0.0258 | 10 | 452 | 27 | 453 | 10 | 453 | 10 | 515 | 20 | -0.32 |
| 25 | DJ192 26 | 0.0566 | 6 | 0.6008 | 150 | 0.0770 | 18 | 0.0223 | 8 | 476 | 25 | 478 | 10 | 478 | 11 | 446 | 16 | -0.46 |
| 26 | DJ192 27 | 0.0557 | 5 | 0.5454 | 107 | 0.0710 | 15 | 0.0205 | 6 | 442 | 23 | 442 | 7 | 442 | 9 | 410 | 13 | 0.02 |
| 27 | DJ192 28 | 0.0568 | 9 | 0.6119 | 207 | 0.0781 | 20 | 0.0223 | 12 | 485 | 34 | 485 | 13 | 485 | 12 | 445 | 24 | -0.05 |
| 28 | DJ192 29 | 0.0565 | 6 | 0.5797 | 133 | 0.0745 | 17 | 0.0226 | 7 | 470 | 23 | 464 | 9 | 463 | 10 | 451 | 14 | 1.55 |
| 29 | DJ192 30 | 0.0563 | 6 | 0.5753 | 74 | 0.0742 | 15 | 0.0220 | 4 | 462 | 22 | 461 | 5 | 461 | 9 | 439 | 8 | 0.22 |
| 30 | DJ192 31 | 0.0565 | 17 | 0.5826 | 333 | 0.0748 | 25 | 0.0366 | 30 | 472 | 63 | 466 | 21 | 465 | 15 | 726 | 59 | 1.46 |
| 31 | DJ192 32 | 0.0561 | 8 | 0.5647 | 184 | 0.0730 | 19 | 0.0211 | 11 | 458 | 31 | 455 | 12 | 454 | 11 | 421 | 22 | 0.79 |
| 32 | DJ192 33 | 0.0571 | 6 | 0.6192 | 146 | 0.0787 | 18 | 0.0271 | 8 | 495 | 24 | 489 | 9 | 488 | 11 | 539 | 16 | 1.45 |
| 33 | DJ192 34 | 0.0566 | 24 | 0.5786 | 442 | 0.0741 | 32 | 0.0261 | 32 | 477 | 87 | 464 | 28 | 461 | 19 | 522 | 64 | 3.44 |
| 34 | DJ192 35 | 0.0561 | 6 | 0.5645 | 146 | 0.0730 | 17 | 0.0221 | 9 | 456 | 24 | 454 | 9 | 454 | 10 | 441 | 18 | 0.3 |
| 35 | DJ192 36 | 0.0555 | 6 | 0.5352 | 142 | 0.0699 | 16 | 0.0213 | 9 | 434 | 27 | 435 | 9 | 436 | 10 | 427 | 18 | -0.36 |
| 36 | DJ192 37 | 0.0560 | 14 | 0.5419 | 259 | 0.0702 | 21 | 0.0253 | 17 | 452 | 50 | 440 | 17 | 437 | 13 | 504 | 33 | 3.45 |
| 37 | DJ192 38 | 0.0561 | 7 | 0.5593 | 148 | 0.0723 | 17 | 0.0213 | 7 | 456 | 24 | 451 | 10 | 450 | 10 | 427 | 14 | 1.31 |
| 38 | DJ192 40 | 0.0559 | 5 | 0.5576 | 106 | 0.0723 | 16 | 0.0214 | 6 | 450 | 19 | 450 | 7 | 450 | 9 | 428 | 12 | -0.09 |

| Analysis No. | | Ratios | | | | | | | | | | Age (Ma) | | | | | | Disc* (%) |
|--------------|----------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 39 | DJ192 41 | 0.0561 | 5 | 0.5633 | 111 | 0.0729 | 16 | 0.0235 | 7 | 455 | 21 | 454 | 7 | 454 | 9 | 469 | 13 | 0.29 |
| 40 | DJ192 42 | 0.0561 | 11 | 0.5664 | 233 | 0.0733 | 21 | 0.0234 | 16 | 455 | 42 | 456 | 15 | 456 | 12 | 467 | 31 | -0.25 |
| 41 | DJ192 43 | 0.0565 | 9 | 0.5855 | 203 | 0.0751 | 19 | 0.0233 | 14 | 473 | 37 | 468 | 13 | 467 | 12 | 465 | 27 | 1.39 |
| 42 | DJ192 44 | 0.0561 | 9 | 0.5641 | 190 | 0.0730 | 19 | 0.0190 | 9 | 456 | 39 | 454 | 12 | 454 | 11 | 380 | 18 | 0.36 |
| 43 | DJ192 45 | 0.0573 | 6 | 0.6326 | 155 | 0.0801 | 18 | 0.0259 | 8 | 502 | 25 | 498 | 10 | 497 | 11 | 516 | 15 | 0.97 |
| 44 | DJ192 46 | 0.0560 | 5 | 0.5621 | 106 | 0.0728 | 16 | 0.0201 | 6 | 452 | 21 | 453 | 7 | 453 | 9 | 402 | 12 | -0.15 |
| 45 | DJ192 47 | 0.0563 | 7 | 0.5737 | 163 | 0.0739 | 18 | 0.0222 | 8 | 465 | 28 | 460 | 11 | 460 | 11 | 443 | 16 | 1.33 |
| 46 | DJ192 48 | 0.0564 | 5 | 0.5819 | 112 | 0.0749 | 16 | 0.0209 | 8 | 468 | 21 | 466 | 7 | 465 | 10 | 418 | 15 | 0.66 |
| 47 | DJ192 49 | 0.0555 | 5 | 0.5321 | 116 | 0.0695 | 15 | 0.0200 | 5 | 433 | 20 | 433 | 8 | 433 | 9 | 400 | 10 | 0 |
| 48 | DJ192 50 | 0.0556 | 8 | 0.5268 | 171 | 0.0688 | 17 | 0.0224 | 11 | 435 | 31 | 430 | 11 | 429 | 10 | 448 | 22 | 1.56 |
| 49 | DJ192 51 | 0.0562 | 6 | 0.5797 | 134 | 0.0748 | 17 | 0.0235 | 9 | 462 | 24 | 464 | 9 | 465 | 10 | 470 | 18 | -0.66 |
| 50 | DJ192 52 | 0.0556 | 5 | 0.5442 | 96 | 0.0710 | 15 | 0.0202 | 6 | 438 | 21 | 441 | 6 | 442 | 9 | 405 | 12 | -1.01 |
| 51 | DJ192 53 | 0.0557 | 5 | 0.5397 | 85 | 0.0703 | 15 | 0.0205 | 5 | 439 | 19 | 438 | 6 | 438 | 9 | 410 | 9 | 0.28 |
| 52 | DJ192 54 | 0.0558 | 5 | 0.5472 | 84 | 0.0711 | 15 | 0.0214 | 5 | 446 | 24 | 443 | 6 | 443 | 9 | 428 | 9 | 0.68 |
| 53 | DJ192 55 | 0.0572 | 7 | 0.6115 | 173 | 0.0776 | 19 | 0.0230 | 10 | 497 | 28 | 484 | 11 | 482 | 11 | 459 | 20 | 3.25 |
| 54 | DJ192 56 | 0.0567 | 5 | 0.5996 | 114 | 0.0768 | 17 | 0.0233 | 6 | 479 | 21 | 477 | 7 | 477 | 10 | 466 | 12 | 0.45 |
| 55 | DJ192 57 | 0.0567 | 7 | 0.6103 | 64 | 0.0781 | 16 | 0.0225 | 3 | 481 | 26 | 484 | 4 | 485 | 9 | 449 | 7 | -0.71 |
| 56 | DJ192 58 | 0.0559 | 9 | 0.5507 | 192 | 0.0715 | 19 | 0.0218 | 10 | 448 | 34 | 445 | 13 | 445 | 11 | 436 | 20 | 0.59 |
| 57 | DJ192 59 | 0.0559 | 5 | 0.5584 | 111 | 0.0726 | 16 | 0.0215 | 7 | 446 | 20 | 450 | 7 | 452 | 9 | 431 | 13 | -1.13 |
| 58 | DJ192 60 | 0.0569 | 10 | 0.6134 | 222 | 0.0782 | 21 | 0.0214 | 14 | 488 | 37 | 486 | 14 | 485 | 12 | 427 | 28 | 0.7 |
| 59 | DJ192 61 | 0.0558 | 7 | 0.5449 | 151 | 0.0709 | 17 | 0.0202 | 8 | 444 | 27 | 442 | 10 | 441 | 10 | 404 | 16 | 0.77 |
| 60 | DJ192 62 | 0.0558 | 5 | 0.5429 | 105 | 0.0706 | 15 | 0.0222 | 6 | 444 | 22 | 440 | 7 | 440 | 9 | 444 | 12 | 1.03 |
| 61 | DJ192 63 | 0.0566 | 7 | 0.5863 | 171 | 0.0752 | 18 | 0.0239 | 12 | 476 | 29 | 469 | 11 | 467 | 11 | 477 | 24 | 1.96 |
| 62 | DJ192 64 | 0.0560 | 6 | 0.5669 | 138 | 0.0734 | 17 | 0.0253 | 10 | 454 | 24 | 456 | 9 | 457 | 10 | 504 | 21 | -0.56 |
| 63 | DJ192 65 | 0.0562 | 5 | 0.5738 | 108 | 0.0741 | 16 | 0.0228 | 7 | 461 | 21 | 460 | 7 | 461 | 10 | 455 | 13 | 0.06 |
| 64 | DJ192 66 | 0.0559 | 6 | 0.5557 | 66 | 0.0722 | 15 | 0.0215 | 4 | 447 | 24 | 449 | 4 | 449 | 9 | 429 | 7 | -0.52 |
| 65 | DJ192 67 | 0.0559 | 5 | 0.5561 | 114 | 0.0722 | 16 | 0.0244 | 8 | 448 | 22 | 449 | 7 | 449 | 9 | 486 | 16 | -0.26 |
| 66 | DJ192 68 | 0.0570 | 5 | 0.6165 | 116 | 0.0785 | 17 | 0.0245 | 7 | 490 | 20 | 488 | 7 | 487 | 10 | 489 | 15 | 0.61 |

DJ15 (n=62)

| | | | | | | | | | | | | | | | | | | |
|----|---------|--------|----|--------|-----|--------|----|--------|----|-----|-----|-----|----|-----|----|-----|----|-------|
| 1 | DJ15 01 | 0.0530 | 24 | 0.3752 | 291 | 0.0513 | 21 | 0.0188 | 20 | 330 | 109 | 323 | 21 | 322 | 13 | 377 | 39 | 2.34 |
| 2 | DJ15 02 | 0.0527 | 26 | 0.3507 | 297 | 0.0482 | 21 | 0.0151 | 9 | 317 | 105 | 305 | 22 | 304 | 13 | 303 | 17 | 4.21 |
| 3 | DJ15 03 | 0.0526 | 9 | 0.3664 | 122 | 0.0505 | 11 | 0.0162 | 4 | 312 | 38 | 317 | 9 | 318 | 7 | 324 | 9 | -1.68 |
| 4 | DJ15 04 | 0.0530 | 4 | 0.3834 | 72 | 0.0524 | 9 | 0.0161 | 3 | 331 | 21 | 330 | 5 | 329 | 6 | 322 | 7 | 0.34 |
| 5 | DJ15 05 | 0.0551 | 8 | 0.5054 | 152 | 0.0666 | 14 | 0.0210 | 7 | 415 | 32 | 415 | 10 | 415 | 8 | 420 | 14 | -0.08 |
| 6 | DJ15 06 | 0.0525 | 4 | 0.3555 | 63 | 0.0491 | 9 | 0.0150 | 3 | 308 | 17 | 309 | 5 | 309 | 5 | 301 | 6 | -0.45 |
| 7 | DJ15 07 | 0.0534 | 9 | 0.4022 | 129 | 0.0546 | 12 | 0.0183 | 6 | 347 | 38 | 343 | 9 | 343 | 7 | 366 | 12 | 1.17 |
| 8 | DJ15 08 | 0.0562 | 45 | 0.5789 | 788 | 0.0747 | 51 | 0.0165 | 40 | 459 | 172 | 464 | 51 | 465 | 31 | 331 | 79 | -1.15 |
| 9 | DJ15 09 | 0.0526 | 17 | 0.3624 | 206 | 0.0500 | 16 | 0.0134 | 10 | 310 | 73 | 314 | 15 | 315 | 10 | 269 | 19 | -1.55 |
| 10 | DJ15 10 | 0.0530 | 7 | 0.3838 | 104 | 0.0525 | 11 | 0.0160 | 5 | 328 | 29 | 330 | 8 | 330 | 6 | 320 | 9 | -0.83 |
| 11 | DJ15 11 | 0.0527 | 7 | 0.3671 | 108 | 0.0505 | 10 | 0.0151 | 5 | 318 | 31 | 318 | 8 | 317 | 6 | 304 | 10 | 0.04 |
| 12 | DJ15 12 | 0.0529 | 6 | 0.3749 | 91 | 0.0514 | 10 | 0.0155 | 4 | 324 | 25 | 323 | 7 | 323 | 6 | 310 | 8 | 0.29 |
| 13 | DJ15 13 | 0.0533 | 15 | 0.4023 | 207 | 0.0548 | 16 | 0.0205 | 11 | 341 | 58 | 343 | 15 | 344 | 10 | 409 | 22 | -0.9 |
| 14 | DJ15 16 | 0.0535 | 8 | 0.4098 | 123 | 0.0555 | 12 | 0.0177 | 6 | 350 | 31 | 349 | 9 | 348 | 7 | 354 | 11 | 0.59 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|--------------|---------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 15 | DJ15 17 | 0.0524 | 18 | 0.3513 | 209 | 0.0486 | 15 | 0.0155 | 8 | 303 | 82 | 306 | 16 | 306 | 9 | 311 | 16 | -0.89 |
| 16 | DJ15 19 | 0.0527 | 6 | 0.3695 | 91 | 0.0508 | 10 | 0.0164 | 4 | 316 | 25 | 319 | 7 | 320 | 6 | 328 | 9 | -1.24 |
| 17 | DJ15 20 | 0.0539 | 10 | 0.4366 | 156 | 0.0588 | 13 | 0.0178 | 7 | 366 | 44 | 368 | 11 | 368 | 8 | 356 | 14 | -0.73 |
| 18 | DJ15 22 | 0.0531 | 5 | 0.3865 | 74 | 0.0528 | 9 | 0.0163 | 3 | 331 | 20 | 332 | 5 | 332 | 6 | 326 | 6 | -0.31 |
| 19 | DJ15 23 | 0.0527 | 24 | 0.3716 | 293 | 0.0512 | 21 | 0.0185 | 16 | 315 | 104 | 321 | 22 | 322 | 13 | 370 | 31 | -2.32 |
| 20 | DJ15 24 | 0.0538 | 24 | 0.4153 | 306 | 0.0560 | 20 | 0.0233 | 17 | 362 | 92 | 353 | 22 | 351 | 12 | 466 | 34 | 3.13 |
| 21 | DJ15 27 | 0.0530 | 6 | 0.3839 | 101 | 0.0526 | 10 | 0.0167 | 5 | 327 | 28 | 330 | 7 | 330 | 6 | 335 | 10 | -1.16 |
| 22 | DJ15 28 | 0.0546 | 20 | 0.4698 | 300 | 0.0624 | 22 | 0.0239 | 18 | 394 | 80 | 391 | 21 | 390 | 13 | 477 | 36 | 0.97 |
| 23 | DJ15 29 | 0.0556 | 32 | 0.5264 | 515 | 0.0687 | 33 | 0.0254 | 30 | 436 | 134 | 429 | 34 | 428 | 20 | 508 | 60 | 1.75 |
| 24 | DJ15 30 | 0.0526 | 4 | 0.3588 | 54 | 0.0495 | 8 | 0.0154 | 3 | 312 | 16 | 311 | 4 | 311 | 5 | 309 | 5 | 0.11 |
| 25 | DJ15 32 | 0.0526 | 7 | 0.3615 | 98 | 0.0498 | 10 | 0.0139 | 4 | 313 | 29 | 313 | 7 | 313 | 6 | 278 | 8 | -0.18 |
| 26 | DJ15 34 | 0.0527 | 7 | 0.3604 | 106 | 0.0496 | 10 | 0.0154 | 4 | 314 | 28 | 313 | 8 | 312 | 6 | 309 | 8 | 0.62 |
| 27 | DJ15 35 | 0.0527 | 40 | 0.3709 | 471 | 0.0510 | 31 | 0.0269 | 36 | 317 | 182 | 320 | 35 | 321 | 19 | 536 | 71 | -1.32 |
| 28 | DJ15 36 | 0.0530 | 28 | 0.3694 | 331 | 0.0505 | 23 | 0.0157 | 11 | 329 | 121 | 319 | 25 | 318 | 14 | 315 | 21 | 3.4 |
| 29 | DJ15 37 | 0.0524 | 15 | 0.3487 | 177 | 0.0483 | 13 | 0.0151 | 8 | 302 | 67 | 304 | 13 | 304 | 8 | 303 | 15 | -0.5 |
| 30 | DJ15 38 | 0.0530 | 8 | 0.3805 | 114 | 0.0521 | 11 | 0.0176 | 6 | 329 | 31 | 327 | 8 | 327 | 7 | 352 | 13 | 0.49 |
| 31 | DJ15 39 | 0.0539 | 15 | 0.4322 | 216 | 0.0581 | 17 | 0.0177 | 9 | 367 | 64 | 365 | 15 | 364 | 10 | 354 | 19 | 0.7 |
| 32 | DJ15 40 | 0.0530 | 5 | 0.3807 | 77 | 0.0521 | 10 | 0.0168 | 3 | 328 | 20 | 328 | 6 | 328 | 6 | 336 | 6 | -0.02 |
| 33 | DJ15 41 | 0.0556 | 10 | 0.5331 | 182 | 0.0696 | 15 | 0.0219 | 9 | 435 | 38 | 434 | 12 | 434 | 9 | 438 | 18 | 0.28 |
| 34 | DJ15 42 | 0.0533 | 17 | 0.3973 | 224 | 0.0541 | 16 | 0.0150 | 8 | 341 | 74 | 340 | 16 | 339 | 10 | 301 | 16 | 0.52 |
| 35 | DJ15 43 | 0.0528 | 5 | 0.3711 | 76 | 0.0510 | 9 | 0.0152 | 3 | 321 | 21 | 320 | 6 | 320 | 6 | 305 | 6 | 0.22 |
| 36 | DJ15 44 | 0.0532 | 16 | 0.3921 | 212 | 0.0535 | 16 | 0.0138 | 8 | 336 | 66 | 336 | 15 | 336 | 10 | 276 | 15 | -0.08 |
| 37 | DJ15 45 | 0.0558 | 14 | 0.5515 | 259 | 0.0716 | 20 | 0.0217 | 16 | 446 | 55 | 446 | 17 | 446 | 12 | 434 | 31 | 0.02 |
| 38 | DJ15 46 | 0.0526 | 17 | 0.3569 | 199 | 0.0492 | 15 | 0.0180 | 13 | 310 | 70 | 310 | 15 | 310 | 9 | 360 | 25 | -0.02 |
| 39 | DJ15 47 | 0.0532 | 23 | 0.3988 | 295 | 0.0543 | 21 | 0.0186 | 13 | 339 | 97 | 341 | 21 | 341 | 13 | 372 | 26 | -0.75 |
| 40 | DJ15 48 | 0.0525 | 13 | 0.3594 | 161 | 0.0497 | 13 | 0.0139 | 6 | 306 | 57 | 312 | 12 | 313 | 8 | 279 | 11 | -2.37 |
| 41 | DJ15 49 | 0.0530 | 5 | 0.3810 | 74 | 0.0521 | 9 | 0.0161 | 3 | 328 | 19 | 328 | 5 | 328 | 6 | 323 | 7 | 0.06 |
| 42 | DJ15 50 | 0.0530 | 8 | 0.3779 | 115 | 0.0518 | 11 | 0.0140 | 5 | 327 | 34 | 325 | 8 | 325 | 7 | 282 | 10 | 0.42 |
| 43 | DJ15 51 | 0.0541 | 6 | 0.4496 | 103 | 0.0602 | 12 | 0.0195 | 5 | 377 | 23 | 377 | 7 | 377 | 7 | 391 | 10 | -0.03 |
| 44 | DJ15 52 | 0.0526 | 7 | 0.3560 | 98 | 0.0491 | 10 | 0.0162 | 7 | 310 | 29 | 309 | 7 | 309 | 6 | 325 | 14 | 0.4 |
| 45 | DJ15 53 | 0.0553 | 4 | 0.5169 | 74 | 0.0678 | 12 | 0.0211 | 3 | 424 | 16 | 423 | 5 | 423 | 7 | 421 | 7 | 0.13 |
| 46 | DJ15 55 | 0.0553 | 7 | 0.5202 | 147 | 0.0682 | 14 | 0.0214 | 7 | 424 | 28 | 425 | 10 | 426 | 9 | 428 | 13 | -0.5 |
| 47 | DJ15 56 | 0.0558 | 15 | 0.5508 | 271 | 0.0716 | 20 | 0.0246 | 14 | 443 | 59 | 446 | 18 | 446 | 12 | 490 | 27 | -0.75 |
| 48 | DJ15 57 | 0.0525 | 9 | 0.3593 | 120 | 0.0496 | 11 | 0.0167 | 6 | 309 | 38 | 312 | 9 | 312 | 7 | 334 | 11 | -1.18 |
| 49 | DJ15 58 | 0.0553 | 10 | 0.5052 | 174 | 0.0663 | 15 | 0.0205 | 8 | 424 | 38 | 415 | 12 | 414 | 9 | 409 | 15 | 2.41 |
| 50 | DJ15 59 | 0.0530 | 5 | 0.3839 | 80 | 0.0525 | 10 | 0.0162 | 3 | 328 | 20 | 330 | 6 | 330 | 6 | 324 | 7 | -0.53 |
| 51 | DJ15 61 | 0.0558 | 7 | 0.5426 | 148 | 0.0706 | 15 | 0.0195 | 7 | 443 | 28 | 440 | 10 | 439 | 9 | 390 | 13 | 0.87 |
| 52 | DJ15 62 | 0.0531 | 5 | 0.3861 | 87 | 0.0527 | 10 | 0.0145 | 4 | 333 | 22 | 332 | 6 | 331 | 6 | 292 | 7 | 0.39 |
| 53 | DJ15 63 | 0.0545 | 29 | 0.4919 | 339 | 0.0655 | 15 | 0.0205 | 4 | 390 | 126 | 406 | 23 | 409 | 9 | 409 | 8 | -4.91 |
| 54 | DJ15 64 | 0.0532 | 13 | 0.3982 | 186 | 0.0542 | 15 | 0.0189 | 10 | 338 | 57 | 340 | 14 | 341 | 9 | 379 | 20 | -0.74 |
| 55 | DJ15 65 | 0.0525 | 4 | 0.3525 | 63 | 0.0487 | 9 | 0.0145 | 3 | 306 | 19 | 307 | 5 | 307 | 5 | 291 | 5 | -0.07 |
| 56 | DJ15 66 | 0.0527 | 5 | 0.3650 | 74 | 0.0502 | 9 | 0.0153 | 3 | 318 | 20 | 316 | 5 | 316 | 6 | 307 | 6 | 0.62 |
| 57 | DJ15 67 | 0.0552 | 15 | 0.5184 | 258 | 0.0681 | 20 | 0.0238 | 14 | 419 | 63 | 424 | 17 | 425 | 12 | 475 | 27 | -1.57 |
| 58 | DJ15 68 | 0.0527 | 5 | 0.3600 | 82 | 0.0496 | 9 | 0.0144 | 3 | 314 | 22 | 312 | 6 | 312 | 6 | 288 | 6 | 0.56 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|---------------------|----------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 59 | DJ15 69 | 0.0530 | 15 | 0.3810 | 195 | 0.0521 | 15 | 0.0142 | 9 | 330 | 62 | 328 | 14 | 327 | 9 | 286 | 17 | 0.82 |
| 60 | DJ15 70 | 0.0555 | 9 | 0.5315 | 168 | 0.0694 | 15 | 0.0230 | 10 | 433 | 33 | 433 | 11 | 433 | 9 | 459 | 19 | 0.13 |
| 61 | DJ15 72 | 0.0550 | 15 | 0.4992 | 242 | 0.0658 | 18 | 0.0225 | 12 | 412 | 66 | 411 | 16 | 411 | 11 | 450 | 24 | 0.31 |
| 62 | DJ15 73 | 0.0535 | 12 | 0.4069 | 177 | 0.0552 | 14 | 0.0184 | 10 | 349 | 52 | 347 | 13 | 346 | 9 | 369 | 19 | 0.88 |
| DJ149 (n=50) | | | | | | | | | | | | | | | | | | |
| 1 | DJ149 01 | 0.0546 | 6 | 0.4638 | 117 | 0.0616 | 14 | 0.0179 | 5 | 395 | 25 | 387 | 8 | 385 | 9 | 359 | 11 | 2.62 |
| 2 | DJ149 02 | 0.0543 | 7 | 0.4674 | 130 | 0.0625 | 15 | 0.0203 | 7 | 382 | 31 | 389 | 9 | 391 | 9 | 405 | 13 | -2.25 |
| 3 | DJ149 03 | 0.0559 | 25 | 0.5214 | 409 | 0.0677 | 29 | 0.0254 | 22 | 446 | 94 | 426 | 27 | 422 | 17 | 507 | 43 | 5.57 |
| 4 | DJ149 04 | 0.0575 | 26 | 0.6121 | 505 | 0.0772 | 36 | 0.0263 | 22 | 510 | 103 | 485 | 32 | 480 | 21 | 525 | 44 | 6.09 |
| 5 | DJ149 06 | 0.0553 | 16 | 0.5162 | 279 | 0.0677 | 22 | 0.0208 | 11 | 426 | 63 | 423 | 19 | 422 | 14 | 416 | 22 | 0.85 |
| 6 | DJ149 07 | 0.0557 | 27 | 0.5482 | 470 | 0.0714 | 33 | 0.0262 | 28 | 441 | 99 | 444 | 31 | 444 | 20 | 523 | 56 | -0.84 |
| 7 | DJ149 09 | 0.0544 | 20 | 0.4894 | 324 | 0.0652 | 25 | 0.0184 | 13 | 389 | 93 | 405 | 22 | 407 | 15 | 368 | 25 | -4.74 |
| 8 | DJ149 10 | 0.0547 | 7 | 0.4853 | 134 | 0.0644 | 16 | 0.0184 | 6 | 398 | 27 | 402 | 9 | 402 | 9 | 368 | 11 | -1.01 |
| 9 | DJ149 11 | 0.0550 | 9 | 0.5012 | 180 | 0.0661 | 18 | 0.0191 | 9 | 410 | 38 | 412 | 12 | 413 | 11 | 383 | 17 | -0.68 |
| 10 | DJ149 12 | 0.0547 | 25 | 0.5109 | 412 | 0.0677 | 30 | 0.0261 | 24 | 401 | 98 | 419 | 28 | 422 | 18 | 521 | 46 | -5.44 |
| 11 | DJ149 13 | 0.0547 | 8 | 0.4807 | 151 | 0.0637 | 16 | 0.0186 | 7 | 401 | 33 | 399 | 10 | 398 | 10 | 372 | 14 | 0.8 |
| 12 | DJ149 14 | 0.0559 | 15 | 0.5207 | 267 | 0.0676 | 22 | 0.0210 | 13 | 448 | 55 | 426 | 18 | 421 | 13 | 421 | 26 | 6.21 |
| 13 | DJ149 15 | 0.0547 | 10 | 0.4834 | 182 | 0.0641 | 17 | 0.0194 | 8 | 401 | 35 | 400 | 12 | 400 | 10 | 387 | 16 | 0.24 |
| 14 | DJ149 16 | 0.0545 | 6 | 0.4742 | 120 | 0.0631 | 15 | 0.0171 | 5 | 393 | 25 | 394 | 8 | 394 | 9 | 343 | 10 | -0.46 |
| 15 | DJ149 18 | 0.0543 | 8 | 0.4628 | 155 | 0.0618 | 16 | 0.0162 | 6 | 383 | 36 | 386 | 11 | 387 | 10 | 325 | 12 | -1.11 |
| 16 | DJ149 19 | 0.0545 | 9 | 0.4599 | 168 | 0.0612 | 16 | 0.0174 | 8 | 391 | 40 | 384 | 12 | 383 | 10 | 349 | 15 | 1.95 |
| 17 | DJ149 20 | 0.0547 | 14 | 0.4856 | 246 | 0.0644 | 20 | 0.0171 | 11 | 400 | 64 | 402 | 17 | 402 | 12 | 343 | 21 | -0.58 |
| 18 | DJ149 21 | 0.0547 | 12 | 0.4706 | 203 | 0.0624 | 18 | 0.0209 | 10 | 401 | 49 | 392 | 14 | 392 | 11 | 418 | 21 | 2.88 |
| 19 | DJ149 22 | 0.0547 | 12 | 0.4732 | 208 | 0.0627 | 18 | 0.0203 | 9 | 402 | 47 | 393 | 14 | 392 | 11 | 407 | 17 | 2.48 |
| 20 | DJ149 23 | 0.0549 | 14 | 0.5001 | 247 | 0.0661 | 21 | 0.0199 | 12 | 406 | 56 | 412 | 17 | 413 | 12 | 399 | 24 | -1.69 |
| 21 | DJ149 24 | 0.0551 | 16 | 0.4982 | 268 | 0.0656 | 22 | 0.0183 | 11 | 417 | 60 | 410 | 18 | 409 | 13 | 367 | 22 | 1.82 |
| 22 | DJ149 25 | 0.0546 | 8 | 0.4752 | 153 | 0.0632 | 16 | 0.0194 | 8 | 394 | 32 | 395 | 11 | 395 | 10 | 388 | 15 | -0.28 |
| 23 | DJ149 26 | 0.0547 | 8 | 0.4937 | 152 | 0.0655 | 16 | 0.0188 | 7 | 400 | 31 | 407 | 10 | 409 | 10 | 377 | 14 | -2.14 |
| 24 | DJ149 27 | 0.0550 | 19 | 0.4809 | 302 | 0.0635 | 23 | 0.0193 | 15 | 411 | 80 | 399 | 21 | 397 | 14 | 387 | 29 | 3.75 |
| 25 | DJ149 28 | 0.0551 | 15 | 0.5160 | 275 | 0.0679 | 22 | 0.0190 | 13 | 418 | 59 | 422 | 18 | 423 | 13 | 380 | 26 | -1.34 |
| 26 | DJ149 29 | 0.0547 | 13 | 0.4694 | 217 | 0.0622 | 19 | 0.0181 | 9 | 401 | 52 | 391 | 15 | 389 | 11 | 363 | 17 | 3.01 |
| 27 | DJ149 30 | 0.0549 | 7 | 0.4953 | 146 | 0.0654 | 16 | 0.0189 | 7 | 409 | 29 | 409 | 10 | 409 | 10 | 378 | 13 | 0.01 |
| 28 | DJ149 31 | 0.0545 | 8 | 0.4739 | 148 | 0.0631 | 16 | 0.0189 | 7 | 392 | 33 | 394 | 10 | 394 | 9 | 377 | 14 | -0.66 |
| 29 | DJ149 32 | 0.0541 | 14 | 0.4439 | 226 | 0.0595 | 19 | 0.0168 | 9 | 375 | 64 | 373 | 16 | 373 | 11 | 338 | 17 | 0.57 |
| 30 | DJ149 34 | 0.0562 | 27 | 0.5559 | 466 | 0.0718 | 33 | 0.0191 | 14 | 459 | 110 | 449 | 30 | 447 | 20 | 381 | 29 | 2.76 |
| 31 | DJ149 35 | 0.0550 | 7 | 0.4952 | 144 | 0.0653 | 16 | 0.0174 | 6 | 413 | 28 | 408 | 10 | 408 | 10 | 348 | 12 | 1.47 |
| 32 | DJ149 36 | 0.0551 | 13 | 0.5123 | 245 | 0.0675 | 21 | 0.0187 | 10 | 415 | 53 | 420 | 16 | 421 | 12 | 374 | 19 | -1.58 |
| 33 | DJ149 37 | 0.0559 | 26 | 0.5431 | 448 | 0.0706 | 31 | 0.0225 | 19 | 447 | 107 | 440 | 29 | 440 | 19 | 450 | 37 | 1.74 |
| 34 | DJ149 38 | 0.0552 | 9 | 0.4862 | 168 | 0.0639 | 17 | 0.0183 | 7 | 421 | 34 | 402 | 11 | 399 | 10 | 367 | 15 | 5.3 |
| 35 | DJ149 39 | 0.0555 | 19 | 0.4999 | 312 | 0.0654 | 24 | 0.0190 | 13 | 431 | 74 | 412 | 21 | 409 | 14 | 380 | 26 | 5.41 |
| 36 | DJ149 40 | 0.0547 | 22 | 0.5014 | 359 | 0.0666 | 26 | 0.0190 | 17 | 399 | 95 | 413 | 24 | 415 | 16 | 380 | 33 | -4.12 |
| 37 | DJ149 41 | 0.0547 | 7 | 0.4738 | 134 | 0.0628 | 15 | 0.0174 | 6 | 401 | 29 | 394 | 9 | 393 | 9 | 349 | 12 | 2.23 |
| 38 | DJ149 43 | 0.0553 | 12 | 0.5112 | 218 | 0.0671 | 19 | 0.0249 | 13 | 424 | 46 | 419 | 15 | 419 | 12 | 496 | 25 | 1.24 |

| Analysis No. | | Ratios | | | | | | | | | | Age (Ma) | | | | | | Disc* (%) |
|---------------------|----------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 39 | DJ149 44 | 0.0546 | 27 | 0.4822 | 412 | 0.0642 | 28 | 0.0205 | 18 | 394 | 110 | 400 | 28 | 401 | 17 | 410 | 36 | -1.77 |
| 40 | DJ149 45 | 0.0565 | 21 | 0.5444 | 369 | 0.0700 | 27 | 0.0190 | 17 | 471 | 82 | 441 | 24 | 436 | 16 | 380 | 34 | 7.83 |
| 41 | DJ149 46 | 0.0557 | 25 | 0.5619 | 434 | 0.0732 | 30 | 0.0237 | 19 | 441 | 99 | 453 | 28 | 456 | 18 | 472 | 37 | -3.35 |
| 42 | DJ149 47 | 0.0557 | 41 | 0.4970 | 622 | 0.0647 | 41 | 0.0186 | 24 | 442 | 172 | 410 | 42 | 404 | 25 | 373 | 47 | 8.89 |
| 43 | DJ149 48 | 0.0549 | 20 | 0.4840 | 316 | 0.0640 | 24 | 0.0174 | 13 | 409 | 84 | 401 | 22 | 400 | 14 | 348 | 26 | 2.52 |
| 44 | DJ149 50 | 0.0543 | 12 | 0.4611 | 197 | 0.0617 | 17 | 0.0173 | 9 | 383 | 46 | 385 | 14 | 386 | 11 | 346 | 18 | -0.6 |
| 45 | DJ149 51 | 0.0554 | 14 | 0.4925 | 244 | 0.0646 | 20 | 0.0211 | 11 | 428 | 54 | 407 | 17 | 403 | 12 | 422 | 22 | 5.95 |
| 46 | DJ149 52 | 0.0539 | 23 | 0.4522 | 341 | 0.0609 | 25 | 0.0215 | 17 | 368 | 91 | 379 | 24 | 381 | 15 | 430 | 33 | -3.63 |
| 47 | DJ149 53 | 0.0542 | 15 | 0.4736 | 245 | 0.0635 | 20 | 0.0247 | 13 | 377 | 64 | 394 | 17 | 397 | 12 | 493 | 26 | -5.24 |
| 48 | DJ149 54 | 0.0541 | 13 | 0.4472 | 206 | 0.0601 | 18 | 0.0171 | 10 | 374 | 49 | 375 | 14 | 376 | 11 | 343 | 19 | -0.43 |
| 49 | DJ149 56 | 0.0543 | 20 | 0.4823 | 313 | 0.0645 | 23 | 0.0168 | 14 | 383 | 91 | 400 | 21 | 403 | 14 | 336 | 28 | -5.36 |
| 50 | DJ149 57 | 0.0552 | 15 | 0.4713 | 246 | 0.0621 | 19 | 0.0186 | 11 | 419 | 57 | 392 | 17 | 388 | 12 | 372 | 22 | 7.67 |
| DJ325 (n=48) | | | | | | | | | | | | | | | | | | |
| 1 | DJ325 01 | 0.0555 | 26 | 0.5230 | 360 | 0.0683 | 18 | 0.0180 | 8 | 434 | 108 | 427 | 24 | 426 | 11 | 361 | 16 | 1.93 |
| 2 | DJ325 02 | 0.0553 | 32 | 0.5237 | 433 | 0.0686 | 20 | 0.0225 | 15 | 426 | 140 | 428 | 29 | 428 | 12 | 450 | 29 | -0.47 |
| 3 | DJ325 03 | 0.0554 | 16 | 0.5263 | 254 | 0.0688 | 16 | 0.0206 | 8 | 430 | 62 | 429 | 17 | 429 | 10 | 413 | 16 | 0.18 |
| 4 | DJ325 04 | 0.0554 | 10 | 0.5269 | 185 | 0.0690 | 15 | 0.0194 | 5 | 427 | 40 | 430 | 12 | 430 | 9 | 389 | 9 | -0.85 |
| 5 | DJ325 05 | 0.0553 | 13 | 0.5095 | 215 | 0.0668 | 15 | 0.0184 | 7 | 423 | 53 | 418 | 14 | 417 | 9 | 369 | 14 | 1.47 |
| 6 | DJ325 06 | 0.0550 | 7 | 0.5003 | 135 | 0.0659 | 14 | 0.0197 | 5 | 414 | 26 | 412 | 9 | 411 | 8 | 395 | 10 | 0.56 |
| 7 | DJ325 10 | 0.0550 | 7 | 0.4842 | 128 | 0.0639 | 14 | 0.0183 | 5 | 411 | 23 | 401 | 9 | 399 | 8 | 367 | 9 | 3.07 |
| 8 | DJ325 11 | 0.0549 | 46 | 0.4990 | 573 | 0.0659 | 24 | 0.0194 | 20 | 408 | 180 | 411 | 39 | 412 | 14 | 388 | 39 | -0.98 |
| 9 | DJ325 12 | 0.0551 | 20 | 0.5174 | 292 | 0.0681 | 17 | 0.0197 | 10 | 417 | 82 | 423 | 20 | 424 | 10 | 394 | 19 | -1.84 |
| 10 | DJ325 13 | 0.0551 | 7 | 0.5107 | 137 | 0.0672 | 14 | 0.0188 | 4 | 417 | 27 | 419 | 9 | 419 | 9 | 376 | 8 | -0.42 |
| 11 | DJ325 14 | 0.0552 | 32 | 0.5167 | 426 | 0.0679 | 20 | 0.0200 | 13 | 421 | 140 | 423 | 28 | 423 | 12 | 401 | 26 | -0.63 |
| 12 | DJ325 17 | 0.0544 | 22 | 0.4748 | 291 | 0.0633 | 16 | 0.0181 | 9 | 387 | 89 | 394 | 20 | 396 | 10 | 363 | 17 | -2.39 |
| 13 | DJ325 18 | 0.0553 | 18 | 0.5187 | 267 | 0.0681 | 16 | 0.0206 | 8 | 423 | 71 | 424 | 18 | 424 | 10 | 413 | 16 | -0.32 |
| 14 | DJ325 19 | 0.0546 | 30 | 0.4910 | 388 | 0.0652 | 19 | 0.0212 | 11 | 398 | 116 | 406 | 26 | 407 | 11 | 424 | 23 | -2.45 |
| 15 | DJ325 20 | 0.0551 | 11 | 0.5057 | 189 | 0.0666 | 15 | 0.0197 | 7 | 416 | 43 | 416 | 13 | 415 | 9 | 395 | 13 | 0.21 |
| 16 | DJ325 21 | 0.0551 | 5 | 0.5110 | 115 | 0.0672 | 14 | 0.0194 | 4 | 418 | 22 | 419 | 8 | 419 | 8 | 388 | 9 | -0.36 |
| 17 | DJ325 23 | 0.0560 | 52 | 0.5482 | 689 | 0.0711 | 27 | 0.0221 | 21 | 451 | 207 | 444 | 45 | 442 | 16 | 441 | 41 | 1.9 |
| 18 | DJ325 24 | 0.0550 | 16 | 0.5166 | 250 | 0.0681 | 16 | 0.0203 | 8 | 413 | 66 | 423 | 17 | 425 | 10 | 405 | 16 | -2.8 |
| 19 | DJ325 26 | 0.0563 | 42 | 0.5627 | 586 | 0.0725 | 25 | 0.0244 | 18 | 464 | 154 | 453 | 38 | 451 | 15 | 486 | 36 | 2.81 |
| 20 | DJ325 27 | 0.0557 | 20 | 0.5315 | 296 | 0.0692 | 17 | 0.0190 | 9 | 440 | 80 | 433 | 20 | 432 | 10 | 380 | 17 | 1.9 |
| 21 | DJ325 29 | 0.0554 | 9 | 0.5223 | 166 | 0.0684 | 15 | 0.0219 | 6 | 428 | 36 | 427 | 11 | 426 | 9 | 437 | 13 | 0.48 |
| 22 | DJ325 30 | 0.0554 | 26 | 0.5213 | 362 | 0.0682 | 18 | 0.0265 | 16 | 428 | 97 | 426 | 24 | 425 | 11 | 529 | 31 | 0.69 |
| 23 | DJ325 31 | 0.0553 | 12 | 0.5210 | 205 | 0.0683 | 15 | 0.0219 | 7 | 425 | 46 | 426 | 14 | 426 | 9 | 438 | 13 | -0.19 |
| 24 | DJ325 32 | 0.0555 | 7 | 0.5318 | 139 | 0.0695 | 15 | 0.0198 | 5 | 432 | 26 | 433 | 9 | 433 | 9 | 396 | 10 | -0.29 |
| 25 | DJ325 33 | 0.0557 | 7 | 0.5363 | 152 | 0.0699 | 15 | 0.0236 | 7 | 440 | 29 | 436 | 10 | 435 | 9 | 471 | 13 | 1.12 |
| 26 | DJ325 34 | 0.0558 | 15 | 0.5418 | 254 | 0.0705 | 17 | 0.0198 | 9 | 443 | 64 | 440 | 17 | 439 | 10 | 396 | 17 | 1 |
| 27 | DJ325 35 | 0.0559 | 14 | 0.5613 | 249 | 0.0728 | 17 | 0.0219 | 9 | 449 | 59 | 452 | 16 | 453 | 10 | 438 | 17 | -0.87 |
| 28 | DJ325 36 | 0.0556 | 11 | 0.5374 | 195 | 0.0700 | 15 | 0.0202 | 7 | 438 | 42 | 437 | 13 | 436 | 9 | 403 | 14 | 0.37 |
| 29 | DJ325 37 | 0.0553 | 16 | 0.5154 | 248 | 0.0676 | 16 | 0.0219 | 9 | 424 | 60 | 422 | 17 | 422 | 10 | 438 | 17 | 0.67 |
| 30 | DJ325 38 | 0.0560 | 11 | 0.5673 | 212 | 0.0735 | 16 | 0.0213 | 7 | 452 | 45 | 456 | 14 | 457 | 10 | 425 | 13 | -1.07 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|---------------------|----------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 31 | DJ325 39 | 0.0565 | 6 | 0.5824 | 138 | 0.0748 | 16 | 0.0221 | 6 | 470 | 23 | 466 | 9 | 465 | 9 | 442 | 11 | 1.09 |
| 32 | DJ325 40 | 0.0557 | 15 | 0.5418 | 247 | 0.0706 | 16 | 0.0223 | 9 | 440 | 61 | 440 | 16 | 440 | 10 | 445 | 17 | 0 |
| 33 | DJ325 41 | 0.0554 | 6 | 0.5191 | 53 | 0.0680 | 12 | 0.0214 | 3 | 428 | 24 | 425 | 4 | 424 | 7 | 429 | 7 | 0.87 |
| 34 | DJ325 42 | 0.0547 | 7 | 0.4776 | 139 | 0.0634 | 15 | 0.0186 | 6 | 399 | 32 | 396 | 10 | 396 | 9 | 372 | 12 | 0.84 |
| 35 | DJ325 43 | 0.0548 | 5 | 0.4917 | 83 | 0.0651 | 13 | 0.0175 | 4 | 405 | 20 | 406 | 6 | 406 | 8 | 351 | 8 | -0.23 |
| 36 | DJ325 44 | 0.0551 | 5 | 0.5055 | 79 | 0.0666 | 13 | 0.0197 | 4 | 416 | 17 | 415 | 5 | 415 | 8 | 394 | 8 | 0.25 |
| 37 | DJ325 47 | 0.0555 | 5 | 0.5309 | 87 | 0.0694 | 13 | 0.0196 | 5 | 432 | 18 | 432 | 6 | 433 | 8 | 392 | 9 | -0.23 |
| 38 | DJ325 49 | 0.0548 | 6 | 0.4909 | 112 | 0.0649 | 14 | 0.0210 | 6 | 406 | 23 | 406 | 8 | 406 | 8 | 420 | 12 | 0.05 |
| 39 | DJ325 50 | 0.0554 | 5 | 0.5198 | 72 | 0.0680 | 13 | 0.0195 | 3 | 429 | 18 | 425 | 5 | 424 | 8 | 390 | 6 | 1.2 |
| 40 | DJ325 50 | 0.0547 | 5 | 0.4822 | 77 | 0.0639 | 12 | 0.0171 | 4 | 400 | 19 | 400 | 5 | 400 | 7 | 342 | 7 | 0.13 |
| 41 | DJ325 51 | 0.0551 | 7 | 0.5062 | 137 | 0.0667 | 15 | 0.0229 | 10 | 416 | 27 | 416 | 9 | 416 | 9 | 457 | 19 | -0.01 |
| 42 | DJ325 52 | 0.0544 | 12 | 0.4648 | 201 | 0.0620 | 17 | 0.0176 | 8 | 386 | 52 | 388 | 14 | 388 | 10 | 352 | 15 | -0.62 |
| 43 | DJ325 53 | 0.0544 | 5 | 0.4653 | 86 | 0.0620 | 12 | 0.0165 | 3 | 388 | 21 | 388 | 6 | 388 | 7 | 331 | 7 | 0.03 |
| 44 | DJ325 54 | 0.0547 | 7 | 0.4717 | 131 | 0.0626 | 14 | 0.0194 | 8 | 398 | 29 | 392 | 9 | 391 | 8 | 388 | 15 | 1.68 |
| 45 | DJ325 55 | 0.0546 | 5 | 0.4780 | 56 | 0.0635 | 12 | 0.0164 | 2 | 397 | 21 | 397 | 4 | 397 | 7 | 328 | 5 | 0.12 |
| 46 | DJ325 56 | 0.0560 | 23 | 0.5769 | 424 | 0.0747 | 31 | 0.0267 | 25 | 454 | 96 | 462 | 27 | 464 | 18 | 533 | 49 | -2.44 |
| 47 | DJ325 58 | 0.0547 | 6 | 0.4829 | 115 | 0.0640 | 13 | 0.0182 | 5 | 399 | 24 | 400 | 8 | 400 | 8 | 364 | 10 | -0.28 |
| 48 | DJ325 59 | 0.0549 | 5 | 0.4978 | 95 | 0.0658 | 13 | 0.0182 | 4 | 408 | 18 | 410 | 6 | 410 | 8 | 365 | 8 | -0.61 |
| DJ329 (n=78) | | | | | | | | | | | | | | | | | | |
| 1 | DJ329 01 | 0.0534 | 10 | 0.4073 | 157 | 0.0553 | 14 | 0.0173 | 7 | 347 | 45 | 347 | 11 | 347 | 8 | 346 | 13 | -0.08 |
| 2 | DJ329 02 | 0.0527 | 6 | 0.3782 | 95 | 0.0520 | 12 | 0.0146 | 4 | 317 | 26 | 326 | 7 | 327 | 7 | 292 | 7 | -3.3 |
| 3 | DJ329 03 | 0.0528 | 7 | 0.3600 | 111 | 0.0494 | 12 | 0.0141 | 5 | 322 | 30 | 312 | 8 | 311 | 7 | 283 | 11 | 3.51 |
| 4 | DJ329 04 | 0.0533 | 6 | 0.3943 | 100 | 0.0537 | 12 | 0.0154 | 4 | 339 | 27 | 337 | 7 | 337 | 8 | 308 | 8 | 0.69 |
| 5 | DJ329 05 | 0.0535 | 7 | 0.4158 | 129 | 0.0564 | 14 | 0.0172 | 7 | 348 | 29 | 353 | 9 | 354 | 9 | 344 | 13 | -1.72 |
| 6 | DJ329 06 | 0.0529 | 18 | 0.3715 | 227 | 0.0509 | 18 | 0.0166 | 12 | 325 | 74 | 321 | 17 | 320 | 11 | 332 | 23 | 1.64 |
| 7 | DJ329 07 | 0.0538 | 5 | 0.4258 | 80 | 0.0574 | 13 | 0.0167 | 4 | 361 | 21 | 360 | 6 | 360 | 8 | 334 | 8 | 0.4 |
| 8 | DJ329 08 | 0.0533 | 6 | 0.4017 | 48 | 0.0547 | 11 | 0.0156 | 3 | 341 | 24 | 343 | 3 | 343 | 7 | 312 | 5 | -0.73 |
| 9 | DJ329 09 | 0.0531 | 5 | 0.3874 | 60 | 0.0528 | 11 | 0.0155 | 3 | 335 | 24 | 332 | 4 | 332 | 7 | 310 | 6 | 0.82 |
| 10 | DJ329 10 | 0.0536 | 5 | 0.4115 | 88 | 0.0557 | 12 | 0.0175 | 4 | 353 | 24 | 350 | 6 | 349 | 8 | 350 | 8 | 0.9 |
| 11 | DJ329 12 | 0.0531 | 6 | 0.3782 | 97 | 0.0516 | 12 | 0.0143 | 4 | 334 | 26 | 326 | 7 | 324 | 7 | 286 | 8 | 2.89 |
| 12 | DJ329 13 | 0.0529 | 5 | 0.3716 | 57 | 0.0510 | 11 | 0.0145 | 3 | 322 | 21 | 321 | 4 | 321 | 7 | 290 | 6 | 0.55 |
| 13 | DJ329 14 | 0.0526 | 5 | 0.3667 | 70 | 0.0505 | 11 | 0.0155 | 4 | 313 | 23 | 317 | 5 | 318 | 7 | 311 | 7 | -1.44 |
| 14 | DJ329 15 | 0.0537 | 5 | 0.4246 | 78 | 0.0573 | 12 | 0.0164 | 4 | 358 | 20 | 359 | 6 | 359 | 8 | 329 | 8 | -0.42 |
| 15 | DJ329 16 | 0.0528 | 5 | 0.3667 | 67 | 0.0504 | 11 | 0.0145 | 3 | 319 | 22 | 317 | 5 | 317 | 7 | 291 | 6 | 0.78 |
| 16 | DJ329 17 | 0.0531 | 5 | 0.3860 | 64 | 0.0527 | 11 | 0.0162 | 3 | 333 | 21 | 331 | 5 | 331 | 7 | 326 | 6 | 0.59 |
| 17 | DJ329 18 | 0.0529 | 7 | 0.3819 | 112 | 0.0523 | 13 | 0.0162 | 6 | 325 | 28 | 328 | 8 | 329 | 8 | 325 | 12 | -1.27 |
| 18 | DJ329 19 | 0.0529 | 5 | 0.3730 | 65 | 0.0511 | 11 | 0.0139 | 3 | 325 | 21 | 322 | 5 | 321 | 7 | 279 | 6 | 0.94 |
| 19 | DJ329 20 | 0.0531 | 5 | 0.3904 | 57 | 0.0534 | 11 | 0.0153 | 3 | 331 | 21 | 335 | 4 | 335 | 7 | 307 | 6 | -1.17 |
| 20 | DJ329 21 | 0.0536 | 7 | 0.4125 | 121 | 0.0558 | 14 | 0.0180 | 6 | 355 | 33 | 351 | 9 | 350 | 8 | 360 | 12 | 1.47 |
| 21 | DJ329 22 | 0.0529 | 5 | 0.3881 | 87 | 0.0532 | 12 | 0.0161 | 4 | 325 | 22 | 333 | 6 | 334 | 7 | 323 | 8 | -3.07 |
| 22 | DJ329 23 | 0.0530 | 14 | 0.3974 | 203 | 0.0543 | 17 | 0.0126 | 9 | 330 | 64 | 340 | 15 | 341 | 10 | 253 | 18 | -3.46 |
| 23 | DJ329 24 | 0.0533 | 6 | 0.4042 | 54 | 0.0550 | 12 | 0.0163 | 3 | 343 | 23 | 345 | 4 | 345 | 7 | 326 | 6 | -0.49 |
| 24 | DJ329 25 | 0.0529 | 5 | 0.3667 | 64 | 0.0503 | 11 | 0.0131 | 2 | 325 | 23 | 317 | 5 | 316 | 7 | 263 | 5 | 2.63 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|--------------|----------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 25 | DJ329 26 | 0.0528 | 6 | 0.3727 | 50 | 0.0512 | 11 | 0.0148 | 3 | 319 | 25 | 322 | 4 | 322 | 7 | 296 | 5 | -0.99 |
| 26 | DJ329 27 | 0.0529 | 5 | 0.3826 | 85 | 0.0525 | 12 | 0.0152 | 4 | 323 | 22 | 329 | 6 | 330 | 7 | 304 | 8 | -2.24 |
| 27 | DJ329 28 | 0.0530 | 5 | 0.3860 | 66 | 0.0529 | 11 | 0.0148 | 3 | 328 | 23 | 331 | 5 | 332 | 7 | 296 | 7 | -1.42 |
| 28 | DJ329 29 | 0.0529 | 5 | 0.3664 | 78 | 0.0502 | 11 | 0.0141 | 4 | 324 | 23 | 317 | 6 | 316 | 7 | 284 | 8 | 2.56 |
| 29 | DJ329 30 | 0.0532 | 6 | 0.3881 | 55 | 0.0529 | 11 | 0.0151 | 3 | 336 | 26 | 333 | 4 | 333 | 7 | 303 | 6 | 0.94 |
| 30 | DJ329 31 | 0.0531 | 5 | 0.3860 | 71 | 0.0528 | 12 | 0.0149 | 4 | 331 | 23 | 331 | 5 | 332 | 7 | 299 | 7 | -0.04 |
| 31 | DJ329 32 | 0.0534 | 5 | 0.4025 | 67 | 0.0547 | 12 | 0.0171 | 4 | 347 | 21 | 343 | 5 | 343 | 7 | 342 | 7 | 1.1 |
| 32 | DJ329 33 | 0.0527 | 5 | 0.3632 | 74 | 0.0500 | 11 | 0.0146 | 4 | 314 | 22 | 315 | 6 | 315 | 7 | 294 | 8 | -0.16 |
| 33 | DJ329 34 | 0.0530 | 5 | 0.3780 | 66 | 0.0517 | 11 | 0.0145 | 3 | 331 | 22 | 326 | 5 | 325 | 7 | 291 | 6 | 1.76 |
| 34 | DJ329 35 | 0.0527 | 5 | 0.3744 | 55 | 0.0515 | 11 | 0.0149 | 3 | 317 | 22 | 323 | 4 | 324 | 7 | 300 | 5 | -2.1 |
| 35 | DJ329 36 | 0.0530 | 5 | 0.3776 | 68 | 0.0517 | 11 | 0.0150 | 3 | 328 | 22 | 325 | 5 | 325 | 7 | 301 | 7 | 1.1 |
| 36 | DJ329 37 | 0.0530 | 6 | 0.3946 | 106 | 0.0540 | 13 | 0.0162 | 5 | 328 | 28 | 338 | 8 | 339 | 8 | 324 | 11 | -3.66 |
| 37 | DJ329 38 | 0.0531 | 5 | 0.3909 | 62 | 0.0534 | 11 | 0.0151 | 3 | 335 | 21 | 335 | 5 | 335 | 7 | 303 | 6 | -0.08 |
| 38 | DJ329 39 | 0.0533 | 5 | 0.3913 | 77 | 0.0533 | 12 | 0.0159 | 4 | 340 | 19 | 335 | 6 | 335 | 7 | 319 | 8 | 1.57 |
| 39 | DJ329 40 | 0.0536 | 5 | 0.4127 | 69 | 0.0559 | 12 | 0.0162 | 4 | 353 | 24 | 351 | 5 | 351 | 7 | 325 | 7 | 0.87 |
| 40 | DJ329 41 | 0.0531 | 13 | 0.3730 | 176 | 0.0510 | 16 | 0.0142 | 7 | 331 | 49 | 322 | 13 | 321 | 10 | 285 | 13 | 3.35 |
| 41 | DJ329 42 | 0.0527 | 8 | 0.3546 | 116 | 0.0488 | 12 | 0.0148 | 6 | 318 | 31 | 308 | 9 | 307 | 8 | 298 | 11 | 3.45 |
| 42 | DJ329 43 | 0.0529 | 5 | 0.3747 | 77 | 0.0514 | 12 | 0.0149 | 4 | 323 | 22 | 323 | 6 | 323 | 7 | 300 | 9 | -0.11 |
| 43 | DJ329 44 | 0.0532 | 5 | 0.4005 | 84 | 0.0546 | 12 | 0.0151 | 4 | 337 | 22 | 342 | 6 | 343 | 8 | 302 | 7 | -1.77 |
| 44 | DJ329 45 | 0.0530 | 6 | 0.3782 | 46 | 0.0518 | 11 | 0.0152 | 3 | 327 | 25 | 326 | 3 | 326 | 7 | 304 | 5 | 0.49 |
| 45 | DJ329 46 | 0.0532 | 6 | 0.3781 | 103 | 0.0516 | 12 | 0.0145 | 5 | 337 | 27 | 326 | 8 | 324 | 8 | 290 | 9 | 4.05 |
| 46 | DJ329 47 | 0.0534 | 6 | 0.4150 | 99 | 0.0564 | 13 | 0.0168 | 5 | 345 | 22 | 352 | 7 | 354 | 8 | 337 | 9 | -2.42 |
| 47 | DJ329 48 | 0.0527 | 5 | 0.3657 | 55 | 0.0504 | 11 | 0.0144 | 3 | 315 | 24 | 316 | 4 | 317 | 7 | 290 | 6 | -0.53 |
| 48 | DJ329 49 | 0.0529 | 5 | 0.3791 | 64 | 0.0520 | 11 | 0.0157 | 3 | 326 | 23 | 326 | 5 | 327 | 7 | 314 | 7 | -0.04 |
| 49 | DJ329 50 | 0.0531 | 6 | 0.3782 | 95 | 0.0517 | 12 | 0.0153 | 5 | 331 | 23 | 326 | 7 | 325 | 7 | 307 | 9 | 1.84 |
| 50 | DJ329 51 | 0.0529 | 5 | 0.3798 | 71 | 0.0522 | 12 | 0.0165 | 4 | 322 | 23 | 327 | 5 | 328 | 7 | 332 | 8 | -1.65 |
| 51 | DJ329 52 | 0.0526 | 5 | 0.3555 | 73 | 0.0490 | 11 | 0.0136 | 4 | 312 | 21 | 309 | 5 | 309 | 7 | 272 | 7 | 1.03 |
| 52 | DJ329 53 | 0.0535 | 5 | 0.4018 | 66 | 0.0545 | 12 | 0.0168 | 3 | 349 | 23 | 343 | 5 | 342 | 7 | 337 | 7 | 2.12 |
| 53 | DJ329 54 | 0.0536 | 6 | 0.4133 | 94 | 0.0560 | 13 | 0.0154 | 4 | 354 | 21 | 351 | 7 | 351 | 8 | 308 | 8 | 0.87 |
| 54 | DJ329 55 | 0.0533 | 5 | 0.4041 | 77 | 0.0550 | 12 | 0.0167 | 4 | 342 | 20 | 345 | 6 | 345 | 8 | 334 | 8 | -0.9 |
| 55 | DJ329 56 | 0.0533 | 5 | 0.3931 | 76 | 0.0536 | 12 | 0.0161 | 4 | 339 | 21 | 337 | 6 | 336 | 7 | 323 | 8 | 0.97 |
| 56 | DJ329 57 | 0.0529 | 5 | 0.3849 | 67 | 0.0528 | 12 | 0.0146 | 3 | 326 | 24 | 331 | 5 | 332 | 7 | 293 | 6 | -1.58 |
| 57 | DJ329 58 | 0.0531 | 5 | 0.3868 | 64 | 0.0529 | 12 | 0.0160 | 4 | 334 | 23 | 332 | 5 | 332 | 7 | 322 | 8 | 0.82 |
| 58 | DJ329 59 | 0.0529 | 5 | 0.3785 | 59 | 0.0519 | 11 | 0.0160 | 3 | 325 | 23 | 326 | 4 | 326 | 7 | 320 | 6 | -0.37 |
| 59 | DJ329 60 | 0.0533 | 5 | 0.4037 | 64 | 0.0550 | 12 | 0.0155 | 3 | 341 | 24 | 344 | 5 | 345 | 7 | 311 | 7 | -1.09 |
| 60 | DJ329 61 | 0.0532 | 5 | 0.3987 | 82 | 0.0544 | 12 | 0.0152 | 4 | 339 | 24 | 341 | 6 | 341 | 8 | 305 | 8 | -0.58 |
| 61 | DJ329 62 | 0.0528 | 9 | 0.3737 | 140 | 0.0514 | 14 | 0.0160 | 7 | 320 | 42 | 322 | 10 | 323 | 9 | 320 | 14 | -0.94 |
| 62 | DJ329 63 | 0.0531 | 5 | 0.3882 | 74 | 0.0531 | 12 | 0.0158 | 4 | 332 | 21 | 333 | 5 | 334 | 7 | 317 | 7 | -0.46 |
| 63 | DJ329 64 | 0.0531 | 5 | 0.3912 | 71 | 0.0535 | 12 | 0.0160 | 4 | 333 | 23 | 335 | 5 | 336 | 7 | 320 | 8 | -0.61 |
| 64 | DJ329 65 | 0.0537 | 6 | 0.4284 | 60 | 0.0579 | 13 | 0.0170 | 3 | 358 | 24 | 362 | 4 | 363 | 8 | 341 | 7 | -1.31 |
| 65 | DJ329 66 | 0.0531 | 5 | 0.3834 | 75 | 0.0524 | 12 | 0.0161 | 4 | 333 | 23 | 330 | 6 | 329 | 7 | 322 | 9 | 1.25 |
| 66 | DJ329 68 | 0.0528 | 10 | 0.3556 | 138 | 0.0489 | 14 | 0.0166 | 9 | 321 | 40 | 309 | 10 | 308 | 8 | 333 | 17 | 4.23 |
| 67 | DJ329 69 | 0.0534 | 6 | 0.4019 | 63 | 0.0547 | 12 | 0.0161 | 4 | 345 | 24 | 343 | 5 | 343 | 7 | 323 | 7 | 0.82 |
| 68 | DJ329 70 | 0.0528 | 6 | 0.3873 | 92 | 0.0532 | 13 | 0.0161 | 5 | 322 | 25 | 332 | 7 | 334 | 8 | 322 | 9 | -3.82 |

| Analysis No. | | Ratios | | | | | | Age (Ma) | | | | | | Disc* (%) | | | | |
|--------------|----------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-----------------------------------|---------------|----------------------------------|---------------|----------------------------------|---------------|-----------------------------------|---------------|-------|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\sigma$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\sigma$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\sigma$ | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm 1\sigma$ | |
| 69 | DJ329 71 | 0.0533 | 6 | 0.4016 | 91 | 0.0548 | 13 | 0.0150 | 4 | 339 | 22 | 343 | 7 | 344 | 8 | 301 | 8 | -1.17 |
| 70 | DJ329 72 | 0.0536 | 6 | 0.4084 | 105 | 0.0554 | 13 | 0.0177 | 6 | 353 | 26 | 348 | 8 | 347 | 8 | 355 | 13 | 1.76 |
| 71 | DJ329 73 | 0.0530 | 16 | 0.3929 | 217 | 0.0539 | 18 | 0.0139 | 8 | 328 | 58 | 337 | 16 | 338 | 11 | 278 | 16 | -3.08 |
| 72 | DJ329 74 | 0.0534 | 6 | 0.4138 | 66 | 0.0563 | 12 | 0.0158 | 3 | 348 | 25 | 352 | 5 | 353 | 8 | 317 | 7 | -1.4 |
| 73 | DJ329 75 | 0.0531 | 5 | 0.3914 | 76 | 0.0535 | 12 | 0.0155 | 4 | 335 | 23 | 335 | 6 | 336 | 7 | 311 | 7 | -0.22 |
| 74 | DJ329 76 | 0.0532 | 7 | 0.3911 | 116 | 0.0534 | 13 | 0.0144 | 6 | 336 | 31 | 335 | 8 | 335 | 8 | 288 | 11 | 0.46 |
| 75 | DJ329 77 | 0.0540 | 6 | 0.4388 | 120 | 0.0590 | 15 | 0.0180 | 7 | 371 | 25 | 369 | 8 | 370 | 9 | 361 | 14 | 0.53 |
| 76 | DJ329 78 | 0.0530 | 6 | 0.3827 | 57 | 0.0525 | 11 | 0.0147 | 3 | 328 | 25 | 329 | 4 | 330 | 7 | 295 | 6 | -0.55 |
| 77 | DJ329 79 | 0.0532 | 6 | 0.3915 | 54 | 0.0535 | 12 | 0.0159 | 3 | 337 | 26 | 335 | 4 | 336 | 7 | 319 | 6 | 0.51 |
| 78 | DJ329 80 | 0.0532 | 6 | 0.3951 | 57 | 0.0539 | 12 | 0.0157 | 3 | 339 | 25 | 338 | 4 | 339 | 7 | 316 | 6 | 0.19 |

Table 4

| Analysis No. | U/Th | Ratios | | | | | | Age (Ma) | | | | | | |
|--------------|----------|-----------------------------------|-----------------|----------------------------------|-----------------|----------------------------------|-----------------|-----------------------------------|-----------------|----------------------------------|-----------------|----------------------------------|-----------------|----|
| | | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\text{s}$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\text{s}$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\text{s}$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm 1\text{s}$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm 1\text{s}$ | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm 1\text{s}$ | |
| DJ259 | | <i>46.9046°N, 84.2452°E</i> | | | | | | | | | | | | |
| 1 | DJ259 01 | 1.31 | 0.05334 | 1.14 | 0.39453 | 1.76 | 0.05365 | 2.44 | 343 | 27 | 338 | 5 | 337 | 8 |
| 2 | DJ259 02 | 1.3 | 0.05321 | 1.35 | 0.39498 | 1.28 | 0.05384 | 2.38 | 338 | 28 | 338 | 4 | 338 | 8 |
| 3 | DJ259 03 | 1.28 | 0.05341 | 1.29 | 0.39386 | 1.35 | 0.05348 | 2.37 | 346 | 27 | 337 | 4 | 336 | 8 |
| 4 | DJ259 04 | 1.5 | 0.05364 | 1.19 | 0.39471 | 1.63 | 0.05338 | 2.42 | 356 | 28 | 338 | 5 | 335 | 8 |
| 5 | DJ259 06 | 1.42 | 0.05343 | 1.31 | 0.39538 | 1.34 | 0.05367 | 2.38 | 347 | 28 | 338 | 4 | 337 | 8 |
| 6 | DJ259 07 | 1.64 | 0.05312 | 1.30 | 0.39279 | 1.37 | 0.05363 | 2.39 | 334 | 31 | 336 | 4 | 337 | 8 |
| 7 | DJ259 08 | 1.53 | 0.0531 | 1.28 | 0.38635 | 1.40 | 0.05277 | 2.39 | 333 | 29 | 332 | 4 | 332 | 8 |
| 8 | DJ259 11 | 2.04 | 0.05278 | 1.33 | 0.3816 | 1.36 | 0.05244 | 2.40 | 319 | 31 | 328 | 4 | 329 | 8 |
| 9 | DJ259 12 | 1.05 | 0.05368 | 1.36 | 0.40094 | 1.29 | 0.05418 | 2.40 | 358 | 31 | 342 | 4 | 340 | 8 |
| 10 | DJ259 13 | 1.43 | 0.05262 | 1.12 | 0.3828 | 1.98 | 0.05276 | 2.50 | 312 | 24 | 329 | 6 | 331 | 8 |
| 11 | DJ259 14 | 1.47 | 0.05332 | 1.18 | 0.38895 | 2.67 | 0.05291 | 2.65 | 342 | 26 | 334 | 8 | 332 | 9 |
| 12 | DJ259 15 | 1.2 | 0.05327 | 1.35 | 0.39665 | 1.31 | 0.054 | 2.41 | 340 | 30 | 339 | 4 | 339 | 8 |
| 13 | DJ259 16 | 1.02 | 0.05347 | 1.38 | 0.41008 | 1.25 | 0.05563 | 2.39 | 349 | 29 | 349 | 4 | 349 | 8 |
| 14 | DJ259 19 | 1.05 | 0.05338 | 1.39 | 0.41365 | 1.25 | 0.05621 | 2.40 | 345 | 32 | 352 | 4 | 353 | 8 |
| 15 | DJ259 20 | 1.1 | 0.05274 | 1.35 | 0.40298 | 1.34 | 0.05542 | 2.42 | 318 | 30 | 344 | 4 | 348 | 8 |
| 16 | DJ259 21 | 1.38 | 0.05278 | 1.36 | 0.40734 | 1.31 | 0.05598 | 2.43 | 319 | 32 | 347 | 4 | 351 | 8 |
| 17 | DJ259 22 | 1.22 | 0.05221 | 1.36 | 0.39875 | 1.31 | 0.0554 | 2.42 | 295 | 30 | 341 | 4 | 348 | 8 |
| 18 | DJ259 23 | 1.92 | 0.05285 | 1.12 | 0.3787 | 2.16 | 0.05198 | 2.56 | 322 | 25 | 326 | 6 | 327 | 8 |
| DJ303 | | <i>47.0245°N, 86.0374°E</i> | | | | | | | | | | | | |
| 1 | DJ303 01 | 0.62 | 0.05479 | 1.20 | 0.39822 | 2.69 | 0.05276 | 2.67 | 404 | 27 | 340 | 8 | 331 | 9 |
| 2 | DJ303 02 | 1.54 | 0.05462 | 1.28 | 0.42085 | 2.91 | 0.05593 | 2.72 | 397 | 29 | 357 | 9 | 351 | 9 |
| 3 | DJ303 03 | 1.08 | 0.05354 | 1.14 | 0.41151 | 2.07 | 0.05579 | 2.55 | 352 | 25 | 350 | 6 | 350 | 9 |
| 4 | DJ303 04 | 1.67 | 0.05544 | 1.61 | 0.41317 | 3.60 | 0.0541 | 2.92 | 430 | 35 | 351 | 11 | 340 | 10 |
| 5 | DJ303 05 | 1.27 | 0.05356 | 1.12 | 0.41638 | 2.30 | 0.05643 | 2.59 | 353 | 26 | 353 | 7 | 354 | 9 |
| 6 | DJ303 06 | 0.59 | 0.054 | 1.13 | 0.40287 | 2.05 | 0.05415 | 2.53 | 371 | 25 | 344 | 6 | 340 | 8 |
| 7 | DJ303 07 | 1.8 | 0.054 | 1.15 | 0.42161 | 2.48 | 0.05667 | 2.61 | 371 | 26 | 357 | 7 | 355 | 9 |
| 8 | DJ303 08 | 1.09 | 0.05384 | 1.15 | 0.40493 | 2.51 | 0.05459 | 2.62 | 364 | 26 | 345 | 7 | 343 | 9 |
| 9 | DJ303 09 | 1.32 | 0.05443 | 2.81 | 0.42212 | 5.51 | 0.05629 | 3.50 | 389 | 63 | 358 | 17 | 353 | 12 |
| 10 | DJ303 10 | 0.77 | 0.05357 | 1.18 | 0.40427 | 1.79 | 0.05478 | 2.48 | 353 | 26 | 345 | 5 | 344 | 8 |
| 11 | DJ303 11 | 1.08 | 0.05362 | 1.12 | 0.40575 | 2.35 | 0.05492 | 2.59 | 355 | 25 | 346 | 7 | 345 | 9 |
| 12 | DJ303 12 | 1.13 | 0.0531 | 1.13 | 0.39641 | 2.05 | 0.05418 | 2.53 | 333 | 26 | 339 | 6 | 340 | 8 |
| 13 | DJ303 13 | 0.82 | 0.05399 | 1.39 | 0.41239 | 3.19 | 0.05543 | 2.78 | 371 | 34 | 351 | 9 | 348 | 9 |
| 14 | DJ303 15 | 1.27 | 0.05333 | 1.16 | 0.39946 | 1.75 | 0.05436 | 2.47 | 343 | 26 | 341 | 5 | 341 | 8 |
| 15 | DJ303 16 | 2.01 | 0.05361 | 1.12 | 0.4008 | 2.37 | 0.05426 | 2.58 | 355 | 24 | 342 | 7 | 341 | 9 |
| 16 | DJ303 17 | 1.61 | 0.05264 | 2.11 | 0.41012 | 4.43 | 0.05654 | 3.13 | 313 | 47 | 349 | 13 | 355 | 11 |
| 17 | DJ303 18 | 2.18 | 0.05335 | 3.28 | 0.41069 | 6.22 | 0.05586 | 3.76 | 344 | 82 | 349 | 18 | 350 | 13 |
| 18 | DJ303 19 | 1.41 | 0.05348 | 1.53 | 0.40462 | 3.46 | 0.05491 | 2.84 | 349 | 34 | 345 | 10 | 345 | 10 |
| 19 | DJ303 20 | 0.58 | 0.05369 | 1.27 | 0.40109 | 2.90 | 0.05421 | 2.69 | 358 | 29 | 342 | 8 | 340 | 9 |
| 20 | DJ303 21 | 1.09 | 0.05332 | 1.14 | 0.39281 | 2.47 | 0.05346 | 2.60 | 342 | 27 | 336 | 7 | 336 | 9 |
| 21 | DJ303 22 | 1.37 | 0.05326 | 1.13 | 0.39488 | 2.01 | 0.0538 | 2.51 | 340 | 26 | 338 | 6 | 338 | 8 |
| 22 | DJ303 23 | 0.67 | 0.05378 | 1.19 | 0.40186 | 1.68 | 0.05422 | 2.45 | 362 | 26 | 343 | 5 | 340 | 8 |
| 23 | DJ303 24 | 1.44 | 0.05325 | 1.54 | 0.40451 | 3.49 | 0.05512 | 2.85 | 339 | 35 | 345 | 10 | 346 | 10 |
| 24 | DJ303 26 | 1.98 | 0.05467 | 1.13 | 0.41246 | 2.39 | 0.05474 | 2.58 | 399 | 26 | 351 | 7 | 344 | 9 |

Table 5

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_t$ | $\varepsilon\text{Hf}(t)$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|---------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ46 | | | | | | | | | | | |
| DJ46 01 | 445 | 0.28292 | 0.00003 | 0.0014 | 0.0310 | 0.282908 | 14.6 | 1.1 | 0.476 | 0.497 | 0.519 |
| DJ46 02 | 471 | 0.28291 | 0.00002 | 0.0014 | 0.0258 | 0.282898 | 14.8 | 0.8 | 0.490 | 0.504 | 0.519 |
| DJ46 04 | 496 | 0.28288 | 0.00003 | 0.0016 | 0.0294 | 0.282865 | 14.2 | 1.1 | 0.536 | 0.562 | 0.591 |
| DJ46 06 | 448 | 0.28287 | 0.00003 | 0.0008 | 0.0165 | 0.282863 | 13.1 | 0.9 | 0.539 | 0.598 | 0.662 |
| DJ46 07 | 473 | 0.28281 | 0.00002 | 0.0010 | 0.0217 | 0.282801 | 11.4 | 0.7 | 0.627 | 0.724 | 0.830 |
| DJ46 08 | 445 | 0.28294 | 0.00003 | 0.0039 | 0.0770 | 0.282907 | 14.6 | 1.0 | 0.480 | 0.499 | 0.522 |
| DJ46 09 | 461 | 0.28289 | 0.00002 | 0.0010 | 0.0196 | 0.282881 | 14.0 | 0.8 | 0.514 | 0.548 | 0.585 |
| DJ46 10 | 471 | 0.28291 | 0.00002 | 0.0007 | 0.0130 | 0.282904 | 15.0 | 0.8 | 0.481 | 0.490 | 0.498 |
| DJ46 11 | 459 | 0.28287 | 0.00002 | 0.0009 | 0.0168 | 0.282862 | 13.3 | 0.8 | 0.541 | 0.593 | 0.650 |
| DJ46 12 | 479 | 0.28288 | 0.00002 | 0.0010 | 0.0192 | 0.282871 | 14.1 | 0.7 | 0.528 | 0.560 | 0.595 |
| DJ46 13 | 465 | 0.28283 | 0.00003 | 0.0023 | 0.0479 | 0.282810 | 11.6 | 0.9 | 0.620 | 0.709 | 0.812 |
| DJ46 14 | 479 | 0.28292 | 0.00002 | 0.0010 | 0.0186 | 0.282911 | 15.5 | 0.8 | 0.471 | 0.468 | 0.464 |
| DJ46 15 | 450 | 0.28287 | 0.00003 | 0.0021 | 0.0394 | 0.282852 | 12.7 | 0.9 | 0.558 | 0.622 | 0.695 |
| DJ46 16 | 469 | 0.28284 | 0.00002 | 0.0016 | 0.0357 | 0.282826 | 12.2 | 0.8 | 0.594 | 0.670 | 0.755 |
| DJ46 17 | 480 | 0.28290 | 0.00003 | 0.0016 | 0.0302 | 0.282886 | 14.6 | 0.9 | 0.508 | 0.526 | 0.546 |
| DJ46 18 | 454 | 0.28288 | 0.00002 | 0.0015 | 0.0326 | 0.282867 | 13.4 | 0.7 | 0.535 | 0.585 | 0.641 |
| DJ46 19 | 439 | 0.28290 | 0.00002 | 0.0012 | 0.0249 | 0.282890 | 13.8 | 0.7 | 0.502 | 0.542 | 0.587 |
| DJ46 20 | 469 | 0.28284 | 0.00003 | 0.0025 | 0.0538 | 0.282818 | 12.0 | 0.9 | 0.609 | 0.688 | 0.781 |
| DJ46 21 | 473 | 0.28284 | 0.00002 | 0.0012 | 0.0260 | 0.282829 | 12.4 | 0.8 | 0.588 | 0.659 | 0.738 |
| DJ46 22 | 441 | 0.28289 | 0.00002 | 0.0017 | 0.0368 | 0.282876 | 13.4 | 0.9 | 0.523 | 0.574 | 0.630 |
| DJ46 23 | 487 | 0.28292 | 0.00002 | 0.0009 | 0.0199 | 0.282912 | 15.7 | 0.7 | 0.470 | 0.461 | 0.451 |
| DJ46 24 | 449 | 0.28298 | 0.00002 | 0.0016 | 0.0317 | 0.282967 | 16.8 | 0.9 | 0.392 | 0.361 | 0.323 |
| DJ46 25 | 476 | 0.28288 | 0.00002 | 0.0014 | 0.0266 | 0.282868 | 13.9 | 0.8 | 0.534 | 0.570 | 0.610 |
| DJ46 26 | 457 | 0.28289 | 0.00002 | 0.0011 | 0.0203 | 0.282881 | 13.9 | 0.6 | 0.515 | 0.553 | 0.593 |
| DJ46 27 | 456 | 0.28288 | 0.00002 | 0.0013 | 0.0296 | 0.282869 | 13.5 | 0.7 | 0.532 | 0.580 | 0.633 |
| DJ46 28 | 449 | 0.28288 | 0.00002 | 0.0012 | 0.0222 | 0.282870 | 13.3 | 0.8 | 0.531 | 0.582 | 0.639 |
| DJ46 29 | 479 | 0.28292 | 0.00003 | 0.0015 | 0.0284 | 0.282907 | 15.3 | 0.9 | 0.477 | 0.479 | 0.479 |
| DJ46 30 | 469 | 0.28292 | 0.00003 | 0.0015 | 0.0284 | 0.282907 | 15.1 | 0.9 | 0.477 | 0.485 | 0.491 |
| DJ46 31 | 466 | 0.28290 | 0.00002 | 0.0009 | 0.0172 | 0.282892 | 14.5 | 0.6 | 0.498 | 0.520 | 0.543 |
| DJ46 32 | 471 | 0.28294 | 0.00002 | 0.0011 | 0.0203 | 0.282930 | 16.0 | 0.8 | 0.444 | 0.430 | 0.412 |
| DJ46 33 | 448 | 0.28283 | 0.00003 | 0.0018 | 0.0384 | 0.282815 | 11.4 | 1.1 | 0.612 | 0.708 | 0.819 |
| DJ46 34 | 456 | 0.28292 | 0.00002 | 0.0022 | 0.0499 | 0.282901 | 14.6 | 0.7 | 0.487 | 0.506 | 0.527 |
| DJ46 35 | 461 | 0.28293 | 0.00003 | 0.0021 | 0.0405 | 0.282912 | 15.1 | 0.9 | 0.471 | 0.478 | 0.486 |
| DJ46 36 | 449 | 0.28287 | 0.00002 | 0.0013 | 0.0258 | 0.282859 | 13.0 | 0.6 | 0.546 | 0.607 | 0.674 |
| DJ46 37 | 497 | 0.28282 | 0.00002 | 0.0012 | 0.0270 | 0.282809 | 12.2 | 0.7 | 0.616 | 0.690 | 0.773 |
| DJ46 38 | 459 | 0.28290 | 0.00002 | 0.0017 | 0.0349 | 0.282885 | 14.1 | 0.8 | 0.509 | 0.540 | 0.575 |
| DJ46 39 | 468 | 0.28291 | 0.00002 | 0.0013 | 0.0240 | 0.282899 | 14.8 | 0.7 | 0.489 | 0.504 | 0.520 |
| DJ46 40 | 452 | 0.28291 | 0.00002 | 0.0010 | 0.0190 | 0.282902 | 14.5 | 0.7 | 0.485 | 0.508 | 0.532 |
| DJ46 41 | 460 | 0.28290 | 0.00002 | 0.0014 | 0.0248 | 0.282888 | 14.2 | 0.6 | 0.505 | 0.534 | 0.565 |
| DJ46 42 | 483 | 0.28289 | 0.00002 | 0.0012 | 0.0222 | 0.282879 | 14.4 | 0.6 | 0.516 | 0.539 | 0.563 |
| DJ46 43 | 465 | 0.28290 | 0.00002 | 0.0010 | 0.0189 | 0.282891 | 14.5 | 0.7 | 0.499 | 0.523 | 0.547 |
| DJ46 44 | 458 | 0.28293 | 0.00002 | 0.0016 | 0.0305 | 0.282916 | 15.2 | 0.7 | 0.464 | 0.470 | 0.475 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ46 45 | 464 | 0.28290 | 0.00002 | 0.0014 | 0.0268 | 0.282888 | 14.3 | 0.6 | 0.505 | 0.531 | 0.560 |
| DJ46 46 | 463 | 0.28288 | 0.00002 | 0.0008 | 0.0141 | 0.282873 | 13.8 | 0.6 | 0.525 | 0.566 | 0.610 |
| DJ46 47 | 464 | 0.28283 | 0.00002 | 0.0008 | 0.0175 | 0.282823 | 12.0 | 0.8 | 0.596 | 0.679 | 0.771 |
| DJ46 48 | 460 | 0.28289 | 0.00002 | 0.0015 | 0.0278 | 0.282877 | 13.8 | 0.7 | 0.521 | 0.559 | 0.601 |
| DJ46 50 | 465 | 0.28290 | 0.00002 | 0.0013 | 0.0233 | 0.282889 | 14.4 | 0.7 | 0.503 | 0.529 | 0.556 |
| DJ46 51 | 473 | 0.28287 | 0.00002 | 0.0028 | 0.0654 | 0.282845 | 13.0 | 0.7 | 0.569 | 0.623 | 0.687 |
| DJ46 52 | 459 | 0.28289 | 0.00002 | 0.0018 | 0.0337 | 0.282875 | 13.7 | 0.7 | 0.525 | 0.565 | 0.610 |
| DJ46 53 | 465 | 0.28292 | 0.00002 | 0.0009 | 0.0184 | 0.282912 | 15.2 | 0.7 | 0.470 | 0.475 | 0.479 |
| DJ46 54 | 457 | 0.28288 | 0.00002 | 0.0012 | 0.0218 | 0.282870 | 13.5 | 0.7 | 0.531 | 0.577 | 0.629 |
| DJ46 55 | 481 | 0.28286 | 0.00002 | 0.0012 | 0.0260 | 0.282849 | 13.3 | 0.7 | 0.559 | 0.609 | 0.663 |
| DJ46 56 | 500 | 0.28289 | 0.00002 | 0.0012 | 0.0212 | 0.282879 | 14.8 | 0.6 | 0.516 | 0.529 | 0.541 |
| DJ46 57 | 476 | 0.28292 | 0.00002 | 0.0017 | 0.0365 | 0.282905 | 15.2 | 0.7 | 0.480 | 0.485 | 0.488 |
| DJ46 58 | 477 | 0.28286 | 0.00002 | 0.0014 | 0.0288 | 0.282847 | 13.2 | 0.7 | 0.562 | 0.615 | 0.674 |
| DJ46 59 | 464 | 0.28283 | 0.00002 | 0.0015 | 0.0338 | 0.282817 | 11.8 | 0.7 | 0.607 | 0.693 | 0.791 |
| DJ46 60 | 461 | 0.28287 | 0.00001 | 0.0016 | 0.0296 | 0.282856 | 13.1 | 0.5 | 0.551 | 0.606 | 0.667 |
| DJ46 61 | 472 | 0.28290 | 0.00002 | 0.0009 | 0.0160 | 0.282892 | 14.6 | 0.5 | 0.498 | 0.517 | 0.536 |
| DJ46 62 | 457 | 0.28289 | 0.00002 | 0.0004 | 0.0075 | 0.282887 | 14.1 | 0.6 | 0.506 | 0.539 | 0.574 |
| DJ46 63 | 462 | 0.28288 | 0.00001 | 0.0011 | 0.0233 | 0.282870 | 13.7 | 0.5 | 0.529 | 0.572 | 0.619 |
| DJ46 64 | 457 | 0.28287 | 0.00002 | 0.0008 | 0.0144 | 0.282863 | 13.3 | 0.5 | 0.539 | 0.592 | 0.650 |
| DJ83 | | | | | | | | | | | |
| DJ83 02 | 439 | 0.28287 | 0.00003 | 0.0006 | 0.0135 | 0.282865 | 13.0 | 0.9 | 0.536 | 0.600 | 0.668 |
| DJ83 03 | 432 | 0.28288 | 0.00003 | 0.0014 | 0.0271 | 0.282869 | 12.9 | 1.1 | 0.534 | 0.596 | 0.666 |
| DJ83 04 | 463 | 0.28286 | 0.00003 | 0.0013 | 0.0248 | 0.282849 | 12.9 | 0.9 | 0.561 | 0.621 | 0.689 |
| DJ83 05 | 428 | 0.28289 | 0.00003 | 0.0018 | 0.0401 | 0.282876 | 13.1 | 1.0 | 0.525 | 0.583 | 0.649 |
| DJ83 06 | 445 | 0.28280 | 0.00002 | 0.0033 | 0.0800 | 0.282772 | 9.8 | 0.8 | 0.683 | 0.807 | 0.961 |
| DJ83 07 | 454 | 0.28285 | 0.00003 | 0.0016 | 0.0344 | 0.282836 | 12.3 | 0.9 | 0.580 | 0.655 | 0.741 |
| DJ83 08 | 428 | 0.28288 | 0.00002 | 0.0017 | 0.0376 | 0.282866 | 12.8 | 0.7 | 0.538 | 0.604 | 0.679 |
| DJ83 09 | 457 | 0.28283 | 0.00003 | 0.0010 | 0.0189 | 0.282821 | 11.8 | 0.9 | 0.599 | 0.688 | 0.786 |
| DJ83 10 | 455 | 0.28285 | 0.00002 | 0.0012 | 0.0271 | 0.282840 | 12.4 | 0.8 | 0.573 | 0.647 | 0.729 |
| DJ83 11 | 445 | 0.28287 | 0.00002 | 0.0011 | 0.0240 | 0.282861 | 12.9 | 0.8 | 0.543 | 0.606 | 0.674 |
| DJ83 12 | 416 | 0.28279 | 0.00003 | 0.0015 | 0.0351 | 0.282778 | 9.4 | 1.0 | 0.664 | 0.812 | 0.981 |
| DJ83 13 | 451 | 0.28289 | 0.00002 | 0.0015 | 0.0311 | 0.282877 | 13.7 | 0.8 | 0.521 | 0.564 | 0.612 |
| DJ83 14 | 436 | 0.28286 | 0.00002 | 0.0021 | 0.0396 | 0.282843 | 12.1 | 0.8 | 0.573 | 0.652 | 0.744 |
| DJ83 15 | 450 | 0.28287 | 0.00002 | 0.0013 | 0.0246 | 0.282859 | 13.0 | 0.8 | 0.546 | 0.606 | 0.673 |
| DJ83 16 | 426 | 0.28283 | 0.00002 | 0.0009 | 0.0187 | 0.282823 | 11.2 | 0.7 | 0.597 | 0.705 | 0.823 |
| DJ83 17 | 472 | 0.28284 | 0.00002 | 0.0012 | 0.0227 | 0.282829 | 12.4 | 0.8 | 0.588 | 0.660 | 0.740 |
| DJ83 18 | 436 | 0.28282 | 0.00002 | 0.0017 | 0.0347 | 0.282806 | 10.8 | 0.9 | 0.625 | 0.736 | 0.864 |
| DJ83 19 | 443 | 0.28288 | 0.00003 | 0.0016 | 0.0301 | 0.282867 | 13.1 | 0.9 | 0.536 | 0.593 | 0.657 |
| DJ83 20 | 448 | 0.28283 | 0.00002 | 0.0021 | 0.0405 | 0.282812 | 11.3 | 0.9 | 0.617 | 0.714 | 0.827 |
| DJ83 21 | 440 | 0.28282 | 0.00002 | 0.0017 | 0.0314 | 0.282806 | 10.9 | 0.8 | 0.625 | 0.734 | 0.859 |
| DJ83 22 | 430 | 0.28281 | 0.00002 | 0.0008 | 0.0171 | 0.282804 | 10.6 | 0.8 | 0.624 | 0.746 | 0.880 |
| DJ83 23 | 436 | 0.28291 | 0.00003 | 0.0027 | 0.0528 | 0.282888 | 13.7 | 1.1 | 0.508 | 0.549 | 0.598 |
| DJ83 24 | 439 | 0.28292 | 0.00002 | 0.0016 | 0.0309 | 0.282907 | 14.4 | 0.8 | 0.479 | 0.504 | 0.532 |
| DJ83 25 | 460 | 0.28286 | 0.00002 | 0.0008 | 0.0142 | 0.282853 | 13.0 | 0.6 | 0.553 | 0.613 | 0.679 |
| DJ83 26 | 433 | 0.28287 | 0.00002 | 0.0023 | 0.0458 | 0.282851 | 12.3 | 0.8 | 0.561 | 0.635 | 0.721 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ83 27 | 449 | 0.28282 | 0.00002 | 0.0014 | 0.0297 | 0.282808 | 11.2 | 0.7 | 0.620 | 0.723 | 0.839 |
| DJ83 28 | 442 | 0.28285 | 0.00002 | 0.0017 | 0.0311 | 0.282836 | 12.0 | 0.6 | 0.581 | 0.664 | 0.759 |
| DJ83 29 | 450 | 0.28289 | 0.00002 | 0.0007 | 0.0149 | 0.282884 | 13.9 | 0.8 | 0.510 | 0.549 | 0.591 |
| DJ83 30 | 444 | 0.28279 | 0.00002 | 0.0023 | 0.0541 | 0.282771 | 9.7 | 0.8 | 0.679 | 0.811 | 0.967 |
| DJ83 31 | 464 | 0.28281 | 0.00002 | 0.0009 | 0.0168 | 0.282802 | 11.3 | 0.7 | 0.625 | 0.727 | 0.839 |
| DJ83 32 | 461 | 0.28287 | 0.00002 | 0.0012 | 0.0233 | 0.282860 | 13.3 | 0.7 | 0.545 | 0.598 | 0.656 |
| DJ83 33 | 460 | 0.28287 | 0.00002 | 0.0020 | 0.0357 | 0.282853 | 13.0 | 0.9 | 0.557 | 0.614 | 0.680 |
| DJ83 34 | 449 | 0.28286 | 0.00003 | 0.0015 | 0.0303 | 0.282847 | 12.6 | 0.9 | 0.564 | 0.634 | 0.712 |
| DJ83 35 | 430 | 0.28287 | 0.00002 | 0.0014 | 0.0282 | 0.282859 | 12.5 | 0.8 | 0.548 | 0.620 | 0.701 |
| DJ83 36 | 443 | 0.28284 | 0.00002 | 0.0017 | 0.0311 | 0.282826 | 11.7 | 0.7 | 0.596 | 0.687 | 0.790 |
| DJ83 37 | 445 | 0.28284 | 0.00002 | 0.0011 | 0.0220 | 0.282831 | 11.9 | 0.7 | 0.586 | 0.674 | 0.771 |
| DJ83 38 | 439 | 0.28279 | 0.00002 | 0.0010 | 0.0217 | 0.282782 | 10.0 | 0.8 | 0.655 | 0.790 | 0.939 |
| DJ83 39 | 468 | 0.28283 | 0.00002 | 0.0012 | 0.0227 | 0.282819 | 12.0 | 0.6 | 0.602 | 0.685 | 0.777 |
| DJ83 40 | 447 | 0.28285 | 0.00002 | 0.0013 | 0.0247 | 0.282839 | 12.2 | 0.8 | 0.575 | 0.654 | 0.742 |
| DJ83 41 | 474 | 0.28281 | 0.00002 | 0.0010 | 0.0194 | 0.282801 | 11.5 | 0.7 | 0.627 | 0.723 | 0.829 |
| DJ83 42 | 1894 | 0.28137 | 0.00003 | 0.0004 | 0.0091 | 0.281356 | -7.9 | 1.0 | 2.589 | 3.061 | 3.551 |
| DJ83 43 | 465 | 0.28281 | 0.00002 | 0.0019 | 0.0379 | 0.282793 | 11.0 | 0.8 | 0.643 | 0.746 | 0.866 |
| DJ83 44 | 407 | 0.28282 | 0.00002 | 0.0022 | 0.0492 | 0.282803 | 10.1 | 0.6 | 0.633 | 0.761 | 0.912 |
| DJ83 45 | 463 | 0.28284 | 0.00002 | 0.0007 | 0.0132 | 0.282834 | 12.4 | 0.6 | 0.580 | 0.655 | 0.737 |
| DJ83 46 | 463 | 0.28281 | 0.00002 | 0.0018 | 0.0330 | 0.282794 | 11.0 | 0.7 | 0.641 | 0.745 | 0.866 |
| DJ83 47 | 472 | 0.28289 | 0.00002 | 0.0013 | 0.0245 | 0.282879 | 14.2 | 0.7 | 0.518 | 0.548 | 0.580 |
| DJ83 48 | 425 | 0.28294 | 0.00002 | 0.0011 | 0.0212 | 0.282931 | 15.0 | 0.7 | 0.444 | 0.457 | 0.471 |
| DJ83 49 | 398 | 0.28285 | 0.00002 | 0.0028 | 0.0595 | 0.282829 | 10.8 | 0.8 | 0.599 | 0.708 | 0.840 |
| DJ83 50 | 441 | 0.28283 | 0.00002 | 0.0014 | 0.0302 | 0.282818 | 11.3 | 0.7 | 0.605 | 0.705 | 0.817 |
| DJ83 51 | 447 | 0.28281 | 0.00001 | 0.0011 | 0.0219 | 0.282801 | 10.9 | 0.5 | 0.629 | 0.741 | 0.866 |
| DJ83 52 | 437 | 0.28283 | 0.00001 | 0.0015 | 0.0278 | 0.282818 | 11.2 | 0.5 | 0.607 | 0.709 | 0.825 |
| DJ87 | | | | | | | | | | | |
| DJ87 02 | 515 | 0.28293 | 0.00002 | 0.0008 | 0.0148 | 0.282922 | 16.7 | 0.8 | 0.454 | 0.419 | 0.378 |
| DJ87 04 | 458 | 0.28292 | 0.00002 | 0.0014 | 0.0257 | 0.282908 | 14.9 | 0.7 | 0.476 | 0.489 | 0.502 |
| DJ87 05 | 464 | 0.28300 | 0.00003 | 0.0020 | 0.0393 | 0.282983 | 17.7 | 1.1 | 0.367 | 0.314 | 0.250 |
| DJ87 06 | 496 | 0.28284 | 0.00002 | 0.0015 | 0.0338 | 0.282826 | 12.8 | 0.6 | 0.592 | 0.652 | 0.718 |
| DJ87 07 | 474 | 0.28292 | 0.00002 | 0.0013 | 0.0263 | 0.282908 | 15.3 | 0.7 | 0.475 | 0.478 | 0.479 |
| DJ87 08 | 463 | 0.28293 | 0.00002 | 0.0015 | 0.0316 | 0.282917 | 15.3 | 0.8 | 0.463 | 0.465 | 0.466 |
| DJ87 09 | 468 | 0.28288 | 0.00002 | 0.0012 | 0.0272 | 0.282869 | 13.8 | 0.7 | 0.531 | 0.571 | 0.615 |
| DJ87 10 | 455 | 0.28292 | 0.00002 | 0.0013 | 0.0235 | 0.282909 | 14.9 | 0.6 | 0.475 | 0.489 | 0.503 |
| DJ87 11 | 447 | 0.28290 | 0.00002 | 0.0014 | 0.0265 | 0.282888 | 14.0 | 0.7 | 0.505 | 0.541 | 0.582 |
| DJ87 12 | 451 | 0.28287 | 0.00002 | 0.0013 | 0.0235 | 0.282859 | 13.0 | 0.7 | 0.546 | 0.606 | 0.672 |
| DJ87 13 | 448 | 0.28290 | 0.00002 | 0.0017 | 0.0316 | 0.282886 | 13.9 | 0.8 | 0.509 | 0.547 | 0.589 |
| DJ87 14 | 468 | 0.28291 | 0.00002 | 0.0017 | 0.0326 | 0.282895 | 14.7 | 0.8 | 0.494 | 0.512 | 0.531 |
| DJ87 15 | 456 | 0.28292 | 0.00002 | 0.0014 | 0.0259 | 0.282908 | 14.9 | 0.8 | 0.476 | 0.490 | 0.505 |
| DJ87 16 | 455 | 0.28288 | 0.00002 | 0.0011 | 0.0217 | 0.282871 | 13.5 | 0.6 | 0.529 | 0.577 | 0.628 |
| DJ87 17 | 475 | 0.28285 | 0.00002 | 0.0014 | 0.0310 | 0.282838 | 12.8 | 0.7 | 0.577 | 0.639 | 0.709 |
| DJ87 18 | 455 | 0.28291 | 0.00002 | 0.0012 | 0.0234 | 0.282900 | 14.5 | 0.7 | 0.488 | 0.510 | 0.533 |
| DJ87 19 | 440 | 0.28291 | 0.00002 | 0.0013 | 0.0277 | 0.282899 | 14.2 | 0.7 | 0.489 | 0.521 | 0.555 |
| DJ87 20 | 494 | 0.28289 | 0.00002 | 0.0012 | 0.0229 | 0.282879 | 14.7 | 0.7 | 0.516 | 0.532 | 0.549 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ87 21 | 478 | 0.28291 | 0.00002 | 0.0010 | 0.0194 | 0.282901 | 15.1 | 0.6 | 0.485 | 0.492 | 0.498 |
| DJ87 22 | 474 | 0.28292 | 0.00002 | 0.0010 | 0.0229 | 0.282911 | 15.4 | 0.6 | 0.471 | 0.472 | 0.470 |
| DJ87 23 | 490 | 0.28292 | 0.00002 | 0.0013 | 0.0266 | 0.282908 | 15.6 | 0.7 | 0.475 | 0.468 | 0.459 |
| DJ87 24 | 473 | 0.28289 | 0.00002 | 0.0014 | 0.0285 | 0.282878 | 14.2 | 0.7 | 0.519 | 0.549 | 0.581 |
| DJ87 25 | 479 | 0.28289 | 0.00002 | 0.0025 | 0.0593 | 0.282868 | 13.9 | 0.8 | 0.535 | 0.568 | 0.606 |
| DJ87 26 | 463 | 0.28296 | 0.00002 | 0.0012 | 0.0234 | 0.282950 | 16.5 | 0.6 | 0.416 | 0.391 | 0.360 |
| DJ87 27 | 473 | 0.28283 | 0.00002 | 0.0008 | 0.0193 | 0.282823 | 12.2 | 0.7 | 0.596 | 0.674 | 0.759 |
| DJ87 28 | 478 | 0.28287 | 0.00002 | 0.0012 | 0.0267 | 0.282859 | 13.6 | 0.7 | 0.545 | 0.588 | 0.634 |
| DJ87 29 | 441 | 0.28293 | 0.00002 | 0.0011 | 0.0209 | 0.282921 | 15.0 | 0.7 | 0.458 | 0.471 | 0.483 |
| DJ87 30 | 437 | 0.28294 | 0.00002 | 0.0019 | 0.0469 | 0.282924 | 15.0 | 0.7 | 0.453 | 0.465 | 0.477 |
| DJ87 31 | 455 | 0.28293 | 0.00002 | 0.0015 | 0.0302 | 0.282917 | 15.2 | 0.6 | 0.463 | 0.470 | 0.476 |
| DJ87 32 | 461 | 0.28291 | 0.00002 | 0.0012 | 0.0259 | 0.282900 | 14.7 | 0.6 | 0.488 | 0.506 | 0.526 |
| DJ87 33 | 499 | 0.28297 | 0.00002 | 0.0018 | 0.0338 | 0.282953 | 17.4 | 0.6 | 0.409 | 0.359 | 0.299 |
| DJ87 34 | 465 | 0.28293 | 0.00002 | 0.0013 | 0.0257 | 0.282919 | 15.4 | 0.6 | 0.461 | 0.460 | 0.458 |
| DJ87 35 | 468 | 0.28288 | 0.00002 | 0.0013 | 0.0248 | 0.282869 | 13.7 | 0.7 | 0.532 | 0.573 | 0.617 |
| DJ87 36 | 488 | 0.28294 | 0.00002 | 0.0010 | 0.0219 | 0.282931 | 16.4 | 0.6 | 0.443 | 0.417 | 0.387 |
| DJ87 37 | 478 | 0.28291 | 0.00002 | 0.0007 | 0.0134 | 0.282904 | 15.2 | 0.8 | 0.481 | 0.486 | 0.489 |
| DJ87 38 | 451 | 0.28294 | 0.00002 | 0.0011 | 0.0216 | 0.282931 | 15.5 | 0.7 | 0.444 | 0.442 | 0.438 |
| DJ87 39 | 473 | 0.28295 | 0.00002 | 0.0014 | 0.0273 | 0.282938 | 16.3 | 0.7 | 0.433 | 0.411 | 0.385 |
| DJ87 40 | 491 | 0.28292 | 0.00002 | 0.0008 | 0.0169 | 0.282913 | 15.8 | 0.7 | 0.469 | 0.457 | 0.442 |
| DJ87 41 | 480 | 0.28290 | 0.00002 | 0.0010 | 0.0199 | 0.282891 | 14.8 | 0.6 | 0.499 | 0.514 | 0.528 |
| DJ87 42 | 455 | 0.28293 | 0.00002 | 0.0005 | 0.0092 | 0.282926 | 15.5 | 0.6 | 0.451 | 0.450 | 0.449 |
| DJ87 43 | 499 | 0.28290 | 0.00002 | 0.0016 | 0.0331 | 0.282885 | 15.0 | 0.8 | 0.508 | 0.515 | 0.522 |
| DJ87 44 | 463 | 0.28293 | 0.00002 | 0.0013 | 0.0260 | 0.282919 | 15.4 | 0.7 | 0.461 | 0.461 | 0.461 |
| DJ87 45 | 501 | 0.28292 | 0.00002 | 0.0016 | 0.0351 | 0.282905 | 15.7 | 0.7 | 0.479 | 0.468 | 0.454 |
| DJ87 46 | 486 | 0.28291 | 0.00002 | 0.0010 | 0.0181 | 0.282901 | 15.3 | 0.7 | 0.485 | 0.487 | 0.488 |
| DJ87 47 | 483 | 0.28294 | 0.00002 | 0.0007 | 0.0168 | 0.282934 | 16.4 | 0.7 | 0.439 | 0.414 | 0.384 |
| DJ87 48 | 493 | 0.28289 | 0.00002 | 0.0014 | 0.0326 | 0.282877 | 14.6 | 0.7 | 0.519 | 0.537 | 0.556 |
| DJ87 49 | 470 | 0.28289 | 0.00002 | 0.0014 | 0.0326 | 0.282878 | 14.1 | 0.7 | 0.519 | 0.551 | 0.585 |
| DJ87 50 | 506 | 0.28289 | 0.00002 | 0.0010 | 0.0233 | 0.282881 | 15.0 | 0.7 | 0.514 | 0.521 | 0.527 |
| DJ87 51 | 463 | 0.28288 | 0.00002 | 0.0011 | 0.0223 | 0.282870 | 13.7 | 0.6 | 0.529 | 0.572 | 0.618 |
| DJ87 52 | 471 | 0.28289 | 0.00002 | 0.0008 | 0.0161 | 0.282883 | 14.3 | 0.6 | 0.511 | 0.538 | 0.567 |
| DJ87 53 | 490 | 0.28287 | 0.00002 | 0.0013 | 0.0263 | 0.282858 | 13.8 | 0.6 | 0.546 | 0.583 | 0.622 |
| DJ87 54 | 493 | 0.28291 | 0.00002 | 0.0010 | 0.0206 | 0.282901 | 15.4 | 0.6 | 0.485 | 0.483 | 0.478 |
| DJ87 55 | 494 | 0.28294 | 0.00002 | 0.0013 | 0.0256 | 0.282928 | 16.4 | 0.7 | 0.446 | 0.420 | 0.388 |
| DJ87 56 | 522 | 0.28288 | 0.00002 | 0.0010 | 0.0191 | 0.282870 | 15.0 | 0.7 | 0.528 | 0.534 | 0.539 |
| DJ87 57 | 482 | 0.28289 | 0.00002 | 0.0015 | 0.0291 | 0.282876 | 14.3 | 0.7 | 0.521 | 0.546 | 0.573 |
| DJ87 58 | 490 | 0.28289 | 0.00002 | 0.0010 | 0.0221 | 0.282881 | 14.6 | 0.7 | 0.514 | 0.530 | 0.548 |
| DJ87 59 | 469 | 0.28289 | 0.00002 | 0.0010 | 0.0221 | 0.282881 | 14.2 | 0.7 | 0.514 | 0.543 | 0.575 |
| DJ89 | | | | | | | | | | | |
| DJ89 01 | 471 | 0.28290 | 0.00002 | 0.0016 | 0.0306 | 0.282886 | 14.4 | 0.7 | 0.508 | 0.531 | 0.557 |
| DJ89 02 | 480 | 0.28289 | 0.00002 | 0.0010 | 0.0194 | 0.282881 | 14.4 | 0.7 | 0.514 | 0.537 | 0.561 |
| DJ89 03 | 465 | 0.28282 | 0.00002 | 0.0016 | 0.0354 | 0.282806 | 11.4 | 0.8 | 0.623 | 0.718 | 0.825 |
| DJ89 04 | 506 | 0.28288 | 0.00002 | 0.0013 | 0.0274 | 0.282868 | 14.5 | 0.8 | 0.532 | 0.550 | 0.569 |
| DJ89 05 | 473 | 0.28288 | 0.00002 | 0.0011 | 0.0205 | 0.282870 | 13.9 | 0.7 | 0.529 | 0.566 | 0.605 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ89 06 | 476 | 0.28286 | 0.00002 | 0.0011 | 0.0226 | 0.282850 | 13.2 | 0.7 | 0.558 | 0.610 | 0.667 |
| DJ89 07 | 485 | 0.28283 | 0.00002 | 0.0010 | 0.0212 | 0.282821 | 12.4 | 0.7 | 0.599 | 0.671 | 0.750 |
| DJ89 08 | 496 | 0.28284 | 0.00002 | 0.0015 | 0.0331 | 0.282826 | 12.8 | 0.8 | 0.592 | 0.652 | 0.718 |
| DJ89 09 | 436 | 0.28287 | 0.00002 | 0.0011 | 0.0202 | 0.282861 | 12.7 | 0.6 | 0.543 | 0.611 | 0.685 |
| DJ89 11 | 453 | 0.28287 | 0.00002 | 0.0017 | 0.0412 | 0.282856 | 12.9 | 0.8 | 0.552 | 0.612 | 0.680 |
| DJ89 12 | 511 | 0.28284 | 0.00002 | 0.0010 | 0.0216 | 0.282830 | 13.3 | 0.7 | 0.585 | 0.632 | 0.684 |
| DJ89 13 | 461 | 0.28287 | 0.00002 | 0.0013 | 0.0256 | 0.282859 | 13.2 | 0.7 | 0.546 | 0.600 | 0.659 |
| DJ89 14 | 495 | 0.28291 | 0.00002 | 0.0015 | 0.0272 | 0.282896 | 15.3 | 0.8 | 0.492 | 0.492 | 0.491 |
| DJ89 15 | 452 | 0.28282 | 0.00002 | 0.0014 | 0.0324 | 0.282808 | 11.2 | 0.7 | 0.620 | 0.721 | 0.836 |
| DJ89 16 | 486 | 0.28289 | 0.00002 | 0.0011 | 0.0261 | 0.282880 | 14.5 | 0.6 | 0.515 | 0.535 | 0.556 |
| DJ89 17 | 469 | 0.28292 | 0.00002 | 0.0008 | 0.0156 | 0.282913 | 15.3 | 0.8 | 0.469 | 0.471 | 0.471 |
| DJ89 18 | 479 | 0.28284 | 0.00002 | 0.0012 | 0.0248 | 0.282829 | 12.6 | 0.8 | 0.588 | 0.656 | 0.731 |
| DJ89 19 | 463 | 0.28288 | 0.00002 | 0.0012 | 0.0247 | 0.282870 | 13.6 | 0.8 | 0.531 | 0.574 | 0.621 |
| DJ89 20 | 437 | 0.28292 | 0.00002 | 0.0007 | 0.0124 | 0.282914 | 14.7 | 0.7 | 0.467 | 0.489 | 0.510 |
| DJ89 21 | 458 | 0.28289 | 0.00003 | 0.0014 | 0.0270 | 0.282878 | 13.8 | 0.9 | 0.519 | 0.558 | 0.600 |
| DJ89 22 | 474 | 0.28288 | 0.00002 | 0.0009 | 0.0172 | 0.282872 | 14.0 | 0.9 | 0.526 | 0.561 | 0.598 |
| DJ89 23 | 508 | 0.28291 | 0.00002 | 0.0016 | 0.0314 | 0.282895 | 15.5 | 0.8 | 0.493 | 0.487 | 0.478 |
| DJ89 24 | 439 | 0.28291 | 0.00002 | 0.0018 | 0.0498 | 0.282895 | 14.0 | 0.7 | 0.496 | 0.531 | 0.570 |
| DJ89 26 | 488 | 0.28281 | 0.00002 | 0.0010 | 0.0217 | 0.282801 | 11.8 | 0.7 | 0.627 | 0.715 | 0.811 |
| DJ89 27 | 458 | 0.28284 | 0.00002 | 0.0009 | 0.0173 | 0.282832 | 12.2 | 0.7 | 0.583 | 0.662 | 0.749 |
| DJ89 28 | 455 | 0.28294 | 0.00002 | 0.0012 | 0.0243 | 0.282930 | 15.6 | 0.7 | 0.445 | 0.441 | 0.435 |
| DJ89 29 | 472 | 0.28281 | 0.00002 | 0.0013 | 0.0241 | 0.282799 | 11.3 | 0.6 | 0.632 | 0.730 | 0.840 |
| DJ89 30 | 461 | 0.28295 | 0.00002 | 0.0017 | 0.0371 | 0.282935 | 15.9 | 0.6 | 0.437 | 0.425 | 0.409 |
| DJ89 31 | 474 | 0.28295 | 0.00002 | 0.0015 | 0.0290 | 0.282937 | 16.3 | 0.7 | 0.434 | 0.413 | 0.387 |
| DJ89 32 | 453 | 0.28282 | 0.00002 | 0.0014 | 0.0297 | 0.282808 | 11.2 | 0.7 | 0.620 | 0.721 | 0.834 |
| DJ89 33 | 481 | 0.28289 | 0.00002 | 0.0010 | 0.0208 | 0.282881 | 14.4 | 0.6 | 0.514 | 0.536 | 0.559 |
| DJ89 34 | 507 | 0.28283 | 0.00002 | 0.0011 | 0.0236 | 0.282820 | 12.9 | 0.7 | 0.600 | 0.659 | 0.724 |
| DJ89 35 | 470 | 0.28294 | 0.00002 | 0.0014 | 0.0264 | 0.282928 | 15.9 | 0.6 | 0.447 | 0.436 | 0.422 |
| DJ89 36 | 445 | 0.28290 | 0.00002 | 0.0011 | 0.0199 | 0.282891 | 14.0 | 0.7 | 0.501 | 0.537 | 0.576 |
| DJ89 37 | 442 | 0.28287 | 0.00002 | 0.0013 | 0.0246 | 0.282859 | 12.8 | 0.6 | 0.546 | 0.611 | 0.683 |
| DJ89 38 | 464 | 0.28293 | 0.00002 | 0.0007 | 0.0145 | 0.282924 | 15.6 | 0.7 | 0.453 | 0.449 | 0.442 |
| DJ89 39 | 493 | 0.28286 | 0.00002 | 0.0011 | 0.0227 | 0.282850 | 13.6 | 0.7 | 0.558 | 0.599 | 0.645 |
| DJ89 40 | 469 | 0.28282 | 0.00002 | 0.0013 | 0.0282 | 0.282809 | 11.6 | 0.7 | 0.618 | 0.709 | 0.811 |
| DJ89 41 | 471 | 0.28286 | 0.00002 | 0.0013 | 0.0289 | 0.282849 | 13.1 | 0.6 | 0.561 | 0.617 | 0.679 |
| DJ89 42 | 489 | 0.28285 | 0.00002 | 0.0017 | 0.0387 | 0.282834 | 13.0 | 0.6 | 0.581 | 0.637 | 0.700 |
| DJ89 43 | 504 | 0.28283 | 0.00002 | 0.0012 | 0.0263 | 0.282819 | 12.8 | 0.6 | 0.602 | 0.663 | 0.731 |
| DJ89 44 | 480 | 0.28290 | 0.00002 | 0.0009 | 0.0173 | 0.282892 | 14.8 | 0.6 | 0.498 | 0.512 | 0.525 |
| DJ89 45 | 485 | 0.28288 | 0.00002 | 0.0011 | 0.0220 | 0.282870 | 14.1 | 0.7 | 0.529 | 0.558 | 0.590 |
| DJ89 46 | 467 | 0.28291 | 0.00002 | 0.0011 | 0.0208 | 0.282900 | 14.8 | 0.6 | 0.487 | 0.501 | 0.515 |
| DJ89 47 | 472 | 0.28294 | 0.00002 | 0.0013 | 0.0248 | 0.282929 | 15.9 | 0.7 | 0.446 | 0.433 | 0.416 |
| DJ89 48 | 470 | 0.28284 | 0.00002 | 0.0009 | 0.0210 | 0.282832 | 12.5 | 0.7 | 0.583 | 0.655 | 0.734 |
| DJ89 49 | 472 | 0.28289 | 0.00002 | 0.0009 | 0.0177 | 0.282882 | 14.3 | 0.6 | 0.512 | 0.539 | 0.568 |
| DJ89 50 | 486 | 0.28285 | 0.00002 | 0.0013 | 0.0291 | 0.282838 | 13.0 | 0.5 | 0.575 | 0.631 | 0.692 |
| DJ89 51 | 474 | 0.28289 | 0.00002 | 0.0010 | 0.0181 | 0.282881 | 14.3 | 0.7 | 0.514 | 0.540 | 0.568 |
| DJ89 52 | 476 | 0.28284 | 0.00002 | 0.0008 | 0.0139 | 0.282833 | 12.6 | 0.6 | 0.582 | 0.649 | 0.723 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ89 53 | 483 | 0.28287 | 0.00002 | 0.0014 | 0.0324 | 0.282857 | 13.7 | 0.6 | 0.548 | 0.589 | 0.634 |
| DJ89 54 | 503 | 0.28284 | 0.00002 | 0.0012 | 0.0244 | 0.282829 | 13.1 | 0.7 | 0.588 | 0.641 | 0.700 |
| DJ89 55 | 491 | 0.28280 | 0.00002 | 0.0009 | 0.0190 | 0.282792 | 11.5 | 0.6 | 0.640 | 0.733 | 0.837 |
| DJ89 56 | 489 | 0.28290 | 0.00001 | 0.0011 | 0.0206 | 0.282890 | 14.9 | 0.5 | 0.501 | 0.510 | 0.519 |
| DJ89 57 | 448 | 0.28290 | 0.00002 | 0.0019 | 0.0468 | 0.282884 | 13.8 | 0.5 | 0.512 | 0.550 | 0.594 |
| DJ89 58 | 434 | 0.28293 | 0.00002 | 0.0019 | 0.0362 | 0.282915 | 14.6 | 0.7 | 0.468 | 0.490 | 0.514 |
| DJ89 59 | 475 | 0.28285 | 0.00001 | 0.0010 | 0.0188 | 0.282841 | 12.9 | 0.5 | 0.570 | 0.631 | 0.698 |
| DJ89 60 | 467 | 0.28291 | 0.00002 | 0.0012 | 0.0218 | 0.282900 | 14.8 | 0.6 | 0.488 | 0.503 | 0.518 |
| DJ89 61 | 448 | 0.28290 | 0.00002 | 0.0016 | 0.0364 | 0.282887 | 13.9 | 0.7 | 0.508 | 0.545 | 0.586 |
| DJ89 62 | 487 | 0.28285 | 0.00002 | 0.0014 | 0.0323 | 0.282837 | 13.0 | 0.6 | 0.577 | 0.632 | 0.694 |
| DJ98 | | | | | | | | | | | |
| DJ98 01 | 408 | 0.28290 | 0.00002 | 0.0011 | 0.0208 | 0.282892 | 13.2 | 0.6 | 0.501 | 0.559 | 0.624 |
| DJ98 02 | 407 | 0.28287 | 0.00002 | 0.0007 | 0.0121 | 0.282865 | 12.2 | 0.7 | 0.538 | 0.621 | 0.713 |
| DJ98 03 | 400 | 0.28288 | 0.00002 | 0.0009 | 0.0195 | 0.282873 | 12.4 | 0.6 | 0.526 | 0.606 | 0.694 |
| DJ98 04 | 415 | 0.28289 | 0.00002 | 0.0006 | 0.0111 | 0.282885 | 13.1 | 0.7 | 0.508 | 0.569 | 0.635 |
| DJ98 05 | 399 | 0.28282 | 0.00002 | 0.0007 | 0.0159 | 0.282815 | 10.3 | 0.6 | 0.608 | 0.740 | 0.885 |
| DJ98 06 | 419 | 0.28286 | 0.00002 | 0.0004 | 0.0079 | 0.282857 | 12.2 | 0.6 | 0.547 | 0.631 | 0.722 |
| DJ98 07 | 402 | 0.28288 | 0.00002 | 0.0010 | 0.0186 | 0.282872 | 12.4 | 0.6 | 0.528 | 0.607 | 0.694 |
| DJ98 08 | 403 | 0.28288 | 0.00002 | 0.0010 | 0.0198 | 0.282872 | 12.4 | 0.6 | 0.528 | 0.606 | 0.693 |
| DJ98 09 | 404 | 0.28287 | 0.00002 | 0.0009 | 0.0160 | 0.282863 | 12.1 | 0.6 | 0.541 | 0.627 | 0.721 |
| DJ98 10 | 417 | 0.28289 | 0.00002 | 0.0011 | 0.0216 | 0.282881 | 13.0 | 0.7 | 0.515 | 0.577 | 0.645 |
| DJ98 11 | 409 | 0.28292 | 0.00002 | 0.0008 | 0.0147 | 0.282914 | 14.0 | 0.6 | 0.469 | 0.508 | 0.550 |
| DJ98 12 | 424 | 0.28288 | 0.00002 | 0.0010 | 0.0222 | 0.282872 | 12.9 | 0.5 | 0.528 | 0.593 | 0.666 |
| DJ98 13 | 399 | 0.28288 | 0.00002 | 0.0010 | 0.0201 | 0.282873 | 12.3 | 0.6 | 0.528 | 0.609 | 0.698 |
| DJ98 14 | 418 | 0.28287 | 0.00002 | 0.0008 | 0.0172 | 0.282864 | 12.4 | 0.6 | 0.539 | 0.616 | 0.701 |
| DJ98 15 | 435 | 0.28285 | 0.00001 | 0.0012 | 0.0259 | 0.282840 | 12.0 | 0.5 | 0.573 | 0.659 | 0.754 |
| DJ98 16 | 413 | 0.28285 | 0.00002 | 0.0008 | 0.0169 | 0.282844 | 11.6 | 0.6 | 0.567 | 0.665 | 0.772 |
| DJ98 17 | 419 | 0.28287 | 0.00002 | 0.0009 | 0.0178 | 0.282863 | 12.4 | 0.6 | 0.541 | 0.618 | 0.702 |
| DJ98 18 | 424 | 0.28287 | 0.00002 | 0.0008 | 0.0154 | 0.282864 | 12.6 | 0.6 | 0.539 | 0.613 | 0.693 |
| DJ98 19 | 406 | 0.28282 | 0.00002 | 0.0008 | 0.0160 | 0.282814 | 10.4 | 0.6 | 0.610 | 0.738 | 0.879 |
| DJ98 20 | 411 | 0.28286 | 0.00002 | 0.0005 | 0.0093 | 0.282856 | 12.0 | 0.5 | 0.549 | 0.638 | 0.735 |
| DJ98 21 | 422 | 0.28284 | 0.00002 | 0.0017 | 0.0389 | 0.282827 | 11.2 | 0.7 | 0.596 | 0.699 | 0.816 |
| DJ98 22 | 408 | 0.28287 | 0.00002 | 0.0016 | 0.0322 | 0.282858 | 12.0 | 0.6 | 0.551 | 0.636 | 0.734 |
| DJ98 23 | 417 | 0.28288 | 0.00001 | 0.0007 | 0.0151 | 0.282875 | 12.8 | 0.5 | 0.524 | 0.592 | 0.667 |
| DJ98 24 | 397 | 0.28290 | 0.00002 | 0.0010 | 0.0207 | 0.282893 | 13.0 | 0.6 | 0.499 | 0.564 | 0.635 |
| DJ98 25 | 437 | 0.28287 | 0.00002 | 0.0005 | 0.0098 | 0.282866 | 12.9 | 0.5 | 0.535 | 0.599 | 0.668 |
| DJ98 26 | 419 | 0.28286 | 0.00002 | 0.0008 | 0.0173 | 0.282854 | 12.1 | 0.7 | 0.553 | 0.639 | 0.732 |
| DJ98 27 | 406 | 0.28287 | 0.00002 | 0.0008 | 0.0143 | 0.282864 | 12.2 | 0.5 | 0.539 | 0.624 | 0.716 |
| DJ98 28 | 421 | 0.28289 | 0.00002 | 0.0012 | 0.0224 | 0.282881 | 13.1 | 0.6 | 0.516 | 0.576 | 0.642 |
| DJ98 29 | 426 | 0.28288 | 0.00002 | 0.0013 | 0.0286 | 0.282870 | 12.8 | 0.7 | 0.532 | 0.598 | 0.671 |
| DJ98 30 | 421 | 0.28288 | 0.00002 | 0.0015 | 0.0347 | 0.282868 | 12.7 | 0.7 | 0.535 | 0.604 | 0.682 |
| DJ98 31 | 433 | 0.28288 | 0.00002 | 0.0014 | 0.0318 | 0.282869 | 12.9 | 0.7 | 0.534 | 0.595 | 0.665 |
| DJ98 32 | 427 | 0.28286 | 0.00001 | 0.0009 | 0.0178 | 0.282853 | 12.3 | 0.5 | 0.555 | 0.636 | 0.724 |
| DJ98 33 | 473 | 0.28287 | 0.00001 | 0.0004 | 0.0077 | 0.282866 | 13.8 | 0.5 | 0.534 | 0.574 | 0.618 |
| DJ98 34 | 421 | 0.28285 | 0.00002 | 0.0015 | 0.0355 | 0.282838 | 11.6 | 0.6 | 0.578 | 0.673 | 0.780 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ98 35 | 395 | 0.28286 | 0.00002 | 0.0008 | 0.0151 | 0.282854 | 11.6 | 0.7 | 0.553 | 0.653 | 0.763 |
| DJ98 36 | 404 | 0.28287 | 0.00002 | 0.0006 | 0.0108 | 0.282865 | 12.2 | 0.6 | 0.536 | 0.622 | 0.714 |
| DJ98 37 | 414 | 0.28286 | 0.00002 | 0.0010 | 0.0201 | 0.282852 | 11.9 | 0.6 | 0.556 | 0.645 | 0.744 |
| DJ98 38 | 422 | 0.28288 | 0.00002 | 0.0013 | 0.0281 | 0.282870 | 12.7 | 0.6 | 0.532 | 0.600 | 0.676 |
| DJ98 39 | 418 | 0.28286 | 0.00002 | 0.0008 | 0.0157 | 0.282854 | 12.1 | 0.6 | 0.553 | 0.639 | 0.733 |
| DJ98 40 | 419 | 0.28287 | 0.00002 | 0.0004 | 0.0079 | 0.282867 | 12.6 | 0.5 | 0.534 | 0.609 | 0.689 |
| DJ98 41 | 401 | 0.28285 | 0.00002 | 0.0010 | 0.0227 | 0.282842 | 11.3 | 0.7 | 0.570 | 0.676 | 0.793 |
| DJ98 42 | 428 | 0.28284 | 0.00001 | 0.0008 | 0.0167 | 0.282834 | 11.6 | 0.5 | 0.582 | 0.679 | 0.785 |
| DJ98 43 | 417 | 0.28287 | 0.00002 | 0.0008 | 0.0160 | 0.282864 | 12.4 | 0.7 | 0.539 | 0.617 | 0.702 |
| DJ98 44 | 415 | 0.28289 | 0.00002 | 0.0013 | 0.0277 | 0.282880 | 13.0 | 0.6 | 0.518 | 0.581 | 0.652 |
| DJ98 45 | 424 | 0.28291 | 0.00002 | 0.0009 | 0.0198 | 0.282903 | 14.0 | 0.7 | 0.484 | 0.523 | 0.565 |
| DJ98 46 | 416 | 0.28289 | 0.00002 | 0.0014 | 0.0317 | 0.282879 | 12.9 | 0.7 | 0.519 | 0.583 | 0.654 |
| DJ98 47 | 408 | 0.28284 | 0.00002 | 0.0006 | 0.0117 | 0.282835 | 11.2 | 0.7 | 0.578 | 0.687 | 0.806 |
| DJ98 48 | 398 | 0.28285 | 0.00002 | 0.0015 | 0.0286 | 0.282839 | 11.1 | 0.6 | 0.578 | 0.686 | 0.809 |
| DJ98 49 | 433 | 0.28286 | 0.00001 | 0.0008 | 0.0166 | 0.282854 | 12.4 | 0.5 | 0.553 | 0.630 | 0.714 |
| DJ98 51 | 403 | 0.28289 | 0.00002 | 0.0015 | 0.0287 | 0.282879 | 12.6 | 0.6 | 0.521 | 0.592 | 0.672 |
| DJ98 52 | 409 | 0.28285 | 0.00001 | 0.0012 | 0.0254 | 0.282841 | 11.4 | 0.5 | 0.573 | 0.675 | 0.787 |
| DJ98 53 | 418 | 0.28290 | 0.00001 | 0.0015 | 0.0297 | 0.282888 | 13.3 | 0.5 | 0.506 | 0.560 | 0.621 |
| DJ98 54 | 411 | 0.28290 | 0.00002 | 0.0010 | 0.0192 | 0.282892 | 13.3 | 0.5 | 0.499 | 0.556 | 0.617 |
| DJ98 55 | 448 | 0.28286 | 0.00001 | 0.0008 | 0.0181 | 0.282853 | 12.7 | 0.5 | 0.553 | 0.621 | 0.694 |
| DJ98 56 | 421 | 0.28285 | 0.00001 | 0.0011 | 0.0268 | 0.282841 | 11.7 | 0.5 | 0.572 | 0.666 | 0.770 |
| DJ98 57 | 414 | 0.28288 | 0.00001 | 0.0009 | 0.0174 | 0.282873 | 12.7 | 0.5 | 0.526 | 0.598 | 0.676 |
| DJ98 58 | 437 | 0.28282 | 0.00002 | 0.0016 | 0.0374 | 0.282807 | 10.9 | 0.5 | 0.623 | 0.734 | 0.860 |
| DJ98 59 | 432 | 0.28286 | 0.00001 | 0.0006 | 0.0104 | 0.282855 | 12.4 | 0.5 | 0.550 | 0.627 | 0.710 |
| DJ98 60 | 427 | 0.28285 | 0.00002 | 0.0010 | 0.0228 | 0.282842 | 11.9 | 0.5 | 0.570 | 0.660 | 0.759 |
| DJ108 | | | | | | | | | | | |
| DJ108 01 | 460 | 0.28290 | 0.00002 | 0.0007 | 0.0135 | 0.282894 | 14.4 | 0.6 | 0.495 | 0.520 | 0.546 |
| DJ108 02 | 442 | 0.28286 | 0.00002 | 0.0009 | 0.0195 | 0.282853 | 12.6 | 0.6 | 0.555 | 0.626 | 0.705 |
| DJ108 03 | 458 | 0.28287 | 0.00002 | 0.0011 | 0.0254 | 0.282861 | 13.2 | 0.6 | 0.543 | 0.598 | 0.657 |
| DJ108 04 | 469 | 0.28293 | 0.00002 | 0.0010 | 0.0235 | 0.282921 | 15.6 | 0.7 | 0.457 | 0.452 | 0.444 |
| DJ108 05 | 469 | 0.28284 | 0.00003 | 0.0024 | 0.0568 | 0.282819 | 12.0 | 1.0 | 0.607 | 0.686 | 0.778 |
| DJ108 06 | 452 | 0.28287 | 0.00002 | 0.0010 | 0.0231 | 0.282862 | 13.1 | 0.6 | 0.542 | 0.599 | 0.662 |
| DJ108 07 | 477 | 0.28286 | 0.00002 | 0.0017 | 0.0410 | 0.282845 | 13.1 | 0.7 | 0.567 | 0.621 | 0.683 |
| DJ108 08 | 470 | 0.28290 | 0.00002 | 0.0024 | 0.0581 | 0.282879 | 14.1 | 0.8 | 0.519 | 0.548 | 0.581 |
| DJ108 09 | 445 | 0.28287 | 0.00002 | 0.0018 | 0.0423 | 0.282855 | 12.7 | 0.8 | 0.554 | 0.619 | 0.693 |
| DJ108 10 | 460 | 0.28285 | 0.00002 | 0.0013 | 0.0309 | 0.282839 | 12.5 | 0.6 | 0.575 | 0.646 | 0.725 |
| DJ108 11 | 448 | 0.28288 | 0.00002 | 0.0013 | 0.0301 | 0.282869 | 13.3 | 0.6 | 0.532 | 0.585 | 0.643 |
| DJ108 12 | 440 | 0.28290 | 0.00002 | 0.0012 | 0.0276 | 0.282890 | 13.9 | 0.5 | 0.502 | 0.542 | 0.585 |
| DJ108 13 | 449 | 0.28289 | 0.00002 | 0.0018 | 0.0396 | 0.282875 | 13.5 | 0.6 | 0.525 | 0.571 | 0.623 |
| DJ108 14 | 455 | 0.28287 | 0.00002 | 0.0019 | 0.0463 | 0.282854 | 12.9 | 0.5 | 0.555 | 0.615 | 0.683 |
| DJ108 15 | 445 | 0.28287 | 0.00002 | 0.0016 | 0.0342 | 0.282857 | 12.8 | 0.6 | 0.551 | 0.615 | 0.687 |
| DJ108 16 | 461 | 0.28286 | 0.00002 | 0.0024 | 0.0527 | 0.282839 | 12.5 | 0.7 | 0.578 | 0.644 | 0.722 |
| DJ108 17 | 455 | 0.28288 | 0.00002 | 0.0013 | 0.0270 | 0.282869 | 13.4 | 0.8 | 0.532 | 0.581 | 0.634 |
| DJ108 18 | 450 | 0.28290 | 0.00002 | 0.0017 | 0.0351 | 0.282886 | 13.9 | 0.7 | 0.509 | 0.545 | 0.586 |
| DJ108 19 | 451 | 0.28290 | 0.00002 | 0.0011 | 0.0271 | 0.282891 | 14.1 | 0.6 | 0.501 | 0.533 | 0.568 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ108 20 | 458 | 0.28292 | 0.00002 | 0.0012 | 0.0250 | 0.282910 | 15.0 | 0.6 | 0.474 | 0.485 | 0.497 |
| DJ108 21 | 450 | 0.28285 | 0.00002 | 0.0009 | 0.0183 | 0.282842 | 12.4 | 0.6 | 0.569 | 0.644 | 0.727 |
| DJ108 22 | 459 | 0.28289 | 0.00001 | 0.0007 | 0.0163 | 0.282884 | 14.1 | 0.5 | 0.510 | 0.543 | 0.579 |
| DJ108 23 | 481 | 0.28287 | 0.00001 | 0.0005 | 0.0094 | 0.282865 | 13.9 | 0.5 | 0.535 | 0.571 | 0.610 |
| DJ108 24 | 485 | 0.28284 | 0.00002 | 0.0022 | 0.0524 | 0.282820 | 12.4 | 0.6 | 0.604 | 0.673 | 0.753 |
| DJ108 25 | 458 | 0.28288 | 0.00002 | 0.0011 | 0.0223 | 0.282871 | 13.6 | 0.5 | 0.529 | 0.575 | 0.625 |
| DJ108 26 | 455 | 0.28288 | 0.00002 | 0.0011 | 0.0265 | 0.282871 | 13.5 | 0.6 | 0.529 | 0.577 | 0.628 |
| DJ108 29 | 461 | 0.28289 | 0.00002 | 0.0024 | 0.0565 | 0.282869 | 13.6 | 0.6 | 0.534 | 0.576 | 0.625 |
| DJ108 30 | 431 | 0.28293 | 0.00003 | 0.0012 | 0.0238 | 0.282920 | 14.7 | 1.0 | 0.459 | 0.479 | 0.499 |
| DJ108 31 | 528 | 0.28282 | 0.00002 | 0.0016 | 0.0359 | 0.282804 | 12.8 | 0.6 | 0.623 | 0.681 | 0.746 |
| DJ108 32 | 462 | 0.28287 | 0.00002 | 0.0015 | 0.0348 | 0.282857 | 13.2 | 0.6 | 0.549 | 0.603 | 0.663 |
| DJ108 33 | 447 | 0.28288 | 0.00001 | 0.0012 | 0.0246 | 0.282870 | 13.3 | 0.5 | 0.531 | 0.583 | 0.641 |
| DJ108 34 | 455 | 0.28291 | 0.00002 | 0.0018 | 0.0376 | 0.282895 | 14.4 | 0.6 | 0.496 | 0.522 | 0.550 |
| DJ108 35 | 467 | 0.28287 | 0.00002 | 0.0006 | 0.0112 | 0.282865 | 13.6 | 0.6 | 0.536 | 0.582 | 0.631 |
| DJ108 36 | 467 | 0.28287 | 0.00002 | 0.0013 | 0.0301 | 0.282859 | 13.3 | 0.7 | 0.546 | 0.596 | 0.651 |
| DJ108 37 | 476 | 0.28288 | 0.00001 | 0.0012 | 0.0278 | 0.282869 | 13.9 | 0.4 | 0.531 | 0.566 | 0.604 |
| DJ108 38 | 465 | 0.28289 | 0.00002 | 0.0009 | 0.0185 | 0.282882 | 14.1 | 0.6 | 0.512 | 0.544 | 0.577 |
| DJ108 39 | 471 | 0.28287 | 0.00001 | 0.0006 | 0.0138 | 0.282865 | 13.7 | 0.5 | 0.536 | 0.580 | 0.626 |
| DJ108 40 | 459 | 0.28291 | 0.00002 | 0.0012 | 0.0249 | 0.282900 | 14.6 | 0.6 | 0.488 | 0.508 | 0.528 |
| DJ108 41 | 465 | 0.28286 | 0.00001 | 0.0012 | 0.0233 | 0.282850 | 13.0 | 0.5 | 0.559 | 0.618 | 0.684 |
| DJ108 42 | 454 | 0.28286 | 0.00001 | 0.0016 | 0.0383 | 0.282846 | 12.6 | 0.4 | 0.565 | 0.633 | 0.709 |
| DJ108 43 | 485 | 0.28285 | 0.00002 | 0.0023 | 0.0581 | 0.282829 | 12.7 | 0.5 | 0.591 | 0.652 | 0.723 |
| DJ108 44 | 450 | 0.28286 | 0.00002 | 0.0027 | 0.0672 | 0.282837 | 12.2 | 0.6 | 0.583 | 0.656 | 0.744 |
| DJ108 45 | 460 | 0.28289 | 0.00001 | 0.0014 | 0.0282 | 0.282878 | 13.9 | 0.5 | 0.519 | 0.557 | 0.598 |
| DJ108 46 | 455 | 0.28288 | 0.00001 | 0.0009 | 0.0226 | 0.282872 | 13.6 | 0.5 | 0.526 | 0.573 | 0.623 |
| DJ108 47 | 467 | 0.28287 | 0.00001 | 0.0010 | 0.0240 | 0.282861 | 13.4 | 0.5 | 0.542 | 0.590 | 0.643 |
| DJ108 48 | 484 | 0.28288 | 0.00001 | 0.0013 | 0.0305 | 0.282868 | 14.1 | 0.5 | 0.532 | 0.563 | 0.597 |
| DJ108 49 | 487 | 0.28287 | 0.00001 | 0.0007 | 0.0138 | 0.282864 | 14.0 | 0.5 | 0.538 | 0.572 | 0.608 |
| DJ108 50 | 471 | 0.28292 | 0.00002 | 0.0015 | 0.0347 | 0.282907 | 15.1 | 0.6 | 0.477 | 0.483 | 0.489 |
| DJ108 51 | 449 | 0.28291 | 0.00002 | 0.0020 | 0.0456 | 0.282893 | 14.2 | 0.5 | 0.499 | 0.529 | 0.563 |
| DJ108 52 | 454 | 0.28290 | 0.00002 | 0.0011 | 0.0243 | 0.282891 | 14.2 | 0.5 | 0.501 | 0.531 | 0.565 |
| DJ108 53 | 471 | 0.28284 | 0.00002 | 0.0004 | 0.0074 | 0.282836 | 12.7 | 0.6 | 0.575 | 0.644 | 0.718 |
| DJ108 54 | 482 | 0.28286 | 0.00002 | 0.0009 | 0.0166 | 0.282852 | 13.4 | 0.5 | 0.555 | 0.602 | 0.653 |
| DJ108 55 | 467 | 0.28289 | 0.00001 | 0.0008 | 0.0179 | 0.282883 | 14.2 | 0.5 | 0.511 | 0.540 | 0.572 |
| DJ108 56 | 486 | 0.28286 | 0.00001 | 0.0012 | 0.0295 | 0.282849 | 13.4 | 0.5 | 0.559 | 0.606 | 0.657 |
| DJ108 57 | 442 | 0.28290 | 0.00002 | 0.0010 | 0.0228 | 0.282892 | 14.0 | 0.6 | 0.499 | 0.537 | 0.577 |
| DJ108 58 | 491 | 0.28287 | 0.00001 | 0.0009 | 0.0217 | 0.282862 | 14.0 | 0.4 | 0.541 | 0.573 | 0.609 |
| DJ108 59 | 485 | 0.28291 | 0.00001 | 0.0023 | 0.0573 | 0.282889 | 14.8 | 0.5 | 0.503 | 0.515 | 0.527 |
| DJ108 60 | 493 | 0.28289 | 0.00001 | 0.0016 | 0.0372 | 0.282875 | 14.5 | 0.5 | 0.522 | 0.541 | 0.562 |
| DJ188 | | | | | | | | | | | |
| DJ188 02 | 442 | 0.28294 | 0.00003 | 0.0034 | 0.0749 | 0.282912 | 14.7 | 1.0 | 0.473 | 0.491 | 0.512 |
| DJ188 04 | 418 | 0.28291 | 0.00002 | 0.0027 | 0.0608 | 0.282889 | 13.3 | 0.9 | 0.508 | 0.559 | 0.619 |
| DJ188 06 | 449 | 0.28293 | 0.00003 | 0.0026 | 0.0508 | 0.282908 | 14.7 | 0.9 | 0.477 | 0.495 | 0.514 |
| DJ188 09 | 432 | 0.28297 | 0.00003 | 0.0026 | 0.0591 | 0.282949 | 15.8 | 1.1 | 0.418 | 0.412 | 0.404 |
| DJ188 11 | 379 | 0.28297 | 0.00003 | 0.0036 | 0.0858 | 0.282944 | 14.4 | 0.9 | 0.430 | 0.457 | 0.491 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ188 12 | 409 | 0.28295 | 0.00002 | 0.0009 | 0.0199 | 0.282943 | 15.1 | 0.8 | 0.427 | 0.441 | 0.454 |
| DJ188 15 | 442 | 0.28287 | 0.00003 | 0.0017 | 0.0339 | 0.282856 | 12.7 | 1.0 | 0.552 | 0.619 | 0.694 |
| DJ188 16 | 427 | 0.28296 | 0.00003 | 0.0024 | 0.0536 | 0.282941 | 15.4 | 0.9 | 0.430 | 0.434 | 0.437 |
| DJ188 17 | 400 | 0.28299 | 0.00003 | 0.0018 | 0.0387 | 0.282977 | 16.0 | 1.1 | 0.380 | 0.370 | 0.357 |
| DJ188 18 | 427 | 0.28308 | 0.00004 | 0.0041 | 0.1081 | 0.283047 | 19.1 | 1.5 | 0.265 | 0.190 | 0.088 |
| DJ188 19 | 412 | 0.28300 | 0.00003 | 0.0036 | 0.0818 | 0.282972 | 16.2 | 1.2 | 0.384 | 0.372 | 0.355 |
| DJ188 20 | 418 | 0.28294 | 0.00003 | 0.0022 | 0.0480 | 0.282923 | 14.5 | 0.9 | 0.457 | 0.481 | 0.508 |
| DJ188 26 | 410 | 0.28291 | 0.00002 | 0.0010 | 0.0203 | 0.282902 | 13.6 | 0.7 | 0.485 | 0.533 | 0.586 |
| DJ188 29 | 434 | 0.28293 | 0.00003 | 0.0020 | 0.0438 | 0.282914 | 14.6 | 0.9 | 0.469 | 0.492 | 0.516 |
| DJ188 31 | 431 | 0.28291 | 0.00003 | 0.0016 | 0.0341 | 0.282897 | 13.9 | 1.0 | 0.493 | 0.532 | 0.575 |
| DJ188 32 | 416 | 0.28293 | 0.00004 | 0.0053 | 0.1416 | 0.282889 | 13.3 | 1.3 | 0.516 | 0.561 | 0.622 |
| DJ188 33 | 412 | 0.28290 | 0.00003 | 0.0024 | 0.0555 | 0.282881 | 12.9 | 1.1 | 0.519 | 0.580 | 0.651 |
| DJ188 34 | 416 | 0.28289 | 0.00002 | 0.0009 | 0.0187 | 0.282883 | 13.1 | 0.8 | 0.512 | 0.574 | 0.641 |
| DJ188 35 | 394 | 0.28295 | 0.00002 | 0.0022 | 0.0485 | 0.282934 | 14.4 | 0.9 | 0.443 | 0.472 | 0.505 |
| DJ188 37 | 423 | 0.28288 | 0.00003 | 0.0021 | 0.0455 | 0.282863 | 12.5 | 1.1 | 0.544 | 0.614 | 0.695 |
| DJ188 39 | 397 | 0.28292 | 0.00002 | 0.0020 | 0.0465 | 0.282905 | 13.4 | 0.7 | 0.484 | 0.535 | 0.594 |
| DJ188 40 | 386 | 0.28295 | 0.00003 | 0.0012 | 0.0272 | 0.282941 | 14.5 | 0.9 | 0.431 | 0.460 | 0.491 |
| DJ188 41 | 396 | 0.28295 | 0.00002 | 0.0023 | 0.0542 | 0.282933 | 14.4 | 0.8 | 0.444 | 0.472 | 0.505 |
| DJ188 43 | 398 | 0.28293 | 0.00004 | 0.0038 | 0.1011 | 0.282902 | 13.3 | 1.3 | 0.494 | 0.543 | 0.604 |
| DJ188 45 | 398 | 0.28292 | 0.00002 | 0.0020 | 0.0437 | 0.282905 | 13.5 | 0.8 | 0.484 | 0.535 | 0.593 |
| DJ188 47 | 410 | 0.28288 | 0.00003 | 0.0016 | 0.0349 | 0.282868 | 12.4 | 0.9 | 0.536 | 0.612 | 0.699 |
| DJ188 48 | 412 | 0.28283 | 0.00002 | 0.0017 | 0.0318 | 0.282817 | 10.7 | 0.6 | 0.610 | 0.727 | 0.861 |
| DJ188 51 | 439 | 0.28289 | 0.00003 | 0.0018 | 0.0354 | 0.282875 | 13.3 | 1.0 | 0.525 | 0.577 | 0.635 |
| DJ188 54 | 411 | 0.28295 | 0.00003 | 0.0025 | 0.0567 | 0.282931 | 14.7 | 1.0 | 0.446 | 0.468 | 0.492 |
| DJ188 55 | 390 | 0.28292 | 0.00002 | 0.0009 | 0.0198 | 0.282913 | 13.6 | 0.6 | 0.470 | 0.521 | 0.577 |
| DJ188 58 | 414 | 0.28294 | 0.00002 | 0.0016 | 0.0344 | 0.282928 | 14.6 | 0.6 | 0.450 | 0.473 | 0.498 |
| DJ188 59 | 425 | 0.28296 | 0.00003 | 0.0052 | 0.1166 | 0.282919 | 14.5 | 0.9 | 0.466 | 0.486 | 0.513 |
| DJ188 60 | 487 | 0.28292 | 0.00003 | 0.0018 | 0.0405 | 0.282904 | 15.4 | 0.9 | 0.481 | 0.480 | 0.477 |
| DJ188 61 | 440 | 0.28290 | 0.00002 | 0.0017 | 0.0396 | 0.282886 | 13.7 | 0.8 | 0.509 | 0.551 | 0.599 |
| DJ188 62 | 401 | 0.28297 | 0.00002 | 0.0022 | 0.0473 | 0.282953 | 15.2 | 0.8 | 0.413 | 0.422 | 0.431 |
| DJ188 63 | 394 | 0.28294 | 0.00002 | 0.0032 | 0.0686 | 0.282916 | 13.8 | 0.7 | 0.470 | 0.512 | 0.562 |
| DJ188 65 | 407 | 0.28293 | 0.00002 | 0.0019 | 0.0423 | 0.282916 | 14.0 | 0.7 | 0.468 | 0.505 | 0.547 |
| DJ188 66 | 416 | 0.28296 | 0.00003 | 0.0022 | 0.0500 | 0.282943 | 15.2 | 1.0 | 0.428 | 0.437 | 0.446 |
| DJ188 67 | 415 | 0.28290 | 0.00002 | 0.0014 | 0.0311 | 0.282889 | 13.3 | 0.6 | 0.505 | 0.560 | 0.622 |
| DJ192 | | | | | | | | | | | |
| DJ192 01 | 465 | 0.28293 | 0.00002 | 0.0015 | 0.0285 | 0.282917 | 15.4 | 0.8 | 0.463 | 0.464 | 0.464 |
| DJ192 02 | 487 | 0.28287 | 0.00002 | 0.0007 | 0.0138 | 0.282864 | 14.0 | 0.8 | 0.538 | 0.572 | 0.608 |
| DJ192 03 | 469 | 0.28291 | 0.00002 | 0.0008 | 0.0157 | 0.282903 | 15.0 | 0.6 | 0.483 | 0.493 | 0.504 |
| DJ192 04 | 491 | 0.28292 | 0.00002 | 0.0008 | 0.0156 | 0.282913 | 15.8 | 0.8 | 0.469 | 0.457 | 0.442 |
| DJ192 05 | 481 | 0.28291 | 0.00002 | 0.0020 | 0.0400 | 0.282892 | 14.8 | 0.8 | 0.499 | 0.511 | 0.523 |
| DJ192 07 | 447 | 0.28285 | 0.00002 | 0.0013 | 0.0303 | 0.282839 | 12.2 | 0.9 | 0.575 | 0.654 | 0.742 |
| DJ192 08 | 450 | 0.28290 | 0.00003 | 0.0017 | 0.0316 | 0.282886 | 13.9 | 0.9 | 0.509 | 0.545 | 0.586 |
| DJ192 09 | 470 | 0.28292 | 0.00002 | 0.0014 | 0.0273 | 0.282908 | 15.2 | 0.8 | 0.476 | 0.482 | 0.487 |
| DJ192 10 | 459 | 0.28295 | 0.00002 | 0.0024 | 0.0500 | 0.282929 | 15.7 | 0.8 | 0.445 | 0.440 | 0.431 |
| DJ192 11 | 446 | 0.28292 | 0.00002 | 0.0008 | 0.0161 | 0.282913 | 14.8 | 0.6 | 0.469 | 0.485 | 0.501 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ192 12 | 452 | 0.28289 | 0.00002 | 0.0016 | 0.0311 | 0.282876 | 13.6 | 0.6 | 0.522 | 0.565 | 0.614 |
| DJ192 13 | 456 | 0.28292 | 0.00002 | 0.0013 | 0.0245 | 0.282909 | 14.9 | 0.8 | 0.475 | 0.488 | 0.502 |
| DJ192 14 | 466 | 0.28296 | 0.00003 | 0.0011 | 0.0192 | 0.282950 | 16.6 | 0.9 | 0.415 | 0.387 | 0.353 |
| DJ192 15 | 455 | 0.28288 | 0.00002 | 0.0011 | 0.0209 | 0.282871 | 13.5 | 0.8 | 0.529 | 0.577 | 0.628 |
| DJ192 16 | 451 | 0.28292 | 0.00002 | 0.0018 | 0.0389 | 0.282905 | 14.6 | 0.8 | 0.481 | 0.501 | 0.522 |
| DJ192 17 | 474 | 0.28292 | 0.00003 | 0.0011 | 0.0235 | 0.282910 | 15.3 | 0.9 | 0.472 | 0.474 | 0.473 |
| DJ192 18 | 438 | 0.28289 | 0.00002 | 0.0011 | 0.0225 | 0.282881 | 13.5 | 0.8 | 0.515 | 0.564 | 0.618 |
| DJ192 19 | 453 | 0.28297 | 0.00002 | 0.0042 | 0.1051 | 0.282934 | 15.7 | 0.8 | 0.437 | 0.432 | 0.423 |
| DJ192 20 | 445 | 0.28289 | 0.00002 | 0.0010 | 0.0206 | 0.282882 | 13.7 | 0.7 | 0.514 | 0.558 | 0.606 |
| DJ192 21 | 450 | 0.28293 | 0.00002 | 0.0019 | 0.0400 | 0.282914 | 14.9 | 0.8 | 0.468 | 0.481 | 0.494 |
| DJ192 22 | 445 | 0.28293 | 0.00002 | 0.0014 | 0.0273 | 0.282918 | 15.0 | 0.8 | 0.462 | 0.474 | 0.486 |
| DJ192 23 | 447 | 0.28293 | 0.00002 | 0.0015 | 0.0320 | 0.282917 | 15.0 | 0.6 | 0.463 | 0.475 | 0.487 |
| DJ192 24 | 450 | 0.28295 | 0.00002 | 0.0012 | 0.0228 | 0.282940 | 15.8 | 0.8 | 0.431 | 0.421 | 0.409 |
| DJ192 25 | 453 | 0.28292 | 0.00002 | 0.0012 | 0.0254 | 0.282910 | 14.8 | 0.9 | 0.474 | 0.488 | 0.503 |
| DJ192 26 | 478 | 0.28293 | 0.00002 | 0.0012 | 0.0249 | 0.282919 | 15.7 | 0.8 | 0.459 | 0.450 | 0.438 |
| DJ192 27 | 442 | 0.28290 | 0.00002 | 0.0013 | 0.0280 | 0.282889 | 13.9 | 0.7 | 0.503 | 0.543 | 0.585 |
| DJ192 28 | 485 | 0.28289 | 0.00003 | 0.0013 | 0.0225 | 0.282878 | 14.4 | 1.1 | 0.518 | 0.540 | 0.563 |
| DJ192 29 | 463 | 0.28286 | 0.00002 | 0.0013 | 0.0279 | 0.282849 | 12.9 | 0.9 | 0.561 | 0.621 | 0.689 |
| DJ192 30 | 461 | 0.28296 | 0.00002 | 0.0023 | 0.0444 | 0.282940 | 16.1 | 0.8 | 0.429 | 0.414 | 0.393 |
| DJ192 31 | 465 | 0.28298 | 0.00002 | 0.0009 | 0.0173 | 0.282972 | 17.3 | 0.9 | 0.385 | 0.337 | 0.283 |
| DJ192 32 | 454 | 0.28296 | 0.00002 | 0.0010 | 0.0207 | 0.282951 | 16.3 | 0.8 | 0.414 | 0.392 | 0.366 |
| DJ192 33 | 488 | 0.28295 | 0.00003 | 0.0017 | 0.0322 | 0.282934 | 16.5 | 1.1 | 0.437 | 0.409 | 0.375 |
| DJ192 34 | 461 | 0.28296 | 0.00003 | 0.0015 | 0.0276 | 0.282947 | 16.3 | 1.1 | 0.420 | 0.398 | 0.371 |
| DJ192 35 | 454 | 0.28295 | 0.00002 | 0.0010 | 0.0191 | 0.282941 | 16.0 | 0.8 | 0.428 | 0.415 | 0.398 |
| DJ192 36 | 436 | 0.28289 | 0.00002 | 0.0015 | 0.0300 | 0.282878 | 13.3 | 0.7 | 0.521 | 0.573 | 0.631 |
| DJ192 37 | 437 | 0.28288 | 0.00002 | 0.0008 | 0.0140 | 0.282873 | 13.2 | 0.8 | 0.525 | 0.582 | 0.644 |
| DJ192 38 | 450 | 0.28290 | 0.00002 | 0.0012 | 0.0230 | 0.282890 | 14.1 | 0.7 | 0.502 | 0.536 | 0.572 |
| DJ192 39 | 450 | 0.28289 | 0.00002 | 0.0011 | 0.0223 | 0.282881 | 13.8 | 0.7 | 0.515 | 0.557 | 0.602 |
| DJ192 41 | 454 | 0.28297 | 0.00003 | 0.0012 | 0.0214 | 0.282960 | 16.6 | 0.9 | 0.402 | 0.373 | 0.338 |
| DJ192 42 | 456 | 0.28287 | 0.00002 | 0.0008 | 0.0156 | 0.282863 | 13.3 | 0.8 | 0.539 | 0.593 | 0.651 |
| DJ192 43 | 467 | 0.28295 | 0.00003 | 0.0010 | 0.0187 | 0.282941 | 16.3 | 1.1 | 0.428 | 0.407 | 0.381 |
| DJ192 44 | 454 | 0.28296 | 0.00003 | 0.0016 | 0.0319 | 0.282946 | 16.2 | 1.1 | 0.421 | 0.404 | 0.382 |
| DJ192 45 | 497 | 0.28291 | 0.00003 | 0.0011 | 0.0201 | 0.282900 | 15.5 | 0.9 | 0.487 | 0.482 | 0.476 |
| DJ192 46 | 453 | 0.28291 | 0.00002 | 0.0017 | 0.0323 | 0.282896 | 14.3 | 0.8 | 0.494 | 0.521 | 0.550 |
| DJ192 47 | 460 | 0.28291 | 0.00002 | 0.0011 | 0.0192 | 0.282901 | 14.7 | 0.7 | 0.487 | 0.505 | 0.524 |
| DJ192 48 | 465 | 0.28286 | 0.00002 | 0.0007 | 0.0117 | 0.282854 | 13.1 | 0.7 | 0.552 | 0.608 | 0.669 |
| DJ192 49 | 433 | 0.28287 | 0.00002 | 0.0014 | 0.0320 | 0.282859 | 12.6 | 0.8 | 0.548 | 0.618 | 0.697 |
| DJ192 50 | 429 | 0.28292 | 0.00003 | 0.0008 | 0.0150 | 0.282914 | 14.5 | 1.0 | 0.469 | 0.495 | 0.524 |
| DJ192 51 | 465 | 0.28299 | 0.00003 | 0.0013 | 0.0247 | 0.282979 | 17.6 | 1.2 | 0.374 | 0.322 | 0.261 |
| DJ192 52 | 442 | 0.28289 | 0.00002 | 0.0008 | 0.0154 | 0.282883 | 13.7 | 0.6 | 0.511 | 0.556 | 0.604 |
| DJ192 53 | 438 | 0.28287 | 0.00002 | 0.0016 | 0.0360 | 0.282857 | 12.6 | 0.9 | 0.551 | 0.619 | 0.696 |
| DJ192 54 | 443 | 0.28291 | 0.00003 | 0.0020 | 0.0439 | 0.282893 | 14.0 | 0.9 | 0.499 | 0.532 | 0.570 |
| DJ192 55 | 482 | 0.28294 | 0.00002 | 0.0008 | 0.0163 | 0.282933 | 16.3 | 0.8 | 0.440 | 0.417 | 0.389 |
| DJ192 56 | 477 | 0.28287 | 0.00003 | 0.0009 | 0.0191 | 0.282862 | 13.7 | 0.9 | 0.541 | 0.582 | 0.627 |
| DJ192 57 | 485 | 0.28292 | 0.00002 | 0.0030 | 0.0683 | 0.282893 | 15.0 | 0.6 | 0.498 | 0.506 | 0.516 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ192 58 | 445 | 0.28294 | 0.00003 | 0.0019 | 0.0357 | 0.282924 | 15.2 | 1.2 | 0.453 | 0.461 | 0.467 |
| DJ192 59 | 452 | 0.28295 | 0.00003 | 0.0013 | 0.0251 | 0.282939 | 15.9 | 0.9 | 0.432 | 0.422 | 0.409 |
| DJ192 60 | 485 | 0.28294 | 0.00002 | 0.0011 | 0.0204 | 0.282930 | 16.3 | 0.8 | 0.444 | 0.421 | 0.394 |
| DJ192 61 | 441 | 0.28289 | 0.00003 | 0.0015 | 0.0333 | 0.282878 | 13.4 | 1.0 | 0.521 | 0.570 | 0.625 |
| DJ192 62 | 440 | 0.28288 | 0.00002 | 0.0014 | 0.0310 | 0.282868 | 13.1 | 0.7 | 0.534 | 0.591 | 0.656 |
| DJ192 63 | 467 | 0.28294 | 0.00002 | 0.0014 | 0.0254 | 0.282928 | 15.8 | 0.7 | 0.447 | 0.438 | 0.426 |
| DJ192 64 | 457 | 0.28290 | 0.00002 | 0.0018 | 0.0362 | 0.282885 | 14.0 | 0.7 | 0.510 | 0.543 | 0.580 |
| DJ192 65 | 461 | 0.28291 | 0.00002 | 0.0012 | 0.0225 | 0.282900 | 14.7 | 0.7 | 0.488 | 0.506 | 0.526 |
| DJ192 66 | 449 | 0.28286 | 0.00002 | 0.0022 | 0.0472 | 0.282842 | 12.3 | 0.6 | 0.575 | 0.647 | 0.731 |
| DJ192 67 | 449 | 0.28288 | 0.00002 | 0.0008 | 0.0155 | 0.282873 | 13.5 | 0.7 | 0.525 | 0.574 | 0.628 |
| DJ192 68 | 487 | 0.28283 | 0.00002 | 0.0012 | 0.0234 | 0.282819 | 12.4 | 0.7 | 0.602 | 0.674 | 0.753 |
| DJ15 | | | | | | | | | | | |
| DJ15 01 | 322 | 0.28302 | 0.00002 | 0.0010 | 0.0197 | 0.283014 | 15.6 | 0.6 | 0.329 | 0.335 | 0.341 |
| DJ15 02 | 304 | 0.28289 | 0.00002 | 0.0018 | 0.0390 | 0.282880 | 10.5 | 0.9 | 0.525 | 0.653 | 0.802 |
| DJ15 03 | 318 | 0.28296 | 0.00002 | 0.0021 | 0.0509 | 0.282948 | 13.2 | 0.7 | 0.427 | 0.490 | 0.563 |
| DJ15 04 | 329 | 0.28279 | 0.00003 | 0.0015 | 0.0348 | 0.282781 | 7.5 | 1.0 | 0.664 | 0.862 | 1.088 |
| DJ15 05 | 415 | 0.28292 | 0.00002 | 0.0019 | 0.0465 | 0.282905 | 13.8 | 0.8 | 0.483 | 0.524 | 0.570 |
| DJ15 06 | 309 | 0.28294 | 0.00002 | 0.0021 | 0.0478 | 0.282928 | 12.3 | 0.9 | 0.456 | 0.540 | 0.639 |
| DJ15 07 | 343 | 0.28270 | 0.00003 | 0.0007 | 0.0161 | 0.282696 | 4.8 | 1.0 | 0.777 | 1.047 | 1.344 |
| DJ15 08 | 465 | 0.28295 | 0.00003 | 0.0012 | 0.0268 | 0.282940 | 16.2 | 1.0 | 0.431 | 0.412 | 0.390 |
| DJ15 09 | 315 | 0.28300 | 0.00002 | 0.0024 | 0.0533 | 0.282986 | 14.5 | 0.7 | 0.371 | 0.404 | 0.442 |
| DJ15 10 | 330 | 0.28284 | 0.00002 | 0.0010 | 0.0218 | 0.282834 | 9.4 | 0.7 | 0.585 | 0.741 | 0.916 |
| DJ15 11 | 317 | 0.28294 | 0.00003 | 0.0015 | 0.0306 | 0.282931 | 12.6 | 0.9 | 0.449 | 0.528 | 0.618 |
| DJ15 12 | 323 | 0.28293 | 0.00002 | 0.0009 | 0.0209 | 0.282925 | 12.5 | 0.7 | 0.456 | 0.539 | 0.631 |
| DJ15 13 | 344 | 0.28298 | 0.00002 | 0.0010 | 0.0217 | 0.282974 | 14.7 | 0.7 | 0.386 | 0.413 | 0.443 |
| DJ15 16 | 348 | 0.28297 | 0.00002 | 0.0012 | 0.0254 | 0.282962 | 14.4 | 0.7 | 0.402 | 0.437 | 0.475 |
| DJ15 17 | 306 | 0.28296 | 0.00003 | 0.0019 | 0.0436 | 0.282949 | 13.0 | 1.1 | 0.424 | 0.494 | 0.574 |
| DJ15 19 | 320 | 0.28299 | 0.00003 | 0.0024 | 0.0590 | 0.282976 | 14.2 | 0.9 | 0.386 | 0.424 | 0.469 |
| DJ15 20 | 368 | 0.28293 | 0.00002 | 0.0012 | 0.0258 | 0.282922 | 13.4 | 0.8 | 0.459 | 0.516 | 0.579 |
| DJ15 22 | 332 | 0.28291 | 0.00002 | 0.0022 | 0.0504 | 0.282896 | 11.7 | 0.8 | 0.501 | 0.598 | 0.710 |
| DJ15 23 | 322 | 0.28305 | 0.00003 | 0.0014 | 0.0315 | 0.283042 | 16.6 | 1.0 | 0.289 | 0.272 | 0.250 |
| DJ15 24 | 351 | 0.28299 | 0.00002 | 0.0009 | 0.0177 | 0.282984 | 15.2 | 0.8 | 0.370 | 0.385 | 0.399 |
| DJ15 27 | 330 | 0.28297 | 0.00002 | 0.0021 | 0.0462 | 0.282957 | 13.8 | 0.7 | 0.412 | 0.460 | 0.516 |
| DJ15 28 | 390 | 0.28296 | 0.00003 | 0.0004 | 0.0090 | 0.282957 | 15.1 | 0.9 | 0.408 | 0.421 | 0.434 |
| DJ15 29 | 428 | 0.28292 | 0.00002 | 0.0003 | 0.0056 | 0.282918 | 14.6 | 0.8 | 0.462 | 0.487 | 0.512 |
| DJ15 30 | 311 | 0.28290 | 0.00002 | 0.0017 | 0.0381 | 0.282890 | 11.0 | 0.8 | 0.509 | 0.625 | 0.759 |
| DJ15 32 | 313 | 0.28284 | 0.00002 | 0.0019 | 0.0443 | 0.282829 | 8.9 | 0.9 | 0.599 | 0.763 | 0.954 |
| DJ15 34 | 312 | 0.28298 | 0.00003 | 0.0017 | 0.0377 | 0.282970 | 13.9 | 1.0 | 0.393 | 0.442 | 0.497 |
| DJ15 35 | 321 | 0.28299 | 0.00002 | 0.0014 | 0.0334 | 0.282982 | 14.5 | 0.7 | 0.375 | 0.410 | 0.448 |
| DJ15 36 | 318 | 0.28295 | 0.00003 | 0.0021 | 0.0478 | 0.282938 | 12.8 | 1.2 | 0.441 | 0.513 | 0.595 |
| DJ15 37 | 304 | 0.28299 | 0.00002 | 0.0016 | 0.0314 | 0.282981 | 14.1 | 0.8 | 0.378 | 0.422 | 0.473 |
| DJ15 38 | 327 | 0.28299 | 0.00002 | 0.0021 | 0.0501 | 0.282977 | 14.4 | 0.8 | 0.383 | 0.416 | 0.454 |
| DJ15 39 | 364 | 0.28299 | 0.00002 | 0.0020 | 0.0487 | 0.282976 | 15.2 | 0.7 | 0.382 | 0.394 | 0.407 |
| DJ15 40 | 328 | 0.28297 | 0.00002 | 0.0035 | 0.0841 | 0.282949 | 13.5 | 0.8 | 0.428 | 0.481 | 0.546 |
| DJ15 41 | 434 | 0.28293 | 0.00002 | 0.0006 | 0.0130 | 0.282925 | 15.0 | 0.6 | 0.452 | 0.466 | 0.479 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ15 42 | 339 | 0.28298 | 0.00002 | 0.0009 | 0.0185 | 0.282974 | 14.6 | 0.8 | 0.385 | 0.415 | 0.447 |
| DJ15 43 | 320 | 0.28285 | 0.00002 | 0.0015 | 0.0329 | 0.282841 | 9.5 | 0.7 | 0.578 | 0.731 | 0.906 |
| DJ15 44 | 336 | 0.28279 | 0.00003 | 0.0013 | 0.0295 | 0.282782 | 7.7 | 1.1 | 0.661 | 0.855 | 1.076 |
| DJ15 45 | 446 | 0.28293 | 0.00002 | 0.0010 | 0.0191 | 0.282922 | 15.1 | 0.7 | 0.457 | 0.466 | 0.474 |
| DJ15 46 | 310 | 0.28298 | 0.00002 | 0.0019 | 0.0403 | 0.282969 | 13.8 | 0.8 | 0.395 | 0.446 | 0.504 |
| DJ15 47 | 341 | 0.28293 | 0.00002 | 0.0008 | 0.0150 | 0.282925 | 12.9 | 0.7 | 0.454 | 0.527 | 0.606 |
| DJ15 48 | 313 | 0.28287 | 0.00003 | 0.0017 | 0.0357 | 0.282860 | 10.0 | 1.0 | 0.552 | 0.692 | 0.853 |
| DJ15 49 | 328 | 0.28296 | 0.00002 | 0.0007 | 0.0144 | 0.282956 | 13.7 | 0.6 | 0.411 | 0.465 | 0.523 |
| DJ15 50 | 325 | 0.28302 | 0.00002 | 0.0015 | 0.0305 | 0.283011 | 15.6 | 0.6 | 0.333 | 0.340 | 0.347 |
| DJ15 51 | 377 | 0.28293 | 0.00002 | 0.0008 | 0.0185 | 0.282924 | 13.7 | 0.6 | 0.454 | 0.504 | 0.559 |
| DJ15 52 | 309 | 0.28294 | 0.00002 | 0.0011 | 0.0222 | 0.282934 | 12.5 | 0.6 | 0.444 | 0.527 | 0.620 |
| DJ15 53 | 423 | 0.28290 | 0.00002 | 0.0013 | 0.0313 | 0.282890 | 13.5 | 0.8 | 0.503 | 0.554 | 0.610 |
| DJ15 55 | 426 | 0.28291 | 0.00002 | 0.0011 | 0.0261 | 0.282901 | 13.9 | 0.7 | 0.487 | 0.526 | 0.568 |
| DJ15 56 | 446 | 0.28290 | 0.00002 | 0.0008 | 0.0190 | 0.282893 | 14.1 | 0.6 | 0.497 | 0.531 | 0.567 |
| DJ15 57 | 312 | 0.28288 | 0.00002 | 0.0022 | 0.0493 | 0.282867 | 10.2 | 0.8 | 0.545 | 0.677 | 0.832 |
| DJ15 58 | 414 | 0.28289 | 0.00002 | 0.0008 | 0.0156 | 0.282884 | 13.1 | 0.5 | 0.511 | 0.573 | 0.641 |
| DJ15 59 | 330 | 0.28291 | 0.00002 | 0.0017 | 0.0420 | 0.282900 | 11.8 | 0.7 | 0.494 | 0.592 | 0.703 |
| DJ15 61 | 439 | 0.28288 | 0.00002 | 0.0009 | 0.0200 | 0.282873 | 13.2 | 0.5 | 0.526 | 0.583 | 0.644 |
| DJ15 62 | 331 | 0.28290 | 0.00002 | 0.0034 | 0.0860 | 0.282879 | 11.1 | 0.7 | 0.534 | 0.638 | 0.768 |
| DJ15 63 | 409 | 0.28290 | 0.00002 | 0.0009 | 0.0182 | 0.282893 | 13.3 | 0.6 | 0.498 | 0.555 | 0.617 |
| DJ15 64 | 341 | 0.28297 | 0.00001 | 0.0007 | 0.0132 | 0.282966 | 14.3 | 0.5 | 0.397 | 0.434 | 0.473 |
| DJ15 65 | 307 | 0.28293 | 0.00002 | 0.0016 | 0.0359 | 0.282921 | 12.0 | 0.6 | 0.464 | 0.558 | 0.664 |
| DJ15 66 | 316 | 0.28292 | 0.00002 | 0.0013 | 0.0275 | 0.282912 | 11.9 | 0.6 | 0.475 | 0.571 | 0.680 |
| DJ15 67 | 425 | 0.28288 | 0.00002 | 0.0009 | 0.0210 | 0.282873 | 12.9 | 0.6 | 0.526 | 0.591 | 0.662 |
| DJ15 68 | 312 | 0.28293 | 0.00002 | 0.0015 | 0.0332 | 0.282921 | 12.1 | 0.5 | 0.463 | 0.554 | 0.656 |
| DJ15 69 | 327 | 0.28294 | 0.00001 | 0.0008 | 0.0186 | 0.282935 | 13.0 | 0.5 | 0.440 | 0.512 | 0.591 |
| DJ15 70 | 433 | 0.28290 | 0.00001 | 0.0006 | 0.0127 | 0.282895 | 13.9 | 0.5 | 0.494 | 0.535 | 0.578 |
| DJ15 72 | 411 | 0.28291 | 0.00002 | 0.0008 | 0.0193 | 0.282904 | 13.7 | 0.7 | 0.483 | 0.529 | 0.580 |
| DJ15 73 | 346 | 0.28293 | 0.00001 | 0.0007 | 0.0146 | 0.282925 | 13.0 | 0.5 | 0.453 | 0.522 | 0.597 |
| DJ149 | | | | | | | | | | | |
| DJ149 01 | 385 | 0.28289 | 0.00002 | 0.0031 | 0.0752 | 0.282868 | 11.9 | 0.7 | 0.544 | 0.629 | 0.732 |
| DJ149 02 | 391 | 0.28293 | 0.00003 | 0.0028 | 0.0674 | 0.282910 | 13.5 | 0.9 | 0.480 | 0.529 | 0.588 |
| DJ149 03 | 422 | 0.28287 | 0.00002 | 0.0012 | 0.0272 | 0.282861 | 12.4 | 0.8 | 0.545 | 0.621 | 0.706 |
| DJ149 04 | 480 | 0.28288 | 0.00003 | 0.0021 | 0.0480 | 0.282861 | 13.7 | 1.0 | 0.544 | 0.582 | 0.626 |
| DJ149 06 | 422 | 0.28292 | 0.00003 | 0.0027 | 0.0645 | 0.282899 | 13.8 | 1.0 | 0.493 | 0.534 | 0.582 |
| DJ149 07 | 444 | 0.28293 | 0.00002 | 0.0012 | 0.0274 | 0.282920 | 15.0 | 0.8 | 0.459 | 0.471 | 0.482 |
| DJ149 09 | 407 | 0.28290 | 0.00002 | 0.0018 | 0.0405 | 0.282886 | 13.0 | 0.8 | 0.510 | 0.572 | 0.642 |
| DJ149 10 | 402 | 0.28292 | 0.00002 | 0.0022 | 0.0503 | 0.282903 | 13.5 | 0.8 | 0.487 | 0.536 | 0.593 |
| DJ149 11 | 413 | 0.28295 | 0.00002 | 0.0029 | 0.0687 | 0.282928 | 14.6 | 0.8 | 0.451 | 0.474 | 0.500 |
| DJ149 12 | 422 | 0.28287 | 0.00002 | 0.0020 | 0.0463 | 0.282854 | 12.2 | 0.9 | 0.557 | 0.636 | 0.726 |
| DJ149 13 | 398 | 0.28288 | 0.00003 | 0.0019 | 0.0449 | 0.282866 | 12.1 | 1.0 | 0.541 | 0.625 | 0.721 |
| DJ149 14 | 421 | 0.28297 | 0.00003 | 0.0025 | 0.0588 | 0.282950 | 15.6 | 1.0 | 0.417 | 0.416 | 0.415 |
| DJ149 15 | 400 | 0.28292 | 0.00002 | 0.0020 | 0.0460 | 0.282905 | 13.5 | 0.7 | 0.484 | 0.534 | 0.591 |
| DJ149 16 | 394 | 0.28287 | 0.00003 | 0.0025 | 0.0591 | 0.282852 | 11.5 | 0.9 | 0.565 | 0.660 | 0.773 |
| DJ149 18 | 387 | 0.28292 | 0.00002 | 0.0036 | 0.0835 | 0.282894 | 12.8 | 0.8 | 0.506 | 0.568 | 0.644 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ149 19 | 383 | 0.28292 | 0.00002 | 0.0024 | 0.0572 | 0.282903 | 13.1 | 0.9 | 0.489 | 0.550 | 0.621 |
| DJ149 20 | 402 | 0.28290 | 0.00002 | 0.0022 | 0.0490 | 0.282883 | 12.8 | 0.7 | 0.516 | 0.582 | 0.658 |
| DJ149 21 | 390 | 0.28294 | 0.00003 | 0.0026 | 0.0636 | 0.282921 | 13.9 | 0.9 | 0.462 | 0.504 | 0.552 |
| DJ149 22 | 392 | 0.28290 | 0.00002 | 0.0026 | 0.0614 | 0.282881 | 12.5 | 0.7 | 0.522 | 0.594 | 0.680 |
| DJ149 23 | 413 | 0.28292 | 0.00002 | 0.0024 | 0.0563 | 0.282901 | 13.7 | 0.8 | 0.489 | 0.533 | 0.585 |
| DJ149 24 | 409 | 0.28290 | 0.00002 | 0.0024 | 0.0565 | 0.282882 | 12.9 | 0.8 | 0.519 | 0.581 | 0.655 |
| DJ149 25 | 395 | 0.28290 | 0.00003 | 0.0029 | 0.0697 | 0.282879 | 12.5 | 0.9 | 0.526 | 0.597 | 0.684 |
| DJ149 26 | 409 | 0.28290 | 0.00002 | 0.0021 | 0.0505 | 0.282884 | 13.0 | 0.8 | 0.515 | 0.576 | 0.647 |
| DJ149 27 | 397 | 0.28292 | 0.00003 | 0.0020 | 0.0463 | 0.282905 | 13.4 | 0.9 | 0.484 | 0.535 | 0.594 |
| DJ149 28 | 423 | 0.28291 | 0.00002 | 0.0021 | 0.0476 | 0.282893 | 13.6 | 0.7 | 0.500 | 0.545 | 0.598 |
| DJ149 29 | 389 | 0.28289 | 0.00002 | 0.0020 | 0.0439 | 0.282875 | 12.2 | 0.7 | 0.528 | 0.608 | 0.702 |
| DJ149 30 | 409 | 0.28294 | 0.00002 | 0.0031 | 0.0742 | 0.282916 | 14.1 | 0.7 | 0.469 | 0.502 | 0.542 |
| DJ149 31 | 394 | 0.28293 | 0.00002 | 0.0029 | 0.0687 | 0.282909 | 13.5 | 0.9 | 0.481 | 0.529 | 0.587 |
| DJ149 32 | 373 | 0.28293 | 0.00002 | 0.0026 | 0.0588 | 0.282912 | 13.2 | 0.8 | 0.477 | 0.536 | 0.605 |
| DJ149 34 | 447 | 0.28290 | 0.00002 | 0.0020 | 0.0460 | 0.282883 | 13.8 | 0.8 | 0.513 | 0.553 | 0.598 |
| DJ149 35 | 408 | 0.28297 | 0.00003 | 0.0039 | 0.0950 | 0.282940 | 14.9 | 0.9 | 0.433 | 0.448 | 0.465 |
| DJ149 36 | 421 | 0.28288 | 0.00002 | 0.0021 | 0.0454 | 0.282863 | 12.5 | 0.8 | 0.544 | 0.615 | 0.698 |
| DJ149 37 | 440 | 0.28294 | 0.00002 | 0.0016 | 0.0350 | 0.282927 | 15.2 | 0.8 | 0.450 | 0.458 | 0.465 |
| DJ149 38 | 399 | 0.28294 | 0.00002 | 0.0028 | 0.0662 | 0.282919 | 14.0 | 0.8 | 0.465 | 0.502 | 0.546 |
| DJ149 39 | 409 | 0.28292 | 0.00002 | 0.0029 | 0.0692 | 0.282898 | 13.5 | 0.8 | 0.496 | 0.544 | 0.602 |
| DJ149 40 | 415 | 0.28301 | 0.00002 | 0.0028 | 0.0669 | 0.282988 | 16.8 | 0.8 | 0.360 | 0.333 | 0.298 |
| DJ149 41 | 393 | 0.28291 | 0.00002 | 0.0025 | 0.0588 | 0.282892 | 12.9 | 0.8 | 0.505 | 0.569 | 0.644 |
| DJ149 43 | 419 | 0.28294 | 0.00002 | 0.0019 | 0.0433 | 0.282925 | 14.6 | 0.8 | 0.453 | 0.475 | 0.500 |
| DJ149 44 | 401 | 0.28292 | 0.00002 | 0.0026 | 0.0594 | 0.282900 | 13.4 | 0.7 | 0.492 | 0.543 | 0.604 |
| DJ149 45 | 436 | 0.28294 | 0.00002 | 0.0021 | 0.0496 | 0.282923 | 14.9 | 0.7 | 0.456 | 0.470 | 0.484 |
| DJ149 46 | 456 | 0.28293 | 0.00002 | 0.0026 | 0.0592 | 0.282908 | 14.8 | 0.8 | 0.477 | 0.491 | 0.506 |
| DJ149 47 | 404 | 0.28289 | 0.00002 | 0.0029 | 0.0679 | 0.282868 | 12.3 | 0.8 | 0.541 | 0.616 | 0.706 |
| DJ149 48 | 400 | 0.28296 | 0.00002 | 0.0034 | 0.0803 | 0.282935 | 14.6 | 0.8 | 0.442 | 0.466 | 0.494 |
| DJ149 50 | 386 | 0.28294 | 0.00002 | 0.0019 | 0.0441 | 0.282926 | 14.0 | 0.8 | 0.453 | 0.494 | 0.540 |
| DJ149 51 | 403 | 0.28295 | 0.00002 | 0.0027 | 0.0647 | 0.282930 | 14.4 | 0.8 | 0.449 | 0.476 | 0.506 |
| DJ149 52 | 381 | 0.28294 | 0.00002 | 0.0024 | 0.0543 | 0.282923 | 13.7 | 0.6 | 0.460 | 0.505 | 0.558 |
| DJ149 53 | 397 | 0.28289 | 0.00002 | 0.0019 | 0.0442 | 0.282876 | 12.4 | 0.5 | 0.526 | 0.602 | 0.690 |
| DJ149 54 | 376 | 0.28297 | 0.00002 | 0.0023 | 0.0540 | 0.282954 | 14.7 | 0.8 | 0.414 | 0.438 | 0.464 |
| DJ149 56 | 403 | 0.28293 | 0.00002 | 0.0020 | 0.0469 | 0.282915 | 13.9 | 0.5 | 0.469 | 0.509 | 0.554 |
| DJ149 57 | 388 | 0.28293 | 0.00002 | 0.0019 | 0.0434 | 0.282916 | 13.6 | 0.6 | 0.468 | 0.516 | 0.571 |
| DJ325 | | | | | | | | | | | |
| DJ325 01 | 426 | 0.28291 | 0.00003 | 0.0015 | 0.0335 | 0.282898 | 13.8 | 1.0 | 0.492 | 0.533 | 0.578 |
| DJ325 02 | 428 | 0.28289 | 0.00003 | 0.0011 | 0.0219 | 0.282881 | 13.3 | 0.9 | 0.515 | 0.570 | 0.631 |
| DJ325 03 | 429 | 0.28290 | 0.00002 | 0.0010 | 0.0193 | 0.282892 | 13.7 | 0.8 | 0.499 | 0.545 | 0.594 |
| DJ325 04 | 430 | 0.28299 | 0.00003 | 0.0030 | 0.0651 | 0.282966 | 16.3 | 1.0 | 0.392 | 0.375 | 0.351 |
| DJ325 05 | 417 | 0.28293 | 0.00002 | 0.0013 | 0.0246 | 0.282920 | 14.4 | 0.8 | 0.461 | 0.489 | 0.519 |
| DJ325 06 | 411 | 0.28289 | 0.00002 | 0.0012 | 0.0231 | 0.282881 | 12.9 | 0.8 | 0.516 | 0.582 | 0.655 |
| DJ325 10 | 399 | 0.28290 | 0.00002 | 0.0016 | 0.0315 | 0.282888 | 12.9 | 0.6 | 0.508 | 0.573 | 0.647 |
| DJ325 11 | 412 | 0.28298 | 0.00003 | 0.0009 | 0.0176 | 0.282973 | 16.2 | 1.0 | 0.385 | 0.370 | 0.352 |
| DJ325 12 | 424 | 0.28284 | 0.00003 | 0.0012 | 0.0229 | 0.282830 | 11.4 | 1.0 | 0.588 | 0.688 | 0.801 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ325 13 | 419 | 0.28294 | 0.00002 | 0.0011 | 0.0246 | 0.282931 | 14.9 | 0.9 | 0.444 | 0.461 | 0.479 |
| DJ325 14 | 423 | 0.28299 | 0.00003 | 0.0014 | 0.0280 | 0.282979 | 16.6 | 1.1 | 0.375 | 0.350 | 0.318 |
| DJ325 17 | 396 | 0.28288 | 0.00002 | 0.0013 | 0.0262 | 0.282870 | 12.2 | 0.8 | 0.532 | 0.615 | 0.709 |
| DJ325 18 | 424 | 0.28289 | 0.00002 | 0.0014 | 0.0306 | 0.282879 | 13.1 | 0.8 | 0.519 | 0.578 | 0.643 |
| DJ325 19 | 407 | 0.28287 | 0.00003 | 0.0010 | 0.0190 | 0.282862 | 12.2 | 1.0 | 0.542 | 0.627 | 0.720 |
| DJ325 20 | 415 | 0.28288 | 0.00003 | 0.0014 | 0.0270 | 0.282869 | 12.6 | 0.9 | 0.534 | 0.606 | 0.687 |
| DJ325 21 | 419 | 0.28289 | 0.00003 | 0.0016 | 0.0318 | 0.282877 | 13.0 | 0.9 | 0.522 | 0.584 | 0.655 |
| DJ325 23 | 442 | 0.28285 | 0.00002 | 0.0010 | 0.0218 | 0.282842 | 12.2 | 0.8 | 0.570 | 0.651 | 0.740 |
| DJ325 24 | 425 | 0.28285 | 0.00002 | 0.0008 | 0.0145 | 0.282844 | 11.9 | 0.7 | 0.567 | 0.658 | 0.757 |
| DJ325 26 | 451 | 0.28295 | 0.00003 | 0.0010 | 0.0209 | 0.282942 | 15.9 | 1.0 | 0.428 | 0.417 | 0.402 |
| DJ325 27 | 432 | 0.28286 | 0.00002 | 0.0015 | 0.0332 | 0.282848 | 12.2 | 0.6 | 0.564 | 0.644 | 0.734 |
| DJ325 29 | 426 | 0.28286 | 0.00002 | 0.0010 | 0.0188 | 0.282852 | 12.2 | 0.6 | 0.556 | 0.638 | 0.728 |
| DJ325 30 | 425 | 0.28288 | 0.00002 | 0.0009 | 0.0180 | 0.282873 | 12.9 | 0.7 | 0.526 | 0.591 | 0.662 |
| DJ325 31 | 426 | 0.28285 | 0.00002 | 0.0015 | 0.0309 | 0.282838 | 11.7 | 0.7 | 0.578 | 0.670 | 0.774 |
| DJ325 32 | 433 | 0.28287 | 0.00002 | 0.0011 | 0.0204 | 0.282861 | 12.7 | 0.7 | 0.543 | 0.613 | 0.689 |
| DJ325 33 | 435 | 0.28288 | 0.00002 | 0.0014 | 0.0268 | 0.282869 | 13.0 | 0.7 | 0.534 | 0.594 | 0.662 |
| DJ325 34 | 439 | 0.28287 | 0.00002 | 0.0011 | 0.0205 | 0.282861 | 12.8 | 0.7 | 0.543 | 0.609 | 0.682 |
| DJ325 35 | 453 | 0.28286 | 0.00002 | 0.0014 | 0.0266 | 0.282848 | 12.7 | 0.7 | 0.562 | 0.629 | 0.704 |
| DJ325 36 | 436 | 0.28289 | 0.00002 | 0.0009 | 0.0174 | 0.282883 | 13.5 | 0.6 | 0.512 | 0.561 | 0.615 |
| DJ325 37 | 422 | 0.28288 | 0.00002 | 0.0015 | 0.0321 | 0.282868 | 12.7 | 0.8 | 0.535 | 0.604 | 0.681 |
| DJ325 38 | 457 | 0.28279 | 0.00003 | 0.0008 | 0.0147 | 0.282783 | 10.5 | 1.0 | 0.652 | 0.775 | 0.910 |
| DJ325 39 | 465 | 0.28279 | 0.00002 | 0.0012 | 0.0223 | 0.282780 | 10.5 | 0.7 | 0.659 | 0.778 | 0.911 |
| DJ325 40 | 440 | 0.28285 | 0.00002 | 0.0012 | 0.0250 | 0.282840 | 12.1 | 0.6 | 0.573 | 0.656 | 0.748 |
| DJ259 | | | | | | | | | | | |
| DJ259 01 | 337 | 0.28293 | 0.00002 | 0.0029 | 0.0695 | 0.282912 | 12.4 | 0.8 | 0.481 | 0.559 | 0.654 |
| DJ259 02 | 338 | 0.28295 | 0.00002 | 0.0031 | 0.0730 | 0.282930 | 13.0 | 0.7 | 0.454 | 0.516 | 0.592 |
| DJ259 03 | 336 | 0.28289 | 0.00002 | 0.0021 | 0.0526 | 0.282877 | 11.1 | 0.7 | 0.529 | 0.639 | 0.768 |
| DJ259 04 | 335 | 0.28289 | 0.00002 | 0.0022 | 0.0533 | 0.282876 | 11.1 | 0.8 | 0.531 | 0.641 | 0.772 |
| DJ259 06 | 337 | 0.28297 | 0.00002 | 0.0022 | 0.0524 | 0.282956 | 13.9 | 0.6 | 0.413 | 0.458 | 0.509 |
| DJ259 07 | 337 | 0.28294 | 0.00002 | 0.0016 | 0.0390 | 0.282930 | 13.0 | 0.6 | 0.450 | 0.518 | 0.595 |
| DJ259 08 | 332 | 0.28298 | 0.00002 | 0.0019 | 0.0461 | 0.282968 | 14.2 | 0.6 | 0.395 | 0.433 | 0.477 |
| DJ259 11 | 329 | 0.28293 | 0.00001 | 0.0011 | 0.0256 | 0.282923 | 12.6 | 0.5 | 0.458 | 0.538 | 0.627 |
| DJ259 12 | 340 | 0.28291 | 0.00002 | 0.0017 | 0.0424 | 0.282899 | 12.0 | 0.6 | 0.494 | 0.586 | 0.690 |
| DJ259 13 | 331 | 0.28295 | 0.00002 | 0.0025 | 0.0603 | 0.282935 | 13.0 | 0.7 | 0.446 | 0.511 | 0.588 |
| DJ259 14 | 332 | 0.28291 | 0.00002 | 0.0019 | 0.0464 | 0.282898 | 11.8 | 0.5 | 0.497 | 0.593 | 0.704 |
| DJ259 15 | 339 | 0.28296 | 0.00002 | 0.0024 | 0.0599 | 0.282945 | 13.6 | 0.6 | 0.430 | 0.482 | 0.544 |
| DJ259 16 | 349 | 0.28298 | 0.00002 | 0.0024 | 0.0604 | 0.282964 | 14.5 | 0.7 | 0.401 | 0.431 | 0.466 |
| DJ259 19 | 353 | 0.28293 | 0.00002 | 0.0027 | 0.0696 | 0.282912 | 12.7 | 0.6 | 0.478 | 0.548 | 0.631 |
| DJ259 20 | 348 | 0.28291 | 0.00003 | 0.0035 | 0.0863 | 0.282887 | 11.7 | 0.9 | 0.520 | 0.608 | 0.719 |
| DJ259 21 | 351 | 0.28293 | 0.00002 | 0.0029 | 0.0696 | 0.282911 | 12.6 | 0.6 | 0.481 | 0.552 | 0.637 |
| DJ259 22 | 348 | 0.28294 | 0.00002 | 0.0026 | 0.0662 | 0.282923 | 13.0 | 0.7 | 0.462 | 0.526 | 0.602 |
| DJ259 23 | 327 | 0.28289 | 0.00002 | 0.0013 | 0.0320 | 0.282882 | 11.1 | 0.6 | 0.518 | 0.633 | 0.763 |
| DJ303 | | | | | | | | | | | |
| DJ303 01 | 331 | 0.28293 | 0.00003 | 0.0034 | 0.0691 | 0.282909 | 12.1 | 1.1 | 0.488 | 0.569 | 0.671 |
| DJ303 02 | 351 | 0.28290 | 0.00002 | 0.0013 | 0.0240 | 0.282891 | 11.9 | 0.9 | 0.503 | 0.596 | 0.701 |

| Analysis No. | Age* (Ma) | $^{176}\text{Hf}/^{177}\text{Hf}$ | 1σ | $^{176}\text{Lu}/^{177}\text{Hf}$ | $^{176}\text{Yb}/^{177}\text{Hf}$ | $(^{176}\text{Hf}/^{177}\text{Hf})_i$ | $\epsilon\text{Hf(t)}$ | 1σ | T_{DM} | T_{DM}^{C} | $T_{\text{DM}}^{\text{LC}}$ |
|--------------|-----------|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------------------------|------------------------|-----------|-----------------|----------------------------|-----------------------------|
| DJ303 03 | 350 | 0.28299 | 0.00003 | 0.0026 | 0.0473 | 0.282973 | 14.8 | 0.9 | 0.388 | 0.411 | 0.437 |
| DJ303 04 | 340 | 0.28301 | 0.00003 | 0.0024 | 0.0457 | 0.282995 | 15.4 | 1.0 | 0.356 | 0.367 | 0.379 |
| DJ303 05 | 354 | 0.28294 | 0.00002 | 0.0017 | 0.0318 | 0.282929 | 13.3 | 0.9 | 0.451 | 0.509 | 0.576 |
| DJ303 06 | 340 | 0.28295 | 0.00003 | 0.0035 | 0.0687 | 0.282928 | 13.0 | 1.0 | 0.459 | 0.521 | 0.598 |
| DJ303 07 | 355 | 0.28299 | 0.00003 | 0.0011 | 0.0197 | 0.282983 | 15.3 | 0.9 | 0.372 | 0.385 | 0.398 |
| DJ303 08 | 343 | 0.28298 | 0.00003 | 0.0019 | 0.0371 | 0.282968 | 14.5 | 0.9 | 0.395 | 0.427 | 0.463 |
| DJ303 09 | 353 | 0.28292 | 0.00002 | 0.0009 | 0.0159 | 0.282914 | 12.8 | 0.8 | 0.470 | 0.544 | 0.625 |
| DJ303 10 | 344 | 0.28292 | 0.00003 | 0.0020 | 0.0395 | 0.282907 | 12.3 | 1.0 | 0.484 | 0.565 | 0.659 |
| DJ303 11 | 345 | 0.28300 | 0.00003 | 0.0028 | 0.0515 | 0.282982 | 15.0 | 0.9 | 0.375 | 0.394 | 0.414 |
| DJ303 12 | 340 | 0.28292 | 0.00002 | 0.0022 | 0.0410 | 0.282906 | 12.2 | 0.9 | 0.487 | 0.570 | 0.668 |
| DJ303 13 | 348 | 0.28294 | 0.00002 | 0.0023 | 0.0437 | 0.282925 | 13.1 | 0.7 | 0.458 | 0.522 | 0.596 |
| DJ303 15 | 341 | 0.28297 | 0.00002 | 0.0017 | 0.0323 | 0.282959 | 14.1 | 0.7 | 0.408 | 0.448 | 0.494 |
| DJ303 16 | 341 | 0.28294 | 0.00002 | 0.0007 | 0.0127 | 0.282936 | 13.3 | 0.7 | 0.439 | 0.502 | 0.571 |
| DJ303 17 | 355 | 0.28296 | 0.00003 | 0.0015 | 0.0264 | 0.282950 | 14.1 | 1.0 | 0.420 | 0.460 | 0.505 |
| DJ303 18 | 350 | 0.28291 | 0.00002 | 0.0009 | 0.0167 | 0.282904 | 12.4 | 0.9 | 0.484 | 0.568 | 0.661 |
| DJ303 19 | 345 | 0.28292 | 0.00002 | 0.0017 | 0.0332 | 0.282909 | 12.4 | 0.9 | 0.480 | 0.560 | 0.652 |
| DJ303 20 | 340 | 0.28294 | 0.00003 | 0.0017 | 0.0335 | 0.282929 | 13.0 | 0.9 | 0.451 | 0.517 | 0.593 |
| DJ303 21 | 336 | 0.28294 | 0.00003 | 0.0016 | 0.0297 | 0.282930 | 13.0 | 0.9 | 0.450 | 0.518 | 0.596 |
| DJ303 22 | 338 | 0.28290 | 0.00002 | 0.0016 | 0.0307 | 0.282890 | 11.6 | 0.7 | 0.508 | 0.608 | 0.723 |
| DJ303 23 | 340 | 0.28293 | 0.00002 | 0.0028 | 0.0571 | 0.282912 | 12.4 | 0.8 | 0.480 | 0.556 | 0.648 |
| DJ303 24 | 346 | 0.28293 | 0.00002 | 0.0013 | 0.0246 | 0.282922 | 12.9 | 0.7 | 0.461 | 0.531 | 0.610 |
| DJ303 26 | 344 | 0.28293 | 0.00002 | 0.0011 | 0.0198 | 0.282923 | 12.9 | 0.8 | 0.458 | 0.529 | 0.608 |

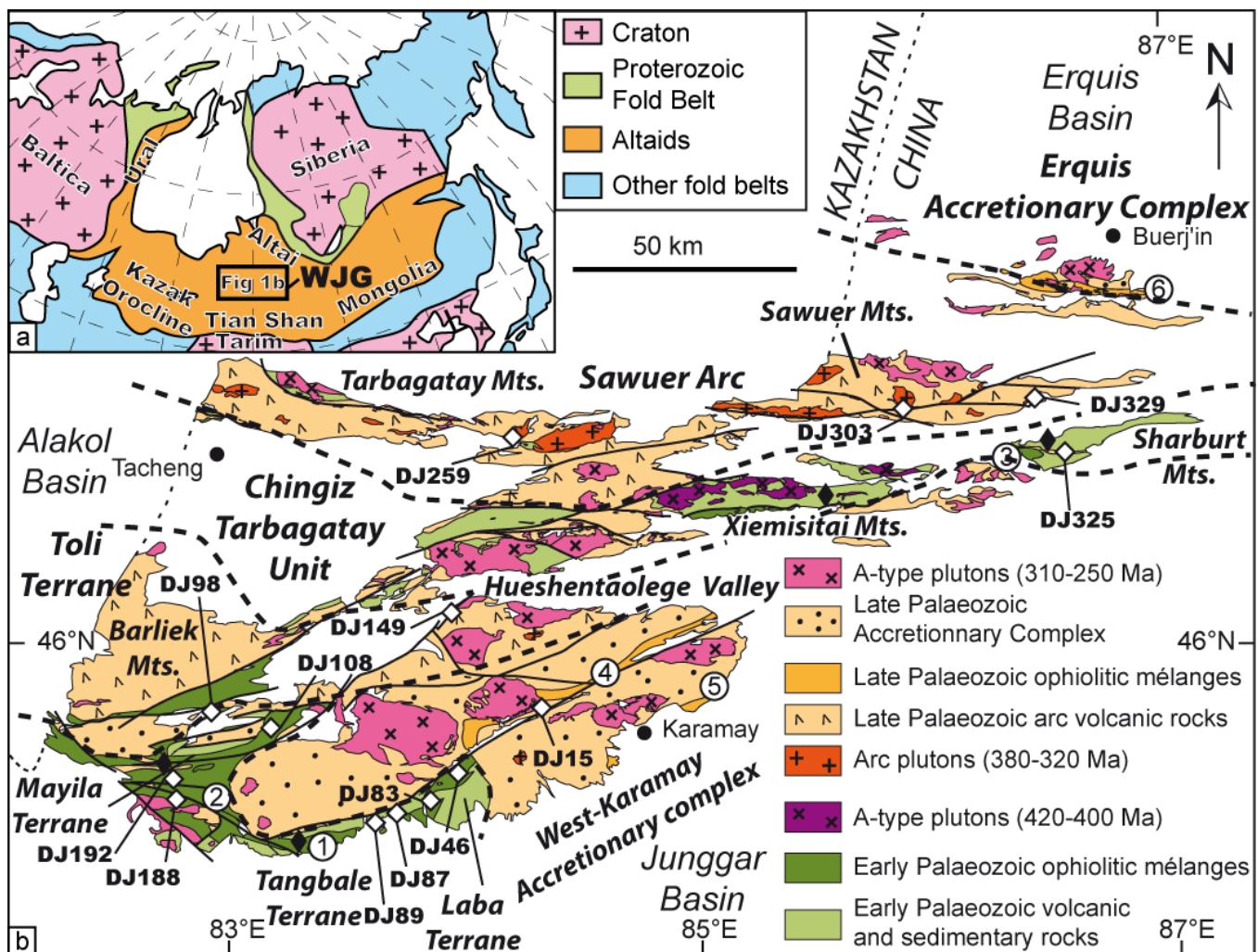


Figure 1

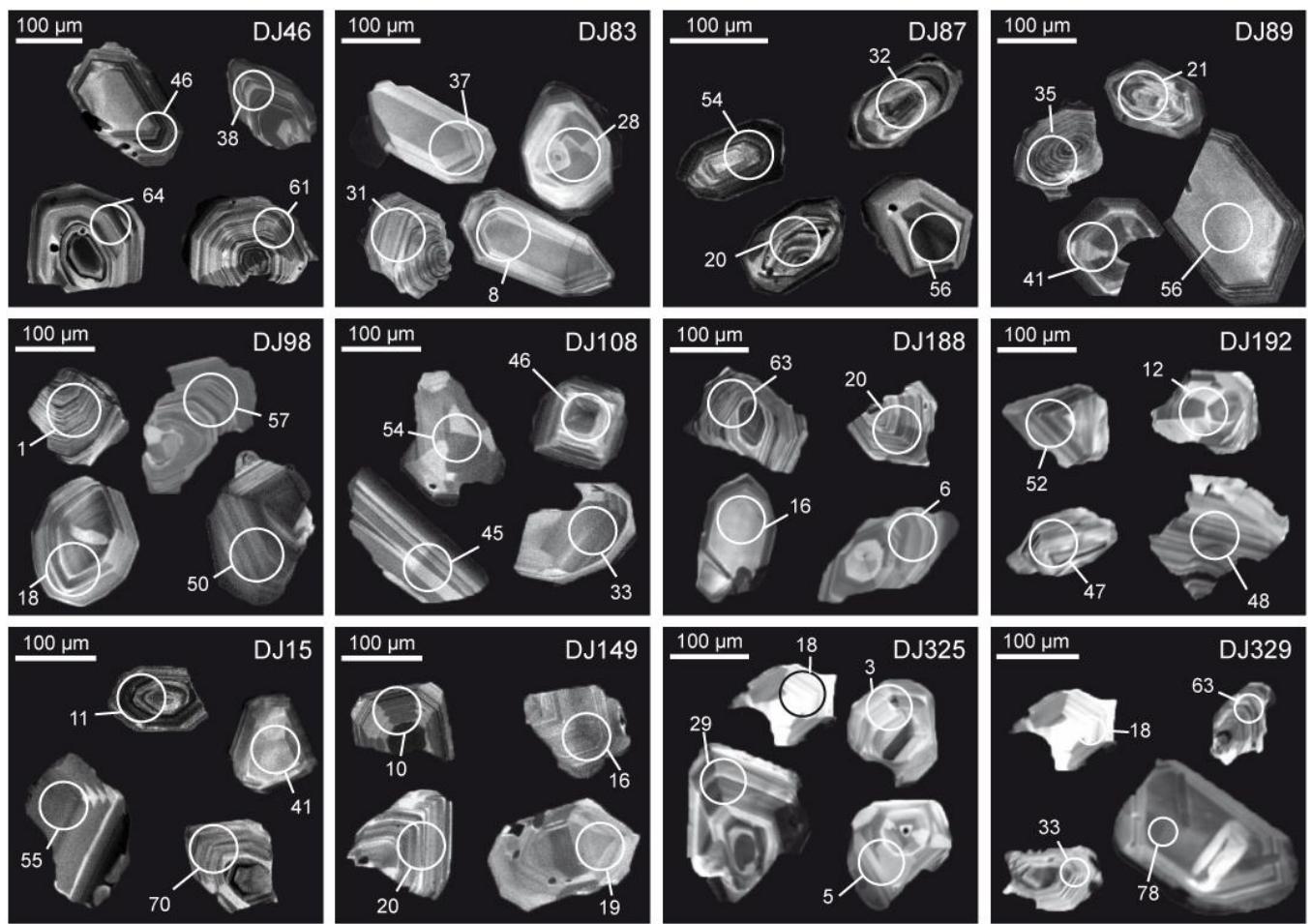


Figure 2

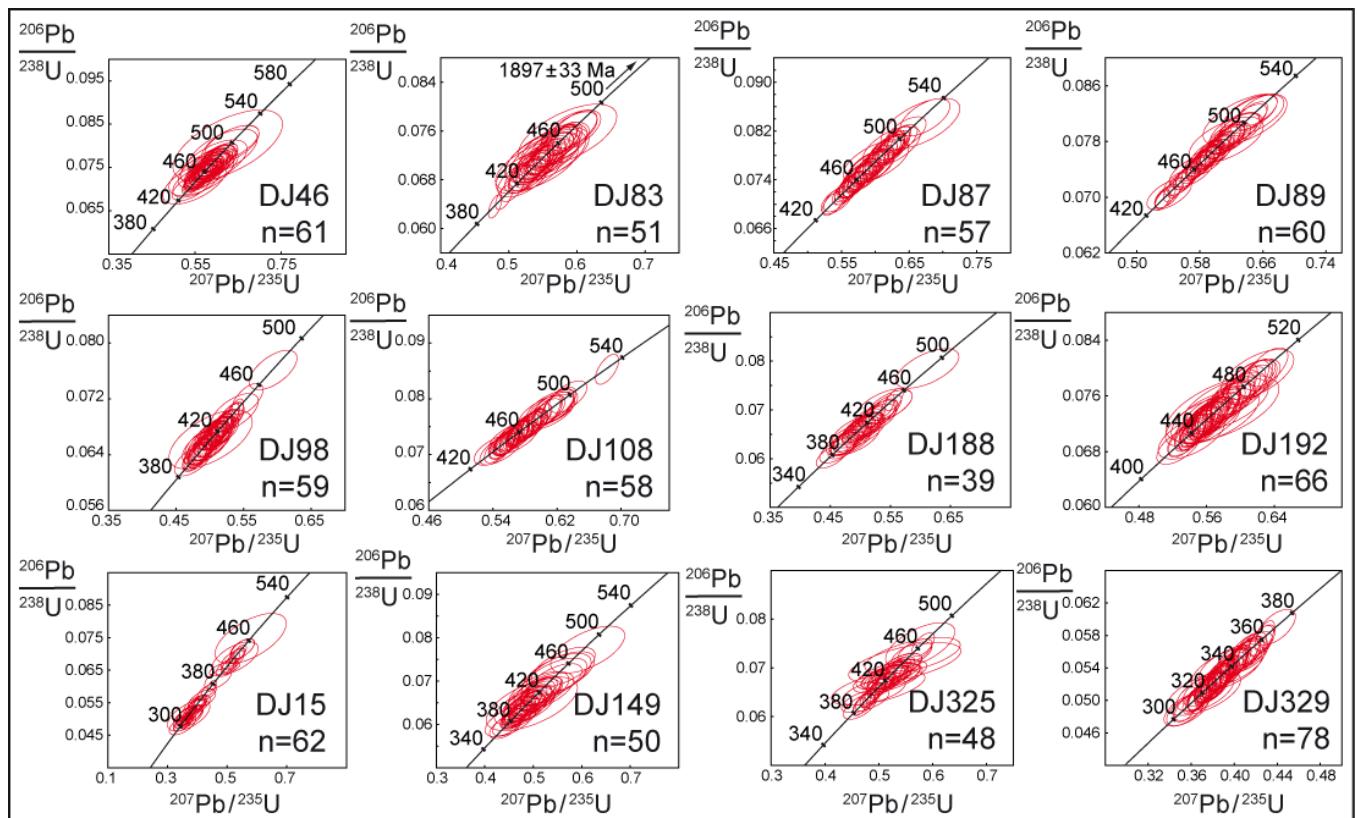


Figure 3

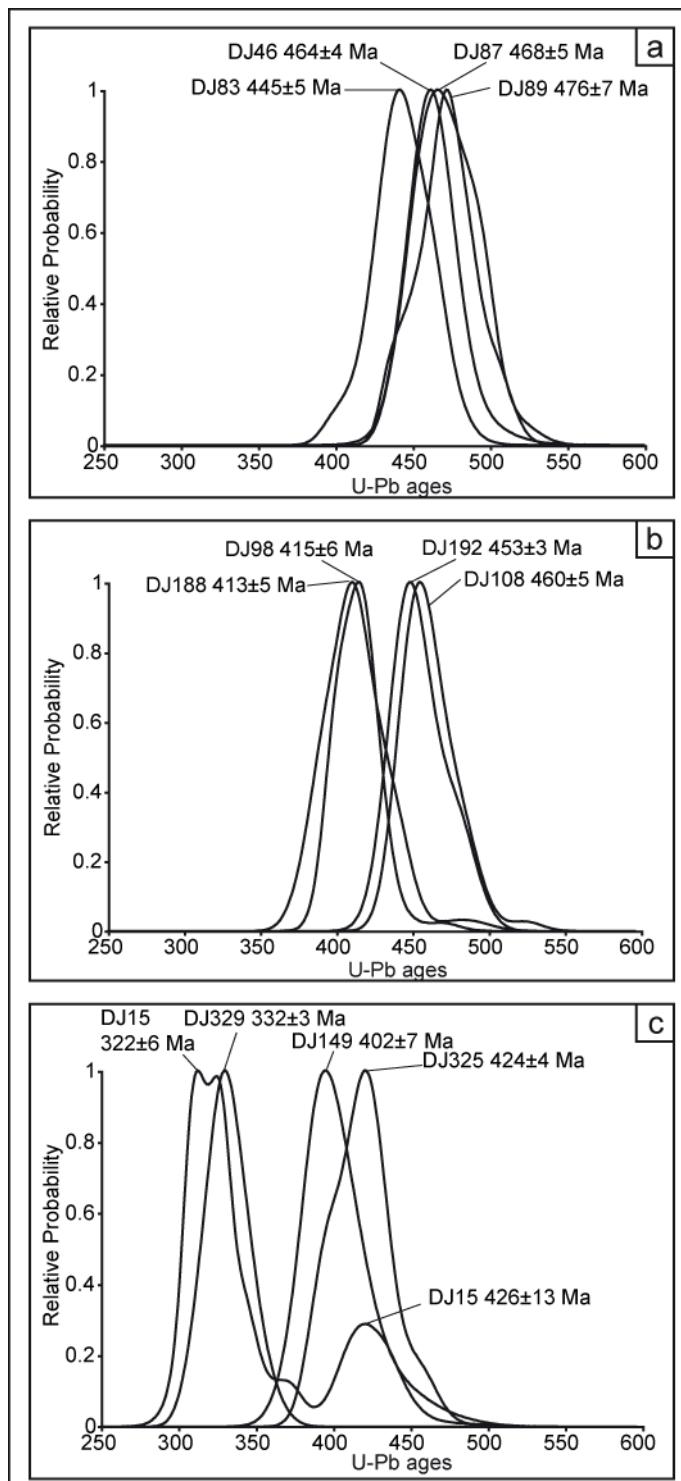


Figure 4

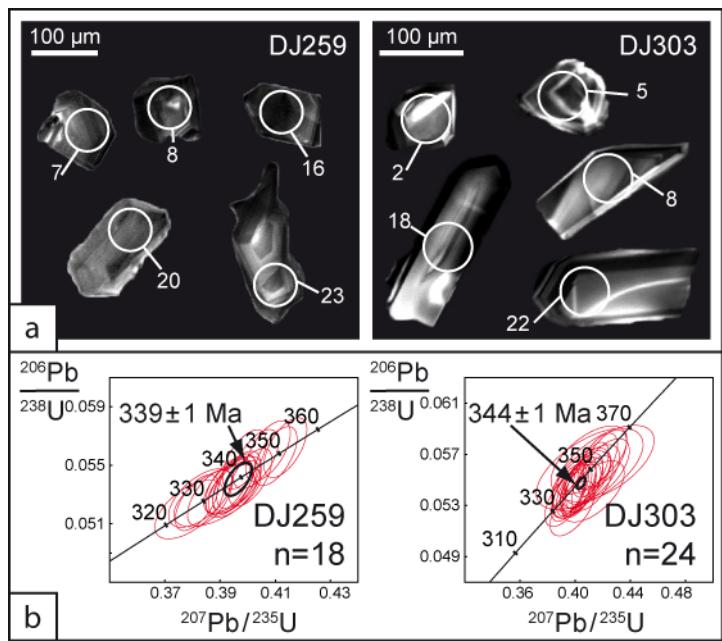


Figure 5

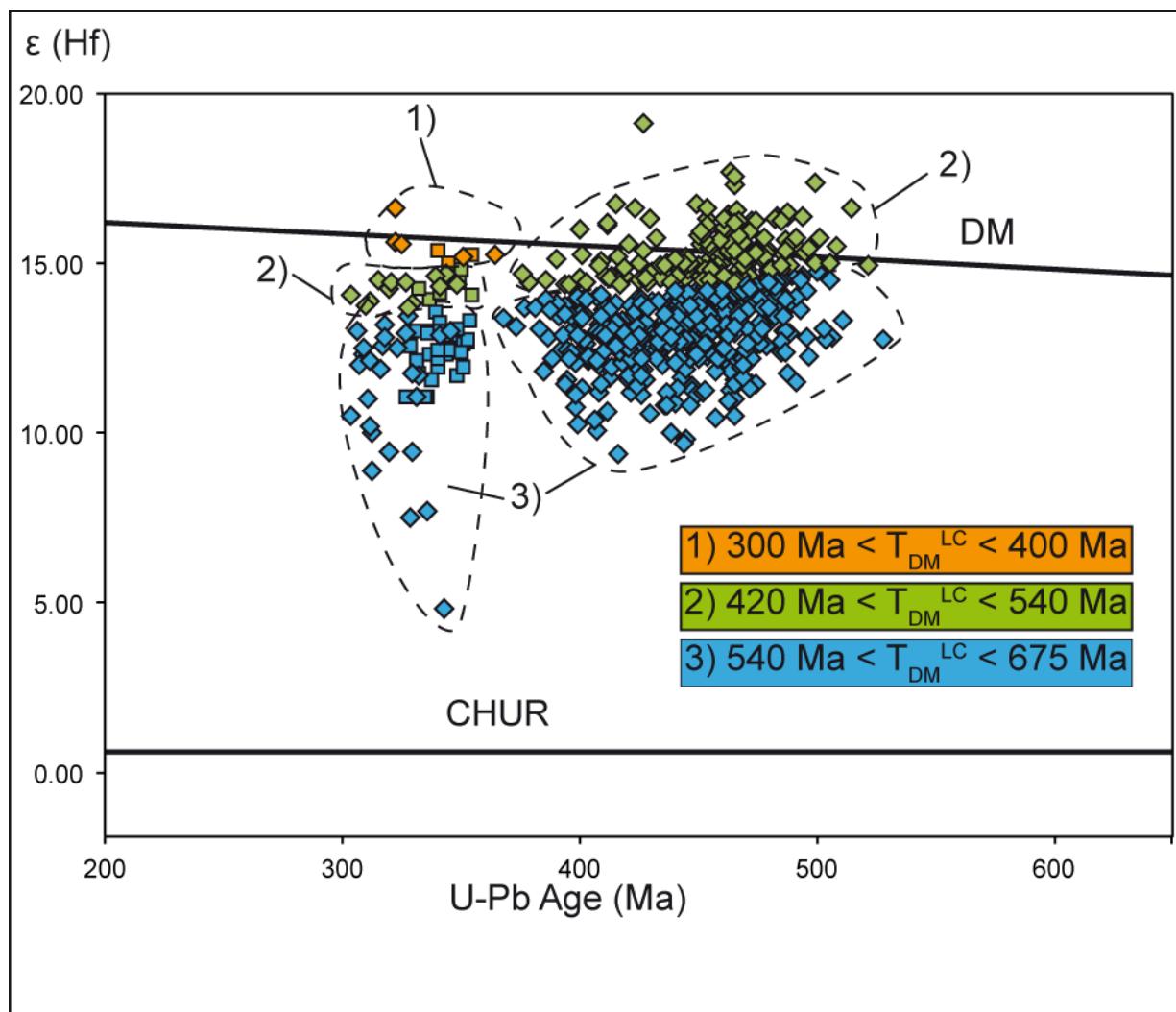


Figure 6

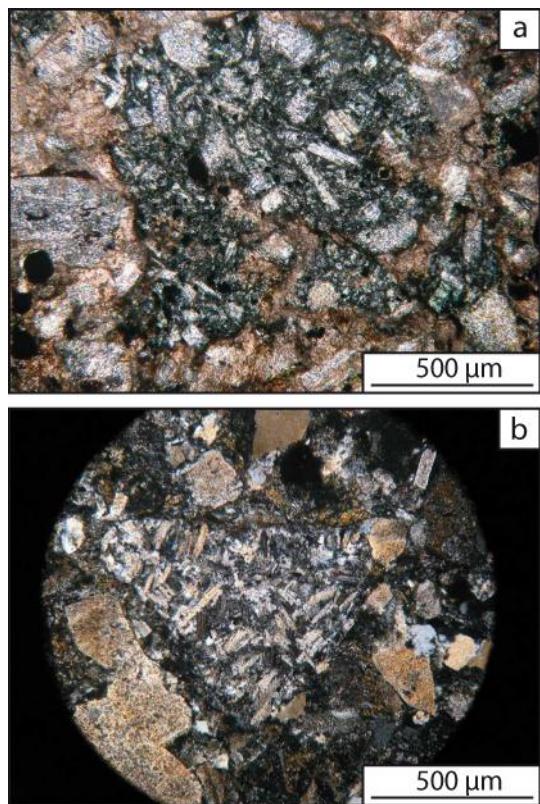


Figure 7

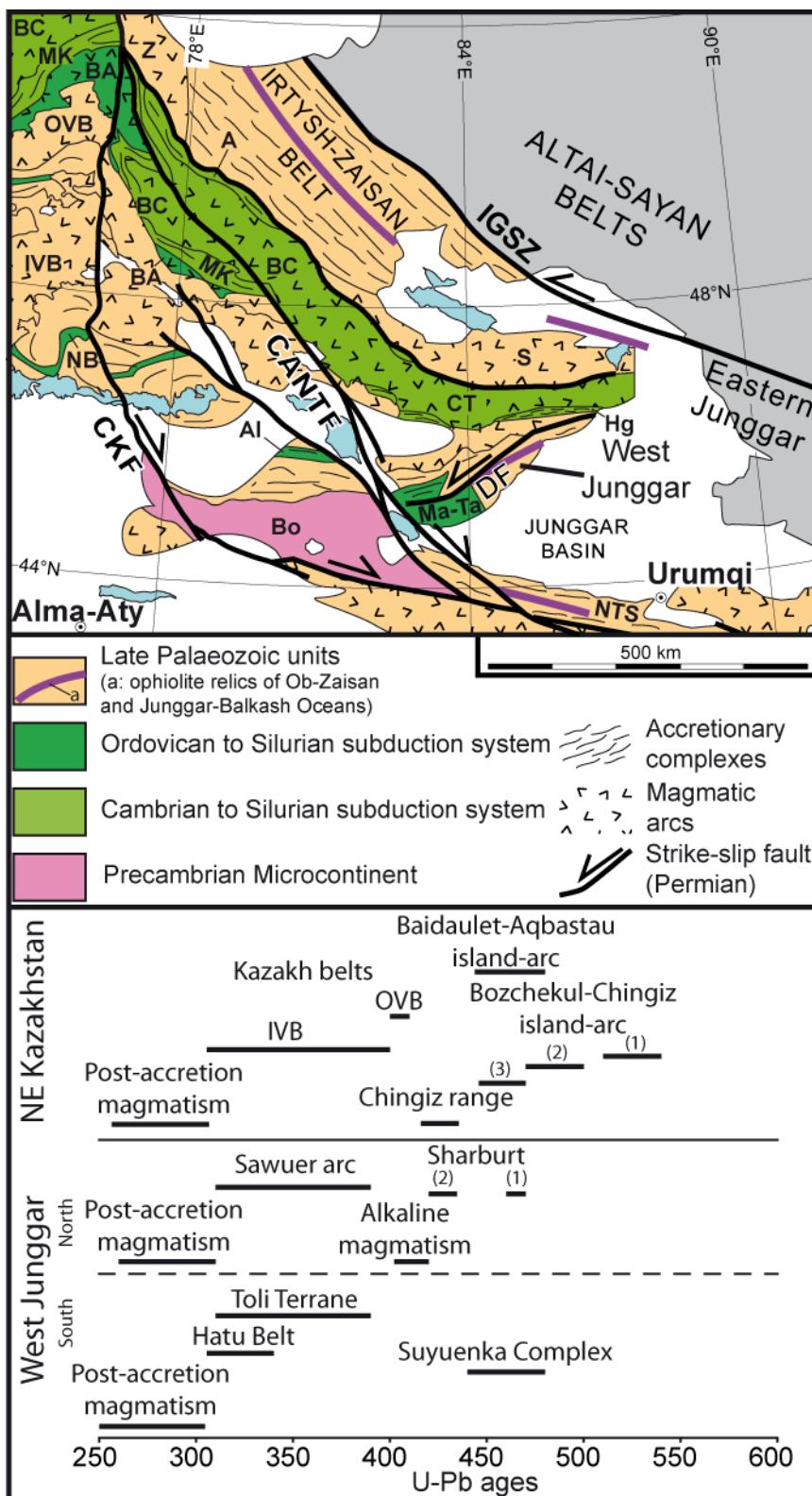


Figure 8

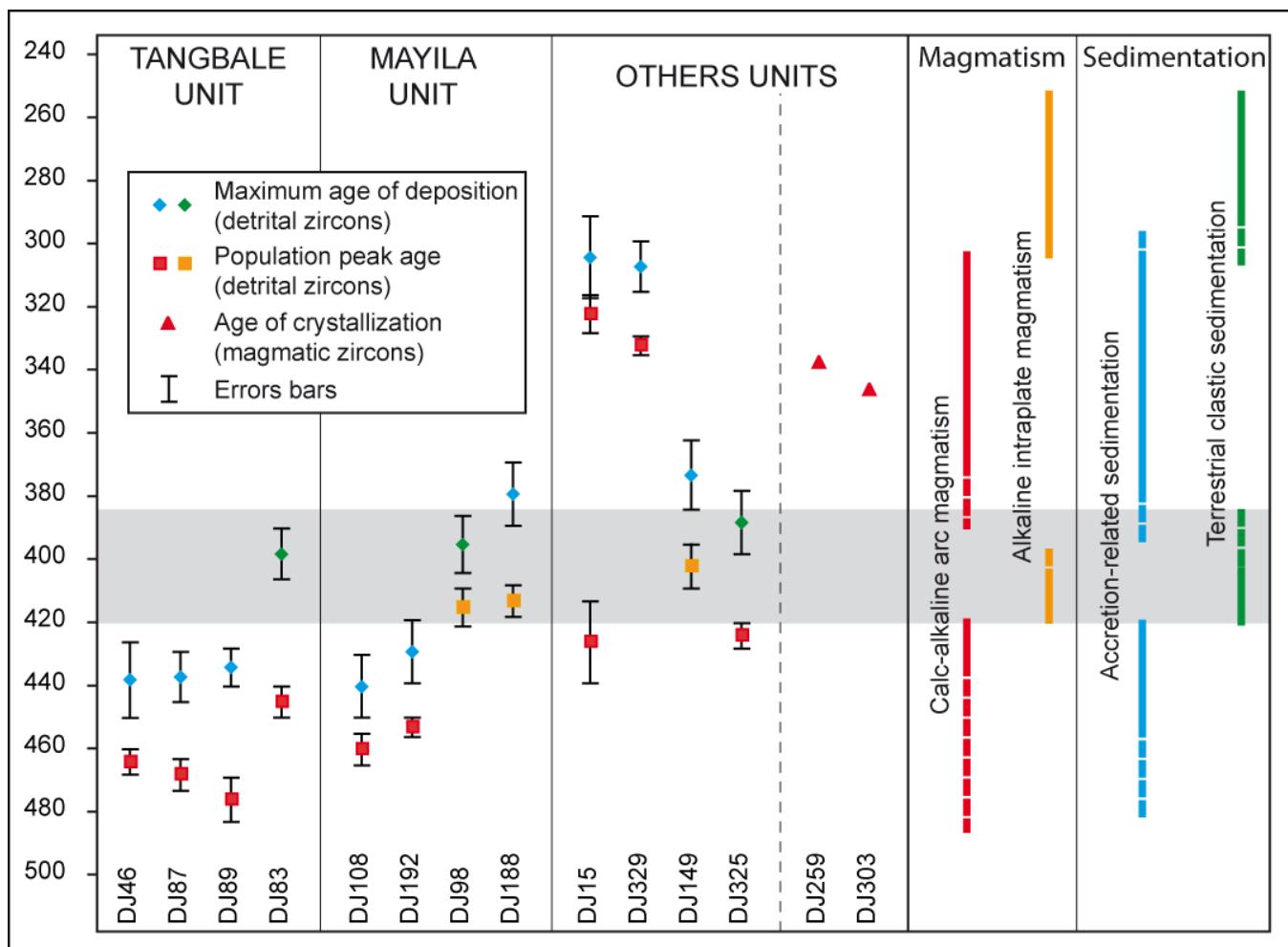


Figure 9