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The Sedimentary Record Of Eocene Deformation In The Interior Of The Southern Canadian Cordillera

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ABSTRACT

Eocene sedimentary strata exposed in the interior of the southern Canadian Cordillera (SCC) in British Columbia (BC) and northernmost Washington (WA) record a poorly understood history of extension-related deformation in the hinterland of the orogen. Today these strata are exposed in isolated, distinct outcrop belts, although the nature of the original basin(s) is unknown. We examined 650 m of Eocene strata, analyzed 2,995 detrital zircons for uranium-lead (U-Pb) ages, and measured 67 detrital zircons for Hf isotope systematics in an effort to better understand the physiography of the SCC during this time period. Eocene strata consist of clast- and matrix-supported conglomerates, very fine- to very coarse-grained sandstones, mudstones, and coal that were deposited in fluvial, alluvial fan, lacustrine, and paludal environments. Sandstone samples from across the region contain large populations of detrital zircons with Eocene (ca. 51 Ma) and/or Jurassic (ca. 160) U-Pb ages, which are interpreted to have been derived from the erosion of the Eocene Challis-Kamloops volcanics, and Mesozoic-age batholiths, respectively. Maximum depositional ages (MDA) of the Eocene strata are relatively uniform throughout the region, with most MDA between 47-50 Ma. ƐHf values of ~50 Ma detrital zircons extracted from samples collected in 3 locations (Merritt, BC, Kelowna, BC, and Republic, WA) across the SCC vary between -16 to +14. Detrital zircons from strata in Republic, WA, in the east of the study area, have primarily negative ƐHf values, with one positive value (-16 to +7), indicating derivation from relatively evolved sources. Detrital zircons from strata in Merritt, BC, in the west of the study area,

have positive εHf values, with one negative value (-2 to +13), indicating relatively juvenile sources. Detrital zircons from Kelowna, BC, in the central part of the study area have bimodal εHf values, with both positive and negative populations (-10 to +12). εHf values correspond to the depositional location relative to the strontium (Sr) 0.706 isopleth. The localized changes in sedimentary facies, the variability in εHf values of 50 Ma detrital zircons, and the local variations in detrital zircon U-Pb ages indicate Eocene sedimentary strata in the hinterland of the SCC were deposited in multiple, isolated basins separated by paleotopographic highs, and not in a single continuous hinterland basin. The MDA data and existing constraints suggest these basins formed across the SCC at approximately the same time, although the basins to the east formed in traditional grabens, those in the central portion formed in a supradetachment basin, and those in the west are associated with strike-slip faulting. The regional transtensional stress field is attributed to the subduction of an oceanic spreading center beneath the SCC during the Eocene, which resulted in oblique subduction along this portion of the North American margin.

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LIST OF ABBREVIATIONS

ALC .... Arizona LaserChron Center

BC .... British Columbia

CEMS .... Center for Elemental Mass Spectrometry

Hf .... Hafnium

KDE .... Kernel Density Estimation

K-S .... Kolmogorov-Smirnoff

LA-HR-SC-ICP-MS .. Laser-ablation high-resolution single-collector inductively-coupled mass-spectrometry

MDA .... Maximum Depositional Age

MDS .... Multi-Dimensional Scaling

MSWD .... Mean Square Weighted Deviation

OVSZ .... Okanagan Valley Shear Zone

PDP .... Probability Density Plot

SCC .... Southern Canadian Cordillera

SL .... Sri Lanka

Sr .... Strontium

U-Pb .... Uranium-Lead

USC .... University of South Carolina

WA .... Washington

Yb .... Ytterbium

CHAPTER 1

INTRODUCTION

The Southern Canadian Cordillera (SCC; Figure 1.1) resulted from ocean-continent convergence and terrane accretion along the western margin of North America, and today represents one of the classic cordilleran orogenic systems in the world (Bally et al., 1966; Dahlstrom, 1970; Price, 1981; Armstrong, 1982; Monger et al., 1982; Brown and Read, 1983; Okulitch, 1984). Although the geologic history of the fold-thrust belt and foreland basin in the SCC is well documented (e.g., Price, 1981, 1986; Leckie and Smith, 1992; Miall, 1995), far less is known about the evolution of the hinterland of the orogen. This is particularly true for the Paleogene Period, a time when compressive stresses in the interior of the SCC gave way to extension and transtension. During this time, the SCC was located above a slab window associated with a subducted ocean spreading center (Figure 1.2; Thorkelson and Taylor, 1989; Breitsprecher et al., 2003). To the south, in the United States, the Farallon plate rolled back to the south-southwest (Figure 1.2; Dickinson, 1979, 2004; Humphreys, 1995, 2009); however near the SCC, the northern plate of the ocean spreading center (Resurrection plate) subducted obliquely beneath the North American margin with dextral relative slip (Haeussler et al., 2003; Madsen et al., 2006; Groome and Thorkelson, 2009; Eddy et al., 2016). A variety of deformation occurred in the SCC in response to the changing tectonic boundary conditions, including detachment faulting and core complex formation (Coney, 1980; Coney and Harms, 1984; Bardoux, 1985; Tempelman-Kluit and Parkinson, 1986;

McNulty and Farber, 2002; McClaughry and Gaylord, 2005; Giovanni et al., 2010; Brown et al., 2012), strike-slip faulting (Ewing, 1980, 1981a; Fyles, 1990; Schiarizza and Israel, 2001; Eddy et al., 2016), and high-angle normal faulting (Ewing, 1980, 1981a; Thorkelson, 1989; Suydam and Gaylord, 1997; Beatty et al., 2006). However, our understanding of the linkages between these features and the ancient physiography of the SCC hinterland during this period is limited, due in large part to the sparse amount of geologic data from this area.

The interior of the SCC contains outcrops of Eocene strata that were deposited concomitant with upper crustal faulting and extension (Figure 1.3). Today, these strata occur in discontinuous outcrops across the area (Figure 1.4) and consist of clastic sediments, ranging from boulder-conglomerates to mudstones and coal (Figures 1.4, 1.5, 1.6, and 1.7). Detailed and regional provenance data from these sediments do not exist, which prohibit reconstructions of hinterland physiography. Deposition in the hinterlands of modern cordilleran margins occurs in a variety of regional and isolated basins, and in an assortment of depositional systems (Horton, 2012). Although the outcrops in the hinterland are now isolated from one another, it is unclear if this was always the case. Similarly discontinuous outcrops of Eocene strata in the forearc of the SCC were once part of a single regional basin and were subsequently separated along strike-slip faults (Eddy et al., 2016).

We examined 16 outcrops across southern British Columbia (BC) and northernmost Washington (WA; which we include as part of the SCC) in order to better understand the Eocene history of this region. The specific aims of this study are to: 1) determine sediment provenance of the Eocene strata in the hinterland of the SCC; 2)

determine if the strata were deposited in isolated basins or one regional and continuous basin; and 3) determine maximum depositional ages (MDAs) of the strata in order to constrain the history of basin formation and upper crustal deformation. We collected 22 samples of Eocene strata from 11 locations (Figure 1.1; Table 1.1), and measured ~650 m of strata in the field, collecting information on grain-size and facies. Detrital zircons from the samples were analyzed using uranium-lead (U-Pb) geochronology and hafnium (Hf) isotopes, yielding a total of 2,995 U-Pb ages and 67 ƐHf values. In total, these data record a complex history of upper crustal deformation in the hinterland of the SCC during the Eocene.

Table 1.1 Table of all 22 samples, the location where they were collected, the location of analysis (ALC = Arizona LaserChron Center; CEMS = Center for Elemental Mass Spectrometry), the number of detrital zircon grains analyzed, and how many measured sections were collected at each location.

Sample	Location	N	W	U-Pb Analysis Location	Number of U-Pb grains analyzed	Hf Analysis Location	Number of Hf grains analyzed	Number of Measured Sections collected
15Ca01B	Republic, WA	48.643628	-118.737	ALC	308	ALC	15	2
15Ca03A	Republic, WA	48.6504	-118.74004	ALC	303	ALC	15	
15Ca04A	Republic, WA	48.80054	-118.641146	CEMS	99			
CAN-BC-1024K	Midway, BC	49.017517	-118.851738	CEMS	116			0
CAN-BC-1024L	Midway, BC	49.041733	-118.874149	CEMS	100			
WLR1	White Lake, BC	49.33061	-119.63216	CEMS	117			1
WLR2	White Lake, BC	49.32906	-119.62995	CEMS	111			
SKEL1	Summerland, BC	49.62039	-119.68225	CEMS	117			1
SKEL2	Summerland, BC	49.61897	-119.68025	CEMS	106			
CAN-BC-1023H	Kelowna, BC	49.8202	-119.649614	ALC	105	ALC	15	2
SAWMILL1	Kelowna, BC	49.8177	-119.65308	CEMS	100			
15Ca18A	Kelowna, BC	49.820189	-119.652825	CEMS	114			
PB2	Princeton, BC	49.537332	-120.52024	CEMS	108			4
15CAN10B	Princeton, BC	49.536941	-120.519624	CEMS	119			
15Ca15A	Princeton, BC	49.454832	-120.51075	CEMS	105			
Prince1A	Princeton, BC	49.45525	-120.51083	CEMS	115			
15Ca13B	Blakeburn, BC	49.483636	-120.744793	CEMS	123			0
AbbeyRd2	Kamloops, BC	50.69157	-120.57502	CEMS	105			1
15Ca23B	McAbee, BC	50.797026	-121.142149	CEMS	103			0
CAN-BC-1022Gab	Merritt, BC	50.088573	-120.8008	ALC	311	ALC	22	0
CAN-BC-1022Gbb	Merritt, BC	50.088573	-120.8008	CEMS	111			
Coldwater1	Coldwater, BC	49.95673	-120.92689	CEMS	99			0

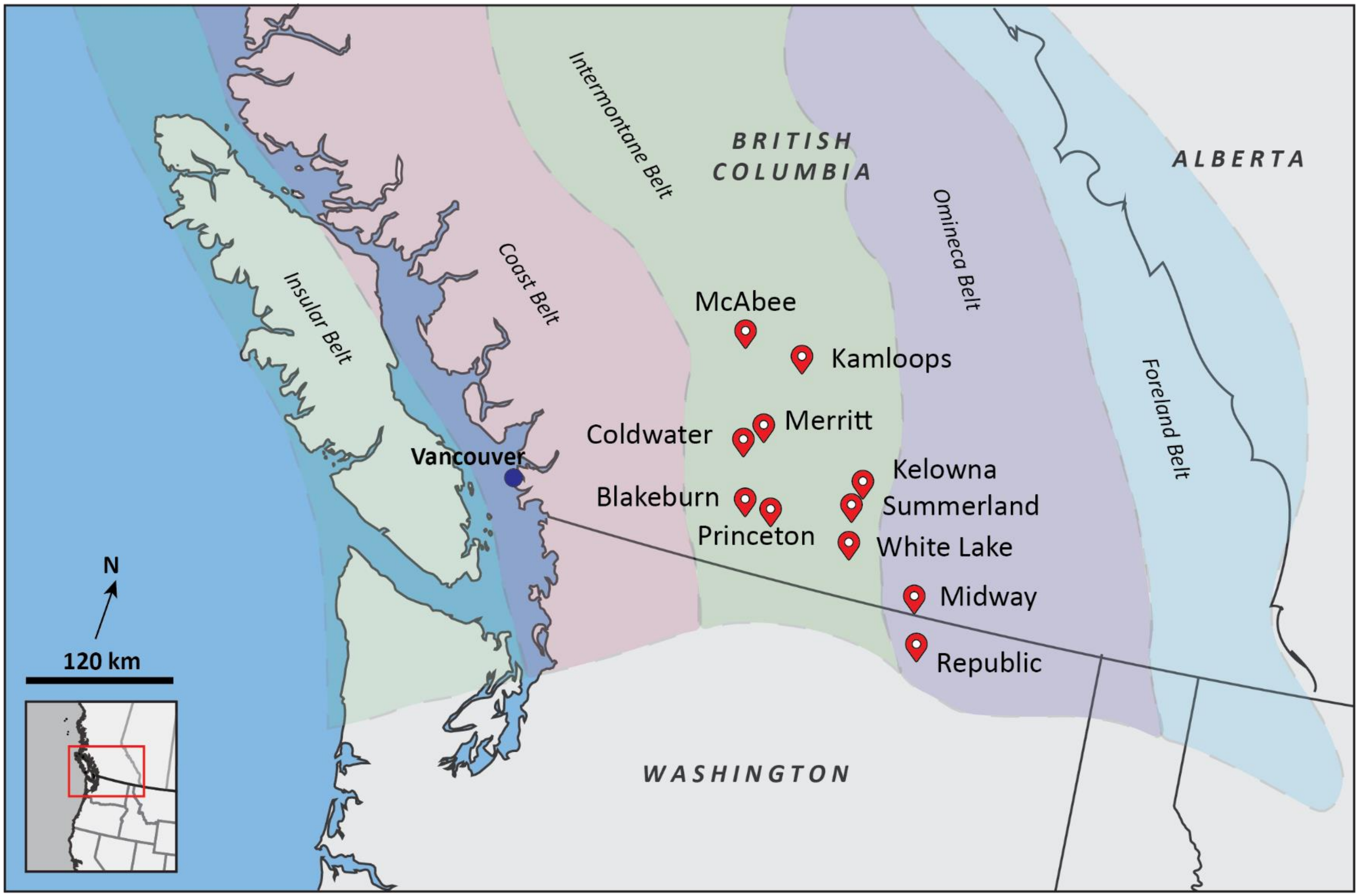

Figure 1.1 Overview map of the southern Canadian Cordillera, showing the location of the five-morphogeological belts (Monger, 1989; Monger and Price, 2002), and the locations of the 11 areas where measured sections and samples were collected from southern British Columbia and northern Washington.

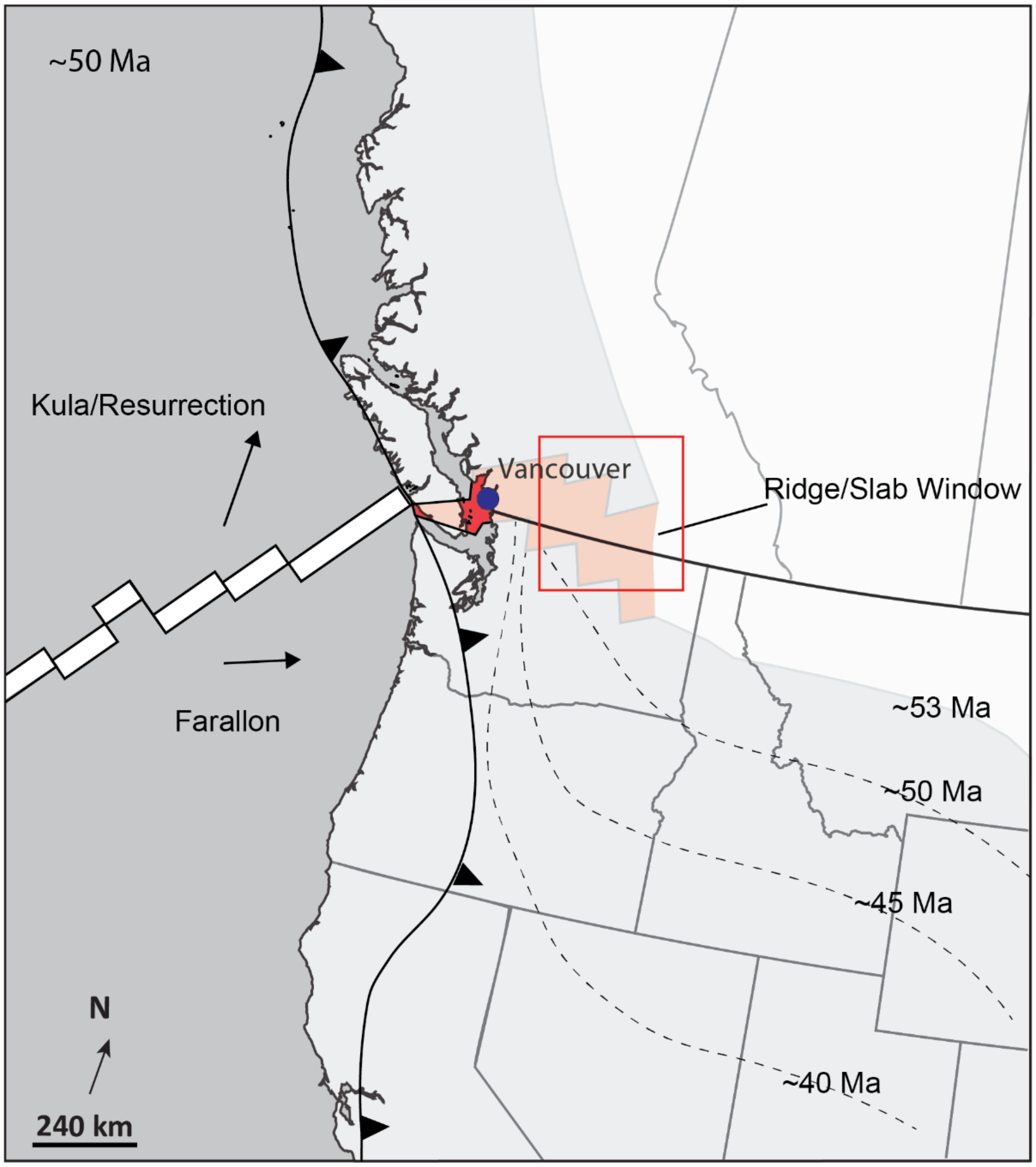

Figure 1.2 Eocene (~50 Ma) paleotectonic map of the Canadian Cordillera and adjacent areas. Red shading represents the approximate geometry of the Kula/Resurrection-Farallon slab window underneath the southern Canadian Cordillera, due to the subducted spreading center of the diverging Kula/Resurrection and Farallon plates (Breitsprecher et al., 2003; Haeussler et al., 2003). Vectors shown for oceanic plates represent motion relative to North America (Breitsprecher et al., 2003; Haeussler et al., 2003). Dotted lines in the western United States represent the approximate location, through time, of the northern part of the Farallon plate as it foundered and as slab rollback occurred (Armstrong, 1988; Dickinson, 2006; Smith et al., 2014). Red box highlights the general study area.

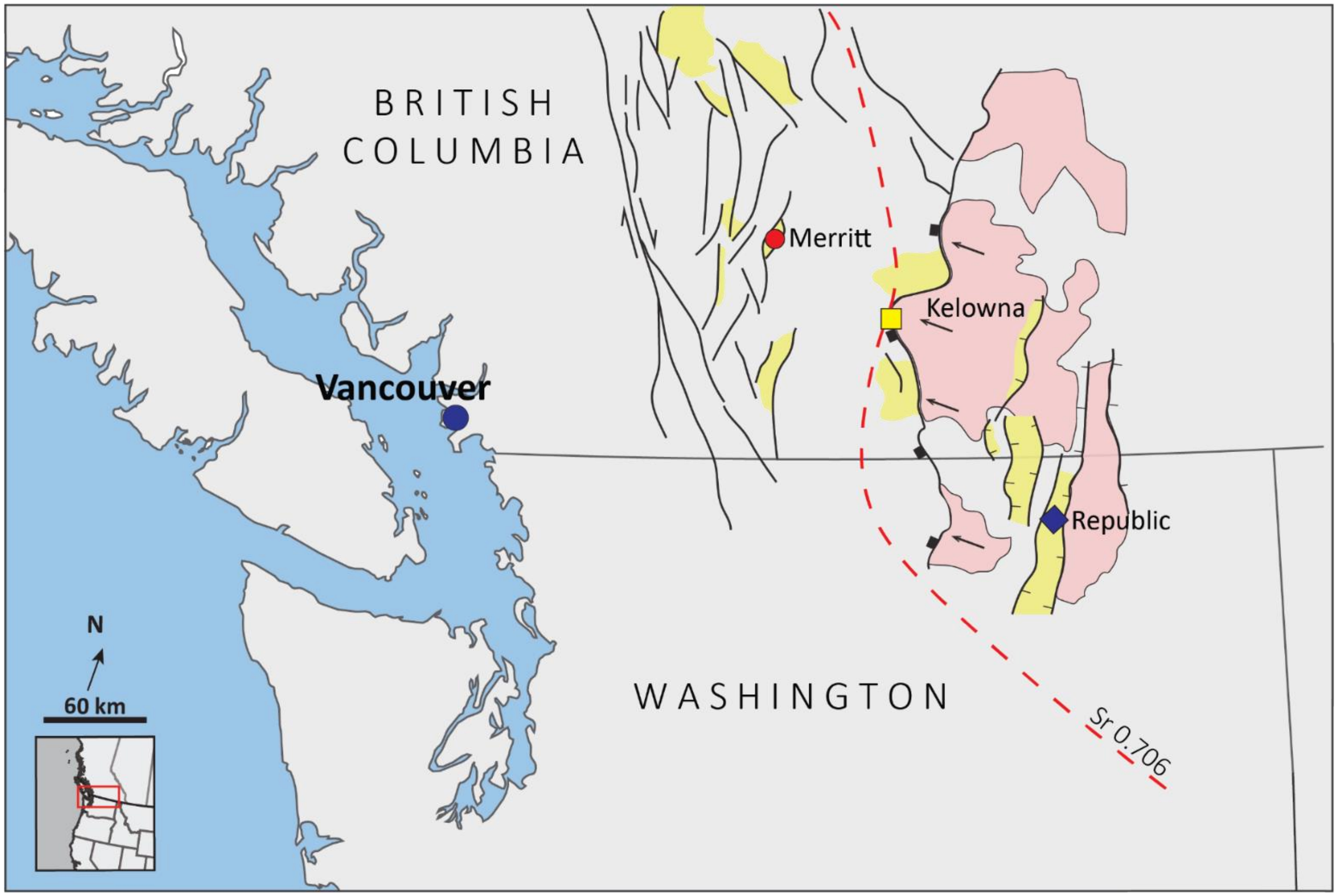

Figure 1.3 Map showing the structural setting of the SCC. In the eastern part of the hinterland, deformation is dominated by the OVSZ and the Shuswap Metamorphic Core Complex (pink). In the west, the SCC is more affected by transtensional strike-slip faulting. Basins formed in graben, strike-slip, and pull-apart structures, as well as supradetachment basins along the metamorphic core complex. The red dotted line is the approximate Sr 0.706 isotope boundary line, separating cratonic North America from accreted terranes. In both this figure and Figures 4.1 and 4.2, the red circle represents Merritt, BC; the yellow square represents Kelowna, BC; the black square represents Princeton, BC; and the blue diamond represents Republic, WA.

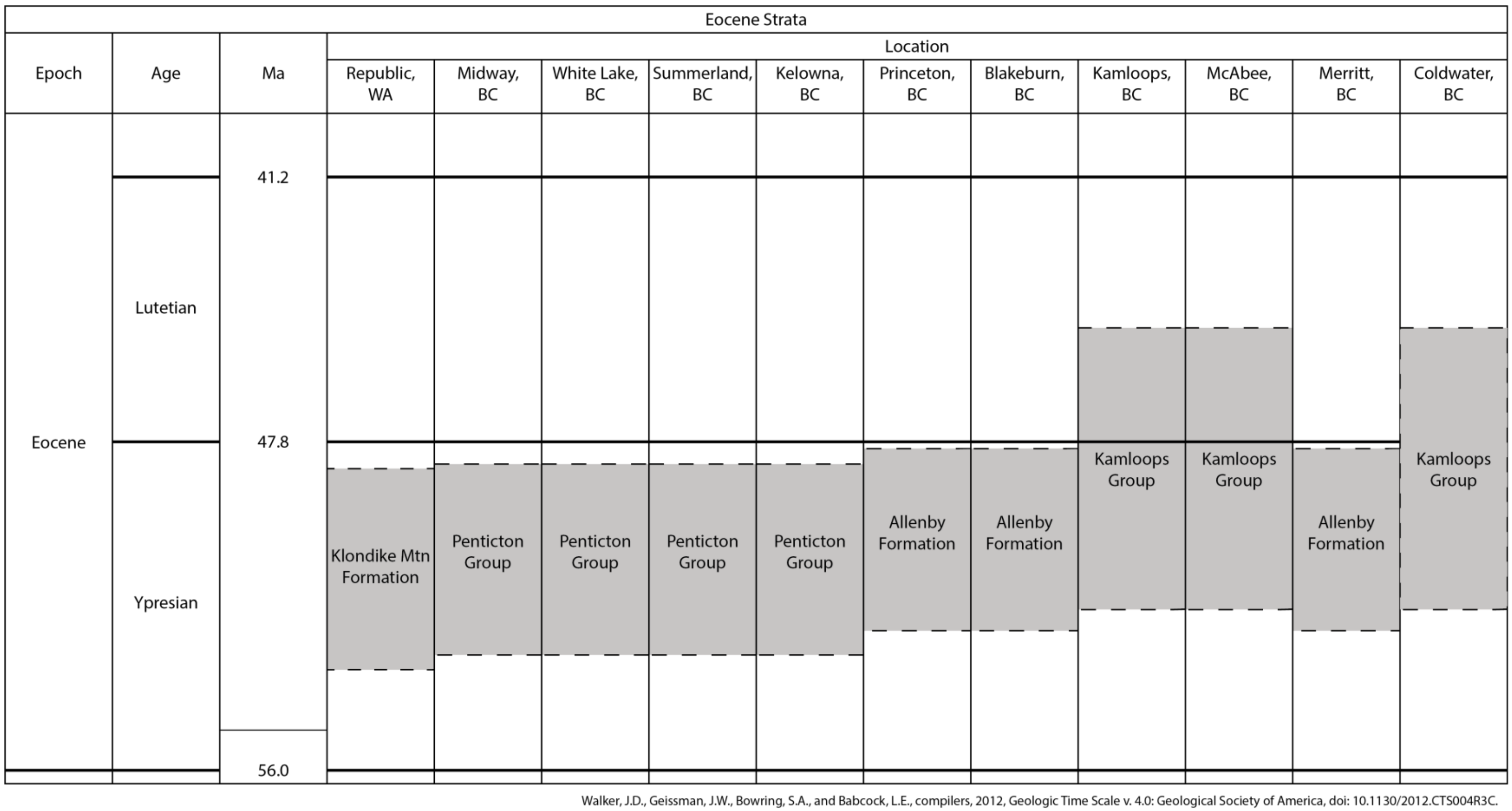

Figure 1.4 Generalized formation chart presenting the names, ages, and locations of the Eocene formations studied in the southern Canadian Cordillera (Mathews, 1964; Ewing, 1980; Hora and Church, 1985; Thorkelson, 1989; Gaylord et al., 1996; Read, 2000; Wolfe et al., 2003).

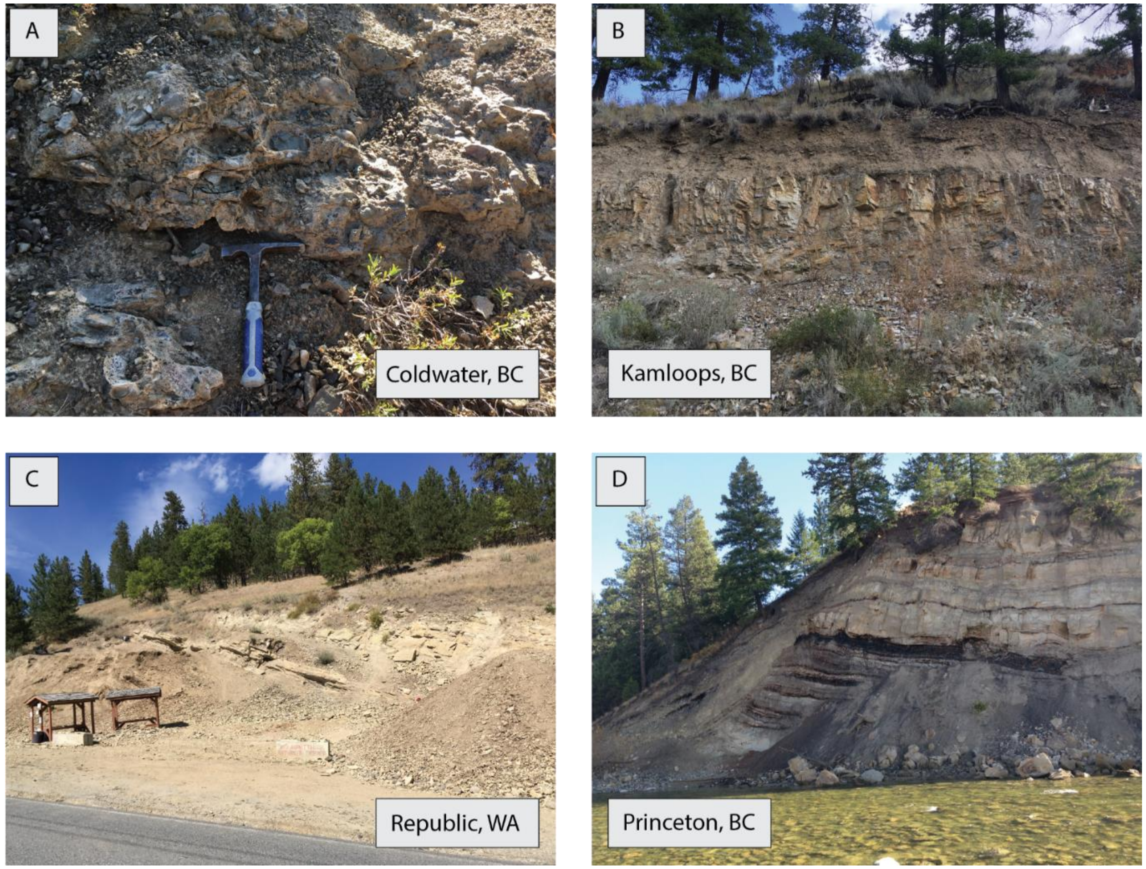

Figure 1.5 Photos showing range of lithologies and grain size in the Eocene sedimentary strata of southern British Columbia. (A) Subrounded to rounded pebble conglomerate from our Coldwater, BC, location, which is a part of the Kamloops Group of the Fig Lake Graben. (B) Interbedded sandstone, siltstone, and shale of the Kamloops Group, located on Abbey Rd. west of Kamloops, BC. Flora in foreground approximately 0.5 m high. (C) Interbedded mudstone, siltstone, and sandstone of the Klondike Mountain Formation, located at the Stonerose Interpretative Center and Eocene Fossil Site in Republic, WA. Scale is provided by 2 m structure in foreground. (D) Interbedded sandstones, mudstones, and coals located in the Allenby Formation, located in Princeton, BC. Thick black coal seam is approximately 0.5 m.

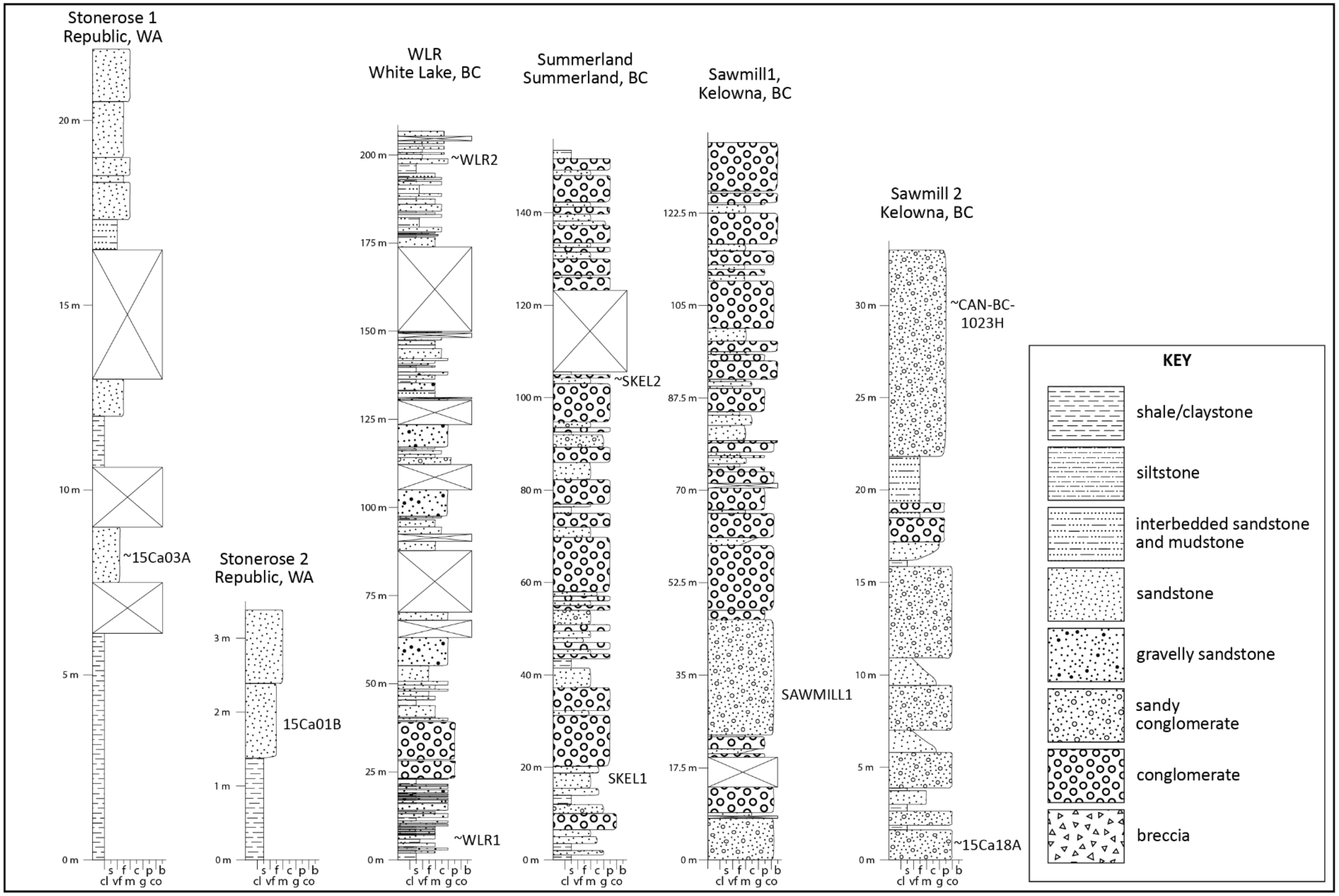

Figure 1.6 Measured sections from Republic, WA (N=2), White Lake, BC (N=1), Summerland, BC (N=1), and Kelowna, BC (N=2). Strata that sample was collected from is marked next to respective measured section. Areas marked by “X” are covered sections, where no strata could be measured.

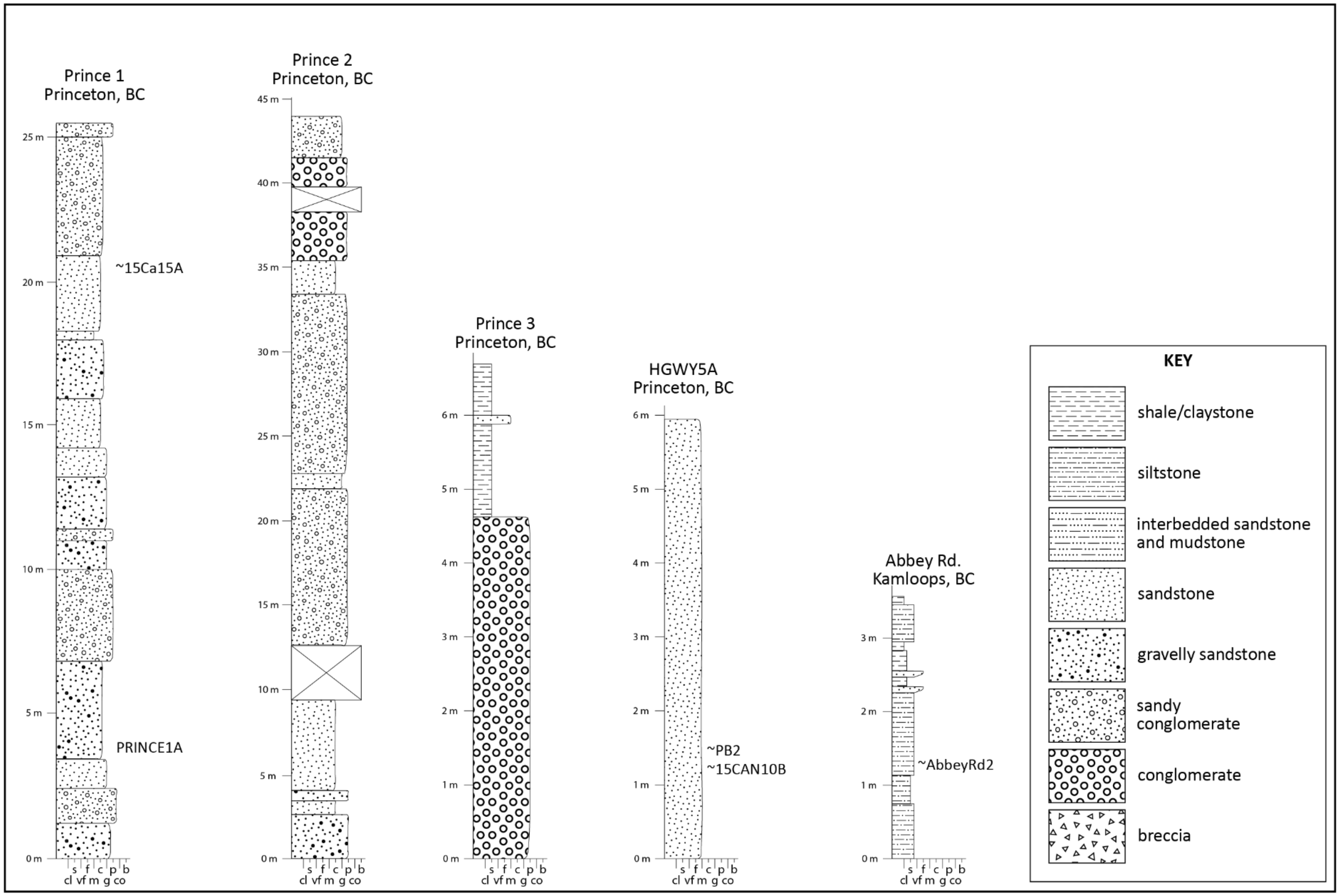

Figure 1.7 Measured sections from Princeton, BC (N=4), and Kamloops, BC (N=1). Strata that sample was collected from is marked next to respective measured section. Areas marked by "X" are covered sections, where no strata could be measured.

CHAPTER 2

BACKGROUND

2.1 REGIONAL TECTONIC SETTING

Subduction of oceanic material along the southern margin of Canada began by at least Early Jurassic time (Gabrielse and Yorath, 1991; Engebretson et al., 1992; Monger and Price, 2002; Cook et al., 2012) and was accompanied by the accretion of oceanic and intraoceanic arc rocks of Paleozoic and younger age onto the Archean-Paleoproterozoic basement of western North America (Monger, 1977; Monger and Irving, 1980; Porter et al., 1982; Okulitch, 1984; Price, 1986; Monger, 1989, Gabrielse et al., 1991; Roed et al., 1995; Monger and Price, 2002; Haeussler et al., 2003; Simony and Carr, 2011). Convergence and subduction over this period resulted in an eastward propagating orogenic wedge (Price, 1981; Yorath, 1991) that records a total of at least ~200-350 km of NE-SW horizontal shortening by the early Cenozoic (Brown et al., 1993; Johnson and Brown, 1996). Prior to Cenozoic extension, parts of the SCC are estimated to have reached a total crustal thickness of ~50-60 km (Price and Mountjoy, 1970; Brown et al., 1986; Bardoux and Mareschal, 1994; Brown and Gibson, 2006; Gibson et al., 2008).

Terminal phases of contraction in the easternmost fold-thrust belt between ~60-40 Ma (Van Der Pluijm et al., 2006) coincided with the onset of ESE-WNW oriented extension in the interior of the mountain belt (Ewing, 1980; Monger, 1985; Parrish et al., 1988; Thorkelson, 1989; Monger et al., 1991; Wingate and Irving, 1994; Monger and Price,

2002; Brown and Gibson, 2006; Glombick et al., 2006; Gervais and Brown, 2011). Extension in the hinterland was associated with core complex exhumation, strike-slip faulting, sediment deposition, and volcanism (e.g., Ewing, 1981a; Coney and Harms, 1984; Monger, 1985; Armstrong, 1988; Parrish et al., 1988; Roaed et al., 1995; Constenius, 1996; Brown et al., 2012). The volcanism is part of the Challis-Kamloops volcanic episode, which occurred primarily between Early to Middle Eocene time (Monger et al., 1982; Armstrong, 1988; Dostal et al., 2003).

Several tectonic models have been proposed to explain the onset of extension in the SCC hinterland. In the regions south of the SCC, extension and volcanism during the Cenozoic is attributed to slab foundering and rollback (e.g., Humphreys, Dickinson); however, such processes do not seem consistent with the geologic record in the SCC (e.g., Armstrong 1988). The composition and distribution of volcanism in the SCC, as well as plate reconstruction models suggest that the SCC overrode a subducted ocean-spreading center (slab window) during the Eocene (Thorkelson and Taylor, 1989; Lawver and Scotese, 1990; Breitsprecher et al., 2003; Haeussler et al., 2003), which amongst other things, resulted in oblique (right-lateral) subduction north of the slab window (Haeussler et al., 2003; Madsen et al., 2006; Groome and Thorkelson, 2009; Eddy et al., 2016). Oblique subduction likely produced a northwest-southeast oriented extensional stress field (e.g. Price, 1979; Price et al., 1981; Monger, 1985; Price and Carmichael, 1986; Thorkelson, 1989; Harms and Price, 1992), which is reflected in the orientation of upper crustal features in the hinterland of the SCC (Price and Carmichael, 1986). Bao et al. (2014) recently proposed an alternative (although not mutually exclusive) model of

SCC Eocene geodynamics involving delamination and the removal of dense mantle lithosphere from beneath the SCC.

2.2 CORDILLERAN HINTERLAND AND DEFORMATION

The Canadian Cordillera is commonly separated into five geomorphological belts that from east to west include the Foreland, Omineca, Intermontane, Coast, and Insular Belts (Gabrielse and Yorath, 1989; Price, 1994; Monger and Price, 2002). Eocene sedimentary strata in the hinterland of the SCC occur almost entirely within the Intermontane Belt; an area characterized by relatively low elevations and minimal relief. Geologically, this region consists of Devonian to Early Jurassic sedimentary rocks and Devonian to early Cenozoic volcanic rocks (Haggart and Richstad, 1998; Monger and Price, 2002). West of the Intermontane Belt is the Coast Belt, which consists primarily of Jurassic-Cretaceous granite and volcanic rocks (Gehrels et al., 1992; Haggart and Richstad, 1998; Monger and Price, 2002). The Omineca Belt lies to the east of the Intermontane Belt and consists of Paleoproterozoic continental crust, Neoproterozoic rift-related clastics and volcanics, Paleozoic clastic and volcanic rocks, local late Paleozoic to Mesozoic volcanic rocks, and early Cenozoic continental volcanic and sedimentary rocks (Monger and Price, 2002). The boundary between accreted terranes and Precambrian crystalline basement of North America is marked by the north-south trending strontium (Sr) 0.706 isotope boundary, which is located near the boundary of the Intermontane and Omineca belts in the SCC (Armstrong, 1988; Souther, 1991; Gosh, 1995; Dostal et al., 2003).

Extensional deformation in the hinterland of the SCC began approximately 60 million years ago (Monger et al., 1991; Wingate and Irving, 1994; Brown and Gibson,

2006; Glombick et al., 2006; Gervais and Brown, 2011) and resulted in the Okanagan Valley shear zone (OVSZ); a part of the greater Shuswap Metamorphic Core Complex (Bardoux, 1993; Johnson, 1994). The OVSZ is a ~1.5 km thick zone that consists of high-grade footwall gneisses juxtaposed against low-grade to nonmetamorphosed hanging-wall rocks across a detachment surface that dips ~10°-30° to the west (Tempelman-Kluit and Parkinson, 1986; Brown et al., 2012). Exhumation along the OVSZ is speculated to have lasted from 56-48 Ma, with its peak between 53-50 Ma (Brown et al., 2012). During the Eocene, the OVSZ is estimated to have undergone 64-90 km of WNW-directed horizontal extension (~291°), with an original shear zone angle of ~15° (Tempelman-Kluit and Parkinson, 1986; Brown et al., 2012). Supradetachment basins formed to the west of and above the OVSZ, including the White Lake Basin (e.g., Pearson and Obradovich, 1977; Mathews, 1981; Wingate and Irving, 1994; Suydam and Gaylord, 1997; McClaughry and Gaylord, 2005).

Extensional and strike-slip related deformation occurred in other parts of the SCC hinterland coincident with the activity along the OVSZ. To the east of the OVSZ, high-angle (~60°) normal faulting resulted in the Republic and Toroda Creek Grabens, linear basins which are oriented approximately NNE-SSW (e.g., Gaylord, 1989; Suydam and Gaylord, 1997). Deformation to the west of the OVSZ typically has a greater component of strike-slip motion (Ewing, 1981a). Examples include the Princeton Basin, which is the site of a N-trending half-graben, formed by steeply dipping strike-slip and dip-slip faults (Read, 2000), and the Fig Lake Graben, which originated as a pull-apart basin resulting from Eocene dextral faulting (Ewing, 1981a; Thorkelson, 1989).

2.3 EOCENE STRATA

Eocene strata in the SCC consist of clastic, nonmarine deposits interbedded with volcanic and volcaniclastic units. Most Eocene strata are considered to be part of the Penticton Group (e.g., Hamblin, 2011; Mustoe, 2011, 2015), which is a 0-2,500 m thick succession, composed of volcanic and sedimentary rocks, and commonly divided into several local 6 formations (Church, 1981; Hora and Church, 1985). Clastic units consist of immature sandstones, mudstones, conglomerates, and coals (Church, 1981; Hora and Church, 1985; Tribe, 2005; Hamblin, 2008), deposited in environments including: alluvial fan, debris flow, fluvial, lacustrine, and paludal settings (Williams and Ross, 1979; Suydam and Gaylord, 1993; Tribe, 2005; Hamblin, 2011; Mustoe, 2011, 2015). Although there are local variations, the strata typically lie on Paleozoic-Mesozoic granitoids and Paleozoic-Mesozoic meta-sedimentary and meta-volcanic rocks in unconformable-disconformable relationships. In most locations in the Intermontane Belt, the Eocene strata are unconformably overlain by Miocene basalt (Church, 1981; Mathews, 1988, 1989).

Several formations are exposed across the Intermontane Belt, and therefore warrant additional discussion. Eocene strata in the Republic, WA area belong to the Klondike Mountain Formation (Pearson and Obradovich, 1977; Suydam and Gaylord, 1997). These Eocene strata consist of debris-flow breccias, conglomerates, sandstones, and mudstones, and were deposited in the Republic graben, and the adjacent Toroda Creek half-graben in alluvial fan and lacustrine environments (Gaylord et al., 1987; Gaylord et al., 1996; Mustoe, 2015). The White Lake Formation is exposed around the city of Kelowna, BC, and consists of up to ~3,500 m of volcanic breccia and

conglomerates deposited by debris flows, mudstones, and sandstones deposited in lacustrine and fluvial environments (Church, 1981; Hora and Church, 1985; McClaughry and Gaylord, 2005; Hamblin, 2011). The Allenby Formation is exposed in the central part of the Intermontane Belt and consists of fault-bounded conglomerates, sandstones, shales, and coals deposited in alluvial fan, fluvial, and paludal settings (e.g., McMechan, 1983; Read, 2000; Mustoe, 2005, 2011). The Kamloops Group is exposed near the city of Kamloops, BC, and consists of up to 2,000 m of volcano-clastic and volcanic strata (Mathews, 1964; Ewing, 1981a). Within the Kamloops Group are the Tranquille Formation and the McAbee Beds, both of which were deposited primarily in lacustrine environments (Ewing, 1981a; Souther, 1991). Conglomerate beds of the Kamloops Group are exposed within the Coldwater fault system (strike-slip) and consist of up to 2,000 m of pebble- to cobble-conglomerate that were deposited in the transtensional Fig Lake Graben (Thorkelson, 1989).

2.4 CLIMATE AND PALEOELEVATION ESTIMATES

During the Eocene, the Intermontane Belt in the SCC was much warmer than present, with mean annual temperatures >10°C and mean coldest month temperatures ~8°C (Wolfe and Weher, 1991; Wolfe et al., 1998; Greenwood et al., 2005; Archibald et al., 2014). Paleoelevation of the SCC during the Eocene is poorly constrained, but the majority of the estimates suggest elevations higher than current values. Paleoaltimetry data including stable isotopes and paleoflora assemblages from Mix et al. (2011) support a high elevation for the central Intermontane Belt, with elevations of 4 km or more. Mathews (1991) speculated the SCC may well have exceeded 5 km. Mulch et al. (2007) reconstructed paleoelevations of 3-4 km in the Kettle metamorphic core complex, and 4-5

km in the Shuswap metamorphic core complex, both located in the adjacent Omineca Belt. In contrast, Tribe (2005) suggested more modest paleoelevations of 400-1500 m for the Eocene Intermontane Belt. Most recently, Foster-Baril (2017) used hydrated volcanic glass (δD_{glass}) values from ignimbrites from the western Cordilleran hinterland to estimate that the hinterland of the SCC was 2.8-3.0 km ± 0.3 km during the Eocene.

CHAPTER 3

METHODS

3.1 FIELD DATA AND SAMPLING

Over 600 m of stratigraphic sections of Eocene sedimentary units were measured and described in detail across the SCC including two sections near Republic, WA, one in the White Lake, BC area, one in the Summerland, BC area, two in the Kelowna, BC area, four from the Princeton, BC area, and one from Kamloops, BC (Figures 1.6 and 1.7). Sections were measured at the centimeter to decimeter-scale with grain-size, sedimentary structures, fossils, bedding, stratigraphic surfaces, and other salient features recorded.

Twenty-two ~4 kg samples of sandstone were collected from outcrop exposures at 11 locations for detrital zircon U-Pb geochronology and ƐHf analyses (Table 1.1; Figure 1.1). Detrital zircons were extracted through mechanical disaggregation, and density and magnetic differentiation in the Rock Preparation Laboratory at the University of South Carolina (USC), following standard procedures described in Gehrels et al. (2006).

3.2 DETRITAL ZIRCON U-PB GEOCHRONOLOGY

Detrital zircon U-Pb geochronology of 18 samples (Table 1.1) was performed at the USC Center for Elemental Mass Spectrometry (CEMS) using laser-ablation high-resolution single-collector inductively coupled plasma mass-spectrometry (LA-HR-SC-ICP-MS). For each sample, ~100-120 randomly selected zircon grains were ablated using

a PhotonMachines Analyte G2 193 nm (deep ultraviolet) ArF exciplex laser with accompanying HelEx ablation chamber. Ablated material was transported via argon gas to the plasma source of a Thermo Scientific Element2 high-resolution SC-ICP-MS. An analysis of the zircon standard 91500 (1062.4 ± 0.4 Ma; Wiedenbeck et al., 1995) and Sri Lanka Zircon (SL; ID-TIMS age 563.5 ± 3.2 Ma; Gehrels et al., 2008) was collected after every fifth unknown analysis. Data was reduced and processed in the Iolite add-on U-Pb Geochronology 3 data reduction scheme for WaveMetrics' IgorPro software package (Paton et al., 2011). Additional details can be found in Appendix A.

Four additional samples were analyzed at the Arizona LaserChron Center (ALC). For these particular samples, approximately 300 zircon grains were randomly selected from each sample and ablated with a PhotonMachines Analyte G2 excimer laser equipped with HelEx ablation cell. Ablated material was carried in helium into the plasma source of a Thermo Scientific Element2 high-resolution inductively-coupled-multi-collector-plasma-mass-spectrometer. An analysis of zircon standard SL, FC-1 (1099 ± 2 Ma; Paces and Miller, 1993; Wiedenbeck et al., 1995), and R33 (ID-TIMS age 419.3 ± 0.4 Ma; Black et al., 2004) was collected after every fifth unknown analysis. Post-processing data reduction was performed with an ALC Python decoding routine and Excel spreadsheet (E2agecalc). Additional details can be found in Appendix E.

All U-Pb results are presented in Figure 3.1 as Kernel Density Estimations (KDE), Probability Density Plots (PDP), histograms, and individual ages following procedures outlined in Vermeesch (2012). Additional KDE, PDP, and histograms for samples separated by location can be found in Appendix D. Raw data for all analyses can be found in the Appendix B and Appendix F.

3.3 DETRITAL ZIRCON HF SYSTEMATICS

Hf isotope analyses were conducted on four detrital zircon samples (CAN-BC-1023H; 15Ca01B; 15Ca03A; CAN-BC-1022Gab) at the ALC (Table 1.1). Hf isotope analyses were conducted with a Nu HR ICP-MS connected to a Photon Machines Analyte G2 excimer laser following procedures described in Gehrels and Pecha (2014). Analyses of unknowns are bracketed by analyses of standard solutions and zircon standards to ensure interference corrections are conducted accurately. The standards used include: Mud Tank (Black and Gulson, 1978; Woodhead and Hergt, 2005); 91500 (Wiedenbeck et al., 1995), Temora-2 (Black et al., 2004), R33 (Black et al., 2004), FC-52 (similar to FC-1; see above), Plešovice (Sláma et al., 2008), and SL (Gehrels et al., 2008). Solution analyses were run with a 60-second background, followed by 3 blocks of 20 measurements, separated by 20-second background measurements, with an integration period of 5 seconds. Laser ablation occurred on U-Pb analysis pits, with a laser beam diameter of 40 μm, and a laser pulse frequency of 7 Hz. Zircon standards were analyzed at the start of the session, between every ~25 unknown analyses, and at the end of the session. At the end of the session, all analyses from solutions and standard zircons were plotted together, and the cutoff for the use of ytterbium (βYb) versus βHf was evaluated. Additional details and raw data are included in Appendix E and Appendix G.

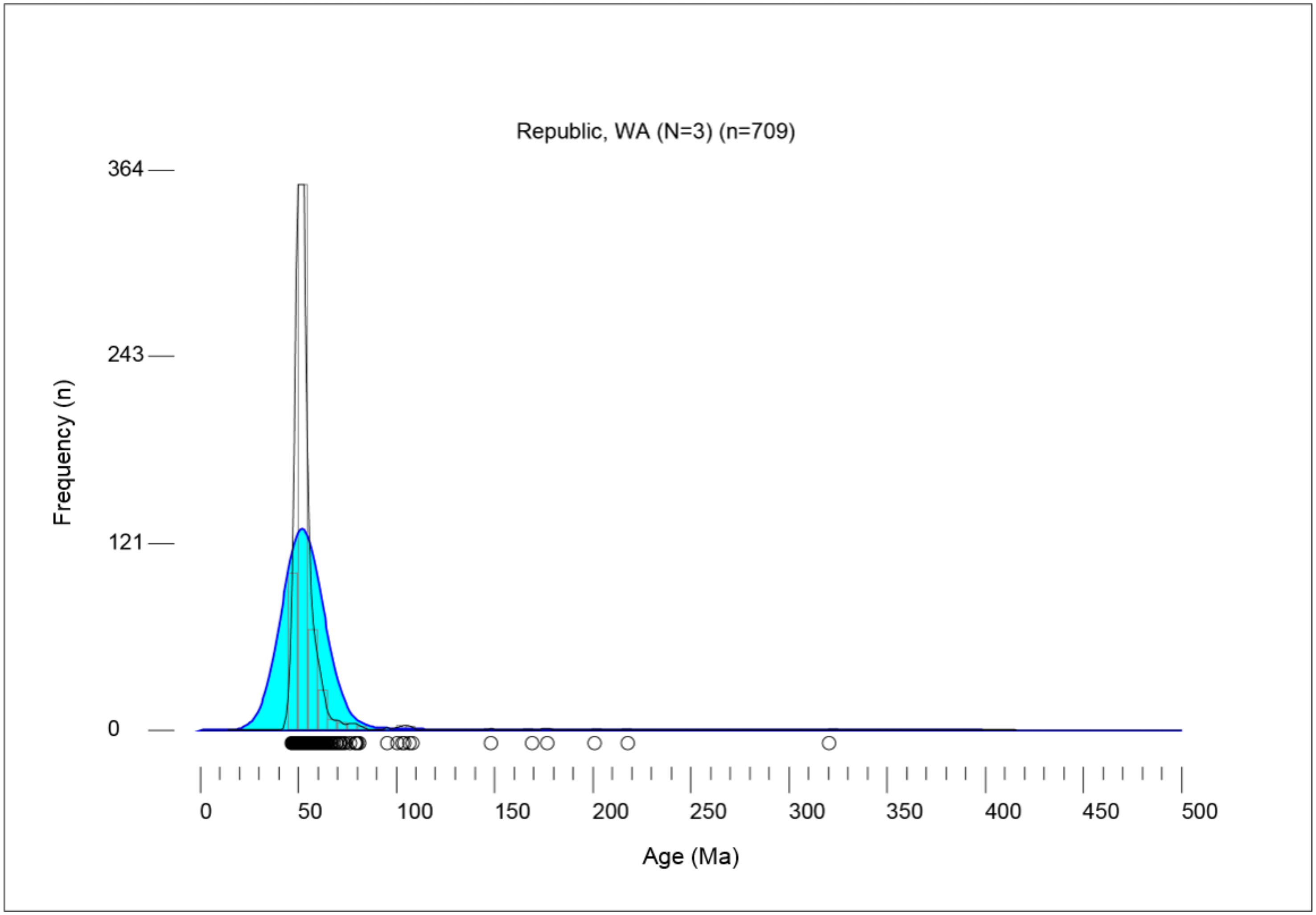

Figure 3.1 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all Republic, WA, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

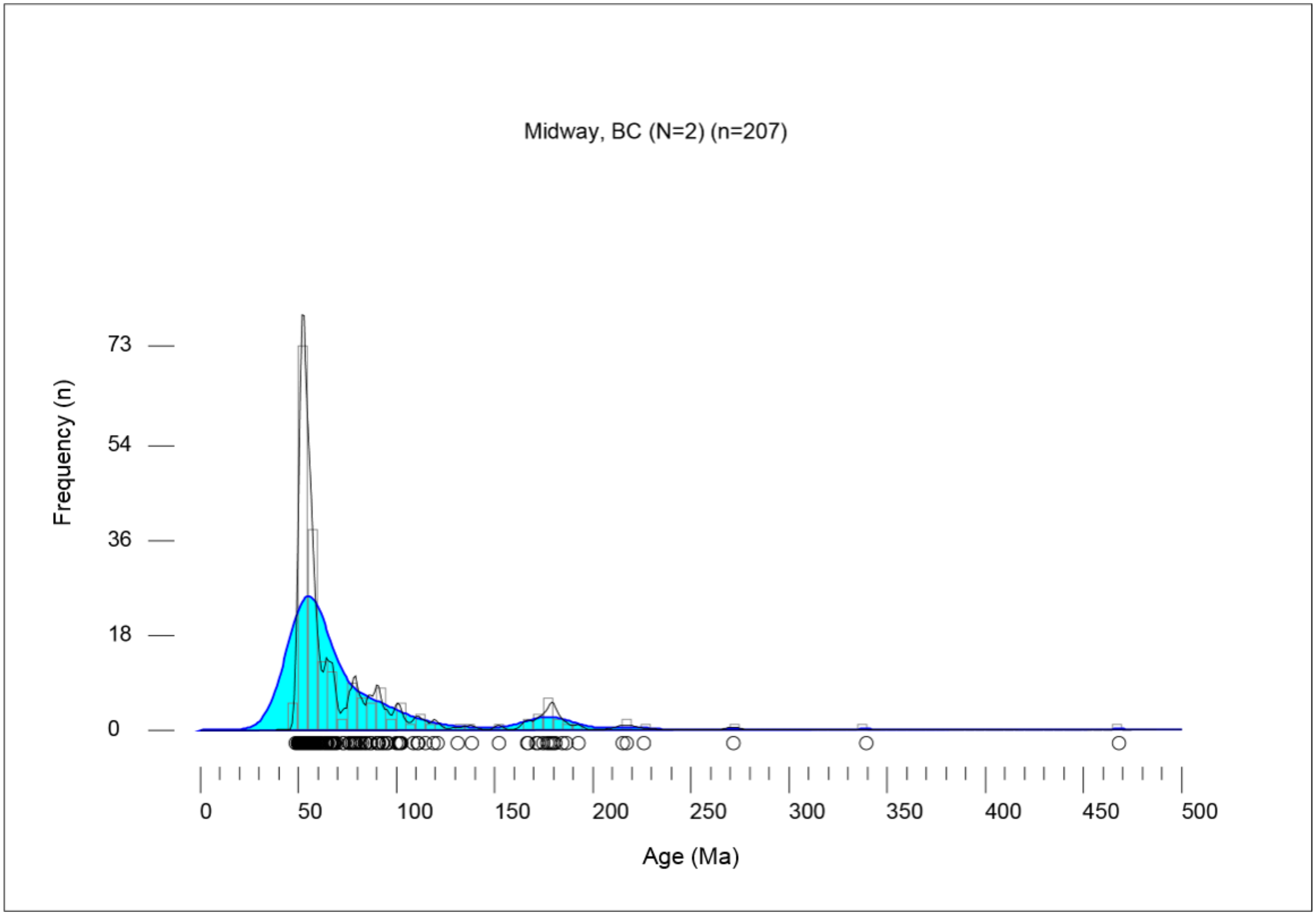

Figure 3.2 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all Midway, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

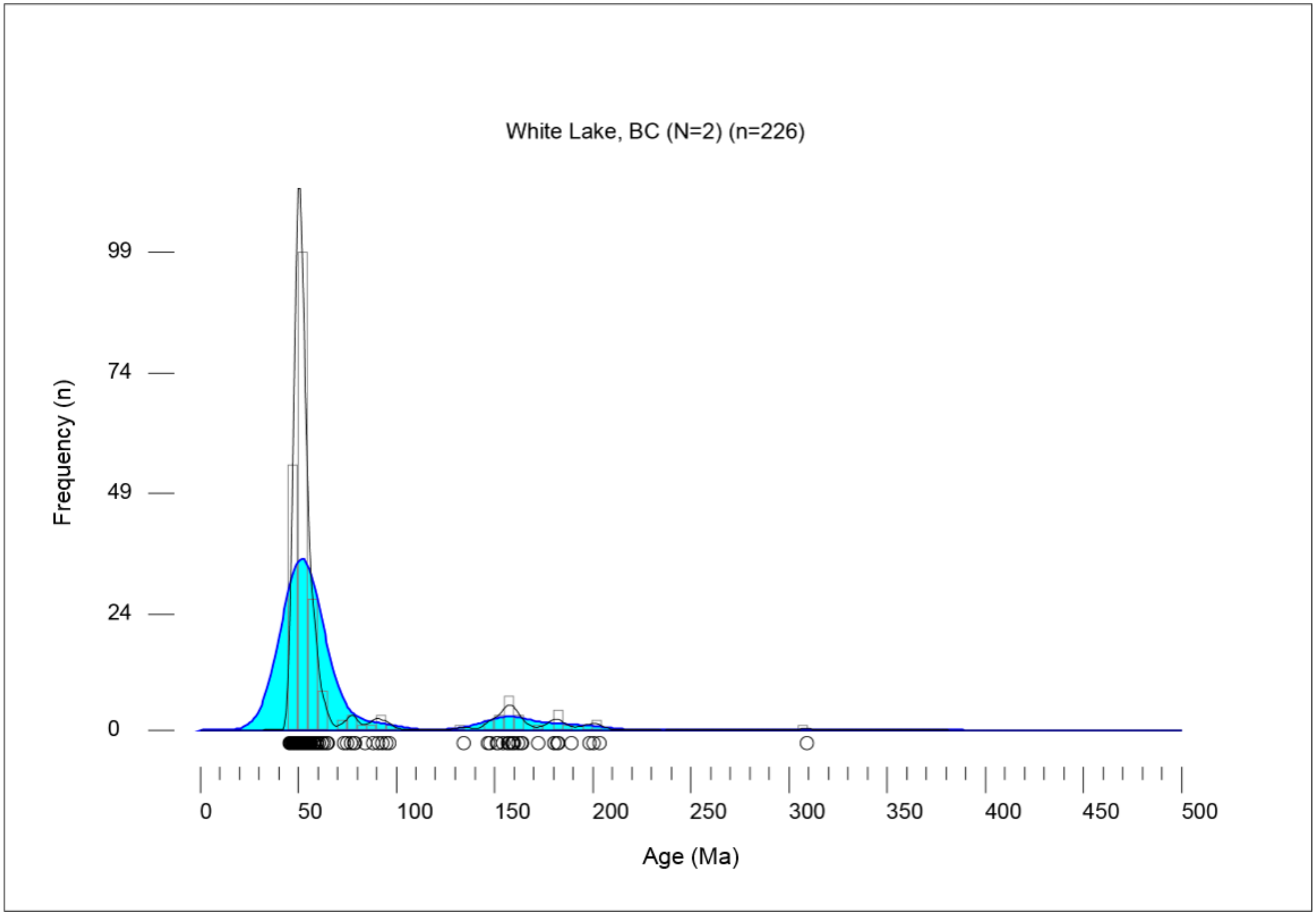

Figure 3.3 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all White Lake, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

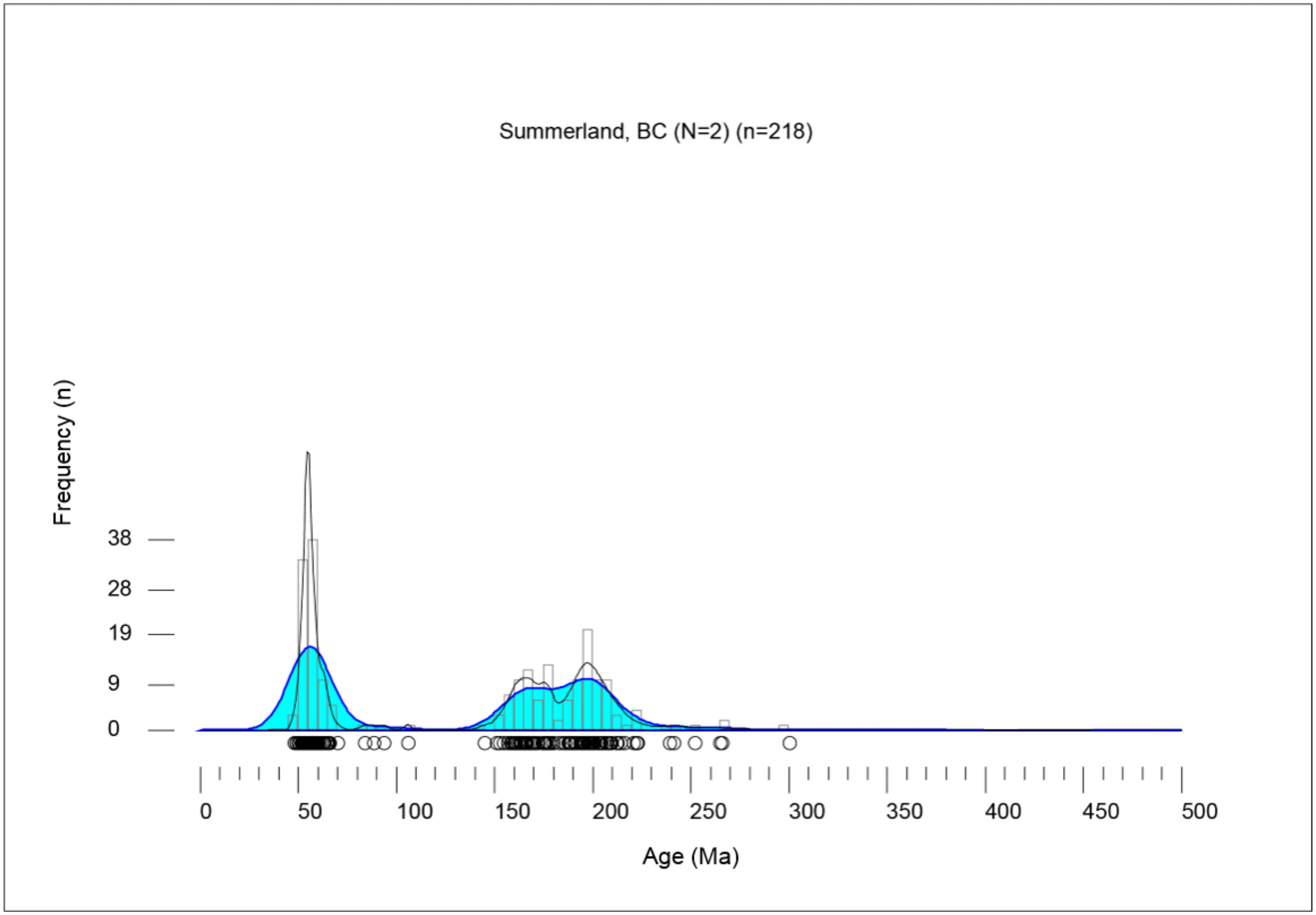

Figure 3.4 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all Summerland, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

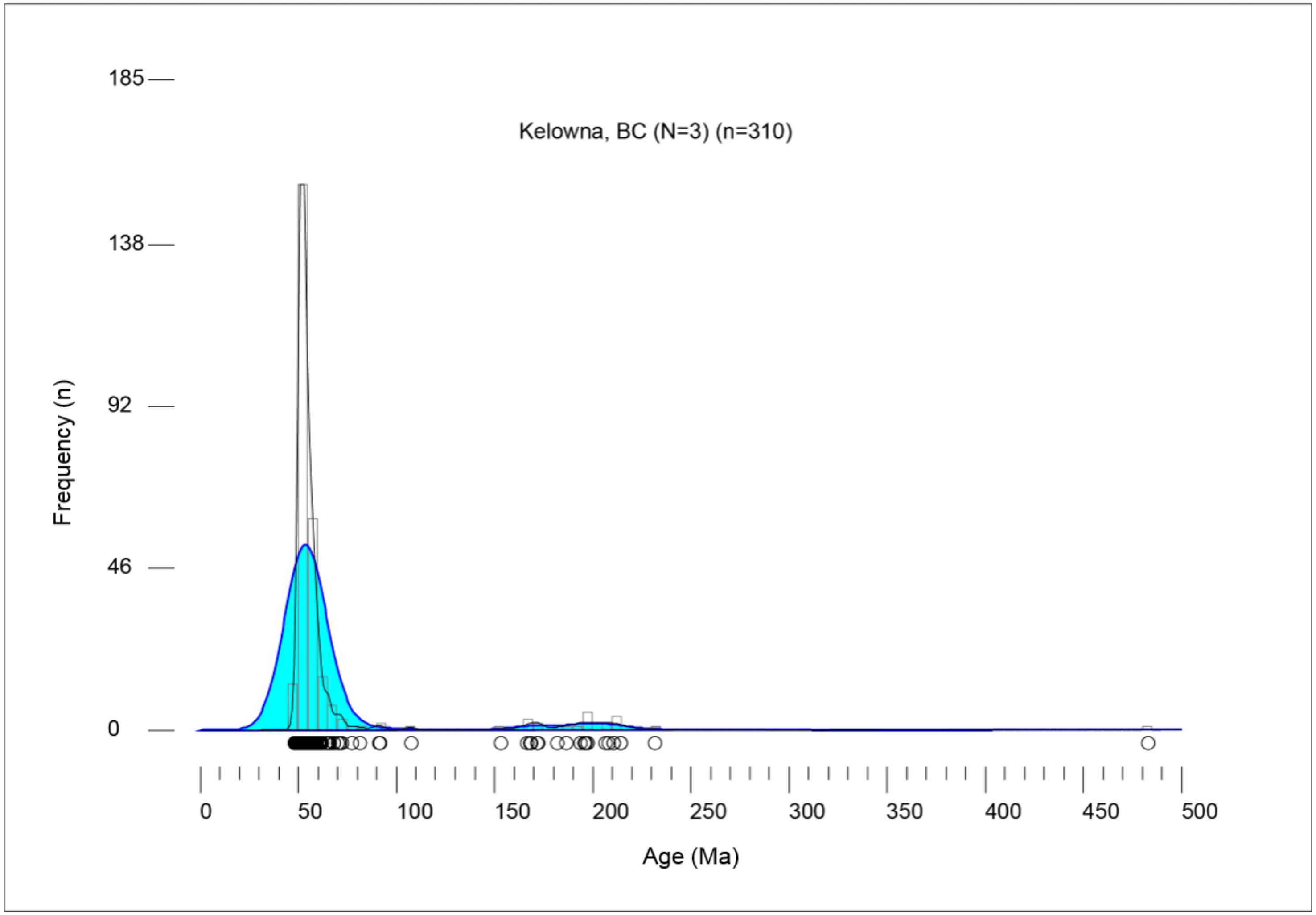

Figure 3.5 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all Kelowna, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

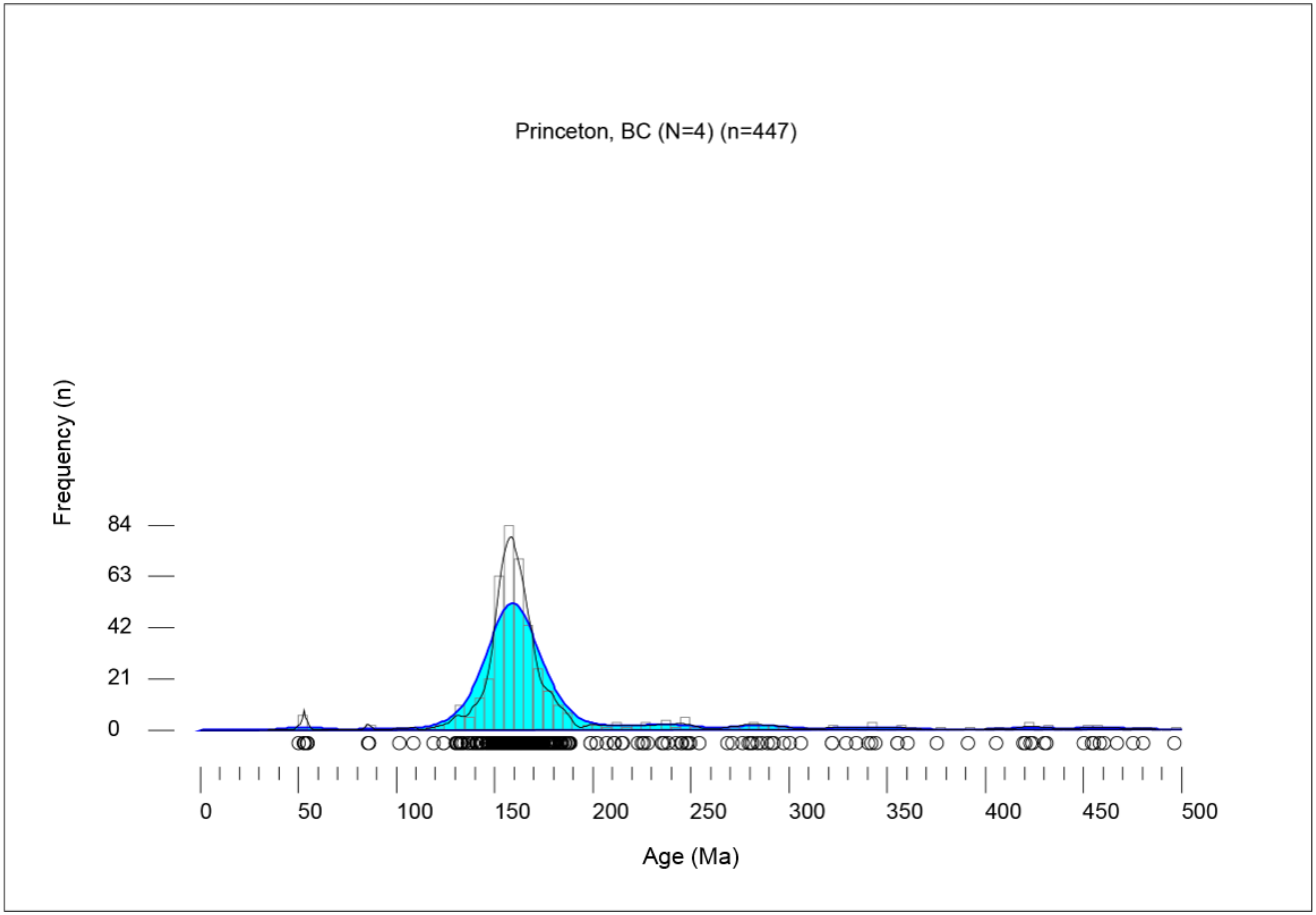

Figure 3.6 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all Princeton, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

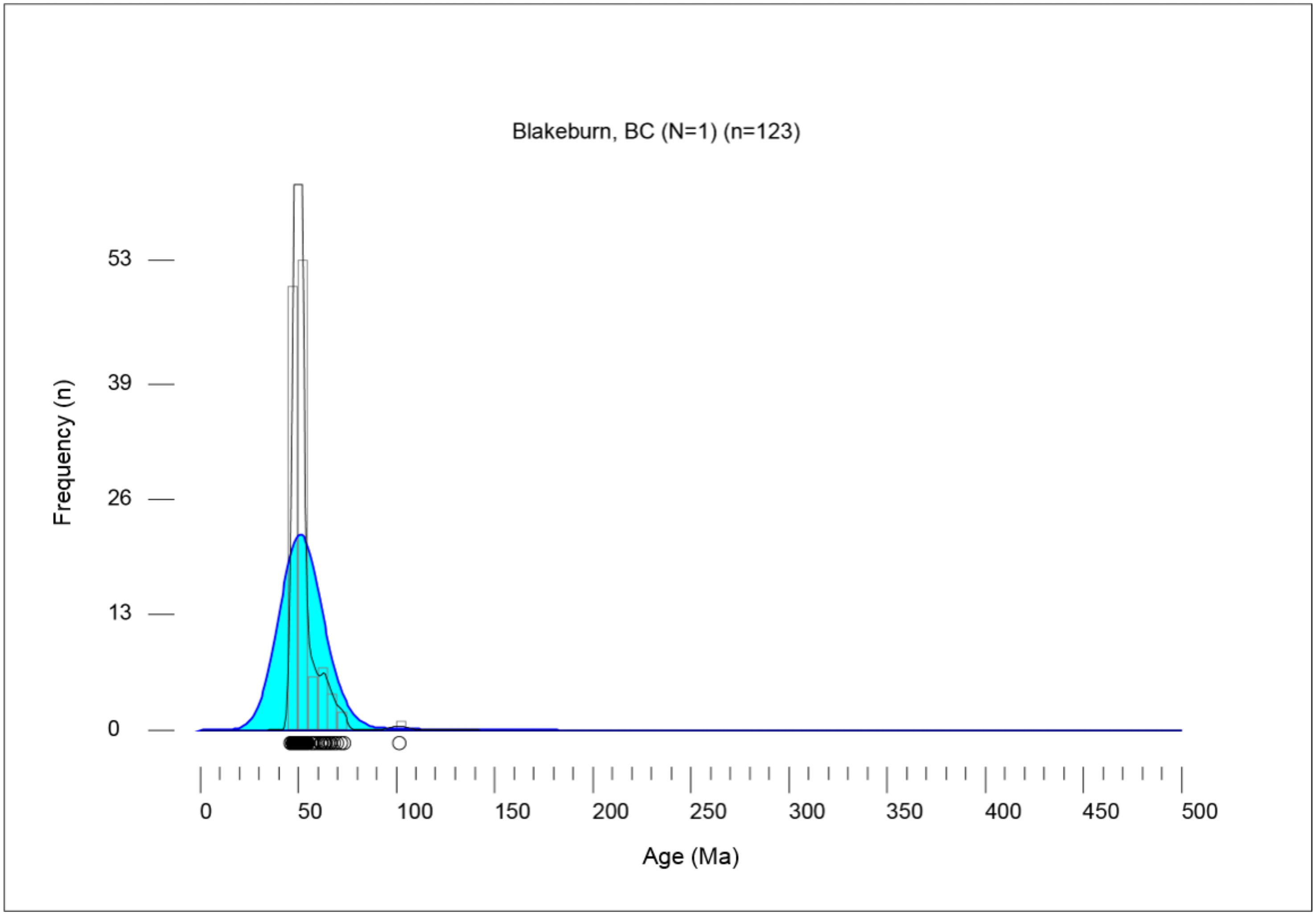

Figure 3.7 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all Blakeburn, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

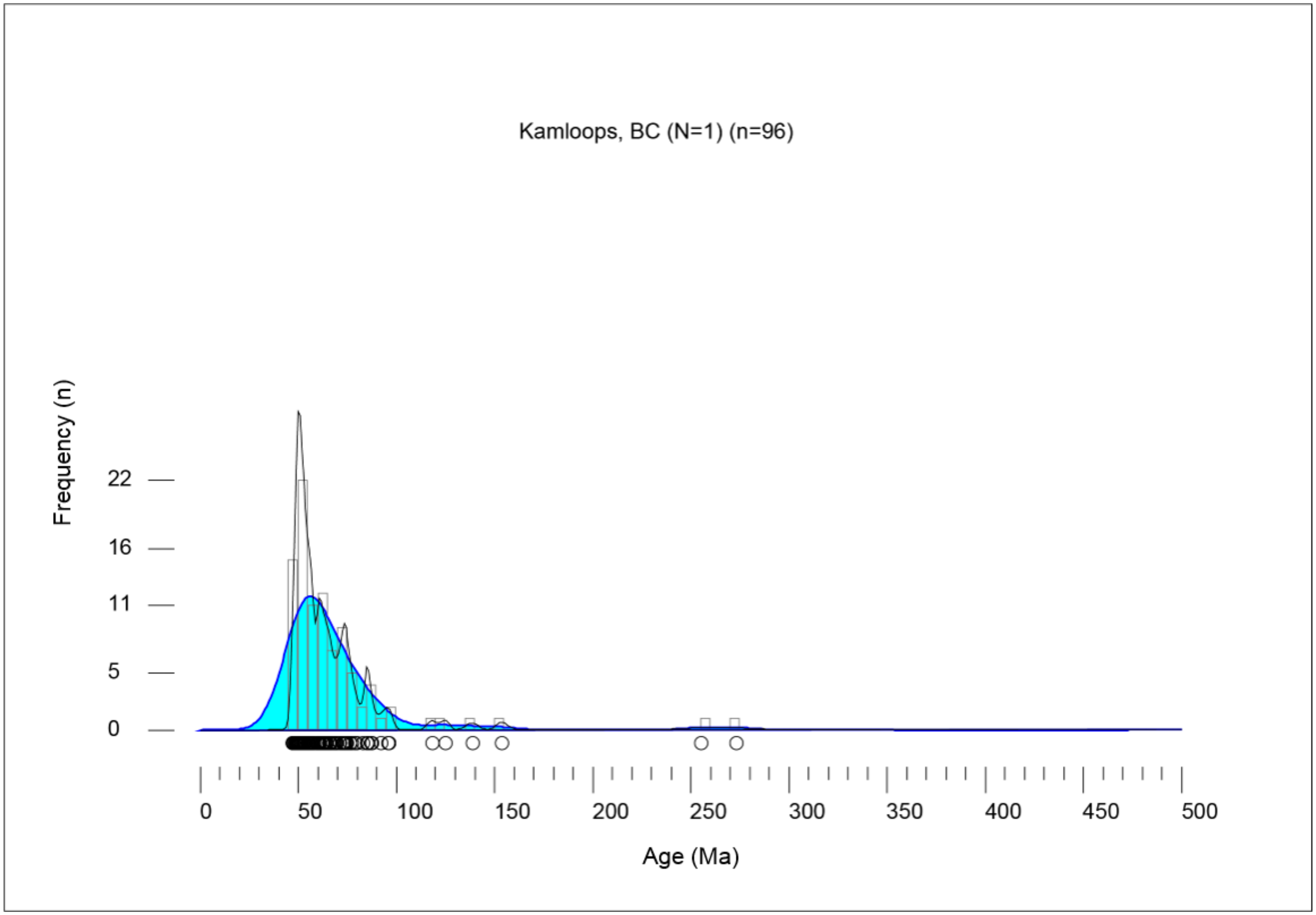

Figure 3.8 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all Kamloops, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

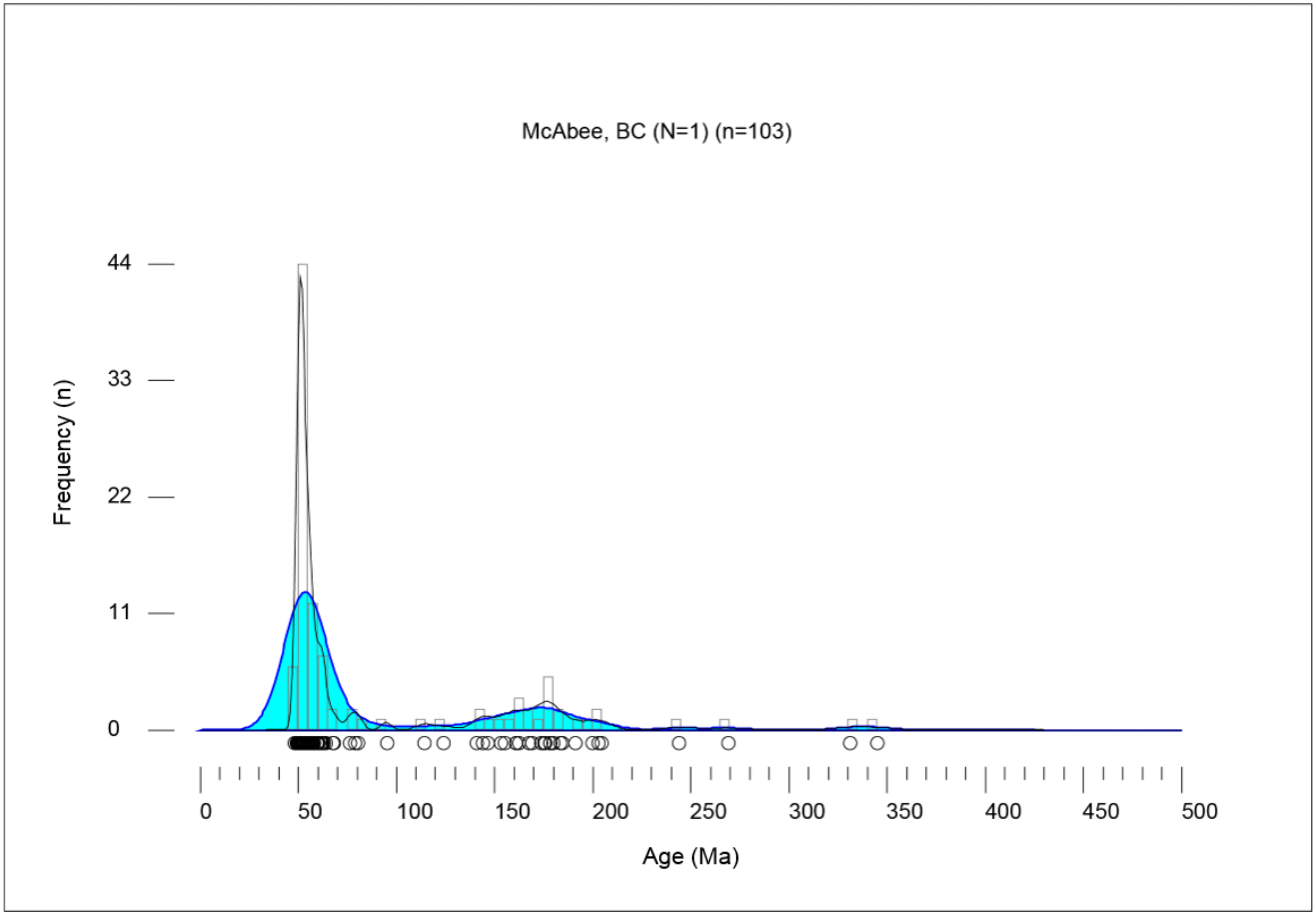

Figure 3.9 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all McAbee, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

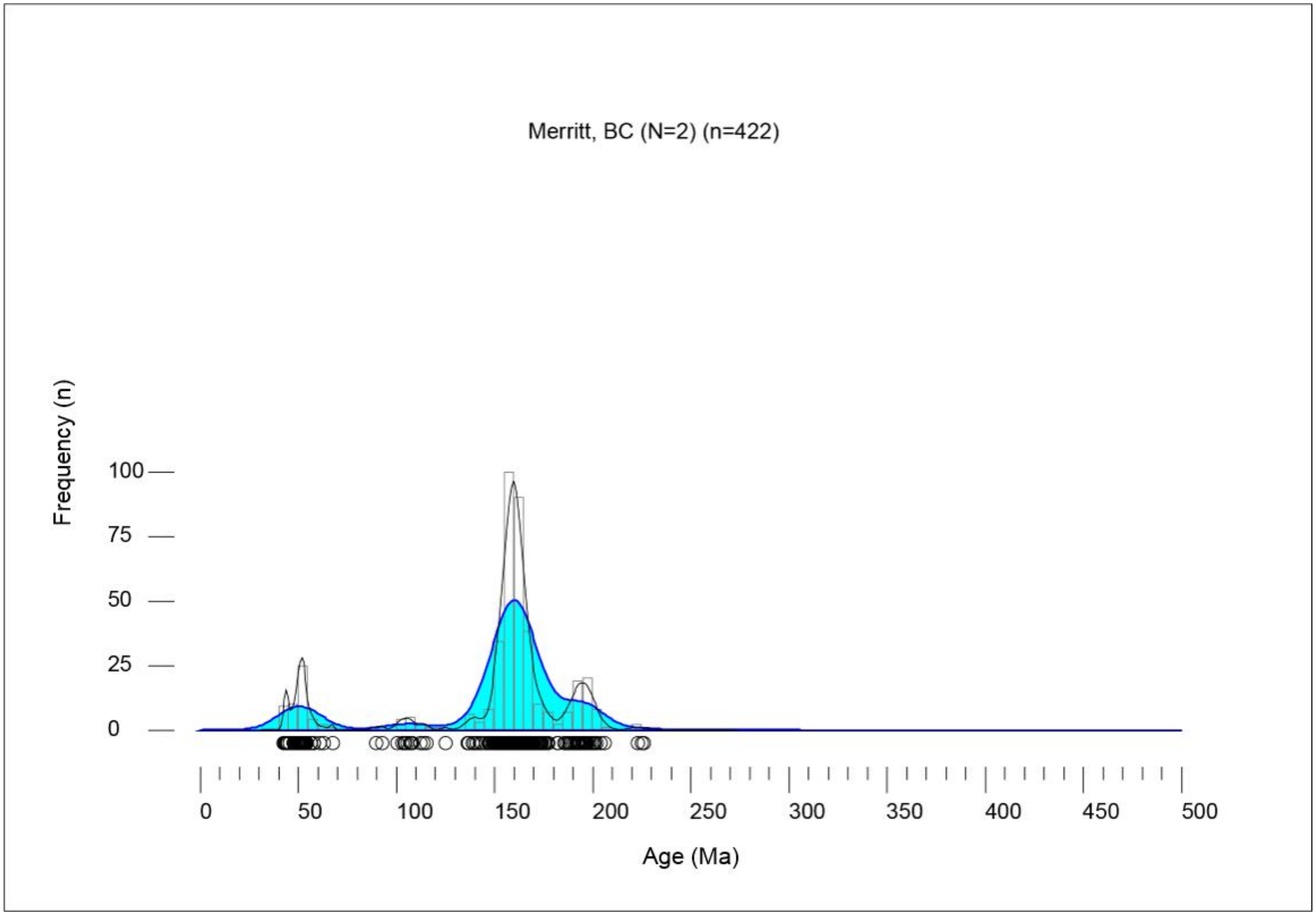

Figure 3.10 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all Merritt, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

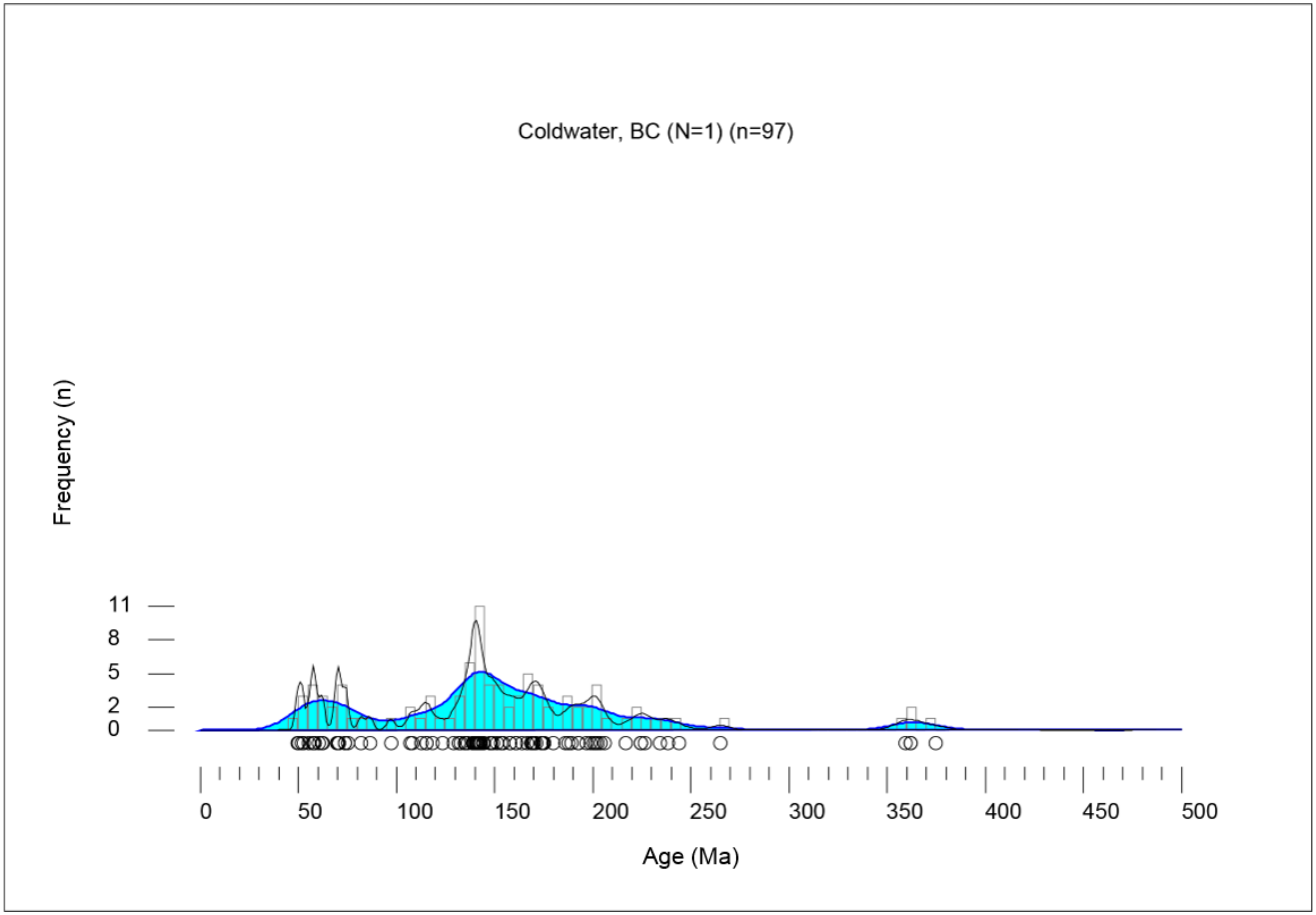

Figure 3.11 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for all Coldwater, BC, samples, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

CHAPTER 4

RESULTS

4.1 U-PB RESULTS

The 22 analyzed samples of Eocene strata from the SCC yielded 2,995 acceptable U-Pb ages (Appendix B and Appendix F). Samples analyzed at CEMS are corrected to the standard 91500, whereas those from the ALC are corrected to the SL standard. For the purposes of clarity and brevity, we grouped multiple samples from adjacent outcrops into single locations (e.g., Republic) and discuss the data within this framework. Youngest U-Pb ages from each sample are shown with: 1) the youngest age and the particular standard used to determine that age; 2) the MDA of the youngest two-to-three grains that have overlapping 2σ standard deviation; 3) the mean square weighted deviation (MSWD) provided for the same two-three grains used to determine the MDA; 4) the youngest peak ages from PDP and KDE plots. All raw data and graphs are available in Appendix H.

4.1.1 Republic, WA

Three samples from fine- to medium-grained sandstone were collected from the Klondike Mountain Formation near Republic, WA, and were analyzed for detrital zircon U-Pb ages (n=710) (Figure 3.1). Strata in Republic, WA, were measured in two sections (Figure 1.6), and consist primarily of interbedded mudstone, siltstone and sandstone, although local conglomerates are reported (Suydam and Gaylord, 1997). The best

exposures of Eocene strata are located in the town of Republic, where the strata consist of shale and mudstone, with very thin to thick beds of fine- to medium-grained sandstone (i.e. Mustoe, 2015). The ~20 m thick succession in Republic, WA consists of a coarsening upward succession as laminated mudstones are progressively replaced by fine- to medium-grained sandstone beds near the top of the exposure. The sandstone beds are laterally continuous and contain multiple planar laminations, asymmetric ripples, rip-up clasts, and flame structures, with interbedded, thinly laminated shale, carbonized wood fragments, and leaf, insect, and fish fossils. Overall, we interpret these beds as prograding lacustrine delta deposits, similar to Mustoe (2015).

Sample 15Ca01B (*n*=308) was analyzed at the ALC and contains a single population with a peak at 51 Ma (range: 45-70 Ma), which constitutes 97% of the analyzed grains. The youngest U-Pb age from the sample is 47 ± 2 Ma (SL standard), the MDA (SL standard) is 47 ± 1 Ma (MSWD 0.043), and the youngest peak is 51 Ma. Sample 15Ca03A (*n*=303) was analyzed at the ALC and contains a single population with a peak at 51 Ma (range: 45-60 Ma), which constitutes 98% of the analyzed grains. The youngest U-Pb age from the sample is 46 ± 2 Ma (SL standard), the MDA (SL standard) is 47 ± 1 Ma (MSWD 0.64), and the youngest peak is 51 Ma. Sample 15Ca04A (*n*=99) was analyzed at CEMS and contains a single population with a peak at 55 Ma (range: 45-80 Ma), which constitutes 93% of the analyzed grains. Four grains have U-Pb ages between 90-110 Ma. The youngest U-Pb ages from the sample are 48 ± 2 Ma (91500 standard) and 45 ± 2 Ma (SL standard), the MDA (91500 standard) is 51 ± 3 Ma (MSWD 5.2), and the youngest peak is 55 Ma.

4.1.2 Midway, BC

Two samples of fine- to medium-grained sandstone were collected from road cuts of the Penticton Group along Canadian Highway 3 near the town of Midway, BC (Figure 3.2). Sandstone beds in the area are planar and laterally continuous, but due to poor exposures, no section was measured at this location.

Sample CAN-BC-1024K (*n*=116) was analyzed at CEMS and contains a single population with a peak at 52 Ma (range: 47-73 Ma), which constitutes 90% of the analyzed grains. Additional grains have U-Pb ages between 74 Ma – 2.6 Ga. The youngest age from the sample is 49 ± 1 Ma (both 91500 and SL standards), the MDA (91500 standard) is 49 ±1 Ma (MSWD 1.19), and the youngest peak is 51 Ma. Sample CAN-BC-1024L (*n*=100) was analyzed at CEMS and contains a primary population with a peak at 56 Ma (range: 51-104 Ma), which constitutes 68% of the analyzed grains. An additional population includes 163-196 Ma (12% of total grains). The youngest ages from the sample are 52 ± 1 (91500 standard), and 50 ± 1 Ma (SL standard), the MDA (91500 standard) is 52 ± 2 Ma (MSWD 0.15), and the youngest peak is 55 Ma.

4.1.3 White Lake, BC

Two samples from fine- to medium-grained sandstone exposures were collected from the Penticton Group on White Lake Road, south of Penticton, BC (Figure 3.3). One measured section (Figure 1.6) was collected along White Lake Road, where strata consist of interbedded matrix- and clast-supported conglomerate, very fine- to very coarse-grained sandstone, and black and green mudstones with abundant organic material, and lesser coals. Conglomerates include subangular to subrounded pebble-size clasts, while

sandstones include abundant volcanic rock fragments, trough cross strata, rip-up clasts, and horizontal laminations. Carbonaceous mudstones include *Metasequoia* fragments (Church, 1973), and other fossilized plant detritus. The depositional environments of these deposits are interpreted as debris flow, braided fluvial, meandering fluvial and floodplain deposits (e.g., Church, 1981; McClaughry and Gaylord, 2005; Hamblin, 2011).

Sample WLR1 (*n*=117) was analyzed at CEMS and contains a single population with a peak at 51 Ma (range: 44-68 Ma), which constitutes 91% of the analyzed grains. The youngest ages from the sample are 46 ± 1 Ma (91500 standard), and 48 ± 1 Ma (SL standard), the MDA (91500 standard) is 46 ± 1 Ma (MSWD 0.57), and the youngest peak is 51 Ma. Sample WLR2 (*n*=111) was analyzed at CEMS and contains a primary population with a peak at 50 Ma (range: 44-67 Ma), which constitutes 74% of the analyzed grains. The secondary population in the sample includes 142-169 Ma (14% of total grains). The youngest ages from the sample are 46 ± 1 Ma (91500 standard), and 48 ± 1 Ma (SL standard), the MDA (91500 standard) is 46 ± 2 Ma (MSWD 1.5), and the youngest peak is 50 Ma.

4.1.4 Summerland, BC

Two samples from fine- to medium-grained sandstone exposures were collected from the Penticton Group outside Summerland, BC (Figure 3.4). One measured section (Figure 1.6) was collected outside Summerland, where strata consist primarily of interbedded organic-rich mudstones, fine- to very coarse-grained sandstones, and subangular to subrounded, matrix-supported conglomerates and breccias. Sandstones are

very fine- to very coarse-grained, and include pebble clasts. The depositional environments for these strata are interpreted as braided fluvial, floodplain, and debris flow settings.

Sample SKEL1 (*n*=117) was analyzed at CEMS and contains a prominent peak at 55 Ma (range: 49-67 Ma), which constitutes 57% of the analyzed grains. Additional populations include grains with 157-183 Ma (16% of total grains) and 185-228 Ma (18% of total grains). The youngest ages from the sample are 51 ± 1 Ma (91500 standard), and 48 ± 1 Ma (SL standard), the MDA (91500 standard) is 51 ± 1 Ma (MSWD 1.4), and the youngest peak is 55 Ma. Sample SKEL2 (*n*=106) was analyzed at CEMS and contains two chief populations with peaks at 52 Ma (range: 46-72 Ma) and 195 Ma (range: 146-216 Ma), which constitute 22% and 71% of the analyzed grains, respectively. The youngest ages from the sample are 48 ± 2 Ma (91500 standard), and 49 ± 2 Ma (SL standard), the MDA (91500 standard) is 49 ± 1 Ma, and the (MSWD 0.83), and the youngest peak is 52 Ma.

4.1.5 Kelowna, BC

Three samples from fine- to medium-grained sandstone were collected from the Penticton Group near Kelowna, BC (Figure 3.5). Two measured sections (Figure 1.6) were collected in the Kelowna area, where the strata consist of interbedded matrix- and clast-supported conglomerates, fine- to coarse-grained sandstones, and shale. Conglomerates include pebble- to cobble-size clasts, with poor imbrication locally, while sandstones have both normal and inverse grading. Mudstones include organic matter and

abundant plant fossils. The depositional environments of these strata are interpreted as debris-flows, lacustrine, braided fluvial, and floodplain environments.

Sample CAN-BC-1023H (*n*=105) was analyzed at ALC and contains a single population with a peak at 52 Ma (range: 46-58 Ma), which constitutes 89% of the analyzed grains. The youngest age from the sample is 48 ± 2 Ma (SL standard), the MDA (SL standard) is 48 ± 1 Ma (MSWD 0.046), and the youngest peak is 51 Ma. Sample SAWMILL1 (*n*=100) was analyzed CEMS and contains a single prominent population with a peak at 55 Ma (range: 47-80 Ma), which constitutes 84% of the analyzed grains. A lesser population of grains with ages of 161-204 Ma constitutes 16% of the total grains. The youngest ages from the sample are 49 ± 1 Ma (91500 standard) and 48 ± 1 Ma (SL standard), the MDA (91500 standard) is 50 ± 2 Ma (MSWD 1.3), and the youngest peak is 55 Ma. Sample 15Ca18A (*n*=114) was analyzed at CEMS and contains a single population with a peak at 52 Ma (range: 46-64 Ma), which constitutes 83% of the analyzed grains. The additional grains have ages of 65-73 Ma, 87-97 Ma, 201-213 Ma, 481-530 Ma, and 619-681 Ma. The youngest age from the sample is 48 ± 1 Ma (both 91500 and SL standards), the MDA (91500 standard) is 50 ± 1 Ma (MSWD 0.029), and the youngest peak is 52 Ma.

4.1.6 Princeton, BC

Four samples from fine- to medium-grained sandstone were collected from the Allenby Formation near Princeton, BC (Figure 3.6). Four measured sections (Figure 1.7) were collected in Princeton, where strata consist primarily of interbedded medium- to very coarse-grained sandstones, siltstones and mudstones with organic matter, with lesser

pebble- to cobble-conglomerates and coals. Sandstone strata include local sources, lenticular beds, trough cross-stratification, and normal grading. Conglomerates are both matrix- and clast-supported. The depositional environments of these strata are interpreted as braided and meandering fluvial systems and lacustrine environments.

Sample PB2 (*n*=108) was analyzed at CEMS and contains a prominent population with a peak at 155 Ma (range: 138-171 Ma), which constitutes 52% of the analyzed grains. Lesser populations include 174-186 Ma (6% of the total grains), 194-255 Ma (15% of the total grains), 263-305 Ma (8% of the total grains), and 316-349 Ma (6% of the total grains). The youngest age from the sample is 131 ± 2 Ma (91500 standard), the MDA (91500 standard) is 142 ± 1 Ma (MSWD 0.88), and the youngest peak is 130 Ma. Sample 15CAN10B (*n*=119) was analyzed at CEMS and contains a primary population with a peak at 167 Ma (range: 151-192 Ma), which constitutes 77% of the analyzed grains. The youngest age from sample 15CAN10B is 53 ± 1 Ma (91500 standard), the MDA (91500 standard) is 53 ± 1 Ma (MSWD 0.39), and the youngest peak is 53 Ma. Sample 15Ca15A (*n*=105) was analyzed at CEMS and contains a single population with a peak at 156 Ma (range: 126-185 Ma), which constitutes 97% of the analyzed grains. The youngest age from the sample is 50 ± 1 (both 91500 and SL standards), the MDA (91500 standard) is 52 ± 5 Ma (MSWD 8.4), and the youngest peak is 51 Ma. Sample Prince1A (*n*=115) was analyzed at CEMS and contains a single population with a peak at 159 Ma (range: 114-190 Ma), which constitutes 97% of the analyzed grains. The youngest ages from the sample are 86 ± 1 (91500 standard) and 88 ± 1 Ma (SL standard), the MDA (91500 standard) is 86 ± 1 Ma (MSWD 0.116), and the youngest peak is 85 Ma.

4.1.7 Blakeburn, BC

One sample from a tuffaceous sandstone exposed between coal beds was collected from the Allenby Formation near Blakeburn, BC (Figure 3.7). Eocene strata in the Blakeburn area contain thick (~30 m) coal beds as well as lesser sandstone and mudstone. Exposures are poor and no section was measured in this locality. However, based on the lithologies the sediments were likely deposited in fluvial and paludal settings (e.g., McMechan; 1983; Read, 2000; Mustoe, 2005, 2011).

Sample 15Ca13B (n=123) was analyzed at CEMS and contains a single population with a peak at 50 Ma (range: 44-76 Ma), which constitutes 99% of the analyzed grains. The youngest zircon ages from the sample are 46 ± 1 Ma (91500 standard) and 48 ± 1 Ma (SL standard), the MDA from the (91500 standard) is 49 ± 1 Ma (MSWD 0.86), and the youngest peak is 50 Ma.

4.1.8 Kamloops, BC

One sample from fine- to medium-grained sandstone was collected from the Kamloops Group near Kamloops, BC (Figure 3.8). One small section was measured (Figure 1.7), and consists of interbedded, thin, tuffaceous sandstone beds, siltstone, and shale. Individual sandstone and siltstone beds are laterally continuous and many are normally-graded. Mudstone beds are thinly laminated and contain well-preserved fossil leaves. We interpret these beds as having been deposited in a lacustrine environment.

Sample ABBEYRD2 (n=105) was analyzed at CEMS and contains a single population with a peak at 50 Ma (range: 47-100 Ma), which constitutes 86% of the analyzed grains. The remaining grains have ages between 115-660 Ma. The youngest

ages from the sample are 47 ± 1 Ma (91500 standard) and 49 ± 1 Ma (SL standard), the MDA (91500 standard) is 47 ± 1 Ma (MSWD 0.25), and the youngest peak is 50 Ma.

4.1.9 McAbee, BC

One sample from fine-grained tuffaceous sandstone was collected from the McAbee Beds from the Kamloops Group (Figure 3.9). The McAbee Beds consist of ash-fall tuffs interbedded with thin beds of siltstones, sandstones, and localized clast-supported and matrix-supported cobble-conglomerates. These strata are interpreted to have been deposited in lacustrine environments adjacent to alluvial fans (e.g., Ewing, 1981a; Foster-Baril, 2017).

Sample 15Ca23B (*n*=103) was analyzed at CEMS and contains a primary population with a peak at 51 Ma (range: 46-71 Ma), which constitutes 69% of the analyzed grains, and a secondary population with ages between 135 and 200 Ma that constitute 21% of the analyzed grains. The youngest age from the sample is 48 ± 1 Ma (both 91500 standard and SL standard), the MDA (91500 standard) is 49 ± 1 Ma (MSWD 0.89), and the youngest peak is 51 Ma.

4.1.10 Merritt, BC

Two samples from fine- to medium-grained sandstone were collected from the Allenby Formation, near Merritt, BC (Figure 3.10). Due to poor exposures no sections were measured in this location. Previous interpretations indicate these strata were deposited in fluvial-paludal environments (Ewing, 1981a).

Sample CAN-BC-1022Gab (*n*=311) was analyzed at ALC and contains a prominent population with a peak at 159 Ma (range: 133-182 Ma), which constitutes 69% of the analyzed grains. Lesser populations have ages of 41-59 Ma (11.5% of total grains) and 181-210 Ma (15% of total grains). The youngest age from the sample is 43 ± 1 (SL standard), the MDA (SL standard) is 43 ± 2 Ma (MSWD 2.8), and the youngest peak is 44 Ma. Sample CAN-BC-1022Gbb (*n*=111) was analyzed at CEMS and contains a prominent population with a peak at 163 Ma (range: 133-187 Ma), which constitutes 76% of the analyzed grains. Less prominent populations have ages of 40-64 Ma (12% of total grains) and 187-207 Ma (7% of total grains). The youngest ages from sample CAN-BC-1022Gbb are 43 ± 1 (91500 standard) and 41 ± 1 Ma (SL standard), the MDA (91500 standard) is 43 ± 1 Ma, (MSWD 0.55), and the youngest peak is 43 Ma.

4.1.11 Coldwater, BC

One sample from a clast-supported pebble conglomerate was collected from the Kamloops Group in the Fig Lake Graben along Coldwater Creek, BC (Figure 3.11). Due to poor exposures, no section was measured in this location; however, the beds are typically interpreted as having been deposited in a braided, fluvial to fluviolacustrine environment (Thorkelson, 1989).

Sample COLDWATER1 (*n*=99) was analyzed at CEMS and contains a prominent population with a peak at 140 Ma (range: 100-218 Ma), which comprises 66% of the analyzed grains. Less prominent populations have ages of 47-100 Ma (22% of the analyzed grains), and 220-265 Ma (7% of the analyzed grains). The youngest age from

the sample is 49 ± 1 Ma (both 91500 standard and SL standard), the MDA (91500 standard) is 50 ± 3 Ma (MSWD 4.1), and the youngest peak is 51 Ma.

4.2 HF RESULTS

ƐHf detrital zircon values (*n*=67) were analyzed for 4 of the samples collected from the SCC (Table 1.1; Figure 4.1); all ƐHf analyses were performed at the ALC. ƐHf values vary from -16 to +14 for zircons with U-Pb ages of ~50 Ma. These data are presented on Hf-evolution diagrams (Figure 4.2), which depict ƐHf values at the time of crystallization.

Sample CAN-BC-1022Gab (*n*=22) from Merritt, BC, contains primarily positive ƐHf values, with values between -3 and +14. Sample CAN-BC-1023H (*n*=15) from Kelowna, BC, contains both positive and negative values, with a total range in values of -10 to +14. This sample contains two distinct ƐHf populations, one with positive ƐHf values, the other with negative ƐHf values. Samples 15Ca01B and 15Ca03A from Republic, WA (*n*=30), contain almost exclusively negative values, with values between -16 and +7.

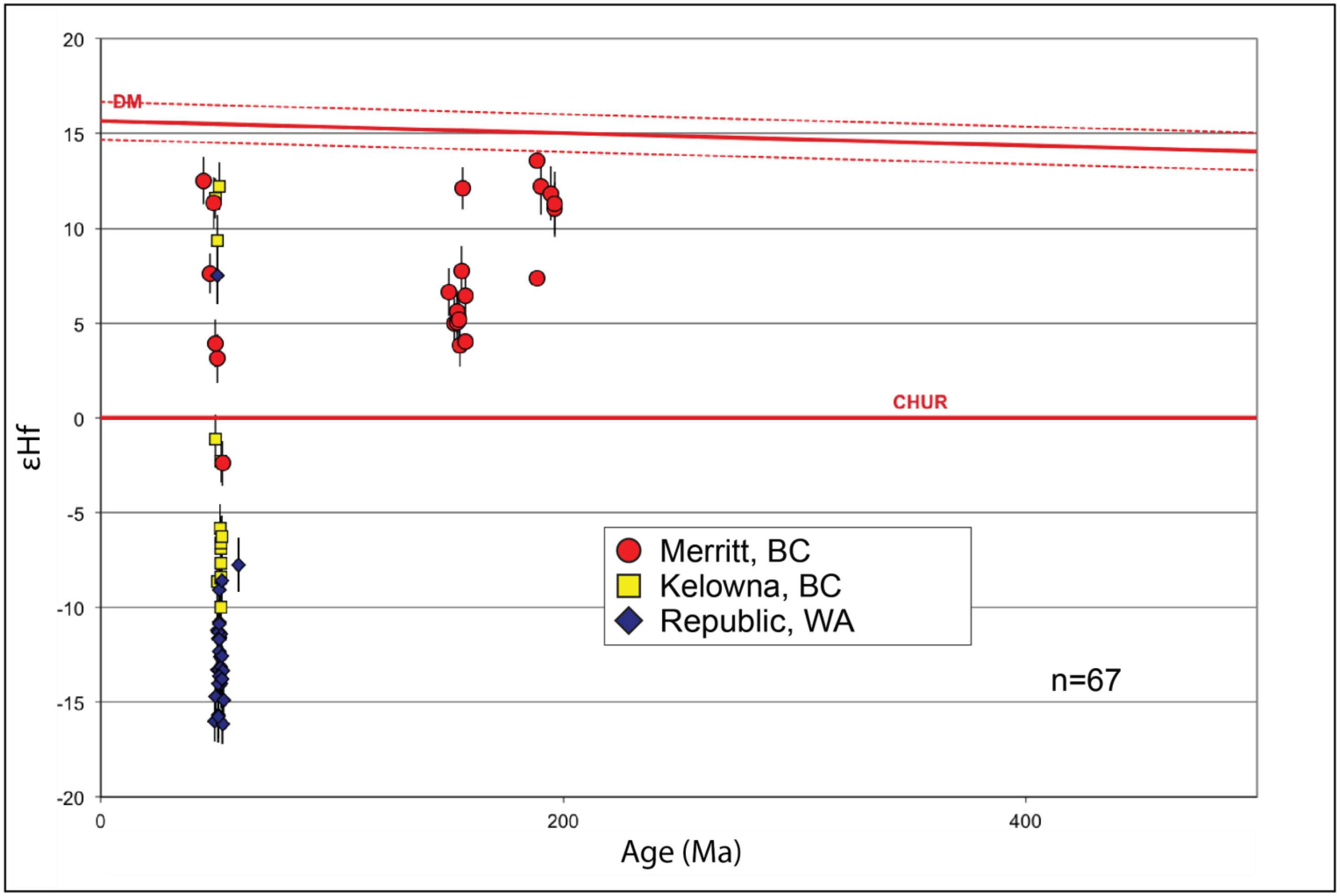

Figure 4.1 Detrital zircon Hf isotope data with detrital zircon U-Pb ages of 0-500 Ma. ƐHf values vary between -16 to 14 for n=67 grains taken Merritt, BC (N=1), Kelowna, BC (N=1), and Republic, WA (N=2), with a widespread distribution of ƐHf values for detrital zircons with U-Pb ages of ~50 Ma. Positive and negative ƐHf values for detrital zircons with ages of ~50 Ma correlate to the Sr 0.706 isotope boundary.

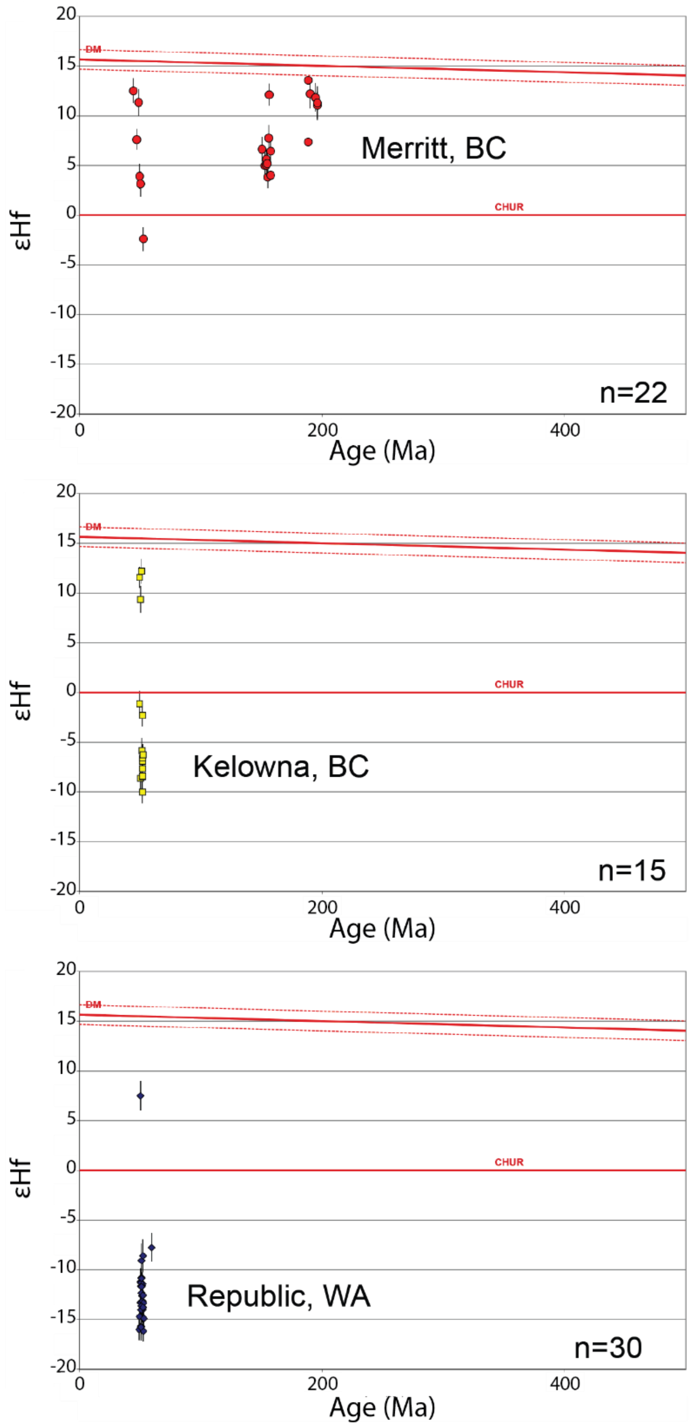

Figure 4.2 Detrital zircon Hf isotope data, separated by location, with detrital zircon U-Pb ages of 0-200 Ma. The ƐHf data discussed is primarily for detrital zircons dated ~50 Ma from U-Pb dating. ƐHf values for detrital zircons aged ~50 Ma range from positive to negative, differing by geographic location. Detrital zircons from Merritt, BC (N=1), have primarily positive ƐHf values from 14 to -3, zircons from Kelowna, BC (N=1) have two distinct ƐHf populations, with ƐHf values from 14 to -10, and zircons from Republic, WA (N=2), have primarily negative ƐHf values from 8 to -16.

CHAPTER 5

ANALYSIS

5.1 U-PB AGE POPULATIONS AND SEDIMENT SOURCES

Eocene sandstone from the SCC contain a variety of detrital zircon U-Pb age populations, but several populations are more prevalent than others. The most common age population consists of Eocene-age (ca. 51 Ma) detrital zircons: of all of the zircons analyzed, nearly 50% have U-Pb ages that correspond to the Eocene Epoch, with the next most common populations being Jurassic (29%), Paleocene (10%), Cretaceous (8%), and Triassic (3%) in age (Figure 5.1). Zircons with Permian-Archean age are also present in the samples, but at a relatively small percentage.

Eocene-age detrital zircons, particularly those with ca. 50 Ma ages are interpreted to have been derived from the voluminous Challis-Kamloops volcanics, which were deposited across the SCC between ca. 55 and 42 Ma (e.g. Pearson and Obradovich, 1977; Ewing, 1980; Armstrong, 1988; Armstrong and Ward, 1991; Morris et al., 2000; Madsen et al., 2006). Record of this volcanic episode is present throughout the North American Cordillera, but is particularly common in the areas of Idaho, WA, and southern BC (Souther, 1991; Breitsprecher et al., 2003; Dostal et al., 2003; Ickert et al., 2009). The Challis-Kamloops volcanics consists of calc-alkaline igneous rocks in the west, and alkaline igneous rocks in the east (Armstrong and Ward, 1991; Ickert et al., 2009); the volcanic units in the south are alkaline in nature (Madsen et al., 2006), while the middle

of the Challis-Kamloops volcanics in southern BC and northern United States represents a geochemical transition zone. This transition zone includes adakitic, alkalic, and arc rocks (Ewing, 1981a; Breitsprecher et al., 2003; Madsen et al., 2006). Today, many of the sedimentary basins in the SCC are interstratified with volcanic units related to the Challis-Kamloops series (Dostal et al., 2003; Ickert et al., 2009). The ubiquity of ca. 50 Ma volcanics in the area limits the use of these grains as provenance indicators; however, ƐHf isotopes of these ~50 Ma grains are useful for interpreting provenance and sediment source areas (below).

Mesozoic-age detrital zircons are interpreted to have been derived from the erosion of local Cretaceous, Jurassic, and Triassic intrusive intermediate-to-felsic rocks, which are common across the SCC (Armstrong, 1988; Armstrong and Ward, 1991) Examples of Jurassic-Cretaceous igneous rocks in the area include the Okanagan and Similkameen batholiths, which are exposed adjacent to Eocene sedimentary strata. Igneous rocks of Triassic- to very early Jurassic-age in the area include the Iron Mask and Cherry Creek plutons (Ewing, 1981a; Armstrong, 1988). In addition, it is possible that Triassic-Cretaceous age detrital zircons in the Eocene sedimentary strata were recycled from Triassic-Cretaceous sedimentary strata in the SCC. Examples of these strata include the Sophie Mountain Conglomerate and clastic units of the Rossland Group (Tipper, 1984; Monger et al., 1991; Beatty et al., 2006) in southern BC. Although these units are far smaller volumetrically than the igneous rocks, they may have contributed some Jurassic-Cretaceous zircons. Once again, the widespread nature of these rocks in the SCC makes them difficult to use for provenance studies, although the ƐHf data

described below provides some possible avenues for future research and improved provenance reconstructions.

Paleozoic-age detrital zircons are present in several samples, particularly in the Princeton and Merritt areas, although the relative percentage of these grains to the total grains analyzed is small (Figure 3.1). The specific origin of these detrital zircons is difficult to determine due to the fact that many of these grains may have been recycled once or more times prior to deposition as Eocene sediments. Samples with $n \geq 3$ of Permian-, Carboniferous-, Devonian-, Silurian-, and Ordovician-age detrital zircons are restricted to samples 15CAN10B and PB2 from Princeton, BC; sample COLDWATER1, from a sample collected south of Merritt, BC, also has $n \geq 3$ of Devonian-age detrital zircons. Possible sources of Paleozoic grains include the rocks that accreted onto western North America during the Mesozoic-early Cenozoic. These terranes are located in the Omineca, Intermontane, and Coast Belts, and include the Bridge River (Carboniferous-Upper Jurassic), Cache Creek (Carboniferous-Lower Jurassic), Chilliwack (Devonian-Lower Jurassic), Quesnel (Upper Paleozoic-Lower Jurassic), Slide Mountain (Devonian-Permian), and Kootenay (Proterozoic-Paleozoic) terranes (Gabrielse et al., 1991; Massey et al., 2005; Beatty et al., 2006).

Proterozoic-age detrital zircons with $n \geq 3$ are present in several samples (CAN-BC-1024L, SKEL1, 15Ca18A, and ABBEYRD2), including Midway, Summerland, Kelowna, and Kamloops, BC (Figures 3.2, 3.4, 3.5, and 3.8). Proterozoic detrital zircons are interpreted to have been derived originally from ancestral North America, although the potential for the recycling of these grains between Proterozoic and Eocene times is very high. In particular, the Belt-Purcell Group is a widespread and voluminous

sedimentary/metasedimentary unit that contains Proterozoic-age detrital zircons (Evans et al., 2000; Luepke and Lyons, 2001; Ross and Villeneuve, 2003; Lemieux et al., 2007).

5.2 MAXIMUM DEPOSITIONAL AGES

The youngest detrital zircon ages constrain the timing of deposition (Rainbird et al., 2001; Stewart et al., 2001; Surpless et al., 2006; Brown and Gehrels, 2007). The youngest-grain measures can only define the MDAs, not the actual depositional ages (Dickinson and Gehrels, 2009), but MDAs can be useful for evaluating regional trends, particularly in areas like the SCC where sedimentation was accompanied by coeval volcanism.

Dickinson and Gehrels (2009) determined the most statistically robust method to estimate MDA was to measure the mean age of the youngest two or more grains that overlap in age at 2σ. Using this technique, the majority of the 22 samples for this study have an MDA of 47-50 Ma, without any regional trends dependent on longitude (Figure 5.2). There are a few samples with outlying MDAs, including Princeton (described below), which has MDAs dating to the Mesozoic (PRINCE1A & PB2). Despite the ages, we know these samples are younger than their MDAs indicate, based on previous paleobiology studies in the area (McMechan, 1983; Read, 2000; Greenwood et al., 2005; Mustoe, 2011).

Merritt samples also have outlying MDAs, with both samples having MDAs of 43 Ma. A 43 MDA is younger than those from surrounding areas, but consistent with fossils in the area, which date the strata of the Merritt Basin as Eocene to Miocene in age (Rouse

et al., 1971; Piel, 1971, 1977; Clague, 1974; Rouse and Mathews, 1979; Mathews and Rouse, 1984; Read, 2000).

5.3 COMPARING AGE POPULATIONS

Comparing the U-Pb ages between samples and sampling areas can provide insights into the depositional history and the paleogeography of a region. The difficulty of such comparisons lies in the large number of U-Pb ages (e.g., Vermeesch, 2013; Spencer and Kirkland, 2015). Visual comparison using traditional KDE or PDP curves is next to impossible with all 22 samples. Vermeesch (2013) proposed a new visual display, multi-dimensional scaling (MDS), which involves a two-dimensional map of points. MDS is based on a dissimilarity matrix for a series of samples derived from the *D* values of the Kolmogorov-Smirnoff (K-S) test. The K-S test converts detrital zircon probability spectrum to a cumulative density arrangement, which is the sum of probabilities with increasing age, based on the *D* values from each sample. The closer that outputs are plotted on the MDS plot to each other, the more similar they are; the farther away they are plotted, the more dissimilar they are. A solid line is drawn from each point in the plot to its “closest” neighbor in dissimilarity-space, and a dotted line is drawn to the second “closest” neighbor (Vermeesch, 2013).

All U-Pb data are separated by location and are plotted using the MDS technique in Figure 5.3 (for KDEs and PDPs of U-Pb data for all 22 individual samples, see Appendix C). On this plot, there are two principal groups: the first group consists of Princeton, Merritt, Summerland, and Coldwater, while the second group consists of Blakeburn, Republic, White Lake, McAbee, Kelowna, Midway, and Kamloops. These two groups appear to reflect the relative proportion of ca. 51 Ma grains to ca. 160 Ma

grains. Alternatively, an argument could be made that three groups exist, with Blakeburn, Republic, and White Lake representing a distinct group (Figure 5.3).

Proximity in MDS space is not always consistent with proximity in geographical space. KDEs for Midway and Kamloops, BC (Figure 5.3), are nearly identical, even though they are located 200 km apart. Samples from both locations show widespread age populations between ~50-100 Ma. In MDS space, Midway and Kamloops are plotted almost on top of one another, as well are connected by a solid line, suggesting they are highly similar to one another. In contrast, Samples from Princeton and Blakeburn were collected less than 20 km apart, but are plotted far apart in MDS space (Figure 5.3). Detrital zircons in Princeton samples have markedly older, Mesozoic U-Pb ages, while detrital zircons from Blakeburn consist primarily of Cenozoic U-Pb ages.

Adding synthetic age populations to MDS evaluations can highlight principal sediment source areas for different samples (Spencer and Kirkland, 2015). Based on the two largest detrital zircon age populations from our samples, we plotted two "synthetic" source areas, one with an age of 51 ± 5 Ma, which approximates the Challis-Kamloops volcanics and associated rocks, and the other with an age of 160 ± 5 Ma, which approximates the Jurassic-age population present in several samples (Figure 5.4). The addition of synthetic age populations does not alter the relative similarity/dissimilarity between sample locations, but those locations with greater similarity to 51 Ma or 160 Ma source areas will group nearer these endmembers. With the synthetic source areas added to the MDS plot (Figure 5.4), the sample locations continue to be separated into distinguishable groups: Merritt, Princeton, Summerland, and Coldwater plot more closely to the 160 Ma endmember, while the remaining sample locations plot more closely to the

51 Ma endmember. We interpret this as indicating that locations such as Blakeburn, BC, received the majority of its sediment from the Challis-Kamloops volcanics (i.e., 51 Ma), whereas the Princeton, Merritt, Summerland and Coldwater area received a greater proportion of sediment from Jurassic-age sources (or younger if the grains were recycled).

5.4 ƐHF INTERPRETATIONS

The abundance of ca. 50 Ma detrital zircons in the Eocene strata of the SCC combined with the widespread ca. 50 Ma Challis-Kamloops volcanics makes provenance interpretations difficult. For example, a 50 Ma detrital zircon within a particular succession could have been derived from either a local or distant exposure of Challis-Kamloops volcanics. Moreover, it is impossible to determine if two sedimentary successions containing ca. 50 Ma grains were once part of a continuous sedimentary basin, or if they were originally two separate basins with similar sediment source rocks in the surrounding area. ƐHf data from these analyses offers a way of examining the abundant ca. 50 Ma grains in the Eocene strata in a different space.

ƐHf values from the 4 collected samples vary between -16 to +14 for detrital zircons with ca. 50 Ma U-Pb ages (Figure 4.1). In general, zircons from Republic, WA, have the most negative ƐHf values, those from Merritt have the most positive ƐHf values, and those from Kelowna have primarily negative values as well as some positive values (Figure 4.2). We interpret the negative ƐHf values in the Republic area as indicating the ca. 50 Ma zircons crystallized from relatively evolved igneous sources (e.g., Amelin et al., 1999; Bodet and Schärer, 2000; Kinny and Maas, 2003; Augustsson et al., 2006; Bahlburg et al., 2011; Cecil et al., 2011). Gashnig et al. (2011) measured zircons with

similar ƐHf values in the Idaho Batholith, south-southeast of Republic, WA. We interpret the positive ƐHf values in the Merritt area as indicating the ca. 50 Ma grains were derived from relatively juvenile sources (e.g., Amelin et al., 1999; Bodet and Schärer, 2000; Kinny and Maas, 2003; Augustsson et al., 2006; Bahlburg et al., 2011; Cecil et al., 2011). Similar ƐHf values were measured in the Coastal Batholiths of BC by Cecil et al. (2011). We interpret the ƐHf values of detrital zircons in the Kelowna area as a bimodal population, and therefore likely from two different sources. The positive and negative ƐHf values in the Kelowna area are interpreted to reflect derivation from both relatively evolved and juvenile sources.

The variability in ƐHf values between detrital zircons of the same age correspond to their depositional locations relative to the presumed margin of ancestral North America. The changes in ƐHf values correspond to the general location of the Sr 0.706 isopleth, which separates the younger, accreted terranes in the west from ancestral North American crust to the east (Figure 1.3; Armstrong, 1988; Souther, 1991; Gosh, 1995; Dostal et al., 2003). Zircons with primarily positive ƐHf values are located west of the Sr 0.706 isopleth, whereas zircons with negative ƐHf values are located to the east of the same isotopic boundary. The Kelowna sampling location lies nearly atop the Sr 0.706 isopleth and has zircons with both positive and negative ƐHf values.

The differences in ƐHf values of detrital zircons have important implications for reconstructing the dimensions and continuity of the Eocene sedimentary basins. If during the Eocene, one large basin, or several smaller basins that were in communication, were receiving sediment from the same or similar sources at the time of deposition, we would expect similar ƐHf values, independent of their geographical location and distance from

the Sr 0.706 isopleth. Instead, we see relatively distinct ƐHf populations for samples from Merritt, Kelowna, and Republic, dependent on their proximity and position to the Sr 0.706 isotope boundary. The distinct ƐHf populations are consistent with the strata of isolated basins, which received no sediment communication at the time of deposition.

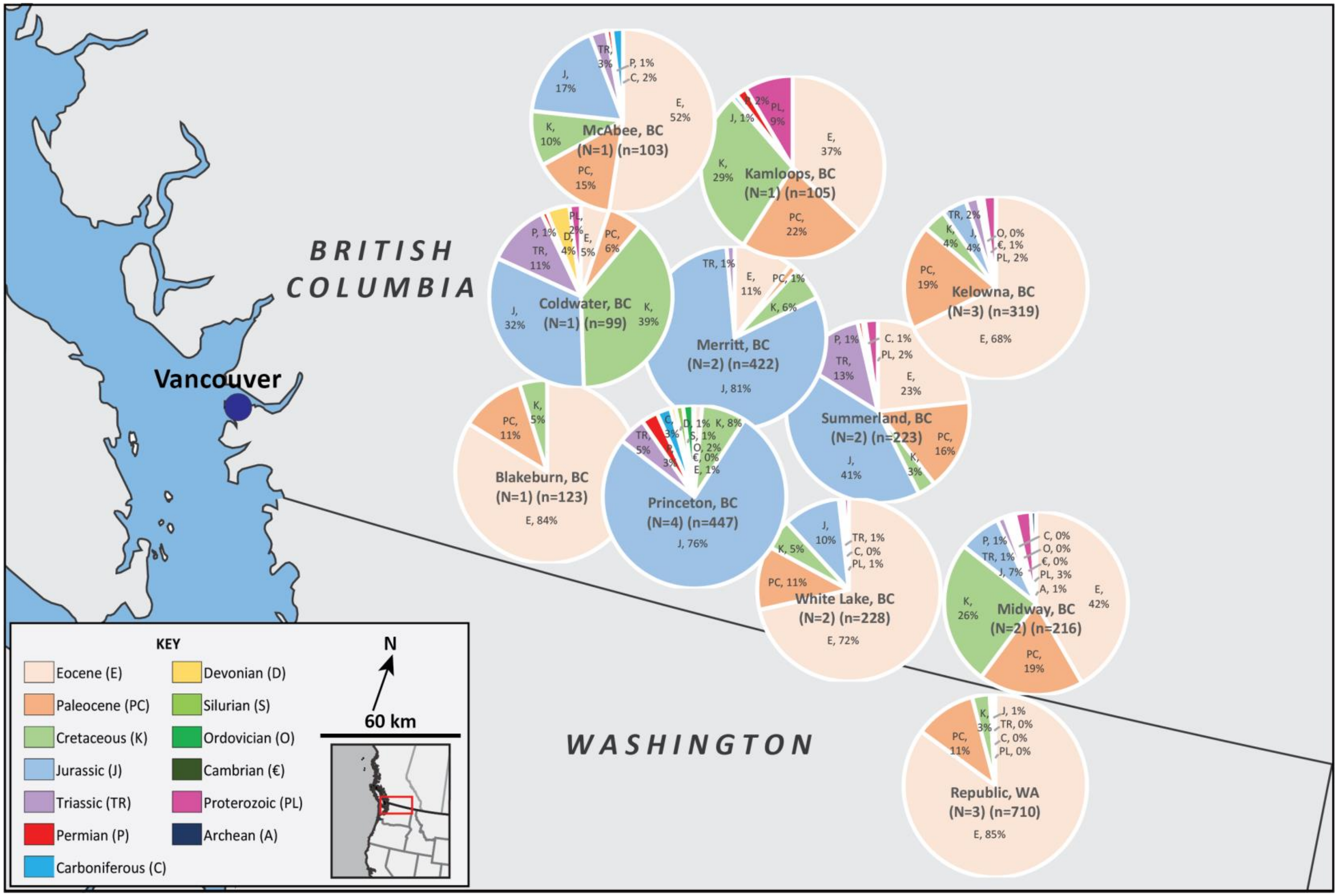

Figure 5.1 Map of the SCC with pie charts displaying the distribution of detrital zircon U-Pb ages, separated by location.

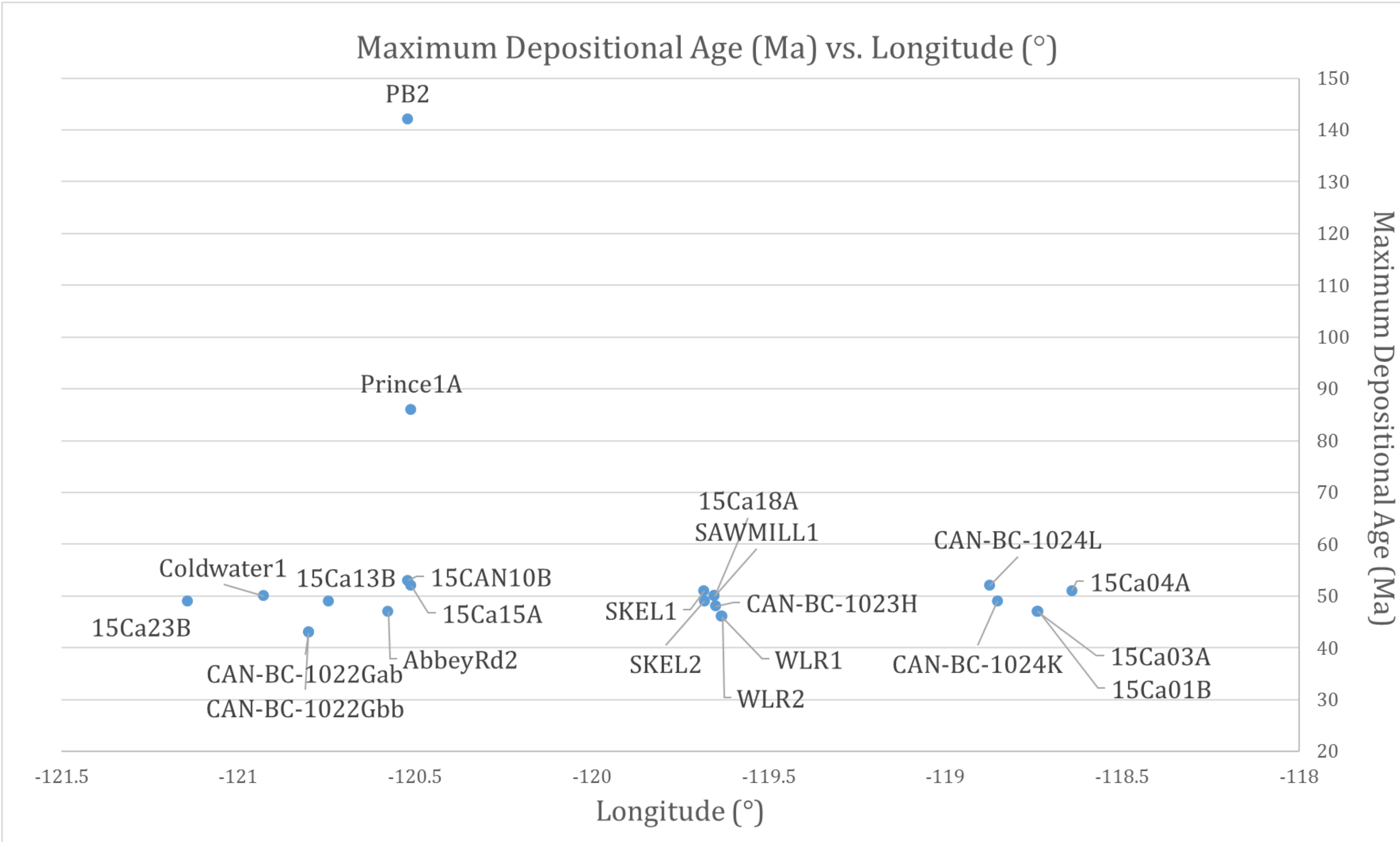

Figure 5.2 Graph showing maximum depositional age (MDA) of N=22 samples versus the longitudinal position where each sample was collected. Most samples have MDAs ~47-50 Ma, with no regional trends dependent on longitude.

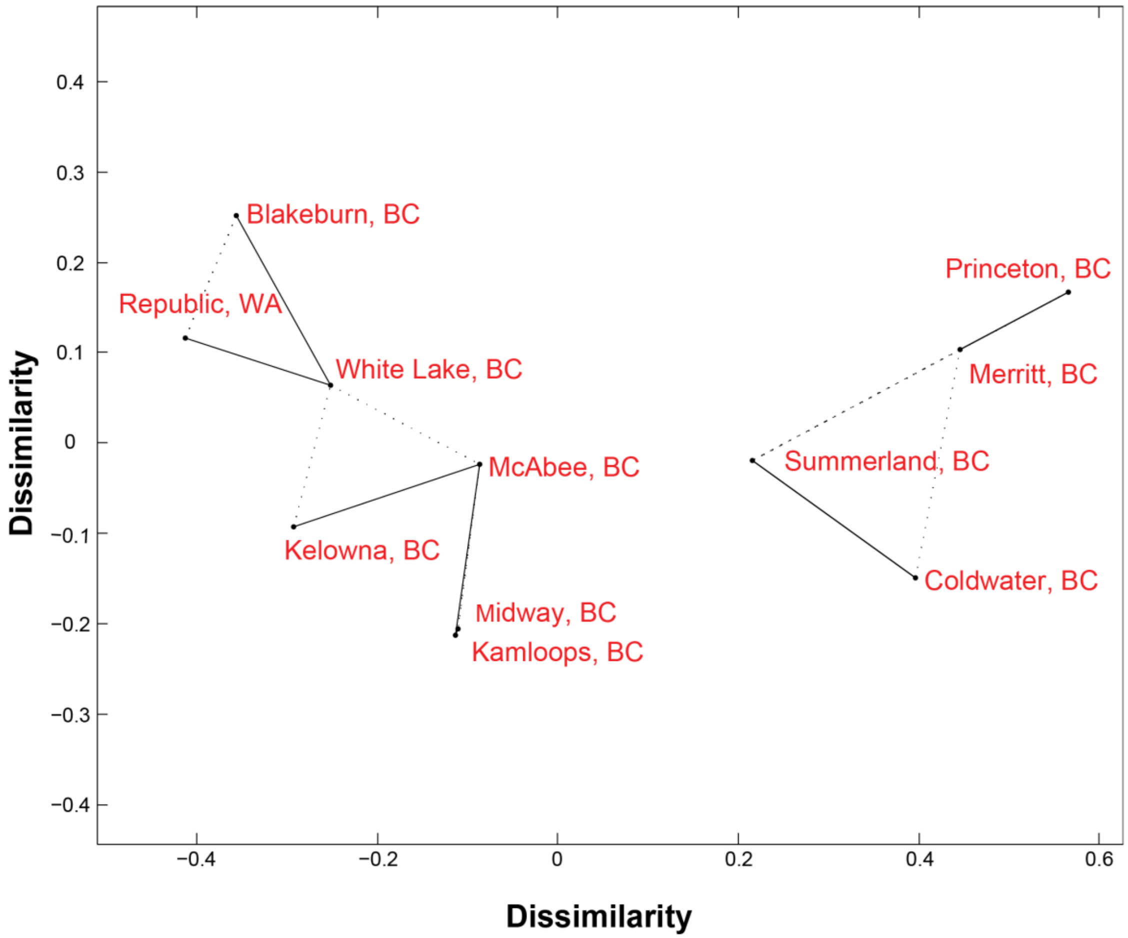

Figure 5.3 MDS plot of all 22 samples, separated by location. This MDS plot shows the similarities and dissimilarities between detrital zircon U-Pb age population data between sample locations. This may be observed through the distance each location is plotted relative to one another in Euclidean space. Solid lines mark the closest neighbors in dissimilarity-space, while dashed lines show the second closest neighbors. In this plot, for example, Midway, BC, and Kamloops, BC, contain statistically similar detrital zircon U-Pb age populations.

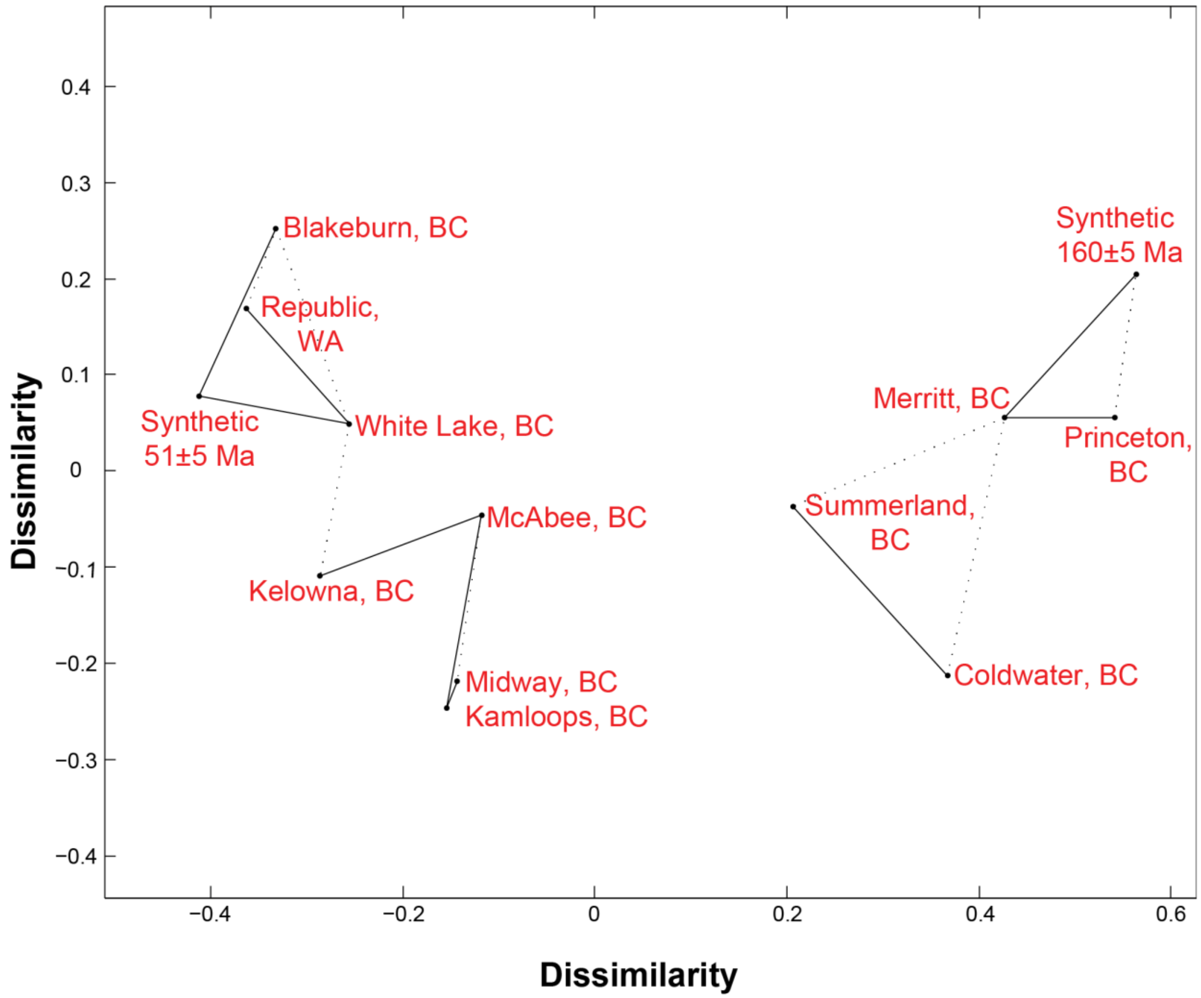

Figure 5.4 MDS plot of all 22 samples, separated by location, with synthetic, normally-distributed 51 ± 5 Ma, and 160 ± 5 Ma age populations. The synthetic age populations show the increasing contributions of detrital zircons with those age components, providing more information on the primary source of sediments at locations plotted closely to a synthetic age.

CHAPTER 6

DISCUSSION

6.1 SOUTHERN CANADIAN CORDILLERA INTERMONTANE BASINS

Deposition in intermontane regions of cordilleran margins takes place in a variety of tectonic and structural settings (Horton, 2012). In the South American Cordillera today there are intermontane basins associated with compression (Horton, 1998, 2012), extension (McNulty and Farber 2002), strike-slip faulting (Toussaint and Restrepo, 1994; Winkler et al., 2005), and mantle processes (DeCelles et al., 2009). These basins are manifested as everything from single, relatively continuous depocenters like the Altiplano (Horton, 2012), to multiple, isolated basins like those in the Puna Plateau (Allmendinger et al., 1997). The style and nature of intermontane deposits record important insights into the tectonic mechanisms responsible for sediment accumulation (e.g., DeCelles et al., 2009), but can be difficult to reconstruct from ancient sedimentary successions due to the poor preservation potential in intermontane areas (Horton, 2012).

A basic question regarding the Eocene strata in the SCC hinterland is whether these deposits were once associated with one single hinterland basin (i.e., was sediment transport and water flow in communication throughout the area), or multiple isolated basins. Although the Eocene-age deposits in the SCC hinterland are exposed today in discrete locations across the area, this does not mean that they were originally deposited in isolated basins. Approximately coeval sedimentary strata preserved to the west of the

SCC hinterland are exposed today in a series of discrete exposures over a ~200 km distance in the state of WA. Eddy et al. (2016) demonstrated that despite the isolated and discrete nature of these exposures, the Eocene sediments in all of these locales were originally deposited in a single depositional basin, which was segmented by later faulting. The similar ages of the Eocene strata in the SCC hinterland (Figure 1.4), the similar MDAs (Figure 5.2), the consistent lithofacies, and the similarity in many of the detrital zircon populations (Figure 3.1) suggest the possibility of a similar history for these strata.

Our data indicate the Eocene sedimentary units exposed across the SCC hinterland were deposited at approximately the same time, but in multiple, isolated basins. Although the lithofacies in each Eocene exposure in the SCC are similar, the physical sedimentology suggests local derivation, proximal provenance, and minimal distances of sediment transport. Strata in many of the exposures in the SCC consist of matrix-supported conglomerates, suggesting these units were deposited by debris-flow processes. Debris-flows typically cease moving when local slope diminishes below several degrees, indicating proximal source areas and local paleorelief (e.g., Blair and McPherson, 1994). Localized topography and sediment sources is more consistent with multiple basins and local relief. Similarly, the angularity of the conglomerate and sandstone beds indicate proximal deposition and minor sediment transport. Abrupt changes in grain size or facies across relatively small geographic distances (e.g., 25 km), as well as local facies changes within Eocene exposures are also more consistent with localized depocenters versus a single, continuous basin. The paleoflora throughout the area also suggest localized basins and transport (Greenwood et al. 2005) as the fossil

leaves in the strata are not known to transport more than a few hundred meters down streams (Greenwood, 1992; Steart et al., 2002).

ƐHf data provide additional evidence the Eocene sediment in the SCC were derived from different sources and did not mix within a continuous regional basin. Many of the detrital zircons in the Eocene strata of the SCC have U-Pb ages of ~50 Ma, but have distinct ƐHf values between locations. The distinct ƐHf values between samples is more consistent with multiple sediment sources and multiple basins. If the SCC hinterland were occupied by a single regional basin where sediment and water were in communication, a greater variety of ƐHf values would be expected within each location.

6.2 PROVENANCE

The majority of the samples collected in the SCC contain high percentages of ca. 50 Ma detrital zircon grains; however there are several that deviate from this trend. Samples from Princeton, Merritt, and Coldwater, which are all in relatively close proximity to one another (Figure 1.1), contain relatively large percentages of 150-160 Ma detrital zircons and few with ca. 50 Ma ages (Figures 3.6, 3.10, and 3.11). The most obvious interpretation from these numbers is that the small population of ca. 50 Ma detrital zircons reflects a relatively small contribution of zircons from the Eocene Challis-Kamloops volcanics during deposition, but the reason for this is not entirely clear. We postulate that either the Eocene volcanic units were not widespread in this area of the SCC and/or that these volcanic units were eroded prior to deposition of the sedimentary strata in this region. The Princeton Group, from which samples were collected in the Princeton area, is interstratified with volcanic and volcaniclastic units (McMechan, 1983; Read, 2000), and areas adjacent to these specific locations in the SCC contain large

populations of ca. 50 Ma detrital zircons (e.g., Blakeburn, Figure 3.7), suggesting the absence of Eocene volcanic rocks in this area is an unlikely explanation for the small population of Eocene detrital zircons. We propose that the likely explanation is that the Challis-Kamloops volcanic strata in this part of the SCC were eroded prior to deposition in the Princeton, Merritt, and Coldwater areas, leaving the underlying Jurassic igneous rocks in the region as the principal sediment source to these basins. The samples from the Merritt, Princeton, and Coldwater areas were collected from the middle-to-upper portion of the respective stratigraphic successions, leaving open the possibility that by the time of deposition, the surrounding volcanic strata had already been eroded from the contributing sediment source areas. This hypothesis implies that strata from the lowermost portion of these successions would have larger populations of ca. 50 Ma detrital zircons.

Samples from the White Lake location demonstrate this trend of increasing proportions of 150-160 Ma detrital zircons up-section, which we interpret as an unroofing signal (Figure 1.1). Sample WLR1 was collected from a lower portion of the White Lake succession and WLR2 was collected from higher in the section (Figure 1.6). Sample WLR1 contains a large population of ca. 50 Ma detrital zircons and only few with ages >150 Ma (Figure 6.1), whereas sample WLR2 contains larger populations of 150-160 Ma detrital zircons (Figure 6.2). WLR1 and WLR2 samples were collected from Penticton Group strata, deposited in half-grabens and supradetachment basins, which formed adjacent to the Okanagan Valley fault system (McClaughry and Gaylord, 2005; Hamblin, 2011). The volcanic rocks in the Penticton Group of the White Lake Basin are associated with Challis-Kamloops volcanic episode; Eocene strata in the basin rest non-conformably on Mesozoic-Cenozoic igneous and metamorphic rocks (Dostal et al., 2003). The

increase in ~155 Ma detrital zircons up-section may indicate progressive erosion of the Challis-Kamloops volcanic carapace from the surrounding region, which was replaced by exposures of the surrounding bedrock. Determining provenance from the relative percentage of detrital zircons is tenuous without large numbers of zircons (e.g., Pullen et al., 2014); however, similar unroofing trends are noted within the White Lake Basin by detailed sedimentary and stratigraphy analyses by McClaughry and Gaylord (2005), as well as by detrital provenance on conglomerates and breccias by Suydam and Gaylord (1997) in the nearby Toroda Creek half graben.

The fact that the three areas with relatively large populations of 150-160 Ma detrital zircons are relatively close to one another geographically suggests some genetic relationship. The two most likely scenarios are that the Coldwater, Princeton, and Merritt strata were deposited in a continuous basin (sediment mixing) or shared similar source rocks. Facies from each of the locations suggests sediment was derived and deposited in proximal systems (e.g., alluvial fan), which is inconsistent with a continuous sedimentary basin, although it does not exclude this hypothesis. We surmise that the hypothesis of similar source rocks in the regions surrounding these areas is the primary cause of the similar detrital zircon signatures.

6.3 IMPLICATIONS FOR GEODYNAMIC AND TECTONIC MODELS

Sedimentation in the hinterland of Cordilleran margins records information on topography, physiography, and tectonics. Several models have been proposed to explain the Eocene evolution of the SCC hinterland, focusing in particular on the mechanisms that changed the stresses from compression to extension. Bao et al. (2014) proposed Eocene delamination of the lower lithosphere in the SCC. This model involves the

removal of dense mantle lithosphere from beneath the SCC and upwelling of asthenosphere, which would have resulted in surface uplift in the overlying SCC hinterland and subsequent extension. One of the primary pieces of evidence for this is the absence of mantle lithosphere beneath the SCC hinterland today (Bao et al., 2014). It is difficult to test this model with sedimentary strata alone, however the data we have are not consistent with at least some aspects of this hypothesis. Delamination or drip models predict that prior to the removal of the dense mantle lithosphere and eclogitic lower crust, the overlying region becomes topographically depressed, forming a regional “drip basin” (DeCelles et al., 2009). Such a process is thought to lead to deposition (typically fine-grained deposits) in one, regionally continuous basin in the hinterland of cordilleran margins, which is subsequently segmented by upper crustal normal-faulting following drip-removal (DeCelles et al., 2009). We observed no evidence of a continuous, correlatable stratigraphic unit at or near the base of the sedimentary successions in the SCC hinterland, as would be expected in a removal scenario. It is possible that such strata were eroded prior to deposition of the Eocene sedimentary strata in the SCC, and therefore not preserved, or that current ideas about drip basins are over-simplified. Either way, our current data set does not contain evidence to support mantle delamination or drip from beneath the SCC during the Eocene.

Slab rollback or steepening of the down-going slab beneath the SCC during the Eocene could be used to explain the transition from compression and extension in the SCC (e.g., Horton and Fuentes, 2016). In this model, the decrease in the subduction angle beneath the SCC during the Eocene could have resulted in reduced compressive stresses, allowing for extension. The rollback of the subducted Farallon Plate to the south of the

SCC, in the US Cordillera, was accompanied by significant topographic, sedimentary, and volcanic changes and occurred at roughly the same time as extensional deformation and deposition in the SCC (e.g., Humphreys, 1995; Dickinson, 2002, 2006; Smith et al., 2014). The data from the SCC, however, is not consistent with a slab rollback model. Rollback is generally associated with a margin-directed shift in volcanic activity (Humphreys, 2009; Smith et al., 2014), which is not observed in the geologic record of the SCC (e.g., Armstrong, 1988). In addition, deformation in the overriding plate tends to mimic the margin-directed shift in the volcanic arc, which in this case would result in an east-to-west trend in deformation and sedimentation (e.g., Smith et al., 2014). Existing paleontological constraints, coupled with our MDA data, suggest all of the basins in the SCC hinterland formed at approximately the same time, without any spatial-temporal trend (Figure 5.2).

The data from this study are consistent with models proposing that an oceanic-spreading center (i.e., slab window) was subducted beneath the SCC during the Eocene. Tectonic and volcanic studies suggest that a slab window was located underneath the hinterland of the SCC during the Eocene, as the Resurrection/Kula-Farallon ridge subducted along western North America (Thorkelson and Taylor, 1989; Lawver and Scotese, 1990; Breitsprecher et al., 2003; Groome et al., 2003; Haeussler et al., 2003; Madsen et al., 2006; Ickert et al., 2009). South of this slab window, the Farallon Plate experienced slab rollback directed to the south-southwest (present-day coordinates), whereas to the north, the Resurrection/Kula plate subducted obliquely to the north-northeast (Humphreys, 1995; Thorkelson and Taylor, 1989; Breitsprecher et al., 2003). In the SCC hinterland, the slab window and the oblique subduction resulted in a wide zone

of transtension with extension oriented roughly northwest-southeast (Figure 6.3; Ewing, 1981a; Price and Carmichael, 1986). Our data suggest the upper crust in the SCC hinterland responded to this stress field through strike-slip faulting in the western hinterland (e.g., Princeton Basin), detachment faulting in the central hinterland (OVSZ), and high-angle normal faulting in the eastern hinterland (Republic; Figure 6.3). The transtension and the upper crustal deformation resulted in the coeval formation of strike-slip and pull-apart basins, supradetachment basins, and grabens. The en-echelon nature of the grabens, the direction of slip along the detachment fault hanging wall and the strike slip basins are consistent with right-lateral transtension in the hinterland (Ewing, 1981a; Price and Carmichael, 1986). Similar right-lateral deformation occurred in the forearc region of the SCC during the same time (Eddy et al., 2016). These numerous basins formed at approximately the same time (the OVSZ may have been active prior to this; Parrish et al., 1988; Brown et al. 2012), in a hinterland area that was ~3-4 km above sea-level (Mix et al., 2011; Foster-Baril 2017).

6.4 MODERN ANALOGUE

A modern tectonic analogue of the SCC is the southern Chilean margin of South America. The forearc of the southern Andes consists of the Chile Triple Junction, the location where the Nazca, Antarctic, and South American Plates meet. North of the Chile Triple Junction, the Nazca plate is obliquely subducting under South America, resulting in the structural decoupling and northward motion of the Chiloé block from the rest of the Andes, along the Liquiñe-Ofqui fault zone (Cembrano et al., 1996; Rosenau et al., 2006; Melnick et al., 2009; Georgieva et al., 2016). This fault zone consists of a crustal-scale intra-arc, dextral-transpressional fault system, which accommodates the margin-parallel

component of oblique subduction, and is associated with volcanic activity, rock uplift, exhumation, and enhanced cooling (Cembrano et al., 2002; Thomson, 2002; Rosenau et al., 2006). The collision of three relatively short ridge segments of the Chile Rise in the Golfo de Penas region has resulted in the opening of an areally-extensive asthenospheric slab window beneath southern Patagonia (Cande and Leslie, 1986; Cande et al., 1987; Murdie et al., 1993; Breitsprecher and Thorkelson, 2009; Russo et al., 2010a). The northward motion of the Chiloé block is accommodated by extension in the Golfo de Penas basin (Forsythe and Nelson, 1985; Nelson et al., 1994).

East of the Chile Triple Junction, the Northern Patagonian Icefield is characterized by abrupt paleotopographic elevations and relief. This area consists of localized extension along normal faults, tectonic subsidence, and lower elevations along the Andean crest line to the south, which is characterized by fjord landscapes and anomalously low elevation regions along the axis of the Andes (Georgieva et al., 2016). Margin-parallel right-lateral strike-slip deformation along the eastern flank of the Northern Patagonian Icefield is enhanced by the oblique collision of the oceanic ridge segments of the Chile Rise over the past 6 Ma.

The SCC during the Eocene also experienced regional transtensional and dextral strike-slip faulting, attributed to the subduction of the Resurrection-Farallon spreading center. There was also oblique subduction along the western margin of southern British Columbia and northern Washington during the Eocene.

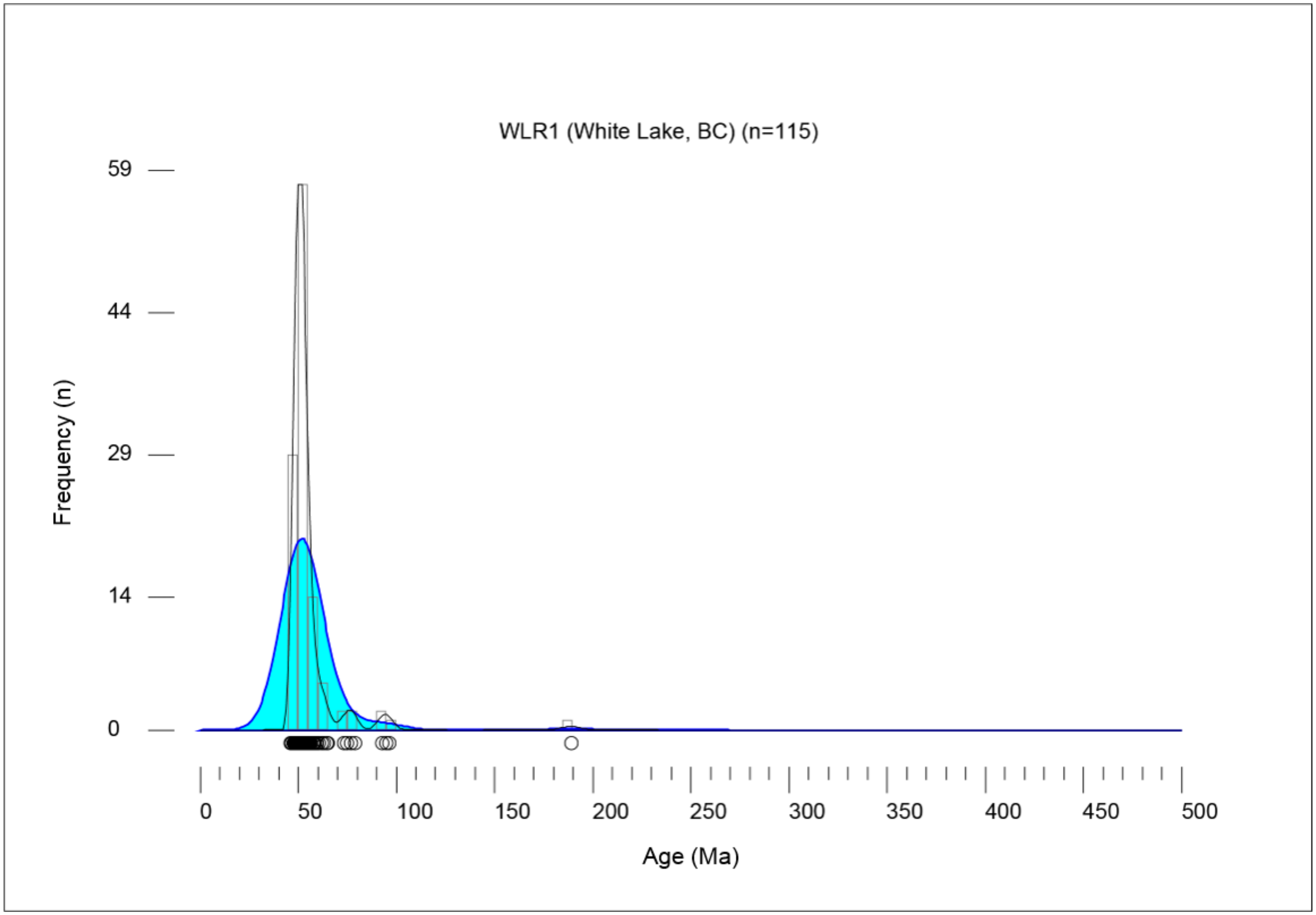

Figure 6.1 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for WLR1 from White Lake, BC, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

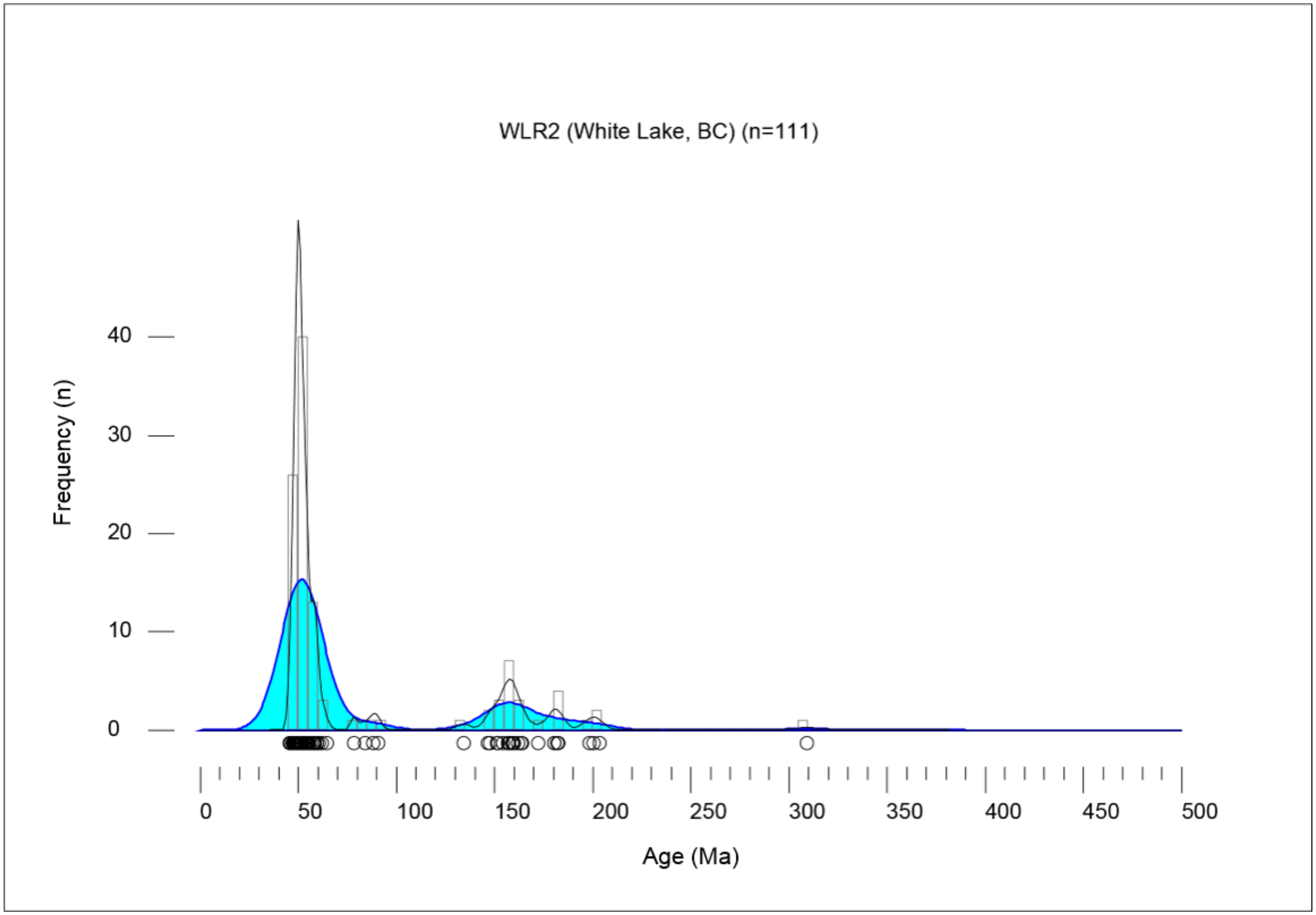

Figure 6.2 Detrital zircon U-Pb KDE (blue) and PDP (black) plot for WLR2 from White Lake, BC, from 0-500 Ma. KDE has a bandwidth of 10, and a normalized area of 0.02. Histogram is represented by gray boxes, which have a bin width of 5.

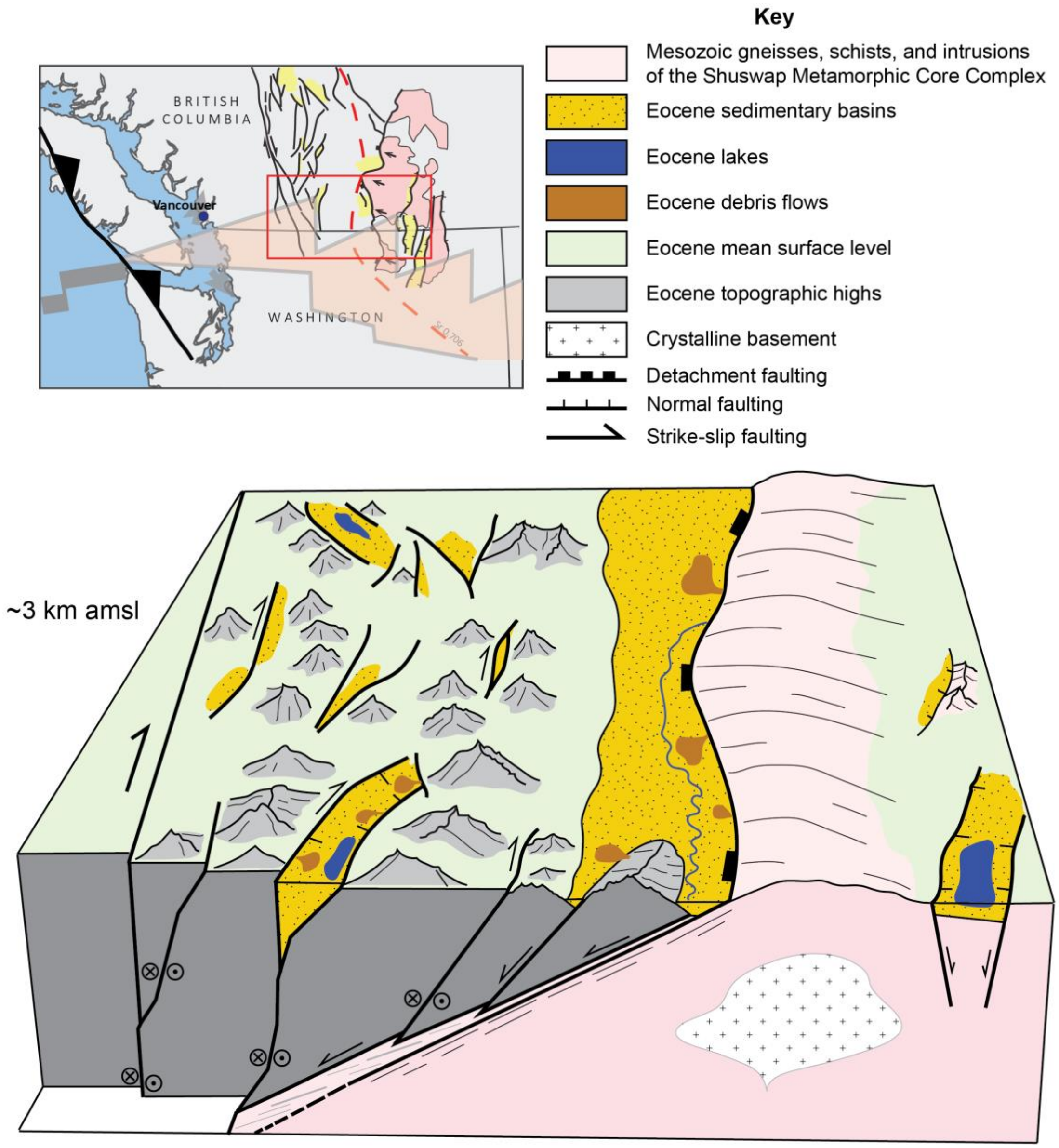

Figure 6.3 3D diagram of the surface manifestation and basin formation above the complicated structural and tectonic setting in the hinterland of the SCC (represented in the inset map view). Due to the regional dextral transtension during the Eocene, strike-slip faulting and the exhumation of the Shuswap Metamorphic Core Complex caused multiple, isolated basins, separated by local paleohighs, to form. In the east, supradetachment basins formed along the metamorphic core complex, while in the west, normal and strike-slip faulting caused basins to form in pull-apart, graben, and half-graben structures.

CHAPTER 7

CONCLUSION

The transition from compression to extension and transtensional stress along the western margin of BC and WA during the Eocene caused the formation of several basins in the hinterland of the SCC. The regional transtensional stress and dextral strike-slip faulting is attributed to the subduction of the Resurrection-Farallon spreading center, resulting in oblique subduction along the western margin of this part of North America during this time. Today, Eocene strata are exposed in separate outcrops, and consist of clast- and matrix-supported pebble and cobble conglomerates, very coarse- to very fine-grained sandstones, mudstones, and coals, which were deposited in fluvial, alluvial fan, lacustrine, and paludal environments. This study measured ~650 m of Eocene strata, analyzed 2,995 detrital zircons for U-Pb ages, and analyzed 67 detrital zircons for ƐHf values in order to determine the sediment provenance, MDAs, and whether strata were deposited in isolated basins or one regional and continuous basin during this complicated tectonic and structural setting.

Twenty-two sandstone samples were collected from 11 locations throughout the SCC; these samples contain primarily Eocene U-Pb ages (ca. 51 Ma), interpreted to derive from the erosion of the Eocene Challis-Kamloops volcanics, and Jurassic U-Pb ages (ca. 160 Ma), interpreted to derive from Mesozoic-age batholiths. MDAs of the Eocene sandstones are relatively similar throughout the region, with ages 47-50 Ma,

suggesting widespread deposition throughout the study area at approximately the same time. εHf values for detrital zircons with U-Pb ages of ~50 Ma were obtained from samples in 3 locations (Merritt, Kelowna, and Republic) across the SCC, and vary between -16 and +14. Detrital zircons from Merritt, BC, in the west of the study area, have primarily positive εHf values, with one negative value (-2 to +13), indicating relatively juvenile sources. Detrital zircons from Republic, WA, in the east of the study area, have primarily negative εHf values, with one positive value (-16 to +7), indicating relatively evolved sources. Detrital zircons from Kelowna, BC, in the central part of the study area, have two populations of εHf values; one positive and one negative (-10 to +12). εHf values coincide geographically to their location relative to the Sr 0.706 isotope boundary, which separates ancestral North American crust to the east from accreted terranes to the west.

Together, the localized changes in stratigraphy throughout the interior of the SCC, the variability in εHf values of detrital zircons with ~50 Ma U-Pb ages geographically, and the local variation of U-Pb ages indicate Eocene sedimentary strata were deposited in multiple, isolated basins, and not in a single, continuous basin, during the Eocene (Figure 6.3). These basins were separated by local paleotopographic highs, and were not connected or in communication with one another. Basin formation varied from east to west: in the east of the study area, basins formed in traditional grabens and half-grabens; in the central part of the study area, basins formed in a supradetachment basin; and in west of the study area, basins area associated with strike-slip faulting.

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APPENDIX A

USC ROCK PREPARATION LABORATORY & CEMS U-PB ANALYSIS

A.1 SAMPLE PREPARATION

Zircon separates were acquired through mechanical disaggregation and density and magnetic differentiation in the Rock Preparation Facility and Sedimentary Geology Laboratory at the University of South Carolina, using protocols adapted from previous, well-established methods (Gehrels et al., 2006).

Samples were progressively disaggregated using a Bico Braun WD Chipmunk jaw crusher and Bico Braun UA Pulverizer disc mill. At the end of each milling step, all material finer than 500 μm was removed from further disaggregation steps via single-use Sefar NITEX nylon filament mesh mounted by hose clamp to an 8” diameter polyvinyl chloride cylinder.

Resulting disaggregated grains were further separated by hydrodynamic characteristics using a MD Mineral Technologies MK-2 Gemini shaking water table, and then further separated using a manually operated ABS gold pan. Grains retained within the gold pan were dried in an ~30° C oven, and proceeded to further processing; splits exiting the gold pan were examined to confirm the absence of zircon, and archived.

Retained grains were then progressively separated by their effective magnetic susceptibility first with a hand magnet, and then an L-1 Frantz isodynamic magnetic

separator operating at horizontal and vertical angles of 15° and 10° degrees, respectively. Grains were progressively removed in 0.3 ampere increments up to 1.2 amperes. The magnetic faction was removed and stored for possible heavy-mineral analysis; the nonmagnetic fractions at 1.2 amperes proceeded to further processing (below).

Resulting nonmagnetic dense mineral fractions were combined with Lithium Metatungstate (LMT; Specific gravity=2.95) in 15 mL centrifuge tubes, agitated and left to settle, until grains separated into fully floating and sunken fractions with an intervening clear heavy liquid window. Centrifuge tubes were then placed vertically into liquid nitrogen to a sufficient depth to submerge one-half of the heavy liquid window. Upon complete freezing of the submerged liquid and sunken fraction, the remaining liquid and floating fraction were poured off into a 11 cm pore-diameter filter paper cone, rinsed repeatedly with de-ionized water, transferred to a second filter paper, re-rinsed, dried, and archived. The frozen sunken separate and remaining liquid were thawed in a 30°C oven, and poured off into a separate 11 cm pore-diameter filter paper cone, and rinsed repeatedly with de-ionized water, transferred to a second filter paper, re-rinsed, and then dried in a 30°C oven. All samples later analyzed at CEMS were sent to GeoSep Services for further Methl Iodide (MI) density separation of zircon and apatite, except for samples PB2 and 15Ca10b.

To avoid possible biases associated with hand-picking, when possible each sample's resulting zircon-rich separate was poured onto double-sided tape attached to a 6" square glossy ceramic tile, and within the bounds of a 1" Buehler circular ring form. These mounted grains were then bound in place using Buehler Epo-Thin epoxy resin. Upon 48-72 hours of curing, the resulting mounts were pried from their tiles, and gently

ground using wet sandpaper of 600 grit in order to expose the grain cores, followed by polishing using 1 μm abrasive alumina solution polishing powder suspended in de-ionized water and a Buehler MINIMET auto-polisher. Such procedure was repeated in 15-30 minute increments, until a reflected light microscope revealed an absence of scratches in target zircons. Mounts were then sonicated in a de-ionized water bath for 15 minutes, and then dried in a 30°C oven.

A.2 LASER-ABLATION MASS-SPECTROMETRY

U-Pb detrital-zircon geochronology was conducted by laser-ablation high-resolution single-collector inductively coupled plasma mass-spectrometry (LA-HR-SC-ICPMS) at the University of South Carolina's Center for Elemental Mass Spectrometry (CEMS) in 3 sample runs during December 2015 to March 2017.

Analysis involved grain-ablation with a PhotonMachines Analyte G2 193 nm (deep ultraviolet) ArF exciplex laser with a spot diameter of 25 μm, with a 6.5 J/cm^2 energy fluence, aimed at the centers of individual sample ('unknown') and reference (aka 'standard') zircon grains, mounted in 1" polished epoxy resin pucks (see 1.1 above). For each sample, 105-120 unknown zircon grains were targeted, with the goal of recovering ~100 usable ages. Unknown zircons were selected randomly from each mounted aliquot analyzed in batches of five grains each, separated by the analysis of natural reference zircons of known and well-constrained U-Pb isotope-dilution thermal ionization mass-spectrometry (ID-TIMS) ages after every five to ten 'unknown' analyses.

In this study reference material 91500 (1062.4 ± 0.4 Ma; Wiedenbeck et al., 1995) was analyzed after every 4-5 'unknown' analyses and was used as the primary reference material for all samples analyzed at CEMS. In this study reference material Sri Lanka

(SL; ID-TIMS age 563.5 ± 3.2 Ma; Gehrels et al., 2008) was analyzed after every 4-5 'unknown' analyses and was used as the monitor reference material for all samples analyzed at CEMS.

Prior to each analytical session, the coupled LA-HR-SC-ICP-MS system was manually tuned to optimize performance using the NIST 612 synthetic glass standard and the SL natural zircon reference material. Typical tuning optimization routines involved adjusting torch position, then sample and HelEx (MFC) gas flows to maximize signal (^{139}La and ^{238}U) while minimizing oxide formation and inter-elemental fractionation.

A.3 POST-ACQUISITION PROCESSING & DATA REDUCTION

Post-acquisition processing of data utilized the *UPbGeochronology3* data reduction scheme (DRS) of the Iolite (v. 6.36) software package, employed in the cross-platform WaveMetrics IgorPro computational environment.

Processing began with the import of individual .FIN2 files acquired from analysis of each unknown or reference zircon and its associated baseline and washout signals into the time-constrained reference frame of the IgorPro environment. Following data import, integration windows for baseline and ablatant signals were selected by trimming from the start and end of each data file for baseline integrations, and from the start and end of each data file for ablation signals. In addition to removing the baseline signal for the ablatant signal, the latter data trimming removes any surface contamination incorporated into the mount surface during grinding, polishing and storage. Small offsets in analytical start times caused by operator error or computational delays in compiling prior analyses' data occasionally yielded inaccurately auto-selected integration windows; the ablation of epoxy in insufficiently ground zircons and/or small zircons drilled through during

standard ablation durations yielded similarly inappropriate windows. Adjustment of these windows was achieved by manual grain-by-grain data inspection, as was the elimination of analyses of grains known not to be zircon (e.g., by low U signals, etc.). In the case of the former, care was taken to ensure that the start time of each ablatant integration window was spatially equivalent to those of grains with auto-selected windows in order to optimize the accuracy of down-hole fraction correction models (see below).

Following data import, selection, and inspection of integration windows, Iolite-based data reduction involved: (1) subtraction of background signals from an automatic (best-fit: see Paton et al. 2010) interpolation model; (2) determination of an appropriate downhole-fractionation correction model by separately stacking the $^{206}Pb/^{238}U$, $^{207}Pb/^{235}U$ and $^{208}Pb/^{232}Th$ downhole ratios of each of the approximately two primary reference zircon analyses, calculating best-fit exponential curves to those stacked datasets, and applying the resulting models to transform the isotopic ratios of analyzed 'unknown' zircons, ideally to optimize ratio steadiness; (3) estimation and correction of instrumental age-offsets and drift by comparison of determined (raw) and accepted (i.e., ID-TIMS) isotopic ratios of the primary reference zircon; and (4) calculation of final ages and values, including (a) propagated uncertainties determined from analyses of the primary reference zircon as pseudo-secondary standards, progressively removing them individually from the dataset, reprocessing the data, and calculating uncertainty, and (b) error correlations using the IgorPro StatsCorrelation function. See Paton et al. (2010) for further clarification and discussion of methods of Iolite data reduction of U-Pb zircon data.

A.4 REFERENCES

Gehrels, G., Valencia, V., and Pullen, A., 2006, Detrital zircon geochronology by Laser-Ablation-Multicollector ICPMS at the Arizona LaserChron Center: Paleontological Society Papers, v. 12, p. 67-76.

APPENDIX B

CEMS DETRITAL ZIRCON U-PB ANALYSES DATA TABLE

analysis	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
X15CA04A_1	0.065	0.014	0.00857	0.00059	0.14031	0.055	0.012	0.24753	0.00313	0.00092	73.7	0.7	64	13	55	3.7	420	380	63	19	13%
X15CA04A_2	0.052	0.02	0.00848	0.00077	0.51147	0.04	0.016	-0.097184	0.0035	0.0015	37.7	1.0	50	19	54.4	4.9	-90	540	70	30	-60%
X15CA04A_3	0.051	0.017	0.00951	0.00061	-0.098943	0.035	0.013	0.43504	0.0031	0.00099	52.8	0.8	50	16	61	3.9	-440	440	62	20	-14%
X15CA04A_4	0.111	0.021	0.00831	0.00026	0.59404	0.089	0.016	-0.44883	0.00343	0.00079	750	0.9	105	19	53.3	1.6	1090	330	69.2	16	5%
X15CA04A_5	0.281	0.057	0.01021	0.0006	-0.085382	0.183	0.037	0.099638	0.0049	0.0017	240	0.9	243	44	65.5	3.8	2420	400	98	34	3%
X15CA04A_6	0.117	0.032	0.00826	0.00063	0.30978	0.096	0.026	0.087944	0.0059	0.0023	320	2.1	109	27	53	4.1	1160	480	118	47	5%
X15CA04A_7	0.164	0.031	0.00966	0.00054	0.20661	0.114	0.021	0.12718	0.00496	0.0014	144.5	0.9	151	27	61.9	3.5	1630	360	100	28	4%
X15CA04A_8	0.0723	0.0096	0.00817	0.00028	0.059578	0.0603	0.0078	0.31726	0.00305	0.00071	1030	1.7	70.6	9.1	52.5	1.8	500	270	61.5	14	11%
X15CA04A_9	0.294	0.067	0.01062	0.00092	0.28554	0.177	0.036	-0.0080096	0.0065	0.0017	77.4	0.8	250	51	68	5.9	2640	340	131	34	3%
X15CA04A_10	0.1127	0.013	0.01483	0.00041	-0.0056601	0.0536	0.0063	0.14668	0.00533	0.0013	416	2.2	108.1	12	94.9	2.6	300	230	107	26	32%
X15CA04A_11	0.083	0.023	0.00862	0.00041	0.093167	0.071	0.02	-0.040882	0.00292	0.00095	75	1.1	79	21	55.3	2.6	450	490	59	19	12%
X15CA04A_12	0.0658	0.0079	0.00872	0.00029	0.031515	0.0525	0.0061	0.36907	0.00325	0.00082	478	1.8	64.5	7.5	56	1.8	260	230	65.5	17	22%
X15CA04A_15	0.089	0.038	0.00828	0.00063	0.051456	0.083	0.034	0.041811	0.0052	0.0016	46.7	0.7	81	32	53.2	4	330	580	105	33	16%
X15CA04A_16	0.0539	0.0052	0.00801	0.0002	0.36513	0.0493	0.0044	0.19546	0.00278	0.00068	1893	6.2	53.2	5	51.46	1.3	171	190	56.1	14	30%
X15CA04A_17	0.051	0.0051	0.00804	0.00026	0.35734	0.0474	0.0044	0.14833	0.00237	0.00055	1251	2.7	50.5	4.9	51.6	1.7	60	190	47.8	11	86%
X15CA04A_18	0.048	0.018	0.00839	0.00056	0.14727	0.045	0.018	-0.067383	0.00408	0.0013	47.4	0.7	47	17	53.9	3.6	-320	510	82	26	-17%
X15CA04A_19	0.061	0.016	0.00804	0.00041	0.0049107	0.06	0.016	0.10922	0.003	0.00086	121	0.8	59	15	51.6	2.6	310	430	60	17	17%
X15CA04A_20	0.099	0.035	0.00974	0.00068	-0.1509	0.076	0.024	0.26701	0.00356	0.0012	55.2	1.0	91	30	62.5	4.4	440	580	72	23	14%
X15CA04A_21	0.142	0.042	0.00921	0.00084	0.52204	0.121	0.031	-0.11961	0.0045	0.0015	96	0.8	129	35	59	5.4	1470	510	91	31	4%
X15CA04A_22	0.085	0.019	0.00843	0.00043	-0.16618	0.076	0.017	0.20931	0.00299	0.00085	104.2	0.8	82	17	54.1	2.8	740	380	60	17	7%
X15CA04A_23	0.098	0.019	0.00853	0.00033	0.10069	0.085	0.016	0.27662	0.00317	0.00087	144.6	0.8	93	17	54.7	2.1	1240	380	64	18	4%
X15CA04A_25	0.086	0.019	0.00971	0.00045	-0.079539	0.071	0.016	0.20434	0.00407	0.0012	226	1.9	82	18	62.3	2.9	620	430	82	25	10%
X15CA04A_26	0.077	0.02	0.00833	0.00043	-0.1371	0.068	0.018	0.24818	0.0027	0.00071	146.1	0.7	74	18	53.5	2.8	530	430	54.4	14	10%
X15CA04A_27	0.244	0.082	0.00964	0.00072	-0.046377	0.195	0.064	0.35608	0.0047	0.0017	79.2	1.1	204	61	62.8	4.9	1740	630	94	34	4%
X15CA04A_28	0.237	0.029	0.0343	0.0013	0.25649	0.051	0.0059	0.089068	0.0119	0.0028	408	2.6	215	23	217.5	8.4	200	220	239	55	109%
X15CA04A_29	0.085	0.026	0.00863	0.00044	0.2486	0.07	0.02	-0.10612	0.00342	0.00096	113.8	0.8	80	23	55.4	2.8	580	540	69	19	10%
X15CA04A_30	0.095	0.024	0.00947	0.00046	-0.074501	0.072	0.018	0.19456	0.0064	0.0033	200	8.9	90	21	60.7	2.9	640	430	128	65	9%
X15CA04A_31	0.087	0.033	0.00905	0.00039	0.13091	0.068	0.025	-0.094968	0.0036	0.0014	137.6	1.7	80	29	58.1	2.5	190	550	73	29	31%
X15CA04A_32	0.135	0.02	0.00926	0.00045	0.15935	0.11	0.017	0.16627	0.00444	0.0013	268	1.1	128	17	59.4	2.9	1680	280	90	27	4%
X15CA04A_35	0.084	0.036	0.00931	0.0008	0.037918	0.08	0.037	-0.038972	0.0101	0.006	68.1	1.3	77	32	59.7	5.1	190	720	200	120	31%
X15CA04A_36	0.0611	0.0089	0.00844	0.00041	-0.074987	0.0503	0.0071	0.50114	0.00245	0.00061	458	0.8	60	8.5	54.2	2.6	160	260	49.4	12	34%
X15CA04A_37	0.068	0.016	0.0091	0.00033	0.16249	0.053	0.011	-0.071571	0.0045	0.0019	269	1.8	66	15	58.4	2.1	160	330	90	38	37%
X15CA04A_38	0.106	0.042	0.00936	0.00056	-0.01499	0.081	0.031	0.14794	0.004	0.0013	103	1.1	96	35	60	3.6	360	600	80	26	17%
X15CA04A_39	0.0678	0.0078	0.00852	0.00032	-0.039055	0.0567	0.0064	0.34473	0.00274	0.00069	1039	2.0	66.5	7.4	54.7	2	460	250	55.2	14	12%
X15CA04A_40	0.12	0.019	0.01146	0.0009	0.38373	0.0756	0.011	0.1815	0.0066	0.0017	583	3.7	114	17	73.4	5.7	960	300	134	35	8%
X15CA04A_41	0.0808	0.0092	0.01234	0.00046	0.52094	0.0476	0.0049	0.0095759	0.00366	0.001	873	3.4	78.7	8.6	79.1	2.9	90	200	74	20	88%
X15CA04A_43	0.0661	0.011	0.00851	0.0004	0.08478	0.0553	0.009	0.17082	0.00293	0.00082	389	1.1	64.6	11	54.6	2.5	320	310	59	16	17%
X15CA04A_44	0.118	0.037	0.00842	0.00045	0.14744	0.104	0.034	-0.083985	0.0042	0.0014	160	1.3	108	32	54	2.9	940	540	84	28	6%
X15CA04A_45	0.091	0.037	0.00882	0.00047	-0.022342	0.07	0.028	0.092459	0.0033	0.00096	77.1	0.6	83	33	56.6	3	450	690	66	19	13%
X15CA04A_46	0.093	0.013	0.00898	0.00047	0.041414	0.0736	0.011	0.38719	0.00369	0.0009	427	0.9	90	12	57.6	3	1040	310	74.4	18	6%
X15CA04A_47	0.057	0.03	0.0089	0.0006	-0.01695	0.046	0.026	-0.020152	0.0046	0.0017	70.8	1.4	52	28	57.1	3.8	60	730	93	34	95%
X15CA04A_48	0.019	0.037	0.00957	0.00039	0.10112	0.014	0.035	-0.080151	0.005	0.0034	45.8	0.9	13	35	61.3	5.7	-1260	910	100	68	-5%
X15CA04A_50	0.107	0.023	0.0094	0.00045	0.73156	0.079	0.012	-0.50338	0.00369	0.001	3140	1.9	101	20	60.3	2.9	1100	270	74	21	5%
X15CA04A_51	0.123	0.069	0.00999	0.00085	-0.080686	0.1	0.051	0.29341	0.0061	0.003	55.2	0.7	100	57	64.1	5.4	150	910	123	60	43%
X15CA04A_52	0.235	0.094	0.00956	0.00089	0.020316	0.171	0.063	0.09012	0.008	0.0041	84.7	1.3	190	67	61.3	5.7	1410	780	160	80	4%
X15CA04A_53	0.088	0.013	0.00979	0.00048	0.2013	0.0671	0.0095	-0.0064141	0.00294	0.00068	563	0.9	84.8	12	62.8	3.1	670	270	59.3	14	9%
X15CA04A_54	0.52	0.12	0.0108	0.001	0.36908	0.316	0.074	-0.1243	0.0062	0.0019	76.3	0.7	393	81	69.2	6.4	3400	430	124	39	2%
X15CA04A_55	0.0568	0.0071	0.00899	0.00029	0.36129	0.0454	0.0053	-0.089939	0.00309	0.00069	1064	1.5	56	6.8	57.7	1.9	-10	210	62.3	14	-577%
X15CA04A_56	0.044	0.03	0.00903	0.00071	0.38834	0.037	0.025	-0.1922	0.00346	0.0012	77.6	0.9	39	28	57.9	4.6	-470	760	70	24	-12%
X15CA04A_57	0.1199	0.013	0.01662	0.00053	0.14609	0.0523	0.0058	0.31776	0.00562	0.0013	567	1.9	114.6	12	106.3	3.3	260	230	113	26	41%
X15CA04A_58	0.135	0.026	0.0127	0.0011	0.40844	0.068	0.012	0.11674	0.0062	0.0018	243	1.7	126	23	81	7.1	920	370	125	36	9%
X15CA04A_59	0.112	0.069	0.0075	0.00056	0.018009	0.101	0.064	0.12933	0.0037	0.0012	65.2	0.7	103	62	48.1	3.6	100	1100	74	25	48%
X15CA04A_61	0.076	0.012	0.01187	0.00041	0.085251	0.0459	0.0069	0.069459	0.0045	0.0015	447	4.4	71.6	9.9	76.1	2.6	-10	250	91	31	-761%
X15CA04A_62	0.0596	0.0091	0.0083	0.00029	0.13993	0.0513	0.0073	-0.051077	0.00326	0.00098	580	1.5	58.5	8.7	53.3	1.8	240	240	66	20	22%
X15CA04A_63	0.051	0.01	0.00816	0.00041	0.030614	0.0451	0.0088	0.21904	0.00266	0.00072	456	1.7	50.2	10	52.4	2.6	-30	330	53.6	15	-175%
X15CA04A_64	0.066	0.012	0.0091	0.0005	0.0038531	0.054	0.012	0.063361	0.0036	0.0011	321	2.7	65	12	58.4	3.2	290	310	73	22	20%
X15CA04A_65	0.046	0.055	0.00871	0.0006	-0.017799	0.032	0.04	0.015541	0.00264	0.00088	71.6	0.8	20	37	55.9	3.8	-1150	920	53	18	-5%
X15CA04A_66	0.068	0.015	0.00964	0.00042	0.0034306	0.049	0.011	0.11288	0.0042	0.0014	301	3.1	66	14	61.8	2.7	70	350	84	28	88%
X15CA04A_68	0.169	0.046	0.00957	0.00072	0.60997	0.122	0.03	-0.28497	0.0058	0.0019	117.8	0.9	152	38	61.4	4.6	1660	480	116	39	4%
X15CA04A_69	0.15	0.05	0.00821	0.00077	-0.10125	0.135	0.044	0.28897	0.00401	0.0012	97.9	0.8	134	40	52.7	4.9	1320	590	81	25	4%
X15CA04A_70	0.056	0.028	0.00893	0.00059	-0.12964	0.041	0.021	0.35337	0.00333	0.00094	162	1.2	47	24	57.3	3.8	-410	560	67	19	-14%
X15CA04A_71	0.0621	0.0085	0.00946	0.0003	-0.035716	0.048	0.0067	0.28832	0.00354	0.00091	592	2.8	60.9	8.1	60.7	1.9	80	250	71	18	76%
X15CA04A_72	0.0634	0.0068	0.00845	0.00026	-0.031707	0.0552	0.0057	0.417	0.00269	0.00063	843	1.7	63	6.7	54.3	1.7	380	220	54.4	13	14%
X15CA04A_73	0.035	0.047	0.00855	0.00054	-0.031314	0.021	0.042	-0.046549	0.0044	0.0019	76	1.3	26	41	54.9	3.5	-1120	890	88	38	-5%
X15CA04A_74	0.069	0.039	0.00885	0.0007	0.04458	0.054	0.03	0.030066	0.0029	0.0012	82	1.4	62	34	56.8	4.4	-430	670	58	24	-13%
X15CA04A_75	0.022	0.024	0.00884	0.00062	-0.048794	0.02	0.02	0.024321	0.00322	0.00088	99	0.6	20	24	56.7	3.9	-730	670	65	18	-8%
X15CA04A_76	0.272	0.027	0.02326	0.00085	0.77022	0.0846	0.0073	-0.12738	0.0129	0.003	985	7.0	244	21	148.2	5.4	1287	170	259	60	12%
X15CA04A_78	0.069	0.033	0.00932	0.00064	0.057443	0.048	0.026	-0.080824	0.0056	0.002	72.6	1.2	63	31	59.8	4.1	-210	750	113	40	-28%
X15CA04A_79	0.0579	0.0052	0.00817	0.0002	0.40596	0.0507	0.0042	0.13314	0.0025	0.00056	3100	3.4	57.1	5	52.5	1.3	231	190	50.4	11	23%
X15CA04A_80	0.101	0.041	0.00869	0.00058	-0.14141	0.079	0.032	0.2077	0.0041	0.0013	91.4	1.1	91	36	55.7	3.7	640	670	83	26	9%
X15CA04A_81	0.054	0.014	0.00861	0.00037	0.18502	0.044	0.011	0.1161	0.00328	0.001	173.9	1.3	53	14	55.3	2.3	-90	400	66	20	-61%
X15CA04A_82	0.1143	0.014	0.01687	0.0005	0.27538	0.0494	0.0056	-0.055009	0.00599	0.0014	555	1.9	109.4	12	107.8	3.1	150	220	121	28	72%
X15CA04A_83	0.089	0.026	0.00866	0.00049	0.029862	0.073	0.02	0.011681	0.0035	0.00093	150	0.8	88	24	55.6	3.1	610	500	71	19	9%
X15CA04A_85	0.0583	0.0094	0.00862	0.00025	0.27141	0.0481	0.0072	-0.11565	0.00266	0.00069	604	1.4	57.2	9	55.3	1.6	60	260	53.6	14	92%
X15CA04A_86	0.088	0.028	0.00858	0.00054	-0.058306	0.072	0.023	0.17675	0.00301	0.00083	147.5	0.5	83	24	55.1	3.5	360	500	61	17	15%
X15CA04A_87	0.0552	0.0057	0.00797	0.00023	0.43694	0.049	0.0046	-0.056961	0.00264	0.00065	2284	4.0	54.5	5.5	51.2	1.4	110	170	53.2	13	47%
X15CA04A_88	0.131	0.036	0.00909	0.00056	0.17361	0.126	0.037	0.091629	0.0042	0.0013	99.5	0.7	120	32	58.3	3.6	1640	570	84	27	4%
X15CA04A_89	0.299	0.08	0.00991	0.00085	0.41844	0.194	0.051	0.093142	0.0052	0.0015	93.4	0.9	249	61	63.6	5.4	2320	550	105	30	3%
X15CA04A_90	0.198	0.029	0.01101	0.00058	-0.23874	0.132	0.022	0.39674	0.0089	0.0025	197	2.7	181	24	70.6	3.7	1960	260	179	50	4%
X15CA04A_91	0.056	0.027	0.00794	0.00055	0.14444	0.05	0.024	0.11705	0.00303	0.00078	99.3	0.5	53	25	50.9	3.5	-170	680	61.1	16	-30%
X15CA04A_92	0.08	0.056	0.00821	0.00075	0.11634	0.057	0.048	0.06947	0.00392	0.0012	65.2	0.7	66	49	52.7	4.8	-910	990	79	25	-6%
X15CA04A_93	0.0609	0.0075	0.00851	0.00025	0.22848	0.0514	0.0059	-0.038536	0.00264	0.00069	935	2.9	59.9	7.2	54.6	1.6	260	230	53.4	14	21%
X15CA04A_94	0.075	0.025	0.00891	0.00064	-0.011773	0.07	0.026	0.23337	0.00323	0.00084	150.3	0.9	71	23	57.2	4.1	250	590	65	17	23%
X15CA04A_96	0.0647	0.0074	0.00867	0.00022	0.1617	0.0539	0.0058	0.1681	0.00343	0.00089	1870	3.4	64.3	7.3	55.6	1.4	340	230	69	18	16%
X15CA04A_97	0.0626	0.011	0.00937	0.00042	-0.040355	0.049	0.0088	0.13849	0.00299	0.00089	479	2.4	61.2	11	60.1	2.7	60	300	60	18	100%
X15CA04A_98	0.084	0.019	0.00896	0.00041	-0.034606	0.069	0.017	0.085504	0.00332	0.00078	224	0.6	81	17	57.5	2.7	510	410	66.9	16	11%
X15CA04A_99	0.054	0.044	0.00841	0.00064	-0.1455	0.072	0.05	0.23972	0.00329	0.00095	75	0.7	46	39	54	4.1	-330	940	66	19	-16%
X15CA04A_101	0.082	0.024	0.00908	0.00054	0.21519	0.064	0.018	-0.070398	0.00369	0.00095	134.8	0.5	78	22	58.2	3.5	370	470	74	19	16%
X15CA04A_102	0.112	0.014	0.01568	0.00067	0.55435	0.0531	0.0062	-0.22206	0.00597	0.0015	412	3.4	107	13	100.3	4.2	280	230	120	30	36%
X15CA04A_103	0.0565	0.0051	0.0083	0.00026	0.3367	0.0504	0.0042	0.37302	0.00255	0.00057	2585	3.8	55.8	4.9	53.3	1.6	203	180	51.4	12	26%
X15CA04A_104	0.1911	0.017	0.02777	0.00078	0.55641	0.0511	0.0042	0.48707	0.00757	0.0016	1720	1.5	177.4	15	176.6	4.9	234	180	152	33	75%
X15CA04A_105	0.162	0.06	0.00891	0.00076	0.3563	0.117	0.034	-0.09996	0.00399	0.0011	89.5	0.8	118	34	57.2	4.8	1590	600	80	23	4%
X15CA04A_106	0.079	0.029	0.0088	0.00061	-0.074483	0.075	0.03	0.23239	0.00286	0.00073	153.8	0.4	75	27	56.5	3.9	400	630	57.7	15	14%
X15CA04A_107	0.066	0.031	0.00791	0.00042	-0.06402	0.071	0.036	0.072039	0.0048	0.0017	117.6	1.3	61	27	51.2	2.7	90	610	97	34	57%
X15CA04A_108	0.07	0.054	0.00915	0.00051	-0.048867	0.056	0.042	0.14273	0.00326	0.0012	65.1	1.0	35	36	58.7	3.3	-780	900	66	23	-8%
X15CA04A_110	0.185	0.063	0.01083	0.00062	-0.020588	0.117	0.036	0.099599	0.0053	0.0014	182	0.9	160	49	69.4	3.9	1100	540	107	28	6%
X15CA04A_112	0.128	0.024	0.0091	0.00051	-0.073931	0.103	0.021	0.32497	0.00347	0.00084	166	0.5	121	21	58.4	3.3	1520	420	70.1	17	4%
X15CA04A_113	0.228	0.045	0.00969	0.00067	0.12897	0.162	0.033	0.20937	0.00467	0.0012	106.5	0.7	203	37	62.2	4.3	2340	440	94	25	3%
X15CA04A_114	0.065	0.026	0.00898	0.00045	0.11949	0.054	0.021	-0.040999	0.0039	0.0013	181	0.9	61	24	57.6	2.8	-130	570	78	26	-44%
CANBC1024K_1	0.0863	0.011	0.00858	0.00041	0.12864	0.0729	0.0086	0.1357	0.00358	0.00064	427	1.3	83.7	10	55.1	2.6	880	250	72	13	6%
CANBC1024K_2	0.0813	0.01	0.00879	0.00044	0.22179	0.0659	0.0071	0.0013345	0.0031	0.00042	391	2.6	79	9.3	56.4	2.8	680	200	62.5	8.4	8%
CANBC1024K_3	0.0747	0.0098	0.0093	0.00048	0.056087	0.0588	0.0076	-0.028448	0.00318	0.00029	571	1.4	72.8	9	59.7	3.1	430	200	64.2	5.8	14%
CANBC1024K_4	0.231	0.08	0.0092	0.00073	0.84848	0.149	0.036	-0.34359	0.0063	0.0019	152	1.0	180	46	59	4.7	2000	430	127	38	3%
CANBC1024K_5	0.38	0.064	0.01032	0.00081	0.83963	0.245	0.026	-0.53532	0.0088	0.0013	574	1.1	321	47	66.2	5.2	3120	180	178	26	2%
CANBC1024K_6	0.0594	0.0078	0.00827	0.00038	0.025787	0.0508	0.0058	0.12525	0.00302	0.00033	659	2.2	58.4	7.3	53.1	2.4	160	200	60.8	6.7	33%

	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
CANBC1024K_7	0.087	0.02	0.00847	0.00044	0.74162	0.081	0.02	-0.31682	0.0034	0.0003	470	1.0	83	18	54.3	2.8	780	330	68.7	6	7%
CANBC1024K_8	3.08	0.25	0.0339	0.0021	0.85726	0.653	0.02	0.13956	0.0611	0.0039	221	1.1	1420	63	215	13	4630	46	1198	74	5%
CANBC1024K_9	0.134	0.024	0.00866	0.00044	0.67407	0.116	0.017	-0.43751	0.00504	0.00081	700	1.3	126	21	55.6	2.8	1710	270	102	16	3%
CANBC1024K_10	0.0623	0.0052	0.00787	0.00038	0.19654	0.0575	0.0035	0.16026	0.00282	0.00018	677	1.3	61.3	5	50.5	2.4	470	130	56.9	3.7	11%
CANBC1024K_11	0.143	0.048	0.00837	0.0005	0.26909	0.113	0.035	-0.24545	0.00324	0.00074	114.6	1.0	128	40	53.8	3.2	1280	590	65	15	4%
CANBC1024K_12	0.0692	0.0056	0.00934	0.00044	0.2794	0.0541	0.0029	0.092175	0.00288	0.00025	1065	2.2	67.9	5.3	59.9	2.8	350	110	58.1	5.1	17%
CANBC1024K_13	0.073	0.0086	0.00798	0.00034	0.035471	0.0682	0.0077	0.22052	0.00258	0.00017	659	0.9	71.3	8.1	51.3	2.2	740	200	52	3.5	7%
CANBC1024K_14	0.279	0.029	0.00995	0.00056	0.64353	0.204	0.013	-0.18593	0.00649	0.00061	308	0.9	248	22	63.8	3.6	2849	99	131	12	2%
CANBC1024K_15	0.304	0.055	0.01061	0.00067	0.79585	0.208	0.027	-0.099151	0.0088	0.0013	451	1.3	261	42	68.1	4.3	2690	240	178	25	3%
CANBC1024K_16	0.09	0.015	0.00785	0.00038	-0.032997	0.082	0.012	0.22086	0.0028	0.00036	345	1.1	87	13	50.4	2.4	1050	260	56.5	7.2	5%
CANBC1024K_17	0.503	0.099	0.01206	0.00093	0.85423	0.275	0.04	-0.59158	0.011	0.0025	141	1.1	393	67	77.3	6	3200	290	221	49	2%
CANBC1024K_18	0.081	0.02	0.00796	0.00038	0.7325	0.07	0.014	-0.55041	0.00322	0.0005	715	1.4	77	18	51.1	2.4	630	320	65	10	8%
CANBC1024K_19	0.229	0.037	0.00909	0.00049	0.64203	0.178	0.024	-0.13973	0.00449	0.00055	562	0.8	206	29	58.3	3.2	2560	200	91	11	2%
CANBC1024K_20	0.119	0.019	0.00808	0.00048	0.37186	0.098	0.013	0.066857	0.00469	0.0009	179	2.2	113	17	51.9	3.1	1680	240	95	18	3%
CANBC1024K_21	0.0486	0.0043	0.00769	0.00035	0.241	0.0452	0.0029	0.093287	0.00228	0.00014	791	1.1	48.2	4.2	49.4	2.2	10	110	46	2.9	494%
CANBC1024K_22	0.0526	0.0058	0.00819	0.00042	0.46529	0.0461	0.0042	0.015366	0.00288	0.0002	461	0.8	51.9	5.5	52.6	2.7	10	160	58.2	4.1	526%
CANBC1024K_23	0.095	0.015	0.0081	0.00037	0.28026	0.083	0.012	-0.015976	0.00345	0.00037	585	1.4	91	14	52	2.4	1080	260	69.7	7.4	5%
CANBC1024K_24	0.0538	0.006	0.00823	0.00041	0.30288	0.0465	0.0036	-0.051559	0.00257	0.0002	627	1.2	53.1	5.8	52.8	2.6	-10	110	51.8	4	-528%
CANBC1024K_25	0.0788	0.0083	0.00834	0.00038	0.044913	0.0667	0.0052	0.26812	0.00333	0.0003	401	1.3	76.8	7.8	53.5	2.4	750	160	67.2	6	7%
CANBC1024K_26	0.093	0.017	0.00814	0.00034	-0.053994	0.081	0.014	0.15669	0.00277	0.00043	376	1.1	89	15	52.3	2.2	920	290	55.9	8.7	6%
CANBC1024K_27	0.109	0.018	0.0085	0.00039	0.41118	0.089	0.013	-0.25748	0.00367	0.00051	451	1.3	104	16	54.5	2.5	1230	280	74	10	4%
CANBC1024K_28	1.09	0.14	0.01603	0.0011	0.9105	0.483	0.031	-0.66826	0.021	0.0025	373	1.0	738	70	102.5	7	4156	97	420	50	2%
CANBC1024K_29	0.142	0.015	0.0087	0.00039	-0.17915	0.117	0.011	0.35251	0.0036	0.0003	496	1.2	134	13	55.9	2.5	1830	150	72.5	6	3%
CANBC1024K_30	0.095	0.012	0.00843	0.00039	0.17679	0.0779	0.008	0.013537	0.00286	0.00036	395	1.0	91.5	11	54.1	2.5	1100	220	57.7	7.3	5%
CANBC1024K_31	0.0919	0.0072	0.00807	0.00034	0.18372	0.0811	0.004	0.21076	0.00294	0.00022	498	1.1	89.2	6.6	51.8	2.2	1194	97	59.3	4.3	4%
CANBC1024K_32	0.0819	0.0099	0.00815	0.00039	0.29204	0.0734	0.0081	-0.025193	0.0031	0.00028	247	1.2	79.6	9.3	52.3	2.5	930	200	62.5	5.7	6%
CANBC1024K_33	0.196	0.059	0.00987	0.00065	0.89856	0.137	0.033	-0.79107	0.006	0.0022	296	1.1	176	47	64.5	4.8	2130	430	120	43	3%
CANBC1024K_34	0.376	0.045	0.0107	0.00058	0.33052	0.235	0.02	0.01913	0.0087	0.0012	260	1.1	320	33	68.6	3.7	3120	140	175	25	2%
CANBC1024K_35	0.132	0.014	0.00834	0.00041	-0.019703	0.1144	0.0096	0.30812	0.00425	0.00032	578	1.3	125	13	53.5	2.6	1790	160	85.7	6.4	3%
CANBC1024K_36	0.128	0.017	0.00863	0.00039	0.39583	0.102	0.01	-0.15159	0.00434	0.00057	635	1.3	122	15	55.4	2.5	1600	220	87	12	3%
CANBC1024K_37	0.0505	0.0045	0.00827	0.00034	0.016375	0.0445	0.0035	0.22653	0.00261	0.00018	500	1.2	50	4.3	53.1	2.1	-50	140	52.6	3.7	-106%
CANBC1024K_38	0.0532	0.0043	0.00815	0.00041	0.1716	0.0469	0.0031	0.34341	0.00251	0.00019	438	1.1	52.6	4.1	52.3	2.6	80	130	50.7	3.8	65%
CANBC1024K_39	0.0691	0.0069	0.00826	0.00037	0.16077	0.0594	0.0049	0.15547	0.00219	0.00017	364	1.0	67.7	6.5	53	2.4	620	160	44.2	3.3	9%
CANBC1024K_40	3.06	0.27	0.0357	0.0025	0.83451	0.623	0.015	0.22854	0.0815	0.0074	333	1.4	1408	67	226	16	4567	39	1580	140	5%
CANBC1024K_41	0.084	0.013	0.00811	0.00043	0.53803	0.079	0.01	-0.28682	0.00326	0.00044	381	1.4	82	12	52.1	2.7	980	250	65.9	8.9	5%
CANBC1024K_42	0.0556	0.0049	0.00797	0.00038	0.071307	0.0521	0.0047	0.16133	0.00267	0.0002	483	1.2	55.1	4.7	51.2	2.4	240	160	53.9	4.1	21%
CANBC1024K_43	0.098	0.015	0.0088	0.00044	0.10433	0.081	0.011	-0.006072	0.00308	0.00035	245	0.9	94	14	56.5	2.8	1010	240	62.2	7	6%
CANBC1024K_44	0.051	0.0048	0.00814	0.00034	0.2298	0.0451	0.0031	0.054667	0.00259	0.00024	340	1.4	50.5	4.6	52.2	2.2	-20	130	52.3	4.9	-261%
CANBC1024K_45	0.106	0.013	0.00905	0.00051	0.8601	0.0814	0.0063	-0.6668	0.0049	0.001	480	1.5	102	12	58.1	3.3	1190	170	100	21	5%
CANBC1024K_46	0.077	0.013	0.00814	0.00035	0.45166	0.069	0.011	-0.31062	0.00296	0.00033	298	1.4	75	12	52.2	2.2	830	300	59.7	6.7	6%
CANBC1024K_47	0.18	0.043	0.01041	0.00052	-0.14363	0.122	0.029	0.19775	0.00369	0.00048	83.4	0.8	164	34	66.8	3.3	1620	380	74.5	9.7	4%
CANBC1024K_48	0.0536	0.0057	0.00807	0.00037	-0.014037	0.0489	0.0047	0.21999	0.00248	0.00025	434	1.5	52.9	5.5	52.1	2.3	80	160	50.1	5	65%
CANBC1024K_49	0.079	0.039	0.00938	0.00066	0.21327	0.06	0.028	-0.23425	0.0038	0.0015	55.9	1.3	72	32	60.2	4.2	-50	530	76	30	-120%
CANBC1024K_50	2.329	0.16	0.02792	0.0013	0.82861	0.604	0.014	-0.0026568	0.0638	0.0038	270	1.4	1217	49	177.5	8.3	4521	33	1249	72	4%
CANBC1024K_51	0.125	0.013	0.00845	0.00038	-0.011446	0.1059	0.009	0.069435	0.00384	0.00056	600	1.1	119	12	54.2	2.4	1650	150	77	11	3%
CANBC1024K_52	0.052	0.0057	0.00798	0.00036	0.013472	0.0481	0.0051	0.22798	0.00257	0.00028	424	1.1	51.4	5.4	51.2	2.3	40	160	51.9	5.7	128%
CANBC1024K_53	0.0709	0.0074	0.00807	0.00037	0.081143	0.0634	0.006	0.13408	0.00291	0.00026	500	1.0	69.4	7	51.8	2.4	620	190	58.8	5.2	8%
CANBC1024K_54	0.079	0.019	0.00871	0.0006	0.088419	0.071	0.021	0.063474	0.00293	0.00048	109.6	0.9	76	17	55.9	3.8	390	380	59.1	9.6	14%
CANBC1024K_55	0.0818	0.0076	0.00817	0.00047	0.37732	0.0707	0.0047	0.34304	0.00251	0.00031	417	1.1	79.8	7.1	52.5	3	950	130	50.6	6.3	6%
CANBC1024K_56	0.094	0.015	0.00841	0.0004	0.24862	0.08	0.012	-0.094632	0.00344	0.0003	385	1.4	90	13	54	2.5	960	250	69.4	6	6%
CANBC1024K_57	0.179	0.017	0.00909	0.0004	0.45926	0.1395	0.0091	-0.067681	0.0063	0.00044	218.9	1.8	166	14	58.3	2.5	2200	120	127	8.7	3%
CANBC1024K_58	0.076	0.013	0.00901	0.00049	-0.20232	0.064	0.012	0.44019	0.00393	0.0008	190	4.3	74	12	57.8	3.1	530	320	79	16	11%
CANBC1024K_59	0.241	0.023	0.02778	0.0013	0.37051	0.0623	0.0042	-0.065722	0.0102	0.0012	266	2.6	218	18	176.6	8.4	650	150	205	25	27%
CANBC1024K_60	0.071	0.0079	0.00819	0.00037	0.15716	0.0652	0.0068	0.13602	0.00316	0.00027	402	1.5	69.4	7.5	52.6	2.4	730	210	63.9	5.4	7%
CANBC1024K_61	0.08	0.013	0.0089	0.00062	0.072171	0.0611	0.0073	0.23304	0.00244	0.00034	237	0.9	81	13	57.1	3.9	780	320	49.3	6.8	7%
CANBC1024K_62	0.846	0.1	0.017	0.0012	0.56172	0.358	0.031	-0.1428	0.0155	0.0054	163	0.8	619	54	108.6	7.3	3760	150	310	110	3%
CANBC1024K_63	0.0809	0.0081	0.0078	0.00034	0.21302	0.0734	0.0058	0.077564	0.00301	0.00018	633	1.2	78.8	7.6	50.1	2.2	1060	170	60.8	3.7	5%
CANBC1024K_64	0.088	0.018	0.00813	0.00039	0.78334	0.077	0.013	-0.62317	0.00296	0.00022	371	1.1	85	16	52.2	2.5	920	310	59.7	4.5	6%
CANBC1024K_65	0.508	0.069	0.0131	0.0011	0.72024	0.279	0.026	-0.047877	0.00898	0.00082	370	0.9	414	44	83.9	7	3320	150	181	16	3%
CANBC1024K_66	0.122	0.038	0.00834	0.00051	0.86761	0.108	0.027	-0.71541	0.00394	0.0008	684	1.2	113	33	53.5	3.2	1240	460	79	16	4%
CANBC1024K_67	0.0594	0.0059	0.00811	0.00035	0.40528	0.0537	0.0042	-0.05796	0.00263	0.00017	716	1.3	58.5	5.7	52.1	2.3	310	160	53.1	3.5	17%
CANBC1024K_68	0.0941	0.0098	0.00809	0.00036	0.11767	0.084	0.0082	0.13962	0.00291	0.00021	346	1.0	91.1	9.1	51.9	2.3	1240	170	58.8	4.2	4%
CANBC1024K_69	0.0591	0.0053	0.00801	0.00034	0.26355	0.0554	0.0036	0.070438	0.00266	0.0002	491	1.1	58.3	5.1	51.4	2.2	410	130	53.7	4	13%
CANBC1024K_70	0.228	0.02	0.00988	0.00045	0.1753	0.1653	0.0098	0.19598	0.00607	0.00048	345	1.1	210	16	63.4	2.8	2497	95	122.2	9.7	3%
CANBC1024K_71	0.0789	0.0084	0.0085	0.00037	0.019256	0.0669	0.0064	0.19478	0.00306	0.00023	437	1.3	76.9	7.8	54.6	2.3	770	180	61.7	4.6	7%
CANBC1024K_72	0.0596	0.0057	0.00776	0.00037	0.61861	0.0542	0.0031	-0.28396	0.00237	0.00014	1140	1.7	58.7	5.4	49.9	2.4	340	120	47.8	2.8	15%
CANBC1024K_73	0.0613	0.0054	0.00808	0.00039	0.046291	0.0565	0.0044	0.38855	0.00268	0.00022	500	1.4	60.3	5.2	51.9	2.5	460	170	54.1	4.5	11%
CANBC1024K_74	0.0624	0.0059	0.00788	0.00032	0.16667	0.0574	0.004	0.082234	0.00257	0.00012	811	1.1	61.4	5.6	50.6	2	420	130	51.9	2.5	12%
CANBC1024K_75	0.0564	0.0059	0.00799	0.00036	0.33377	0.0512	0.0045	-0.1339	0.0028	0.00022	439	1.3	55.6	5.7	51.3	2.3	210	170	56.5	4.5	24%
CANBC1024K_76	0.0529	0.0047	0.00796	0.00036	0.51395	0.0484	0.0026	-0.051274	0.00244	0.00013	506	1.4	52.3	4.6	51.1	2.3	120	110	49.2	2.7	43%
CANBC1024K_77	0.0742	0.01	0.00858	0.00042	0.6257	0.0629	0.0063	-0.33389	0.00331	0.00042	549	1.3	72.3	9.6	55.1	2.7	580	190	66.9	8.5	10%
CANBC1024K_78	0.0877	0.0057	0.01035	0.00045	0.4782	0.0622	0.0019	0.32172	0.00494	0.00032	1520	4.2	85.3	5.3	66.4	2.9	668	65	99.5	6.5	10%
CANBC1024K_79	0.055	0.0062	0.00771	0.00031	0.27502	0.0496	0.0033	-0.14522	0.00248	0.00018	618	1.2	54.2	5.9	49.5	2	160	130	50	3.6	31%
CANBC1024K_80	0.0807	0.0095	0.0083	0.0004	0.15978	0.0697	0.0068	0.050711	0.00316	0.00027	391	1.4	78.5	8.9	53.3	2.6	840	210	63.8	5.5	6%
CANBC1024K_81	0.205	0.024	0.00876	0.00041	0.031493	0.171	0.018	0.1394	0.00489	0.0004	387	1.1	188	20	56.5	2.5	2450	180	98.5	8	2%
CANBC1024K_82	0.128	0.052	0.00832	0.00048	0.93181	0.082	0.018	-0.76912	0.00415	0.00086	442	1.1	115	39	53.4	3.1	1030	320	84	17	5%
CANBC1024K_83	0.0893	0.0056	0.01352	0.00055	0.62742	0.04772	0.0009	0.31327	0.00411	0.00026	3740	7.8	86.8	5.2	86.5	3.5	80	43	82.9	5.3	108%
CANBC1024K_84	0.0648	0.0072	0.00812	0.00037	0.50538	0.0571	0.0044	-0.29169	0.00271	0.00024	664	1.2	63.6	6.8	52.2	2.4	430	150	54.6	4.7	12%
CANBC1024K_85	0.0543	0.005	0.00832	0.00036	0.1354	0.0475	0.0034	0.26151	0.00274	0.00022	438	1.1	53.6	4.8	53.4	2.3	80	140	55.3	4.5	67%
CANBC1024K_87	0.119	0.015	0.0091	0.00041	0.12534	0.097	0.011	0.02189	0.00358	0.00052	281	1.0	114	13	58.4	2.6	1480	240	72	11	4%
CANBC1024K_88	0.155	0.031	0.00868	0.00044	0.70583	0.128	0.022	-0.56993	0.00456	0.00066	678	1.1	143	27	55.7	2.8	1720	310	92	13	3%
CANBC1024K_89	0.057	0.0075	0.00784	0.00034	0.10303	0.0525	0.0062	-0.023697	0.00272	0.00021	494	1.6	56.1	7	50.3	2.2	170	170	55	4.2	30%
CANBC1024K_90	0.258	0.03	0.00993	0.00049	0.18944	0.183	0.015	-0.029984	0.00605	0.00051	525	1.0	231	24	63.7	3.1	2620	140	122	10	2%
CANBC1024K_91	0.175	0.036	0.00885	0.00055	0.92796	0.148	0.023	-0.81962	0.00493	0.00088	380	1.1	160	29	56.8	3.5	2210	280	99	18	3%
CANBC1024K_92	0.0515	0.0044	0.0079	0.00035	0.065979	0.0475	0.0034	0.10381	0.00248	0.00018	510	1.4	50.9	4.2	50.7	2.2	80	130	50.1	3.6	63%
CANBC1024K_93	0.079	0.019	0.00863	0.00046	0.77964	0.06	0.01	-0.34171	0.00292	0.0003	195	1.2	76	17	55.4	2.9	380	280	59	6.1	15%
CANBC1024K_94	0.0592	0.01	0.00781	0.00041	-0.072753	0.0537	0.0093	0.1559	0.00264	0.00038	374	1.7	58.2	9.7	50.2	2.6	270	310	53.3	7.8	19%
CANBC1024K_95	0.0611	0.01	0.00797	0.00037	0.29411	0.0557	0.0085	-0.24849	0.00241	0.0003	336	1.8	59.8	9.5	51.1	2.4	300	200	48.6	6	17%
CANBC1024K_96	0.121	0.014	0.00867	0.00048	0.84501	0.1001	0.0063	-0.58837	0.00464	0.00047	466	1.5	115	12	55.6	3	1640	120	93.4	9.4	3%
CANBC1024K_97	0.1008	0.0076	0.008	0.00032	0.11322	0.0914	0.0037	0.025165	0.00337	0.00017	733	1.0	97.4	7	51.4	2.1	1435	76	68.1	3.4	4%
CANBC1024K_98	0.433	0.049	0.01053	0.00058	0.84288	0.308	0.025	-0.49941	0.0114	0.0013	454	1.2	361	32	67.5	3.7	3500	120	229	26	2%
CANBC1024K_99	0.0543	0.0061	0.00755	0.00032	-0.10773	0.0516	0.0048	0.27272	0.00256	0.00023	600	0.9	53.6	5.8	48.5	2	210	170	51.7	4.7	23%
CANBC1024K_100	0.185	0.02	0.01001	0.00049	0.48348	0.137	0.012	-0.20208	0.00434	0.00039	220	1.0	172	17	64.2	3.1	2170	150	87.5	7.9	3%
CANBC1024K_101	0.078	0.0085	0.00811	0.00042	0.3596	0.0705	0.0062	-0.0036919	0.00251	0.00024	284	1.0	76	8	52.1	2.7	840	180	50.7	4.8	6%
CANBC1024K_102	0.087	0.011	0.00776	0.00036	0.46995	0.0808	0.0081	-0.27268	0.00344	0.00054	416	1.6	84.3	10	49.8	2.3	1100	180	69	11	5%
CANBC1024K_103	0.0975	0.01	0.00808	0.00038	0.19769	0.0919	0.0095	0.023564	0.00398	0.00061	255	1.6	94.1	9.6	51.8	2.4	1390	170	80	12	4%
CANBC1024K_104	0.088	0.012	0.00793	0.00033	0.26611	0.081	0.01	-0.12939	0.00349	0.00034	333	1.5	85	11	50.9	2.1	1060	260	70.4	6.8	5%
CANBC1024K_105	0.0908	0.0088	0.00831	0.00044	0.63811	0.0796	0.0046	-0.29752	0.00298	0.00022	422	1.0	88	8.1	53.4	2.8	1170	120	60.1	4.5	5%
CANBC1024K_106	0.1246	0.011	0.00841	0.00038	0.25693	0.1082	0.0072	-0.074358	0.00383	0.00021	452	1.1	118.9	9.9	54	2.5	1710	130	77.2	4.2	3%
CANBC1024K_107	0.224	0.027	0.01087	0.00077	0.55762	0.145	0.011	-0.086409	0.005	0.0005	233	1.2	203	23	69.7	4.9	2330	150	101	10	3%
CANBC1024K_108	10.3	0.62	0.446	0.018	0.76637	0.1681	0.0027	0.57844	0.1209	0.0044	180	1.3	3466	55	2377	81	2541	26	2306	80	94%
CANBC1024K_109	0.126	0.023	0.00842	0.00045	0.83593	0.107	0.014	-0.66166	0.00416	0.0005	368	1.2	120	20	54	2.9	1690	220	84	10	3%
CANBC1024K_110	0.065	0.016	0.008	0.00036	0.051401	0.058	0.014	0.015811	0.00227	0.00031	111.3	0.9	63	15	51.3	2.3	190	370	45.8	6.2	27%
CANBC1024K_111	0.0565	0.0044	0.00892	0.00039	0.1687	0.0464	0.0023	0.23507	0.00309	0.00048	1375	5.0	55.8	4.2	57.2	2.5	28	94	62.4	9.7	204%
CANBC1024K_113	0.1776	0.012	0.02623	0.001	0.24835	0.0494	0.0018	0.2316	0.00817	0.00075	380	4.6	165.8	11	166.9	6.3	163	78	164	15	102%
CANBC1024K_114	0.168	0.025	0.0094	0.00041	0.30662	0.132	0.018	-0.15764	0.00389	0.00052	236	0.9	156	22	60.3	2.6	1920	250	78	10	3%
CANBC1024K_115	0.0613	0.0066	0.00794	0.00037	0.21398	0.0539	0.0047	0.12165	0.00257	0.00023	371	1.2	60.2	6.3	51	2.3	410	180	51.9	4.6	12%

analysis	ISOTOPIC RATIOS 207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	ELEMENTAL CONCENTRATIONS [U] (ppm)	U/Th	AGES 207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
CANBC1024K_116	1.02	0.17	0.0159	0.0014	0.865	0.411	0.035	-0.65434	0.0147	0.0019	82	0.8	680	83	101.6	8.8	3910	130	295	38	3%
CANBC1024K_117	0.0847	0.0078	0.00795	0.00034	0.28623	0.0763	0.0053	0.054686	0.00271	0.00021	581	1.2	82.3	7.3	51	2.2	1110	130	54.6	4.2	5%
CANBC1024K_118	0.113	0.026	0.00859	0.0005	0.82384	0.099	0.02	-0.67021	0.00363	0.00064	477	1.2	107	23	55.1	3.2	1430	350	73	13	4%
CANBC1024L_1	0.0593	0.0099	0.00886	0.00039	0.47289	0.0505	0.0073	0.028266	0.00335	0.00068	458	1.7	58.2	9.4	56.9	2.5	200	250	67.5	14	28%
CANBC1024L_2	0.273	0.041	0.01028	0.00037	0.29455	0.191	0.021	-0.01049	0.008	0.002	220.7	0.9	240	33	65.9	2.4	2680	200	160	41	2%
CANBC1024L_3	0.1303	0.012	0.01859	0.0005	0.64893	0.0504	0.0029	0.33541	0.00694	0.0012	3020	5.1	124.1	11	118.8	3.2	201	130	140	24	59%
CANBC1024L_4	0.121	0.016	0.01735	0.00058	0.46097	0.0505	0.005	-0.12794	0.0066	0.0018	600	1.4	115	15	110.9	3.7	220	200	132	36	50%
CANBC1024L_5	0.0895	0.011	0.01289	0.00033	0.20445	0.0478	0.0047	0.13411	0.0081	0.0023	828	17.3	86.6	10	82.5	2.1	90	190	162	46	92%
CANBC1024L_6	0.731	0.062	0.0831	0.002	0.78721	0.061	0.0035	0.22983	0.0246	0.0038	690	2.0	555	38	514	12	626	120	490	75	82%
CANBC1024L_7	0.1025	0.011	0.01556	0.00044	0.40098	0.0476	0.0034	0.12446	0.00459	0.00075	1189	1.6	100.2	9.8	99.6	2.8	90	140	92.5	15	111%
CANBC1024L_8	0.08	0.023	0.0106	0.00049	0.13508	0.055	0.014	0.089399	0.00465	0.0011	203	1.5	76	21	68	3.1	290	430	94	22	23%
CANBC1024L_9	0.19	0.049	0.0158	0.00092	0.20486	0.093	0.022	-0.017676	0.0052	0.0012	140	1.0	169	40	101	5.8	1030	470	105	25	10%
CANBC1024L_10	0.209	0.026	0.02823	0.00075	0.18497	0.0552	0.0062	0.50891	0.00886	0.0016	460	2.0	191	21	179.5	4.7	330	210	178	32	54%
CANBC1024L_11	4.93	0.39	0.3025	0.0076	0.80574	0.1085	0.0055	0.31651	0.0916	0.014	483	2.1	1803	69	1703	37	1772	92	1768	270	96%
CANBC1024L_12	0.0938	0.01	0.01413	0.00045	0.45282	0.0489	0.0041	0.46928	0.0067	0.0015	873	5.9	90.8	9.3	90.5	2.9	140	170	135	29	65%
CANBC1024L_13	0.173	0.035	0.01409	0.00053	0.023555	0.083	0.013	0.17884	0.0074	0.0018	462	2.0	159	29	90.2	3.3	1200	330	148	35	8%
CANBC1024L_14	0.0575	0.0068	0.00867	0.00023	0.32053	0.049	0.0051	0.1937	0.00251	0.00052	1135	2.9	56.7	6.5	55.7	1.5	180	210	50.6	10	31%
CANBC1024L_15	0.059	0.014	0.00817	0.00038	0.26278	0.05	0.012	0.015806	0.00323	0.00073	224	0.7	58	13	52.5	2.5	150	410	65	15	35%
CANBC1024L_16	0.197	0.025	0.01795	0.00048	0.40297	0.0767	0.0078	0.008568	0.00863	0.0015	630	1.4	181	21	114.7	3	1070	200	174	30	11%
CANBC1024L_17	0.074	0.012	0.00874	0.00036	0.3828	0.0557	0.0075	-0.055242	0.00351	0.00076	511	1.0	72	12	56.1	2.3	410	270	71	15	14%
CANBC1024L_18	0.1137	0.012	0.01581	0.00046	0.22357	0.049	0.0041	0.33701	0.00518	0.00096	705	1.1	109	11	101.1	2.9	190	170	104	19	53%
CANBC1024L_19	0.0831	0.01	0.01144	0.00032	0.13216	0.0503	0.0057	0.2146	0.00362	0.00078	613	1.7	80.7	9.7	73.3	2.1	170	220	73	16	43%
CANBC1024L_20	0.0824	0.0096	0.01224	0.00041	0.13777	0.0486	0.0048	0.090856	0.0057	0.0018	608	14.3	80.2	8.9	78.4	2.6	120	190	115	37	65%
CANBC1024L_21	0.185	0.032	0.027	0.0022	0.68934	0.0481	0.0048	-0.012745	0.0113	0.002	330	2.0	170	26	171	14	100	190	227	40	171%
CANBC1024L_22	0.0851	0.011	0.01319	0.00039	0.29786	0.0478	0.0053	0.25081	0.00403	0.00076	576	1.7	82.6	9.9	84.5	2.5	80	200	81.3	15	106%
CANBC1024L_23	0.21	0.028	0.02808	0.00067	0.22272	0.0558	0.0071	0.016646	0.0115	0.0024	264	2.2	191	23	178.5	4.2	330	230	231	48	54%
CANBC1024L_24	0.14	0.024	0.01266	0.00046	0.0034107	0.081	0.013	0.0042146	0.00479	0.0011	242	1.9	131	21	81.1	2.9	990	310	97	22	8%
CANBC1024L_25	0.0876	0.01	0.01423	0.00052	0.29662	0.0435	0.0044	0.38987	0.0054	0.0018	633	15.8	85	9.8	91.1	3.3	-80	170	108	35	-114%
CANBC1024L_26	0.194	0.018	0.0205	0.0015	0.50033	0.0705	0.005	-0.035336	0.00768	0.0013	610	2.4	180	15	131	9.6	950	150	155	27	14%
CANBC1024L_27	0.061	0.0077	0.00863	0.00029	0.21315	0.0516	0.0058	0.22894	0.004	0.0013	587	6.4	59.9	7.3	55.4	1.9	250	210	80	26	22%
CANBC1024L_28	8.99	1	0.375	0.022	0.98626	0.1667	0.0083	0.1936	0.1048	0.016	268	2.0	2317	110	2050	100	2524	84	2011	300	81%
CANBC1024L_29	0.205	0.022	0.02708	0.00068	0.30005	0.0549	0.0046	0.22503	0.00896	0.0016	515	2.0	189	19	172.3	4.3	360	170	180	31	48%
CANBC1024L_30	0.024	0.014	0.00855	0.00036	0.0073824	0.018	0.011	0.23531	0.00282	0.00067	131	1.0	23	14	54.9	2.3	-1020	420	57	13	-5%
CANBC1024L_31	0.103	0.028	0.00906	0.00039	0.2815	0.083	0.02	-0.13463	0.0053	0.0015	243	1.8	96	25	58.1	2.5	830	430	107	30	7%
CANBC1024L_32	0.0554	0.0072	0.00837	0.00024	0.20195	0.0468	0.0056	0.046985	0.00236	0.00042	648	1.0	54.5	6.9	53.7	1.5	30	210	47.7	8.5	179%
CANBC1024L_33	0.06	0.01	0.00889	0.00024	0.14057	0.0492	0.007	0.00042601	0.00296	0.00075	417	2.5	58.8	9.5	57.1	1.6	110	260	60	15	52%
CANBC1024L_35	0.873	0.1	0.1	0.0063	0.92301	0.0613	0.0035	0.24891	0.035	0.0057	331	2.8	627	57	613	37	637	120	694	110	96%
CANBC1024L_36	0.0559	0.0084	0.0082	0.00029	0.061997	0.0483	0.0066	0.17267	0.00284	0.00058	433	1.2	54.9	8	52.7	1.8	80	240	57.4	12	66%
CANBC1024L_37	0.0571	0.0081	0.00906	0.0003	0.17595	0.0457	0.0057	0.11472	0.00341	0.00066	585	1.7	56.2	7.7	58.1	1.9	20	230	68.9	13	291%
CANBC1024L_38	0.0801	0.0079	0.0119	0.00025	0.32717	0.0475	0.0033	0.17405	0.00345	0.0006	1513	3.1	78.1	7.4	76.2	1.6	83	140	69.6	12	92%
CANBC1024L_39	0.087	0.034	0.00918	0.00059	-0.24933	0.079	0.031	0.48836	0.0042	0.0017	80.1	1.1	80	30	58.9	3.8	230	660	85	34	26%
CANBC1024L_40	0.0722	0.0091	0.01068	0.00034	0.18986	0.048	0.0054	0.057984	0.0046	0.0014	460	7.9	70.5	8.6	68.5	2.1	90	200	92	28	76%
CANBC1024L_41	0.541	0.054	0.054	0.0038	0.81478	0.0718	0.0061	0.56931	0.0352	0.0066	1270	4.3	440	36	339	23	930	150	697	130	36%
CANBC1024L_42	0.0694	0.0091	0.00963	0.00037	0.20276	0.051	0.0058	0.23551	0.00302	0.00063	609	2.7	67.9	8.6	61.8	2.4	190	200	60.9	13	33%
CANBC1024L_43	0.0567	0.0078	0.00936	0.00031	0.11597	0.0428	0.0051	0.19059	0.00269	0.00082	536	4.8	55.8	7.5	60	2	-110	200	54	16	-55%
CANBC1024L_44	0.0543	0.0077	0.00888	0.00034	-0.13314	0.0443	0.0069	0.32875	0.00311	0.00058	391	1.4	53.5	7.5	57	2.2	-30	260	62.7	12	-190%
CANBC1024L_45	0.0612	0.0081	0.00995	0.00036	0.5287	0.0461	0.0043	0.044832	0.00271	0.00055	870	1.5	60.1	7.7	63.8	2.3	50	180	54.7	11	128%
CANBC1024L_46	0.21	0.023	0.03036	0.00071	0.62941	0.0491	0.0036	-0.1153	0.0097	0.002	416	1.8	193	20	192.8	4.5	170	150	196	40	113%
CANBC1024L_48	0.086	0.032	0.00892	0.00048	0.018406	0.078	0.028	0.093981	0.00333	0.00077	211	1.0	80	29	57.2	3.1	430	540	67	16	13%
CANBC1024L_49	0.0513	0.0085	0.00807	0.0003	0.15064	0.0465	0.0078	0.051852	0.00276	0.00056	427	1.4	50.5	8.2	52.1	1.9	-10	280	55.6	11	-521%
CANBC1024L_50	0.091	0.023	0.00894	0.00045	0.21223	0.073	0.018	0.25169	0.0041	0.0013	174	1.0	90	22	57.4	2.9	620	460	83	25	9%
CANBC1024L_51	0.139	0.047	0.00946	0.00056	-0.52171	0.111	0.054	0.81454	0.0037	0.0011	204	1.6	116	34	60.7	3.6	870	540	75	23	7%
CANBC1024L_52	0.21	0.023	0.02935	0.00099	0.71636	0.0508	0.0033	-0.070148	0.00963	0.0016	197	1.6	197	20	186.4	6.2	237	150	194	32	79%
CANBC1024L_53	0.072	0.022	0.01004	0.00056	0.13227	0.05	0.014	0.015097	0.0036	0.0013	136.6	1.8	68	21	64.4	3.5	-10	430	77	27	-644%
CANBC1024L_54	0.0732	0.0067	0.0105	0.00027	0.10526	0.052	0.003	0.043757	0.0148	0.0044	3160	43.7	71.6	6.4	67.3	1.7	273	130	296	86	25%
CANBC1024L_55	0.124	0.014	0.01591	0.00052	0.26323	0.0582	0.0058	0.36407	0.00676	0.0013	516	2.9	117.8	12	101.7	3.3	460	200	136	26	22%
CANBC1024L_56	0.0829	0.011	0.01268	0.00053	0.37396	0.0477	0.005	0.11553	0.00434	0.0008	439	1.4	80.5	10	81.2	3.4	110	200	87.5	16	74%
CANBC1024L_57	0.0577	0.006	0.00881	0.00022	0.054912	0.0477	0.0044	0.11116	0.00311	0.00072	977	2.2	56.9	5.8	56.5	1.4	110	180	63	15	51%
CANBC1024L_59	0.941	0.1	0.0755	0.0053	0.74211	0.0953	0.0053	-0.10581	0.0436	0.0086	591	26.8	671	52	468	32	1543	100	860	170	30%
CANBC1024L_60	0.0785	0.007	0.01234	0.00032	0.40527	0.0479	0.0033	0.34048	0.0069	0.0023	1685	32.6	76.6	6.6	79	2	100	140	138	47	79%
CANBC1024L_62	0.194	0.021	0.02903	0.00073	0.3628	0.0474	0.0035	0.097025	0.0088	0.0017	523	1.6	179	18	184.5	4.6	120	160	177	35	154%
CANBC1024L_63	0.096	0.025	0.01732	0.00063	0.051134	0.0385	0.0091	0.13419	0.0083	0.0029	111.3	2.7	90	22	110.7	4	-310	320	166	58	-36%
CANBC1024L_64	0.0648	0.01	0.00853	0.00022	0.14993	0.0527	0.008	-0.024177	0.00264	0.0005	451	1.0	63.5	9.5	54.8	1.4	230	280	53.2	10	24%
CANBC1024L_65	0.098	0.013	0.01228	0.00036	0.16816	0.059	0.0063	0.32102	0.00395	0.00084	415	1.2	94	12	78.7	2.3	480	220	80	17	16%
CANBC1024L_66	0.098	0.015	0.01357	0.00051	0.35906	0.0534	0.0077	-0.10664	0.0051	0.0013	435	4.9	94	14	86.9	3.3	360	220	102	26	24%
CANBC1024L_67	0.0574	0.0064	0.00834	0.00023	0.21758	0.0509	0.0056	0.3249	0.00256	0.00045	552	1.0	56.6	6.2	53.5	1.5	220	200	51.7	9.1	24%
CANBC1024L_69	0.093	0.027	0.0146	0.0012	0.13712	0.035	0.011	-0.11548	0.0063	0.0024	540	4.7	81	21	93.3	7.3	-310	390	127	48	-30%
CANBC1024L_70	0.1003	0.011	0.01482	0.00056	0.34173	0.0482	0.0033	0.095715	0.00483	0.0012	1112	8.1	96.7	10	94.8	3.6	112	140	97	24	85%
CANBC1024L_71	0.0849	0.0099	0.01347	0.00041	0.34661	0.0464	0.0045	0.084558	0.00431	0.00085	419	2.2	82.4	9.2	86.2	2.6	60	180	87	17	144%
CANBC1024L_72	0.087	0.02	0.01239	0.00066	-0.17173	0.049	0.011	0.56023	0.0052	0.0017	133.3	1.2	83	19	79.4	4.2	40	360	105	33	199%
CANBC1024L_73	0.9	0.13	0.02168	0.00096	0.95734	0.281	0.026	-0.92518	0.0467	0.0087	2460	3.5	648	65	138.2	6.1	3310	170	940	170	4%
CANBC1024L_74	0.088	0.015	0.01204	0.00047	0.12308	0.0525	0.0071	0.046486	0.00358	0.00076	221	1.1	87	14	77.1	3	320	270	72	15	24%
CANBC1024L_75	0.059	0.011	0.00817	0.00039	-0.070572	0.0558	0.01	0.33092	0.00288	0.00068	303	1.6	58.2	10	52.4	2.5	220	280	58	14	24%
CANBC1024L_76	0.16	0.017	0.02389	0.00074	0.59244	0.051	0.0038	0.38525	0.01	0.0026	595	14.3	152	14	152.2	4.6	230	150	200	51	66%
CANBC1024L_77	0.0852	0.011	0.01356	0.00044	0.088733	0.0443	0.0046	0.1197	0.00437	0.00087	479	1.7	82.7	9.9	86.8	2.8	-40	180	88	18	-217%
CANBC1024L_78	3.82	0.32	0.2587	0.0076	0.87471	0.1051	0.0055	0.38754	0.0689	0.011	345	3.0	1589	72	1482	39	1712	96	1345	210	87%
CANBC1024L_79	0.846	0.084	0.1011	0.0025	0.2069	0.0612	0.0043	0.32136	0.0281	0.0047	216	1.7	617	47	621	14	650	150	566	90	96%
CANBC1024L_80	0.188	0.023	0.02745	0.00074	0.06225	0.0508	0.005	0.37069	0.00788	0.0015	500	2.2	173	20	174.6	4.6	190	180	158	30	92%
CANBC1024L_81	4.48	0.43	0.297	0.011	0.77883	0.1085	0.0061	0.45538	0.0795	0.013	151.7	2.5	1734	75	1676	54	1766	100	1540	240	95%
CANBC1024L_82	0.087	0.013	0.01449	0.00061	0.14574	0.0442	0.0067	0.30988	0.00409	0.00088	312	2.8	84	12	92.7	3.9	-80	250	82	18	-116%
CANBC1024L_83	0.0924	0.011	0.0141	0.00068	0.7614	0.0487	0.0036	0.12908	0.00416	0.00096	1017	5.3	90.9	11	90.2	4.3	130	150	84	19	69%
CANBC1024L_84	0.0788	0.0085	0.01176	0.00034	0.74972	0.0479	0.0032	-0.19728	0.00368	0.0011	2017	24.0	76.8	8	75.4	2.2	113	140	74	22	67%
CANBC1024L_85	0.293	0.037	0.01403	0.00051	0.71782	0.15	0.012	-0.25671	0.00538	0.00086	1591	0.6	258	29	89.8	3.3	2330	130	108.4	17	4%
CANBC1024L_87	0.064	0.012	0.00852	0.00035	0.17461	0.052	0.0089	0.0493	0.00281	0.00077	556	4.0	63	11	54.7	2.2	150	280	57	15	36%
CANBC1024L_88	0.0797	0.011	0.01132	0.00049	0.56542	0.0492	0.0047	-0.015989	0.0031	0.0017	650	16.2	77.5	10	72.6	3.1	130	180	62	34	56%
CANBC1024L_90	0.0655	0.0067	0.0101	0.00031	0.58928	0.046	0.0033	0.41132	0.0049	0.0019	2120	41.6	64.3	6.3	64.8	2	22	140	98	38	295%
CANBC1024L_91	0.0578	0.0065	0.00855	0.00023	0.47207	0.0466	0.0035	0.043557	0.00274	0.0006	1521	2.7	57	6.2	54.9	1.5	50	150	55.4	12	110%
CANBC1024L_92	0.0991	0.012	0.01414	0.00041	0.24874	0.0485	0.0047	0.33121	0.00364	0.00075	650	3.0	95.5	11	90.5	2.6	150	200	73	15	60%
CANBC1024L_93	0.0501	0.0095	0.00833	0.00026	-0.24263	0.0465	0.0096	0.33497	0.0025	0.00058	381	1.5	49.2	9.1	53.5	1.7	-110	270	50.4	12	-49%
CANBC1024L_94	0.176	0.018	0.02616	0.00065	0.11882	0.0476	0.0039	0.11059	0.00764	0.0014	424	1.7	164	15	166.5	4.1	90	160	154	28	185%
CANBC1024L_96	0.064	0.011	0.00841	0.0003	0.30184	0.0531	0.0075	-0.10363	0.00301	0.00066	419	1.5	62.3	10	54	1.9	360	280	60.7	13	15%
CANBC1024L_97	3.26	0.33	0.2428	0.0095	0.5572	0.0969	0.0075	0.30707	0.061	0.014	19.94	1.1	1478	88	1409	47	1590	150	1200	260	89%
CANBC1024L_98	0.095	0.015	0.01256	0.00046	0.17843	0.0533	0.008	0.039674	0.00463	0.0011	255	1.8	91	14	80.4	2.9	240	260	93	22	34%
CANBC1024L_99	0.135	0.014	0.01895	0.00061	0.64823	0.0486	0.0034	-0.06801	0.00525	0.0011	671	5.1	130	12	121	3.9	130	140	106	23	93%
CANBC1024L_100	0.19	0.022	0.02829	0.00069	0.50744	0.0505	0.0044	-0.11515	0.0091	0.0018	222.6	2.4	175	19	179.8	4.3	190	170	183	36	95%
CANBC1024L_101	0.182	0.019	0.02826	0.00073	0.15483	0.0471	0.0038	0.15518	0.00785	0.0013	344	1.7	169	16	179.7	4.6	70	150	158	27	257%
CANBC1024L_102	0.238	0.033	0.0343	0.0013	0.44756	0.0505	0.0055	-0.018894	0.0107	0.0025	137	3.1	209	25	217.2	7.8	180	200	214	50	121%
CANBC1024L_104	0.063	0.022	0.0087	0.00033	0.14992	0.052	0.017	-0.13109	0.00276	0.00069	214	1.8	60	20	56.2	2	-50	410	56	14	-112%
CANBC1024L_105	0.102	0.023	0.00929	0.00053	0.10506	0.082	0.018	-0.010087	0.00427	0.0012	353	2.0	98	21	59.6	3.4	940	370	86	23	6%
CANBC1024L_106	0.41	0.037	0.043	0.0013	0.62979	0.0703	0.0046	0.32394	0.0273	0.0044	301	1.8	351	25	271.3	8.2	913	130	544	87	30%
CANBC1024L_107	0.0796	0.0088	0.01221	0.00042	0.4189	0.0485	0.0042	0.39217	0.0038	0.00064	960	1.3	77.6	8.2	78.2	2.7	110	170	76.6	13	71%
CANBC1024L_108	0.1002	0.0095	0.01496	0.00039	-0.049963	0.0466	0.0033	0.46528	0.00492	0.0011	836	8.3	96.8	8.8	95.7	2.5	50	140	99	21	191%
CANBC1024L_109	0.202	0.021	0.02847	0.00089	0.62732	0.0507	0.0033	-0.053646	0.00808	0.0014	664	1.5	186	18	180.9	5.6	235	150	163	27	77%

analysis	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES									
	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
WLR1_1	0.075	0.014	0.00831	0.00059	0.4708	0.0653	0.0093	-0.25408	0.00283	0.00033	468	0.8	73	13	53.4	3.8	610	260	57.1	6.7	9%
WLR1_2	0.66	0.13	0.01142	0.00096	0.40289	0.379	0.057	-0.15382	0.00855	0.0013	117	0.8	488	77	73.2	6.1	3680	260	172	25	2%
WLR1_3	0.253	0.045	0.0101	0.00075	0.31689	0.188	0.027	-0.17289	0.00615	0.0011	252	0.8	230	37	64.8	4.8	2620	240	124	21	2%
WLR1_4	0.237	0.028	0.02973	0.0018	0.37119	0.0568	0.0046	-0.1389	0.0112	0.0017	371	2.7	215	22	188.9	11	420	160	225	34	45%
WLR1_5	0.082	0.021	0.0079	0.00051	0.12768	0.075	0.019	-0.069884	0.0041	0.0015	360	0.7	78	19	50.7	3.2	610	370	81	31	8%
WLR1_6	0.15	0.04	0.00792	0.00056	0.018725	0.131	0.035	0.12757	0.00369	0.00056	154.2	1.0	137	34	50.8	3.6	1940	440	74.4	11	3%
WLR1_7	0.044	0.014	0.00803	0.00054	0.10471	0.039	0.012	0.12303	0.0034	0.0011	171.4	1.4	43	13	51.6	3.5	-360	380	68	21	-14%
WLR1_8	0.085	0.026	0.00828	0.00053	0.19312	0.077	0.024	-0.15167	0.0042	0.0023	224	3.2	81	23	53.1	3.4	530	430	63	15	10%
WLR1_10	0.06	0.021	0.00826	0.00059	-0.13899	0.053	0.019	0.28789	0.0048	0.002	196	1.2	57	20	53	3.8	-110	460	97	40	-48%
WLR1_11	0.127	0.038	0.00872	0.0007	0.12585	0.107	0.03	-0.023699	0.00369	0.001	185	1.2	116	32	56	4.5	1250	570	74	21	4%
WLR1_12	0.169	0.048	0.00857	0.00065	-0.13137	0.148	0.042	0.25176	0.0042	0.0015	201	1.1	151	39	55	4.1	1590	560	84	30	3%
WLR1_13	0.094	0.02	0.00843	0.00059	0.29975	0.079	0.015	0.35411	0.00411	0.00085	291	1.1	90	19	54.1	3.7	960	400	83	17	6%
WLR1_14	0.131	0.051	0.00798	0.00053	0.043758	0.125	0.047	-0.037186	0.00289	0.00065	225	1.1	116	40	51.2	3.4	1120	500	58	13	5%
WLR1_15	0.096	0.034	0.00807	0.00055	0.042889	0.099	0.038	0.001643	0.00317	0.00072	228	1.0	89	29	51.8	3.5	670	530	64	14	8%
WLR1_16	0.088	0.013	0.00797	0.00049	-0.098415	0.077	0.0081	0.29941	0.00311	0.00041	429	1.2	82.6	10	51.2	3.1	1010	200	62.7	8.3	5%
WLR1_17	0.157	0.03	0.00835	0.00058	0.35422	0.136	0.022	-0.17068	0.0055	0.0013	295	1.2	146	26	53.6	3.7	2150	330	111	26	2%
WLR1_18	0.067	0.02	0.00752	0.00053	-0.062371	0.065	0.019	0.19093	0.00249	0.00071	201.1	1.1	64	18	48.3	3.4	270	440	50	14	18%
WLR1_19	0.114	0.021	0.008	0.00054	0.079785	0.104	0.017	0.15195	0.00357	0.00057	263	1.0	109	19	51.4	3.5	1490	290	72	11	3%
WLR1_20	0.057	0.018	0.00786	0.00053	0.019747	0.055	0.017	0.028622	0.00277	0.00049	195.3	1.1	55	17	50.5	3.4	80	480	55.8	9.9	63%
WLR1_21	0.094	0.026	0.00824	0.00073	0.32466	0.088	0.022	-0.027452	0.005	0.0014	169.7	1.2	89	24	52.9	4.7	1040	530	102	28	5%
WLR1_22	0.066	0.02	0.00801	0.00057	-0.20369	0.063	0.022	0.27805	0.00292	0.00047	308	0.8	63	18	51.4	3.6	110	370	58.8	9.4	47%
WLR1_23	0.055	0.017	0.00777	0.00051	-0.058273	0.053	0.017	0.085251	0.00331	0.00078	198.1	1.2	54	16	49.9	3.3	-30	430	67	16	-166%
WLR1_24	0.125	0.035	0.00749	0.00056	-0.10127	0.115	0.027	0.3105	0.00303	0.00062	126.6	0.7	115	30	48.1	3.6	1310	510	61	12	4%
WLR1_25	0.0544	0.006	0.00819	0.00052	0.13679	0.0498	0.0038	0.2343	0.00293	0.00039	1507	3.9	53.7	5.8	52.6	3.3	160	140	59.1	7.9	33%
WLR1_26	0.074	0.011	0.00737	0.00045	0.38973	0.0736	0.0091	-0.2293	0.00291	0.00046	858	0.9	72.1	11	47.3	2.9	900	250	58.8	9.2	5%
WLR1_27	1.366	0.13	0.1411	0.0087	0.70224	0.0709	0.003	0.33909	0.0412	0.0041	848	1.2	873	54	851	49	965	87	815	80	88%
WLR1_28	0.071	0.022	0.00787	0.00053	0.4638	0.062	0.017	-0.2132	0.00279	0.0005	266	1.0	68	20	50.5	3.4	440	460	56.2	10	11%
WLR1_29	0.0821	0.01	0.00863	0.00054	0.067001	0.0713	0.0077	0.14401	0.00354	0.00055	429	1.0	79.9	9.7	55.4	3.4	850	190	71.5	11	7%
WLR1_30	0.051	0.014	0.00754	0.00048	0.1233	0.053	0.014	0.16441	0.00339	0.00088	217.9	1.4	49	13	48.4	3.1	50	390	68	18	97%
WLR1_31	0.059	0.027	0.00771	0.00059	-0.00076681	0.077	0.036	0.13029	0.0042	0.0014	137	1.5	56	25	49.5	3.8	20	630	84	28	248%
WLR1_32	0.0505	0.0054	0.00719	0.00047	0.54427	0.052	0.0031	-0.12042	0.00222	0.00022	2082	0.4	50	5.2	46.2	3	263	130	44.7	4.5	18%
WLR1_33	0.0848	0.01	0.00766	0.00047	0.23448	0.082	0.0078	0.14725	0.00291	0.00035	839	1.0	82.4	9.8	49.2	3	1180	190	58.6	7.1	4%
WLR1_34	0.0444	0.0057	0.00796	0.0005	-0.069722	0.0406	0.004	0.20144	0.00251	0.00031	612	1.3	44	5.5	51.1	3.2	-200	160	50.7	6.2	-26%
WLR1_35	0.068	0.016	0.00771	0.00049	0.42451	0.063	0.013	-0.31006	0.00278	0.00038	553	0.8	66	15	49.5	3.1	390	360	56.2	7.7	13%
WLR1_36	0.076	0.023	0.00793	0.00053	0.26608	0.068	0.019	-0.23658	0.00318	0.00053	198.5	1.1	73	21	50.9	3.4	360	470	64.1	11	14%
WLR1_37	0.163	0.033	0.00866	0.00055	0.56423	0.131	0.021	-0.42734	0.00452	0.00077	395	0.9	150	28	55.6	3.5	1900	260	91	16	3%
WLR1_38	0.034	0.012	0.00736	0.00053	-0.15006	0.04	0.017	0.30745	0.00267	0.00065	160	1.0	33	12	47.2	3.4	-440	440	54	13	-11%
WLR1_39	0.064	0.014	0.00851	0.00056	-0.10661	0.054	0.011	0.19668	0.0033	0.00045	289	1.2	62	13	54.6	3.6	180	300	66.5	9.1	30%
WLR1_40	0.056	0.011	0.00746	0.00046	0.37116	0.0539	0.0086	-0.26946	0.00254	0.00036	508	2.2	54.9	10	47.9	3	230	260	51.2	7.4	21%
WLR1_41	0.061	0.019	0.00793	0.00053	-0.11356	0.057	0.018	0.12984	0.0039	0.0012	199	1.2	58	18	50.9	3.4	150	480	79	23	34%
WLR1_42	0.082	0.021	0.00779	0.00052	-0.1587	0.076	0.019	0.35148	0.0039	0.0011	147	1.3	79	19	50	3.3	710	410	78	22	7%
WLR1_43	0.041	0.011	0.00788	0.00051	0.050908	0.041	0.011	0.00045448	0.00225	0.00037	225	1.3	40	11	50.6	3.2	-290	350	45.3	7.5	-17%
WLR1_44	0.046	0.0077	0.00747	0.00061	0.54975	0.0457	0.0048	-0.13012	0.00225	0.00025	700	0.8	47	6.6	48	3.9	-10	170	45.5	5.1	-480%
WLR1_45	0.048	0.016	0.00783	0.00053	-0.028182	0.046	0.015	0.048005	0.00272	0.00082	158.4	1.0	42	12	50.3	3.4	-270	340	55	16	-19%
WLR1_46	3.893	0.35	0.2595	0.016	0.81782	0.1098	0.0044	0.67633	0.0532	0.0055	414	1.9	1617	67	1487	80	1794	73	1048	110	83%
WLR1_47	0.094	0.013	0.00763	0.00049	0.15021	0.0911	0.01	0.16456	0.00327	0.00044	485	1.3	90.5	12	49	3.1	1310	220	65.9	8.9	4%
WLR1_48	0.0724	0.0097	0.00798	0.00049	-0.036718	0.0654	0.007	0.36682	0.00292	0.00039	987	1.0	70.8	9	51.3	3.1	690	190	58.9	7.9	7%
WLR1_49	0.064	0.015	0.00762	0.00055	0.0071408	0.062	0.015	0.26549	0.0038	0.0012	233	1.0	62	14	48.9	3.5	540	410	76	24	9%
WLR1_50	0.0621	0.0094	0.00718	0.00043	0.14873	0.0626	0.0082	-0.0019753	0.00244	0.00032	484	0.8	60.9	8.9	46.1	2.8	600	280	49.3	6.4	8%
WLR1_51	0.152	0.045	0.00854	0.00058	0.42443	0.115	0.028	-0.21285	0.00343	0.00058	264	1.4	137	36	54.8	3.7	1560	400	69.2	12	4%
WLR1_52	0.093	0.013	0.00791	0.00049	-0.016672	0.0839	0.0094	0.39482	0.0028	0.0003	845	0.5	89.9	12	50.8	3.1	1150	220	56.5	6.1	4%
WLR1_53	0.174	0.033	0.00839	0.00055	0.19224	0.142	0.022	0.24053	0.00443	0.00073	303	1.0	160	28	53.8	3.5	2070	270	89	15	3%
WLR1_54	0.068	0.029	0.00807	0.0006	0.064242	0.063	0.027	-0.029465	0.00326	0.00055	140.8	1.1	64	25	51.8	3.9	580	640	65.7	11	9%
WLR1_55	0.0687	0.011	0.00759	0.00046	0.47825	0.066	0.0098	-0.29991	0.00277	0.00032	774	1.0	67.1	11	48.7	2.9	740	290	55.9	6.5	7%
WLR1_56	0.071	0.013	0.00794	0.00053	0.033108	0.066	0.011	0.11921	0.00392	0.00092	392	1.5	70	12	51	3.4	690	300	79	18	7%
WLR1_57	0.303	0.086	0.00872	0.00062	0.4745	0.231	0.056	-0.37589	0.00344	0.00047	208	0.6	251	63	55.9	3.9	2430	490	69.4	9.6	2%
WLR1_58	0.0697	0.012	0.00791	0.00047	0.36415	0.0645	0.0096	-0.25532	0.00261	0.00032	980	1.1	68	11	50.8	3	550	260	52.7	6.5	9%
WLR1_59	0.082	0.02	0.00821	0.0006	0.71079	0.073	0.015	-0.53401	0.00314	0.00045	301	0.8	79	18	52.7	3.8	730	370	63.3	9.1	7%
WLR1_60	0.069	0.018	0.00741	0.00046	0.18278	0.065	0.016	-0.062693	0.00284	0.001	252	1.2	63	15	47.6	3	510	430	57	20	9%
WLR1_61	0.508	0.075	0.01196	0.00086	0.6173	0.309	0.032	-0.19989	0.0107	0.0018	219	0.9	410	48	76.6	5.5	3490	160	216	35	2%
WLR1_62	0.071	0.017	0.0086	0.00054	0.13695	0.06	0.014	-0.096782	0.00308	0.00062	288	3.0	68	15	55.2	3.4	230	300	62	12	24%
WLR1_63	0.184	0.049	0.00978	0.00083	0.45199	0.134	0.032	-0.067733	0.00516	0.0011	179.7	1.0	165	41	62.8	5.3	1930	470	104	22	3%
WLR1_64	0.134	0.037	0.00898	0.00065	0.6874	0.106	0.026	-0.54117	0.00447	0.00092	207	1.0	123	32	57.6	4.2	1320	520	90	19	4%
WLR1_65	0.0621	0.0089	0.00782	0.00047	0.09132	0.0604	0.0081	0.037466	0.00257	0.00029	868	0.7	60.9	8.3	50.2	3	380	190	51.8	5.8	13%
WLR1_66	0.078	0.026	0.00757	0.00047	0.11943	0.075	0.024	-0.078928	0.00318	0.00089	190	1.4	74	23	48.6	3	450	450	64	18	11%
WLR1_67	0.081	0.026	0.00794	0.00051	0.22327	0.073	0.023	-0.16306	0.00232	0.00029	271	0.7	76	23	51	3.3	390	370	46.8	5.9	13%
WLR1_68	0.219	0.056	0.00888	0.00069	0.72835	0.167	0.035	-0.35297	0.00523	0.001	243	0.8	203	49	57	4.4	2400	410	105	21	2%
WLR1_69	0.149	0.023	0.00808	0.00058	0.13261	0.133	0.018	0.070059	0.00598	0.00087	310	2.5	140	20	51.9	3.7	1980	220	121	17	3%
WLR1_70	0.061	0.017	0.00784	0.0005	-0.055826	0.057	0.016	0.11206	0.00245	0.00033	283	0.6	59	16	50.3	3.2	210	390	49.4	6.6	24%
WLR1_71	0.282	0.068	0.00924	0.00092	0.76561	0.191	0.038	-0.57002	0.00485	0.00088	208	0.5	240	54	59.3	5.9	2310	450	98	18	3%
WLR1_72	0.048	0.011	0.00766	0.00047	0.10783	0.046	0.011	-0.077046	0.00289	0.00045	224	1.1	47	10	49.2	3	-170	270	58.4	9	-29%
WLR1_73	0.085	0.018	0.00851	0.00057	0.40654	0.075	0.014	-0.028629	0.00325	0.00052	286	0.7	81	16	54.6	3.7	820	330	65.7	10	7%
WLR1_74	0.066	0.016	0.00779	0.00049	0.21048	0.057	0.012	0.0094158	0.00275	0.00042	295	0.8	64	15	50	3.2	390	360	55.6	8.4	13%
WLR1_75	0.196	0.053	0.00792	0.00062	0.90478	0.161	0.034	-0.85091	0.00364	0.00064	643	0.4	174	43	50.8	4	2140	390	73	13	2%
WLR1_76	0.088	0.031	0.00744	0.00052	0.26133	0.083	0.028	-0.2025	0.00225	0.00036	196.1	1.0	81	27	47.8	3.3	540	480	45.3	7.2	9%
WLR1_77	0.153	0.037	0.00859	0.00055	0.35507	0.133	0.029	-0.22652	0.00294	0.00048	270	0.5	140	32	55.2	3.5	1620	450	59.3	9.7	3%
WLR1_78	0.05	0.0071	0.00828	0.00052	-0.066606	0.0448	0.0057	0.2054	0.00283	0.00043	421	1.2	49.4	6.8	53.2	3.3	-40	210	57.1	8.7	-133%
WLR1_80	0.0614	0.011	0.00838	0.00053	0.23844	0.053	0.0075	-0.092688	0.00297	0.0004	485	0.9	60.1	10	53.8	3.4	220	240	59.9	8.1	24%
WLR1_81	0.068	0.019	0.00805	0.00053	0.076041	0.059	0.015	-0.0030754	0.00315	0.00068	162.5	1.4	65	17	51.7	3.4	210	380	63	14	25%
WLR1_82	0.053	0.016	0.00771	0.00057	-0.041646	0.05	0.016	0.1863	0.00315	0.00055	145.4	1.4	51	15	49.5	3.7	-120	430	63.5	11	-41%
WLR1_83	0.064	0.016	0.00763	0.00054	0.069803	0.062	0.015	-0.0022373	0.00297	0.0007	189	1.2	62	15	49	3.5	370	390	60	14	13%
WLR1_84	0.0652	0.0091	0.0092	0.00059	0.26633	0.0515	0.0056	-0.13199	0.00311	0.00037	684	0.7	63.9	8.5	59	3.8	200	180	62.7	7.5	30%
WLR1_86	0.089	0.018	0.00797	0.00059	0.11319	0.082	0.015	0.037112	0.00359	0.00053	273	1.4	85	16	51.2	3.8	890	350	72.5	11	6%
WLR1_87	0.0503	0.0074	0.0074	0.00046	0.085915	0.0491	0.0058	0.090619	0.00227	0.00026	479	0.9	49.7	7.1	47.6	2.9	150	220	45.8	5.3	32%
WLR1_88	0.067	0.014	0.00762	0.00054	-0.063113	0.063	0.013	0.22692	0.0043	0.0016	166	1.1	65	13	48.9	3.4	560	390	86	31	9%
WLR1_89	0.096	0.022	0.00752	0.00056	-0.10692	0.102	0.031	0.26274	0.00297	0.00045	175	1.3	91	20	48.3	3.6	940	420	59.9	9.2	5%
WLR1_90	0.114	0.023	0.00841	0.00054	0.36357	0.102	0.019	-0.21366	0.0059	0.0024	258	0.9	108	21	54	3.5	1400	390	119	47	4%
WLR1_91	0.136	0.04	0.00815	0.00066	0.15862	0.114	0.032	0.14973	0.0056	0.0023	223	1.3	131	35	52.3	4.2	1340	520	112	47	4%
WLR1_92	0.555	0.06	0.0123	0.00082	0.52949	0.329	0.021	0.20971	0.0109	0.0014	193.4	0.9	446	40	78.8	5.2	3603	98	218	29	2%
WLR1_93	0.074	0.017	0.00813	0.0006	0.099891	0.061	0.012	0.039392	0.00296	0.00047	201	1.2	72	16	52.2	3.8	460	380	59.8	9.5	11%
WLR1_94	0.24	0.059	0.00906	0.00073	0.22859	0.187	0.042	-0.22378	0.00565	0.001	153.9	1.1	209	45	58.1	4.7	2280	370	114	21	3%
WLR1_95	0.066	0.017	0.00748	0.00047	-0.034589	0.069	0.019	0.12823	0.00353	0.0008	175.8	1.2	64	15	48	3	360	340	71	16	13%
WLR1_96	0.071	0.013	0.00825	0.00054	0.26151	0.0609	0.0096	-0.072182	0.00313	0.00073	284	1.6	69	12	52.9	3.5	430	290	63	15	12%
WLR1_97	0.083	0.015	0.00812	0.00049	0.20139	0.0686	0.01	-0.062339	0.0083	0.0027	510	3.7	81	14	52.1	3.1	840	290	166	54	6%
WLR1_98	0.0589	0.0063	0.00829	0.00051	0.02902	0.0516	0.0037	0.34841	0.00283	0.00033	733	0.5	58	6	53.2	3.3	250	150	57.1	6.6	21%
WLR1_99	0.071	0.013	0.00746	0.00046	0.22776	0.069	0.012	-0.10793	0.00271	0.00038	496	1.2	69	12	47.9	3	660	280	54.7	7.7	7%
WLR1_100	0.787	0.1	0.01448	0.00094	0.52731	0.385	0.034	-0.3248	0.009	0.0017	160.3	0.5	586	57	92.7	6	3830	130	180	33	2%
WLR1_101	0.195	0.03	0.00962	0.00068	0.09508	0.14	0.017	0.29637	0.00423	0.00063	271	0.6	179	25	61.7	4.3	2130	210	85.3	13	3%
WLR1_102	0.052	0.0089	0.00811	0.00054	0.077397	0.0466	0.0074	-0.037091	0.00335	0.00062	272	1.3	51.2	8.5	52.1	3.5	-10	240	68	12	-521%
WLR1_103	0.09	0.017	0.0079	0.00053	0.11174	0.085	0.015	0.021536	0.00328	0.00055	232.9	1.3	86	16	50.7	3.4	980	340	66.2	11	5%
WLR1_104	0.133	0.03	0.01005	0.00078	0.78472	0.095	0.015	-0.22527	0.0078	0.002	930	3.3	124	25	64.4	5	1380	270	156	41	5%
WLR1_105	0.07	0.013	0.00824	0.00054	0.2205	0.0604	0.0096	-0.19019	0.0026	0.00042	337	1.1	68	12	52.9	3.4	440	260	52.4	8.4	12%
WLR1_106	0.119	0.036	0.00855	0.0006	0.9069	0.092	0.021	-0.81036	0.003	0.00041	1653	0.7	110	30	54.9	3.8	1060	370	60.4	8.2	5%
WLR1_107	0.081	0.013	0.00787	0.00049	0.75032	0.0733	0.0089	-0.59892	0.00269	0.00029	1124	0.7	79	12	50.6	3.1	890	210	54.3	5.9	6%
WLR1_108	0.1055	0.0099	0.01502	0.00096	0.58283	0.0508	0.0025	0.41302	0.00565	0.00097	3160	7.1	102.3	8.7	96.1	6.1	232	110	114	19	41%
WLR1_109	0.092	0.013	0.00939	0.00064	0.072234	0.0751	0.009	0.29804	0.00327	0.00041	625	0.7	88.8	12	60.2	4.1	940	250	65.9	8.3	6%
WLR1_110	0.809	0.11	0.01479	0.0012	0.84696	0.395	0.033	-0.66619	0.0212	0.003	191.2	1.3	598	65	94.6	7.5	3840	140	424	60	2%

	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
WLR1_111	0.069	0.012	0.00757	0.00051	0.88852	0.066	0.0084	-0.73796	0.00307	0.00044	590	1.1	67.7	11	48.6	3.3	660	210	61.9	8.8	7%
WLR1_112	0.074	0.017	0.00816	0.00054	0.35404	0.065	0.013	-0.27102	0.00296	0.00045	184	1.3	72	15	52.4	3.5	520	330	59.7	9.1	10%
WLR1_113	0.119	0.027	0.00837	0.00059	0.027247	0.119	0.03	0.16174	0.00344	0.00072	100.8	1.1	112	23	53.8	3.7	1400	390	69	14	4%
WLR1_114	0.177	0.037	0.00895	0.00061	0.83675	0.135	0.022	-0.59812	0.00487	0.00092	222	1.2	154	27	57.4	3.9	2010	340	98	18	3%
WLR1_115	0.089	0.015	0.00776	0.0005	0.020742	0.082	0.013	0.15105	0.00321	0.00062	289	1.4	86	14	49.8	3.2	1000	290	65	12	5%
WLR1_116	0.31	0.079	0.01162	0.001	0.34846	0.18	0.038	-0.27922	0.0057	0.0012	86	0.7	258	59	74.5	6.6	2150	450	114	25	3%
WLR1_117	0.0552	0.0079	0.008	0.0005	0.22057	0.052	0.0065	-0.087198	0.00234	0.0003	443	1.2	54.4	7.5	51.3	3.2	160	190	47.2	6.1	32%
WLR1_118	0.063	0.015	0.00828	0.00058	0.063622	0.055	0.012	0.054001	0.00263	0.00057	138.1	1.5	62	14	53.2	3.7	340	360	53	12	16%
WLR1_119	0.078	0.017	0.00796	0.00051	0.073497	0.07	0.014	0.024857	0.00279	0.00043	181	1.1	76	15	51.1	3.3	770	360	56.3	8.6	7%
WLR1_120	0.116	0.023	0.00873	0.00066	0.23834	0.093	0.015	-0.1001	0.00442	0.00075	223	1.3	110	21	56	4.2	1350	310	89	15	4%
WLR2_1	0.0577	0.009	0.00796	0.00039	-0.19088	0.0534	0.0085	0.35245	0.00322	0.00071	272.3	3.3	56.6	8.5	51.1	2.5	210	260	65	14	24%
WLR2_2	0.214	0.021	0.02498	0.0011	0.30419	0.0616	0.0055	-0.10886	0.01111	0.0012	1018	2.5	196	17	159	6.6	580	160	223	24	27%
WLR2_3	0.28	0.019	0.03151	0.0013	0.38301	0.0655	0.0035	0.0034966	0.01351	0.0013	305	2.3	250	15	200	8.4	810	93	271	26	25%
WLR2_4	0.0487	0.0061	0.00758	0.0003	-0.0070405	0.0467	0.0056	0.089332	0.00267	0.00037	359	1.3	48.1	5.9	48.7	1.9	-20	190	53.9	7.4	-244%
WLR2_5	0.1707	0.01	0.02374	0.001	0.59762	0.0515	0.0022	0.21458	0.00793	0.00066	1160	1.8	159.8	9	151.2	6.5	253	95	159.6	13	60%
WLR2_6	0.0572	0.0052	0.00792	0.00038	0.45743	0.0514	0.0038	0.070288	0.00291	0.00029	849	1.1	56.4	5	50.8	2.4	230	150	58.8	5.8	22%
WLR2_7	0.0593	0.0094	0.00801	0.00037	-0.21602	0.0531	0.0086	0.44807	0.00293	0.00043	367	1.5	58.1	8.9	51.4	2.4	190	280	59.2	8.6	27%
WLR2_8	0.0567	0.0058	0.0076	0.00033	-0.021099	0.0549	0.0052	0.24625	0.00305	0.00036	871	2.9	55.9	5.5	48.8	2.1	370	190	61.6	7.3	13%
WLR2_9	0.0576	0.0058	0.00803	0.00036	-0.11113	0.052	0.0055	0.31719	0.00312	0.00038	748	2.8	56.7	5.5	51.6	2.3	210	180	62.9	7.7	25%
WLR2_10	0.194	0.014	0.02871	0.0012	0.23918	0.0491	0.0031	0.010604	0.00899	0.0011	459	2.9	179.4	11	182.5	7.4	104	92	181	21	175%
WLR2_11	0.0483	0.004	0.00744	0.00035	0.23323	0.0472	0.0036	0.20253	0.00287	0.00038	926	2.8	47.9	3.8	47.8	2.2	60	140	57.9	7.7	80%
WLR2_12	0.351	0.023	0.023	0.0013	0.011016	0.1125	0.0081	0.70055	0.01432	0.0011	2360	1.9	305	18	146.6	8.4	1820	140	287	22	8%
WLR2_13	0.1692	0.0097	0.02508	0.00096	0.36258	0.0487	0.0019	0.14594	0.00868	0.00067	1379	1.8	158.6	8.4	159.7	6.1	134	82	174.6	13	119%
WLR2_14	0.062	0.016	0.008	0.00039	-0.058853	0.056	0.015	0.22722	0.00314	0.00073	271	3.2	60	15	51.3	2.5	120	360	63	15	43%
WLR2_15	0.213	0.053	0.0092	0.00048	0.65273	0.149	0.031	-0.43227	0.011	0.0034	446	2.2	189	43	59	3	2110	430	220	68	3%
WLR2_16	0.2275	0.014	0.02466	0.00099	0.73878	0.0664	0.0025	0.018258	0.01054	0.0008	1550	1.8	209	11	157	6.2	808	79	212	16	19%
WLR2_17	0.047	0.0034	0.00746	0.0003	0.0029067	0.0459	0.0031	0.33116	0.00273	0.00032	1500	1.5	46.6	3.3	47.9	1.9	10	130	55.1	6.4	479%
WLR2_18	0.0623	0.0098	0.00727	0.0003	0.001864	0.0613	0.0095	0.17473	0.00261	0.00028	529	1.1	61	9.3	46.7	1.9	450	280	52.7	5.7	10%
WLR2_19	0.0504	0.0063	0.00783	0.00035	0.03013	0.0488	0.0068	0.062265	0.00263	0.00024	576	0.6	49.8	6	50.3	2.3	30	210	53.2	4.9	168%
WLR2_20	0.1159	0.011	0.0089	0.00033	-0.061453	0.0943	0.0081	0.21446	0.00564	0.00061	569	2.9	111	9.8	57.1	2.1	1500	160	113.6	12	4%
WLR2_21	0.185	0.036	0.00909	0.00049	0.84208	0.137	0.017	-0.68495	0.00683	0.001	560	2.1	155	21	58.3	3.2	2090	170	137	20	3%
WLR2_22	0.1924	0.013	0.02492	0.0012	0.59274	0.0579	0.0028	0.29782	0.00928	0.00086	669	2.5	178.4	11	158.7	7.7	502	110	187	17	32%
WLR2_23	0.348	0.035	0.0284	0.0011	0.1469	0.0892	0.0081	0.11173	0.0134	0.002	163	1.7	301	26	180.5	7	1300	190	268	40	14%
WLR2_24	0.163	0.022	0.00846	0.00038	0.79729	0.137	0.014	-0.6693	0.00726	0.0011	949	2.3	155	20	54.3	2.4	2120	190	146	21	3%
WLR2_25	0.168	0.037	0.00861	0.00035	0.28216	0.139	0.03	-0.15833	0.0088	0.002	535	2.0	153	32	55.3	2.3	1780	440	183	42	3%
WLR2_26	0.266	0.06	0.01	0.00062	0.62236	0.184	0.034	-0.55418	0.0071	0.0016	362	1.0	229	46	64.2	4	2390	340	143	31	3%
WLR2_27	0.056	0.012	0.00837	0.00038	-0.1555	0.049	0.011	0.21393	0.00328	0.00041	300	0.9	55	12	53.7	2.4	10	340	66.1	8.3	537%
WLR2_28	0.05	0.014	0.0076	0.00042	0.053741	0.049	0.014	-0.026889	0.00294	0.00042	324	1.6	48	13	48.8	2.7	-110	360	59.3	8.5	-44%
WLR2_29	0.0537	0.0042	0.00775	0.0003	0.32249	0.0508	0.0032	-0.024073	0.00268	0.00024	1659	1.1	53.1	4	49.8	1.9	210	120	54	4.8	24%
WLR2_30	0.093	0.011	0.00794	0.00036	0.5273	0.0846	0.0086	-0.27395	0.00397	0.00054	830	2.4	89.7	10	51	2.3	1160	220	80	11	4%
WLR2_31	0.0395	0.0048	0.00832	0.00038	0.30888	0.0346	0.0035	-0.12525	0.00321	0.00069	445	3.1	39.2	4.7	53.4	2.4	-430	140	65	14	-12%
WLR2_32	0.1853	0.01	0.02418	0.00095	0.15267	0.056	0.0027	0.66078	0.00853	0.00069	2030	1.7	172.5	8.8	154	6	460	100	171.8	14	33%
WLR2_33	0.167	0.034	0.00919	0.00051	0.45742	0.128	0.022	-0.31701	0.005	0.00065	222	1.1	153	28	59	3.2	1790	300	101	13	3%
WLR2_34	0.42	0.041	0.01223	0.00053	0.88356	0.249	0.016	-0.54194	0.00548	0.00051	2360	0.4	353	29	78.3	3.4	3180	100	110.4	10	2%
WLR2_35	0.132	0.077	0.00829	0.00048	0.047245	0.103	0.059	0.011533	0.0049	0.0015	82.2	2.1	93	54	53.2	3.1	100	900	98	29	53%
WLR2_36	0.0627	0.01	0.00766	0.00035	-0.26193	0.0606	0.01	0.40915	0.00413	0.00075	561	2.5	61.3	9.6	49.2	2.2	520	320	83	15	9%
WLR2_37	0.273	0.017	0.0258	0.0013	0.70991	0.0773	0.0037	0.41686	0.01093	0.00086	1820	1.9	244.9	13	164	8.4	1147	92	219.6	17	14%
WLR2_39	0.174	0.016	0.02465	0.001	0.030305	0.0521	0.0046	0.12508	0.00879	0.0011	407	1.7	162	14	157	6.3	240	160	177	22	65%
WLR2_40	0.1961	0.013	0.0284	0.0015	0.57078	0.0509	0.0024	0.2481	0.01043	0.001	646	5.7	181.5	11	180.3	9.5	223	99	210	20	81%
WLR2_41	0.0438	0.0062	0.00763	0.00041	0.15643	0.0409	0.0046	0.082844	0.00249	0.00026	569	1.1	43.4	6	49	2.6	-190	180	50.3	5.3	-26%
WLR2_42	0.0675	0.01	0.0083	0.00037	-0.24599	0.062	0.011	0.36711	0.0043	0.00083	479	3.6	65.9	9.6	53.3	2.3	430	280	87	17	12%
WLR2_43	0.0618	0.0041	0.00832	0.00034	0.18161	0.0535	0.003	0.36872	0.00296	0.00027	1787	1.6	60.9	3.9	53.4	2.2	320	120	59.8	5.4	17%
WLR2_44	0.047	0.0064	0.0076	0.00035	0.21664	0.0473	0.0066	0.01644	0.0044	0.0021	434	3.0	46.5	6.2	48.8	2.3	30	200	88	42	163%
WLR2_45	0.1716	0.012	0.02461	0.0011	0.46185	0.0518	0.0028	0.13575	0.00871	0.00074	625	2.1	160.5	10	156.7	7	300	130	175.3	15	52%
WLR2_46	0.073	0.0059	0.00827	0.00037	0.79023	0.0636	0.0033	-0.50248	0.00243	0.00018	3590	0.4	71.5	5.6	53.1	2.4	699	110	49.1	3.6	8%
WLR2_47	0.286	0.022	0.00922	0.00037	0.30622	0.223	0.013	-0.028109	0.011	0.0013	405	2.2	254	17	59.2	2.3	3010	96	221	25	2%
WLR2_48	0.0586	0.0094	0.00859	0.00046	0.18763	0.0487	0.0072	-0.05277	0.00326	0.0006	375.5	3.8	57.5	8.9	55.1	2.9	10	210	66	12	551%
WLR2_49	0.0708	0.0099	0.00831	0.00034	-0.11769	0.0615	0.0085	0.28675	0.00292	0.00029	427	0.6	69	9.3	53.3	2.2	530	270	58.9	5.9	10%
WLR2_50	0.3	0.035	0.02101	0.0011	-0.41686	0.107	0.014	0.63066	0.00946	0.00075	1854	2.0	263	27	134	6.7	1520	270	190.3	15	9%
WLR2_51	0.0529	0.0051	0.0079	0.0004	0.23063	0.0488	0.0044	-0.077535	0.00286	0.00037	770	3.2	52.3	4.9	50.7	2.6	130	170	57.7	7.4	39%
WLR2_52	0.072	0.0085	0.00842	0.0004	0.47289	0.0613	0.0059	-0.20743	0.0029	0.00023	1650	0.9	70.4	8	54.1	2.6	560	180	58.4	4.7	10%
WLR2_53	0.28	0.091	0.00924	0.0009	0.90661	0.183	0.043	-0.66619	0.0064	0.0015	198.7	0.8	228	66	59.3	5.7	1950	530	129	30	3%
WLR2_54	0.059	0.01	0.00788	0.00038	0.20114	0.0516	0.0076	-0.068752	0.00258	0.00025	700	0.7	58.1	9.7	50.6	2.4	160	230	52.1	5.1	32%
WLR2_55	0.076	0.011	0.00779	0.00032	0.10526	0.0695	0.0097	-0.0099031	0.0053	0.0014	563	3.6	74	11	50	2.1	730	240	106	29	7%
WLR2_56	0.244	0.035	0.00964	0.00057	0.30037	0.177	0.024	0.24028	0.0059	0.0011	193	0.7	218	29	61.9	3.6	2490	270	112	20	2%
WLR2_57	0.075	0.015	0.00792	0.00035	-0.04722	0.064	0.011	0.17074	0.00395	0.001	359	3.7	72	13	50.8	2.3	510	300	80	20	10%
WLR2_58	0.147	0.033	0.00872	0.00045	0.59472	0.113	0.022	-0.49425	0.00464	0.0008	461	1.1	135	29	55.9	2.8	1390	390	93	16	4%
WLR2_59	0.282	0.02	0.03202	0.0012	-0.12799	0.0626	0.0044	0.53962	0.0145	0.0023	253	2.4	251	16	203.2	7.7	680	150	290	46	30%
WLR2_60	0.214	0.015	0.02569	0.001	0.13221	0.0589	0.0033	0.22783	0.01044	0.0011	750	1.8	196.5	12	163.5	6.4	530	120	210	23	31%
WLR2_61	0.0618	0.0073	0.00804	0.0006	0.37035	0.0549	0.0047	0.12004	0.0029	0.0003	1230	2.0	60.7	6.9	51.6	3.8	350	170	58.5	6	15%
WLR2_62	0.0457	0.0079	0.00727	0.00033	0.14941	0.0435	0.0066	-0.1043	0.00271	0.00036	441	1.3	45.1	7.5	46.7	2.1	-180	190	54.7	7.3	-26%
WLR2_63	0.228	0.056	0.00936	0.00053	0.39127	0.168	0.038	-0.16609	0.0072	0.0013	109.6	1.1	199	44	60	3.4	2480	450	144	27	2%
WLR2_64	0.196	0.031	0.00853	0.00048	0.63512	0.155	0.018	-0.32008	0.004	0.00043	1121	0.6	178	26	54.8	3.1	2260	210	80.6	8.6	2%
WLR2_65	0.084	0.0064	0.00813	0.00032	0.19238	0.0749	0.0055	0.16636	0.0047	0.00067	671	3.2	81.8	6	52.2	2	1050	140	95	13	5%
WLR2_66	0.06	0.013	0.00875	0.00048	-0.06938	0.048	0.0096	0.2759	0.00393	0.00072	296	3.4	59	12	56.1	3.1	-70	280	79	14	-80%
WLR2_67	0.06	0.0067	0.00791	0.00035	-0.083513	0.0557	0.0064	0.44707	0.0028	0.00032	439	0.8	59	6.4	50.8	2.2	340	220	56.5	6.4	15%
WLR2_68	0.1739	0.0098	0.02538	0.00095	0.5997	0.0493	0.0018	0.31189	0.00851	0.00063	1710	1.7	162.7	8.4	161.6	6	160	79	171.3	13	101%
WLR2_69	0.0509	0.0037	0.00782	0.00035	0.25722	0.0468	0.0024	0.11696	0.00303	0.00044	740	3.6	50.3	3.6	50.2	2.2	56	100	61.2	8.8	90%
WLR2_70	0.102	0.019	0.00831	0.00039	-0.021545	0.089	0.017	0.16688	0.00343	0.00053	238	1.2	98	17	53.3	2.5	1170	380	69.2	11	5%
WLR2_71	0.092	0.0097	0.00796	0.00042	0.17211	0.0856	0.0091	0.29005	0.00348	0.0004	356	1.0	89	9	51.1	2.7	1210	190	70.3	8	4%
WLR2_72	0.056	0.0062	0.00781	0.00032	0.066349	0.0518	0.0057	0.021417	0.00315	0.0006	479	4.0	55.1	5.9	50.2	2.1	160	170	64	12	31%
WLR2_73	0.0861	0.009	0.00834	0.00042	0.23933	0.0745	0.0075	0.066024	0.0046	0.0006	650	3.1	83.5	8.3	53.5	2.7	940	200	93	12	6%
WLR2_74	0.178	0.033	0.00899	0.00038	0.51908	0.149	0.026	-0.36902	0.00424	0.00065	277	0.8	170	30	57.7	2.4	2090	290	86	13	3%
WLR2_75	0.282	0.035	0.00919	0.00036	0.15424	0.219	0.025	0.050633	0.0107	0.0013	469	2.0	249	27	59	2.3	2850	180	216	25	2%
WLR2_76	0.0508	0.0062	0.00776	0.00032	-0.0038525	0.0463	0.0051	0.10102	0.00277	0.00032	431	1.1	50.2	5.9	49.8	2.1	10	180	55.9	6.4	498%
WLR2_77	0.072	0.0085	0.00787	0.00041	0.2616	0.0656	0.0067	0.0020771	0.00387	0.00052	457	2.9	70.3	7.9	50.6	2.7	680	190	78.1	10	7%
WLR2_78	0.177	0.031	0.00708	0.00032	0.33282	0.182	0.03	0.090175	0.00504	0.00075	1211	1.9	162	27	45.5	2.1	2180	420	102	15	2%
WLR2_79	0.475	0.027	0.01414	0.00066	0.81514	0.2403	0.008	0.49681	0.00879	0.00065	4950	0.8	396	19	90.5	4.2	3119	53	176.8	13	3%
WLR2_80	0.1898	0.013	0.0238	0.0013	-0.70698	0.0559	0.0051	0.93876	0.0103	0.0013	739	2.4	176.1	11	151.7	8.2	410	180	207	25	37%
WLR2_81	0.0562	0.0033	0.00795	0.00039	0.5408	0.0517	0.0023	0.54111	0.00265	0.0002	4120	1.1	55.5	3.2	51	2.5	270	100	53.5	4.1	19%
WLR2_82	0.0549	0.0089	0.00773	0.00035	0.10705	0.0517	0.0079	-0.019866	0.00265	0.00033	326	1.4	53.9	8.5	49.6	2.2	160	250	53.5	6.7	31%
WLR2_83	0.0671	0.0065	0.00743	0.00035	-0.13833	0.0652	0.0066	0.45381	0.0026	0.00027	550	0.7	65.8	6.2	47.7	2.2	660	200	52.4	5.4	7%
WLR2_84	0.0985	0.011	0.0074	0.00028	0.18134	0.0969	0.0099	-0.022251	0.00492	0.00077	451	2.9	94.9	10	47.5	1.8	1480	200	99	16	3%
WLR2_85	0.0511	0.0034	0.0078	0.00041	0.18243	0.0483	0.0026	0.5017	0.00297	0.00037	900	2.9	50.6	3.3	50.1	2.6	129	110	60	7.4	39%
WLR2_86	0.0497	0.0045	0.00715	0.00034	0.074224	0.0489	0.0036	0.33374	0.0026	0.00038	863	2.7	49.2	4.3	45.9	2.2	120	140	52.5	7.6	38%
WLR2_87	0.0794	0.01	0.00803	0.00036	0.22803	0.0721	0.0088	0.080338	0.00305	0.00036	581	1.0	77.2	9.5	51.6	2.3	950	260	61.6	7.2	5%
WLR2_88	0.102	0.013	0.00746	0.00032	0.17355	0.1	0.012	0.11137	0.00402	0.00049	1220	1.9	98	12	47.9	2.1	1530	250	81	9.8	3%
WLR2_89	0.931	0.09	0.01377	0.00064	0.39661	0.48	0.04	-0.052832	0.0157	0.0016	334	0.8	662	46	88.2	4.1	4170	120	314	32	2%
WLR2_90	0.0527	0.004	0.00772	0.0004	0.36549	0.0493	0.0033	0.067005	0.00266	0.00021	894	0.5	52.1	3.8	49.5	2.5	150	130	53.6	4.3	33%
WLR2_91	0.0706	0.0059	0.00767	0.00038	-0.013814	0.0646	0.0055	0.40767	0.0042	0.0014	431	2.7	69.1	5.6	49.3	2.4	750	180	85	27	7%
WLR2_92	0.29	0.018	0.0312	0.0014	-0.32856	0.0668	0.0048	0.73342	0.0148	0.0018	427	3.2	257.8	14	198	8.5	810	140	297	36	24%
WLR2_93	0.0573	0.0052	0.00767	0.00034	0.21605	0.0535	0.0041	0.18435	0.0027	0.00034	393	1.3	56.5	5	49.3	2.2	300	150	54.4	6.9	16%
WLR2_94	0.599	0.046	0.0491	0.0029	0.81431	0.0877	0.0036	-0.1065	0.012	0.0013	358	1.5	478	28	309	18	1363	79	240	26	23%
WLR2_95	0.71	0.12	0.027	0.0019	0.90668	0.177	0.023	-0.84464	0.0286	0.0044	1095	2.1	517	75	172	12	2370	300	568	86	7%
WLR2_96	0.0746	0.0089	0.00824	0.00051	0.59658	0.0637	0.0058	-0.24496	0.00286	0.00027	538	0.6	72.7	8.4	52.9	3.2	710	190	57.6	5.5	7%

	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
WLR2_97	0.106	0.03	0.01305	0.0008	0.21494	0.06	0.018	0.069736	0.0051	0.0013	116	2.9	99	26	83.6	5.1	200	380	103	26	42%
WLR2_98	0.0587	0.0069	0.00774	0.00037	0.17374	0.0549	0.0057	0.096301	0.00309	0.00083	667	3.0	57.7	6.6	49.7	2.3	320	200	62	17	16%
WLR2_99	0.065	0.014	0.00784	0.00039	-0.023764	0.061	0.013	0.091412	0.00233	0.00031	262	1.6	63	13	50.4	2.5	330	340	47.1	6.2	15%
WLR2_100	0.0533	0.0073	0.00789	0.00039	0.18219	0.0498	0.006	0.16562	0.00262	0.00031	671	2.8	52.5	7	50.7	2.5	120	210	52.9	6.2	42%
WLR2_101	0.0617	0.0067	0.00764	0.00035	-0.081245	0.0581	0.0064	0.27241	0.0027	0.00033	712	1.8	60.7	6.4	49.1	2.2	470	210	54.5	6.6	10%
WLR2_102	0.0472	0.0041	0.00828	0.00042	0.37924	0.0428	0.0035	0.055135	0.0026	0.00033	630	2.3	46.8	4	53.1	2.7	-110	140	52.4	6.6	-48%
WLR2_103	0.1853	0.012	0.02316	0.00084	0.23966	0.0579	0.0027	0.045139	0.00868	0.0008	1156	2.1	172.4	10	147.6	5.3	503	100	175	16	29%
WLR2_104	0.228	0.051	0.00899	0.00032	0.51109	0.194	0.043	-0.40885	0.00429	0.00059	4680	0.6	201	40	57.72	2.1	2410	380	86	12	2%
WLR2_105	0.173	0.01	0.02462	0.00093	0.46932	0.0516	0.0021	0.10838	0.008	0.00062	824	2.0	161.8	9.1	156.8	5.9	269	87	161.1	13	58%
WLR2_106	0.267	0.023	0.00764	0.00049	0.68626	0.243	0.018	-0.42652	0.0231	0.0027	1680	5.1	239	19	49	3.1	3140	110	462	53	2%
WLR2_107	0.0848	0.0078	0.00751	0.00029	0.12524	0.0817	0.0068	0.15462	0.0053	0.0016	611	2.9	82.5	7.3	48.2	1.8	1240	170	106	31	4%
WLR2_108	0.0565	0.006	0.00733	0.00036	-0.27139	0.0554	0.006	0.40265	0.00258	0.00025	690	0.6	55.7	5.7	47.1	2.3	350	190	52.1	5.1	13%
WLR2_109	0.1142	0.0085	0.00852	0.00033	0.19021	0.098	0.0065	0.18889	0.00506	0.00061	782	2.1	110.9	8.2	54.7	2.1	1620	120	102	12	3%
WLR2_110	0.0552	0.0046	0.00793	0.00037	0.2631	0.0499	0.0039	0.12013	0.00261	0.00028	459	1.2	54.5	4.4	50.9	2.3	210	140	52.7	5.7	24%
WLR2_111	0.658	0.054	0.02858	0.0011	-0.39911	0.172	0.016	0.74407	0.01526	0.0014	2540	0.8	514	34	181.6	7.2	2520	150	306	28	7%
WLR2_112	0.14	0.037	0.0085	0.00043	0.3391	0.112	0.025	-0.1747	0.00418	0.00061	150.8	1.0	128	31	54.6	2.8	1390	340	84	12	4%
SKEL1_1	0.75	0.13	0.0314	0.0018	-0.19077	0.179	0.034	0.44977	0.0212	0.007	61.2	2.0	542	74	199	11	2290	340	420	140	9%
SKEL1_2	0.2142	0.02	0.02746	0.00079	0.16041	0.0562	0.0049	0.23039	0.00955	0.0018	386	1.5	196.7	17	174.6	4.9	435	190	192	36	40%
SKEL1_3	1.69	0.18	0.02273	0.00097	0.76799	0.527	0.044	-0.070647	0.0273	0.0058	343	0.8	999	64	144.8	6.1	4309	120	543	110	3%
SKEL1_4	0.0708	0.0085	0.00853	0.00039	-0.0065974	0.0592	0.0068	0.96152	0.00342	0.00069	682	0.9	69.3	7.9	54.8	2.5	490	200	69	14	11%
SKEL1_5	0.32	0.065	0.02494	0.00067	-0.32924	0.091	0.018	0.7601	0.01023	0.002	234.6	1.6	272	46	159.6	4.7	1190	330	206	41	13%
SKEL1_7	1.685	0.16	0.0382	0.0014	0.18652	0.319	0.027	0.43219	0.039	0.0073	54.7	1.2	1000	58	241.5	8.9	3548	140	773	140	7%
SKEL1_8	0.71	0.25	0.0278	0.0017	0.88739	0.156	0.04	-0.67306	0.0187	0.0058	133.1	1.8	490	120	177	10	1920	400	372	110	9%
SKEL1_9	0.224	0.026	0.00959	0.00035	0.56627	0.164	0.016	-0.26111	0.0046	0.00089	435	0.8	204	22	61.5	2.2	2490	180	92.7	18	2%
SKEL1_10	0.088	0.013	0.00899	0.00039	-0.082096	0.0714	0.01	0.27241	0.00514	0.0011	151.7	3.3	85.2	11	57.7	2.5	920	300	104	23	6%
SKEL1_11	0.0714	0.01	0.00939	0.0005	-0.045157	0.0542	0.0074	0.26448	0.00299	0.00058	317	0.8	69.8	9.6	60.3	3.2	310	240	60.4	12	19%
SKEL1_12	0.0816	0.0087	0.00851	0.00031	0.17256	0.0735	0.0088	0.23961	0.00317	0.0006	529	0.9	79.5	8.1	54.6	2	940	230	63.9	12	6%
SKEL1_13	0.079	0.016	0.00858	0.00032	-0.16361	0.072	0.016	0.20089	0.0035	0.00075	110	1.2	80	16	55.1	2.1	630	340	70.5	15	9%
SKEL1_14	0.242	0.026	0.0334	0.0015	0.49366	0.0534	0.0049	0.08069	0.013	0.0034	181	2.3	219	21	211.8	9.6	350	220	260	67	61%
SKEL1_15	0.214	0.027	0.0311	0.0012	0.26578	0.0482	0.005	-0.0066695	0.0106	0.0023	120	2.3	195	21	197.3	7.5	140	230	213	46	141%
SKEL1_16	0.0544	0.0055	0.00834	0.00024	0.22563	0.048	0.0044	0.16573	0.00288	0.00055	695	0.9	53.8	5.3	53.6	1.5	100	180	58.2	11	54%
SKEL1_17	0.179	0.031	0.00904	0.00045	0.68965	0.135	0.019	-0.41164	0.00629	0.0014	383	1.6	165	26	58	2.8	2050	240	127	28	3%
SKEL1_18	0.0609	0.0099	0.00855	0.00033	-0.1179	0.0513	0.0084	0.31939	0.0025	0.00049	157	0.7	59.7	9.4	54.9	2.1	210	300	50.4	9.9	26%
SKEL1_19	0.082	0.013	0.00819	0.00021	-0.47674	0.072	0.012	0.85903	0.00323	0.00063	517	1.1	79	12	52.6	1.3	780	270	65.2	13	7%
SKEL1_20	0.0611	0.0072	0.00866	0.00028	0.105	0.0508	0.0056	0.061511	0.00295	0.00058	439	1.2	60.1	6.8	55.6	1.8	200	210	59.6	12	28%
SKEL1_21	0.087	0.013	0.00907	0.0003	-0.24262	0.07	0.011	0.51527	0.00387	0.00085	340.1	1.6	84	12	58.2	1.9	800	300	78	17	7%
SKEL1_22	0.1974	0.017	0.02807	0.00089	0.24472	0.0508	0.0041	0.32925	0.00949	0.0018	704	1.4	182.8	15	178.4	5.6	223	180	191	36	80%
SKEL1_23	0.592	0.068	0.03411	0.0011	0.66539	0.1253	0.012	-0.23914	0.0284	0.0061	221	2.5	468	43	216.2	6.9	1980	190	565	120	11%
SKEL1_24	0.47	0.086	0.0275	0.0012	0.6034	0.12	0.019	-0.40698	0.0171	0.0037	288	2.4	378	56	174.6	7.5	1750	270	342	74	10%
SKEL1_25	0.22	0.024	0.02753	0.00077	0.30556	0.0567	0.0054	0.055245	0.0107	0.0022	265	2.4	201	19	175.1	4.8	460	210	216	44	38%
SKEL1_27	0.235	0.024	0.03122	0.00087	-0.023121	0.0543	0.0051	0.10725	0.012	0.0027	151.9	3.2	214	19	198.2	5.4	350	190	241	53	57%
SKEL1_28	0.067	0.013	0.00868	0.00038	0.097782	0.0561	0.01	-0.070504	0.00276	0.00055	320	1.0	65	12	55.7	2.4	270	250	55.8	11	21%
SKEL1_29	0.069	0.0072	0.00862	0.00031	-0.29813	0.0581	0.0056	0.85125	0.00351	0.00069	776	1.7	68.7	7.4	55.3	2	480	200	70.9	14	12%
SKEL1_30	2.03	0.43	0.0476	0.0041	0.86728	0.306	0.044	-0.50185	0.062	0.024	436	1.5	1110	140	300	25	3410	220	1190	420	9%
SKEL1_31	0.109	0.018	0.00893	0.00027	0.33714	0.088	0.013	-0.16154	0.00344	0.00067	585	0.9	104	16	57.3	1.7	1270	270	69.4	13	5%
SKEL1_32	0.0718	0.011	0.00863	0.00029	-0.26203	0.0621	0.01	0.38623	0.00366	0.00079	303	2.0	70	10	55.4	1.9	470	280	73.7	16	12%
SKEL1_33	0.0581	0.0057	0.00825	0.00031	0.55806	0.0508	0.0044	0.2243	0.00254	0.00047	1540	0.8	57.3	5.5	52.9	2	215	190	51.4	9.5	25%
SKEL1_35	0.1956	0.019	0.02759	0.00086	0.61656	0.051	0.0043	-0.0054857	0.01011	0.002	524	1.9	181.1	16	175.4	5.4	233	180	203	40	75%
SKEL1_36	11.96	1.1	0.1138	0.0047	0.90865	0.759	0.058	0.30472	14	2.9	67.2	60.7	2595	84	694	27	4870	130	54200	3900	14%
SKEL1_37	0.233	0.024	0.0326	0.0011	0.28428	0.0517	0.0047	0.10428	0.01127	0.0022	268	1.9	212	19	206.8	7.2	250	190	227	43	83%
SKEL1_39	0.284	0.038	0.028	0.0017	0.32885	0.0736	0.009	0.71139	0.0101	0.0022	305	1.4	252	29	178	11	960	230	203	44	19%
SKEL1_40	0.2	0.082	0.00909	0.00083	0.7356	0.148	0.054	-0.54863	0.00419	0.0011	380	1.1	176	67	58.3	5.3	1660	760	85	22	4%
SKEL1_41	0.192	0.019	0.026	0.0011	0.6047	0.053	0.0044	0.047301	0.0108	0.0023	1082	3.9	177.8	16	165.7	7.2	315	180	216	46	53%
SKEL1_42	0.234	0.057	0.01014	0.00059	0.48062	0.164	0.038	-0.28559	0.00524	0.0013	245	1.1	209	46	65	3.8	2240	410	106	25	3%
SKEL1_44	0.216	0.052	0.00852	0.00064	0.12043	0.174	0.032	0.84196	0.00472	0.001	621	0.8	194	42	54.7	4.1	2380	410	95	20	2%
SKEL1_45	0.263	0.028	0.02673	0.00074	0.46423	0.0716	0.0067	0.10732	0.0105	0.002	890	1.2	237	22	170	4.6	930	190	211	40	18%
SKEL1_47	0.63	0.13	0.0322	0.0023	0.019707	0.142	0.029	0.10737	0.0143	0.003	32	0.6	472	67	204	15	1970	290	287	60	10%
SKEL1_49	0.219	0.021	0.0276	0.0019	0.77716	0.059	0.0051	0.2682	0.012	0.0023	1030	4.1	200.8	18	175	12	552	170	241	45	32%
SKEL1_50	0.0609	0.0078	0.00874	0.00029	-0.24756	0.0503	0.0065	0.44571	0.00288	0.00056	740	1.2	59.8	7.3	56.1	1.9	150	190	58.1	11	37%
SKEL1_51	0.1349	0.015	0.00874	0.00044	0.016215	0.113	0.013	0.53935	0.00357	0.0007	444	1.0	128.1	13	56.1	2.8	1780	210	72	14	3%
SKEL1_52	0.224	0.049	0.00969	0.00053	0.78116	0.161	0.03	-0.68121	0.0064	0.0015	384	1.0	211	46	62.1	3.4	2290	340	129	31	3%
SKEL1_53	0.0761	0.0085	0.00877	0.0003	0.034919	0.063	0.0067	0.39858	0.00351	0.00095	655	0.8	74.4	8	56.3	1.9	650	220	71	19	9%
SKEL1_54	0.286	0.033	0.03193	0.00089	0.22456	0.0645	0.0066	-0.005429	0.0133	0.0028	214.2	3.8	254	25	202.6	5.6	700	190	267	56	29%
SKEL1_55	0.0889	0.012	0.00853	0.00027	0.041411	0.0737	0.0093	0.25149	0.00314	0.00063	737	0.9	86.1	11	54.7	1.7	950	250	63.4	13	6%
SKEL1_56	0.278	0.026	0.0351	0.0016	0.34331	0.0587	0.0052	0.5312	0.01348	0.0026	550	2.9	248.5	21	222.5	9.8	530	190	271	52	42%
SKEL1_57	0.0717	0.0097	0.00837	0.00032	0.13832	0.0627	0.0084	0.10371	0.0029	0.0006	413	0.8	70.1	9.1	53.7	2	580	260	58.6	12	9%
SKEL1_58	0.097	0.015	0.0086	0.00025	0.19164	0.081	0.012	-0.079851	0.00311	0.00058	1030	0.5	93	14	55.2	1.6	1080	260	62.8	12	5%
SKEL1_59	0.0738	0.01	0.00975	0.00048	0.36775	0.0555	0.0072	0.019958	0.00329	0.00068	394	1.2	72	9.5	62.5	3.1	380	260	66.3	14	16%
SKEL1_60	0.1266	0.013	0.00859	0.00031	-0.049285	0.1064	0.011	0.21784	0.00369	0.00074	223.8	0.9	120.8	12	55.1	2	1680	200	74.4	15	3%
SKEL1_61	0.168	0.022	0.00868	0.00031	0.62427	0.1333	0.013	-0.29051	0.00473	0.00091	498	1.1	156	18	55.7	1.9	2120	190	95.3	18	3%
SKEL1_62	0.0833	0.0088	0.00789	0.00027	0.13746	0.0762	0.0081	0.46818	0.00295	0.00057	436	1.0	81.1	8.2	50.6	1.7	1020	210	59.5	11	5%
SKEL1_63	0.24	0.024	0.0322	0.0012	0.26308	0.0533	0.0049	0.35871	0.0117	0.0026	107.3	2.9	218	20	204.3	7.6	350	220	234	52	58%
SKEL1_64	0.061	0.0062	0.00867	0.00028	0.10682	0.0511	0.0049	0.44335	0.0028	0.00053	782	0.9	60.1	5.9	55.6	1.8	230	200	56.5	11	24%
SKEL1_65	0.177	0.028	0.00921	0.00034	0.35096	0.136	0.018	-0.13067	0.00444	0.00088	644	0.9	163	23	59.1	2.2	2100	240	89.5	18	3%
SKEL1_66	0.1998	0.018	0.02662	0.00085	0.39422	0.0541	0.0044	0.58082	0.00817	0.0015	1060	1.2	184.9	15	169.4	5.3	361	180	164.5	30	47%
SKEL1_67	0.0701	0.01	0.00802	0.00019	0.042307	0.061	0.0076	0.38188	0.00314	0.00066	608	1.2	68.5	9.2	51.52	1.2	620	270	63.3	13	8%
SKEL1_68	0.93	0.14	0.0338	0.0012	0.61988	0.199	0.024	-0.17965	0.0239	0.0048	1079	1.1	652	69	214.3	7.5	2730	210	478	94	8%
SKEL1_69	0.183	0.027	0.00904	0.00037	-0.010065	0.139	0.018	0.32626	0.00468	0.00097	384	0.9	169	22	58	2.4	2160	220	94.3	20	3%
SKEL1_70	0.309	0.038	0.03242	0.0011	0.15069	0.0682	0.0077	0.18295	0.0126	0.0025	540	1.9	271	28	205.6	6.7	800	190	253	50	26%
SKEL1_71	0.24	0.063	0.01014	0.00055	0.90344	0.168	0.034	-0.78061	0.0063	0.0017	284	0.9	218	50	65.1	3.5	2200	310	127	34	3%
SKEL1_74	0.232	0.039	0.00881	0.00045	-0.54531	0.204	0.041	0.76741	0.0046	0.00096	436	0.7	209	32	56.5	2.9	2560	320	93	19	2%
SKEL1_75	0.179	0.049	0.00928	0.00051	0.83555	0.14	0.032	-0.64781	0.00436	0.0012	336	0.9	160	39	59.6	3.3	1800	360	88	24	3%
SKEL1_77	0.0571	0.0059	0.00828	0.00024	-0.020171	0.0509	0.0052	0.27329	0.00274	0.00052	657	1.1	56.3	5.6	53.2	1.6	210	200	55.4	11	25%
SKEL1_78	0.376	0.036	0.00984	0.00034	0.38726	0.275	0.024	0.4664	0.00441	0.00083	544	0.5	323	26	63.1	2.2	3309	140	89	17	2%
SKEL1_79	0.1007	0.013	0.0088	0.00029	0.22705	0.0829	0.0096	0.071961	0.00325	0.00061	698	0.6	97.1	12	56.5	1.9	1180	220	65.6	12	5%
SKEL1_80	0.162	0.032	0.00866	0.00033	0.21062	0.129	0.024	0.28936	0.00401	0.00081	377	0.7	149	27	55.6	2.1	1810	350	80.9	16	3%
SKEL1_81	0.63	0.16	0.033	0.0023	0.4122	0.131	0.028	-0.14887	0.0133	0.0028	32.1	0.5	460	85	209	15	1810	300	267	57	12%
SKEL1_82	0.0627	0.007	0.00832	0.00024	0.013892	0.0548	0.0059	0.27994	0.00275	0.00053	455	0.8	61.6	6.6	53.4	1.5	350	210	55.6	11	15%
SKEL1_83	0.0969	0.012	0.00872	0.00025	-0.34219	0.0812	0.011	0.54305	0.00413	0.00084	435	1.5	93.5	11	55.9	1.6	1130	240	83.2	17	5%
SKEL1_84	0.062	0.0061	0.00836	0.00021	0.25387	0.0535	0.0048	-0.16259	0.00293	0.00055	1319	0.5	61.1	5.7	53.67	1.3	320	180	59.2	11	17%
SKEL1_85	0.0607	0.0067	0.00843	0.00034	0.13453	0.052	0.0054	0.274	0.00261	0.00052	533	1.3	59.8	6.4	54.1	2.2	310	250	52.7	10	17%
SKEL1_86	0.0584	0.0071	0.00854	0.00043	0.056255	0.0499	0.006	0.34455	0.00298	0.0006	346	0.9	57.5	6.7	54.8	2.7	150	220	60.1	12	37%
SKEL1_87	0.0702	0.0086	0.00917	0.0005	0.17781	0.0551	0.0063	0.47046	0.00371	0.0008	411	1.2	68.7	8.2	58.8	3.2	390	240	74.8	16	15%
SKEL1_88	0.0972	0.012	0.00866	0.00031	0.42935	0.081	0.009	-0.10121	0.00364	0.00079	508	1.2	93.9	11	55.6	2	1130	210	73.5	16	5%
SKEL1_89	0.0613	0.008	0.00837	0.00024	0.15514	0.0513	0.0057	0.0013853	0.00283	0.0006	274	1.1	60.2	7.6	53.7	1.5	260	240	57.1	12	21%
SKEL1_90	0.073	0.014	0.009	0.00033	0.3499	0.0591	0.01	-0.23077	0.00321	0.00068	124.4	0.8	71	13	57.8	2.1	380	300	64.8	14	15%
SKEL1_91	0.143	0.016	0.00858	0.00031	0.14445	0.124	0.014	0.24163	0.00303	0.00057	433	0.4	138	16	55	2	1940	190	61.1	11	3%
SKEL1_93	0.0523	0.0052	0.008	0.00034	0.47842	0.0476	0.0042	0.1832	0.00254	0.0005	640	1.2	51.7	5	51.4	2.1	110	190	51.3	10	47%
SKEL1_94	0.0743	0.0099	0.00849	0.00029	-0.15725	0.0644	0.0087	0.44492	0.00311	0.0006	296	0.6	72.5	9.3	54.5	1.9	680	280	62.8	12	8%
SKEL1_95	0.1146	0.011	0.01655	0.00057	0.44812	0.0503	0.0045	0.11019	0.00576	0.0011	439	1.6	110	10	105.8	3.6	190	180	116.2	23	56%
SKEL1_96	0.268	0.031	0.02969	0.00096	0.37091	0.0653	0.007	0.0019857	0.0119	0.0026	87.4	2.7	239	25	188.6	6	710	230	240	52	27%
SKEL1_97	0.0969	0.011	0.00836	0.00039	-0.26703	0.0875	0.012	0.83268	0.00321	0.00063	487	1.0	93.7	9.9	53.7	2.5	1250	210	64.8	13	4%
SKEL1_99	0.078	0.013	0.00954	0.0005	0.25798	0.0582	0.0088	0.03747	0.00342	0.00073	137.3	0.9	76	12	61.2	3.2	440	300	69	15	14%
SKEL1_100	0.807	0.082	0.0307	0.0012	0.54944	0.1868	0.016	0.11942	0.0237	0.0045	105.4	1.4	597	45	194.6	7.8	2714	150	474	89	7%
SKEL1_101	0.111	0.019	0.00849	0.00035	0.10392	0.096	0.016	0.089909	0.00371	0.00076	152.2	0.8	106	17	54.5	2.2	1320	360	74.9	15	4%

analysis	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
SKEL1_102	0.1863	0.017	0.02591	0.00085	0.43859	0.0523	0.0043	0.17428	0.00919	0.0018	312	2.5	173.3	15	164.9	5.3	282	180	185	35	58%
SKEL1_103	0.216	0.021	0.03055	0.0011	0.33784	0.0512	0.0046	0.11147	0.01201	0.0024	169.1	2.2	198.1	18	194	6.8	240	190	241	47	81%
SKEL1_104	0.411	0.043	0.02708	0.00094	0.6074	0.1097	0.0099	-0.16485	0.0134	0.0025	155.7	0.9	348	31	172.2	5.9	1764	160	269	50	10%
SKEL1_106	12.61	1.2	0.1199	0.0058	-0.0024124	0.768	0.076	0.49263	0.0513	0.0099	3.44	0.2	2642	86	729	33	4890	180	1010	190	15%
SKEL1_107	0.174	0.035	0.00867	0.00033	0.52493	0.143	0.027	-0.29212	0.0042	0.00088	400	0.9	159	30	55.6	2.1	1830	390	84.7	18	3%
SKEL1_108	0.68	0.12	0.0138	0.0013	0.92605	0.328	0.044	-0.80919	0.0163	0.0039	371	1.1	500	79	88.5	8.1	3460	250	339	85	3%
SKEL1_109	0.0885	0.0093	0.01311	0.00091	0.73751	0.0491	0.0041	0.63172	0.00522	0.0011	1104	7.3	86	8.6	83.9	5.8	167	190	105.3	21	50%
SKEL1_110	0.226	0.041	0.00976	0.0005	0.50811	0.165	0.028	-0.13573	0.00537	0.0011	117.6	1.0	202	34	62.6	3.2	2240	330	111	25	3%
SKEL1_111	0.1869	0.017	0.0266	0.00084	0.25679	0.0506	0.0042	0.52094	0.00918	0.0018	513	3.1	173.8	15	169.2	5.3	235	200	185	35	72%
SKEL1_112	0.22	0.021	0.02596	0.00083	0.23608	0.0607	0.0055	0.6623	0.0097	0.002	333	2.0	201.5	18	165.2	5.2	620	210	195	39	27%
SKEL1_113	0.133	0.018	0.00926	0.00038	-0.26847	0.106	0.015	0.53743	0.00369	0.00071	665	0.7	126	16	59.4	2.4	1590	240	74.4	14	4%
SKEL1_114	0.383	0.038	0.03089	0.0011	0.43633	0.0894	0.0081	0.12671	0.0147	0.003	343	2.4	328	28	196.1	6.7	1381	160	294	59	14%
SKEL1_116	0.1022	0.01	0.00901	0.00034	0.39106	0.0826	0.0075	0.37371	0.00336	0.00062	2520	0.8	98.7	9.2	57.8	2.2	1228	170	67.8	13	5%
SKEL1_117	0.149	0.025	0.00883	0.00036	0.70505	0.12	0.017	-0.53634	0.00461	0.001	625	1.0	140	22	56.7	2.3	1740	310	93	20	3%
SKEL1_118	1.16	0.2	0.03352	0.0011	0.1036	0.244	0.041	0.070368	0.0345	0.0068	378	1.8	758	73	212.5	7.1	3010	210	685	130	7%
SKEL1_119	0.249	0.029	0.01008	0.00045	0.5743	0.179	0.017	-0.059808	0.00498	0.001	370	0.7	225	23	64.7	2.9	2600	170	100	21	2%
SKEL1_120	0.299	0.032	0.0349	0.0026	0.73573	0.0621	0.0054	0.46961	0.01013	0.002	687	3.5	264	25	221	16	650	170	204	40	34%
SKEL1_122	0.176	0.051	0.00924	0.00043	0.8643	0.138	0.033	-0.70829	0.00438	0.001	338	0.8	168	45	59.3	2.7	1790	380	88	20	3%
SKEL1_123	0.0733	0.011	0.00802	0.00024	0.016458	0.0655	0.0089	0.16066	0.00314	0.00064	336	1.0	71.5	10	51.5	1.5	700	290	63.4	13	7%
SKEL1_124	0.0629	0.0085	0.00817	0.00031	-0.3554	0.0557	0.0079	0.70607	0.00295	0.00061	205	0.7	63.4	8.9	52.4	2	430	280	59.6	12	12%
SKEL1_125	0.256	0.024	0.02773	0.00079	-0.42601	0.0683	0.0064	0.91518	0.01154	0.0022	712	1.5	230.6	19	176.3	4.9	840	170	232	44	21%
SKEL1_126	0.1911	0.018	0.02788	0.00083	0.63247	0.0502	0.0041	0.14558	0.00925	0.0018	621	3.8	177.3	15	177.2	5.2	202	180	186	36	88%
SKEL1_127	11.59	1.2	0.1048	0.0057	0.56319	0.813	0.073	0.02486	0.0427	0.0085	5.24	0.2	2555	100	642	33	4991	170	844	160	13%
SKEL1_129	0.162	0.022	0.00893	0.0004	0.79184	0.134	0.016	-0.57067	0.0038	0.00078	300	0.6	156	21	57.3	2.6	2110	200	76.7	16	3%
SKEL1_131	0.1962	0.018	0.02825	0.00086	0.61816	0.0505	0.004	0.22745	0.01045	0.002	709	1.7	181.8	15	179.6	5.4	212	180	210	39	85%
SKEL1_132	7.94	0.76	0.0986	0.0066	0.24141	0.604	0.06	0.7376	0.1261	0.024	10.6	0.7	2215	86	605	38	4490	160	2390	430	13%
SKEL1_133	1.05	0.29	0.033	0.0025	0.7583	0.198	0.041	-0.69993	0.102	0.036	68.1	4.8	640	130	209	16	2430	350	1890	640	9%
SKEL1_135	0.952	0.091	0.0328	0.0013	0.24368	0.212	0.019	0.42999	0.0175	0.0034	45	0.5	676	48	208.3	8.2	2896	150	350	68	7%
SKEL2_1	0.71	0.091	0.02829	0.0018	0.32268	0.175	0.018	-0.24279	0.0171	0.0021	45.1	1.1	533	52	179.8	11	2660	180	342	42	7%
SKEL2_2	0.578	0.082	0.0302	0.0019	0.0096829	0.137	0.018	0.20569	0.00965	0.0012	94.9	0.9	458	51	191.5	12	2110	230	194	24	9%
SKEL2_3	0.357	0.054	0.03166	0.0018	0.56773	0.086	0.013	-0.38611	0.00909	0.0011	159	1.4	304	37	200.9	11	1120	240	183	22	18%
SKEL2_4	0.234	0.017	0.03161	0.0018	0.038798	0.0538	0.0029	0.17655	0.011	0.0015	222	2.2	213	14	200.6	11	340	110	222	31	59%
SKEL2_5	0.33	0.031	0.03259	0.0018	0.22931	0.0731	0.006	-0.032432	0.0175	0.0027	204	4.1	287	24	206.7	11	950	170	351	54	22%
SKEL2_6	0.248	0.093	0.0308	0.0022	-0.1253	0.057	0.02	0.1942	-60	160	19.5	-165000.0	203	60	195.5	14	-10	390	69000	22000	-1955%
SKEL2_7	0.129	0.025	0.00827	0.00063	0.21306	0.111	0.02	-0.10378	0.00388	0.00067	69.2	0.9	121	22	53.1	4	1690	390	78	13	3%
SKEL2_8	0.2224	0.013	0.02954	0.0017	0.37045	0.0541	0.002	0.28596	0.01035	0.001	835	1.5	203.8	11	187.7	11	360	80	208.2	21	52%
SKEL2_9	0.2261	0.015	0.03084	0.0018	0.35732	0.053	0.002	0.06673	0.01037	0.0011	416	2.2	206.7	12	195.8	11	316	83	208	23	62%
SKEL2_10	0.37	0.033	0.0288	0.0018	0.23146	0.0932	0.007	0.096178	0.01005	0.0011	171	1.2	318	24	183	11	1430	140	202	21	13%
SKEL2_11	0.2281	0.014	0.03194	0.0019	0.3063	0.0521	0.0023	0.24307	0.0145	0.0016	266	3.8	208.5	12	202.7	12	275	94	291	32	74%
SKEL2_12	0.242	0.017	0.03081	0.0017	0.22263	0.0574	0.0031	0.12487	0.0144	0.002	283	2.5	219.6	14	195.6	11	480	110	290	39	41%
SKEL2_13	0.226	0.017	0.0305	0.0018	0.18579	0.0534	0.0029	0.094445	0.0135	0.0016	200	2.7	206.5	14	193.7	11	298	110	272	33	65%
SKEL2_14	0.226	0.035	0.00908	0.00054	0.8078	0.173	0.022	-0.71355	0.00671	0.00091	697	1.3	203	29	58.3	3.5	2410	230	135	18	2%
SKEL2_16	0.2423	0.015	0.03261	0.0019	0.64084	0.0525	0.0016	0.075127	0.0111	0.0011	1340	4.1	220.1	12	206.8	12	300	71	223.1	22	69%
SKEL2_17	0.387	0.025	0.03135	0.0019	0.22645	0.0892	0.004	0.040708	0.0143	0.0019	288	2.2	331	18	199	12	1390	86	286	37	14%
SKEL2_18	0.118	0.039	0.00806	0.00055	-0.031737	0.095	0.026	0.056022	0.00337	0.00088	117.2	1.2	98	26	51.8	3.5	950	510	68	18	5%
SKEL2_19	0.414	0.034	0.03131	0.0018	0.14202	0.0952	0.0062	0.19383	0.0132	0.0016	246	1.7	350	24	198.7	11	1530	120	266	32	13%
SKEL2_20	0.1867	0.011	0.02759	0.0015	0.30876	0.0491	0.0017	-0.013287	0.01001	0.0011	896	4.3	173.7	9.7	175.4	9.6	147	73	201	21	119%
SKEL2_21	0.247	0.018	0.03207	0.0018	0.31612	0.0559	0.0025	0.016036	0.01138	0.0014	620	2.3	223.7	14	203.4	11	408	81	229	27	50%
SKEL2_22	0.243	0.019	0.03116	0.0018	0.026091	0.0574	0.0036	0.22429	0.0108	0.0018	162.1	2.5	220	15	197.8	11	470	130	217	36	42%
SKEL2_23	0.182	0.027	0.02472	0.0015	-0.19439	0.053	0.0081	0.30582	0.0106	0.0022	59.3	2.1	168	22	158.6	11	200	250	212	43	79%
SKEL2_24	1.64	0.15	0.0261	0.002	0.42192	0.465	0.024	0.14999	0.0273	0.004	28.8	0.8	987	53	166	13	4121	82	543	78	4%
SKEL2_25	0.2033	0.014	0.02593	0.0014	0.25525	0.0568	0.0027	0.04465	0.00808	0.00086	518	1.6	187.7	11	165.4	8.5	489	100	162.6	17	34%
SKEL2_26	0.278	0.023	0.0327	0.0021	0.61052	0.0628	0.0035	-0.17165	0.0127	0.0023	151	4.4	248	18	207.3	13	660	120	254	46	31%
SKEL2_27	0.229	0.016	0.02605	0.0015	0.40931	0.0634	0.003	0.025891	0.00846	0.00092	699	2.1	210.8	14	165.8	9.3	739	97	170.2	18	22%
SKEL2_28	0.313	0.029	0.02791	0.0016	0.1128	0.0811	0.0063	0.093031	0.0106	0.0019	103.3	2.2	274	22	177.4	10	1150	150	213	38	15%
SKEL2_29	0.1737	0.01	0.02616	0.0015	0.66885	0.04818	0.0012	0.35521	0.00892	0.00089	2340	4.8	162.6	8.7	166.5	9.1	108	58	179.4	18	154%
SKEL2_30	0.0906	0.01	0.00898	0.0005	0.2018	0.071	0.0065	0.022106	0.00334	0.00045	365	1.3	87.7	9.2	57.62	3.2	930	180	67.4	9	6%
SKEL2_31	0.2282	0.015	0.0308	0.0017	0.23645	0.0538	0.0021	0.20249	0.01038	0.0011	596	2.2	208.4	12	195.5	11	347	87	209	22	56%
SKEL2_32	0.2042	0.012	0.02668	0.0015	0.2567	0.0552	0.002	0.1451	0.00957	0.00098	1200	2.4	188.6	10	169.8	9.3	408	79	192.4	20	42%
SKEL2_33	0.213	0.013	0.02965	0.0017	0.75504	0.05156	0.0014	-0.14252	0.00943	0.00096	1341	2.2	196	11	188.4	11	268	59	189.8	19	70%
SKEL2_34	0.227	0.031	0.02541	0.0016	0.682	0.0643	0.0069	-0.39571	0.0104	0.0013	253.6	2.9	205	24	161.8	10	630	190	209	26	26%
SKEL2_35	0.2217	0.014	0.03112	0.0018	0.20334	0.0516	0.002	0.32826	0.01	0.001	537	1.6	203.2	11	197.5	11	257	84	201.1	20	77%
SKEL2_37	1.067	0.1	0.0378	0.0024	0.29295	0.2	0.013	0.0026558	0.0389	0.005	118	2.2	729	48	239.2	15	2791	100	770	97	9%
SKEL2_38	0.239	0.016	0.0291	0.0016	0.27803	0.0597	0.0028	-0.02476	0.01065	0.0013	214.2	2.9	217.2	13	184.9	10	567	100	214	25	33%
SKEL2_39	0.758	0.11	0.0308	0.0028	0.56237	0.184	0.023	0.12965	0.033	0.015	14.95	0.9	557	60	195	17	2680	200	640	260	7%
SKEL2_40	0.332	0.034	0.03215	0.0018	0.27095	0.074	0.0064	-0.059294	0.0122	0.0016	142	2.1	289	25	204	11	980	170	245	32	21%
SKEL2_41	0.349	0.035	0.0265	0.0015	0.44945	0.0942	0.0071	-0.27284	0.0126	0.0016	314	1.8	301	26	168.6	9.6	1440	150	253	31	12%
SKEL2_43	0.1808	0.013	0.02373	0.0014	0.028292	0.0538	0.0026	0.41029	0.00816	0.00089	453	1.9	169.9	11	151.2	8.5	344	110	164.3	18	44%
SKEL2_44	0.548	0.058	0.0399	0.0025	0.1113	0.0979	0.0088	0.075794	0.0204	0.0033	50.2	2.3	438	37	252.1	15	1500	160	408	64	17%
SKEL2_45	0.286	0.02	0.02679	0.0015	0.34042	0.0774	0.0039	-0.057269	0.0112	0.0015	229	2.0	255	16	170.4	9.4	1121	94	225	30	15%
SKEL2_46	0.196	0.043	0.01089	0.00067	-0.18509	0.132	0.03	0.2878	0.0061	0.0012	97.3	1.3	176	35	69.8	4.3	1720	420	123	23	4%
SKEL2_47	0.2201	0.013	0.03153	0.0018	0.22576	0.0504	0.0016	0.12881	0.01135	0.0012	1137	2.8	201.9	11	200.1	11	207	69	228	24	97%
SKEL2_48	0.289	0.034	0.03068	0.0019	-0.060206	0.0684	0.0077	0.23947	0.0138	0.0036	146	3.0	255	26	194.8	12	820	230	276	70	24%
SKEL2_49	0.297	0.039	0.03068	0.0018	0.48097	0.0713	0.0082	-0.27702	0.0126	0.0019	170.3	1.9	261	30	194.8	11	830	230	253	37	23%
SKEL2_50	0.23	0.015	0.02998	0.0017	0.019051	0.0552	0.0024	0.14998	0.00971	0.0011	301	1.7	210	12	190.4	11	400	96	195	21	48%
SKEL2_51	0.0488	0.004	0.00744	0.0005	0.093526	0.0495	0.0038	0.31649	0.00257	0.00027	740	0.9	48.4	3.9	47.8	3.2	160	150	51.8	5.5	30%
SKEL2_52	0.152	0.029	0.00782	0.00049	0.17235	0.146	0.026	0.13797	0.00419	0.00063	454	0.9	141	25	50.2	3.1	1930	330	85	13	3%
SKEL2_54	0.1754	0.01	0.02481	0.0014	0.23648	0.0509	0.0016	0.45403	0.00791	0.00079	875	1.3	164.6	8.3	158	8.8	229	70	159.3	16	69%
SKEL2_55	0.1736	0.011	0.02545	0.0015	0.48105	0.0496	0.0016	0.060056	0.00852	0.00083	785	1.6	162.5	9.4	162	9.2	170	73	171.5	17	95%
SKEL2_56	0.191	0.015	0.0252	0.0015	0.27469	0.0544	0.0031	0.24584	0.00827	0.00094	264.7	2.2	177.3	13	160.4	9.6	350	120	166	19	46%
SKEL2_57	0.055	0.013	0.00761	0.00047	0.28732	0.051	0.011	-0.061708	0.00278	0.00035	168.7	0.8	54	13	48.9	3	50	330	56.1	7.1	98%
SKEL2_58	0.287	0.018	0.02672	0.0015	0.30081	0.0773	0.0033	0.45818	0.01013	0.0012	339	2.7	255.8	15	170	9.7	1111	87	204	25	15%
SKEL2_59	0.225	0.017	0.03002	0.0018	0.47565	0.0546	0.0031	-0.017491	0.0089	0.00093	260	1.7	206	14	190.6	11	370	120	179	19	52%
SKEL2_60	0.371	0.045	0.0103	0.0007	0.8192	0.256	0.02	-0.60568	0.00538	0.00062	513	0.6	320	34	66	4.4	3210	130	108.4	13	2%
SKEL2_61	0.239	0.039	0.01459	0.0009	0.49657	0.113	0.015	-0.35247	0.007	0.0013	239	1.6	217	32	93.4	5.7	1720	250	142	26	5%
SKEL2_62	0.0572	0.0068	0.00826	0.00051	0.096671	0.05	0.0054	0.061847	0.00261	0.00031	315	0.9	56.3	6.5	53	3.2	140	190	52.6	6.3	38%
SKEL2_63	0.1884	0.012	0.0251	0.0014	0.26186	0.0539	0.0021	0.1659	0.00773	0.00076	658	1.4	175.1	10	159.8	8.8	349	86	155.6	15	46%
SKEL2_64	0.2147	0.013	0.03103	0.0018	0.4077	0.0497	0.0017	0.24122	0.0099	0.001	466	2.4	197.3	11	197	11	166	79	199	21	119%
SKEL2_65	0.059	0.011	0.00857	0.00057	0.11042	0.0482	0.0085	0.011618	0.00276	0.0004	152	0.9	57.2	10	55	3.6	30	280	55.7	8.1	183%
SKEL2_66	0.221	0.018	0.03085	0.0018	0.16743	0.052	0.0031	-0.030764	0.01087	0.0013	293.4	3.4	203	15	195.9	11	260	120	218	26	75%
SKEL2_67	0.243	0.018	0.03093	0.0019	0.67946	0.0575	0.0025	-0.07464	0.00833	0.00098	238	2.1	220	15	196.3	12	503	92	168	20	39%
SKEL2_68	0.0572	0.0055	0.008	0.00047	-0.11923	0.0516	0.0044	0.25428	0.00258	0.0003	464	0.9	56.4	5.3	51.4	3	220	160	52.1	6	23%
SKEL2_69	0.243	0.021	0.033	0.0019	0.068244	0.0524	0.0035	0.078555	0.0119	0.0016	231	3.6	217	15	209.3	12	270	140	240	31	78%
SKEL2_70	0.258	0.021	0.0313	0.0018	0.40673	0.0597	0.0037	-0.22101	0.0144	0.0046	240	2.2	232	17	198.7	11	570	140	288	88	35%
SKEL2_71	0.222	0.017	0.02976	0.0018	0.24548	0.0542	0.003	0.1746	0.0114	0.0015	242	2.0	202.7	14	189	11	390	130	228	30	48%
SKEL2_72	0.1812	0.012	0.02572	0.0015	0.45339	0.0509	0.0019	0.25443	0.0088	0.00096	501	2.4	168.9	10	163.7	9.5	241	88	177	19	68%
SKEL2_74	0.201	0.017	0.02464	0.0014	0.37881	0.0592	0.0036	-0.13471	0.012	0.0037	358	5.5	186	14	156.9	8.8	530	120	240	72	30%
SKEL2_75	0.122	0.012	0.00943	0.00059	0.44899	0.0941	0.0068	-0.12733	0.00277	0.00034	326	0.7	116.9	11	60.5	3.8	1480	130	55.9	6.8	4%
SKEL2_76	0.0695	0.0061	0.00765	0.00044	0.32737	0.0658	0.005	-0.01274	0.00225	0.00027	561	0.6	68.1	5.8	49.1	2.8	750	160	45.3	5.5	7%
SKEL2_77	0.1857	0.014	0.02629	0.0015	0.41951	0.0516	0.0025	0.047293	0.00821	0.00085	345	1.2	172.7	12	167.3	9.3	268	100	165.3	17	62%
SKEL2_78	0.108	0.017	0.00819	0.00051	0.25396	0.093	0.013	-0.12457	0.00313	0.00043	238	0.7	103	15	52.6	3.3	1310	250	63.1	8.7	4%
SKEL2_80	0.1792	0.011	0.0261	0.0015	0.59499	0.0507	0.0016	-0.099447	0.00813	0.00085	891	1.2	167.3	9.4	166.1	9.4	221	71	163.7	17	75%
SKEL2_81	0.136	0.015	0.00898	0.00051	0.20277	0.112	0.011	0.060325	0.00378	0.00041	1029	0.7	129	13	57.6	3.3	1790	160	76.2	8.2	3%
SKEL2_82	0.1778	0.01	0.02559	0.0015	0.61413	0.0504	0.0015	0.39738	0.00807	0.00076	2150	1.2	166.1	8.9	162.9	9.4	214	70	162.4	15	76%
SKEL2_83	0.339	0.041	0.0351	0.0022	0.66833	0.075	0.012	-0.39495	0.01	0.0016	56	1.6	292	31	222.2	14	790	210	202	32	28%

	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
SKEL2_84	0.2183	0.013	0.03126	0.0018	0.34565	0.0505	0.0017	0.17337	0.01188	0.0013	572	4.6	200.4	11	198.4	11	212	74	239	26	94%
SKEL2_85	0.1637	0.0098	0.02393	0.0014	0.61627	0.0505	0.0015	0.086082	0.00842	0.00093	2459	9.1	153.9	8.6	152.5	8.5	211	69	170	19	72%
SKEL2_86	0.1983	0.015	0.03057	0.0018	0.46096	0.0484	0.0026	0.0054581	0.01098	0.0013	166	2.6	183.4	12	194.1	11	120	110	221	26	162%
SKEL2_87	3.69	0.54	0.0352	0.0027	0.24267	0.744	0.078	-0.075769	0.0314	0.0035	86	0.5	1502	66	223	17	4830	180	624	70	5%
SKEL2_88	1.3	0.15	0.0421	0.0034	0.26134	0.236	0.024	0.15875	-140	170	13.8	44.0	863	68	266	21	3060	180	11200	2100	9%
SKEL2_89	0.102	0.016	0.00852	0.00052	0.29877	0.084	0.012	-0.1483	0.00382	0.00053	296	1.2	98	14	54.7	3.3	1210	280	77.1	11	5%
SKEL2_90	0.1645	0.011	0.02425	0.0014	0.52158	0.0497	0.0018	0.05836	0.00881	0.00093	590	1.9	155.4	8.9	154.5	9	174	79	177.4	19	89%
SKEL2_91	0.2846	0.017	0.0326	0.0018	0.30127	0.0625	0.0021	0.055051	0.0181	0.0022	712	7.0	254.1	14	206.8	11	697	66	363	44	30%
SKEL2_92	2.828	0.17	0.2107	0.012	0.51617	0.0968	0.003	0.36683	0.0672	0.0068	419	2.8	1361	44	1232	64	1558	57	1314	130	79%
SKEL2_93	0.305	0.025	0.03195	0.0019	0.53852	0.0687	0.004	-0.31436	0.0133	0.0016	269.1	2.3	269	19	202.7	12	850	120	266	32	24%
SKEL2_94	0.0616	0.0097	0.00835	0.00051	0.22902	0.0514	0.0069	-0.070879	0.00213	0.00034	139	0.8	60.3	9.1	53.6	3.3	230	230	43.1	6.9	23%
SKEL2_95	0.1791	0.012	0.02529	0.0014	0.64643	0.0518	0.0026	-0.29747	0.00941	0.0011	452	2.1	167.1	11	161	8.9	256	100	189	22	63%
SKEL2_96	0.237	0.019	0.02948	0.0017	0.37895	0.057	0.0029	-0.10899	0.00913	0.0011	270	2.7	215	15	187.3	10	480	120	184	22	39%
SKEL2_97	1.43	0.27	0.042	0.0041	0.13323	0.241	0.048	0.092553	0.5	0.14	8.84	16.8	850	100	265	25	2990	330	7500	1700	9%
SKEL2_98	0.1726	0.01	0.02566	0.0015	0.43212	0.0488	0.0015	0.089085	0.00842	0.00082	1330	1.3	161.6	9	163.3	9.4	138	66	169.5	16	118%
SKEL2_99	0.202	0.035	0.01016	0.00074	0.53302	0.139	0.02	-0.44852	0.0057	0.0021	225	0.7	183	29	65.2	4.7	2020	260	114	43	3%
SKEL2_100	0.2473	0.016	0.03014	0.0018	0.4532	0.0602	0.0023	0.24534	0.00826	0.0009	566	1.9	224.2	13	191.4	11	607	86	166.2	18	32%
SKEL2_101	0.21	0.015	0.0279	0.0016	0.20181	0.0557	0.0031	0.34982	0.0077	0.0008	448	1.4	195.2	13	177.4	10	400	120	155.1	16	44%
SKEL2_102	0.1741	0.011	0.02494	0.0014	0.35593	0.0504	0.0018	0.29683	0.00806	0.00082	1031	1.6	162.9	9	158.8	9.1	205	78	162.3	16	77%
SKEL2_103	0.0773	0.01	0.00826	0.00047	0.37329	0.0682	0.008	-0.20046	0.00297	0.00032	845	0.9	75.2	9.4	53	3	750	220	60	6.5	7%
SKEL2_104	0.214	0.03	0.01003	0.00071	0.22223	0.155	0.023	0.14582	0.00394	0.00065	138	0.8	194	24	64.3	4.5	2330	220	80	13	3%
SKEL2_105	0.258	0.023	0.03145	0.0018	-0.046348	0.0583	0.0039	0.18664	0.00946	0.00098	333	2.0	232	18	199.6	11	490	130	190.2	20	41%
SKEL2_106	0.0536	0.0039	0.00809	0.00046	0.33755	0.0485	0.0025	-0.18146	0.0025	0.00026	1300	1.0	53	3.8	51.92	2.9	121	100	50.4	5.2	43%
SKEL2_107	0.2305	0.015	0.03075	0.0018	0.090867	0.0544	0.0022	0.050902	0.00842	0.0009	367	1.8	210.3	12	195.2	11	371	84	169.4	18	53%
SKEL2_108	0.1987	0.014	0.02923	0.0016	0.43005	0.0493	0.0021	-0.1778	0.0102	0.0011	492	1.8	183.8	11	185.7	10	159	90	205	22	117%
SKEL2_109	0.249	0.025	0.02562	0.0015	0.36282	0.0697	0.0056	-0.1764	0.00823	0.00094	390	1.2	227	21	163	9.1	860	180	166	19	19%
SKEL2_110	0.1978	0.012	0.02528	0.0016	0.24389	0.0552	0.0023	0.69175	0.00693	0.00071	1500	2.0	183.1	10	160.9	10	402	89	139.5	14	40%
SKEL2_111	0.1747	0.011	0.02495	0.0015	0.59986	0.0508	0.0018	0.045322	0.00713	0.00072	1228	1.5	163.3	9.8	158.8	9.3	225	80	143.5	14	71%
SKEL2_112	0.075	0.013	0.00809	0.0005	0.58516	0.0682	0.01	-0.39348	0.00272	0.00034	494	1.1	72	12	51.9	3.2	700	270	54.9	6.9	7%
SAWMILL1_1	0.063	0.013	0.00858	0.00049	0.32822	0.0505	0.0086	-0.2569	0.00299	0.00051	393	1.0	61	12	55.1	3.1	110	270	60.3	10	50%
SAWMILL1_2	0.056	0.012	0.00845	0.00053	0.011829	0.0475	0.0089	0.1197	0.0042	0.0016	260	1.3	55.1	11	54.2	3.4	10	290	85	33	542%
SAWMILL1_4	0.055	0.012	0.00835	0.00049	0.16811	0.0491	0.011	-0.10719	0.00285	0.00053	373	0.9	54	11	53.6	3.1	20	320	57.6	11	268%
SAWMILL1_5	0.0756	0.012	0.00895	0.00051	0.35652	0.0621	0.0085	-0.079035	0.00301	0.00053	206.1	1.5	73.7	11	57.4	3.3	630	270	60.7	11	9%
SAWMILL1_6	0.2102	0.023	0.03035	0.0016	0.62104	0.0507	0.0044	-0.037105	0.00984	0.0014	425	1.2	193.5	19	193.6	11	219	190	197.8	29	88%
SAWMILL1_7	0.0612	0.012	0.00866	0.00052	0.10179	0.0509	0.0085	0.087108	0.00331	0.00061	857	1.4	59.8	11	55.6	3.3	150	280	66.9	12	37%
SAWMILL1_8	0.0634	0.011	0.00782	0.00041	0.093301	0.059	0.0092	0.015335	0.00265	0.00042	306	0.9	62	9.9	50.2	2.6	360	240	53.6	8.4	14%
SAWMILL1_9	0.062	0.013	0.0083	0.00049	0.042955	0.0546	0.011	-0.02098	0.00315	0.00058	654	0.8	60	12	53.3	3.1	210	320	63.6	12	25%
SAWMILL1_10	0.0564	0.0079	0.00853	0.00049	-0.2626	0.0493	0.0055	0.47416	0.00286	0.00044	264	1.0	55.7	7.5	54.8	3.1	150	220	57.7	8.9	37%
SAWMILL1_11	0.055	0.0074	0.00887	0.00049	0.051438	0.0465	0.0056	0.26017	0.003	0.00048	494	1.5	54.3	7.1	56.9	3.2	30	220	60.5	9.6	190%
SAWMILL1_12	0.081	0.015	0.01122	0.00062	-0.17793	0.0517	0.0092	0.301	0.00376	0.00076	615	1.2	79	13	71.9	4	90	230	76	15	80%
SAWMILL1_13	0.0563	0.0098	0.008	0.00045	0.14559	0.0501	0.0078	0.10718	0.00241	0.00037	211	0.7	55.3	9.3	51.4	2.9	270	310	48.7	7.4	19%
SAWMILL1_14	0.0489	0.0074	0.00865	0.00052	-0.038072	0.041	0.0058	0.31333	0.00283	0.00051	393	1.2	48.3	7.1	55.5	3.3	-180	230	57.1	10	-31%
SAWMILL1_15	0.0559	0.0066	0.0086	0.00062	0.58325	0.0504	0.0054	-0.19204	0.00317	0.00052	304	1.7	55.2	6.4	55.2	4	150	170	64	10	37%
SAWMILL1_16	0.075	0.016	0.00922	0.00054	-0.0034142	0.062	0.013	0.15776	0.00294	0.00055	1010	1.4	73	15	59.1	3.4	420	330	59.3	11	14%
SAWMILL1_17	0.063	0.013	0.00838	0.00054	0.13002	0.055	0.011	0.0624	0.00292	0.00051	343	0.9	62	12	53.8	3.5	220	300	58.8	10	24%
SAWMILL1_18	0.0721	0.0093	0.00868	0.0005	0.4885	0.0626	0.0067	-0.19833	0.0027	0.00041	312	0.9	70.5	8.8	55.7	3.2	630	210	54.5	8.2	9%
SAWMILL1_19	0.0523	0.0085	0.00833	0.00047	0.032727	0.045	0.0068	0.10166	0.00297	0.00057	650	1.0	51.6	8.2	53.5	3	-40	250	59.8	11	-134%
SAWMILL1_20	0.222	0.028	0.0309	0.0018	0.25042	0.0521	0.0058	-0.15523	0.0106	0.0018	271.5	1.9	202	23	196.4	11	250	210	212	36	79%
SAWMILL1_21	0.0588	0.0093	0.00831	0.00045	0.026177	0.053	0.0082	0.034082	0.00295	0.00049	182.1	1.4	57.8	8.8	53.4	2.9	230	260	59.5	9.9	23%
SAWMILL1_22	0.0524	0.0072	0.00817	0.00047	0.11666	0.0482	0.006	0.11403	0.00305	0.00048	407	0.9	51.8	6.9	52.5	3	100	230	61.6	9.6	53%
SAWMILL1_23	0.0593	0.0077	0.00861	0.00053	0.31562	0.0505	0.0054	0.053727	0.00301	0.00048	495	1.1	58.4	7.3	55.3	3.4	200	210	60.7	9.6	28%
SAWMILL1_24	0.064	0.016	0.00852	0.00055	0.26673	0.054	0.012	-0.1587	0.00336	0.00065	689	1.0	62	14	54.7	3.5	190	280	67.9	13	29%
SAWMILL1_25	0.088	0.015	0.00883	0.00053	0.16015	0.075	0.012	0.027528	0.00385	0.00068	206	1.0	85	14	56.7	3.4	850	300	77.6	14	7%
SAWMILL1_26	0.105	0.019	0.00903	0.00048	-0.14273	0.079	0.012	0.34479	0.00317	0.0005	309	0.9	100	17	57.9	3.1	1090	300	63.9	10	5%
SAWMILL1_27	0.0596	0.012	0.0077	0.00042	-0.18905	0.0558	0.0099	0.28566	0.00279	0.00061	304	0.9	58.3	11	49.4	2.7	270	290	56.3	12	18%
SAWMILL1_28	0.0664	0.011	0.00861	0.00053	0.33192	0.059	0.0095	-0.10156	0.00285	0.00046	367	1.0	64.9	10	55.3	3.4	360	220	57.6	9.3	15%
SAWMILL1_29	0.215	0.031	0.03093	0.0017	-0.00094669	0.0502	0.0065	0.093885	0.0119	0.0027	578	2.2	196	25	196.3	10	170	230	238	54	115%
SAWMILL1_30	0.195	0.027	0.02613	0.0014	-0.20068	0.0537	0.0061	0.37335	0.00946	0.0015	110.2	2.7	180	22	166.2	9	310	220	190	29	54%
SAWMILL1_31	0.0694	0.0091	0.00811	0.00046	-0.13423	0.0626	0.0074	0.33797	0.00297	0.00048	289.4	1.3	68	8.6	52.1	2.9	610	240	59.9	9.7	9%
SAWMILL1_32	0.111	0.024	0.00877	0.00056	0.45525	0.092	0.017	-0.29004	0.00347	0.00062	432	0.7	106	21	56.3	3.6	1230	390	70	12	5%
SAWMILL1_33	0.149	0.024	0.00874	0.00052	0.26878	0.125	0.017	-0.1384	0.00395	0.00089	336	0.7	140	20	56.1	3.3	1940	200	80	18	3%
SAWMILL1_34	0.075	0.015	0.00798	0.00054	0.10802	0.07	0.014	0.0539	0.00309	0.00074	341	0.9	73	14	51.2	3.5	710	380	62	15	7%
SAWMILL1_36	0.239	0.044	0.00939	0.00054	0.33858	0.184	0.029	-0.18356	0.00626	0.0012	140.8	1.1	213	35	60.2	3.4	2520	250	126	24	2%
SAWMILL1_37	0.0647	0.0083	0.0084	0.0005	0.10088	0.0567	0.0062	0.20837	0.00306	0.00053	347	2.4	63.5	7.9	53.9	3.2	430	220	61.8	11	13%
SAWMILL1_38	0.274	0.038	0.0308	0.002	0.57528	0.0654	0.0068	-0.37369	0.00912	0.0015	334	1.7	244	29	195.7	13	730	200	183	30	27%
SAWMILL1_39	0.07	0.013	0.00833	0.00049	0.10327	0.0613	0.011	-0.037689	0.00292	0.00053	955	1.5	68	12	53.5	3.2	470	290	58.9	11	11%
SAWMILL1_40	0.065	0.012	0.00822	0.00047	-0.2016	0.0584	0.01	0.28283	0.0029	0.00046	660	1.0	63.6	11	52.8	3	360	290	58.6	9.3	15%
SAWMILL1_41	0.0645	0.0081	0.00865	0.00051	0.13506	0.0558	0.0062	0.099775	0.00274	0.00047	346	0.7	63.4	7.7	55.5	3.3	390	230	55.2	9.5	14%
SAWMILL1_42	0.07	0.022	0.00866	0.00052	-0.17027	0.056	0.017	0.45897	0.00318	0.00055	418	0.8	67	19	55.6	3.3	80	400	64.2	11	70%
SAWMILL1_43	0.241	0.049	0.01004	0.00064	0.37797	0.172	0.032	-0.049385	0.00563	0.0012	389	1.2	214	39	64.4	4.1	2350	310	113	25	3%
SAWMILL1_44	0.129	0.019	0.0089	0.0005	0.18341	0.107	0.014	0.029808	0.00371	0.00061	191.8	1.2	122	17	57.1	3.2	1720	220	74.8	12	3%
SAWMILL1_45	0.186	0.023	0.0264	0.0016	0.52209	0.0508	0.005	0.058423	0.00869	0.0015	319	1.7	173	20	168.1	10	220	200	175	29	76%
SAWMILL1_46	0.0526	0.0074	0.00845	0.00049	0.30882	0.0477	0.0063	-0.10611	0.00292	0.00047	648	1.6	51.9	7.1	54.2	3.1	10	190	58.9	9.4	542%
SAWMILL1_48	0.0687	0.0089	0.00946	0.00057	0.38919	0.0535	0.0059	0.014852	0.00314	0.00048	152	0.9	67.4	8.4	60.7	3.7	300	210	63.3	9.6	20%
SAWMILL1_49	0.324	0.048	0.0311	0.0019	-0.12545	0.0745	0.01	0.41755	0.015	0.0029	709	2.9	282	35	197.1	12	910	250	301	57	22%
SAWMILL1_50	0.258	0.033	0.0332	0.0021	0.284	0.057	0.0061	0.066516	0.0116	0.002	291	2.0	232	26	210.7	13	500	200	234	40	42%
SAWMILL1_51	0.0582	0.0084	0.00821	0.00045	0.049474	0.0525	0.0069	0.15712	0.00257	0.00038	999	0.8	57.3	8	52.7	2.9	240	240	51.8	7.7	22%
SAWMILL1_53	0.071	0.012	0.009	0.00064	0.19772	0.0597	0.01	0.050931	0.00325	0.00058	201	1.3	69.1	12	57.8	4.1	370	250	65.5	12	16%
SAWMILL1_54	0.284	0.051	0.0338	0.0023	0.062353	0.061	0.01	0.12613	0.013	0.0024	169	2.3	241	34	214	14	460	300	262	48	47%
SAWMILL1_55	0.099	0.016	0.00899	0.0005	0.059732	0.084	0.013	0.13919	0.00268	0.00044	467	0.6	95	14	57.7	3.2	1150	270	54.1	8.9	5%
SAWMILL1_56	0.0626	0.0098	0.00843	0.00048	0.52385	0.0548	0.008	-0.21724	0.00273	0.00045	327	1.2	61.4	9.2	54.1	3.1	290	260	55.1	9	19%
SAWMILL1_57	0.0629	0.01	0.00886	0.00051	0.15777	0.0521	0.0079	0.034849	0.00275	0.0005	564	1.2	61.7	9.7	56.9	3.3	190	250	55.5	10	30%
SAWMILL1_58	0.0651	0.01	0.00836	0.00044	0.13029	0.0561	0.0079	0.018581	0.00284	0.00043	91.6	1.2	63.8	9.6	53.7	2.8	300	230	57.3	8.8	18%
SAWMILL1_59	0.0825	0.011	0.01108	0.00062	0.52345	0.0542	0.0057	-0.21407	0.0079	0.0023	245	25.2	80.3	10	71	4	330	210	158	47	22%
SAWMILL1_60	0.0583	0.0075	0.00885	0.00053	0.40077	0.0472	0.0046	-0.048893	0.00283	0.00044	437	0.7	57.5	7.2	56.8	3.4	60	190	57	8.8	95%
SAWMILL1_61	0.0582	0.0074	0.00823	0.00046	0.12111	0.0512	0.0057	0.095037	0.00263	0.00039	373	0.8	57.4	7.1	52.8	3	180	180	53	7.9	29%
SAWMILL1_62	0.0652	0.0097	0.00895	0.00053	-0.053591	0.0513	0.0067	0.25376	0.00259	0.00041	458	0.8	63.9	9.1	57.4	3.4	200	230	52.2	8.3	29%
SAWMILL1_63	0.074	0.014	0.00905	0.00053	0.23055	0.0591	0.0096	-0.044683	0.00296	0.00053	1741	1.0	72	13	58.1	3.4	420	300	59.7	11	14%
SAWMILL1_64	0.118	0.035	0.00921	0.00057	0.10584	0.089	0.025	-0.027873	0.00278	0.00057	773	1.0	109	30	59.1	3.6	870	420	56.2	12	7%
SAWMILL1_65	0.0575	0.0078	0.008	0.00043	-0.078919	0.0513	0.0062	0.21698	0.00262	0.00041	697	1.0	56.7	7.5	51.4	2.8	210	220	52.8	8.2	24%
SAWMILL1_66	0.158	0.048	0.01062	0.00093	-0.22067	0.099	0.032	-0.0029601	0.00351	0.0009	448	0.4	143	38	68.1	5.9	1340	410	71	18	5%
SAWMILL1_67	0.233	0.027	0.03321	0.0018	0.23236	0.0504	0.0048	0.32455	0.0106	0.0018	326	2.3	212	22	210.6	11	200	200	213	36	105%
SAWMILL1_68	0.093	0.017	0.00892	0.00054	0.70891	0.073	0.011	-0.52427	0.00304	0.00049	106	0.7	89	15	57.2	3.5	860	310	61.4	9.8	7%
SAWMILL1_69	0.0661	0.011	0.00872	0.00048	0.20941	0.0542	0.0074	-0.10348	0.00277	0.00042	557	0.8	64.7	9.9	56	3.1	300	250	55.9	8.4	19%
SAWMILL1_70	0.0542	0.0079	0.00814	0.00046	0.40329	0.0494	0.0062	-0.11914	0.00276	0.00053	410	1.2	53.5	7.6	52.2	2.9	150	240	55.8	11	35%
SAWMILL1_71	0.0608	0.0096	0.00828	0.00058	0.58847	0.0528	0.007	-0.26469	0.00244	0.00049	189	1.2	59.8	9.1	53.2	3.7	280	260	49.3	10	19%
SAWMILL1_72	0.0586	0.0069	0.00853	0.00047	-0.10034	0.0492	0.0051	0.51379	0.00315	0.00053	398	2.5	57.8	6.6	55	3.1	140	200	63.5	11	39%
SAWMILL1_73	0.094	0.03	0.00898	0.00053	0.011227	0.078	0.024	0.07674	0.004	0.0012	487	0.9	88	25	57.7	3.4	570	410	80	24	10%
SAWMILL1_74	0.0655	0.012	0.00872	0.00053	0.082798	0.0548	0.0089	-0.003457	0.00292	0.00045	415	0.9	64	11	55.9	3.4	260	260	58.9	9.1	22%
SAWMILL1_76	0.066	0.0079	0.00961	0.00055	0.56112	0.0498	0.0047	-0.039592	0.00351	0.00056	644	1.7	64.8	7.5	61.6	3.5	200	200	70.8	11	31%
SAWMILL1_77	0.31	0.043	0.01204	0.0009	0.67648	0.188	0.019	-0.086508	0.0845	0.015	793	15.6	272	32	77.1	5.7	2711	150	1630	280	3%
SAWMILL1_78	0.0567	0.0064	0.00864	0.00047	0.12622	0.0475	0.0045	0.15469	0.00277	0.00041	137.5	0.6	56	6.1	55.4	3	79	180	55.9	8.3	70%
SAWMILL1_80	0.0609	0.009	0.00919	0.00066	0.60692	0.047	0.0051	-0.17298	0.00337	0.00059	329	1.1	59.9	8.6	59	4.2	110	220	68	12	54%
SAWMILL1_81	0.0601	0.0076	0.0084	0.00047	0.22868	0.0518	0.0056	-0.16763	0.0026	0.00038	412	0.7	59.2	7.2	53.9	3	240	210	52.4	7.7	22%
SAWMILL1_82	0.229	0.031	0.0338	0.002	0.16737	0.05	0.0059	0.19934	0.0124	0.0025	970	2.0	208	25	214.3	12	200	230	249	49	107%

analysis	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES									
	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
SAWMILL1_83	0.123	0.034	0.00959	0.0006	0.46174	0.082	0.016	-0.31341	0.00405	0.0007	426	1.3	114	28	61.5	3.9	950	310	81.7	14	6%
SAWMILL1_84	0.052	0.016	0.00884	0.0006	-0.1612	0.051	0.021	0.25785	0.00289	0.00052	955	0.9	51	15	56.7	3.8	-180	440	58.3	10	-32%
SAWMILL1_85	0.0595	0.0098	0.0085	0.00051	0.24254	0.051	0.0071	-0.15541	0.00273	0.00049	269	0.9	58.4	9.3	54.5	3.2	190	250	55.1	9.8	29%
SAWMILL1_86	0.23	0.029	0.0311	0.0021	0.70258	0.0527	0.0048	-0.23916	0.00896	0.0013	521	2.4	209	24	197.4	13	296	200	180	27	67%
SAWMILL1_87	0.0555	0.0064	0.00873	0.0005	0.26416	0.0465	0.0045	0.24947	0.00271	0.00045	948	0.9	54.8	6.2	56	3.2	40	190	54.8	9	140%
SAWMILL1_88	0.328	0.039	0.02864	0.0016	-0.14168	0.0841	0.0092	0.88951	0.01233	0.0019	132	1.9	287	30	182	9.8	1230	200	251	35	15%
SAWMILL1_89	0.06	0.0092	0.00847	0.00047	-0.039403	0.0521	0.0079	0.10519	0.00279	0.00051	309	0.8	58.9	8.6	54.4	3	140	200	56.3	10	39%
SAWMILL1_90	0.1943	0.021	0.02694	0.0014	0.45544	0.0522	0.0044	0.16755	0.0087	0.0013	101.1	1.3	180.2	18	171.3	8.9	286	190	175	26	60%
SAWMILL1_91	0.077	0.015	0.00947	0.00058	-0.013825	0.0614	0.011	0.2122	0.00389	0.00077	326	0.8	75	13	60.8	3.7	450	290	78	16	14%
SAWMILL1_92	0.0584	0.0086	0.00808	0.00046	0.16356	0.052	0.0066	-0.052879	0.00279	0.00045	374	1.7	57.5	8.2	51.8	2.9	240	240	56.4	9	22%
SAWMILL1_93	0.111	0.02	0.00868	0.00053	0.14468	0.092	0.014	-0.028235	0.00361	0.00062	1170	1.0	106	18	55.7	3.4	1260	290	72.9	12	4%
SAWMILL1_94	0.1	0.025	0.00879	0.00055	0.17528	0.081	0.019	-0.077889	0.00295	0.00047	497	0.9	89	18	56.4	3.5	780	330	59.6	9.4	7%
SAWMILL1_95	0.1987	0.022	0.02931	0.0016	0.5635	0.049	0.0043	0.52139	0.00879	0.0013	486	2.0	183.8	19	186.2	9.9	145	190	176.9	26	128%
SAWMILL1_96	0.084	0.018	0.00893	0.0005	0.30272	0.068	0.013	-0.23005	0.00288	0.00046	979	1.0	81	16	57.3	3.2	500	230	58.1	9.3	11%
SAWMILL1_97	0.115	0.027	0.00918	0.00056	0.50563	0.09	0.019	-0.27624	0.00338	0.00062	237	1.1	109	24	58.9	3.5	1090	380	68.3	12	5%
SAWMILL1_98	0.674	0.11	0.0366	0.0023	0.56376	0.129	0.018	-0.48592	0.0319	0.0062	910	2.8	507	69	231.7	14	2020	260	633	120	11%
SAWMILL1_100	0.079	0.013	0.00836	0.00047	0.031637	0.0668	0.0099	0.099272	0.0049	0.0011	374	2.7	76.6	12	53.6	3	680	280	99	23	8%
SAWMILL1_101	0.0766	0.011	0.00916	0.00051	0.34675	0.0609	0.0076	-0.18751	0.00316	0.00055	366	0.8	74.7	10	58.8	3.2	540	240	63.8	11	11%
SAWMILL1_102	0.165	0.024	0.0103	0.00061	0.62591	0.118	0.014	-0.30896	0.00411	0.00071	588	0.8	154	21	66.1	3.9	1850	220	82.9	14	4%
SAWMILL1_103	0.0567	0.0077	0.00849	0.00045	0.10296	0.0477	0.0057	0.15304	0.00302	0.00046	509	1.4	55.9	7.4	54.5	2.9	110	240	60.9	9.2	50%
SAWMILL1_104	0.074	0.012	0.00898	0.00053	-0.26151	0.0588	0.009	0.44972	0.00315	0.00052	388	0.9	72.1	11	57.6	3.4	440	260	63.6	11	13%
SAWMILL1_105	0.0632	0.0086	0.00893	0.00058	0.48602	0.0512	0.0054	-0.15219	0.003	0.00048	212	1.3	62.1	8.1	57.3	3.7	220	210	60.6	9.6	26%
SAWMILL1_106	0.061	0.0077	0.00846	0.00049	0.0080471	0.0518	0.0055	0.41885	0.00262	0.00039	122	0.9	60.1	7.3	54.3	3.1	250	210	52.9	7.8	22%
SAWMILL1_107	0.0641	0.0092	0.00855	0.00048	0.16639	0.055	0.0073	0.063484	0.00281	0.00043	197.3	1.0	62.9	8.7	54.9	3.1	330	240	56.8	8.7	17%
X15CA18A_1	0.163	0.048	0.00939	0.00076	0.8276	0.122	0.031	-0.68183	0.0054	0.0012	556	1.1	156	44	60.2	4.8	1360	450	109	23	4%
X15CA18A_2	0.067	0.011	0.00802	0.00036	0.17787	0.0626	0.0096	0.024704	0.00374	0.001	382	3.3	65.8	10	51.5	2.3	490	280	75	20	11%
X15CA18A_3	0.251	0.032	0.02649	0.0012	0.67792	0.0673	0.0066	-0.354	0.00978	0.0012	541	1.4	225	25	168.5	7.7	740	190	197	25	23%
X15CA18A_4	0.0536	0.0036	0.00813	0.0004	0.39604	0.0468	0.0027	0.45484	0.00259	0.00025	1630	0.7	52.9	3.5	52.2	2.5	70	120	52.3	5	75%
X15CA18A_5	0.219	0.08	0.00914	0.00075	0.72698	0.154	0.05	-0.41349	0.00377	0.0008	132.5	0.7	181	60	58.7	4.8	1310	570	76	16	4%
X15CA18A_6	0.0813	0.011	0.00839	0.00037	0.2255	0.0727	0.0087	0.036585	0.00249	0.00027	777	0.7	78.9	9.8	53.9	2.4	840	250	50.3	5.4	6%
X15CA18A_7	0.082	0.015	0.00849	0.00044	0.096238	0.073	0.014	0.20037	0.0039	0.00079	242	1.7	79	14	54.5	2.8	770	330	79	16	7%
X15CA18A_8	0.056	0.0064	0.0078	0.00037	0.13165	0.0549	0.0063	-0.025713	0.00292	0.00063	623	1.3	55.2	6.1	50.1	2.4	310	200	59	13	16%
X15CA18A_9	0.092	0.022	0.0087	0.00061	0.13928	0.079	0.019	0.043755	0.00289	0.00055	139.6	1.4	87	20	55.8	3.9	810	390	58	11	7%
X15CA18A_10	0.07	0.011	0.00841	0.00037	0.13034	0.064	0.011	0.026883	0.00281	0.00037	385	0.7	68.4	10	54	2.3	540	260	56.7	7.5	10%
X15CA18A_12	0.0618	0.01	0.00804	0.00041	0.13183	0.0579	0.0094	0.045839	0.00321	0.00059	208.1	1.6	60.5	9.5	51.6	2.6	420	300	65	12	12%
X15CA18A_13	0.07	0.013	0.0088	0.00041	0.14006	0.062	0.012	0.024388	0.00405	0.00071	336	1.6	68	12	56.5	2.6	440	320	82	14	13%
X15CA18A_14	0.064	0.013	0.00815	0.00035	0.00028592	0.058	0.011	0.10686	0.00272	0.00034	349	1.4	62	12	52.4	2.2	350	300	55	6.8	15%
X15CA18A_15	0.125	0.018	0.00919	0.0005	-0.076939	0.1	0.014	0.28036	0.0064	0.0013	369	2.8	118	16	59	3.2	1410	280	128	25	4%
X15CA18A_17	0.176	0.024	0.00892	0.00051	0.56286	0.142	0.017	-0.20953	0.00442	0.00054	578	1.0	163	20	57.2	3.2	2080	240	89.1	11	3%
X15CA18A_18	0.0553	0.0039	0.00792	0.00033	0.69668	0.0504	0.0028	-0.19477	0.00291	0.00035	2500	5.7	54.6	3.7	50.8	2.1	201	120	58.8	7.1	25%
X15CA18A_19	0.0525	0.0034	0.00828	0.00036	0.38175	0.046	0.0025	0.28537	0.00264	0.00024	3470	0.7	52.5	3.6	53.1	2.3	15	100	53.3	4.8	354%
X15CA18A_20	0.0537	0.0037	0.00826	0.00035	0.24231	0.047	0.0025	0.14861	0.00269	0.00024	2630	0.6	53.1	3.5	53	2.2	55	100	54.3	4.8	96%
X15CA18A_22	0.0865	0.0067	0.00833	0.00037	0.12498	0.0788	0.0066	0.39021	0.00299	0.0003	826	0.6	84.1	6.3	53.5	2.4	1100	160	60.3	6.1	5%
X15CA18A_23	0.105	0.015	0.00847	0.00042	0.15068	0.092	0.013	-0.0085253	0.00354	0.00043	353	1.4	100	14	54.3	2.7	1300	220	71.4	8.7	4%
X15CA18A_24	0.061	0.011	0.00813	0.00041	-0.11658	0.0561	0.0098	0.19065	0.00303	0.00055	218	0.8	60	11	52.2	2.6	280	290	61	11	19%
X15CA18A_26	0.088	0.029	0.00856	0.0005	-0.22333	0.079	0.029	0.34905	0.00321	0.00064	145	0.8	83	24	54.9	3.2	490	440	65	13	11%
X15CA18A_27	0.64	0.12	0.0127	0.0012	0.68276	0.343	0.061	-0.47331	0.0092	0.0019	255	0.8	479	81	81.3	7.6	3220	490	185	38	3%
X15CA18A_28	0.0877	0.0059	0.00884	0.00039	0.14356	0.0689	0.0041	0.44764	0.00434	0.00054	765	2.7	85.3	5.5	56.8	2.5	890	130	87.5	11	6%
X15CA18A_29	0.094	0.014	0.0082	0.00033	-0.093564	0.079	0.012	0.21847	0.00291	0.00036	261	0.6	91	13	52.6	2.1	1010	300	58.7	7.3	5%
X15CA18A_31	0.83	0.17	0.0143	0.0014	0.93149	0.366	0.055	-0.8365	0.0105	0.0021	190.2	0.6	571	96	91.7	8.8	3510	340	210	42	3%
X15CA18A_32	3.68	0.22	0.267	0.014	0.82332	0.0967	0.0044	0.56793	0.0773	0.0071	497	0.9	1564	48	1525	72	1554	85	1504	130	98%
X15CA18A_33	0.0593	0.0068	0.00794	0.00038	0.15505	0.0553	0.0068	0.017739	0.00265	0.0003	494	0.7	58.4	6.4	51	2.4	380	230	53.4	6	13%
X15CA18A_34	0.0486	0.0055	0.00824	0.00037	0.14523	0.0428	0.0046	-0.044518	0.00284	0.00042	360	1.5	48.1	5.3	52.9	2.4	-110	180	57.3	8.5	-48%
X15CA18A_35	0.0512	0.0032	0.00797	0.00033	0.30115	0.0458	0.0024	0.31481	0.00237	0.00022	2220	0.7	50.7	3.1	51.2	2.1	10	100	47.8	4.3	512%
X15CA18A_36	0.0752	0.0082	0.00855	0.00037	0.41142	0.0642	0.0062	0.022891	0.00297	0.00029	1656	0.8	73.4	7.7	54.9	2.4	660	190	60	5.9	8%
X15CA18A_37	0.083	0.017	0.00849	0.00046	0.48072	0.069	0.013	-0.28208	0.00303	0.00048	609	0.7	80	16	54.5	2.9	600	310	61.1	9.6	9%
X15CA18A_38	0.0519	0.0037	0.00829	0.00039	0.43191	0.0456	0.0026	0.24437	0.00252	0.00024	3111	0.7	51.3	3.6	53.2	2.5	20	120	50.8	4.8	266%
X15CA18A_39	0.0662	0.0056	0.0079	0.00036	0.018949	0.0601	0.0049	0.44564	0.00268	0.00033	567	0.9	65	5.3	50.7	2.3	580	180	54.1	6.7	9%
X15CA18A_40	0.0533	0.0035	0.00798	0.00034	0.303	0.0469	0.0027	0.35162	0.00251	0.00024	2680	0.5	52.7	3.3	51.2	2.1	55	120	50.7	4.8	93%
X15CA18A_41	0.0574	0.0035	0.00838	0.00035	0.38004	0.0478	0.0024	0.37628	0.00272	0.00026	2230	0.7	56.7	3.3	53.8	2.2	96	100	54.9	5.3	56%
X15CA18A_42	0.0537	0.0035	0.00809	0.00039	0.37404	0.0467	0.0029	0.47528	0.00242	0.00024	2200	0.8	53.1	3.4	51.9	2.5	47	120	48.8	4.8	110%
X15CA18A_43	0.0889	0.0078	0.00831	0.00042	-0.095883	0.076	0.007	0.34518	0.00304	0.00033	404	0.6	86.3	7.2	53.3	2.7	1000	200	61.3	6.6	5%
X15CA18A_44	0.0593	0.0099	0.0082	0.00034	0.044886	0.0525	0.0093	0.078697	0.00391	0.00076	304	3.2	58.1	9.2	52.6	2.2	290	290	79	15	18%
X15CA18A_45	0.0579	0.0064	0.00805	0.00039	0.25789	0.0521	0.0055	0.22488	0.00284	0.00038	375	1.2	57	6.1	51.7	2.5	240	200	57.3	7.6	22%
X15CA18A_46	0.194	0.036	0.00918	0.00055	0.79733	0.146	0.023	-0.66412	0.00548	0.00082	681	1.0	175	30	58.9	3.5	1940	350	110	17	3%
X15CA18A_47	0.0568	0.0038	0.00856	0.00035	0.26931	0.0485	0.0028	0.2414	0.0028	0.00027	3840	0.7	56	3.6	54.9	2.2	120	120	56.6	5.4	46%
X15CA18A_48	0.0668	0.0078	0.00888	0.00063	0.41746	0.0553	0.0056	-0.031481	0.0101	0.0052	776	30.0	65.4	7.4	57	4	340	180	200	100	17%
X15CA18A_49	0.068	0.014	0.00827	0.00043	0.19283	0.061	0.012	-0.036575	0.00294	0.00038	238	0.7	66	13	53.1	2.7	420	340	59.4	7.6	13%
X15CA18A_50	0.0691	0.0072	0.00778	0.0004	0.237	0.0651	0.0064	0.19703	0.00331	0.00043	916	1.2	67.7	6.7	50	2.5	720	190	66.8	8.6	7%
X15CA18A_51	0.0641	0.0047	0.00844	0.00035	0.27522	0.0551	0.0035	0.085715	0.00264	0.00025	2290	0.7	63.1	4.5	54.2	2.2	380	130	53.4	5	14%
X15CA18A_52	0.0527	0.0039	0.00798	0.00034	0.23329	0.0479	0.0031	0.092287	0.00235	0.00022	1468	0.8	52.1	3.8	51.3	2.2	90	130	47.4	4.5	57%
X15CA18A_54	0.0628	0.0067	0.00834	0.00041	0.34251	0.0542	0.0052	-0.076705	0.00285	0.00047	638	3.6	61.6	6.4	53.5	2.6	310	180	57.5	9.5	17%
X15CA18A_55	0.267	0.025	0.00953	0.00048	0.6919	0.204	0.016	-0.32564	0.0199	0.0026	827	4.4	243	22	61.2	3.1	2810	150	398	51	2%
X15CA18A_56	0.0703	0.006	0.01056	0.00076	0.35931	0.0487	0.0035	0.11589	0.0073	0.0023	452	39.1	68.9	5.7	67.7	4.9	130	140	147	46	52%
X15CA18A_57	0.0585	0.0074	0.00819	0.00039	-0.27641	0.0545	0.0093	0.47567	0.00267	0.00045	177.6	1.1	57.6	7	52.6	2.5	250	240	54	9.1	21%
X15CA18A_58	0.085	0.018	0.00922	0.0007	0.62842	0.0616	0.0095	-0.16819	0.0072	0.0019	344	14.4	81	16	59.1	4.5	520	280	144	37	11%
X15CA18A_59	0.0524	0.0033	0.00827	0.00039	0.24242	0.0479	0.0029	0.42444	0.00251	0.00023	1744	0.6	51.8	3.2	53.1	2.5	96	120	50.7	4.6	55%
X15CA18A_60	0.09	0.014	0.00859	0.00044	0.49081	0.077	0.011	-0.30551	0.00306	0.00037	720	0.8	87	13	55.1	2.8	990	250	61.7	7.4	6%
X15CA18A_61	0.0493	0.0034	0.00782	0.00035	0.5847	0.0473	0.0025	0.056263	0.00253	0.00022	3097	0.6	48.9	3.3	50.2	2.2	71	110	51	4.5	71%
X15CA18A_63	0.151	0.027	0.00956	0.0008	0.90452	0.107	0.012	-0.73035	0.08	0.021	693	38.2	140	24	61.3	5.1	1630	240	1520	380	4%
X15CA18A_64	0.088	0.016	0.0083	0.00041	-0.079393	0.085	0.017	0.25582	0.00341	0.00046	248	1.3	84	14	53.3	2.6	940	330	68.9	9.3	6%
X15CA18A_65	0.0531	0.0033	0.00819	0.00036	0.26871	0.0475	0.0027	0.47982	0.00265	0.00023	3820	0.2	52.6	3.2	52.6	2.3	79	110	53.6	4.6	67%
X15CA18A_66	0.0492	0.0053	0.00796	0.00034	0.0036643	0.0451	0.0046	0.23742	0.00271	0.00039	288	0.8	48.7	5.1	51.1	2.1	-20	180	54.6	7.8	-256%
X15CA18A_67	0.083	0.017	0.00809	0.00034	0.32308	0.074	0.014	-0.144	0.00333	0.00042	364	0.9	80	15	51.9	2.2	910	260	67.2	8.5	6%
X15CA18A_70	0.0643	0.01	0.00821	0.00038	0.01784	0.0562	0.0091	0.075861	0.00297	0.00042	253	1.1	62.9	9.3	52.7	2.4	300	250	59.9	8.5	18%
X15CA18A_71	0.0529	0.0032	0.008	0.00032	0.55482	0.0463	0.0023	0.32395	0.00276	0.00025	3410	0.5	52.4	3.1	51.4	2.1	26	97	55.6	5	198%
X15CA18A_72	0.0569	0.0081	0.00797	0.00041	0.019541	0.0507	0.0068	0.15247	0.00279	0.00042	217	1.2	55.9	7.6	51.2	2.7	160	230	56.3	8.4	32%
X15CA18A_73	0.0626	0.0082	0.00806	0.00037	0.25939	0.0542	0.0063	-0.016187	0.00328	0.0004	339	1.0	63.2	8.5	51.8	2.4	330	220	66.2	8.1	16%
X15CA18A_75	0.1545	0.011	0.00912	0.00042	0.10715	0.1207	0.008	0.46678	0.00383	0.00037	874	0.5	145.6	9.3	58.5	2.7	1930	120	77.2	7.5	3%
X15CA18A_76	0.0948	0.006	0.01423	0.00073	0.67462	0.0473	0.0024	0.48035	0.00533	0.00063	3540	22.0	91.9	5.5	91.1	4.6	70	100	107	17	130%
X15CA18A_78	0.214	0.029	0.0109	0.00085	0.83785	0.135	0.011	-0.46589	0.07	0.015	337	23.2	195	24	69.9	5.4	2110	150	1340	280	3%
X15CA18A_79	2.48	0.27	0.024	0.0021	0.64167	0.737	0.07	0.083706	0.012	0.0013	60	0.3	1250	85	153	13	4820	160	241	26	3%
X15CA18A_80	0.0542	0.0082	0.00791	0.00039	0.040865	0.0495	0.0075	0.14393	0.00271	0.00033	226	0.8	53.3	7.8	50.8	2.5	90	240	54.6	6.7	56%
X15CA18A_82	0.197	0.032	0.00942	0.00052	0.73904	0.145	0.019	-0.56031	0.00543	0.00071	2640	1.0	179	27	60.4	3.3	2090	260	109	14	3%
X15CA18A_83	0.0545	0.005	0.00824	0.0004	0.22328	0.0478	0.004	0.17321	0.00308	0.00044	565	1.1	53.8	4.8	52.9	2.6	80	160	62.1	8.8	66%
X15CA18A_85	10.95	0.73	0.1037	0.0059	0.42033	0.77	0.047	0.57458	0.0485	0.0061	6.52	0.2	2510	63	636	34	4893	110	956	120	13%
X15CA18A_87	0.0537	0.0038	0.00815	0.00042	0.51345	0.048	0.0029	0.21502	0.00248	0.00022	4120	0.3	53.1	3.6	52.3	2.7	130	140	50	4.5	40%
X15CA18A_88	0.0508	0.003	0.00789	0.00036	0.70443	0.0464	0.0021	0.35087	0.00247	0.00023	5180	0.7	50.3	2.9	50.6	2.3	31	93	49.9	4.7	163%
X15CA18A_90	0.088	0.012	0.00822	0.00036	0.41885	0.0756	0.0088	-0.22425	0.00337	0.00046	559	1.0	85	11	52.7	2.3	980	250	68.1	9.2	5%
X15CA18A_91	0.0573	0.0036	0.00844	0.00037	0.65754	0.0487	0.0023	0.080902	0.00243	0.00022	5610	0.5	56.5	3.5	54.2	2.4	132	100	49	4.4	41%
X15CA18A_93	0.256	0.021	0.0328	0.0015	-0.037295	0.0559	0.0046	0.25605	0.0111	0.0016	232	2.6	231	17	207.8	9.2	440	180	223	31	47%
X15CA18A_95	7.56	0.59	0.078	0.0066	0.34688	0.722	0.062	0.61439	0.0258	0.0033	8.15	0.2	2179	76	483	39	4760	150	514	66	10%
X15CA18A_96	11.13	0.94	0.1077	0.0081	0.1767	0.781	0.08	0.60614	0.0408	0.005	5.82	0.2	2516	74	658	46	4950	180	807	96	13%
X15CA18A_98	0.0499	0.0051	0.00781	0.0004	0.10982	0.0478	0.0041	0.21342	0.0023	0.00025	634	0.9	49.3	4.9	50.2	2.6	180	210	46.4	5.1	28%
X15CA18A_100	0.0597	0.0062	0.00819	0.00038	0.083347	0.0568	0.0055	0.14948	0.00234	0.00026	603	0.7	58.8	5.8	52.6	2.4	410	170	47.3	5.2	13%

analysis	ISOTOPIC RATIOS 207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	ELEMENTAL CONCENTRATIONS [U] (ppm)	U/Th	AGES 207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
X15CA18A_101	0.212	0.075	0.00909	0.00077	0.92478	0.15	0.045	-0.83729	0.0093	0.0032	495.4	2.3	178	58	58.3	4.9	1390	540	187	63	4%
X15CA18A_102	0.077	0.014	0.00879	0.00044	0.13735	0.068	0.011	0.078161	0.00278	0.00047	261	1.3	75	13	56.4	2.8	630	300	56.1	9.5	9%
X15CA18A_104	0.0758	0.0065	0.0096	0.00061	-0.42676	0.0651	0.0072	0.83955	0.0126	0.003	603	21.2	74.1	6.1	61.6	3.9	680	230	252	60	9%
X15CA18A_106	0.108	0.021	0.00855	0.00044	0.53331	0.093	0.017	-0.27573	0.00279	0.00039	335	0.9	102	19	54.9	2.8	1150	330	56.4	7.9	5%
X15CA18A_107	12.43	1	0.1293	0.011	0.119	0.722	0.056	0.68937	0.0466	0.0068	3.78	0.2	2620	73	795	67	4780	130	920	130	17%
X15CA18A_108	0.0586	0.0052	0.00813	0.00038	0.172	0.0549	0.0045	0.1981	0.00241	0.00025	803	0.9	57.8	4.9	52.2	2.4	390	180	48.6	5.1	13%
X15CA18A_109	0.0533	0.0031	0.00852	0.00038	0.54663	0.0468	0.0022	0.54588	0.00246	0.00023	4400	0.4	52.7	3	54.7	2.4	51	95	49.7	4.6	107%
X15CA18A_112	0.0541	0.0053	0.00782	0.00039	0.29811	0.0496	0.0045	0.17231	0.00229	0.00029	513	1.0	53.4	5.1	50.2	2.5	150	170	46.3	5.9	33%
X15CA18A_113	0.0562	0.0033	0.00838	0.00034	0.47746	0.0479	0.0023	0.31181	0.00242	0.00022	3460	0.6	55.5	3.2	53.8	2.2	97	100	48.9	4.4	55%
X15CA18A_114	0.0905	0.0088	0.00902	0.00041	0.2617	0.0706	0.0058	0.060608	0.00314	0.00037	633	1.1	87.7	8.2	57.9	2.6	880	160	63.4	7.5	7%
X15CA18A_115	9.04	0.77	0.0836	0.0044	0.024471	0.779	0.061	0.38339	0.0331	0.0035	7.02	0.2	2335	82	517	26	4910	140	658	68	11%
X15CA18A_116	0.156	0.024	0.00899	0.00041	0.56823	0.119	0.016	-0.40124	0.0041	0.00059	392	1.2	145	21	57.7	2.6	1740	240	82.6	12	3%
X15CA18A_117	9.12	1	0.0817	0.0079	0.74219	0.757	0.055	0.20334	0.0336	0.0051	8.3	0.2	2300	110	505	47	4890	140	666	99	10%
X15CA18A_118	0.0571	0.0035	0.00846	0.00033	0.17306	0.0471	0.0025	0.16033	0.00242	0.00023	1660	1.1	56.3	3.4	54.3	2.1	66	110	49	4.6	82%
X15CA18A_119	10.42	0.7	0.097	0.0056	0.098935	0.76	0.052	0.5172	0.0358	0.0041	6.87	0.2	2463	65	596	33	4870	120	709	80	12%
X15CA18A_121	0.0592	0.0044	0.00835	0.0004	0.4698	0.0488	0.0028	0.23293	0.00241	0.00021	4000	0.3	58.3	4.2	53.6	2.5	150	130	48.6	4.3	36%
X15CA18A_122	0.0555	0.0035	0.00839	0.00039	0.57744	0.0471	0.0024	-0.03894	0.00244	0.00022	2610	0.4	54.9	3.3	53.8	2.5	63	100	49.2	4.4	85%
X15CA18A_123	11.52	0.84	0.1052	0.0081	0.11093	0.787	0.065	0.2166	0.0422	0.0059	5.15	0.2	2553	69	643	47	4910	180	833	110	13%
X15CA18A_124	0.0568	0.006	0.00814	0.00033	0.28554	0.0506	0.0047	-0.080427	0.00232	0.00027	375	0.5	56	5.7	52.2	2.1	220	190	46.8	5.4	24%
X15CA18A_125	0.0518	0.0036	0.008	0.00034	0.31227	0.0478	0.0031	0.18101	0.00244	0.00023	1163	1.0	51.2	3.5	51.4	2.2	90	130	49.4	4.6	57%
X15CA18A_126	0.0529	0.0032	0.0082	0.00033	0.16244	0.0474	0.0026	0.44769	0.00233	0.00021	1168	0.7	52.3	3.1	52.6	2.1	75	110	47	4.2	70%
X15CA18A_127	0.0651	0.0043	0.00867	0.00038	0.50708	0.0552	0.003	0.095765	0.00258	0.00023	4820	0.5	64	4.1	55.7	2.4	400	120	52.1	4.7	14%
X15CA18A_129	0.0539	0.0035	0.00834	0.00035	0.44613	0.0469	0.0024	0.23607	0.00263	0.00023	2010	0.6	53.3	3.4	53.6	2.3	55	100	53.1	4.7	97%
X15CA18A_130	0.0535	0.004	0.00745	0.00031	0.15521	0.0525	0.0036	0.30249	0.00245	0.00024	1219	0.7	52.9	3.8	47.8	2	280	140	49.5	4.8	17%
X15CA18A_131	0.081	0.012	0.00831	0.00037	0.56389	0.0697	0.0094	-0.38991	0.00308	0.00033	958	0.9	78	11	53.4	2.4	720	250	62.2	6.7	7%
X15CA18A_133	0.131	0.031	0.00868	0.0005	0.67471	0.111	0.024	-0.49029	0.00431	0.00067	177	1.0	121	27	55.7	3.2	1300	400	87	14	4%
X15CA18A_134	0.1099	0.0071	0.01679	0.00077	0.21508	0.0478	0.0028	0.25242	0.00586	0.00071	972	3.9	105.8	6.5	107.3	4.9	94	120	118	14	114%
X15CA18A_135	0.0533	0.003	0.00827	0.00033	0.48176	0.0475	0.0022	0.32277	0.00265	0.00024	4000	0.8	52.7	2.9	53.1	2.1	78	95	53.4	4.8	68%
X15CA18A_136	0.0532	0.0033	0.00839	0.0004	0.81078	0.0463	0.0021	0.17734	0.00257	0.00023	4660	0.8	52.6	3.2	53.9	2.5	25	90	51.9	4.6	216%
X15CA18A_137	0.0712	0.0062	0.00797	0.00034	0.15166	0.0649	0.0051	0.098325	0.00304	0.00035	635	1.3	69.7	5.9	51.2	2.2	710	170	61.4	7.1	7%
X15CA18A_138	0.0558	0.0038	0.0082	0.00037	0.36579	0.0491	0.0029	0.27308	0.00265	0.00027	1980	0.9	55.1	3.7	52.7	2.3	147	120	53.5	5.3	36%
X15CA18A_139	0.0538	0.0045	0.00811	0.00037	0.15891	0.0478	0.0037	-0.037742	0.00263	0.00026	711	0.7	53.1	4.3	52.1	2.3	80	140	53.1	5.2	65%
X15CA18A_140	0.511	0.048	0.0325	0.0016	0.2655	0.1123	0.0093	0.002588	0.01129	0.0011	65.4	0.2	416	32	206.3	9.9	1780	150	230	25	12%
PB2_1	0.1603	0.033	0.02451	0.0009	0.64365	0.0475	0.0096	-0.072372	0.00764	0.0031	770	2.8	150.7	29	156.1	5.7	94	420	153.8	63	166%
PB2_2	1.259	0.27	0.0361	0.0024	0.70739	0.262	0.054	0.19558	0.0667	0.028	58.8	2.9	827	110	228	15	3266	330	1304	520	7%
PB2_4	5.51	1.1	0.0732	0.003	0.51458	0.545	0.11	0.25076	0.0353	0.015	17.03	0.3	1899	190	455	18	4356	300	700	280	10%
PB2_5	5.64	1.2	0.0725	0.0055	0.78007	0.576	0.12	-0.2226	0.206	0.086	14.08	2.0	1937	210	450	33	4436	300	3770	1400	10%
PB2_6	0.331	0.068	0.02465	0.00071	0.19531	0.0976	0.02	0.28688	0.0143	0.0059	153.4	1.7	289	52	156.9	4.5	1580	370	287	120	10%
PB2_7	3.98	0.85	0.0574	0.003	0.90177	0.498	0.1	-0.42018	0.171	0.072	128	2.2	1627	180	360	18	4234	290	3170	1300	9%
PB2_8	0.37	0.077	0.0251	0.00079	0.15657	0.1047	0.021	0.11651	0.01259	0.0052	150.3	1.3	314	48	159.8	5	1676	370	253	100	10%
PB2_9	0.173	0.036	0.02364	0.00078	0.36137	0.0525	0.011	-0.016433	0.00748	0.0031	638	1.0	161.8	31	150.6	4.9	254	380	150.6	61	59%
PB2_10	0.255	0.052	0.02375	0.00087	0.39846	0.0767	0.016	0.39099	0.01063	0.0044	755	1.5	230	42	151.3	5.5	1111	420	213.6	87	14%
PB2_12	5.52	1.1	0.0692	0.0027	0.25822	0.573	0.12	0.48368	0.0423	0.017	13.25	0.3	1903	180	431	16	4443	320	837	340	10%
PB2_13	0.1645	0.033	0.02394	0.00072	0.55895	0.0496	0.01	-0.067579	0.00795	0.0033	1245	2.6	154.4	29	152.5	4.5	170	430	160.1	65	90%
PB2_14	1.207	0.25	0.0318	0.0014	0.31054	0.278	0.058	0.31365	0.0402	0.017	28.3	1.6	805	110	201.6	8.7	3341	300	795	320	6%
PB2_15	3.12	0.64	0.0512	0.0018	0.60677	0.44	0.089	0.022029	0.0367	0.015	29.2	0.5	1450	160	322	11	4057	310	728	290	8%
PB2_16	1.256	0.26	0.0313	0.0013	0.68159	0.286	0.059	-0.05972	0.0271	0.011	61.2	1.0	819	120	198.8	8.4	3385	330	540	220	6%
PB2_17	0.93	0.22	0.0284	0.0014	0.68369	0.225	0.05	-0.39151	0.01017	0.0042	94.5	0.2	646	110	180.5	9	2970	370	205	84	6%
PB2_18	0.186	0.038	0.0234	0.00078	0.42718	0.0582	0.012	-0.061528	0.00794	0.0033	1050	2.2	172.8	33	149.1	4.9	500	450	159.9	65	30%
PB2_19	0.173	0.036	0.02506	0.001	0.25716	0.049	0.0099	-0.18805	0.0076	0.0031	1220	3.9	162.1	31	160.8	6.9	145	420	153	63	111%
PB2_20	0.1823	0.037	0.02444	0.00088	0.6778	0.0541	0.011	0.11607	0.00792	0.0032	4030	1.8	171.1	30	155.7	5.5	360	450	159.5	65	43%
PB2_21	3.12	0.63	0.0463	0.0025	0.26187	0.48	0.099	0.52805	0.0361	0.015	24.1	0.6	1441	160	292	15	4157	310	715	290	7%
PB2_22	2.27	0.46	0.0425	0.0014	0.44114	0.381	0.077	0.27014	0.01901	0.0078	35.2	0.3	1198	140	268.3	8.9	3822	310	381	150	7%
PB2_23	1.271	0.25	0.0371	0.0012	0.57259	0.247	0.05	0.15973	0.0259	0.011	81.5	0.8	835	120	235	7.6	3156	320	516	210	7%
PB2_24	1.638	0.34	0.0376	0.0015	0.61715	0.314	0.064	0.16368	0.0441	0.018	36	1.3	979	130	238.2	9.3	3520	310	870	350	7%
PB2_25	0.2051	0.041	0.02047	0.00059	0.12412	0.0738	0.015	0.42377	0.00776	0.0032	2010	3.6	189.3	35	130.6	3.7	1033	430	156.2	64	13%
PB2_27	0.1629	0.033	0.02409	0.00075	0.28091	0.0484	0.0097	0.22156	0.00731	0.003	739	1.4	153.1	28	153.4	4.7	118	420	147.2	60	130%
PB2_28	5.97	1.2	0.0737	0.0026	0.42739	0.576	0.12	0.080855	0.0457	0.019	20.2	0.4	1960	170	458	16	4449	280	901	370	10%
PB2_29	5.95	1.2	0.0765	0.0036	0.58212	0.567	0.12	0.0027426	0.05	0.021	11.67	0.4	1957	180	475	21	4411	300	985	400	11%
PB2_30	1.714	0.35	0.0383	0.0013	0.22683	0.318	0.065	0.27243	0.0243	0.01	47.5	0.6	1002	110	242.1	7.8	3557	320	486	200	7%
PB2_32	0.187	0.039	0.0254	0.00097	0.83255	0.0542	0.011	-0.39068	0.00921	0.0038	851	3.0	173	33	161.7	6.1	365	450	185	76	44%
PB2_33	0.1591	0.032	0.02362	0.00089	0.46457	0.047	0.0095	0.34197	0.00841	0.0035	542	4.0	149.7	28	150.5	5.6	62	410	169	70	243%
PB2_34	0.178	0.037	0.02456	0.00089	0.47227	0.0538	0.011	0.35131	0.00858	0.0035	1242	1.8	168.1	30	156.4	5.6	340	450	172.6	71	46%
PB2_35	0.1647	0.034	0.02522	0.00078	0.5973	0.0483	0.0098	-0.019372	0.00841	0.0035	1275	2.5	154.6	29	160.5	4.9	115	420	169.3	69	140%
PB2_36	0.1593	0.032	0.02316	0.00068	0.64778	0.0505	0.01	-0.13004	0.00747	0.0031	1099	1.1	149.9	28	147.6	4.3	219	450	150.3	61	67%
PB2_39	0.1653	0.034	0.02447	0.00072	0.3968	0.05	0.01	0.14595	0.00827	0.0034	1004	2.4	155	29	155.8	4.6	184	420	166.5	68	85%
PB2_40	0.1677	0.034	0.02417	0.00074	0.13563	0.0525	0.011	0.23471	0.00819	0.0034	402	1.5	157.1	30	153.9	4.7	280	420	164.9	67	55%
PB2_41	0.1667	0.034	0.02401	0.00096	0.68635	0.0507	0.01	0.08153	0.00847	0.0035	1560	2.2	156.3	30	152.9	6	219	430	170.5	70	70%
PB2_42	0.1697	0.035	0.02574	0.0009	0.43523	0.0478	0.0098	0.1138	0.00834	0.0034	378	2.5	158.8	30	163.8	5.6	130	440	168	69	126%
PB2_43	0.1719	0.035	0.02347	0.00078	0.55332	0.0551	0.011	-0.014945	0.00758	0.0031	3240	1.7	162.2	29	149.5	4.9	395	450	152.6	62	38%
PB2_44	0.305	0.063	0.02364	0.00075	0.21681	0.0953	0.02	0.27318	0.0176	0.0073	181.2	3.2	270	49	150.6	4.7	1520	380	353	150	10%
PB2_45	3.98	0.85	0.045	0.0024	0.24659	0.657	0.14	0.2213	0.213	0.089	23.6	3.0	1620	170	284	15	4670	280	3890	1500	6%
PB2_46	1.259	0.26	0.0355	0.0014	0.47262	0.267	0.055	-0.12773	0.0228	0.0094	65.3	0.8	820	120	224.9	8.9	3257	320	455	190	7%
PB2_47	2.29	0.48	0.0444	0.0018	0.21917	0.393	0.082	0.33111	0.0246	0.01	35.9	0.4	1214	160	280	11	3869	320	490	200	7%
PB2_48	0.202	0.042	0.0281	0.0011	0.38637	0.0513	0.01	0.07726	0.00841	0.0035	249	0.6	186	35	178.7	7	240	430	169.3	69	74%
PB2_49	1.64	0.34	0.0373	0.0017	0.4209	0.318	0.067	0.24714	0.05	0.023	36.3	1.3	988	120	235.9	10	3570	350	980	420	7%
PB2_50	4.49	0.92	0.0626	0.0026	0.38765	0.517	0.11	0.43197	0.0264	0.011	17.75	0.2	1729	170	391	16	4289	280	526	210	9%
PB2_51	2.39	0.49	0.0462	0.0016	0.31235	0.376	0.076	0.1702	0.0281	0.012	32.1	0.5	1232	150	291	10	3798	320	560	230	8%
PB2_53	1.254	0.26	0.03515	0.0011	0.65064	0.261	0.053	-0.15045	0.0169	0.007	63.7	0.5	825	110	222.6	6.8	3263	320	338	140	7%
PB2_54	0.289	0.059	0.0262	0.00069	0.13213	0.0801	0.016	0.099485	0.00778	0.0032	232.8	0.3	257	46	166.7	4.3	1168	400	156.7	64	14%
PB2_55	0.18	0.037	0.02518	0.00077	0.26278	0.053	0.011	0.14454	0.00663	0.0027	416	1.2	167.6	32	160.3	4.8	300	430	133.6	55	53%
PB2_56	0.188	0.039	0.02459	0.00082	0.18342	0.055	0.011	0.030404	0.00681	0.0028	624	1.8	175	33	156.6	5.1	380	440	137	57	41%
PB2_57	0.284	0.057	0.02553	0.00061	0.21198	0.0813	0.017	0.19711	0.0103	0.0043	281	1.4	253	45	162.5	3.8	1233	360	207	86	13%
PB2_58	3.28	0.68	0.0532	0.0027	0.67958	0.442	0.09	-0.083204	0.0223	0.0092	21.81	0.2	1478	150	334	16	4059	290	446	180	8%
PB2_59	1.618	0.33	0.0395	0.0017	0.25502	0.298	0.061	0.32203	0.0267	0.011	52.4	0.8	972	130	249.6	10	3453	310	532	220	7%
PB2_60	3.28	0.68	0.0567	0.0021	0.47256	0.418	0.085	0.12389	0.0366	0.015	25.6	0.5	1477	170	355	13	3961	320	726	290	9%
PB2_61	0.398	0.083	0.0263	0.0011	0.37297	0.1093	0.023	0.079158	0.00744	0.003	149	0.2	338	60	167.6	6.9	1770	360	149.8	61	9%
PB2_62	2.73	0.57	0.0472	0.002	0.35791	0.423	0.089	0.26047	0.0184	0.0076	21.6	0.3	1325	160	297	12	3980	310	369	150	7%
PB2_63	1.52	0.35	0.03395	0.00097	-0.24156	0.327	0.077	0.44053	0.0147	0.0061	44.8	0.4	929	130	215.2	6.1	3560	340	295	120	6%
PB2_65	0.467	0.097	0.02578	0.00082	0.40073	0.1312	0.027	-0.1248	0.00715	0.0029	116.9	0.2	387	67	164.1	5.2	2080	350	144.1	59	8%
PB2_66	0.383	0.08	0.02491	0.00072	0.4065	0.1149	0.024	0.077231	0.00725	0.003	125.4	0.1	331	56	158.6	4.5	1849	380	145.9	60	9%
PB2_67	0.271	0.055	0.02445	0.00078	0.44855	0.0799	0.016	0.13026	0.0077	0.0032	282.4	0.6	243	44	155.7	4.9	1175	390	155.1	63	13%
PB2_68	1.222	0.25	0.0333	0.0019	0.095365	0.267	0.057	0.47075	0.064	0.028	61.5	2.8	808	120	211	12	3280	370	1250	520	6%
PB2_69	1.14	0.24	0.0339	0.0012	0.089115	0.241	0.05	0.33053	0.01444	0.006	40	0.4	768	110	214.8	7.8	3138	300	290	120	7%
PB2_70	0.1581	0.032	0.02312	0.00065	0.55616	0.0498	0.01	0.11655	0.00668	0.0027	1287	2.2	148.9	28	147.3	4.1	181	440	134.5	55	81%
PB2_71	2.49	0.52	0.0286	0.0018	0.44335	0.655	0.14	0.30768	0.0268	0.011	77	0.5	1280	160	182	12	4640	320	534	220	4%
PB2_72	0.1653	0.034	0.02429	0.001	0.37221	0.0489	0.0099	0.083001	0.00704	0.0029	690	1.2	155.1	29	154.7	6.3	139	420	141.7	58	111%
PB2_73	0.1611	0.032	0.02245	0.00075	0.65582	0.0505	0.01	0.11888	0.00669	0.0027	1560	1.6	151.5	28	143.1	4.7	211	440	134.7	55	68%
PB2_74	3.81	0.79	0.0544	0.0022	0.30678	0.5	0.1	0.45252	0.024	0.0099	21.16	0.3	1583	170	342	13	4215	300	479	190	8%
PB2_75	0.1702	0.035	0.02468	0.00086	0.47939	0.05	0.01	0.23831	0.00728	0.003	895	3.5	159.3	30	157.2	5.4	200	430	146.6	60	79%
PB2_76	0.1712	0.034	0.02523	0.00088	0.29411	0.048	0.0097	0.71382	0.00653	0.0027	1340	10.3	160.4	30	160.6	5.6	105	420	132	55	153%
PB2_77	0.193	0.04	0.0251	0.00079	0.59146	0.0566	0.012	-0.072892	0.00849	0.0035	1467	2.1	182.1	34	159.8	4.9	450	450	170.8	70	36%
PB2_78	0.392	0.082	0.02394	0.00088	0.38339	0.116	0.024	-0.070886	0.0125	0.0052	126	1.3	334	59	152.5	5.5	1860	370	250	100	8%
PB2_79	0.1544	0.031	0.02333	0.00059	0.2998	0.0482	0.0098	0.14249	0.00706	0.0029	468	1.7	145.6	27	149.2	3.8	112	410	142.3	58	133%
PB2_80	5.08	1	0.0678	0.0016	0.042589	0.537	0.11	0.27035	0.0304	0.012	17.34	0.2	1831	170	422.9	9.6	4341	290	605	240	10%

analysis	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								conc. (%)
	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	
PB2_81	4.77	0.97	0.0672	0.0028	0.48005	0.517	0.11	0.32317	0.0288	0.012	20.2	0.3	1788	170	419	17	4296	310	573	230	10%
PB2_82	4.93	1	0.0649	0.0017	0.099073	0.544	0.11	0.40246	0.0455	0.019	17.02	0.4	1807	170	405.2	10	4372	320	899	360	9%
PB2_83	0.472	0.1	0.02515	0.00068	0.085527	0.1327	0.028	0.096432	0.00833	0.0034	87.3	0.2	382	53	160.1	4.3	2090	360	167.6	68	8%
PB2_84	0.153	0.031	0.02243	0.00058	0.37605	0.0494	0.0099	0.21629	0.00687	0.0028	1520	1.8	144.4	27	143	3.7	162	430	138.4	57	88%
PB2_85	0.1514	0.03	0.02294	0.0006	0.36577	0.0474	0.0096	0.16929	0.00776	0.0032	421	1.4	143	27	146.2	3.8	75	410	156.3	64	195%
PB2_86	3.27	0.69	0.0513	0.0029	0.61657	0.435	0.09	-0.0020275	0.0278	0.011	25.19	0.4	1478	160	322	18	4080	330	553	230	8%
PB2_87	0.1811	0.037	0.02428	0.00078	0.47254	0.0547	0.011	0.20415	0.00818	0.0034	795	2.1	168.7	32	154.7	4.9	375	450	164.7	67	41%
PB2_88	0.1699	0.034	0.02494	0.00064	0.61457	0.0484	0.0097	0.10917	0.00867	0.0036	932	1.9	159.1	29	158.8	4	116	430	174	72	137%
PB2_89	4.61	1	0.0599	0.003	0.64051	0.546	0.12	-0.14514	0.16	0.068	33.6	1.9	1746	180	375	18	4380	320	2980	1200	9%
PB2_90	3.96	0.82	0.0567	0.0019	0.48139	0.494	0.1	-0.080545	0.0292	0.012	26.2	0.3	1619	170	355	12	4213	300	581	240	8%
PB2_91	5.11	1	0.069	0.003	0.24613	0.522	0.11	0.46579	0.0335	0.014	16.7	0.3	1827	170	430	18	4276	310	666	270	10%
PB2_92	0.828	0.18	0.02881	0.00087	0.5951	0.21	0.044	-0.30177	0.0238	0.0099	671	1.3	608	98	183.1	5.5	2880	330	475	200	6%
PB2_93	2.65	0.54	0.0446	0.0014	0.095448	0.422	0.086	0.46322	0.0261	0.011	35.2	0.4	1316	150	281.1	8.4	3971	300	521	210	7%
PB2_94	0.1497	0.03	0.02235	0.00076	0.40506	0.0492	0.01	0.22711	0.00767	0.0031	669	2.0	141.5	27	142.5	4.8	153	420	154.5	63	93%
PB2_95	3.34	0.7	0.0523	0.0023	0.63251	0.458	0.095	0.023762	0.142	0.059	21.05	2.3	1481	160	329	14	4121	300	2670	1000	8%
PB2_97	0.162	0.034	0.02362	0.00092	0.38504	0.0491	0.01	-0.046383	0.00755	0.0031	430	2.4	152	30	150.5	5.8	140	410	152	62	108%
PB2_98	0.194	0.041	0.02415	0.00073	0.42678	0.0588	0.012	-0.010775	0.0158	0.0072	209	6.6	180	34	153.8	4.6	520	450	316	140	30%
PB2_99	0.152	0.032	0.0221	0.00083	0.23695	0.0496	0.01	-0.00386	0.00777	0.0032	497	1.6	143.1	27	140.9	5.2	170	420	156.4	64	83%
PB2_100	0.1529	0.031	0.02298	0.00064	0.45586	0.0497	0.01	0.1736	0.00769	0.0032	1192	2.3	144.3	27	146.5	4	177	440	154.9	63	83%
PB2_101	0.411	0.085	0.02506	0.0007	0.36816	0.1194	0.025	0.013333	0.00847	0.0035	121.2	0.3	348	61	159.5	4.4	1918	370	170.5	69	8%
PB2_102	1.87	0.4	0.0387	0.0021	0.56922	0.339	0.071	0.12626	0.0307	0.013	50.7	0.9	1070	140	245	13	3620	320	611	250	7%
PB2_103	3.52	0.74	0.0541	0.0029	0.68432	0.466	0.096	0.13264	0.0338	0.014	39.5	0.4	1526	170	340	18	4130	330	671	270	8%
PB2_104	0.253	0.058	0.02423	0.001	-0.21376	0.0745	0.017	0.35323	0.0132	0.0058	35.3	1.7	226	44	154.3	6.5	910	370	264	120	17%
PB2_105	0.1618	0.033	0.02457	0.00064	0.47896	0.0478	0.0097	0.057417	0.00809	0.0033	716	2.4	152.1	29	156.5	4	94	420	162.9	67	166%
PB2_107	5.07	1	0.068	0.0027	0.31593	0.541	0.11	0.34736	0.0326	0.013	15.59	0.3	1832	170	424	16	4358	320	648	260	10%
PB2_108	1.73	0.36	0.0388	0.0014	0.37465	0.318	0.066	0.045113	0.0235	0.0097	50.6	0.6	1022	120	245.4	8.8	3556	300	470	190	7%
PB2_109	0.459	0.093	0.02598	0.00072	0.060639	0.1261	0.026	0.39173	0.01136	0.0047	114.6	0.6	382	64	165.3	4.5	2041	330	228	93	8%
PB2_110	0.1683	0.034	0.02425	0.00063	0.33193	0.0505	0.01	0.3436	0.00849	0.0035	808	4.4	157.8	29	154.5	4	210	440	171	70	74%
PB2_112	0.163	0.034	0.02458	0.00076	0.2625	0.0499	0.011	0.17184	0.00802	0.0033	225	1.8	153	30	156.5	4.8	170	400	161	66	92%
PB2_113	0.1681	0.034	0.02483	0.00076	0.51026	0.0495	0.01	0.16926	0.00807	0.0034	1930	24.3	157.6	29	158.1	4.8	163	430	162	68	97%
PB2_114	2.46	0.51	0.0438	0.002	0.32996	0.416	0.086	0.45685	0.0899	0.037	32.5	1.9	1265	160	276	12	3954	290	1740	690	7%
PB2_115	0.721	0.15	0.0284	0.0013	0.45002	0.184	0.038	0.007125	0.00946	0.0039	57.1	0.2	546	90	180.3	8.3	2710	340	190.3	78	7%
PB2_117	0.474	0.1	0.0259	0.00086	0.78514	0.1344	0.028	-0.44999	0.01272	0.0052	388	0.8	391	69	164.8	5.4	2130	370	255	100	8%
PB2_118	0.1603	0.032	0.02417	0.00072	0.59949	0.0488	0.0099	-0.053881	0.00739	0.003	926	2.0	150.8	28	153.9	4.6	150	440	148.7	61	103%
PB2_120	1.233	0.25	0.0393	0.0013	0.26172	0.2333	0.047	0.54413	0.0323	0.013	70.7	1.1	814	110	248.5	8.2	3075	320	641	260	8%
PB2_121	0.76	0.16	0.028	0.0011	0.14701	0.198	0.041	0.14741	0.00904	0.0037	59.7	0.1	570	90	178.2	6.9	2770	330	182	74	6%
X15CAN10B_1	0.182	0.025	0.02628	0.00079	0.10446	0.0505	0.0069	0.12391	0.00718	0.002	376	2.2	169	21	167.2	5	180	260	145	39	93%
X15CAN10B_2	3.12	0.49	0.0477	0.0039	-0.042064	0.478	0.083	0.43889	0.0269	0.007	24.9	0.5	1409	110	300	24	4140	270	536	140	7%
X15CAN10B_3	0.1755	0.022	0.02676	0.00062	0.45613	0.0471	0.0056	0.08927	0.00753	0.002	775	2.3	163.9	19	170.2	3.9	61	240	152	40	279%
X15CAN10B_4	0.212	0.026	0.02675	0.00053	0.38725	0.0568	0.0068	0.12184	0.00881	0.0024	792	1.6	195	22	170.2	3.3	460	270	177	48	37%
X15CAN10B_5	0.1657	0.021	0.02537	0.00066	0.337	0.0466	0.0056	0.069689	0.00734	0.0019	559	2.1	155.4	18	161.5	4.1	43	230	148	39	376%
X15CAN10B_6	3.65	0.48	0.0549	0.0029	-0.050448	0.498	0.074	0.47115	0.0257	0.0069	16.95	0.3	1547	100	344	18	4240	220	513	140	8%
X15CAN10B_7	1.54	0.21	0.0356	0.0014	-0.087527	0.316	0.047	0.3546	0.024	0.0067	33.5	0.7	935	79	225.7	9	3510	220	479	130	6%
X15CAN10B_8	0.183	0.033	0.02561	0.00058	0.09331	0.053	0.0099	0.10578	0.00747	0.002	193	1.2	169	27	163	3.7	210	320	150	41	78%
X15CAN10B_9	3.28	0.56	0.0487	0.0037	0.90936	0.461	0.059	-0.51286	0.0171	0.0047	60.5	0.2	1440	140	306	23	4092	190	342	93	7%
X15CAN10B_10	5.72	0.74	0.0752	0.0052	-0.041209	0.549	0.082	0.64386	0.095	0.026	14.24	0.8	1922	110	467	31	4320	240	1830	480	11%
X15CAN10B_11	0.1985	0.023	0.02536	0.001	0.60811	0.0576	0.0067	0.7633	0.00703	0.0019	2540	1.4	183.8	19	161.4	6.3	498	250	142	38	32%
X15CAN10B_12	0.1714	0.022	0.026	0.00059	0.31754	0.0477	0.0058	0.20812	0.00701	0.0019	568	2.2	160.4	19	165.5	3.7	90	240	141	38	184%
X15CAN10B_13	0.1756	0.021	0.02564	0.00051	0.48826	0.0485	0.0055	0.28396	0.00633	0.0016	1920	1.3	164.2	18	163.2	3.2	121	250	127.5	33	135%
X15CAN10B_14	0.216	0.028	0.02605	0.00061	0.036335	0.0601	0.0078	0.17078	0.00784	0.0021	308	1.3	198	23	165.8	3.9	560	270	158	41	30%
X15CAN10B_15	7.34	1	0.0801	0.0054	0.27189	0.691	0.094	0.29575	0.044	0.012	8.46	0.3	2142	120	496	32	4700	220	868	230	11%
X15CAN10B_16	0.204	0.031	0.02615	0.00074	-0.017342	0.0555	0.0084	0.12192	0.00831	0.0022	570	1.2	187	26	166.4	4.6	340	280	167	44	49%
X15CAN10B_18	0.175	0.021	0.02583	0.00067	0.040611	0.0479	0.0056	0.41233	0.00703	0.0018	848	1.1	163.6	18	164.4	4.2	96	240	142	37	171%
X15CAN10B_19	0.1693	0.02	0.02498	0.00058	0.43808	0.0492	0.0057	0.16809	0.00722	0.0019	785	2.0	158.7	17	159	3.6	167	260	145	38	95%
X15CAN10B_20	0.187	0.023	0.0255	0.00059	0.71292	0.0533	0.0064	-0.2858	0.00627	0.0016	1170	1.8	174	20	162.3	3.7	319	250	126	33	51%
X15CAN10B_21	0.253	0.033	0.02686	0.00073	0.45094	0.0679	0.0085	-0.12754	0.00852	0.0022	430	1.0	228	27	170.8	4.6	830	240	171	45	21%
X15CAN10B_22	0.234	0.032	0.03259	0.00083	0.17584	0.055	0.0082	0.097053	0.0106	0.0033	254.2	3.3	212	26	206.8	5.2	330	270	212	65	63%
X15CAN10B_23	0.224	0.029	0.03179	0.00091	-0.022243	0.0512	0.0065	0.089117	0.0101	0.0028	363	2.3	205	24	201.7	5.7	230	260	203	57	88%
X15CAN10B_24	0.1851	0.023	0.02654	0.00051	0.21132	0.05	0.006	0.16565	0.00781	0.0021	656	1.0	172.2	19	168.8	3.2	182	250	157	42	93%
X15CAN10B_25	0.197	0.025	0.02724	0.00072	0.38067	0.0521	0.0064	-0.17085	0.00791	0.0021	868	1.9	182	21	173.2	4.5	237	180	159	43	73%
X15CAN10B_26	0.199	0.027	0.02602	0.00057	0.25893	0.0553	0.0073	-0.10973	0.00774	0.0021	346	1.8	183	22	165.6	3.6	340	200	156	41	49%
X15CAN10B_27	2.61	0.35	0.0459	0.002	0.67375	0.405	0.048	-0.0011801	0.0184	0.005	125.1	0.2	1290	95	289	13	3915	170	367	98	7%
X15CAN10B_28	0.1769	0.022	0.0269	0.00093	0.7019	0.0479	0.0056	-0.10947	0.00711	0.0019	740	1.9	165.2	19	171.1	5.8	97	250	143	38	176%
X15CAN10B_29	0.201	0.034	0.02676	0.00088	-0.10983	0.0563	0.0094	0.36045	0.0075	0.0023	287	2.8	184	28	170.2	5.5	370	310	150	47	46%
X15CAN10B_30	0.2076	0.025	0.02951	0.00065	0.46388	0.0519	0.0059	0.14914	0.00772	0.002	1067	1.1	191.3	21	187.5	4.1	271	260	155	40	69%
X15CAN10B_31	0.213	0.027	0.0332	0.00086	0.41365	0.0487	0.0057	0.10522	0.00867	0.0023	502	2.0	196.4	20	210.5	5.4	133	240	174	46	158%
X15CAN10B_32	0.1709	0.02	0.02527	0.00067	0.5986	0.0491	0.0056	-0.1842	0.00761	0.002	1347	1.3	160.1	18	160.9	4.2	151	250	153	41	107%
X15CAN10B_33	0.187	0.025	0.0254	0.00057	0.30193	0.0536	0.0067	0.010394	0.00804	0.0021	394	1.3	173	21	161.7	3.6	320	260	162	43	51%
X15CAN10B_34	0.1804	0.021	0.02659	0.00062	0.85251	0.04935	0.0055	0.23083	0.00733	0.002	3340	2.0	168.3	18	169.9	3.7	169	270	148	39	101%
X15CAN10B_35	0.284	0.039	0.02631	0.00052	0.15415	0.0816	0.011	-0.031644	0.00906	0.0024	377	1.2	247	25	167.4	3.3	1110	180	182	47	15%
X15CAN10B_36	0.1925	0.023	0.0275	0.00061	0.54989	0.052	0.006	0.20725	0.00801	0.0022	1209	2.8	179.7	19	174.9	3.8	288	240	161	43	61%
X15CAN10B_37	0.194	0.024	0.02846	0.00092	0.56302	0.05	0.0059	-0.015163	0.00857	0.0023	1110	1.4	179.5	21	180.9	5.8	184	250	172	45	98%
X15CAN10B_38	0.204	0.032	0.02549	0.00085	0.27795	0.0607	0.0078	-0.06227	0.0082	0.0024	425	1.5	187	28	162.3	5.3	620	290	165	49	26%
X15CAN10B_39	0.16	0.022	0.02528	0.00086	-0.15922	0.0474	0.0065	0.53065	0.008	0.0025	271	1.2	150	19	160.9	5.4	110	280	160	49	146%
X15CAN10B_40	0.439	0.063	0.02791	0.00066	-0.20939	0.121	0.018	0.51784	0.0117	0.0036	108.7	0.7	367	43	177.5	4.2	1880	240	235	71	9%
X15CAN10B_41	0.201	0.045	0.02755	0.00078	0.12841	0.056	0.013	0.029043	0.0082	0.0025	130	2.0	182	36	175.2	4.9	250	350	164	50	70%
X15CAN10B_42	0.231	0.034	0.02905	0.00061	0.42135	0.0581	0.008	-0.15529	0.0092	0.0025	351	1.5	210	28	184.6	3.8	500	260	185	51	37%
X15CAN10B_43	0.218	0.029	0.0295	0.0007	0.13004	0.0532	0.0066	0.13571	0.00901	0.0024	470	1.7	200	23	187.4	4.4	300	250	181	48	62%
X15CAN10B_44	0.1842	0.023	0.02723	0.00082	0.36579	0.0505	0.0061	0.182	0.0082	0.0025	411	1.8	171.4	20	173.2	5.2	207	250	165	49	84%
X15CAN10B_45	0.1868	0.022	0.02637	0.00073	0.28085	0.0531	0.0063	0.1769	0.0079	0.0022	597	2.3	173.8	19	167.8	4.6	316	260	158	44	53%
X15CAN10B_46	0.1754	0.021	0.02614	0.00077	0.47107	0.0508	0.0059	0.21074	0.00825	0.0022	1145	2.2	164	18	166.3	4.8	221	250	166	44	75%
X15CAN10B_47	0.1823	0.022	0.02433	0.00084	0.87179	0.05334	0.006	0.23108	0.00847	0.0023	2530	1.7	169.9	19	154.9	5.3	340	250	170	45	46%
X15CAN10B_48	0.556	0.096	0.01583	0.00099	0.85042	0.246	0.033	-0.44638	0.0105	0.003	2380	0.9	440	58	101.2	6.3	3140	210	211	60	3%
X15CAN10B_49	0.1893	0.023	0.02543	0.00064	0.14495	0.0552	0.0066	0.40111	0.00783	0.0021	596	1.0	177.1	18	161.9	4	415	250	158	42	39%
X15CAN10B_50	0.2358	0.028	0.0264	0.00066	0.28314	0.0664	0.0081	0.31711	0.0086	0.0024	558	1.3	214.7	23	168	4.1	800	260	174	48	21%
X15CAN10B_51	1.57	0.28	0.0372	0.0017	0.71584	0.279	0.04	-0.44137	0.0286	0.0078	53.2	0.8	927	110	235	10	3330	220	568	150	7%
X15CAN10B_52	0.1892	0.022	0.02813	0.00049	0.76042	0.04992	0.0056	0.58462	0.00749	0.0019	3030	1.4	175.9	19	178.8	3.1	187	260	151	39	96%
X15CAN10B_53	0.203	0.024	0.02798	0.00058	0.54447	0.0532	0.0061	-0.085213	0.0084	0.0024	733	2.0	187.5	20	177.9	3.6	340	270	169	48	52%
X15CAN10B_54	1.68	0.23	0.0391	0.0015	0.43991	0.308	0.038	-0.14641	0.0243	0.0064	45.4	0.6	989	84	247.3	9.5	3486	190	486	130	7%
X15CAN10B_55	0.202	0.025	0.0288	0.00089	0.44168	0.0512	0.0062	-0.096662	0.00912	0.0024	387	2.5	186.7	21	183	5.6	240	260	183	49	76%
X15CAN10B_56	0.1807	0.021	0.02586	0.00051	0.40398	0.0503	0.0058	0.038909	0.00795	0.0021	1970	1.3	168.6	18	164.6	3.2	204	250	160	42	81%
X15CAN10B_57	0.1892	0.023	0.02631	0.00072	0.40625	0.0525	0.0063	-0.044903	0.00798	0.0022	498	1.5	175.7	20	167.4	4.5	284	250	161	43	59%
X15CAN10B_58	0.1762	0.021	0.02607	0.00049	0.17983	0.0494	0.0057	0.17889	0.00809	0.0021	1310	2.0	164.6	18	165.9	3.1	161	250	163	42	103%
X15CAN10B_59	0.1731	0.022	0.0257	0.00054	0.065034	0.049	0.006	0.17864	0.00718	0.0019	302	1.7	161.9	19	163.6	3.4	150	250	144	38	109%
X15CAN10B_60	0.91	0.21	0.026	0.0014	0.87201	0.262	0.05	-0.65966	0.0126	0.005	4410	0.7	656	110	165.1	8.5	3000	360	251	98	6%
X15CAN10B_61	0.213	0.036	0.02493	0.00066	0.70481	0.0615	0.0091	-0.57386	0.00894	0.0024	2590	2.0	194	29	158.8	4.1	640	290	180	48	25%
X15CAN10B_62	0.2048	0.024	0.02713	0.00059	0.31676	0.055	0.0064	0.35471	0.00771	0.002	863	1.6	189	20	172.6	3.7	422	260	155	41	41%
X15CAN10B_63	0.183	0.038	0.0265	0.00064	0.48641	0.0499	0.0093	-0.38854	0.0085	0.0024	213	1.0	168	29	168.6	4	30	200	171	47	562%
X15CAN10B_64	0.324	0.057	0.02673	0.00052	0.62906	0.087	0.014	-0.4857	0.013	0.004	1017	1.8	280	43	170.1	3.2	1180	330	260	79	14%
X15CAN10B_65	0.1885	0.023	0.02788	0.00072	0.64864	0.0485	0.0056	-0.11127	0.00811	0.0022	916	2.0	175.2	19	177.3	4.5	148	270	163	43	120%
X15CAN10B_66	0.244	0.03	0.02798	0.00086	0.10659	0.0636	0.0079	0.49535	0.0094	0.0026	610	1.6	222.5	23	177.9	5.4	690	270	188	51	26%
X15CAN10B_67	0.179	0.021	0.02405	0.00054	0.4041	0.0533	0.0061	0.34262	0.00765	0.002	1930	1.0	167.9	18	153.2	3.4	331	260	154	40	46%
X15CAN10B_68	0.0587	0.0098	0.00824	0.00021	0.10608	0.0517	0.0084	-0.013277	0.0025	0.0007	474	1.7	57.7	9.2	52.9	1.3	210	290	50.5	14	25%
X15CAN10B_69	0.173	0.02	0.0265	0.00053	0.27587	0.0473	0.0055	0.41947	0.00802	0.0022	834	3.1	162	17	168.6	3.3	72	240	161	43	234%
X15CAN10B_70	0.1724	0.02	0.0258	0.00053	0.66656	0.0481	0.0055	0.12498	0.00708	0.0018	625	1.4	161.3	18	164.2	3.3	110	240	142.6	37	149%

	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
X15CAN10B_71	0.1775	0.02	0.02858	0.00069	0.33506	0.0448	0.0051	0.579	0.0083	0.0022	1340	2.8	165.9	18	181.6	4.3	-38	220	167	43	-478%
X15CAN10B_72	0.1925	0.023	0.02421	0.00049	0.34598	0.0574	0.0068	0.030086	0.00721	0.0019	1330	1.2	179.9	21	154.2	3.1	482	250	145	38	32%
X15CAN10B_73	0.18	0.021	0.02582	0.00049	0.39172	0.05	0.0058	0.15329	0.00744	0.002	504.4	1.5	169.1	17	164.3	3.1	189	250	150	40	87%
X15CAN10B_74	0.1667	0.02	0.02619	0.0006	0.73793	0.0466	0.0053	0.01743	0.00731	0.0019	2270	1.5	156.4	17	166.6	3.8	40	230	147.1	38	417%
X15CAN10B_76	0.0504	0.007	0.00853	0.00026	-0.076396	0.0443	0.0062	0.24955	0.00258	0.00073	392	1.3	49.8	6.8	54.7	1.7	-50	240	52	15	-109%
X15CAN10B_77	0.1661	0.02	0.02538	0.00073	0.73469	0.0484	0.0055	0.10539	0.00691	0.0018	1450	1.7	155.9	17	161.6	4.6	122	250	139	37	132%
X15CAN10B_78	0.1787	0.022	0.02662	0.00061	0.061428	0.0506	0.0064	0.25291	0.00678	0.0018	330	1.2	166.6	19	169.4	3.8	200	250	137	36	85%
X15CAN10B_79	0.1495	0.017	0.02473	0.00049	0.47636	0.0456	0.0052	0.24817	0.00692	0.0018	1126	2.2	141.4	15	157.5	3.1	-6	230	139	37	-2625%
X15CAN10B_80	0.1619	0.019	0.02468	0.00062	0.22475	0.0488	0.0058	0.30447	0.00614	0.0016	718	1.2	152.3	17	157.2	3.9	152	260	124	33	103%
X15CAN10B_81	0.307	0.088	0.0296	0.0017	0.88491	0.07	0.014	-0.70756	0.0095	0.0028	690	1.0	259	57	188	11	740	280	191	55	25%
X15CAN10B_82	0.1614	0.019	0.02178	0.00042	0.50994	0.0564	0.0064	0.28395	0.0067	0.0017	4022	1.6	151.9	16	138.9	2.6	460	250	134.9	35	30%
X15CAN10B_83	0.166	0.02	0.02723	0.00066	0.44367	0.0458	0.0053	0.37381	0.00705	0.0019	625	2.9	155.9	17	173.2	4.1	-2	240	142	38	-8660%
X15CAN10B_84	0.1553	0.018	0.02611	0.00062	0.32999	0.0447	0.0052	0.41053	0.0088	0.0027	511	2.3	146.5	16	166.1	3.9	-39	220	177	54	-426%
X15CAN10B_85	2	0.26	0.0429	0.0017	0.43841	0.363	0.047	0.13796	0.0636	0.017	30.7	1.6	1126	96	271	11	3744	190	1240	320	7%
X15CAN10B_86	0.17	0.02	0.02687	0.00058	0.40313	0.0475	0.0054	0.52272	0.00763	0.002	898	1.5	159.4	17	170.9	3.6	67	260	154	41	255%
X15CAN10B_87	0.1706	0.02	0.02658	0.00066	0.55805	0.0477	0.0054	0.4344	0.00678	0.0018	1789	1.2	161.4	16	169.1	4.1	88	240	137	36	192%
X15CAN10B_88	0.0488	0.0061	0.0082	0.00023	0.24474	0.044	0.0055	0.29189	0.00199	0.00055	495	1.2	48.9	6.2	52.6	1.4	-80	240	40.1	11	-66%
X15CAN10B_89	0.158	0.019	0.02595	0.0007	0.62104	0.0451	0.0051	0.23195	0.00632	0.0017	2558	1.3	148.8	16	165.1	4.4	-25	220	127	34	-660%
X15CAN10B_90	0.166	0.02	0.02746	0.00081	0.74466	0.0448	0.0051	0.18185	0.00718	0.0019	1580	1.6	155.8	17	174.6	5.1	-35	210	145	38	-499%
X15CAN10B_91	0.23	0.032	0.0282	0.00084	0.089689	0.062	0.0091	0.20157	0.0111	0.0031	252	3.5	209	26	179.3	5.3	620	300	223	61	29%
X15CAN10B_92	0.192	0.026	0.0281	0.0014	0.7184	0.0478	0.0055	0.02638	0.00739	0.0019	1320	1.1	178	21	178.8	8.7	94	240	149	39	190%
X15CAN10B_93	0.198	0.023	0.02705	0.00058	0.58554	0.0543	0.0061	0.6029	0.0103	0.0028	2380	4.0	184.1	19	172.1	3.7	379	250	207	56	45%
X15CAN10B_94	0.1635	0.02	0.02596	0.00081	0.54344	0.0471	0.0054	0.22128	0.00668	0.0018	804	1.7	153.5	18	165.2	5.1	53	250	135	37	312%
X15CAN10B_95	2.2	0.34	0.0454	0.0026	0.6469	0.34	0.045	-0.23695	0.0198	0.0052	28.9	0.4	1168	110	286	16	3660	220	395	100	8%
X15CAN10B_96	5.37	0.71	0.0766	0.0043	0.5344	0.521	0.066	0.25511	0.0299	0.0083	10.02	0.3	1875	120	480	25	4321	190	595	160	11%
X15CAN10B_98	0.1664	0.02	0.02566	0.00085	0.45156	0.0476	0.0056	-0.14237	0.00664	0.0018	400	0.9	156.2	17	163.3	5.3	87	240	134	36	186%
X15CAN10B_99	0.2057	0.025	0.02844	0.00053	0.47423	0.0534	0.0064	-0.14277	0.0074	0.0019	789	1.5	189.6	21	180.8	3.3	320	270	149	38	57%
X15CAN10B_100	0.1863	0.022	0.02895	0.00073	0.23387	0.0469	0.0053	0.20021	0.00739	0.002	689	2.3	173.3	19	184	4.5	48	240	149	40	383%
X15CAN10B_102	4.57	0.56	0.0669	0.0029	0.49381	0.496	0.059	0.43633	0.0269	0.0069	14.9	0.2	1736	110	420	18	4241	160	536	140	10%
X15CAN10B_103	1.6	0.3	0.0357	0.003	0.80015	0.326	0.047	-0.57869	1.66	0.48	41.2	68.0	980	130	226	19	3590	240	19000	3600	6%
X15CAN10B_104	0.1921	0.023	0.0279	0.0011	0.76104	0.0502	0.0057	0.2626	0.00784	0.0021	1470	1.9	179.6	21	177.6	6.8	198	260	158	42	90%
X15CAN10B_105	0.1872	0.023	0.02776	0.00087	0.32423	0.0485	0.0057	0.11994	0.0082	0.0023	347	1.8	173.9	20	176.5	5.5	123	250	165	47	143%
X15CAN10B_106	0.1889	0.023	0.02791	0.00085	0.56265	0.0493	0.0058	0.017218	0.00754	0.0021	426	1.9	175.4	20	177.4	5.3	155	250	152	42	114%
X15CAN10B_107	0.1917	0.023	0.0292	0.0011	0.74148	0.0484	0.0055	0.38214	0.00868	0.0023	1070	2.1	177.9	20	185.5	6.8	105	260	175	45	177%
X15CAN10B_108	0.2142	0.026	0.0313	0.0008	0.51797	0.0507	0.0059	0.077601	0.00927	0.0025	805	1.9	196.8	21	198.7	5	221	270	186	50	90%
X15CAN10B_109	0.1841	0.022	0.02661	0.00052	0.44812	0.0512	0.006	0.40418	0.00749	0.0019	567	1.9	171.4	18	169.3	3.2	255	270	151	39	66%
X15CAN10B_110	0.1908	0.023	0.02707	0.00057	0.59478	0.0513	0.0059	0.11788	0.00787	0.0021	793	2.2	178.2	20	172.1	3.6	244	260	158	42	71%
X15CAN10B_111	0.1748	0.021	0.02612	0.00066	0.54985	0.0489	0.0055	0.32983	0.00719	0.0019	1319	1.8	163.5	18	166.2	4.2	133	270	145	39	125%
X15CAN10B_112	0.1815	0.022	0.02639	0.00075	0.70959	0.0501	0.0057	0.20305	0.00787	0.0021	908	1.4	169.2	18	167.9	4.7	194	250	158	42	87%
X15CAN10B_113	0.196	0.027	0.02733	0.00077	0.1477	0.052	0.0071	0.046494	0.0091	0.0025	130	1.0	181	23	173.8	4.8	290	250	184	51	60%
X15CAN10B_114	0.1829	0.022	0.02681	0.00064	0.53606	0.0506	0.0059	0.05385	0.00727	0.0019	672	2.8	170.4	19	170.5	4	214	250	146	39	80%
X15CAN10B_115	0.1998	0.025	0.02943	0.00097	0.6665	0.0497	0.0059	-0.10655	0.00788	0.0021	1190	1.3	184.7	21	187	6.1	190	260	159	43	98%
X15CAN10B_116	0.1736	0.021	0.02744	0.00082	0.33324	0.0463	0.0055	0.37507	0.00756	0.002	355	1.7	162.4	18	174.5	5.1	13	220	152	40	1342%
X15CAN10B_117	5.72	0.73	0.074	0.0025	0.48795	0.558	0.066	-0.083717	0.0307	0.008	17.49	0.2	1923	110	460	15	4389	180	610	160	10%
X15CAN10B_118	2.42	0.3	0.0443	0.0018	0.6295	0.394	0.047	0.22696	0.0234	0.0063	31.8	0.4	1250	96	279	11	3874	180	467	120	7%
X15CAN10B_119	1.93	0.24	0.0402	0.0015	0.38279	0.347	0.042	0.13985	0.0778	0.021	35.9	2.2	1087	81	254.3	9.2	3693	180	1510	390	7%
X15CAN10B_120	0.192	0.026	0.02749	0.00099	0.32534	0.0495	0.0062	0.20716	0.00805	0.0022	226	1.1	178	22	174.8	6.2	220	290	162	44	79%
X15CAN10B_121	5.33	0.64	0.0729	0.0029	0.22042	0.532	0.065	0.56007	0.0423	0.011	14.33	0.3	1876	110	454	18	4330	170	836	220	10%
X15CAN10B_122	0.556	0.07	0.0296	0.0011	0.14281	0.1371	0.018	0.342	0.00816	0.0021	81.8	0.1	447	46	188.3	6.8	2180	210	164	42	9%
X15CAN10B_124	0.1887	0.023	0.02662	0.00084	0.29338	0.0507	0.006	0.16927	0.0087	0.0025	316	1.7	175.3	20	169.4	5.3	215	250	175	49	79%
X15CA15A_1	0.1827	0.011	0.02367	0.0012	0.38677	0.0571	0.0027	0.47038	0.00817	0.00056	1605	1.4	170.2	9.3	150.8	7.4	505	100	164.5	11	30%
X15CA15A_3	0.1735	0.013	0.02536	0.0013	0.45611	0.0515	0.0031	0.033876	0.00778	0.00042	647	1.5	162.1	11	161.4	8.1	250	130	156.6	8.4	65%
X15CA15A_4	0.1612	0.011	0.02333	0.0012	0.13848	0.0516	0.0028	0.054604	0.00826	0.00054	610	1.6	151.5	9.4	148.6	7.3	253	110	166.3	11	59%
X15CA15A_5	0.182	0.025	0.0244	0.0013	0.002821	0.0539	0.0062	0.21285	0.01	0.0017	183	1.7	169	20	155.5	8.5	300	220	202	33	52%
X15CA15A_6	0.209	0.025	0.02561	0.0011	0.4705	0.0557	0.0045	-0.27795	0.01053	0.001	951	2.4	182	14	163	7	390	140	212	21	42%
X15CA15A_7	0.1734	0.011	0.02454	0.0011	0.29637	0.0505	0.0027	0.25951	0.00848	0.00062	488	1.7	162.2	9.6	156.2	7.2	210	110	171	12	74%
X15CA15A_8	0.1692	0.01	0.02515	0.0012	0.62023	0.0491	0.0023	0.31263	0.00869	0.0007	827	1.6	158.6	8.9	160.1	7.8	149	100	175	14	107%
X15CA15A_9	0.1651	0.0099	0.0248	0.0012	0.51054	0.0483	0.0022	0.51442	0.00819	0.0005	1120	1.6	155.9	8.8	157.9	7.8	114	96	164.8	10	139%
X15CA15A_10	0.1664	0.013	0.02401	0.0011	0.11036	0.049	0.0035	0.30629	0.00833	0.00069	296	1.3	155.9	11	152.9	7.2	140	140	168	14	109%
X15CA15A_11	0.1717	0.0097	0.02445	0.0012	0.31249	0.05	0.0023	0.60442	0.00805	0.0004	1496	1.4	160.8	8.4	155.7	7.3	179	100	162	8.1	87%
X15CA15A_12	0.1823	0.012	0.0261	0.0014	0.67762	0.0494	0.0024	0.23733	0.00966	0.00076	850	1.8	169.8	10	166.2	8.9	173	110	194	15	96%
X15CA15A_13	0.1569	0.0093	0.02328	0.0012	0.57853	0.0482	0.0023	0.39754	0.00768	0.0005	1820	2.7	147.9	8.2	148.3	7.8	111	99	154.6	9.9	134%
X15CA15A_14	0.1635	0.01	0.0244	0.0014	0.6804	0.0484	0.0023	0.39462	0.0078	0.00059	3000	2.0	153.6	9.1	155.4	8.7	119	100	157	12	131%
X15CA15A_15	0.1702	0.0097	0.02343	0.001	0.21764	0.0524	0.0027	0.51258	0.00803	0.00046	1147	1.6	159.6	8.4	149.3	6.4	314	120	161.7	9.1	48%
X15CA15A_16	0.1733	0.0095	0.02446	0.0011	0.6258	0.0498	0.0021	0.50861	0.00852	0.00046	1918	2.2	162.3	8.2	155.8	6.9	179	94	171.5	9.2	87%
X15CA15A_17	0.164	0.0097	0.02379	0.001	0.42333	0.0488	0.0022	0.12373	0.00875	0.00049	1251	2.0	154.1	8.5	151.6	6.5	136	97	176.1	9.7	111%
X15CA15A_18	0.1774	0.011	0.02495	0.0013	0.61593	0.0499	0.0025	0.13611	0.00889	0.00061	713	1.7	165.6	9.9	158.9	8.3	188	110	179	12	85%
X15CA15A_19	0.205	0.013	0.02593	0.0012	0.42586	0.0564	0.0029	0.093174	0.00999	0.00064	672	2.2	189.1	11	165	7.4	444	110	201	13	37%
X15CA15A_20	0.1761	0.011	0.0248	0.0012	0.55913	0.0504	0.0023	0.51837	0.00843	0.00048	804	2.5	165.5	9.5	157.9	7.4	209	100	169.7	9.7	76%
X15CA15A_21	0.1627	0.011	0.02429	0.0013	0.69507	0.0484	0.0022	0.21656	0.00805	0.00046	1116	2.0	152.9	9.4	154.7	8.2	111	100	162	9.2	139%
X15CA15A_22	0.1412	0.0096	0.0205	0.0013	0.86494	0.04956	0.002	0.36944	0.00649	0.00049	2920	1.5	133.9	8.6	131	8.5	171	90	130.7	9.8	77%
X15CA15A_23	0.1818	0.011	0.02524	0.0012	0.27342	0.0513	0.0025	0.52561	0.00887	0.00074	755	2.1	169.5	9.3	160.6	7.4	242	100	178	15	66%
X15CA15A_24	0.1725	0.011	0.0245	0.0011	0.37437	0.0498	0.0027	0.23032	0.00711	0.00039	1700	1.3	161.4	9.8	156	7.2	177	120	143.1	7.7	88%
X15CA15A_25	0.183	0.015	0.0263	0.0014	0.058019	0.0486	0.0032	0.24658	0.00881	0.0006	326	1.1	169.8	12	167.4	8.8	130	130	177	12	129%
X15CA15A_26	0.1855	0.012	0.02596	0.0012	0.32264	0.051	0.0027	0.18601	0.00899	0.00067	697	2.1	172.6	10	166	7.8	233	110	181	13	71%
X15CA15A_27	0.168	0.012	0.02426	0.0011	0.52979	0.0494	0.0025	0.024162	0.00833	0.0005	1063	1.8	157.5	10	154.5	6.9	166	110	167.7	10	93%
X15CA15A_28	0.179	0.013	0.02468	0.0012	0.030607	0.0513	0.0034	0.24223	0.00848	0.00062	280	1.4	164.2	9.7	157.1	7.3	230	130	171	12	68%
X15CA15A_29	0.232	0.024	0.02571	0.0011	0.48728	0.0654	0.0059	-0.22815	0.00933	0.00058	518	1.3	213	20	163.6	7.1	720	190	187.7	12	23%
X15CA15A_30	0.1693	0.011	0.02451	0.0011	0.14701	0.0501	0.0029	0.3544	0.00815	0.00057	592	2.2	158.7	9.2	156.1	7.1	187	120	164	11	83%
X15CA15A_31	0.1874	0.012	0.02559	0.0012	0.028306	0.0514	0.0027	0.40605	0.00826	0.0005	716	1.6	174.2	10	162.9	7.3	246	110	166.2	10	66%
X15CA15A_32	0.254	0.049	0.02565	0.0013	0.90916	0.066	0.0083	-0.7195	0.0145	0.0041	524	2.7	224	34	163.2	8.1	640	230	290	80	26%
X15CA15A_33	0.1654	0.01	0.02314	0.0011	0.41345	0.0515	0.0027	0.14628	0.0077	0.0004	1630	1.1	155.3	9.1	147.5	6.9	247	110	155.1	7.9	60%
X15CA15A_34	0.1731	0.0097	0.02512	0.0011	0.24529	0.0497	0.0024	0.56651	0.00884	0.00052	829	2.1	162.8	8.8	159.9	7.2	175	100	177.9	11	91%
X15CA15A_35	0.1753	0.01	0.0249	0.0011	0.41203	0.0509	0.0024	0.37845	0.00798	0.00038	1413	1.4	163.9	8.9	158.5	7.2	225	100	160.7	7.5	70%
X15CA15A_36	0.1518	0.0084	0.02141	0.00098	0.57252	0.0507	0.0022	0.36256	0.00713	0.0004	1941	1.7	143.4	7.4	136.6	6.2	220	96	143.5	8.1	62%
X15CA15A_37	0.1759	0.011	0.02448	0.0011	0.35582	0.0516	0.0025	0.35751	0.00858	0.00044	994	1.6	164.4	9.1	155.9	6.9	256	100	172.7	8.9	61%
X15CA15A_38	0.1685	0.0099	0.0243	0.0011	0.61228	0.0498	0.0023	0.27155	0.00819	0.00051	1100	2.2	158.8	9	154.8	7.1	182	99	164.8	10	85%
X15CA15A_39	0.1616	0.0099	0.02339	0.001	0.37082	0.0489	0.0024	0.37422	0.00763	0.0004	1587	2.0	152	8.6	149.1	6.3	142	100	153.7	8	105%
X15CA15A_40	0.182	0.014	0.02462	0.0012	0.37673	0.0522	0.003	-0.10955	0.00857	0.00061	648	1.8	169.6	12	156.8	7.8	270	120	172	12	58%
X15CA15A_41	0.1706	0.01	0.025	0.0011	0.55239	0.0496	0.0022	0.28413	0.00867	0.00054	1980	3.4	159.9	8.7	159.1	6.9	171	97	174.5	11	93%
X15CA15A_42	0.182	0.019	0.0273	0.002	0.43112	0.0492	0.0032	-0.2102	0.0102	0.0014	473	1.9	168	16	174	13	150	130	205	29	116%
X15CA15A_43	0.165	0.012	0.02414	0.0012	0.27497	0.0502	0.0031	0.35092	0.00788	0.0006	506	1.7	154.8	10	153.7	7.5	190	130	159	12	81%
X15CA15A_44	0.1703	0.012	0.02499	0.0013	0.65494	0.05	0.0027	-0.035734	0.00703	0.00051	405	1.5	159.5	10	159.1	8.3	190	110	141.5	10	84%
X15CA15A_45	0.1675	0.01	0.02528	0.0013	0.78963	0.0492	0.002	0.33724	0.00867	0.00048	1900	2.0	157.1	8.8	160.9	8.3	155	91	174.5	9.6	104%
X15CA15A_46	0.1747	0.013	0.02449	0.0011	0.13063	0.0514	0.0032	0.11135	0.00922	0.00083	553	1.3	163.2	11	156	6.9	206	89	185	17	76%
X15CA15A_47	0.189	0.014	0.0249	0.0014	0.69245	0.0559	0.0029	0.16299	0.00809	0.00096	497	2.5	177.1	11	158.8	9	452	120	163	19	35%
X15CA15A_48	0.1635	0.0097	0.0241	0.0011	0.3282	0.0495	0.0027	0.41242	0.00797	0.00048	826	0.7	153.6	8.4	153.5	7.2	169	110	160.5	9.7	91%
X15CA15A_49	0.0534	0.0043	0.0078	0.00036	0.014892	0.0493	0.0027	0.2056	0.00288	0.00032	1846	5.4	52.8	4.1	50.1	2.3	160	110	58	6.4	31%
X15CA15A_50	0.1591	0.011	0.0222	0.0017	0.79132	0.0526	0.0026	0.67538	0.00743	0.00056	3040	1.6	149.7	9.5	141.3	11	298	110	150	11	47%
X15CA15A_51	0.1625	0.0098	0.0207	0.0014	0.34206	0.0602	0.0044	0.72014	0.00694	0.00058	1690	2.0	152.8	8.5	131.8	8.9	550	150	140	12	24%
X15CA15A_52	0.176	0.015	0.0262	0.0015	0.22093	0.0488	0.0036	0.42221	0.0091	0.00093	375	2.7	164	12	166.7	9.4	140	150	183	19	119%
X15CA15A_53	0.1577	0.009	0.02431	0.0011	0.34118	0.048	0.0023	0.44665	0.00769	0.00038	2580	0.9	148.6	7.8	154.8	7.2	102	100	154.8	7.6	152%
X15CA15A_54	0.162	0.01	0.02413	0.0011	0.64201	0.0499	0.0022	0.20545	0.0079	0.00048	1909	1.7	152.3	8.8	153.7	7.2	174	100	159	9.7	88%
X15CA15A_55	0.1597	0.009	0.024	0.001	0.54167	0.048	0.0021	0.412	0.00774	0.00041	1690	0.9	150.4	7.9	152.9	6.6	103	91	155.8	8.1	148%
X15CA15A_56	0.1499	0.011	0.0222	0.0011	0.59537	0.0486	0.0027	0.062387	0.00821	0.00063	753	1.9	141.7	9.4	142.4	7.2	127	110	165	13	112%

analysis	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
X15CA15A_57	0.1604	0.0096	0.02295	0.0011	0.60672	0.0507	0.0024	0.11203	0.00745	0.00046	1066	2.0	151	8.4	146.2	6.8	220	110	150.1	9.2	66%
X15CA15A_58	0.1628	0.0095	0.0241	0.0012	0.72196	0.0495	0.0021	0.37537	0.00762	0.00039	2350	1.3	153.1	8.2	153.5	7.3	175	97	153.5	7.8	88%
X15CA15A_59	0.1695	0.012	0.02508	0.0013	0.68915	0.0495	0.0024	-0.0068209	0.00709	0.00045	935	1.4	158.8	10	159.7	7.9	169	110	142.8	9	94%
X15CA15A_60	0.181	0.012	0.02336	0.0011	0.46292	0.0559	0.0031	0.25183	0.00859	0.00043	1304	1.6	168.7	10	148.8	6.7	439	120	172.8	8.7	34%
X15CA15A_61	0.342	0.045	0.02207	0.0011	0.68232	0.11	0.012	-0.45887	0.00892	0.00082	1582	0.7	294	32	140.7	6.9	1680	200	179	16	8%
X15CA15A_62	0.0977	0.0084	0.0084	0.00074	0.87995	0.0838	0.004	0.37282	0.00284	0.00022	10400	1.4	94.5	7.7	53.9	4.8	1282	93	57.2	4.4	4%
X15CA15A_63	0.1771	0.012	0.0214	0.0019	0.44393	0.0597	0.005	0.8617	0.00756	0.00073	1980	1.7	165.3	10	136	12	520	160	152	15	26%
X15CA15A_64	0.1693	0.011	0.02489	0.0011	0.45425	0.0499	0.0026	0.45793	0.00812	0.00047	1249	2.4	158.6	9.3	158.5	7.1	197	110	163.4	9.4	80%
X15CA15A_65	0.1695	0.011	0.02414	0.0013	0.4789	0.0508	0.0027	0.37368	0.0078	0.00065	609	2.1	158.8	9.3	153.7	8.3	235	120	157	13	65%
X15CA15A_66	0.1679	0.01	0.02376	0.0012	0.56422	0.0502	0.0022	0.13061	0.00774	0.00064	1410	2.4	157.5	9.1	151.4	7.3	199	98	156	13	76%
X15CA15A_67	0.1595	0.0098	0.02427	0.0011	0.49535	0.0474	0.0023	0.18241	0.00834	0.00055	571	1.4	150.2	8.6	154.6	7	75	99	167.9	11	206%
X15CA15A_68	0.165	0.013	0.02313	0.0011	0.045566	0.0505	0.0035	0.30003	0.00857	0.00074	424	1.8	154.9	12	147.4	6.8	200	140	172	15	74%
X15CA15A_69	0.1674	0.01	0.02393	0.001	0.42787	0.0513	0.0027	0.27557	0.00825	0.00067	509	2.2	157	9.1	152.5	6.6	240	120	166	13	64%
X15CA15A_70	0.1693	0.011	0.02467	0.0012	0.49625	0.0494	0.0025	0.082759	0.00866	0.00057	767	2.4	158.6	9.6	157.1	7.3	163	110	174.3	11	96%
X15CA15A_72	0.1464	0.0099	0.0204	0.0013	0.89355	0.0513	0.0022	0.40602	0.00683	0.00047	3990	1.9	138.5	8.7	130.4	8.4	246	96	137.5	9.5	53%
X15CA15A_73	0.1751	0.01	0.02506	0.0012	0.61931	0.0496	0.0023	0.40977	0.00836	0.00046	956	1.8	163.8	8.9	159.6	7.3	170	100	168.2	9.2	94%
X15CA15A_74	0.162	0.01	0.02439	0.0011	0.30715	0.049	0.0028	0.47963	0.00804	0.00052	457	1.5	153.2	8.7	155.3	7.2	161	120	161.9	10	96%
X15CA15A_75	0.1701	0.011	0.02407	0.0011	0.28653	0.0506	0.0026	0.24624	0.00861	0.00062	801	1.6	159.3	9.9	153.3	7	215	110	173	12	71%
X15CA15A_76	0.1632	0.01	0.02368	0.001	0.63764	0.0496	0.0023	-0.1111	0.00804	0.00042	1053	1.5	153.3	9	150.9	6.5	171	100	161.8	8.4	88%
X15CA15A_77	0.1711	0.01	0.02514	0.0012	0.56469	0.0492	0.0023	0.25817	0.00884	0.00057	876	1.8	160.2	8.7	160.1	7.4	155	99	177.8	11	103%
X15CA15A_78	0.1722	0.012	0.0256	0.0015	0.70517	0.0473	0.0022	0.31629	0.00792	0.00063	930	1.4	161.1	10	163.2	9.4	69	97	159	13	237%
X15CA15A_79	0.173	0.013	0.02466	0.0012	0.43923	0.0502	0.0031	-0.13035	0.00802	0.00065	471	1.5	161.7	11	157	7.5	190	120	162	13	83%
X15CA15A_80	0.1771	0.012	0.02535	0.0011	0.52508	0.0498	0.0024	0.10648	0.00818	0.00058	655	2.1	166.4	11	161.3	7.2	183	100	165	12	88%
X15CA15A_81	0.1921	0.012	0.02487	0.0012	0.77141	0.0547	0.0023	0.13977	0.00672	0.00034	956	1.3	178.3	10	158.3	7.2	423	100	135.4	6.8	37%
X15CA15A_82	0.18	0.011	0.02517	0.0012	0.41351	0.0518	0.0027	0.26271	0.00888	0.00073	337.2	2.3	167.9	9.7	160.2	7.3	262	110	179	15	61%
X15CA15A_83	0.196	0.015	0.02366	0.0012	0.55167	0.0607	0.0034	-0.015716	0.00835	0.00038	1970	1.2	181.7	13	150.7	7.5	600	130	168.2	7.7	25%
X15CA15A_84	0.1774	0.011	0.02459	0.0011	0.18244	0.0531	0.0029	0.32377	0.00846	0.00054	889	1.6	165.7	9.7	156.6	6.7	327	120	170.3	11	48%
X15CA15A_85	0.1766	0.012	0.026	0.0013	0.49967	0.0505	0.0027	0.12757	0.0089	0.00065	446	2.0	164.9	11	165.4	7.9	211	110	179	13	78%
X15CA15A_86	0.1719	0.01	0.02697	0.0012	0.40599	0.0478	0.0022	0.23579	0.00839	0.00052	656	1.7	161	9	171.6	7.7	98	96	169	10	175%
X15CA15A_87	0.1751	0.01	0.02195	0.001	0.61326	0.0574	0.0027	0.5474	0.00532	0.00038	3317	1.0	163.8	8.8	140	6.5	490	100	107.2	7.6	29%
X15CA15A_88	0.1892	0.013	0.02577	0.0012	0.38395	0.0529	0.0029	0.19738	0.00854	0.00063	512	1.3	175.7	11	164	7.5	323	110	172	13	51%
X15CA15A_89	0.1854	0.011	0.02478	0.0011	0.71243	0.054	0.0023	0.13677	0.00854	0.00066	1010	1.5	172.5	9.7	157.8	7.1	361	95	172	13	44%
X15CA15A_90	0.1687	0.011	0.02492	0.0012	0.634	0.0497	0.0024	0.065173	0.00854	0.00048	894	1.5	158.1	9.4	158.7	7.7	175	100	171.8	9.7	91%
X15CA15A_91	0.1682	0.011	0.02473	0.0011	0.39029	0.0494	0.0026	0.36827	0.00777	0.00052	636	1.8	157.7	9.2	157.5	7.2	164	110	156.5	10	96%
X15CA15A_92	0.202	0.015	0.0283	0.0014	0.43636	0.0516	0.0034	-0.065601	0.00765	0.00074	454	1.4	186.2	13	179.9	8.9	280	130	154	15	64%
X15CA15A_93	0.174	0.016	0.0235	0.0015	0.63036	0.0527	0.0033	0.078639	0.00767	0.00063	538	1.4	164	13	151	10	290	130	154	13	52%
X15CA15A_94	0.0716	0.011	0.0083	0.00042	-0.15604	0.0614	0.0082	0.28383	0.00367	0.00052	314	3.4	69.8	9.7	53.3	2.7	500	230	74	10	11%
X15CA15A_95	0.1765	0.012	0.02461	0.001	0.12527	0.0524	0.003	0.064201	0.00778	0.00044	1103	1.7	164.8	10	156.7	6.4	280	120	156.6	8.8	56%
X15CA15A_96	0.1902	0.012	0.02577	0.0012	0.28776	0.0542	0.0028	0.39717	0.00784	0.0005	1160	1.6	176.6	9.9	164	7.6	360	110	157.9	10	46%
X15CA15A_97	0.1952	0.013	0.02584	0.0012	0.51023	0.0558	0.0027	0.2329	0.00963	0.00065	1186	2.5	180.8	11	164.5	7.3	424	110	194	13	39%
X15CA15A_98	0.1685	0.011	0.02409	0.0013	0.080763	0.0506	0.0029	0.54084	0.00822	0.00054	986	1.3	157.9	9.8	153.5	8.2	215	120	165.5	11	71%
X15CA15A_99	0.239	0.016	0.02291	0.00098	0.24856	0.0758	0.0042	0.17075	0.00817	0.00056	504	1.1	217.1	13	146	6.2	1062	110	164.4	11	14%
X15CA15A_100	0.1919	0.013	0.02705	0.0013	0.58188	0.0521	0.0027	-0.04571	0.00973	0.00074	514	2.2	177.9	11	172.1	7.9	285	120	196	15	60%
X15CA15A_101	0.174	0.011	0.02461	0.0011	0.44446	0.0504	0.0025	0.18327	0.00832	0.00046	1261	1.4	162.7	9.7	156.7	6.8	203	100	167.5	9.2	77%
X15CA15A_102	0.182	0.012	0.02594	0.0012	0.38319	0.0512	0.0027	0.38235	0.00875	0.00051	847	1.6	169.5	10	165.1	7.7	249	120	176.1	10	66%
X15CA15A_104	0.174	0.015	0.024	0.0011	0.14436	0.0537	0.0042	0.099843	0.0095	0.0014	314	3.3	162	13	152.9	6.7	340	170	191	29	45%
X15CA15A_105	0.1578	0.0094	0.02234	0.001	0.61981	0.0521	0.0023	0.18274	0.00632	0.00055	1467	2.5	148.6	8.3	142.4	6.6	280	98	127	11	51%
X15CA15A_106	0.1639	0.012	0.02397	0.0011	0.39063	0.0509	0.0033	0.033505	0.00761	0.0006	324.8	2.0	153.8	11	152.7	7.1	210	130	153	12	73%
X15CA15A_107	0.1451	0.0093	0.02147	0.0011	0.54253	0.0524	0.0026	0.34846	0.00637	0.00051	1540	1.3	137.4	8.3	136.9	7	306	110	128.3	10	45%
X15CA15A_108	0.1764	0.011	0.0256	0.0011	0.34002	0.0513	0.0025	0.45549	0.00846	0.00054	836	1.8	164.8	9.4	162.9	7.1	246	110	170.3	11	66%
PRINCE1A_1	0.173	0.0076	0.02586	0.00099	0.45133	0.0492	0.0024	0.53832	0.00778	0.001	686	1.5	162	6.5	164.6	6.2	153	100	156.6	20	108%
PRINCE1A_2	0.1764	0.0083	0.0251	0.00095	0.61568	0.0506	0.0021	0.2512	0.00826	0.0011	828	2.0	164.8	7.2	159.8	6	227	97	166.3	22	70%
PRINCE1A_3	0.1754	0.0091	0.02525	0.00093	0.41802	0.0495	0.0024	0.38781	0.00828	0.0011	697	2.1	163.9	7.8	160.7	5.9	167	100	166.7	23	96%
PRINCE1A_4	0.1633	0.0078	0.0235	0.00082	0.46023	0.0496	0.0022	0.44405	0.00737	0.00099	909	1.9	153.5	6.8	149.7	5.2	170	97	148.4	20	88%
PRINCE1A_5	0.239	0.036	0.02688	0.001	0.66136	0.0619	0.0071	-0.48246	0.0106	0.0018	842	1.7	214	28	171	6.4	580	220	212	35	29%
PRINCE1A_6	0.1712	0.0077	0.02577	0.00086	0.37803	0.0486	0.0022	0.37926	0.00863	0.0012	1046	1.8	160.4	6.7	164	5.4	131	96	173.7	23	125%
PRINCE1A_7	0.1718	0.009	0.02447	0.001	0.6425	0.0508	0.0023	0.33761	0.00779	0.001	1560	2.4	160.8	7.8	155.8	6.3	233	100	156.7	21	67%
PRINCE1A_8	0.1816	0.011	0.02415	0.00091	0.6427	0.053	0.0025	0.10432	0.0081	0.0012	820	3.7	169.3	9	153.8	5.7	318	100	163	25	48%
PRINCE1A_9	0.1665	0.0078	0.024	0.0009	0.68638	0.0506	0.0021	0.35085	0.00737	0.00097	1340	1.3	156.3	6.8	152.9	5.7	217	93	148.3	19	70%
PRINCE1A_10	0.1775	0.0085	0.02514	0.00091	0.74855	0.0518	0.0022	0.062418	0.00849	0.0012	693	1.9	165.8	7.3	160.1	5.7	275	99	170.9	23	58%
PRINCE1A_11	0.17	0.012	0.02499	0.00098	0.31216	0.0487	0.0032	0.28682	0.008	0.0015	230	4.1	159	10	159.1	6.2	150	140	161	29	106%
PRINCE1A_12	0.1622	0.0075	0.02256	0.00083	0.69425	0.0528	0.0021	0.19507	0.00696	0.00093	1190	1.3	152.5	6.5	143.8	5.2	311	91	140.2	19	46%
PRINCE1A_13	0.1736	0.0084	0.02516	0.00095	0.69016	0.0496	0.0021	0.12531	0.00876	0.0012	790	2.2	162.4	7.3	160.2	6	174	95	176.3	23	92%
PRINCE1A_14	0.1665	0.008	0.02211	0.0011	0.71809	0.0559	0.0024	0.70546	0.00696	0.00099	2760	1.5	156.3	6.9	141	7	443	95	140.3	20	32%
PRINCE1A_15	0.1706	0.0077	0.02529	0.001	0.53922	0.0497	0.0022	0.43072	0.00853	0.0012	822	1.7	160.6	6.4	161	6.6	177	98	171.6	23	91%
PRINCE1A_16	0.1806	0.009	0.02434	0.00074	0.79093	0.0533	0.0022	-0.30059	0.00816	0.001	3400	2.3	168.4	7.7	155	4.6	362	90	164.2	22	44%
PRINCE1A_17	0.1654	0.0075	0.02383	0.00085	0.61936	0.0501	0.002	0.27054	0.00766	0.001	1642	2.0	156.1	6.2	151.8	5.3	215	100	154.2	20	71%
PRINCE1A_18	0.147	0.012	0.0186	0.0014	0.81844	0.0551	0.0029	0.39525	0.0056	0.0012	1830	2.8	139.1	10	118.8	8.6	435	130	113	25	27%
PRINCE1A_19	0.1774	0.0082	0.02597	0.00083	0.56828	0.0498	0.0021	0.31535	0.00775	0.001	1160	1.6	165.7	7	165.2	5.2	191	98	156.1	21	86%
PRINCE1A_20	0.1755	0.008	0.02477	0.00096	0.59771	0.0506	0.0022	0.24467	0.00826	0.0011	969	1.3	164.1	6.9	157.7	6.1	228	100	166.3	23	69%
PRINCE1A_21	0.165	0.012	0.02458	0.00095	0.5167	0.0488	0.0031	-0.027334	0.00781	0.0012	143	1.1	157.5	10	156.5	5.9	130	130	157	24	120%
PRINCE1A_22	0.1614	0.011	0.02384	0.00095	-0.010473	0.0511	0.0039	0.47367	0.00795	0.0012	132.5	1.9	151.5	9.8	151.9	6	250	160	160	24	61%
PRINCE1A_23	0.1733	0.011	0.0258	0.0013	0.52906	0.0489	0.0026	0.37878	0.00947	0.0014	287	1.8	163.2	9.6	164.4	8.5	143	110	190	29	115%
PRINCE1A_24	0.0947	0.0046	0.01342	0.00058	0.78969	0.0513	0.0021	-0.38914	0.00496	0.001	8580	3.0	91.8	4.2	85.9	3.7	250	92	100	20	34%
PRINCE1A_25	0.18	0.012	0.02374	0.00082	0.35289	0.0562	0.0034	0.0096687	0.00758	0.001	948	1.8	165.4	8.5	151.3	5.1	420	120	152.5	20	36%
PRINCE1A_26	0.1966	0.0078	0.01694	0.00057	0.57966	0.0844	0.0033	0.44631	0.005	0.00067	3910	0.5	182.2	6.7	108.3	3.6	1297	74	100.9	14	8%
PRINCE1A_27	0.1844	0.01	0.02487	0.0009	0.69626	0.054	0.0025	-0.21858	0.0074	0.001	754	1.8	171.6	8.6	158.4	5.7	372	110	149.1	20	43%
PRINCE1A_28	0.1741	0.0097	0.02494	0.0009	0.28326	0.052	0.0033	0.11342	0.00845	0.0012	630	2.3	162.7	8.3	158.8	5.7	260	130	170	24	61%
PRINCE1A_29	0.1755	0.0077	0.02405	0.00078	0.15325	0.0527	0.0025	0.45339	0.00751	0.001	1113	2.1	164.1	6.7	153.2	4.9	304	100	151.1	20	50%
PRINCE1A_30	0.1717	0.0073	0.02419	0.00094	0.70854	0.0528	0.0022	0.53542	0.00764	0.001	2060	1.1	161.6	5.9	154.1	5.9	328	95	153.8	20	47%
PRINCE1A_31	0.198	0.019	0.0259	0.0013	0.29521	0.0552	0.0045	-0.033921	0.00852	0.0012	720	1.9	177.3	11	164.8	8.2	360	150	171	25	46%
PRINCE1A_32	0.1872	0.011	0.02596	0.00087	0.43417	0.0514	0.0026	-0.095303	0.00838	0.0012	891	1.7	172	8.6	165.2	5.5	242	100	168.6	23	68%
PRINCE1A_33	0.1796	0.011	0.02665	0.001	0.079657	0.049	0.0033	0.50924	0.00794	0.0012	418	1.5	167.5	9.2	169.5	6.4	160	140	160	24	106%
PRINCE1A_34	0.237	0.014	0.0204	0.0015	0.66198	0.0865	0.0049	0.51693	0.00591	0.001	1390	0.9	216	11	130.2	9.7	1326	110	119	21	10%
PRINCE1A_35	0.1735	0.0095	0.02511	0.00089	0.074588	0.0497	0.0029	0.39001	0.00807	0.0011	731	2.1	162.3	8.2	159.9	5.6	172	120	162.4	22	93%
PRINCE1A_36	0.172	0.016	0.02486	0.0011	0.26481	0.0507	0.0049	-0.035473	0.00823	0.0012	341	1.8	160	14	158.3	6.7	190	180	166	24	83%
PRINCE1A_37	0.1786	0.0091	0.02627	0.00093	0.45959	0.0487	0.0023	0.077486	0.00907	0.0012	987	1.6	166.7	7.8	167.2	5.8	136	100	182.5	24	123%
PRINCE1A_38	0.185	0.012	0.02501	0.00092	0.26486	0.0526	0.0031	0.14545	0.00835	0.0012	473	1.5	172.1	10	159.2	5.8	290	120	168	24	55%
PRINCE1A_39	0.1704	0.0076	0.02173	0.00078	0.54006	0.056	0.0024	0.36879	0.00631	0.00086	2180	1.3	159.7	6.6	138.6	4.9	453	100	127.1	17	31%
PRINCE1A_40	0.1853	0.0083	0.0268	0.00091	0.27986	0.0502	0.0023	0.36209	0.00913	0.0012	1291	1.4	172.5	7.1	170.5	5.7	209	94	183.7	25	82%
PRINCE1A_41	0.1713	0.0081	0.02509	0.00085	0.48997	0.0504	0.0022	0.31894	0.00796	0.001	1578	1.1	160.5	7	159.8	5.4	208	98	160.3	21	77%
PRINCE1A_42	0.1673	0.011	0.0209	0.0018	0.70813	0.0623	0.0039	0.72321	0.00688	0.0012	1560	1.6	156.8	9.5	133	12	660	140	138	24	20%
PRINCE1A_43	0.1664	0.0072	0.024	0.00093	0.49971	0.0506	0.0021	0.5682	0.00769	0.001	1331	1.5	156.2	6.3	152.8	5.8	217	94	154.9	21	70%
PRINCE1A_44	0.2	0.013	0.02605	0.00098	0.46994	0.0551	0.0032	-0.025292	0.00971	0.0014	535	2.1	185.1	11	165.8	6.1	390	120	195	28	43%
PRINCE1A_45	0.1637	0.01	0.02442	0.00094	0.38437	0.0485	0.0028	0.073826	0.0083	0.0011	501	1.0	153.7	9.1	155.5	5.9	127	120	167.1	22	122%
PRINCE1A_46	0.1639	0.008	0.02452	0.00094	0.28291	0.0493	0.0025	0.44273	0.0073	0.00097	799	1.0	154	7	156.1	5.9	154	110	147.1	19	101%
PRINCE1A_47	0.179	0.013	0.0253	0.0013	0.67555	0.052	0.0027	0.20604	0.00841	0.0013	930	2.0	168.7	11	161.3	8.4	270	110	169	26	60%
PRINCE1A_48	0.1675	0.011	0.02341	0.00079	0.19155	0.0515	0.0033	0.21174	0.00794	0.0011	585	2.0	156.9	9.7	149.1	5	240	130	160	23	62%
PRINCE1A_49	0.1791	0.0098	0.02487	0.00088	0.60987	0.0536	0.0025	-0.057838	0.00805	0.0011	1391	1.6	167.1	8.4	158.4	5.5	341	100	162.1	21	46%
PRINCE1A_50	0.1617	0.008	0.0236	0.001	0.71642	0.0505	0.0023	0.24723	0.00794	0.001	1262	1.6	152.1	7	150.4	6.5	212	99	159.9	21	71%
PRINCE1A_51	0.18	0.014	0.0252	0.0009	0.037862	0.0524	0.004	0.16799	0.00823	0.0013	472	2.7	167	12	160.4	5.7	270	150	166	25	59%
PRINCE1A_52	0.1921	0.01	0.02512	0.001	0.28691	0.0534	0.0027	0.44038	0.00825	0.0011	679	1.8	178.2	8.6	159.9	6.4	348	120	166.1	22	46%
PRINCE1A_53	0.248	0.028	0.02768	0.00099	0.13816	0.0663	0.0076	0.15726	0.0094	0.0016	272	2.6	223	22	176	6.2	740	230	189	32	24%
PRINCE1A_54	0.1675	0.0097	0.02443	0.00097	0.4997	0.0519	0.003	0.12364	0.00854	0.0013	835	1.8	157	8.4	155.6	6.1	270	120	172	27	58%
PRINCE1A_55	0.176	0.01	0.02591	0.00097	0.31503	0.05	0.0028	0.20287	0.00799	0.0011	715	2.0	164.3	8.6	164.9	6.1	181	120	160.9	22	91%

	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
PRINCE1A_56	0.1606	0.0098	0.02382	0.00093	0.21319	0.0498	0.0028	0.28987	0.00785	0.0011	948	1.5	150.9	8.5	151.7	5.8	174	120	158.1	21	87%
PRINCE1A_57	0.174	0.014	0.02492	0.00092	0.049708	0.0523	0.0047	0.19313	0.00888	0.0015	420	2.2	162	12	158.7	5.8	180	140	179	29	88%
PRINCE1A_58	0.1613	0.0085	0.02312	0.00078	0.43716	0.0513	0.0024	0.14784	0.00701	0.00095	1850	1.8	151.7	7.4	147.3	4.9	244	100	141.1	19	60%
PRINCE1A_59	0.162	0.0084	0.02386	0.00087	0.49461	0.0494	0.0022	-0.045199	0.00754	0.00099	1940	1.5	152.3	7.3	152	5.5	163	96	151.9	20	93%
PRINCE1A_60	0.173	0.013	0.0236	0.0018	0.85407	0.0544	0.0027	0.59234	0.00778	0.0012	1150	1.5	161.7	11	150	11	368	110	157	25	41%
PRINCE1A_62	0.174	0.0096	0.02558	0.001	0.56411	0.0491	0.0022	0.14405	0.00877	0.0014	688	1.9	162.6	8.3	162.8	6.6	153	96	176	28	106%
PRINCE1A_63	0.1755	0.01	0.02581	0.0009	0.41422	0.0507	0.0028	0.068118	0.00848	0.0011	834	1.9	163.9	9	164.3	5.6	211	110	170.6	22	78%
PRINCE1A_64	0.1615	0.0085	0.02405	0.00097	0.34419	0.0492	0.0025	0.11612	0.00783	0.0011	1019	1.5	151.9	7.4	153.2	6.1	152	110	157.5	21	101%
PRINCE1A_65	0.1698	0.0096	0.02496	0.0008	0.56515	0.0503	0.0024	-0.062131	0.00728	0.001	935	1.7	159	8.3	158.9	5	198	100	146.6	20	80%
PRINCE1A_66	0.1485	0.0091	0.02404	0.00082	0.23464	0.0452	0.0026	0.16381	0.00772	0.0011	638	1.9	140.4	8	153.2	5.1	-38	94	155	22	-403%
PRINCE1A_67	0.1668	0.0082	0.02429	0.00086	0.55813	0.0494	0.0022	0.3158	0.00723	0.00098	1270	1.9	156.5	7.1	154.7	5.4	162	97	145.6	20	95%
PRINCE1A_68	0.176	0.011	0.02584	0.0011	0.5024	0.0498	0.0027	0.0050559	0.00798	0.0011	1210	1.4	164.4	9.8	164.4	7.2	178	110	160.7	22	92%
PRINCE1A_69	0.204	0.017	0.0292	0.0013	0.22216	0.0492	0.003	0.069186	0.00681	0.001	540	2.8	188	14	185.7	8.1	160	130	137	21	116%
PRINCE1A_70	0.175	0.013	0.0245	0.00091	-0.19121	0.0525	0.0053	0.3197	0.00685	0.00093	1210	1.7	163.2	11	156	5.7	190	86	137.9	19	82%
PRINCE1A_71	0.1798	0.009	0.02518	0.00093	0.56257	0.0515	0.0023	0.31317	0.00791	0.0011	1171	2.3	167.7	7.7	160.3	5.8	252	97	159.3	22	64%
PRINCE1A_72	0.1657	0.0073	0.02475	0.00084	0.27916	0.0483	0.0021	0.48475	0.00752	0.001	1377	2.2	155.6	6.4	157.6	5.3	116	93	151.5	20	136%
PRINCE1A_73	0.191	0.014	0.02514	0.00092	-0.39789	0.055	0.0041	0.61172	0.00826	0.0012	732	2.1	177.2	11	160	5.8	360	140	166	24	44%
PRINCE1A_74	0.206	0.014	0.0208	0.0015	-0.46149	0.0757	0.0086	0.88318	0.00694	0.001	1520	1.3	189	12	132.8	9.3	930	230	140	21	14%
PRINCE1A_75	0.1772	0.0095	0.02365	0.00088	0.31386	0.0538	0.0027	0.27251	0.00725	0.00095	1806	1.5	165.4	8.2	150.7	5.5	325	97	146.1	19	46%
PRINCE1A_76	0.1593	0.0095	0.02345	0.00096	0.61822	0.0494	0.0025	-0.099593	0.00688	0.00095	664	1.1	149.9	8.3	149.4	6	162	110	138.6	19	92%
PRINCE1A_77	0.19	0.013	0.02555	0.00097	0.10209	0.0531	0.0035	0.27874	0.00906	0.0014	644	3.2	176	11	162.6	6.1	300	130	182	27	54%
PRINCE1A_78	0.1757	0.01	0.02519	0.0011	0.45479	0.0502	0.0028	0.16405	0.00805	0.0011	601	2.7	164.1	8.8	160.3	6.8	197	120	162.1	22	81%
PRINCE1A_79	0.1793	0.011	0.02554	0.0011	0.55676	0.0493	0.0026	0.20126	0.00728	0.00098	726	1.8	167.2	9.1	162.6	6.7	172	110	146.7	20	95%
PRINCE1A_80	0.1654	0.0083	0.02407	0.00094	0.18173	0.0489	0.0025	0.27849	0.00752	0.001	942	1.6	155.3	7.3	153.3	5.9	141	110	151.4	20	109%
PRINCE1A_81	0.1526	0.0076	0.0211	0.0012	0.7047	0.0524	0.0027	0.75376	0.00534	0.00075	1830	0.8	144.1	6.7	134.3	7.8	299	110	107.6	15	45%
PRINCE1A_82	0.1663	0.0095	0.02358	0.001	0.52988	0.0492	0.0022	0.23751	0.00694	0.00097	1090	1.4	156	8.2	150.2	6.4	148	97	139.9	20	101%
PRINCE1A_83	0.1721	0.009	0.02394	0.00096	0.41198	0.051	0.0025	0.22321	0.00693	0.00094	1520	2.0	161	7.8	152.5	6	246	110	139.5	19	62%
PRINCE1A_84	0.1836	0.011	0.02242	0.0011	0.36069	0.0581	0.0037	0.40029	0.00836	0.0012	1840	2.1	170.9	9.2	142.9	7	490	140	168	23	29%
PRINCE1A_85	0.1744	0.0094	0.02496	0.001	0.57241	0.0503	0.0024	0.24751	0.00743	0.001	1808	2.0	163	8.1	158.9	6.5	201	100	149.6	20	79%
PRINCE1A_86	0.1686	0.011	0.0247	0.0013	0.64685	0.0487	0.0026	0.27997	0.00784	0.0011	727	1.5	158	9.2	157.3	8.3	130	110	158	22	121%
PRINCE1A_87	0.1714	0.0085	0.02485	0.00092	0.34175	0.0496	0.0023	0.24028	0.00773	0.001	1056	1.6	161.7	6.6	158.2	5.8	186	92	155.6	21	85%
PRINCE1A_88	0.1055	0.0044	0.01335	0.00046	0.54486	0.0567	0.0023	0.5026	0.00412	0.00054	2620	1.6	101.8	4.1	85.5	2.9	472	89	83.1	11	18%
PRINCE1A_89	0.1677	0.011	0.02523	0.00092	0.54213	0.0472	0.0025	0.071786	0.00829	0.0013	629	2.1	158.6	9.6	160.6	5.8	67	100	167	25	240%
PRINCE1A_90	0.1843	0.011	0.02653	0.0009	0.2224	0.0494	0.0026	-0.0002693	0.00905	0.0014	757	2.1	171.5	9.1	168.8	5.7	164	110	182	28	103%
PRINCE1A_91	0.196	0.014	0.02829	0.0011	0.25587	0.0503	0.0037	-0.01462	0.0094	0.0018	297	2.2	181	12	179.8	7	180	140	189	36	100%
PRINCE1A_92	0.1435	0.0082	0.02088	0.0011	0.60181	0.05	0.0025	0.36035	0.00662	0.00099	2320	1.9	137	6.9	133.2	7	181	110	133	20	74%
PRINCE1A_93	0.1671	0.0081	0.02469	0.001	0.72937	0.0488	0.0021	0.43538	0.00748	0.001	1631	1.6	156.8	7	157.2	6.6	126	95	150.7	20	125%
PRINCE1A_94	0.1906	0.01	0.02657	0.001	0.48724	0.0519	0.0026	0.19989	0.00864	0.0012	776	1.5	178.1	8.3	169	6.6	264	110	173.9	23	64%
PRINCE1A_95	0.1745	0.0098	0.02494	0.001	0.41225	0.0513	0.0026	0.12674	0.00743	0.001	968	1.6	163.1	8.5	158.8	6.6	239	110	149.7	21	66%
PRINCE1A_96	0.1745	0.009	0.02591	0.00099	0.47104	0.0492	0.0022	0.25418	0.00761	0.001	762	2.0	163.2	7.7	164.9	6.2	154	96	153.3	21	107%
PRINCE1A_97	0.1717	0.0086	0.02582	0.001	0.49901	0.0487	0.0022	0.51306	0.00763	0.001	2500	1.6	160.7	7.5	164.3	6.5	132	96	153.6	20	124%
PRINCE1A_98	0.1566	0.011	0.01941	0.00097	0.84129	0.0579	0.0027	-0.1857	0.00407	0.00063	2060	1.1	147.4	9.9	123.9	6.1	532	100	82	13	23%
PRINCE1A_99	0.147	0.015	0.0194	0.0014	0.85742	0.0564	0.0032	-0.2886	0.00651	0.0011	1090	1.8	143	13	124.1	8.6	461	120	131	22	27%
PRINCE1A_100	0.1663	0.0081	0.02375	0.00089	0.5105	0.0525	0.0024	0.48236	0.00723	0.001	1800	1.4	156.1	7.1	151.3	5.6	294	100	145.6	21	51%
PRINCE1A_101	0.1653	0.0085	0.02549	0.00099	0.51234	0.048	0.0023	0.26963	0.0077	0.001	1053	1.2	155.2	7.4	162.2	6.2	104	100	155	21	156%
PRINCE1A_102	0.177	0.0089	0.02543	0.00094	0.099556	0.0513	0.0026	0.25405	0.00796	0.0011	884	1.9	165.3	7.7	161.8	5.9	241	110	160.2	22	67%
PRINCE1A_103	0.163	0.0094	0.02468	0.001	0.32706	0.0475	0.0025	0.39335	0.00765	0.0011	645	2.2	153.1	8.2	157.2	6.5	80	110	154	22	197%
PRINCE1A_104	0.229	0.015	0.02513	0.00094	-0.029587	0.0673	0.0045	0.48202	0.00849	0.0012	342	1.2	209	13	160	5.9	830	140	171	24	19%
PRINCE1A_105	0.1426	0.0074	0.02049	0.00088	0.70231	0.0504	0.0021	0.28621	0.00638	0.00084	2870	2.2	135.2	6.6	130.7	5.5	210	94	128.6	17	62%
PRINCE1A_106	0.1675	0.0079	0.02422	0.00092	0.32981	0.052	0.0026	0.33161	0.00774	0.0011	1160	1.2	157.2	6.9	154.3	5.8	269	100	155.8	21	57%
PRINCE1A_107	0.179	0.012	0.025	0.00096	0.46902	0.0529	0.0029	-0.14066	0.00774	0.0011	1807	1.9	166.9	10	159.2	6.1	304	110	156	23	52%
PRINCE1A_108	0.1693	0.011	0.0255	0.00092	0.38273	0.0489	0.0029	0.014002	0.008	0.0011	582	2.1	158.4	9.8	162.3	5.8	116	110	161	23	140%
PRINCE1A_109	0.1729	0.0097	0.02486	0.00095	0.38131	0.0524	0.0029	0.33725	0.00781	0.0011	939	1.6	161.8	8.4	158.3	6	286	120	157.3	21	55%
PRINCE1A_110	0.1596	0.0072	0.02259	0.00088	0.7829	0.052	0.002	0.41966	0.00666	0.00087	3440	1.3	150.3	6.3	144	5.6	278	89	134.2	18	52%
PRINCE1A_111	0.1668	0.007	0.02488	0.00086	0.5853	0.0493	0.002	0.58744	0.00758	0.00097	3200	1.9	156.5	6.1	158.4	5.4	160	91	152.6	19	99%
PRINCE1A_112	0.1852	0.011	0.0271	0.0015	0.7805	0.0499	0.0023	0.28075	0.00866	0.0012	920	1.4	172.2	9.8	172.4	9.4	183	100	174	24	94%
PRINCE1A_113	0.168	0.008	0.02483	0.00083	0.47276	0.0492	0.0022	0.20415	0.00762	0.001	1462	2.0	157.5	6.9	158.1	5.2	153	96	153.4	20	103%
PRINCE1A_114	0.1555	0.0095	0.02288	0.00093	0.40105	0.0515	0.0035	0.051005	0.00669	0.00092	507	1.0	146.5	8.3	145.8	5.8	260	150	134.8	18	56%
PRINCE1A_115	0.162	0.0094	0.02437	0.00091	0.30869	0.0488	0.0028	0.13602	0.00699	0.00094	519	1.6	152.2	8.2	155.2	5.7	135	120	140.8	19	115%
PRINCE1A_116	0.1717	0.0081	0.02543	0.00089	0.23347	0.0499	0.0023	0.35067	0.00813	0.0011	995	1.8	160.8	7	161.9	5.6	198	110	163.6	23	82%
unk15CA13b_1	0.33	0.038	0.00986	0.00058	0.70076	0.239	0.021	-0.50167	0.0204	0.0028	870	3.4	295	28	63.2	3.7	3150	130	407	56	2%
unk15CA13b_3	0.0497	0.0038	0.00752	0.00038	0.19655	0.0485	0.0025	0.2479	0.00242	0.00024	3030	5.1	49.2	3.7	48.3	2.4	122	100	48.9	4.9	40%
unk15CA13b_4	0.158	0.034	0.00797	0.00057	0.93183	0.136	0.02	-0.82562	0.0084	0.0018	1091	2.8	145	28	51.2	3.7	2100	240	169	37	2%
unk15CA13b_5	0.0893	0.0097	0.00758	0.00039	0.0018877	0.0858	0.0076	0.19588	0.00507	0.00067	1005	3.7	86.6	8.9	48.7	2.5	1250	160	102	13	4%
unk15CA13b_6	0.408	0.047	0.01058	0.00065	0.34237	0.279	0.018	0.02846	0.025	0.0029	601	3.3	344	34	67.9	4.2	3370	130	498	58	2%
unk15CA13b_8	0.193	0.042	0.00789	0.0004	0.10458	0.175	0.037	0.022118	0.015	0.0031	10010	6.0	172	35	50.7	2.5	2020	410	300	62	3%
unk15CA13b_9	0.523	0.067	0.01118	0.00079	0.91189	0.323	0.019	-0.68606	0.0325	0.0048	486	3.4	421	42	71.6	5	3580	95	645	94	2%
unk15CA13b_10	0.0744	0.0083	0.00745	0.00039	0.099854	0.0709	0.0057	0.10639	0.00418	0.00063	760	3.9	72.7	7.8	47.9	2.5	880	170	84	13	5%
unk15CA13b_11	0.0802	0.01	0.00777	0.00041	0.53897	0.074	0.0071	-0.40429	0.00505	0.00088	1600	4.1	78.1	9.4	49.9	2.6	950	180	102	18	5%
unk15CA13b_12	0.0886	0.0093	0.00781	0.00046	0.42768	0.0795	0.0056	0.044694	0.00402	0.00053	899	2.4	86	8.6	50.1	2.9	1130	130	81.1	11	4%
unk15CA13b_13	0.0728	0.009	0.00786	0.00039	0.16639	0.0691	0.0083	-0.088103	0.00348	0.00045	984	2.7	71.1	8.3	50.5	2.5	760	200	70.2	9.1	7%
unk15CA13b_14	0.0528	0.0057	0.00809	0.00042	-0.16883	0.0477	0.0045	0.26349	0.00268	0.0003	1166	3.2	52.1	5.4	52	2.7	20	130	54.1	6	260%
unk15CA13b_15	0.0452	0.0043	0.00732	0.00039	0.078003	0.0446	0.0034	0.029667	0.00244	0.00034	877	2.8	44.9	4.2	47	2.5	-40	140	49.2	6.8	-118%
unk15CA13b_16	0.0436	0.0036	0.00718	0.00037	0.12755	0.044	0.0026	0.34322	0.00232	0.00029	952	2.6	43.3	3.5	46.1	2.4	-62	110	46.8	5.9	-74%
unk15CA13b_17	0.304	0.068	0.00977	0.0008	0.93685	0.202	0.033	-0.85841	0.0138	0.0031	1158	2.4	256	51	62.6	5.1	2520	300	277	61	2%
unk15CA13b_18	0.0597	0.0064	0.00809	0.00041	0.2129	0.0524	0.0043	0.11451	0.00307	0.00041	1088	2.7	58.8	6.1	52	2.6	260	160	62	8.2	20%
unk15CA13b_19	0.066	0.019	0.00742	0.00039	-0.08094	0.064	0.019	0.12176	0.00204	0.0004	417	5.1	64	17	47.6	2.5	210	350	41.1	8.1	23%
unk15CA13b_20	0.172	0.049	0.00833	0.00058	0.84396	0.136	0.033	-0.73674	0.0071	0.0017	807	2.7	153	41	53.5	3.7	1490	480	143	34	4%
unk15CA13b_21	0.0531	0.0053	0.00767	0.00039	-0.23547	0.0504	0.0048	0.40728	0.00286	0.00047	534	3.2	52.4	5.1	49.2	2.5	130	150	57.6	9.5	38%
unk15CA13b_22	0.233	0.029	0.00888	0.00048	0.26086	0.188	0.016	-0.14043	0.0137	0.0015	1037	3.2	211	23	57	3.1	2660	140	274	30	2%
unk15CA13b_23	0.0521	0.0048	0.00728	0.00037	0.030332	0.0521	0.0037	0.37324	0.00276	0.00031	919	2.9	51.5	4.6	46.8	2.4	260	150	55.7	6.2	18%
unk15CA13b_24	0.0616	0.0075	0.00768	0.0004	0.34296	0.0593	0.0061	-0.031241	0.00341	0.00054	832	3.1	60.5	7.1	49.3	2.6	500	200	68.8	11	10%
unk15CA13b_25	0.0639	0.0063	0.0076	0.00038	0.033188	0.0627	0.0056	0.14486	0.00316	0.00051	961	3.0	62.8	6	48.8	2.5	610	170	63.8	10	8%
unk15CA13b_26	0.0538	0.0066	0.00762	0.00038	-0.061245	0.0495	0.0054	0.22857	0.00272	0.00042	514	4.0	53.1	6.4	48.9	2.5	220	220	54.8	8.6	22%
unk15CA13b_27	0.049	0.0044	0.0075	0.00036	0.0012507	0.0469	0.0032	0.14363	0.00235	0.00026	1181	2.5	48.6	4.2	48.17	2.3	40	120	47.4	5.2	120%
unk15CA13b_28	0.0494	0.0041	0.00733	0.00035	0.26923	0.0495	0.003	-0.026295	0.00237	0.00022	1332	2.1	48.9	3.9	47.09	2.3	150	120	47.8	4.4	31%
unk15CA13b_29	0.0735	0.0095	0.00741	0.0004	0.64199	0.071	0.0068	-0.50357	0.00407	0.00062	1443	3.1	71.8	8.9	47.6	2.6	900	170	82	12	5%
unk15CA13b_30	0.141	0.014	0.00791	0.00041	0.60987	0.1275	0.0091	-0.29589	0.00766	0.0008	1157	3.3	133.3	13	50.8	2.6	2060	130	154	16	2%
unk15CA13b_31	0.139	0.018	0.00882	0.00048	0.68972	0.115	0.013	-0.40291	0.00827	0.0011	581	3.4	132	16	56.6	3.1	1800	190	166	22	3%
unk15CA13b_32	0.074	0.012	0.00772	0.0004	0.35924	0.0699	0.0099	-0.17929	0.0039	0.00073	792	4.1	71.7	11	49.6	2.5	780	270	79	15	6%
unk15CA13b_33	0.384	0.067	0.01084	0.00088	0.89794	0.252	0.028	-0.68935	0.0287	0.0048	446	4.5	328	49	69.5	5.6	3150	170	571	94	2%
unk15CA13b_34	0.144	0.041	0.0084	0.00074	0.74204	0.118	0.025	-0.63302	0.0048	0.0017	980	2.7	131	33	53.9	4.7	1590	320	96	34	3%
unk15CA13b_35	0.0527	0.0056	0.00779	0.00038	-0.024158	0.048	0.0042	0.23642	0.00233	0.00033	966	3.1	52	5.4	50	2.5	90	160	47	6.7	56%
unk15CA13b_36	0.0695	0.0086	0.00793	0.00043	0.27587	0.0636	0.0078	-0.087644	0.00382	0.00065	687	4.1	67.9	8.1	50.9	2.7	580	240	77	13	9%
unk15CA13b_37	0.0521	0.0046	0.00711	0.00037	0.22648	0.0523	0.0034	0.21881	0.00249	0.00022	1530	1.9	51.6	4.4	45.7	2.4	290	140	50.2	4.5	16%
unk15CA13b_38	0.181	0.02	0.00806	0.00042	0.05446	0.161	0.016	0.16892	0.0117	0.0015	871	4.1	168	17	51.7	2.7	2390	160	235	29	2%
unk15CA13b_39	0.06	0.014	0.00798	0.00045	-0.022289	0.055	0.013	0.082056	0.0046	0.0018	370	4.4	58	13	51.2	2.9	80	320	92	36	64%
unk15CA13b_40	0.058	0.012	0.00782	0.00045	-0.076185	0.0507	0.0094	0.20311	0.00307	0.00058	477	5.0	57	11	50.2	2.9	150	300	62	12	33%
unk15CA13b_41	0.0513	0.0048	0.00795	0.00039	0.2677	0.047	0.0032	-0.076013	0.00327	0.00077	1031	3.3	50.7	4.6	51.1	2.5	60	130	66	15	85%
unk15CA13b_42	0.0547	0.008	0.00774	0.00044	-0.047369	0.0547	0.0085	0.31798	0.00274	0.00052	583	4.3	53.9	7.6	49.7	2.8	200	230	55.3	10	25%
unk15CA13b_43	0.086	0.019	0.00748	0.0004	0.14128	0.083	0.017	-0.023179	0.0057	0.0016	689	3.2	82	17	48	2.6	980	320	115	31	5%
unk15CA13b_44	0.133	0.02	0.00736	0.0004	0.66264	0.134	0.016	-0.36945	0.0069	0.0015	1120	2.5	125	17	47.3	2.6	2060	210	139	31	2%
unk15CA13b_45	0.062	0.012	0.00756	0.0004	0.039976	0.059	0.011	0.021105	0.00297	0.00037	591	4.5	60	11	48.5	2.6	310	280	60	7.5	16%
unk15CA13b_46	0.065	0.015	0.00752	0.00042	0.13077	0.06	0.013	-0.040339	0.00323	0.00061	518	4.8	63	13	48.3	2.7	270	260	65	12	18%
unk15CA13b_47	0.094	0.013	0.00834	0.00049	0.088302	0.083	0.012	0.12729	0.00578	0.0008	525	4.2	90	11	53.6	3.1	1080	250	116	16	5%

	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
unk15CA13b_48	0.202	0.05	0.00886	0.00059	0.8424	0.144	0.024	-0.62143	0.0127	0.003	588	3.6	179	39	56.9	3.7	2120	300	254	59	3%
unk15CA13b_49	0.157	0.035	0.0085	0.00048	0.79433	0.131	0.025	-0.67259	0.0102	0.0023	566	4.3	144	29	54.6	3.1	1890	320	206	46	3%
unk15CA13b_50	1.07	0.25	0.0159	0.0016	0.99063	0.467	0.065	-0.25749	0.062	0.011	490	3.7	710	110	101.4	10	4050	200	1210	210	3%
unk15CA13b_51	0.22	0.031	0.00905	0.00047	0.57114	0.175	0.02	-0.29132	0.0142	0.0027	331	3.9	203	26	58.1	3	2480	190	285	54	2%
unk15CA13b_52	0.0489	0.0054	0.00759	0.00038	0.1097	0.0469	0.0045	0.10984	0.00256	0.00032	617	2.9	48.4	5.2	48.7	2.4	50	170	51.6	6.4	97%
unk15CA13b_53	0.077	0.011	0.00773	0.00042	0.48523	0.0737	0.0091	-0.34055	0.00483	0.001	677	4.0	75.4	10	49.7	2.7	880	220	97	21	6%
unk15CA13b_54	0.065	0.012	0.00795	0.00043	-0.14147	0.061	0.011	0.32153	0.00459	0.00069	206	3.7	64	11	51	2.7	580	350	92	14	9%
unk15CA13b_55	0.0599	0.0074	0.00799	0.00044	0.11603	0.0546	0.0064	0.14024	0.00245	0.00058	289	5.3	58.9	7	51.3	2.8	310	230	50	12	17%
unk15CA13b_56	0.139	0.035	0.00891	0.00061	0.80863	0.109	0.02	-0.40993	0.0093	0.0028	750	3.9	128	28	57.2	3.9	1540	240	187	55	4%
unk15CA13b_57	0.0959	0.0091	0.00774	0.00037	-0.052816	0.0878	0.0065	0.31783	0.00782	0.00071	6660	6.3	92.8	8.3	49.7	2.4	1320	130	157	14	4%
unk15CA13b_58	0.065	0.012	0.00753	0.00043	-0.19308	0.061	0.011	0.34387	0.00367	0.00078	346	4.9	63	11	48.4	2.8	340	250	74	16	14%
unk15CA13b_59	0.19	0.052	0.0082	0.00063	0.93333	0.153	0.033	-0.79847	0.0108	0.0028	235	3.5	170	42	52.6	4	2130	470	216	56	2%
unk15CA13b_60	0.0496	0.005	0.00744	0.00037	0.14307	0.0479	0.0037	-0.028979	0.00241	0.00035	644	4.4	49.1	4.8	47.8	2.4	80	140	48.6	7.1	60%
unk15CA13b_61	0.153	0.02	0.00834	0.00043	0.52016	0.126	0.013	-0.26501	0.0102	0.0016	420	4.4	144	18	53.5	2.8	1980	190	206	32	3%
unk15CA13b_62	0.059	0.0056	0.00784	0.00039	0.33327	0.0548	0.0038	-0.050451	0.00312	0.00039	1472	3.3	59.1	5.8	50.3	2.5	360	140	62.9	7.8	14%
unk15CA13b_63	0.125	0.013	0.00824	0.00041	0.62918	0.1104	0.0087	-0.33424	0.00661	0.00076	811	3.3	119.2	11	52.9	2.6	1770	140	133	15	3%
unk15CA13b_64	0.064	0.0071	0.00757	0.00045	0.61358	0.0619	0.0048	-0.30409	0.00372	0.00053	1750	3.9	62.8	6.7	48.6	2.9	580	140	75	11	8%
unk15CA13b_65	0.081	0.015	0.00799	0.00044	0.49377	0.069	0.011	-0.35795	0.0052	0.0012	386	4.3	79	14	51.3	2.8	810	330	105	24	6%
unk15CA13b_66	0.0495	0.0069	0.00729	0.00039	0.019371	0.0474	0.0054	0.15587	0.00248	0.00034	645	4.2	48.9	6.6	46.8	2.5	50	190	50.1	6.9	94%
unk15CA13b_67	0.1025	0.0092	0.00812	0.00045	0.33382	0.0918	0.0061	0.099918	0.00572	0.00063	1105	3.6	98.9	8.4	52.1	2.8	1440	130	115	13	4%
unk15CA13b_68	0.0961	0.011	0.00819	0.00042	0.12227	0.0848	0.0086	-0.044881	0.00626	0.00096	523	4.3	92.8	10	52.6	2.7	1220	170	126	19	4%
unk15CA13b_69	0.0581	0.0089	0.00777	0.00044	0.17569	0.0535	0.0073	-0.04932	0.00241	0.00062	427	5.2	57	8.5	49.9	2.8	240	240	49	13	21%
unk15CA13b_70	0.076	0.014	0.00755	0.0004	0.31569	0.079	0.015	-0.096902	0.0044	0.0011	903	4.2	74	13	48.5	2.5	890	330	89	23	5%
unk15CA13b_71	0.0758	0.0089	0.00797	0.00041	0.51415	0.069	0.0058	-0.20935	0.00432	0.00098	1060	3.7	75.3	8.7	51.2	2.6	840	180	87	20	6%
unk15CA13b_72	0.0525	0.0039	0.00782	0.00039	0.22103	0.0481	0.002	0.36645	0.00259	0.00031	2037	4.7	51.9	3.8	50.2	2.5	109	88	52.2	6.2	46%
unk15CA13b_73	0.073	0.013	0.00818	0.00042	0.050544	0.064	0.011	-0.032911	0.00276	0.00045	554	4.7	71	12	52.5	2.7	500	260	55.6	9.1	11%
unk15CA13b_74	0.0647	0.0076	0.00782	0.00043	0.29181	0.0579	0.0054	-0.059931	0.00331	0.00047	970	3.8	63.5	7.2	50.2	2.8	440	190	66.8	9.4	11%
unk15CA13b_75	0.156	0.018	0.00928	0.00046	0.12936	0.121	0.012	0.15299	0.00738	0.00089	727	2.9	146	16	59.6	2.9	1880	200	149	18	3%
unk15CA13b_76	0.0558	0.0079	0.00759	0.00045	-0.49973	0.0533	0.0063	0.81908	0.00286	0.00082	675	3.7	54.9	7.5	48.7	2.9	210	190	58	16	23%
unk15CA13b_77	0.228	0.033	0.00955	0.00064	0.79688	0.169	0.016	-0.57507	0.0084	0.0013	1800	2.4	207	27	61.2	4.1	2550	160	170	27	2%
unk15CA13b_78	0.0513	0.0051	0.00745	0.00038	0.11615	0.0509	0.0047	0.10457	0.00233	0.00034	1020	2.9	50.7	4.9	47.8	2.4	190	170	47	6.8	25%
unk15CA13b_79	0.0689	0.01	0.00785	0.00038	0.047962	0.0629	0.0087	0.042161	0.00389	0.00079	662	4.9	64.8	8.3	50.4	2.5	480	230	78	16	11%
unk15CA13b_80	0.0707	0.01	0.0077	0.00039	0.0070494	0.0678	0.0097	0.10801	0.0043	0.00094	1000	3.0	69	9.5	49.4	2.5	650	250	87	19	8%
unk15CA13b_81	0.415	0.035	0.01139	0.00065	0.73616	0.26	0.012	-0.40076	0.0155	0.0015	782	2.0	351	26	73	4.2	3244	84	311	31	2%
unk15CA13b_82	0.0827	0.0093	0.00784	0.00041	0.15791	0.0758	0.0078	0.10939	0.00435	0.00065	583	4.5	80.4	8.7	50.3	2.6	1000	210	88	13	5%
unk15CA13b_83	0.0995	0.011	0.00808	0.00039	0.1656	0.0895	0.0092	0.051971	0.00494	0.00055	2060	3.0	96	10	51.9	2.5	1310	180	99.6	11	4%
unk15CA13b_84	0.141	0.044	0.00845	0.00054	0.77339	0.131	0.037	-0.65778	0.0086	0.0031	971	3.6	128	36	54.2	3.4	1460	420	172	62	4%
unk15CA13b_85	0.0574	0.0046	0.00816	0.00044	-0.34688	0.0513	0.0041	0.80257	0.00311	0.00059	1460	2.7	56.6	4.4	52.4	2.8	250	160	63	12	21%
unk15CA13b_86	0.0568	0.0043	0.00807	0.00039	0.43836	0.0502	0.002	0.021895	0.00255	0.00021	5270	5.0	56.1	4.1	51.78	2.5	198	88	51.4	4.3	26%
unk15CA13b_87	0.0515	0.0052	0.00789	0.00039	0.0093527	0.0464	0.0039	0.14876	0.00266	0.00059	643	4.8	50.9	5	50.7	2.5	30	150	54	12	169%
unk15CA13b_88	0.0562	0.0051	0.00756	0.00036	0.021888	0.0525	0.0035	0.14685	0.00255	0.00027	2057	2.8	55.5	4.9	48.55	2.3	270	130	51.5	5.4	18%
unk15CA13b_89	0.0761	0.007	0.00794	0.0004	0.074362	0.0689	0.0049	0.24358	0.0036	0.0004	2110	2.9	74.4	6.6	51	2.6	860	140	72.7	8	6%
unk15CA13b_90	0.0592	0.0083	0.00787	0.0004	-0.056357	0.0533	0.0071	0.26265	0.0039	0.00067	787	3.3	58.2	7.9	50.5	2.5	230	230	79	13	22%
unk15CA13b_91	0.0536	0.0041	0.00771	0.00041	0.27296	0.0495	0.0025	0.32091	0.00269	0.00032	3220	4.0	53	3.9	49.5	2.7	165	100	54.3	6.5	30%
unk15CA13b_92	0.0582	0.0045	0.0078	0.0004	0.38529	0.0553	0.003	0.23887	0.00329	0.00033	1889	5.2	57.5	4.3	50.1	2.6	430	120	66.5	6.7	12%
unk15CA13b_93	0.0502	0.0042	0.00775	0.00039	0.28592	0.0469	0.0028	-0.016505	0.0028	0.00036	1256	3.0	49.7	4.1	49.8	2.5	50	110	56.5	7.2	100%
unk15CA13b_94	0.342	0.043	0.00992	0.00057	0.79546	0.238	0.019	-0.61824	0.0231	0.0027	890	3.9	295	32	63.7	3.6	3110	140	462	53	2%
unk15CA13b_95	0.112	0.016	0.0082	0.00045	0.080347	0.096	0.012	0.12893	0.0087	0.0016	398	5.1	107	14	52.6	2.9	1650	280	174	31	3%
unk15CA13b_96	0.0514	0.004	0.00767	0.00037	0.012836	0.0488	0.0028	0.392	0.00248	0.0002	2410	2.7	50.8	3.9	49.26	2.4	111	110	50.1	4.1	44%
unk15CA13b_97	0.079	0.016	0.00824	0.0004	0.1647	0.068	0.013	-0.098792	0.00338	0.00064	770	4.4	72	11	52.9	2.6	510	190	68	13	10%
unk15CA13b_98	0.375	0.032	0.01038	0.00054	0.44026	0.253	0.014	0.02497	0.0215	0.002	842	3.4	322	24	66.6	3.5	3202	96	430	39	2%
unk15CA13b_99	0.0518	0.0052	0.00753	0.00036	0.059389	0.0497	0.0042	0.0029639	0.00298	0.00035	1008	4.3	51.2	4.9	48.39	2.3	150	150	60.1	7.1	32%
unk15CA13b_100	0.0501	0.0068	0.00775	0.0004	0.38556	0.047	0.0054	-0.24017	0.0028	0.00041	649	4.3	49.5	6.5	49.8	2.6	40	190	56.4	8.2	125%
unk15CA13b_101	0.353	0.052	0.01008	0.00064	0.84416	0.251	0.028	-0.56965	0.0264	0.0047	465	4.5	302	39	64.7	4.1	3090	180	526	93	2%
unk15CA13b_102	0.1642	0.014	0.00828	0.00041	0.76904	0.1438	0.0076	-0.58381	0.00998	0.001	2250	3.4	154	12	53.1	2.6	2251	88	201	21	2%
unk15CA13b_104	0.0813	0.0078	0.00789	0.00039	0.45398	0.0731	0.0047	-0.14305	0.00359	0.00036	2670	2.4	79.2	7.2	50.7	2.5	1000	130	72.4	7.3	5%
unk15CA13b_105	0.049	0.0052	0.00749	0.00039	0.16182	0.0479	0.0042	-0.076489	0.00274	0.00045	726	4.3	48.5	5	48.1	2.5	90	160	55.3	9.1	53%
unk15CA13b_106	0.0981	0.011	0.00806	0.00042	0.17602	0.0883	0.0084	0.085649	0.00571	0.00067	1040	4.7	94.7	9.8	51.8	2.7	1360	170	115	13	4%
unk15CA13b_107	0.0592	0.0094	0.0079	0.00043	0.20137	0.0561	0.0094	-0.13843	0.00372	0.00085	587	4.8	58.1	8.9	50.7	2.8	290	250	75	17	17%
unk15CA13b_108	0.083	0.012	0.00778	0.00041	0.34135	0.0745	0.0091	-0.14834	0.00407	0.00073	918	3.9	80.3	11	49.9	2.6	940	240	82	15	5%
unk15CA13b_109	0.105	0.015	0.00765	0.00042	0.58252	0.099	0.011	-0.34161	0.00502	0.00078	1860	2.8	101	13	49.1	2.7	1500	180	101	16	3%
unk15CA13b_110	0.082	0.017	0.00803	0.00041	0.79793	0.073	0.013	-0.66681	0.00356	0.00058	2740	3.4	79	15	51.5	2.6	740	260	72	12	7%
unk15CA13b_111	0.0564	0.0069	0.00777	0.0004	0.38994	0.0559	0.0058	-0.16997	0.00292	0.00055	1016	3.7	55.6	6.5	49.9	2.6	360	190	59	11	14%
unk15CA13b_112	0.0698	0.01	0.00751	0.00039	0.62521	0.0673	0.0074	-0.52019	0.00395	0.00066	2217	4.6	68.2	9.3	48.3	2.5	720	200	80	13	7%
unk15CA13b_113	0.0487	0.0039	0.00747	0.00038	0.25284	0.0494	0.0032	0.053171	0.00271	0.00034	1642	3.1	48.2	3.8	48	2.4	87	83	54.8	6.9	55%
unk15CA13b_114	0.0735	0.0094	0.00771	0.0004	0.081901	0.0728	0.0088	0.14574	0.00409	0.00053	1203	3.1	71.8	8.8	49.5	2.6	850	220	82.4	11	6%
unk15CA13b_115	0.302	0.083	0.01027	0.00098	0.75592	0.218	0.044	-0.61143	0.0249	0.0076	1140	4.2	256	60	65.9	6.2	2750	330	490	150	2%
unk15CA13b_116	0.0525	0.0056	0.00763	0.00041	0.070643	0.0526	0.0053	0.2125	0.00256	0.00029	985	2.8	51.9	5.3	49	2.6	240	190	51.6	5.8	20%
unk15CA13b_117	0.219	0.021	0.00778	0.00042	0.31692	0.204	0.015	-0.018383	0.0165	0.002	558	4.2	200	18	50	2.7	2880	110	331	40	2%
unk15CA13b_118	0.146	0.025	0.0083	0.00047	0.84314	0.128	0.018	-0.6844	0.0074	0.0016	1410	3.4	136	22	53.3	3	1900	260	149	32	3%
unk15CA13b_119	0.0568	0.0054	0.00784	0.00039	0.41228	0.055	0.0039	-0.15852	0.00333	0.00058	1041	2.8	56.1	5.1	50.3	2.5	370	150	67	12	14%
unk15CA13b_120	0.101	0.021	0.00803	0.00041	0.10517	0.093	0.017	-0.042872	0.0056	0.0018	575	3.4	96	19	51.5	2.6	1140	320	112	35	5%
unk15CA13b_121	0.0548	0.0052	0.00774	0.00039	0.24884	0.0527	0.0038	0.056627	0.00299	0.00039	816	3.8	54.1	5	49.7	2.5	300	150	60.4	7.9	17%
unk15CA13b_122	0.0459	0.005	0.00802	0.00042	0.27168	0.0424	0.0041	-0.13529	0.00229	0.00037	596	4.0	45.5	4.8	51.5	2.7	-120	160	46.2	7.4	-43%
unk15CA13b_123	0.241	0.037	0.00953	0.00074	0.5711	0.189	0.022	-0.32312	0.0211	0.0043	458	4.0	217	30	61.1	4.8	2640	180	421	85	2%
unk15CA13b_124	0.28	0.025	0.00963	0.00059	0.52664	0.219	0.014	-0.023537	0.0158	0.0014	1270	2.8	250	20	61.8	3.8	2985	110	317	28	2%
unk15CA13b_125	0.0518	0.0048	0.00804	0.00042	0.36072	0.0496	0.0031	0.33068	0.00278	0.00028	1610	2.2	51.2	4.6	51.6	2.7	160	120	56.1	5.7	32%
unk15CA13b_126	0.0521	0.0048	0.00765	0.00038	-0.25291	0.0514	0.0039	0.59306	0.00261	0.00026	1615	2.3	51.5	4.6	49.1	2.4	250	160	52.7	5.3	20%
ABBEYRD2_1	0.054	0.0044	0.00819	0.00034	0.46829	0.0485	0.0036	0.028461	0.00234	0.00031	1350	1.6	53.4	4.2	52.6	2.2	120	150	47.1	6.3	44%
ABBEYRD2_2	0.078	0.018	0.00923	0.00048	-0.10194	0.062	0.015	0.15719	0.0051	0.0017	235	7.8	75	16	59.2	3	400	350	103	34	15%
ABBEYRD2_3	0.071	0.02	0.00856	0.00037	-0.028975	0.063	0.019	0.035539	0.00324	0.00082	233	1.1	68	17	54.9	2.4	220	310	65	16	25%
ABBEYRD2_4	0.067	0.012	0.00801	0.00035	0.13508	0.06	0.011	0.05731	0.0047	0.0022	269	6.7	65	12	51.4	2.3	540	340	94	43	10%
ABBEYRD2_5	0.0983	0.0068	0.0144	0.00059	0.22383	0.0505	0.0036	0.16414	0.00519	0.00084	390	2.7	95.1	6.2	92.1	3.7	230	160	105	17	40%
ABBEYRD2_6	0.0698	0.0037	0.01033	0.00038	0.47152	0.0498	0.0027	0.20264	0.00522	0.0009	1673	13.4	68.5	3.5	66.2	2.4	176	120	105	18	38%
ABBEYRD2_8	0.072	0.015	0.00773	0.00045	-0.0112	0.069	0.016	0.12608	0.00311	0.00051	142.6	1.1	70	14	49.6	2.9	620	410	62.7	10	8%
ABBEYRD2_9	0.0597	0.0067	0.00739	0.00031	-0.1616	0.0576	0.007	0.38815	0.00289	0.00046	493	1.4	58.7	6.4	47.5	2	440	240	58.4	9.3	11%
ABBEYRD2_10	0.0781	0.01	0.01132	0.00052	0.083923	0.0482	0.0055	0.075364	0.00418	0.00072	344	3.6	73.7	8.4	72.6	3.3	80	200	84	15	91%
ABBEYRD2_11	0.045	0.012	0.00793	0.0004	-0.21725	0.042	0.012	0.35398	0.00262	0.00044	135	1.1	44	11	50.9	2.5	-260	370	52.9	8.8	-20%
ABBEYRD2_12	0.09	0.023	0.01133	0.00055	0.094586	0.055	0.013	-0.015163	0.00467	0.001	140	2.2	86	20	72.6	3.5	170	320	94	21	43%
ABBEYRD2_13	0.0509	0.004	0.00763	0.00032	0.17307	0.0489	0.0036	0.11572	0.00329	0.001	941	2.0	50.4	3.8	49	2.1	140	150	66	20	35%
ABBEYRD2_15	0.0782	0.0042	0.01163	0.00046	0.55268	0.0487	0.0025	0.26445	0.00434	0.00064	1535	6.7	76.4	3.9	74.5	2.9	131	110	87.6	13	57%
ABBEYRD2_16	0.0725	0.0055	0.01107	0.00048	0.38669	0.0491	0.0034	-0.14427	0.00499	0.00084	864	8.9	71	5.2	70.9	3	101	85	101	17	70%
ABBEYRD2_17	0.059	0.011	0.00759	0.00039	0.30468	0.058	0.01	-0.13892	0.00303	0.00049	232	1.1	57.8	9.9	48.7	2.5	320	300	61.2	9.9	15%
ABBEYRD2_18	0.1284	0.0084	0.01847	0.0008	0.67412	0.0487	0.0025	0.027924	0.00625	0.00089	1610	11.5	122.5	7.6	118	5.1	134	110	126	18	88%
ABBEYRD2_19	1.08	0.12	0.0902	0.0084	0.95598	0.0843	0.0045	-0.4966	0.0733	0.011	1160	6.0	730	61	556	50	1291	100	1430	210	43%
ABBEYRD2_20	0.094	0.022	0.0116	0.0011	0.099137	0.056	0.014	0.043065	0.00456	0.00074	234	2.6	89	20	74.4	6.7	310	400	92	15	24%
ABBEYRD2_21	1.49	0.13	0.122	0.011	0.98102	0.0904	0.0042	0.41822	0.0425	0.0065	531	18.3	925	55	737	61	1442	96	840	130	51%
ABBEYRD2_22	0.057	0.017	0.00734	0.00046	0.037454	0.057	0.018	0.13904	0.00298	0.00055	140	2.1	55	15	47.1	2.9	110	400	60.2	11	43%
ABBEYRD2_23	0.06	0.013	0.00828	0.00044	-0.048603	0.056	0.014	0.20891	0.0027	0.00041	207.8	0.8	58	12	53.2	2.8	240	390	54.4	8.2	22%
ABBEYRD2_24	4.13	0.22	0.266	0.014	0.8662	0.1134	0.0055	0.5452	0.0758	0.0093	124	2.0	1656	44	1516	73	1857	86	1476	170	82%
ABBEYRD2_26	0.0836	0.0062	0.01232	0.00055	0.35218	0.0492	0.0035	0.087875	0.00394	0.00074	527	4.9	81.4	5.7	78.9	3.5	150	140	79	15	53%
ABBEYRD2_27	1.16	0.062	0.094	0.0048	0.83958	0.0893	0.0043	0.56104	0.0416	0.0049	385	2.5	780	29	579	28	1413	87	824	95	41%
ABBEYRD2_28	0.1008	0.0056	0.01497	0.0006	-0.17563	0.0496	0.0031	0.7374	0.00429	0.00052	1561	2.2	97.4	5.2	95.8	3.8	165	120	86.6	10	58%
ABBEYRD2_29	0.102	0.027	0.00732	0.00035	0.092389	0.103	0.028	-0.013439	0.00277	0.00051	194	0.8	96	24	47	2.2	1130	470	55.9	10	4%
ABBEYRD2_31	0.063	0.018	0.00937	0.00049	0.32015	0.048	0.013	-0.095284	0.00384	0.0006	140.9	1.6	61	16	60.1	3.2	-90	330	77.5	12	-67%

	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
ABBEYRD2_32	0.0589	0.0046	0.00882	0.00038	0.083845	0.0482	0.004	0.15805	0.00297	0.0004	884	2.1	58.1	4.4	57	2.6	100	160	60	8.1	57%
ABBEYRD2_33	0.0481	0.0065	0.00763	0.0004	-0.033755	0.0445	0.0061	0.27304	0.003	0.0005	299	0.9	47.5	6.2	49	2.5	-60	220	60.5	10	-82%
ABBEYRD2_35	0.066	0.013	0.00793	0.00033	0.082135	0.059	0.011	-0.000161	0.0033	0.00057	397	2.6	60.2	9.6	50.9	2.1	230	190	66.5	12	22%
ABBEYRD2_36	0.059	0.018	0.00973	0.00087	0.26236	0.04	0.013	-0.21233	0.0089	0.0052	123	3.1	57	17	62.4	5.6	-250	420	176	99	-25%
ABBEYRD2_37	0.0772	0.0049	0.01153	0.00041	0.077039	0.0484	0.0032	0.16002	0.00426	0.00056	1032	2.5	75.5	4.6	73.9	2.6	120	130	85.9	11	62%
ABBEYRD2_38	0.0624	0.004	0.00949	0.00039	0.46139	0.0468	0.0027	0.063316	0.005	0.0016	702	10.7	61.4	3.8	60.9	2.5	49	120	100	31	124%
ABBEYRD2_39	0.0628	0.0041	0.00934	0.00045	0.50655	0.0491	0.0031	0.3212	0.00418	0.00065	978	6.1	61.8	3.9	59.9	2.9	153	130	84.3	13	39%
ABBEYRD2_40	0.093	0.011	0.01296	0.00063	-0.061936	0.0519	0.0064	0.18715	0.00482	0.00075	355	3.0	89.5	9.9	83	4	150	160	97	15	55%
ABBEYRD2_41	0.0651	0.01	0.00789	0.00031	-0.03673	0.0606	0.0093	0.14912	0.00254	0.00035	451	0.7	63.6	9.3	50.7	2	450	250	51.3	7	11%
ABBEYRD2_42	0.08	0.012	0.00895	0.00042	-0.14647	0.068	0.012	0.2645	0.00394	0.00069	215	1.0	77	11	57.4	2.7	650	290	79	14	9%
ABBEYRD2_43	0.066	0.023	0.00858	0.0006	-0.13208	0.059	0.024	0.23262	0.0072	0.0037	80	1.0	63	21	55.1	3.8	-130	460	143	73	-42%
ABBEYRD2_44	0.0525	0.0056	0.00826	0.00035	-0.12304	0.046	0.0048	0.28811	0.00251	0.00034	465	0.9	51.8	5.3	53	2.3	-50	130	50.7	6.8	-106%
ABBEYRD2_45	0.574	0.066	0.0434	0.0044	0.90904	0.098	0.0055	-0.069764	0.0263	0.0043	812	4.4	460	44	273	27	1572	100	524	84	17%
ABBEYRD2_46	0.0645	0.006	0.0099	0.00043	0.060496	0.0473	0.0046	0.17941	0.00296	0.00048	354	1.0	63.3	5.7	63.5	2.8	70	180	59.8	9.6	91%
ABBEYRD2_47	0.064	0.012	0.00784	0.00034	0.22477	0.06	0.011	-0.09551	0.00265	0.00049	413	1.8	62	11	50.4	2.2	350	290	53.5	9.8	14%
ABBEYRD2_48	0.147	0.047	0.01507	0.00068	0.25995	0.06	0.013	-0.18169	0.00454	0.0008	354	4.5	120	25	96.4	4.3	320	260	92	16	30%
ABBEYRD2_49	0.081	0.022	0.00775	0.00042	-0.11937	0.078	0.023	0.11961	0.0035	0.00081	187	1.1	77	20	49.8	2.7	570	400	71	16	9%
ABBEYRD2_50	0.071	0.016	0.00755	0.00041	0.1559	0.063	0.012	-0.053301	0.00361	0.00091	170.9	1.0	65	12	48.5	2.6	450	340	73	18	11%
ABBEYRD2_51	0.076	0.014	0.00996	0.00043	0.15169	0.0555	0.0097	-0.027142	0.0041	0.00075	153	1.9	73	13	63.9	2.8	260	280	83	15	25%
ABBEYRD2_52	1.752	0.096	0.1527	0.0069	0.9042	0.0836	0.0039	0.24004	0.0167	0.0032	1110	14.6	1025	35	915	39	1287	85	334	63	71%
ABBEYRD2_53	0.0602	0.0068	0.00822	0.00037	0.17835	0.0533	0.0059	0.12184	0.00291	0.00053	581	3.6	59.2	6.5	52.8	2.4	270	210	58.7	11	20%
ABBEYRD2_54	0.123	0.029	0.00876	0.0005	-0.18893	0.104	0.026	0.46354	0.0048	0.0016	151	1.7	115	25	56.2	3.2	1300	460	97	31	4%
ABBEYRD2_55	0.0567	0.0036	0.00829	0.00032	0.14544	0.0495	0.0032	0.25332	0.00286	0.00037	1198	2.3	56	3.4	53.2	2	162	130	57.8	7.5	33%
ABBEYRD2_56	0.0577	0.0054	0.00847	0.00033	-0.19306	0.0517	0.0065	0.3182	0.00338	0.00068	498	7.4	56.9	5.2	54.4	2.1	140	160	68	14	39%
ABBEYRD2_57	0.145	0.025	0.0136	0.00067	0.01972	0.079	0.014	0.095946	0.00566	0.00088	1030	2.8	135	21	87	4.3	950	310	114	18	9%
ABBEYRD2_59	0.095	0.014	0.01147	0.00074	0.13356	0.0606	0.0091	0.06893	0.0057	0.0016	206.2	3.4	91	13	73.5	4.7	470	290	116	31	16%
ABBEYRD2_60	0.069	0.0051	0.01027	0.00041	0.1423	0.0488	0.0038	0.14516	0.00321	0.00046	524	1.9	67.7	4.9	65.9	2.6	160	140	64.7	9.3	41%
ABBEYRD2_62	0.093	0.015	0.01084	0.00049	0.019036	0.063	0.011	0.10794	0.00383	0.00059	223.1	1.6	89	14	69.5	3.1	490	290	77.3	12	14%
ABBEYRD2_63	0.0661	0.0073	0.00852	0.00039	-0.0050982	0.057	0.007	0.18141	0.00272	0.00049	459	2.4	64.8	6.9	54.7	2.5	380	230	54.8	9.9	14%
ABBEYRD2_64	0.0879	0.0076	0.01332	0.00047	0.13939	0.0489	0.0042	0.13205	0.00387	0.00056	481	3.1	85.3	7	85.3	3	130	160	78.1	11	66%
ABBEYRD2_65	0.0637	0.0056	0.00868	0.00038	0.012989	0.0521	0.0049	0.51876	0.00271	0.00045	526	1.3	62.6	5.3	55.7	2.4	300	200	54.6	9.1	19%
ABBEYRD2_66	0.091	0.021	0.00824	0.00043	0.24719	0.088	0.021	-0.16202	0.00304	0.00062	173	0.8	87	19	52.9	2.7	1050	420	61	12	5%
ABBEYRD2_67	0.114	0.024	0.00975	0.00057	0.23072	0.083	0.017	-0.18501	0.0041	0.0014	161	1.2	107	21	62.6	3.6	880	370	83	27	7%
ABBEYRD2_68	0.077	0.027	0.00848	0.00043	-0.063809	0.067	0.023	0.05238	0.00274	0.00049	214	1.1	73	24	54.4	2.8	110	400	55.2	10	49%
ABBEYRD2_69	0.0666	0.0088	0.01067	0.00064	-0.013313	0.0476	0.0068	0.18408	0.0044	0.0012	222	2.8	65.2	8.4	68.4	4.1	100	240	88	23	68%
ABBEYRD2_70	0.0849	0.0063	0.01189	0.00047	0.28427	0.052	0.0036	0.069573	0.0077	0.003	1095	27.6	82.6	5.9	76.2	3	240	130	155	60	32%
ABBEYRD2_71	0.091	0.02	0.00749	0.00036	0.18605	0.088	0.019	-0.14636	0.0029	0.00043	285	0.9	87	18	48.1	2.3	1000	340	58.4	8.7	5%
ABBEYRD2_72	0.0625	0.0094	0.00799	0.0003	-0.021285	0.0567	0.0095	0.093562	0.00278	0.00041	282	0.8	61.2	8.6	51.3	1.9	270	180	56	8.2	19%
ABBEYRD2_73	0.183	0.046	0.01	0.00057	0.11923	0.141	0.041	0.14306	0.00381	0.00083	123	0.5	164	36	64.2	3.7	1750	420	77	17	4%
ABBEYRD2_74	0.185	0.018	0.01017	0.00063	-0.00039325	0.134	0.015	0.26711	0.0083	0.0017	147	2.2	171	16	65.2	4	2060	210	166	34	3%
ABBEYRD2_75	0.079	0.017	0.00835	0.00047	0.22679	0.068	0.014	-0.0072055	0.00239	0.00039	197	0.8	76	16	53.6	3	550	370	48.2	7.9	10%
ABBEYRD2_76	0.089	0.0087	0.01138	0.00046	-0.25137	0.0576	0.0063	0.36558	0.00384	0.00058	506	2.5	86.3	8	72.9	2.9	420	200	77.4	12	17%
ABBEYRD2_77	0.0542	0.0031	0.00809	0.00031	0.27884	0.0493	0.0028	0.32642	0.00258	0.00033	1770	1.2	53.6	3	51.9	2	157	120	52.2	6.7	33%
ABBEYRD2_78	0.0635	0.0033	0.00945	0.00036	0.42361	0.0488	0.0027	0.33353	0.0032	0.00045	1830	5.0	62.5	3.2	60.7	2.3	137	120	64.5	9.1	44%
ABBEYRD2_79	0.154	0.021	0.01135	0.00055	0.085919	0.098	0.014	-0.0073811	0.0035	0.00062	150	0.7	143	18	72.8	3.5	1450	300	70.6	13	5%
ABBEYRD2_80	0.122	0.0084	0.01368	0.00063	0.52757	0.065	0.0041	-0.14954	0.00802	0.0013	2360	10.3	116.7	7.6	87.6	4	747	120	161	25	12%
ABBEYRD2_81	0.0561	0.0054	0.00809	0.00035	0.20007	0.0515	0.0056	0.025149	0.00269	0.00043	381	0.7	55.3	5.2	52	2.3	210	200	54.2	8.6	25%
ABBEYRD2_82	0.0708	0.0078	0.00946	0.00048	0.44296	0.0536	0.0048	-0.17125	0.00383	0.0006	740	2.9	69.2	7.3	60.7	3.1	320	180	77.2	12	19%
ABBEYRD2_83	0.087	0.0057	0.01335	0.00046	0.040556	0.047	0.0031	0.18184	0.00471	0.00072	824	3.7	84.6	5.3	85.5	2.9	60	130	95	14	143%
ABBEYRD2_84	0.08	0.024	0.00776	0.00041	-0.041773	0.076	0.025	0.11478	0.00355	0.00084	184	1.0	76	21	49.9	2.6	320	380	72	17	16%
ABBEYRD2_85	0.059	0.011	0.00777	0.00032	0.27977	0.0554	0.01	-0.19851	0.00364	0.00084	332	2.1	58	11	49.9	2	240	290	73	17	21%
ABBEYRD2_86	0.172	0.027	0.00896	0.00045	0.56432	0.132	0.018	-0.24193	0.00518	0.00088	380	1.3	159	23	57.5	2.9	2040	270	104	18	3%
ABBEYRD2_87	0.0733	0.01	0.00794	0.00035	0.39065	0.0679	0.009	-0.10679	0.00281	0.00041	463	1.1	71.4	9.4	51	2.2	790	240	56.6	8.2	6%
ABBEYRD2_88	0.108	0.025	0.01004	0.00078	0.0032218	0.077	0.019	0.20333	0.00485	0.00095	199	4.1	102	22	64.4	4.9	670	320	98	19	10%
ABBEYRD2_89	0.106	0.032	0.00988	0.00055	0.084686	0.076	0.021	0.0034361	0.0047	0.00091	128.2	1.7	99	27	63.4	3.5	620	470	95	18	10%
ABBEYRD2_90	0.0604	0.0066	0.00886	0.00037	0.20593	0.05	0.0055	0.02413	0.00255	0.00038	482	1.8	59.4	6.2	56.9	2.4	160	200	51.4	7.6	36%
ABBEYRD2_91	0.0831	0.0083	0.01245	0.00056	0.15983	0.0492	0.0053	0.093022	0.00381	0.00062	499	4.5	80.8	7.8	79.8	3.6	170	190	76.8	12	47%
ABBEYRD2_92	0.0701	0.0063	0.01052	0.00039	0.15784	0.0486	0.0044	0.15104	0.00343	0.00055	510	4.1	68.6	5.9	67.5	2.5	170	190	69.2	11	40%
ABBEYRD2_93	0.142	0.027	0.00833	0.00036	0.35917	0.117	0.02	-0.27239	0.00492	0.0011	326	1.6	132	24	53.5	2.3	1530	370	99	21	3%
ABBEYRD2_94	0.053	0.0055	0.00767	0.00032	-0.04712	0.0507	0.0055	0.20953	0.00238	0.00032	880	0.8	52.3	5.3	49.3	2	180	200	48.1	6.4	27%
ABBEYRD2_95	1.492	0.11	0.1041	0.0068	0.93215	0.1051	0.0052	0.061774	0.0126	0.0023	481	1.5	919	47	637	40	1709	91	252	45	37%
ABBEYRD2_96	0.0527	0.005	0.00782	0.0003	0.20594	0.0492	0.0046	-0.029114	0.0024	0.00038	667	1.5	52	4.8	50.2	1.9	140	180	48.4	7.7	36%
ABBEYRD2_97	0.125	0.021	0.0096	0.00043	-0.32596	0.096	0.018	0.45769	0.00341	0.0007	272	1.1	118	19	61.6	2.8	1380	320	69	14	4%
ABBEYRD2_98	0.0879	0.006	0.0108	0.00042	0.11892	0.0589	0.0043	0.36615	0.00349	0.00047	1150	2.3	85.4	5.6	69.2	2.7	540	160	70.4	9.5	13%
ABBEYRD2_99	0.0596	0.0078	0.00884	0.00049	-0.17532	0.0471	0.006	0.57848	0.0032	0.00066	363	6.5	60	7.9	56.7	3.1	40	220	65	13	142%
ABBEYRD2_100	0.0906	0.0061	0.01322	0.00049	0.049529	0.05	0.0037	0.27981	0.00496	0.001	721	3.6	87.9	5.7	84.7	3.1	180	150	100	21	47%
ABBEYRD2_101	1.486	0.085	0.1062	0.0046	0.8864	0.1018	0.0048	-0.090961	0.0244	0.0034	636	3.0	922	35	650	27	1653	87	487	68	39%
ABBEYRD2_102	0.775	0.061	0.09	0.0066	0.9142	0.0622	0.0031	0.10204	0.0307	0.0038	596	3.2	578	36	555	39	672	100	611	74	83%
ABBEYRD2_103	0.0879	0.0064	0.01204	0.00052	0.36925	0.0531	0.0038	0.13991	0.00484	0.00073	951	3.9	85.4	6	77.1	3.3	310	150	97.5	15	25%
ABBEYRD2_104	0.182	0.013	0.02415	0.00094	0.25859	0.0544	0.0042	0.098564	0.0093	0.0015	282	2.6	169.6	11	153.8	5.9	380	150	187	29	40%
ABBEYRD2_105	0.0635	0.0047	0.00875	0.00032	-0.073606	0.0519	0.0042	0.27699	0.003	0.00039	1660	2.2	62.5	4.4	56.2	2.1	250	150	60.5	7.8	22%
ABBEYRD2_106	0.19	0.016	0.02172	0.001	0.34169	0.061	0.0047	0.26486	0.0254	0.0036	385	3.3	176	13	138.5	6.4	660	160	507	71	21%
ABBEYRD2_107	0.068	0.016	0.00774	0.00039	0.24321	0.064	0.014	-0.20768	0.00307	0.00049	220	1.1	66	14	49.7	2.5	420	350	62	10	12%
ABBEYRD2_108	0.44	0.057	0.0403	0.0041	0.95603	0.0778	0.0041	-0.41332	0.0388	0.0061	346	11.4	366	39	255	25	1154	120	768	120	22%
ABBEYRD2_109	0.1414	0.0078	0.01953	0.00076	0.59439	0.0522	0.0027	0.27607	0.0155	0.0023	1030	14.3	134.2	6.9	124.7	4.8	282	120	312	45	44%
ABBEYRD2_110	0.056	0.0082	0.00772	0.00031	0.02645	0.0527	0.008	0.049057	0.0022	0.00029	416	0.7	55	7.7	49.6	2	140	210	44.5	5.9	35%
ABBEYRD2_111	2.909	0.15	0.2116	0.0096	0.83503	0.0994	0.0047	0.42554	0.0616	0.0073	285	1.9	1381	40	1236	51	1609	88	1207	140	77%
ABBEYRD2_112	0.0814	0.0044	0.01186	0.00044	0.3866	0.0479	0.0028	0.39827	0.00291	0.00038	1410	1.3	79.4	4.2	76	2.8	98	120	58.7	7.6	78%
X15CA23B_1	0.0991	0.01	0.01484	0.00086	0.21275	0.0485	0.0047	0.32015	0.00677	0.00091	581	2.9	95.8	9.4	94.9	5.5	126	200	136.4	18	75%
X15CA23B_2	0.091	0.018	0.0085	0.00056	0.57714	0.076	0.014	-0.44415	0.00379	0.00064	834	1.7	87	17	54.6	3.6	900	350	76.5	13	6%
X15CA23B_3	0.094	0.016	0.01253	0.00081	0.25311	0.0533	0.0078	-0.066507	0.0101	0.002	288	11.8	91	14	80.3	5.2	260	260	203	40	31%
X15CA23B_4	0.103	0.042	0.00802	0.00067	0.7371	0.107	0.043	0.19711	0.0044	0.0011	73.5	1.2	94	35	51.5	4.3	680	610	89	22	8%
X15CA23B_5	0.102	0.017	0.00981	0.00066	0.065558	0.0729	0.011	0.16004	0.00466	0.00098	333	3.0	97	15	62.9	4.2	830	290	94	20	8%
X15CA23B_6	0.1747	0.018	0.02437	0.0016	0.71643	0.0525	0.0047	-0.12426	0.00899	0.0012	1233	2.6	164.6	15	155.2	9.8	298	200	181	24	52%
X15CA23B_7	0.238	0.028	0.00995	0.0007	-0.21376	0.172	0.023	0.68308	0.00683	0.0009	1940	1.3	216	23	63.8	4.5	2530	230	137.6	18	3%
X15CA23B_8	0.235	0.025	0.02297	0.0014	0.40894	0.0744	0.0071	0.22771	0.0436	0.0062	660	22.4	214.1	20	146.4	8.8	1031	190	862	120	14%
X15CA23B_9	0.474	0.052	0.0315	0.0023	0.85641	0.1083	0.01	0.099668	0.0123	0.0024	365	3.1	397	33	199.9	15	1760	170	247	48	11%
X15CA23B_10	0.113	0.024	0.00852	0.00058	0.31229	0.095	0.018	-0.2161	0.00312	0.00046	293	0.8	107	21	54.7	3.7	1210	360	62.9	9.3	5%
X15CA23B_11	0.0562	0.0056	0.00808	0.00047	-0.12451	0.0504	0.0049	0.46231	0.00243	0.0003	2108	0.9	55.5	5.4	51.9	3	184	190	49	6	28%
X15CA23B_12	0.113	0.019	0.0089	0.0006	0.23353	0.091	0.015	0.068624	0.0059	0.0012	234	2.0	107	18	57.1	3.8	1350	320	119	24	4%
X15CA23B_13	0.26	0.037	0.0119	0.00092	0.22879	0.16	0.022	0.28302	0.00826	0.0013	570	1.9	232	30	76.2	5.8	2430	270	166	25	3%
X15CA23B_14	0.418	0.043	0.0549	0.0034	0.56256	0.0548	0.005	0.13222	0.0186	0.0023	304	1.8	353	31	344.8	21	392	210	372	46	88%
X15CA23B_15	0.086	0.028	0.0087	0.00065	-0.00029949	0.071	0.023	0.11686	0.005	0.0013	75.5	1.9	81	26	55.8	4.2	640	570	102	25	9%
X15CA23B_16	0.064	0.013	0.00786	0.00046	0.10608	0.059	0.012	-0.045073	0.00275	0.00046	441	1.2	62	12	50.46	2.9	290	270	55.6	9.3	17%
X15CA23B_17	0.338	0.061	0.01049	0.00079	0.75186	0.218	0.033	-0.55799	0.00742	0.0012	342	1.0	294	47	67.3	5.1	2890	270	149	24	2%
X15CA23B_18	0.072	0.015	0.0081	0.00057	0.04294	0.061	0.012	0.13333	0.005	0.0015	335	4.8	70	14	52	3.6	530	350	100	30	10%
X15CA23B_19	0.079	0.02	0.00827	0.00054	-0.063853	0.069	0.017	0.13885	0.00334	0.00066	234	2.3	76	18	53.1	3.5	480	390	67	13	11%
X15CA23B_21	0.0591	0.009	0.0079	0.00049	0.017111	0.051	0.0074	0.28855	0.00256	0.00043	456	1.5	58.1	8.5	50.7	3.2	250	280	51.6	8.7	20%
X15CA23B_22	0.222	0.025	0.03222	0.002	0.17316	0.0501	0.0051	0.11124	0.0112	0.0019	255	2.2	203	21	204.4	12	190	200	225	38	108%
X15CA23B_23	0.081	0.015	0.00855	0.00059	0.14129	0.07	0.014	-0.015733	0.00405	0.00073	225.5	1.7	79	14	54.9	3.8	680	340	82	15	8%
X15CA23B_24	0.0616	0.0077	0.00806	0.00052	0.29036	0.0566	0.0068	-0.029072	0.0027	0.00044	615	1.2	60.6	7.3	51.7	3.4	380	220	54.6	9	14%
X15CA23B_25	0.403	0.043	0.0527	0.0031	0.04967	0.057	0.0057	0.35999	0.017	0.0022	241	2.2	343	31	330.8	19	480	230	341	44	69%
X15CA23B_26	0.0605	0.0076	0.00862	0.00051	0.26636	0.051	0.0058	-0.12111	0.00272	0.00036	990	0.9	57.8	4.8	55.3	3.3	170	170	54.9	7.2	33%
X15CA23B_27	0.295	0.03	0.02406	0.0014	0.29968	0.0894	0.0083	0.24421	0.01132	0.0014	4360	1.8	262.1	24	153.3	8.9	1413	170	228	28	11%
X15CA23B_28	0.1958	0.02	0.02753	0.0016	0.020572	0.0515	0.0049	0.28849	0.00863	0.0013	529	2.0	181.4	17	175.1	10	254	210	174	25	69%

analysis	ISOTOPIC RATIOS: 207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	ELEMENTAL CONCENTRATIONS: [U] (ppm)	U/Th	AGES: 207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
X15CA23B_29	0.0541	0.0059	0.00797	0.00047	0.35794	0.0493	0.0049	-0.055283	0.00287	0.00041	810	2.7	53.5	5.7	51.2	3	135	190	57.9	8.2	38%
X15CA23B_30	0.422	0.09	0.01057	0.00092	0.23385	0.262	0.051	0.080504	0.0112	0.0025	66.5	1.6	341	65	67.8	5.9	3270	380	226	50	2%
X15CA23B_31	0.141	0.049	0.008	0.00065	0.89659	0.112	0.03	-0.81245	0.0039	0.00078	448	1.0	127	40	51.3	4.1	1520	480	79	16	3%
X15CA23B_32	0.169	0.02	0.02658	0.0016	0.39574	0.0469	0.0049	-0.049087	0.0086	0.0013	263	1.9	158	17	169.1	10	60	200	173	25	282%
X15CA23B_33	0.0536	0.008	0.00783	0.00054	0.06621	0.049	0.0069	0.071275	0.00247	0.00041	534	1.0	52.8	7.5	50.3	3.4	60	200	49.8	8.3	84%
X15CA23B_34	0.059	0.012	0.00838	0.00053	-0.13499	0.0509	0.01	0.23882	0.00267	0.00069	188	2.1	57.6	11	53.8	3.4	110	310	54	14	49%
X15CA23B_35	0.2	0.022	0.0301	0.0019	0.35131	0.0486	0.0047	0.17701	0.01082	0.0015	270	2.7	184.7	19	191.1	12	127	200	217	30	150%
X15CA23B_36	0.1734	0.018	0.02526	0.0015	0.017279	0.0487	0.0047	0.52162	0.0083	0.0011	503	3.7	162.2	15	160.8	9.5	132	200	167	23	122%
X15CA23B_37	0.0546	0.0099	0.00786	0.00049	-0.1698	0.0521	0.0099	0.31575	0.00261	0.00039	254	0.7	53.7	9.5	50.5	3.2	160	310	52.6	7.8	32%
X15CA23B_38	0.07	0.014	0.00785	0.0005	-0.12943	0.064	0.013	0.19698	0.0032	0.00057	143.7	0.8	68	13	50.4	3.2	550	330	64.5	12	9%
X15CA23B_39	0.768	0.092	0.0426	0.0035	0.92678	0.1282	0.012	-0.2805	0.0289	0.0039	490	3.4	573	52	269	21	2081	160	576	76	13%
X15CA23B_40	0.207	0.026	0.02802	0.0017	0.14433	0.0531	0.0066	-0.00088105	0.0089	0.0013	224	2.6	190	22	178.1	10	280	240	179	25	64%
X15CA23B_41	0.115	0.02	0.00965	0.00059	0.38975	0.087	0.014	-0.17695	0.00444	0.00072	406	1.3	110	18	61.9	3.8	1170	330	90	14	5%
X15CA23B_42	0.0556	0.009	0.00852	0.0006	0.25125	0.0458	0.0064	0.040308	0.0028	0.00051	347	2.1	54.7	8.5	54.7	3.8	-50	210	56.6	10	-109%
X15CA23B_43	0.219	0.025	0.0286	0.002	0.80721	0.0527	0.0049	-0.17115	0.0101	0.0013	840	2.7	202	20	183.4	13	305	200	203	26	60%
X15CA23B_44	0.186	0.019	0.02733	0.0018	0.22661	0.0481	0.0047	0.3371	0.00945	0.0014	354	1.8	173	17	173.8	11	109	200	190	29	159%
X15CA23B_45	0.2173	0.022	0.03199	0.0019	0.59955	0.0493	0.0047	-0.016954	0.00971	0.0013	710	2.6	199.4	18	203	12	157	200	195	25	129%
X15CA23B_46	0.0551	0.0064	0.00826	0.00054	0.11631	0.0472	0.0052	0.31248	0.00244	0.00031	1178	1.3	54.4	6.1	53	3.5	70	200	49.3	6.3	76%
X15CA23B_47	0.063	0.019	0.00808	0.00057	-0.065712	0.056	0.017	0.073448	0.00286	0.00058	143.9	1.4	61	17	51.9	3.6	130	400	57.8	12	40%
X15CA23B_48	0.062	0.028	0.00841	0.00069	0.12572	0.051	0.024	-0.055553	0.00311	0.00086	57	1.9	58	26	54	4.4	-190	650	63	17	-28%
X15CA23B_49	0.0502	0.0058	0.00786	0.00047	0.30489	0.0456	0.0049	0.064637	0.00244	0.00059	412.7	3.9	49.7	5.6	50.5	3	10	200	49	12	505%
X15CA23B_50	0.071	0.014	0.0079	0.00054	0.079492	0.063	0.012	0.14407	0.00346	0.00078	117.6	1.0	69	14	50.7	3.4	640	390	70	16	8%
X15CA23B_51	0.0651	0.01	0.00937	0.00095	0.64246	0.0486	0.0056	-0.13292	0.0053	0.0021	301	5.5	63.7	9.7	60.1	6	120	220	106	42	50%
X15CA23B_52	0.0566	0.0063	0.00815	0.00053	0.49153	0.0503	0.0051	0.028553	0.0029	0.00044	779	3.8	55.8	6.1	52.4	3.4	200	210	58.6	8.9	26%
X15CA23B_53	0.1205	0.013	0.01784	0.0013	0.75446	0.0494	0.0046	0.02791	0.00826	0.0011	990	4.0	115.3	12	114	8.3	162	200	166	21	70%
X15CA23B_54	0.097	0.022	0.00895	0.00074	0.57447	0.076	0.015	-0.27063	0.00365	0.00069	471	1.7	93	20	57.5	4.7	790	340	74	14	7%
X15CA23B_55	0.562	0.097	0.01227	0.0011	0.14774	0.308	0.047	-0.01213	0.0189	0.0035	54.8	1.7	438	65	78.6	7.1	3390	270	377	69	2%
X15CA23B_56	0.0503	0.0056	0.00791	0.00049	0.29692	0.0469	0.0049	0.13286	0.00266	0.00038	694	0.8	49.8	5.4	50.8	3.1	60	200	53.6	7.8	85%
X15CA23B_57	0.0493	0.0056	0.00815	0.0005	0.43912	0.0437	0.0045	-0.115	0.00317	0.00075	409	5.9	48.8	5.4	52.3	3.2	-70	190	64	15	-75%
X15CA23B_58	0.061	0.021	0.00824	0.00068	0.18576	0.055	0.019	-0.1328	0.0029	0.0011	58	2.1	59	19	52.9	4.3	50	550	58	21	106%
X15CA23B_59	0.0515	0.0059	0.00772	0.00048	0.073389	0.0491	0.0053	0.018589	0.0027	0.00037	801	2.2	50.9	5.7	49.6	3.1	150	210	54.4	7.4	33%
X15CA23B_60	0.1954	0.019	0.02759	0.0016	0.40957	0.0506	0.0046	0.36845	0.00896	0.0011	608	2.8	181.1	16	175.5	10	207	210	180	23	85%
X15CA23B_61	0.0617	0.0098	0.00896	0.00082	0.79634	0.0495	0.0062	-0.17856	0.0035	0.00085	440	4.1	60.5	9.2	57.5	5.2	150	240	71	17	38%
X15CA23B_64	0.0643	0.0085	0.00966	0.00058	0.17383	0.049	0.0062	0.063906	0.00411	0.00073	435	1.6	63.1	8.1	62	3.7	120	230	83	15	52%
X15CA23B_65	0.0471	0.0053	0.00747	0.00044	0.014079	0.0452	0.0049	0.16623	0.00242	0.00041	537	2.2	46.7	5.2	48	2.8	-20	190	48.9	8.3	-240%
X15CA23B_66	0.05	0.006	0.00777	0.00046	-0.01219	0.0462	0.0054	0.22191	0.00251	0.00037	466	1.0	49.5	5.8	49.9	2.9	60	230	50.8	7.4	83%
X15CA23B_67	0.051	0.01	0.00787	0.00053	0.088017	0.0474	0.0092	-0.062019	0.004	0.0013	107.2	2.0	50.2	9.6	50.5	3.4	70	340	81	27	72%
X15CA23B_68	0.1508	0.016	0.02208	0.0015	0.65185	0.0494	0.0044	-0.12737	0.0072	0.00089	1370	2.0	142.4	14	140.7	9.7	162	200	145.1	18	87%
X15CA23B_69	0.0608	0.0061	0.00931	0.00058	0.61347	0.0471	0.0043	0.27037	0.00282	0.00038	1940	6.4	59.9	5.8	59.7	3.7	52	190	56.9	7.7	115%
X15CA23B_70	0.1776	0.018	0.02525	0.0015	0.51187	0.051	0.0047	-0.026207	0.00872	0.0011	658	3.3	165.8	16	160.7	9.4	231	200	176	22	70%
X15CA23B_71	0.186	0.038	0.00885	0.00066	0.46948	0.145	0.027	-0.35292	0.0066	0.0015	82.6	1.3	169	32	56.8	4.2	2190	340	133	30	3%
X15CA23B_72	0.044	0.013	0.00803	0.00059	0.084677	0.041	0.012	0.0044687	0.00274	0.00061	90.5	1.5	42	13	51.6	3.8	-290	410	55	12	-18%
X15CA23B_74	0.128	0.017	0.00971	0.00063	0.46183	0.0964	0.012	-0.1812	0.00446	0.00067	162	1.2	122	15	62.3	4	1500	230	90	13	4%
X15CA23B_75	0.0619	0.0068	0.00899	0.00055	0.27804	0.0499	0.0053	0.16561	0.00325	0.00048	419	2.5	60.9	6.5	57.7	3.5	170	210	65.6	9.6	34%
X15CA23B_76	0.093	0.014	0.00827	0.0005	0.18545	0.0782	0.011	0.12019	0.00406	0.00063	296	1.4	91.1	13	53.1	3.2	1070	290	81.8	13	5%
X15CA23B_77	0.203	0.023	0.02825	0.0018	0.17058	0.0525	0.0058	0.076536	0.0101	0.0014	244	2.5	187	19	179.6	11	270	230	203	29	67%
X15CA23B_78	0.0607	0.0077	0.00799	0.00051	-0.006668	0.0555	0.007	0.29467	0.00286	0.00046	870	1.3	59.7	7.3	51.3	3.3	370	260	57.8	9.2	14%
X15CA23B_79	0.065	0.025	0.00778	0.00052	-0.18864	0.06	0.024	0.22628	0.00254	0.00071	81.1	1.7	61	22	50	3.4	-40	410	51	14	-125%
X15CA23B_80	0.0675	0.0084	0.00791	0.00047	0.072119	0.061	0.0072	0.14162	0.00296	0.00049	393	1.4	66.2	8	50.8	3	590	260	59.7	9.9	9%
X15CA23B_81	0.0484	0.0081	0.00803	0.00064	0.62744	0.0461	0.0067	0.048065	0.00293	0.00058	252	1.7	47.8	7.8	51.5	4.1	10	260	59.1	12	515%
X15CA23B_82	0.0587	0.0087	0.00812	0.00052	0.056778	0.0503	0.007	0.20666	0.00287	0.00045	229	1.6	57.8	8.3	52.1	3.3	200	270	58	9.1	26%
X15CA23B_83	0.284	0.029	0.0386	0.0025	0.75716	0.0531	0.0048	0.099919	0.01467	0.0019	679	3.0	253	23	244.1	16	322	200	294	37	76%
X15CA23B_84	0.2075	0.021	0.02902	0.0018	0.5138	0.0506	0.0046	0.10587	0.00988	0.0013	604	2.9	191.3	18	184.4	11	215	200	199	26	86%
X15CA23B_85	0.129	0.017	0.0194	0.002	0.84388	0.0501	0.0048	0.020576	0.00835	0.0012	491	3.9	123	15	124	12	191	200	168	23	65%
X15CA23B_86	0.0677	0.01	0.00922	0.00067	0.034137	0.0529	0.0077	0.19545	0.00324	0.0006	175	1.9	66.3	9.9	59.2	4.3	260	290	65.4	12	23%
X15CA23B_87	0.055	0.011	0.008	0.00056	-0.051465	0.0487	0.0095	0.35578	0.00328	0.00073	100.2	1.4	54	11	51.4	3.6	60	340	66	15	86%
X15CA23B_88	0.0608	0.0062	0.00798	0.0005	0.14818	0.053	0.005	0.58853	0.00249	0.0003	3980	0.9	59.9	5.9	51.2	3.2	335	230	50.3	6	15%
X15CA23B_89	0.0548	0.0072	0.00778	0.00049	0.2096	0.0512	0.0064	0.082799	0.00279	0.0004	574	1.5	54.1	6.9	50	3.1	250	240	56.2	8.1	20%
X15CA23B_90	0.0622	0.0085	0.00769	0.0005	0.21998	0.0595	0.0077	0.078118	0.00294	0.00041	422	1.1	61.1	8.1	49.4	3.2	530	250	59.4	8.3	9%
X15CA23B_91	0.0603	0.0071	0.00881	0.00053	0.16712	0.0488	0.0053	0.10912	0.00307	0.00051	430	2.2	59.4	6.8	56.5	3.4	140	220	62	10	40%
X15CA23B_93	0.098	0.021	0.00855	0.00054	0.59754	0.082	0.015	-0.41279	0.0058	0.0015	330.1	3.5	94	19	54.9	3.4	1080	350	116	30	5%
X15CA23B_94	0.069	0.013	0.0076	0.00052	-0.12498	0.064	0.011	0.25229	0.00295	0.00065	98.8	1.2	68	12	48.8	3.3	710	330	60	13	7%
X15CA23B_95	0.069	0.017	0.00794	0.00058	0.19488	0.057	0.012	0.012884	0.00278	0.00062	125.5	1.7	63	13	51	3.7	460	390	56	12	11%
X15CA23B_96	0.1553	0.017	0.02259	0.0014	0.34387	0.0492	0.005	0.15419	0.0081	0.0013	249	2.9	146.3	15	144	8.7	150	210	163	25	96%
X15CA23B_97	0.0556	0.0059	0.00856	0.00054	0.18274	0.0467	0.0046	0.212	0.00291	0.00042	1460	1.2	54.9	5.7	54.9	3.4	45	190	58.7	8.4	122%
X15CA23B_98	0.279	0.037	0.00954	0.0006	0.6726	0.207	0.025	-0.48655	0.00881	0.0013	270	1.5	248	30	61.5	4	2880	190	177	25	2%
X15CA23B_99	0.1741	0.017	0.02549	0.0015	0.54362	0.0493	0.0044	0.5522	0.00891	0.0011	2300	8.5	162.9	15	162.2	9.5	149	200	179.3	22	109%
X15CA23B_100	0.0639	0.0093	0.00796	0.00053	0.067091	0.0565	0.0074	0.083882	0.0029	0.00047	403	2.0	62.6	8.8	51.1	3.4	390	260	58.5	9.5	13%
X15CA23B_101	0.0572	0.0063	0.00859	0.00052	-0.071712	0.0473	0.0052	0.42732	0.00281	0.00041	446	1.6	56.4	6	55.2	3.3	70	200	56.8	8.3	79%
X15CA23B_102	0.0506	0.0065	0.00802	0.00053	0.39283	0.0471	0.0056	-0.08585	0.00275	0.00047	337	1.7	50	6.2	51.5	3.4	60	220	55.6	9.4	86%
X15CA23B_105	0.0518	0.0056	0.00776	0.00048	0.31082	0.0493	0.0051	0.23082	0.00236	0.00032	578	1.4	51.3	5.4	49.8	3.1	150	210	47.7	6.5	33%
X15CA23B_106	0.057	0.006	0.00796	0.00049	0.6828	0.0514	0.0049	0.19348	0.00254	0.00032	1159	1.1	56.2	5.7	51.1	3.2	258	210	51.3	6.5	20%
X15CA23B_107	0.0559	0.0074	0.0083	0.00056	0.37349	0.0491	0.0061	-0.023376	0.0025	0.00039	295	1.4	55.1	7	53.3	3.6	160	240	50.6	7.8	33%
X15CA23B_108	0.193	0.019	0.02803	0.0017	0.61007	0.0502	0.0046	0.21444	0.00986	0.0013	408	2.4	179.1	16	178.2	11	197	200	198	26	90%
X15CA23B_109	0.186	0.018	0.02633	0.0016	0.6209	0.0504	0.0045	0.32523	0.00827	0.001	815	1.5	173.1	16	167.5	10	209	200	166.4	20	80%
X15CA23B_110	0.096	0.016	0.00857	0.00057	0.19159	0.0804	0.012	0.059672	0.00373	0.00054	302	1.4	93	15	55	3.6	1030	300	75.1	11	5%
CANBC1022GBB_1	0.1702	0.012	0.02664	0.00087	0.27721	0.0468	0.0028	0.21341	0.00854	0.00074	373	2.9	159.5	10	169.5	5.4	51	120	172	15	332%
CANBC1022GBB_2	0.1552	0.0098	0.0175	0.00079	0.51425	0.0637	0.0038	0.79848	0.00413	0.0003	4720	0.4	146.4	8.6	111.8	5	727	130	83.3	5.9	15%
CANBC1022GBB_3	0.215	0.017	0.03122	0.0011	0.087797	0.0503	0.0037	0.29747	0.01034	0.00095	233	2.8	197.3	14	198.1	7.1	200	150	208	19	99%
CANBC1022GBB_4	0.1608	0.012	0.02348	0.00091	0.49409	0.0498	0.003	0.14114	0.00752	0.00057	528	1.2	151.2	11	149.6	5.7	179	130	151.5	12	84%
CANBC1022GBB_5	0.1821	0.013	0.027	0.0012	0.60563	0.0505	0.0029	0.1945	0.00832	0.00068	623	2.8	169.7	12	171.9	7.8	226	120	167	14	76%
CANBC1022GBB_6	0.061	0.014	0.00711	0.00033	-0.028279	0.064	0.016	0.13392	0.00299	0.00064	147.7	2.7	60	13	45.6	2.1	320	270	60	13	14%
CANBC1022GBB_7	0.1705	0.012	0.02597	0.00094	0.1461	0.0485	0.0029	0.4945	0.00809	0.00069	549	2.7	159.7	10	165.3	5.9	121	120	163	14	137%
CANBC1022GBB_8	0.168	0.011	0.02488	0.00086	0.39535	0.0491	0.0027	0.31983	0.00818	0.00061	1384	1.8	157.6	9.7	158.4	5.4	162	130	164.7	12	98%
CANBC1022GBB_9	0.1764	0.012	0.02617	0.00096	0.5993	0.0494	0.0027	0.2056	0.00835	0.00062	673	1.9	165.7	10	166.5	6	165	120	168	12	101%
CANBC1022GBB_10	0.1952	0.013	0.02689	0.0012	0.76354	0.0539	0.0029	0.39419	0.00446	0.00051	2020	0.7	181	11	171.1	7.3	360	120	89.9	10	48%
CANBC1022GBB_11	0.1929	0.014	0.02561	0.0012	0.73321	0.0547	0.0031	0.16539	0.0082	0.0006	1194	1.3	178.9	12	163	7.3	396	130	165.1	12	41%
CANBC1022GBB_12	0.1659	0.011	0.02547	0.00082	0.55411	0.0481	0.0026	0.24286	0.00746	0.0005	1076	1.4	155.8	9.4	162.1	5.2	103	120	150.3	10	157%
CANBC1022GBB_13	0.1617	0.011	0.0218	0.0015	0.56133	0.0552	0.0039	0.88684	0.00743	0.00061	1900	2.3	152.1	9.5	138.7	9.4	390	150	149.6	12	36%
CANBC1022GBB_14	0.1736	0.012	0.02637	0.00094	0.63384	0.0486	0.0026	-0.035883	0.00834	0.00061	961	2.0	162.4	10	167.8	5.9	126	120	167.9	12	133%
CANBC1022GBB_15	0.106	0.023	0.00896	0.0005	0.66445	0.084	0.015	-0.393	0.00349	0.00047	413	0.8	101	20	57.5	3.2	1070	310	70.4	9.4	5%
CANBC1022GBB_16	0.1983	0.015	0.0256	0.00093	0.57156	0.0554	0.0033	0.0040913	0.008	0.00054	720	1.1	184.6	13	162.9	5.8	449	130	161.1	11	36%
CANBC1022GBB_17	0.1736	0.013	0.0266	0.0013	0.62385	0.0486	0.003	0.15386	0.00857	0.00069	813	1.8	162.3	11	169.1	7.9	127	130	172	14	133%
CANBC1022GBB_18	0.0663	0.0076	0.00879	0.00041	0.062729	0.0528	0.0055	0.23692	0.0034	0.00054	246.1	3.6	65	7.2	56.4	2.6	380	220	69	11	15%
CANBC1022GBB_19	0.1638	0.013	0.02387	0.001	0.30257	0.0498	0.0034	0.29543	0.00788	0.0006	825	2.7	153.8	11	152	6.4	155	130	158.6	12	98%
CANBC1022GBB_20	0.1723	0.013	0.02556	0.00096	0.13381	0.049	0.0032	0.22625	0.00851	0.00074	405	1.6	161.2	11	162.7	6	141	140	171	15	115%
CANBC1022GBB_21	0.207	0.024	0.01953	0.0007	-0.48066	0.0757	0.0096	0.67814	0.00701	0.00066	3950	1.6	189	20	124.7	4.5	1020	240	141	13	12%
CANBC1022GBB_22	0.17	0.012	0.02553	0.00087	0.24309	0.0482	0.0028	0.29798	0.00789	0.00065	598	1.9	159.3	10	162.5	5.4	111	120	159	13	146%
CANBC1022GBB_23	0.1694	0.012	0.02509	0.00084	0.36216	0.0489	0.0027	0.24611	0.00804	0.00051	1270	1.6	158.8	10	159.7	5.3	138	120	161.9	10	116%
CANBC1022GBB_24	0.1732	0.012	0.02485	0.00096	0.050266	0.0506	0.0033	0.40633	0.00855	0.00077	404	1.4	162	11	158.2	6	209	140	172	15	76%
CANBC1022GBB_25	0.188	0.016	0.02724	0.001	0.27122	0.0499	0.0038	0.053118	0.00959	0.0011	221	3.4	174	14	173.2	6.5	180	150	193	22	96%
CANBC1022GBB_26	0.1752	0.012	0.02638	0.001	0.22214	0.0482	0.0027	0.28581	0.00836	0.00069	572	2.2	163.8	11	167.9	6.4	109	120	168	14	154%
CANBC1022GBB_27	0.1865	0.014	0.02651	0.001	-0.17511	0.0523	0.0034	0.76502	0.00847	0.00053	1171	1.7	173.4	12	168.6	6.6	278	140	170.4	11	61%
CANBC1022GBB_28	0.1803	0.013	0.0264	0.00094	0.56005	0.0493	0.0028	0.0091872	0.00815	0.00053	830	1.6	168.2	11	168	5.9	159	120	164	11	106%
CANBC1022GBB_29	0.182	0.015	0.0273	0.0011	0.59967	0.0491	0.0032	0.025406	0.00863	0.00072	301	0.9	169.1	13	173.6	7	150	130	174	15	116%

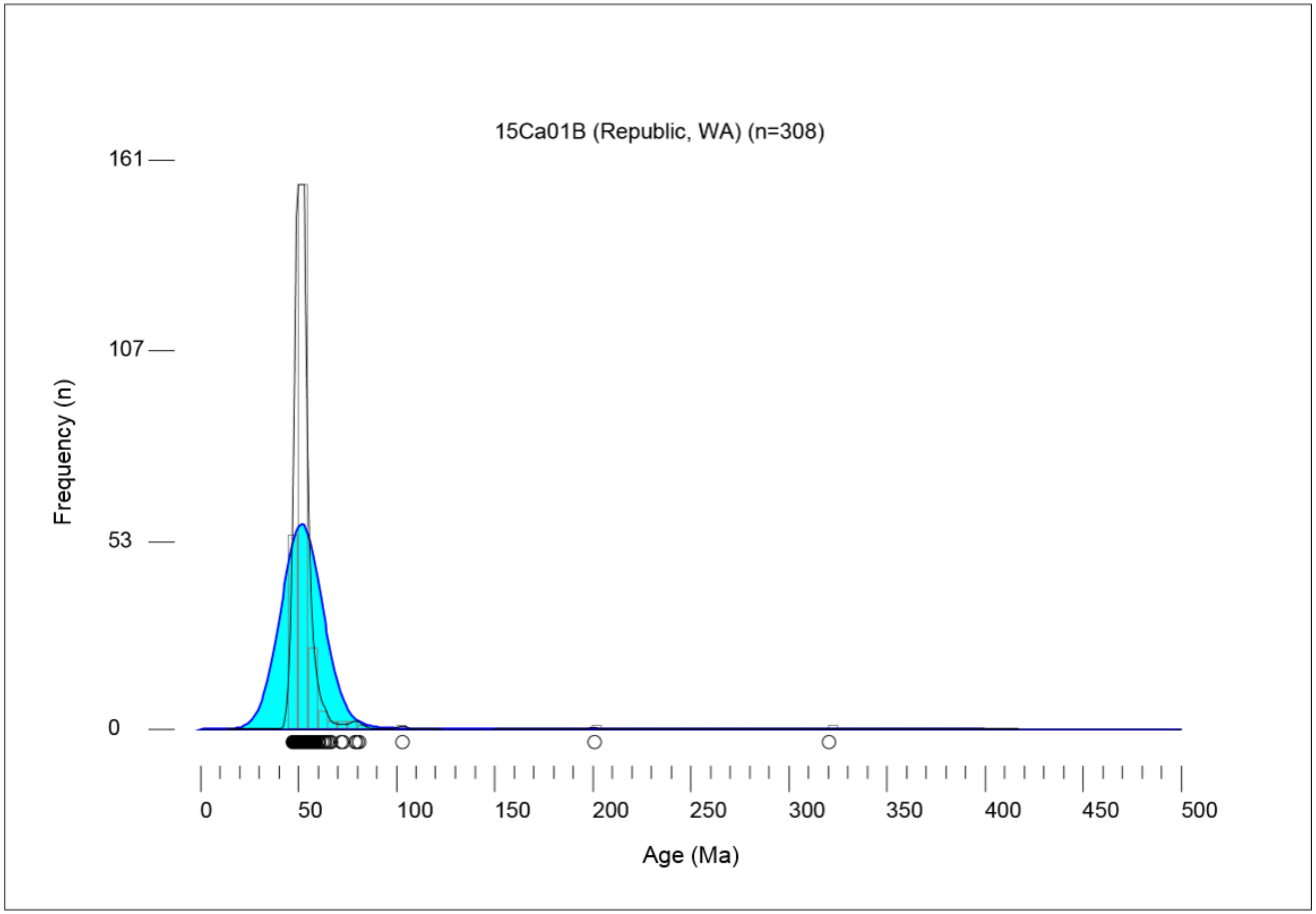
	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
CANBC1022GBB_30	0.1827	0.015	0.02871	0.0012	0.31754	0.0474	0.0035	0.19606	0.01021	0.00088	248	1.2	170.1	12	182.4	7.7	70	150	205	18	261%
CANBC1022GBB_31	0.1767	0.014	0.02642	0.00097	0.70753	0.049	0.003	-0.26433	0.008	0.00055	611	1.3	166.4	13	168.1	6.1	148	130	161.1	11	114%
CANBC1022GBB_32	0.043	0.0061	0.00709	0.00029	-0.11691	0.0455	0.0067	0.20718	0.00279	0.00039	232	2.5	42.6	5.9	45.5	1.8	-30	250	56.2	7.9	-152%
CANBC1022GBB_33	0.223	0.027	0.02754	0.00091	0.45262	0.0584	0.0061	-0.31752	0.00929	0.00092	602	1.5	202	21	175.1	5.7	450	190	187	18	39%
CANBC1022GBB_34	0.1698	0.011	0.02512	0.00095	0.58138	0.0491	0.0027	0.2796	0.0079	0.00051	2041	2.2	159.2	9.8	159.9	5.9	160	120	159	10	100%
CANBC1022GBB_35	0.214	0.02	0.03178	0.0012	0.11986	0.05	0.0045	0.27316	0.0109	0.0015	132	4.2	196	16	201.7	7.5	160	170	218	30	126%
CANBC1022GBB_36	0.1821	0.013	0.02612	0.001	0.44963	0.0507	0.0029	0.32655	0.00883	0.00055	509	1.9	169.7	11	166.2	6.4	218	130	177.6	11	76%
CANBC1022GBB_37	0.1636	0.013	0.02455	0.00091	0.42034	0.0486	0.0031	0.071289	0.00772	0.0005	374	1.5	153.6	11	156.4	5.7	128	130	155.5	10	122%
CANBC1022GBB_38	0.1826	0.013	0.02697	0.00092	0.24059	0.0493	0.003	0.31011	0.00876	0.0006	534	1.5	170.2	11	171.6	5.8	160	130	176.3	12	107%
CANBC1022GBB_39	0.38	0.1	0.0276	0.0021	0.89838	0.083	0.015	-0.79907	0.011	0.0013	376	1.0	304	67	175	13	1080	340	221	26	16%
CANBC1022GBB_40	0.121	0.016	0.0168	0.0016	0.75788	0.0518	0.0046	0.044428	0.006	0.0011	294	4.5	117	15	107	10	260	180	122	22	41%
CANBC1022GBB_41	0.1728	0.013	0.02511	0.0009	0.40773	0.0508	0.0034	0.074114	0.00872	0.00064	461	1.7	161.6	11	159.9	5.6	212	140	175.5	13	75%
CANBC1022GBB_42	0.178	0.013	0.02666	0.00092	0.45891	0.0492	0.003	0.10247	0.00958	0.00064	765	1.6	166.2	11	169.6	5.8	156	130	192.6	13	109%
CANBC1022GBB_43	0.172	0.015	0.0251	0.0013	0.71579	0.0506	0.0031	0.091484	0.00867	0.00083	371	2.7	160.6	13	159.6	8.5	228	120	175	17	70%
CANBC1022GBB_44	0.324	0.024	0.02556	0.0009	0.12894	0.0938	0.0065	0.29226	0.01655	0.0012	522	2.1	287	19	162.7	5.7	1473	130	332	24	11%
CANBC1022GBB_45	0.1716	0.013	0.02362	0.00079	0.11662	0.052	0.0032	0.40789	0.0083	0.00056	898	1.7	160.6	11	150.5	5	285	140	167	11	53%
CANBC1022GBB_46	0.1737	0.013	0.02531	0.00097	0.50622	0.0508	0.0029	0.21689	0.00859	0.00067	578	2.5	162.5	11	161.1	6.1	210	130	173	13	77%
CANBC1022GBB_47	0.1744	0.011	0.02578	0.00084	0.40533	0.0493	0.0026	0.33671	0.00906	0.00065	802	3.1	163.2	9.7	164.1	5.3	158	120	182.3	13	104%
CANBC1022GBB_48	0.1987	0.013	0.0275	0.0013	0.81455	0.053	0.0029	0.81633	0.00979	0.00069	1980	2.2	184	11	175	8.4	322	120	196.8	14	54%
CANBC1022GBB_50	0.204	0.016	0.0272	0.0013	0.64192	0.0545	0.0033	0.20091	0.00907	0.0008	402	2.0	187.9	13	173	8.1	386	130	182	16	45%
CANBC1022GBB_51	0.1845	0.013	0.02607	0.00094	0.45723	0.0524	0.0031	0.17828	0.00864	0.00059	673	2.3	171.8	11	165.9	5.9	302	130	173.8	12	55%
CANBC1022GBB_52	0.1709	0.011	0.02537	0.00082	0.48966	0.0494	0.0027	0.16831	0.00798	0.00054	1222	1.6	160.9	10	161.5	5.1	161	120	160.7	11	100%
CANBC1022GBB_53	0.1499	0.011	0.0214	0.0013	0.82378	0.0519	0.0029	0.62585	0.00651	0.00068	2090	1.8	141.7	9.3	136.6	7.9	272	120	131	14	50%
CANBC1022GBB_54	0.176	0.014	0.02553	0.00091	-0.17135	0.0506	0.0039	0.37957	0.00875	0.00077	380	2.1	164.3	12	162.5	5.7	200	150	176	15	81%
CANBC1022GBB_55	0.175	0.012	0.0266	0.00094	0.75603	0.048	0.0026	-0.090194	0.0083	0.00051	1380	2.3	163.6	11	169.2	5.9	100	120	167	10	169%
CANBC1022GBB_56	0.1759	0.012	0.0231	0.0012	0.32628	0.0564	0.0039	0.7426	0.00732	0.00056	1430	1.7	164.4	10	147	7.7	440	150	147.5	11	33%
CANBC1022GBB_57	0.1744	0.012	0.02569	0.00085	0.60285	0.0496	0.0028	-0.068362	0.00874	0.00066	587	2.3	163.1	11	163.5	5.4	171	120	175.9	13	96%
CANBC1022GBB_58	0.254	0.034	0.02584	0.0009	0.20031	0.0751	0.01	-0.030845	0.0097	0.00087	670	1.7	227	26	164.4	5.7	930	250	195	17	18%
CANBC1022GBB_59	0.1714	0.012	0.0254	0.00083	0.53389	0.0486	0.0027	0.06111	0.00814	0.00052	1375	1.4	160.5	10	161.7	5.2	129	120	163.9	11	125%
CANBC1022GBB_60	0.0588	0.0049	0.00835	0.00031	0.24104	0.0501	0.0034	0.14084	0.00314	0.00033	691	1.4	58	4.7	53.6	2	189	140	63.4	6.6	28%
CANBC1022GBB_61	0.1681	0.011	0.02548	0.00095	0.4465	0.0479	0.0027	0.51652	0.009	0.0011	1309	33.4	157.7	10	162.2	6	100	120	182	23	162%
CANBC1022GBB_62	0.167	0.012	0.02521	0.00086	0.32455	0.0481	0.0028	0.39981	0.00788	0.00053	1028	1.0	156.7	10	160.5	5.4	109	120	158.7	11	147%
CANBC1022GBB_63	0.236	0.026	0.0286	0.0017	-0.12887	0.0605	0.0074	0.57415	0.01015	0.00076	593	1.7	214	21	181.6	11	590	250	204	15	31%
CANBC1022GBB_64	0.285	0.022	0.0168	0.0013	-0.2508	0.125	0.012	0.75936	0.00957	0.00066	3100	1.6	254	17	107.3	7.9	2020	200	192.4	13	5%
CANBC1022GBB_65	0.19	0.017	0.02568	0.0011	0.2063	0.0518	0.0036	0.073128	0.00862	0.00072	278	1.1	176	14	163.4	6.6	260	150	173	15	63%
CANBC1022GBB_66	0.1784	0.013	0.02557	0.0009	0.59753	0.0499	0.003	-0.087615	0.00805	0.00055	490	1.7	166.5	11	162.8	5.7	186	130	162.1	11	88%
CANBC1022GBB_67	0.1809	0.014	0.02598	0.0009	0.58224	0.0498	0.003	-0.029496	0.00851	0.00061	569	2.3	168.6	12	165.3	5.6	207	140	171.3	12	80%
CANBC1022GBB_68	0.1724	0.013	0.02499	0.00087	0.187	0.0504	0.003	0.19049	0.0092	0.0012	754	2.4	161.3	11	159.1	5.5	200	130	186	25	80%
CANBC1022GBB_69	0.1799	0.012	0.02517	0.00083	0.2673	0.0517	0.0031	0.31596	0.00798	0.00051	527	1.7	167.9	11	160.2	5.2	261	130	160.7	10	61%
CANBC1022GBB_70	0.177	0.013	0.02551	0.001	0.46781	0.0508	0.003	0.030595	0.00786	0.00052	676	2.3	165.3	11	162.4	6.3	225	130	158.2	10	72%
CANBC1022GBB_71	0.189	0.017	0.02586	0.0011	0.22596	0.0527	0.0039	0.024536	0.00893	0.00066	573	1.8	175.6	14	164.6	6.9	280	150	179.8	13	59%
CANBC1022GBB_72	0.219	0.018	0.0311	0.0014	0.25211	0.0519	0.0039	0.30999	0.0107	0.0011	195	2.6	200.6	15	197.1	8.5	280	150	214	23	70%
CANBC1022GBB_73	0.0462	0.0055	0.00674	0.00031	0.39653	0.0511	0.0059	-0.13352	0.00247	0.0004	259	2.6	45.7	5.3	43.3	2	270	230	49.9	8	16%
CANBC1022GBB_74	0.2243	0.015	0.0321	0.0011	0.60675	0.0508	0.0027	0.27234	0.01056	0.00074	850	2.3	205.4	12	203.6	6.9	224	120	212	15	91%
CANBC1022GBB_75	0.1759	0.014	0.02519	0.0011	0.56769	0.0504	0.0033	0.021597	0.00801	0.00055	464	1.1	164.1	12	160.4	6.9	202	140	161.3	11	79%
CANBC1022GBB_76	0.0539	0.0051	0.00794	0.00038	0.16311	0.0498	0.0045	0.16564	0.00249	0.0002	584	1.0	53.3	4.8	51	2.4	130	160	50.2	4.1	39%
CANBC1022GBB_77	0.1642	0.012	0.02467	0.00086	0.22616	0.0494	0.0034	0.34089	0.00756	0.00056	347	1.6	154.2	11	157.1	5.4	170	140	152.2	11	92%
CANBC1022GBB_78	0.1668	0.014	0.02399	0.00092	-0.060103	0.0501	0.0039	0.24115	0.00864	0.00082	132	1.1	156.3	12	152.8	5.8	190	160	174	17	80%
CANBC1022GBB_79	1.78	0.15	0.0265	0.0016	0.91261	0.487	0.026	0.30139	0.0279	0.0022	1700	0.8	1032	54	168.5	10	4212	71	555	43	4%
CANBC1022GBB_80	0.2126	0.016	0.03152	0.0011	-0.010044	0.0487	0.0033	0.43035	0.01039	0.001	311	2.8	195.4	14	200.1	6.7	135	140	209	20	148%
CANBC1022GBB_81	0.1665	0.013	0.02455	0.00087	0.21228	0.0493	0.0036	0.070707	0.00844	0.0006	333	1.5	156.1	11	156.4	5.5	150	140	169.8	12	104%
CANBC1022GBB_82	0.1079	0.008	0.01605	0.00054	0.65437	0.048	0.0028	-0.24104	0.00607	0.00057	765	2.8	103.9	7.3	102.6	3.4	99	120	122.2	11	104%
CANBC1022GBB_83	0.214	0.033	0.02523	0.00095	0.17692	0.061	0.0088	0.092932	0.00935	0.001	146	1.9	194	26	160.6	6	510	260	188	21	31%
CANBC1022GBB_84	0.1548	0.012	0.02137	0.00091	0.80881	0.0526	0.0029	0.26116	0.00604	0.00048	2800	0.9	145.9	10	136.3	5.8	323	120	121.7	9.7	42%
CANBC1022GBB_85	0.208	0.016	0.02498	0.00091	0.53301	0.0599	0.0037	-0.15416	0.00915	0.00061	755	2.0	191.9	14	159	5.7	578	140	184	12	28%
CANBC1022GBB_86	0.1775	0.012	0.02607	0.00087	0.45087	0.0491	0.0027	0.069544	0.00853	0.00063	541	2.0	165.8	10	165.9	5.5	150	120	171.8	13	111%
CANBC1022GBB_87	0.213	0.021	0.02519	0.0011	0.59401	0.0609	0.005	-0.21051	0.00974	0.0009	687	2.2	196	17	160.3	7	600	170	196	18	27%
CANBC1022GBB_88	0.1831	0.013	0.02575	0.00095	0.47454	0.0511	0.003	-0.1194	0.0081	0.00056	796	2.5	170.5	12	163.9	6	237	130	163.1	11	69%
CANBC1022GBB_89	0.1618	0.011	0.02172	0.00079	0.32763	0.0541	0.0032	0.34882	0.00731	0.00065	1861	1.8	152.2	9.8	138.5	5	372	140	147	13	37%
CANBC1022GBB_90	0.1572	0.011	0.02236	0.001	0.4564	0.0507	0.0031	0.52184	0.00798	0.00055	1235	2.3	148.1	9.7	142.5	6.4	230	140	160.7	11	62%
CANBC1022GBB_91	0.1685	0.013	0.02452	0.00081	0.21572	0.0502	0.0034	0.13809	0.00792	0.00062	272	1.1	157.9	11	156.2	5.1	191	140	159.4	12	82%
CANBC1022GBB_92	0.2154	0.016	0.03003	0.0011	0.10748	0.052	0.0032	0.20798	0.01072	0.00077	523	2.9	197.8	13	190.7	6.9	270	130	216	15	71%
CANBC1022GBB_93	0.204	0.018	0.03068	0.0011	0.23878	0.0477	0.0038	0.028496	0.00979	0.0011	213.5	3.8	188	15	194.8	6.7	80	150	197	22	244%
CANBC1022GBB_94	0.1669	0.013	0.0228	0.0014	0.81325	0.0533	0.0031	0.31876	0.0076	0.00062	1640	2.2	156.4	11	145.2	8.6	339	130	153	12	43%
CANBC1022GBB_95	0.0739	0.0067	0.00826	0.0004	-0.32323	0.0668	0.0067	0.66444	0.00262	0.00022	486	0.5	72.3	6.4	53	2.6	780	200	53	4.5	7%
CANBC1022GBB_96	0.1747	0.012	0.02435	0.00083	0.11452	0.052	0.0033	0.42377	0.00836	0.00059	736	1.8	163.4	10	155.1	5.2	269	140	168.2	12	58%
CANBC1022GBB_97	0.1804	0.012	0.02564	0.0009	0.29549	0.0504	0.003	0.31018	0.00839	0.00056	636	1.8	168.3	11	163.2	5.7	217	130	168.9	11	75%
CANBC1022GBB_98	0.0501	0.004	0.00823	0.00031	0.13143	0.0435	0.0033	0.31953	0.0028	0.00027	407	1.2	49.6	3.9	52.8	2	-80	130	56.6	5.5	-66%
CANBC1022GBB_99	0.189	0.017	0.02763	0.0012	0.50733	0.0493	0.0034	-0.047758	0.00867	0.00066	316	1.4	175	14	175.7	7.4	160	140	174.5	13	110%
CANBC1022GBB_100	0.278	0.028	0.0351	0.0016	0.37193	0.0563	0.0044	0.043125	0.0132	0.0019	204	2.1	248	22	222.7	10	430	170	265	38	52%
CANBC1022GBB_101	0.065	0.011	0.00951	0.00069	0.010645	0.049	0.009	0.19946	0.0041	0.0011	215	1.2	64	11	61	4.4	110	330	82	23	55%
CANBC1022GBB_102	0.0555	0.0067	0.00804	0.00032	0.020459	0.0494	0.0056	0.09005	0.00352	0.0005	300	2.1	54.7	6.4	51.6	2.1	140	210	71	10	37%
CANBC1022GBB_103	0.1711	0.012	0.02492	0.00085	0.31817	0.05	0.0029	0.095997	0.00781	0.00049	629	0.9	160.2	10	158.7	5.3	191	130	157.2	9.7	83%
CANBC1022GBB_104	0.1739	0.013	0.0255	0.00091	0.3732	0.0499	0.0028	0.10345	0.00833	0.00057	626	2.2	162.7	11	162.3	5.7	184	120	167.6	12	88%
CANBC1022GBB_105	0.1791	0.013	0.02603	0.001	0.32518	0.0497	0.0036	0.095111	0.00855	0.00077	263	1.1	167.1	12	165.7	6.4	190	150	172	15	87%
CANBC1022GBB_106	0.1704	0.012	0.02663	0.00098	0.44555	0.0459	0.0027	0.24229	0.0081	0.00052	917	2.1	159.6	10	169.4	6.2	15	120	163.1	10	1129%
CANBC1022GBB_107	0.215	0.017	0.03163	0.0011	0.39307	0.0494	0.0033	-0.085557	0.0103	0.0012	329	3.4	197.6	14	200.7	6.7	156	140	208	23	129%
CANBC1022GBB_108	0.0587	0.008	0.00846	0.00038	0.44894	0.0493	0.0059	-0.23435	0.0026	0.0003	1230	3.0	57.8	7.6	54.3	2.4	80	180	52.4	6.1	68%
CANBC1022GBB_109	0.0468	0.0056	0.00666	0.00028	0.32154	0.0503	0.0058	-0.0082977	0.00276	0.00053	258	3.0	46.3	5.4	42.8	1.8	180	220	56	11	24%
CANBC1022GBB_110	0.1697	0.012	0.02424	0.00098	0.44281	0.051	0.0033	0.21494	0.00838	0.00078	519	2.2	159	11	154.4	6.2	230	140	169	16	67%
CANBC1022GBB_111	0.1802	0.014	0.02397	0.00087	0.17525	0.0546	0.0038	0.33822	0.00823	0.00057	958	1.6	168	12	152.7	5.5	370	150	165.7	11	41%
CANBC1022GBB_112	0.1847	0.014	0.02594	0.00096	0.25067	0.0516	0.0035	-0.094376	0.0092	0.0012	325	2.2	171.8	12	165.1	6.1	248	140	185	23	67%
COLDWATER1_1	0.1798	0.008	0.02575	0.001	0.38561	0.0517	0.0025	0.12131	0.00857	0.0011	620	1.5	170.6	7.4	163.9	6.3	300	110	172	22	55%
COLDWATER1_2	0.1	0.014	0.01519	0.00068	0.089723	0.0483	0.0062	0.19067	0.0068	0.0015	104.1	2.5	96	12	97.2	4.3	130	230	137	30	75%
COLDWATER1_3	0.164	0.012	0.02175	0.0011	0.49483	0.057	0.0044	-0.027251	0.0165	0.0065	240	11.8	154	10	138.7	6.6	430	160	330	130	32%
COLDWATER1_4	0.1541	0.0068	0.02172	0.00083	0.39155	0.0523	0.0022	0.13293	0.00798	0.0012	552	4.6	145.3	6	138.5	5.2	285	91	161	24	49%
COLDWATER1_5	0.0793	0.0032	0.0115	0.0005	0.409	0.05	0.0021	0.44974	0.00339	0.00043	3250	2.7	77.4	3	73.7	3.2	186	88	68.4	8.7	40%
COLDWATER1_6	0.1541	0.007	0.02233	0.00081	0.33146	0.0499	0.0023	0.034634	0.00739	0.0012	406	3.9	145.4	6.2	142.4	5.1	185	97	149	24	77%
COLDWATER1_8	0.2488	0.0083	0.03574	0.0013	0.024843	0.0493	0.0019	0.65206	0.01063	0.0012	324	0.8	225.4	6.8	226.3	8.1	159	82	216	24	142%
COLDWATER1_9	0.2214	0.0074	0.03171	0.0011	0.35786	0.0491	0.0019	0.15536	0.01102	0.0014	610	3.1	202.9	6.1	201.3	6.9	161	87	222	29	125%
COLDWATER1_10	2.905	0.091	0.1307	0.0055	0.91946	0.1579	0.0034	-0.060091	0.0769	0.0092	499	3.6	1380	24	792	31	2440	37	1495	170	32%
COLDWATER1_11	0.747	0.013	0.0894	0.0032	0.66158	0.05945	0.0014	0.49918	0.0325	0.0037	911	3.5	566	7.7	552.2	19	592	47	646	72	93%
COLDWATER1_12	0.1538	0.0089	0.02366	0.00086	0.20711	0.0466	0.0027	0.10691	0.0088	0.0015	326	6.0	145	7.8	150.8	5.4	40	110	177	30	377%
COLDWATER1_13	0.1684	0.0038	0.02478	0.00091	0.59926	0.04897	0.0011	0.45826	0.00756	0.00092	4630	3.2	158	3.3	157.8	5.7	152	56	152.3	18	104%
COLDWATER1_14	0.1757	0.007	0.02658	0.001	0.59519	0.0473	0.0017	0.44653	0.00897	0.001	930	1.3	165.2	5.8	169.1	6.5	71	73	180.4	20	238%
COLDWATER1_15	0.347	0.02	0.04199	0.0016	0.30529	0.0587	0.0032	0.003499	0.0179	0.0031	134.7	3.7	301	15	265.1	10	550	110	357	62	48%
COLDWATER1_16	0.436	0.013	0.0577	0.0021	0.20254	0.0558	0.0019	0.39086	0.0183	0.0022	311.4	1.7	367.2	9.1	361.8	13	432	78	366	44	84%
COLDWATER1_17	0.214	0.014	0.0303	0.0011	0.082577	0.0517	0.0037	0.2713	0.011	0.0016	213	2.2	196	12	192.4	7.1	260	150	222	32	74%
COLDWATER1_18	0.174	0.018	0.02419	0.0012	-0.10054	0.0545	0.0062	0.46603	0.0088	0.0018	64.5	1.2	165	15	154.1	7.3	350	230	177	36	44%
COLDWATER1_19	0.1203	0.0059	0.01853	0.00072	0.16706	0.0482	0.0029	0.21054	0.00594	0.0011	406	5.8	115.2	5.3	118.4	4.6	110	120	120	22	108%
COLDWATER1_20	0.243	0.014	0.0354	0.0014	0.40936	0.053	0.003	0.21399	0.0122	0.0021	262.2	3.8	221	11	224.3	8.6	310	120	245	41	72%
COLDWATER1_21	0.1448	0.0072	0.02196	0.0008	0.20335	0.0501	0.0025	0.2098	0.0116	0.0039	412	32.4	137.1	6.4	140	5	210	110	231	78	67%
COLDWATER1_22	0.123	0.01	0.00905	0.00038	0.43158	0.1022	0.0083	-0.065085	0.00468	0.00079	369	1.7	117.5	9.3	58.1	2.4	1620	150	94	16	4%
COLDWATER1_23	0.1626	0.0063	0.02188	0.00082	0.37987	0.0545	0.0028	0.059808	0.00724	0.001	399.9	3.6	152.8	5.5	139.5	5.2	380	110	146	21	37%
COLDWATER1_24	0.255	0.011	0.03702	0.0015	0.41104	0.0537	0.0025	0.18614	0.012	0.0018	425	2.7	232.1	8.6	234.3	9.5	336	98	241	35	70%

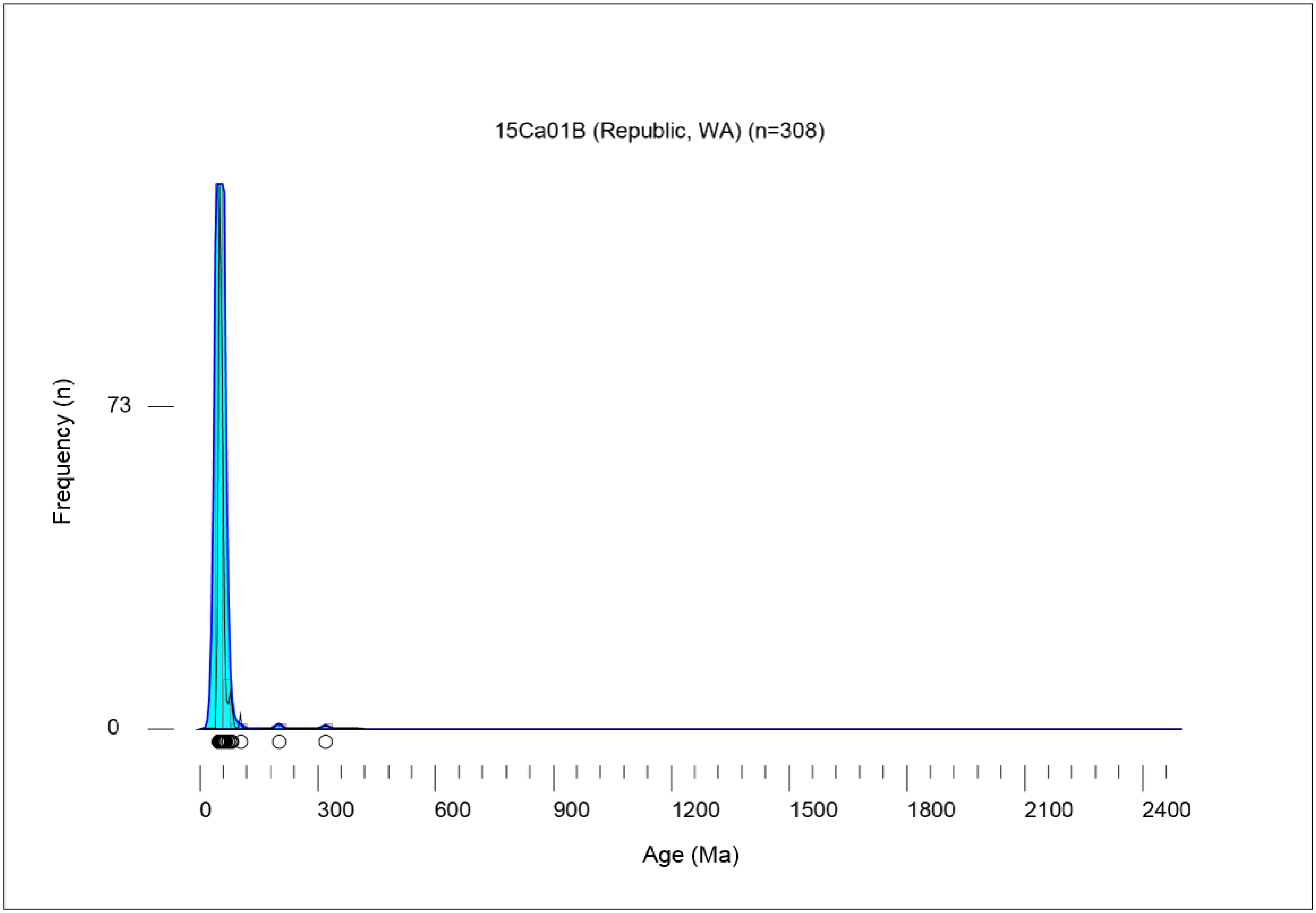
	ISOTOPIC RATIOS										ELEMENTAL CONCENTRATIONS		AGES								
analysis	207/235	prop. 2s	206/238	prop. 2s	206/238 vs 207/235 error correlation	207/206	prop. 2s	238/206 vs 207/206 error correlation	208/232	prop. 2s	[U] (ppm)	U/Th	207/235 age (Ma)	prop. 2s (Myr)	206/238 age (Ma)	prop. 2s (Myr)	207/206 age (Ma)	prop. 2s (Myr)	208/232 age (Ma)	prop. 2s (Myr)	conc. (%)
COLDWATER1_25	0.0512	0.0022	0.00803	0.00032	0.18955	0.0461	0.0023	0.66141	0.00271	0.0004	860	1.3	50.6	2.1	51.5	2.1	29	96	54.7	8.1	178%
COLDWATER1_26	0.199	0.045	0.01799	0.00089	0.82047	0.076	0.013	-0.67764	0.0091	0.0018	591	1.8	179	35	115	5.7	980	310	183	35	12%
COLDWATER1_27	0.1323	0.0059	0.02021	0.00073	0.36775	0.0473	0.0023	0.070021	0.00662	0.001	520	3.8	126	5.3	129	4.6	79	97	133	21	163%
COLDWATER1_29	0.164	0.013	0.02342	0.00083	0.39497	0.0512	0.0034	-0.084518	0.0084	0.0015	392	4.3	154	11	149.2	5.2	220	130	170	29	68%
COLDWATER1_30	0.265	0.017	0.0385	0.0018	0.31667	0.0454	0.0029	0.28355	0.0115	0.002	144	3.0	240	13	243.7	11	50	110	242	38	487%
COLDWATER1_31	0.215	0.008	0.0321	0.0012	0.11695	0.0466	0.0019	0.42057	0.0105	0.0016	543	4.2	197.6	6.7	203.7	7.4	31	84	212	32	657%
COLDWATER1_32	0.1879	0.0093	0.02736	0.0011	0.36655	0.048	0.0024	0.27368	0.00941	0.0014	543	2.3	174.5	7.9	174	6.8	103	100	189	27	169%
COLDWATER1_33	0.1776	0.0081	0.02669	0.001	0.35702	0.0464	0.002	0.25134	0.00832	0.0011	305	1.5	165.8	7	169.8	6.4	53	88	167	22	320%
COLDWATER1_34	0.21	0.014	0.03189	0.0012	0.23331	0.0479	0.0033	0.07675	0.0108	0.0015	346	2.6	193	12	202.3	7.6	100	130	217	30	202%
COLDWATER1_35	0.4	0.075	0.0206	0.0013	0.22518	0.14	0.027	0.11241	-3700	1400	47.2	-924000.0	336	56	131.6	8.5	1950	390	24300	1600	7%
COLDWATER1_36	0.5672	0.0097	0.0578	0.0021	0.81288	0.0717	0.0016	0.8759	0.01184	0.0013	5270	0.9	456	6.3	362	13	979	46	237.9	26	37%
COLDWATER1_37	0.0578	0.0031	0.0097	0.00039	0.43866	0.0437	0.0024	0.045902	0.00372	0.00063	710	5.5	57.1	3	62.2	2.5	-85	96	75	13	-73%
COLDWATER1_38	0.0684	0.0037	0.011	0.00041	0.21426	0.0451	0.0025	0.16285	0.00317	0.00039	1140	1.6	67.2	3.5	70.5	2.6	-17	100	64	7.8	-415%
COLDWATER1_39	0.142	0.0048	0.02225	0.00082	0.28644	0.0471	0.002	0.38642	0.00719	0.0011	747	4.3	134.8	4.3	141.9	5.2	52	90	145	23	273%
COLDWATER1_40	0.638	0.065	0.0226	0.0014	0.31031	0.203	0.02	0.23401	0.0431	0.0094	47.8	4.1	494	40	144.3	8.8	2860	150	850	180	5%
COLDWATER1_41	0.1472	0.0062	0.02207	0.00084	0.45346	0.0491	0.002	0.22999	0.00772	0.001	695	2.9	139.2	5.5	140.7	5.3	137	89	155	20	103%
COLDWATER1_42	0.0561	0.0047	0.00818	0.00037	-0.044511	0.0485	0.0042	0.44012	0.00277	0.0005	250	1.7	55.3	4.5	52.5	2.4	140	170	56	10	38%
COLDWATER1_43	0.213	0.018	0.0193	0.0008	-0.15803	0.0784	0.0073	0.4225	0.00824	0.0011	152.7	1.0	195	15	123.2	5	1110	200	166	22	11%
COLDWATER1_44	0.269	0.015	0.02076	0.00083	0.13889	0.0902	0.0062	0.26713	0.00821	0.0013	151.8	0.8	241	12	132.4	5.3	1430	120	165	26	9%
COLDWATER1_45	0.1521	0.0099	0.02111	0.00081	0.38625	0.053	0.0034	-0.0010522	0.0084	0.0014	311	4.1	143.4	8.7	134.7	5.1	300	130	170	28	45%
COLDWATER1_46	0.221	0.01	0.03134	0.0012	0.1937	0.0499	0.0024	0.31214	0.01022	0.0014	316	2.1	202.3	8.5	198.9	7.2	184	100	205	28	108%
COLDWATER1_47	0.1589	0.0085	0.02121	0.00088	0.40806	0.0549	0.0029	0.22794	0.0108	0.0026	422	9.0	149.5	7.4	135.3	5.5	380	120	217	52	36%
COLDWATER1_48	0.218	0.012	0.03031	0.0012	0.3478	0.0525	0.0028	0.12663	0.0113	0.002	219.5	3.6	201.7	9.6	192.4	7.6	310	110	227	40	62%
COLDWATER1_49	0.1589	0.0069	0.02404	0.0009	0.087479	0.0486	0.0025	0.44022	0.0077	0.0013	478	4.8	149.5	6	153.1	5.7	110	110	155	26	139%
COLDWATER1_50	0.1522	0.0047	0.0221	0.00077	-0.0016209	0.0502	0.0019	0.45811	0.00789	0.0012	927	3.9	143.8	4.1	140.9	4.8	200	81	159	23	70%
COLDWATER1_51	0.209	0.0097	0.02755	0.0013	0.30514	0.0554	0.0031	0.66885	0.067	0.07	213	318.0	192.4	8.2	175.2	8	430	130	350	430	41%
COLDWATER1_52	0.0877	0.0056	0.01353	0.00054	0.083245	0.0461	0.0032	0.20916	0.00445	0.00067	424	2.5	85.2	5.2	86.6	3.4	50	140	90	14	173%
COLDWATER1_53	0.233	0.082	0.0096	0.00085	0.92587	0.143	0.039	-0.8174	0.0069	0.0023	287	1.1	193	61	61.6	5.4	1510	510	139	46	4%
COLDWATER1_54	0.433	0.024	0.0573	0.0023	0.23967	0.0545	0.0032	0.25572	0.0183	0.003	170	2.4	364	17	359.4	14	380	130	366	61	95%
COLDWATER1_55	0.2603	0.0088	0.0342	0.0015	0.70947	0.0551	0.0016	0.18532	0.01049	0.0012	1577	1.6	234.6	7	216.5	9.2	406	68	211	25	53%
COLDWATER1_56	0.1687	0.0041	0.02478	0.00097	0.52868	0.049	0.0014	0.37014	0.0074	0.00084	3910	2.9	158.3	3.5	157.8	6.1	146	65	149	17	108%
COLDWATER1_57	0.1506	0.0074	0.02254	0.00098	0.50675	0.0494	0.002	0.19276	0.00842	0.00098	1120	1.2	142.2	6.5	143.7	6.2	162	84	169.4	20	89%
COLDWATER1_58	0.1775	0.007	0.02613	0.00096	0.33052	0.0488	0.0021	0.22031	0.00823	0.001	809	1.8	165.7	6	166.3	6	153	92	166	20	109%
COLDWATER1_59	0.0726	0.0036	0.01145	0.00045	0.51361	0.0464	0.0023	-0.024652	0.00347	0.00046	1116	1.9	71.1	3.4	73.4	2.8	39	97	70.1	9.3	188%
COLDWATER1_60	0.0655	0.0087	0.00862	0.00038	0.4141	0.0555	0.0071	-0.22732	0.00283	0.00038	360	0.9	64.1	8.2	55.3	2.4	320	240	57.1	7.7	17%
COLDWATER1_62	0.1457	0.0052	0.02132	0.00077	0.21928	0.0498	0.0022	0.32454	0.00724	0.0011	875	3.3	138	4.6	136	4.9	178	94	146	23	76%
COLDWATER1_63	0.0565	0.0021	0.00895	0.00034	0.34457	0.0465	0.0019	0.2824	0.00307	0.00057	2450	8.4	55.8	2.1	57.4	2.1	29	85	62	12	198%
COLDWATER1_64	0.1479	0.0044	0.02216	0.0008	0.33715	0.0484	0.0017	0.17091	0.00762	0.00094	1150	2.6	140	3.9	141.3	5	117	75	153	19	121%
COLDWATER1_65	0.1519	0.0079	0.02325	0.00091	0.34968	0.048	0.0026	0.20054	0.00743	0.0011	335	3.3	143.4	7	148.2	5.7	130	110	150	23	114%
COLDWATER1_66	0.239	0.013	0.0253	0.001	0.29596	0.0688	0.0041	0.24068	0.01025	0.0014	248	1.3	217	11	161	6.6	870	120	206	28	19%
COLDWATER1_67	0.23	0.012	0.02952	0.0011	0.18193	0.0575	0.0032	0.25346	0.00967	0.0014	331	1.9	209.7	9.9	187.6	6.8	480	120	194	28	39%
COLDWATER1_69	0.0707	0.0073	0.01091	0.0005	0.47244	0.0476	0.0044	-0.10281	0.0043	0.0017	260	17.7	69.1	6.9	69.9	3.2	80	170	87	35	87%
COLDWATER1_70	0.194	0.012	0.02825	0.0011	0.23003	0.0503	0.0031	0.11455	0.011	0.0017	233	3.4	180	10	179.6	6.8	210	130	220	34	86%
COLDWATER1_71	0.218	0.012	0.03103	0.0013	0.28848	0.0519	0.0029	0.24966	0.01033	0.0014	353	1.9	201.3	9.7	196.9	7.8	260	110	208	28	76%
COLDWATER1_72	0.0757	0.0035	0.011	0.00042	0.098145	0.0511	0.0028	0.35742	0.00332	0.00046	925	2.0	74.6	3.5	70.5	2.7	230	110	67	9.2	31%
COLDWATER1_73	0.1562	0.0056	0.02416	0.0009	0.032827	0.0472	0.002	0.48862	0.00863	0.0013	618	7.1	148.1	4.7	153.9	5.7	70	86	174	26	220%
COLDWATER1_74	0.308	0.022	0.03764	0.0014	0.46827	0.0582	0.0035	-0.099109	0.0123	0.0017	312.7	2.2	271	17	238.2	8.9	540	140	246	34	44%
COLDWATER1_75	0.153	0.012	0.02309	0.00087	0.15693	0.0486	0.004	0.16103	0.0086	0.0017	260	4.0	144	11	147.2	5.5	180	170	173	33	82%
COLDWATER1_76	0.225	0.013	0.03154	0.0013	0.19454	0.0502	0.0029	0.33621	0.0104	0.0016	296.7	2.2	205	11	200.2	8.2	190	120	209	32	105%
COLDWATER1_77	0.1124	0.0075	0.01693	0.00068	-0.16259	0.048	0.0037	0.51235	0.00614	0.001	260	2.3	109.1	6.6	108.2	4.3	130	150	124	21	83%
COLDWATER1_78	0.1475	0.0059	0.02181	0.00082	0.20017	0.0492	0.0022	0.33424	0.007	0.0013	564	4.7	139.6	5.2	139.1	5.2	167	98	140	25	83%
COLDWATER1_79	0.1859	0.0073	0.02667	0.0011	0.55627	0.0508	0.0023	0.086298	0.00848	0.001	820	1.5	172.9	6.3	169.6	6.6	220	96	170.6	20	77%
COLDWATER1_80	0.272	0.014	0.0354	0.0014	0.33621	0.0568	0.0027	0.27181	0.0135	0.0027	326	6.6	244	11	224.2	8.9	459	100	271	54	49%
COLDWATER1_81	0.1467	0.0066	0.02207	0.00078	0.20349	0.0482	0.0024	0.1508	0.00749	0.0012	508	5.5	138.8	5.8	140.7	4.9	106	98	151	24	133%
COLDWATER1_82	0.1502	0.0072	0.02322	0.00092	-0.12476	0.048	0.003	0.54726	0.0082	0.0016	387	5.7	141.9	6.4	148	5.8	100	120	165	32	148%
COLDWATER1_83	0.1814	0.006	0.02692	0.0011	0.47195	0.0487	0.0016	0.28818	0.00833	0.00099	951	1.4	169.1	5.2	171.2	6.7	132	71	167.7	20	130%
COLDWATER1_84	0.424	0.026	0.0128	0.00054	0.13525	0.233	0.016	0.35739	0.0236	0.0038	146.3	3.0	357	18	82	3.5	3060	110	471	75	3%
COLDWATER1_85	0.194	0.012	0.02745	0.0011	0.018685	0.0511	0.0036	0.35231	0.0107	0.0016	184	3.2	179	11	174.6	6.8	240	150	216	33	73%
COLDWATER1_86	0.44	0.011	0.0599	0.0021	0.4103	0.0536	0.0015	0.21576	0.01791	0.002	767	1.6	370	7.5	374.8	13	346	62	359	40	108%
COLDWATER1_87	0.0772	0.0031	0.01171	0.00041	0.10884	0.0483	0.002	0.29421	0.00365	0.00049	2000	2.7	75.5	2.9	75	2.6	131	89	73.6	10	57%
COLDWATER1_88	0.063	0.012	0.00941	0.00055	-0.15092	0.052	0.011	0.32737	0.0041	0.0017	86.5	3.2	63	12	60.4	3.5	190	360	83	34	32%
COLDWATER1_89	0.128	0.013	0.01762	0.00067	0.31786	0.0536	0.0049	-0.12844	0.0069	0.0016	128.7	3.0	123	12	112.6	4.3	360	190	138	32	31%
COLDWATER1_90	0.226	0.016	0.01083	0.00047	0.058679	0.154	0.011	0.30434	0.0306	0.005	216.7	7.1	206	14	69.5	3	2360	140	608	99	3%
COLDWATER1_91	0.554	0.034	0.02646	0.0012	0.078257	0.153	0.01	0.48663	0.0213	0.0035	85.7	1.8	449	21	168.3	7.5	2410	110	425	68	7%
COLDWATER1_92	0.297	0.051	0.0298	0.0015	0.54713	0.076	0.012	-0.36966	0.0132	0.0023	156	1.2	257	38	189.1	9.2	990	320	265	47	19%
COLDWATER1_93	0.185	0.011	0.0273	0.0011	0.31743	0.0502	0.003	0.090894	0.00814	0.0011	459	1.6	171.8	9.6	173.6	6.6	190	120	164	21	91%
COLDWATER1_94	0.0576	0.0069	0.009	0.00044	-0.1916	0.0454	0.0056	0.42321	0.00379	0.00072	215	2.2	57.6	6.5	57.8	2.8	50	220	76	15	116%
COLDWATER1_95	0.0542	0.0042	0.00767	0.00037	0.22206	0.0527	0.004	0.21295	0.00276	0.00036	460	1.0	54.2	4.2	49.3	2.3	280	150	55.6	7.3	18%
COLDWATER1_96	0.1792	0.0036	0.02527	0.00092	0.30129	0.0507	0.0014	0.46797	0.00821	0.00088	3410	0.7	167.3	3.1	160.9	5.8	230	67	165.3	18	70%
COLDWATER1_97	0.0568	0.0057	0.00781	0.00039	0.32511	0.0523	0.0051	0.038788	0.00268	0.00038	233	0.6	56	5.5	50.1	2.5	340	210	54	7.7	15%
COLDWATER1_98	0.168	0.011	0.02237	0.00089	0.12323	0.0528	0.0038	0.22376	0.0103	0.0029	191	9.0	157.1	9.8	142.6	5.6	330	150	206	57	43%
COLDWATER1_99	0.791	0.043	0.01673	0.00099	-0.033058	0.327	0.029	0.64343	0.0636	0.011	47.3	4.0	600	24	106.9	6.3	3590	140	1240	200	3%
COLDWATER1_100	1.076	0.081	0.02926	0.0014	0.13511	0.255	0.019	0.23499	0.0166	0.0024	56.6	0.6	734	38	185.9	8.5	3170	110	332	49	6%
COLDWATER1_101	0.228	0.014	0.03249	0.0013	0.35939	0.0493	0.003	-0.093564	0.0113	0.0017	292	2.7	208	12	206.1	8	180	110	227	34	115%
COLDWATER1_102	0.1389	0.0041	0.01805	0.00067	0.40552	0.0548	0.0017	0.32599	0.00665	0.00082	2940	7.5	132	3.7	115.3	4.3	405	64	133.9	16	28%
COLDWATER1_103	0.1559	0.0087	0.0224	0.0012	0.39917	0.0502	0.0029	0.48922	0.00838	0.0011	506	1.3	146.9	7.6	143	7.9	220	130	169	23	65%

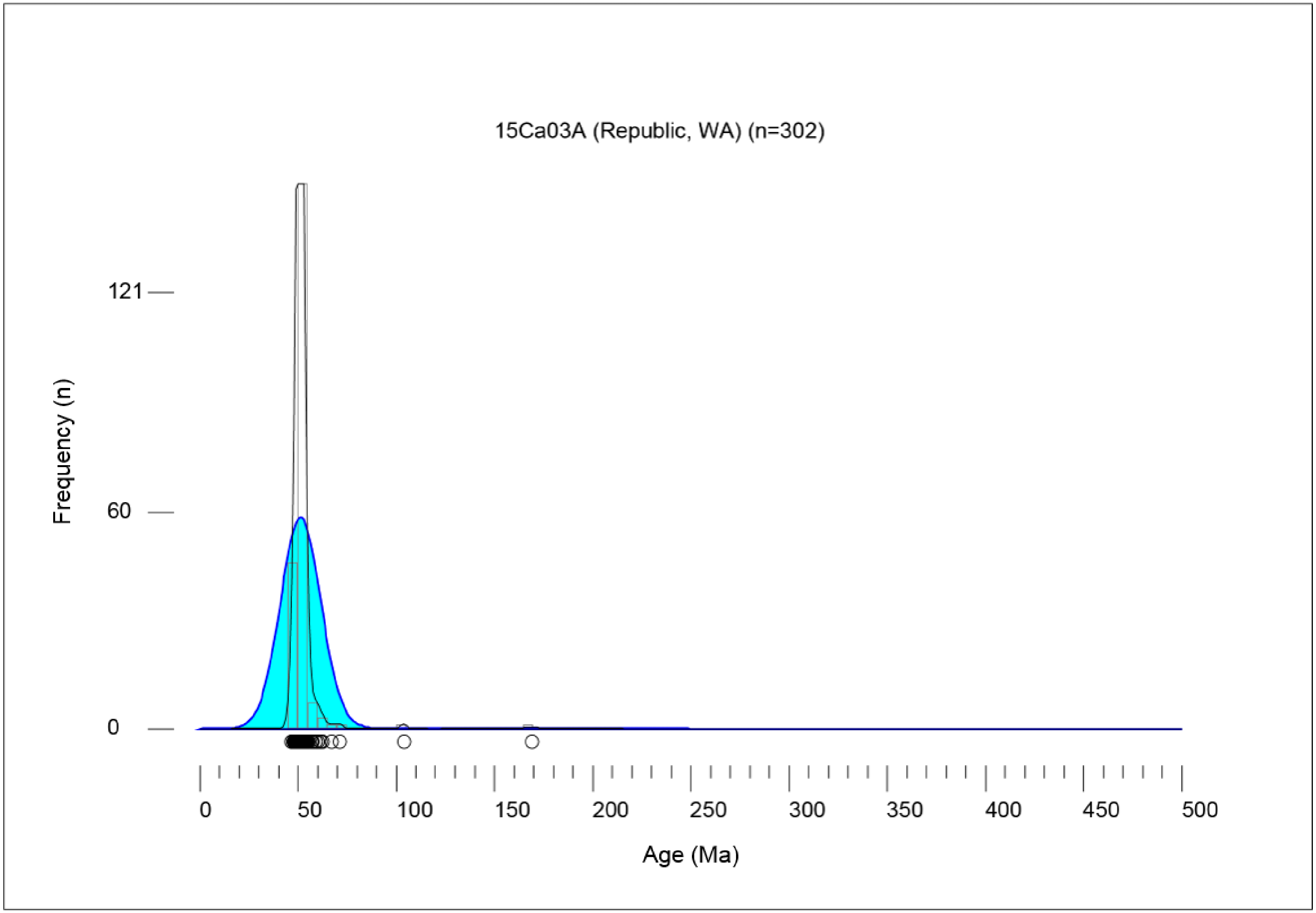
APPENDIX C

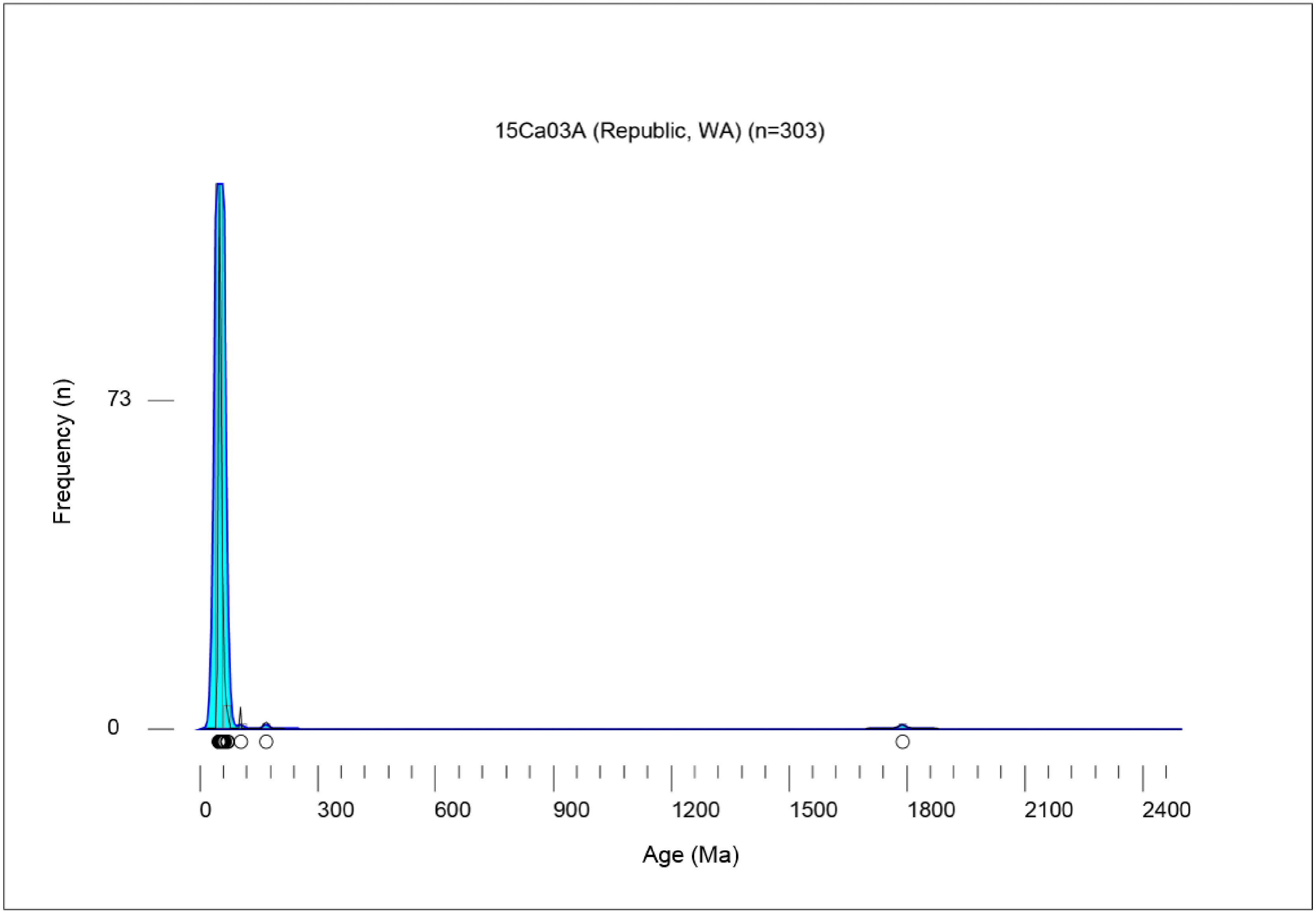
DETRITAL ZIRCON U-PB KDE (BLUE) & PDP (BLACK) PLOTS

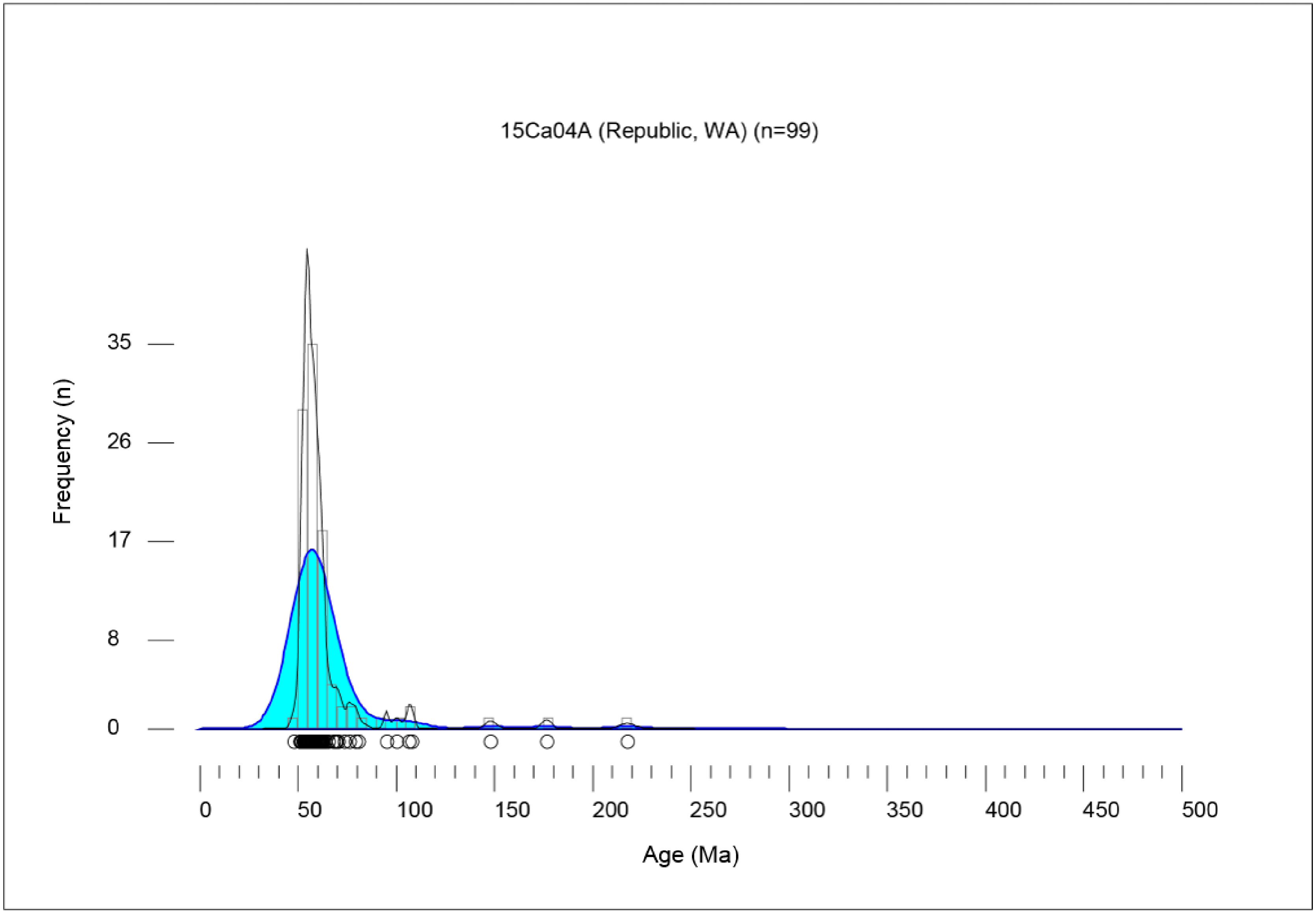
SEPARATED BY SAMPLE (0-500 MA, & 0-2,400 MA)

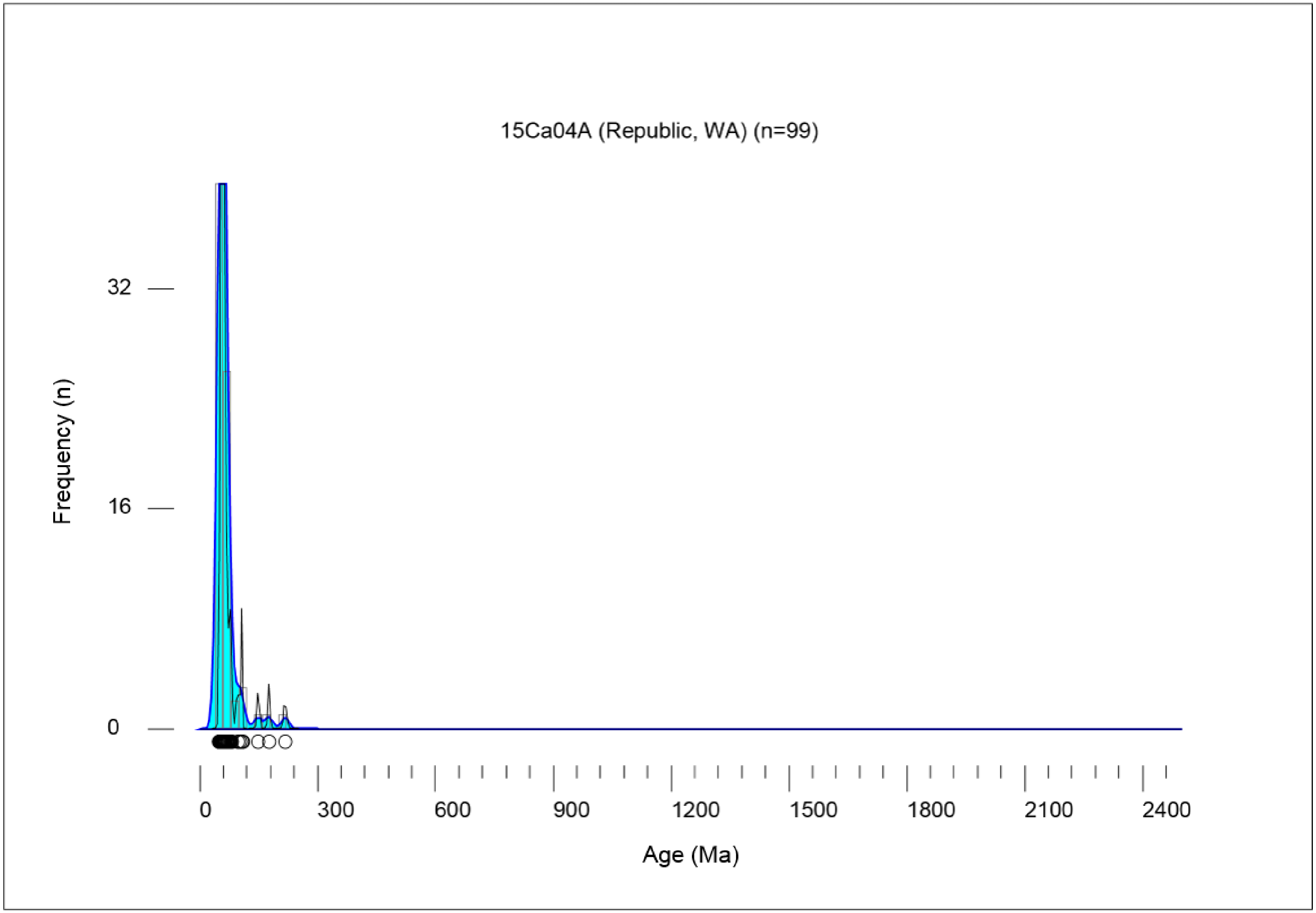


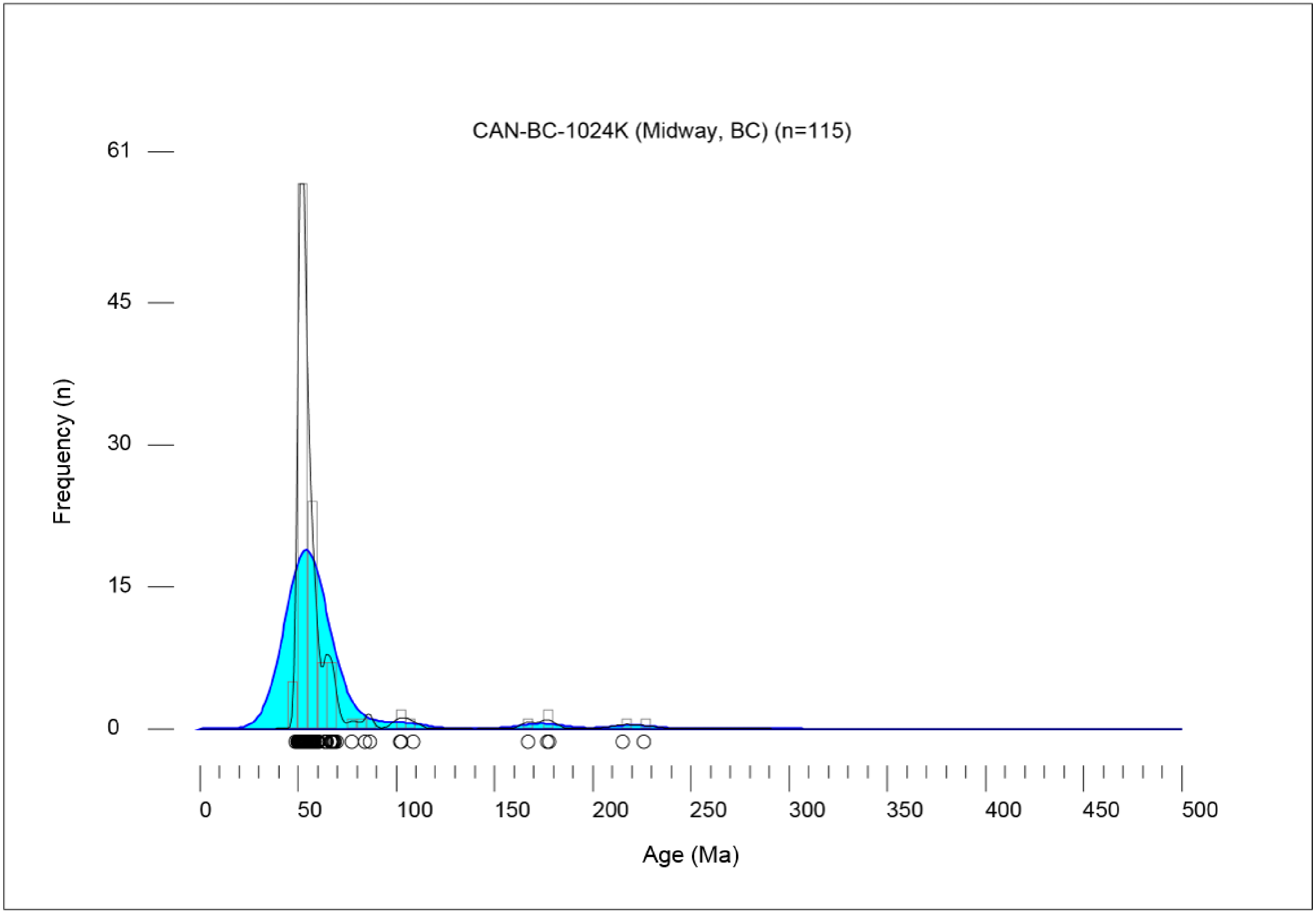

15Ca01B (Republic, WA) (n=308)
Frequency (n)
73
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

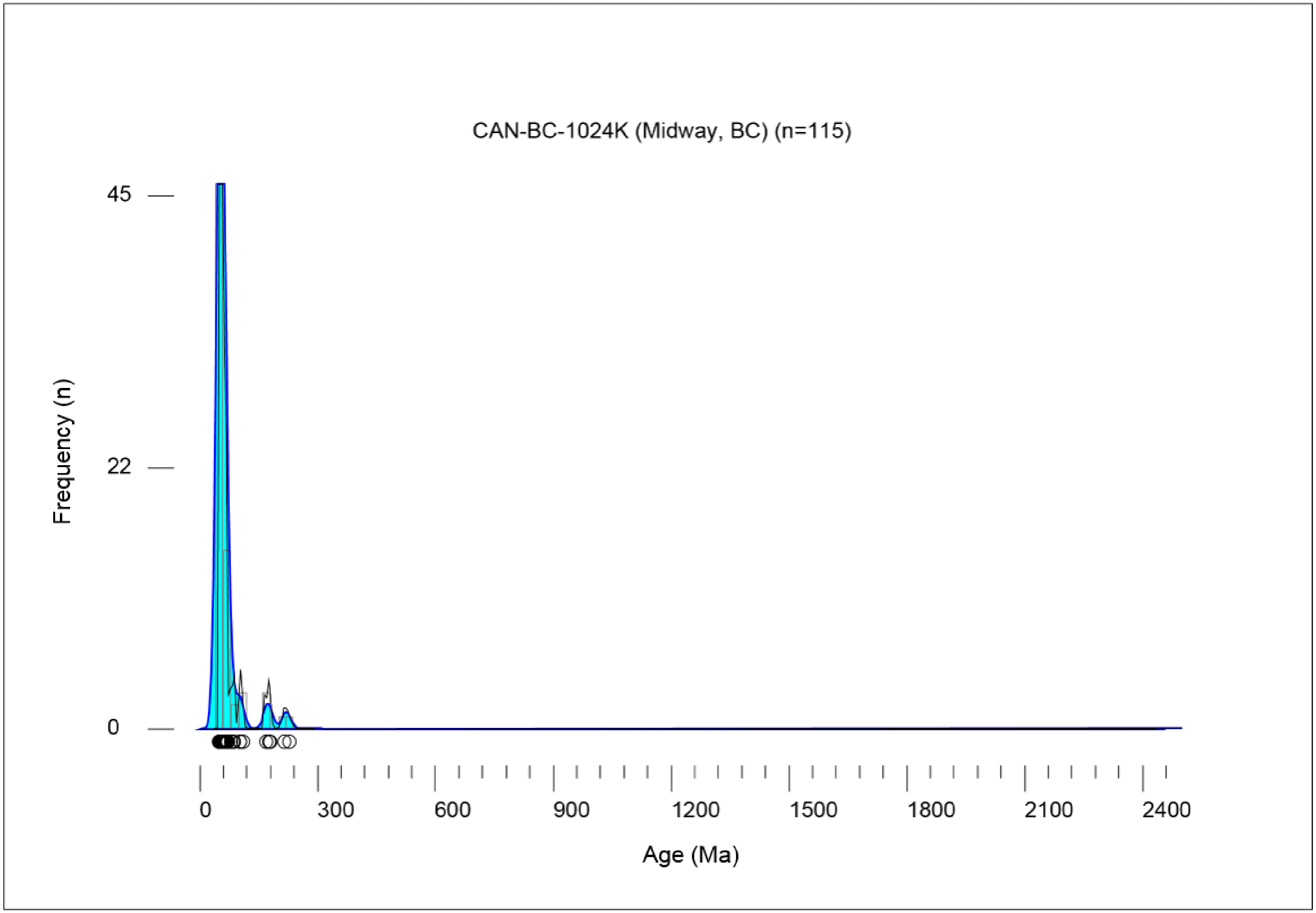

15Ca03A (Republic, WA) (n=302)
Frequency (n)
121
60
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

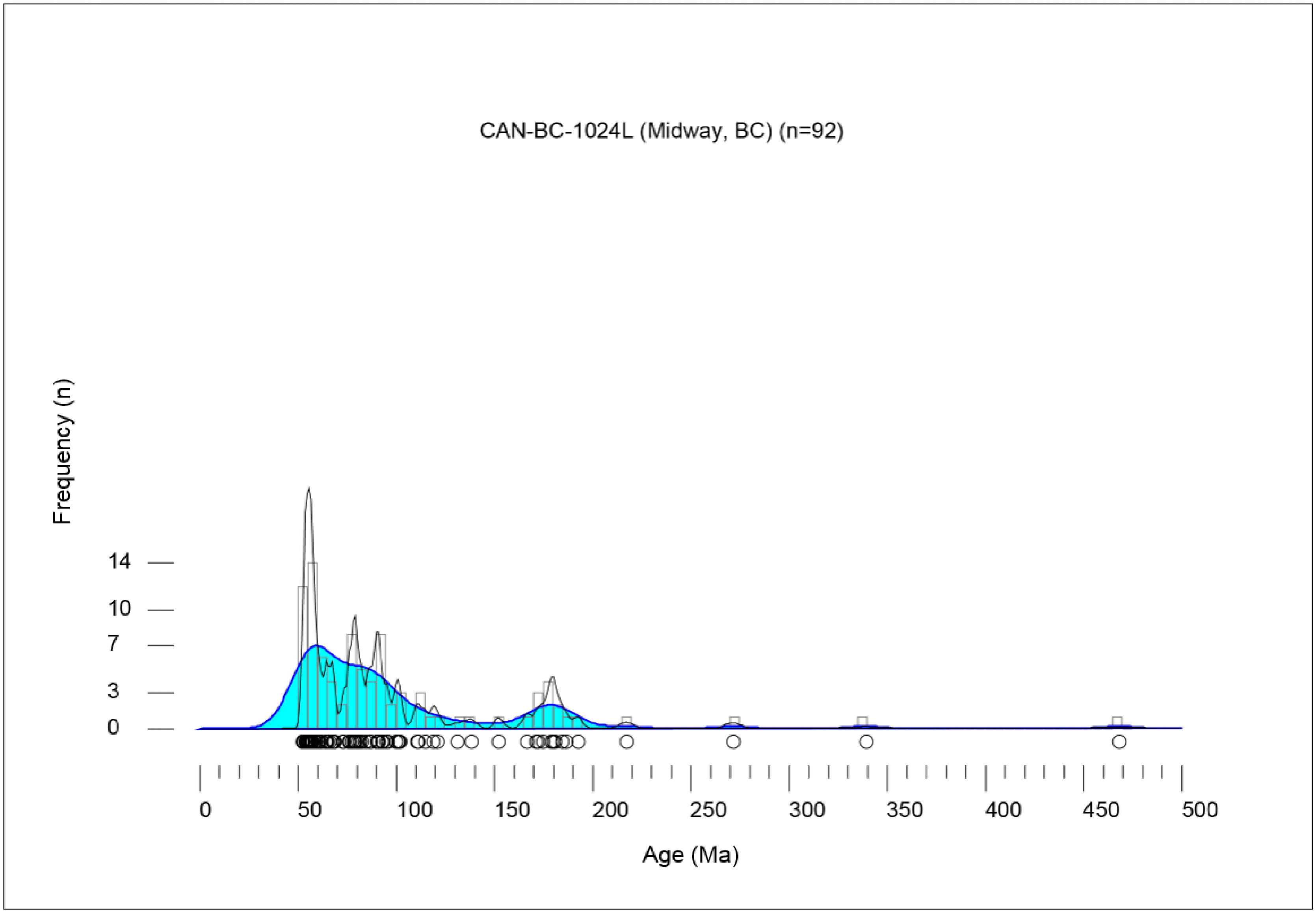

15Ca03A (Republic, WA) (n=303)
Frequency (n)
73
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

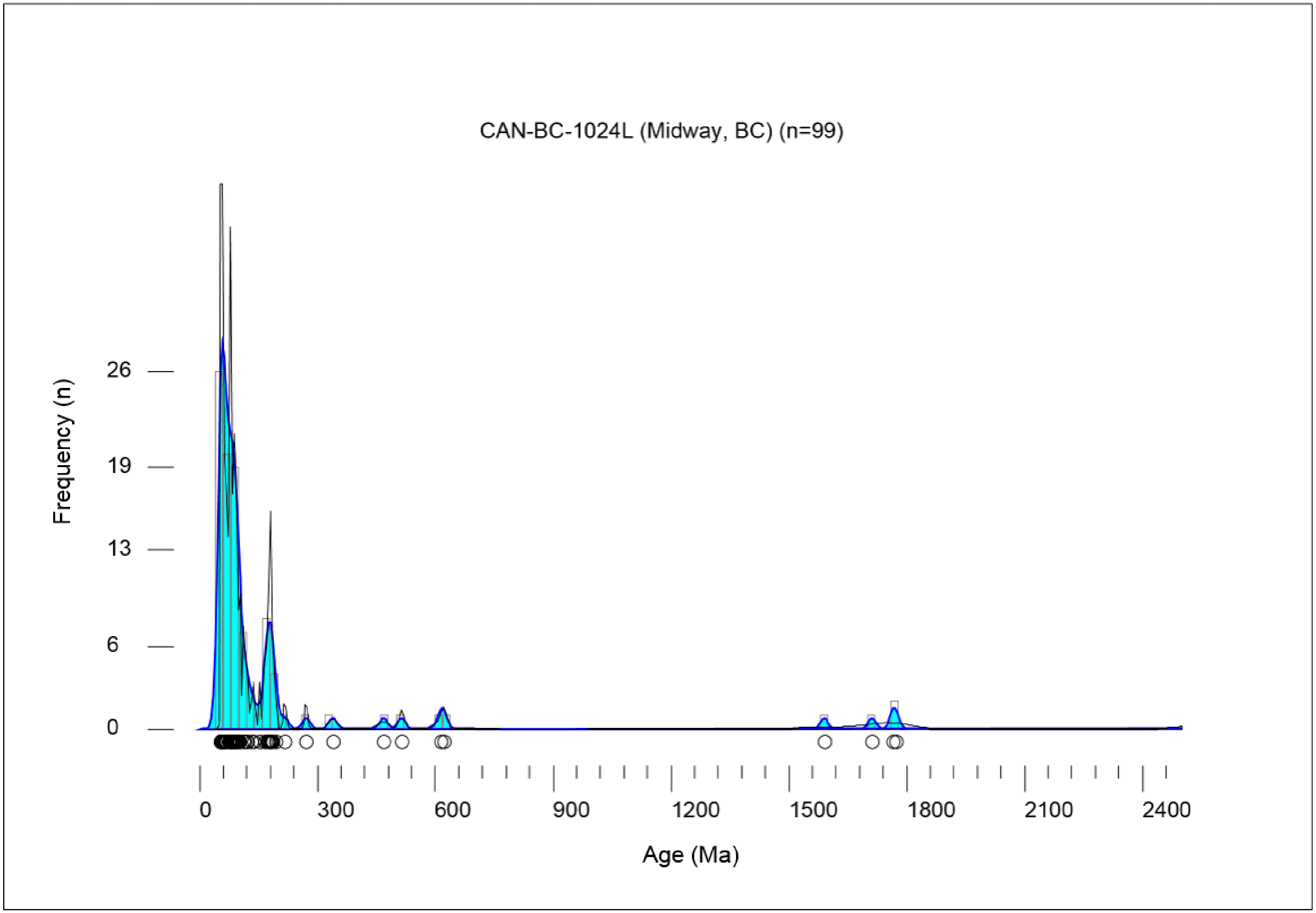

15Ca04A (Republic, WA) (n=99)
Frequency (n)
35
26
17
8
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

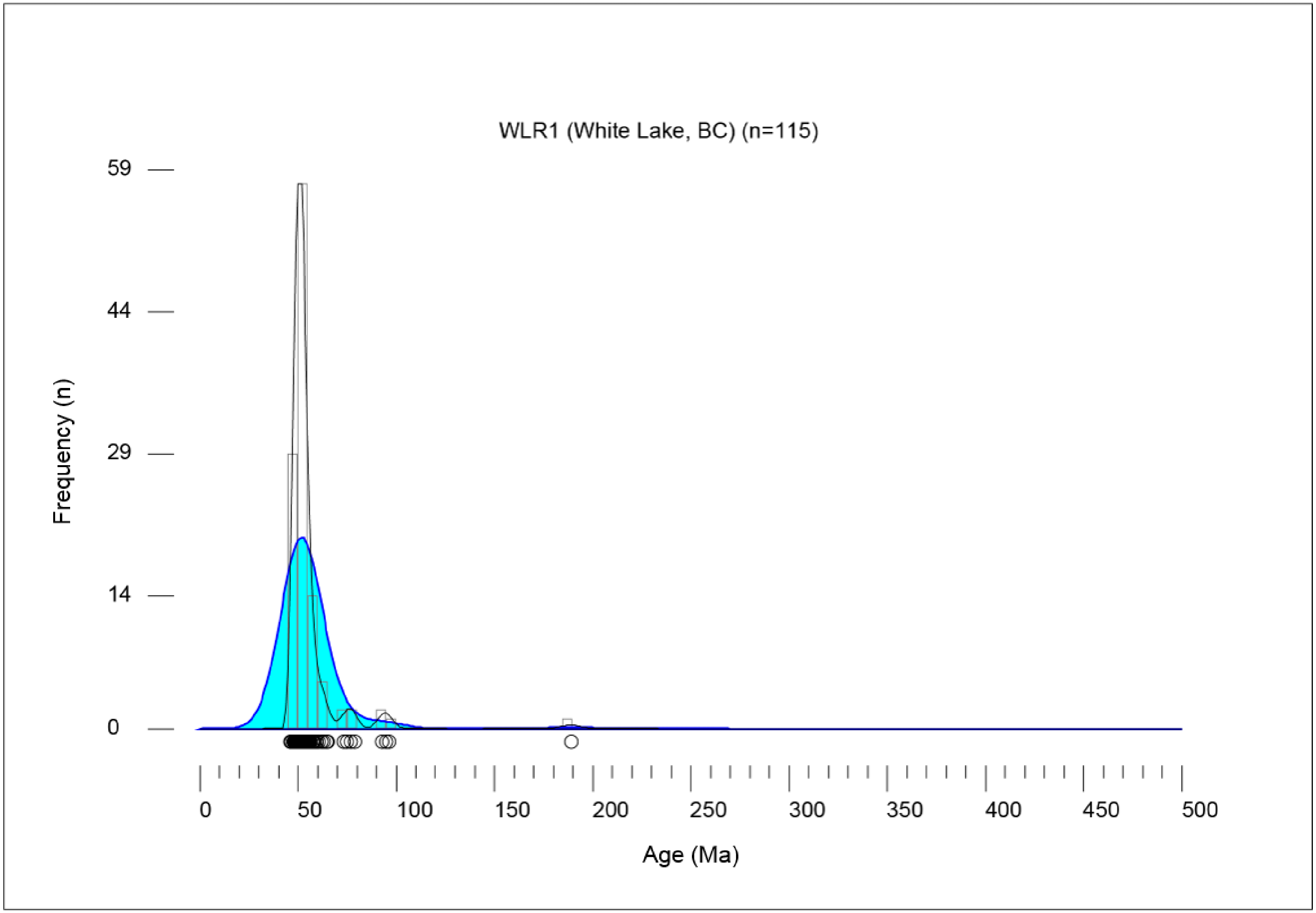

15Ca04A (Republic, WA) (n=99)
Frequency (n)
32
16
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

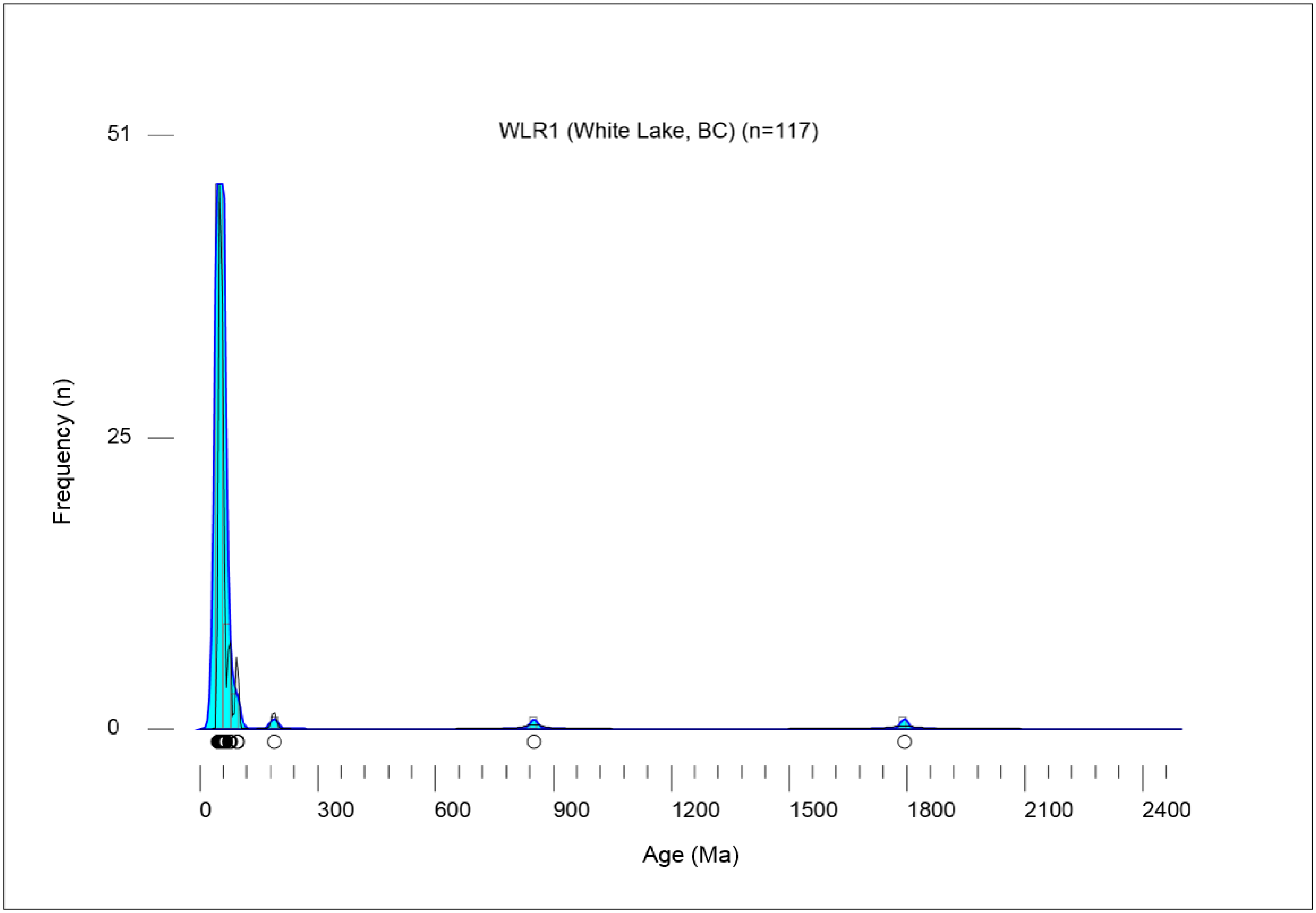

CAN-BC-1024K (Midway, BC) (n=115)
Frequency (n)
61
45
30
15
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

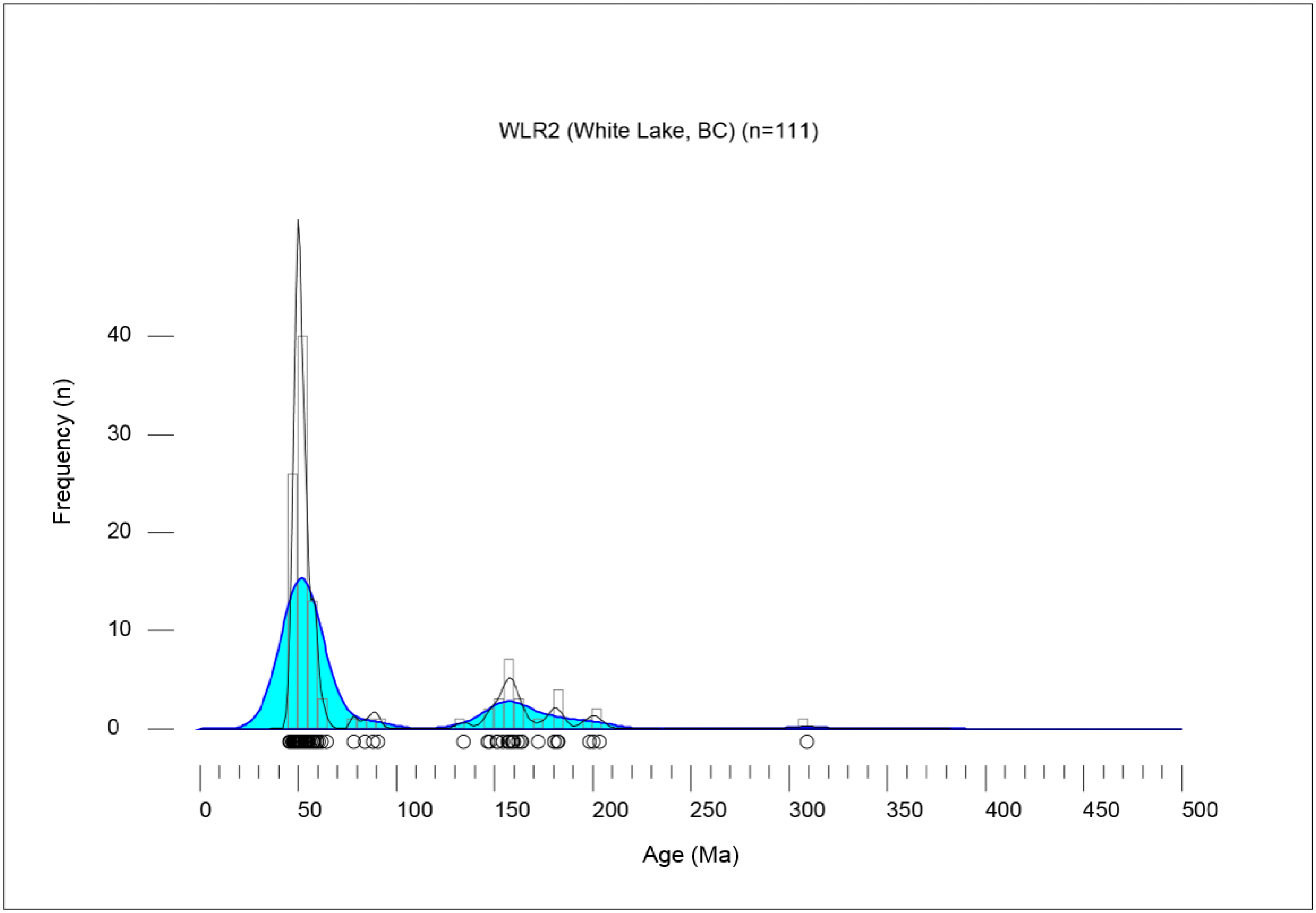

CAN-BC-1024K (Midway, BC) (n=115)
Frequency (n)
45
22
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

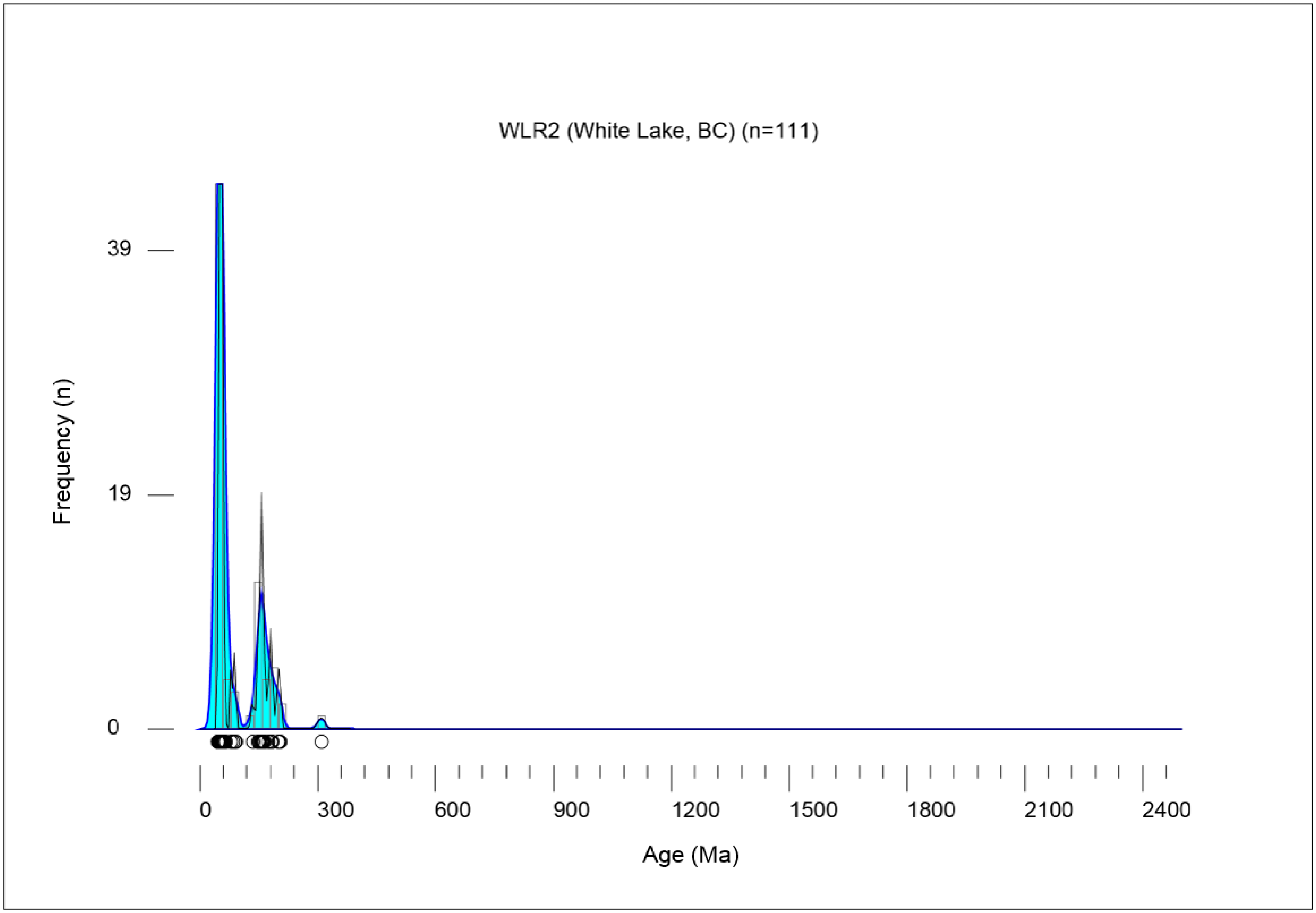

CAN-BC-1024L (Midway, BC) (n=92)
Frequency (n)
14
10
7
3
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

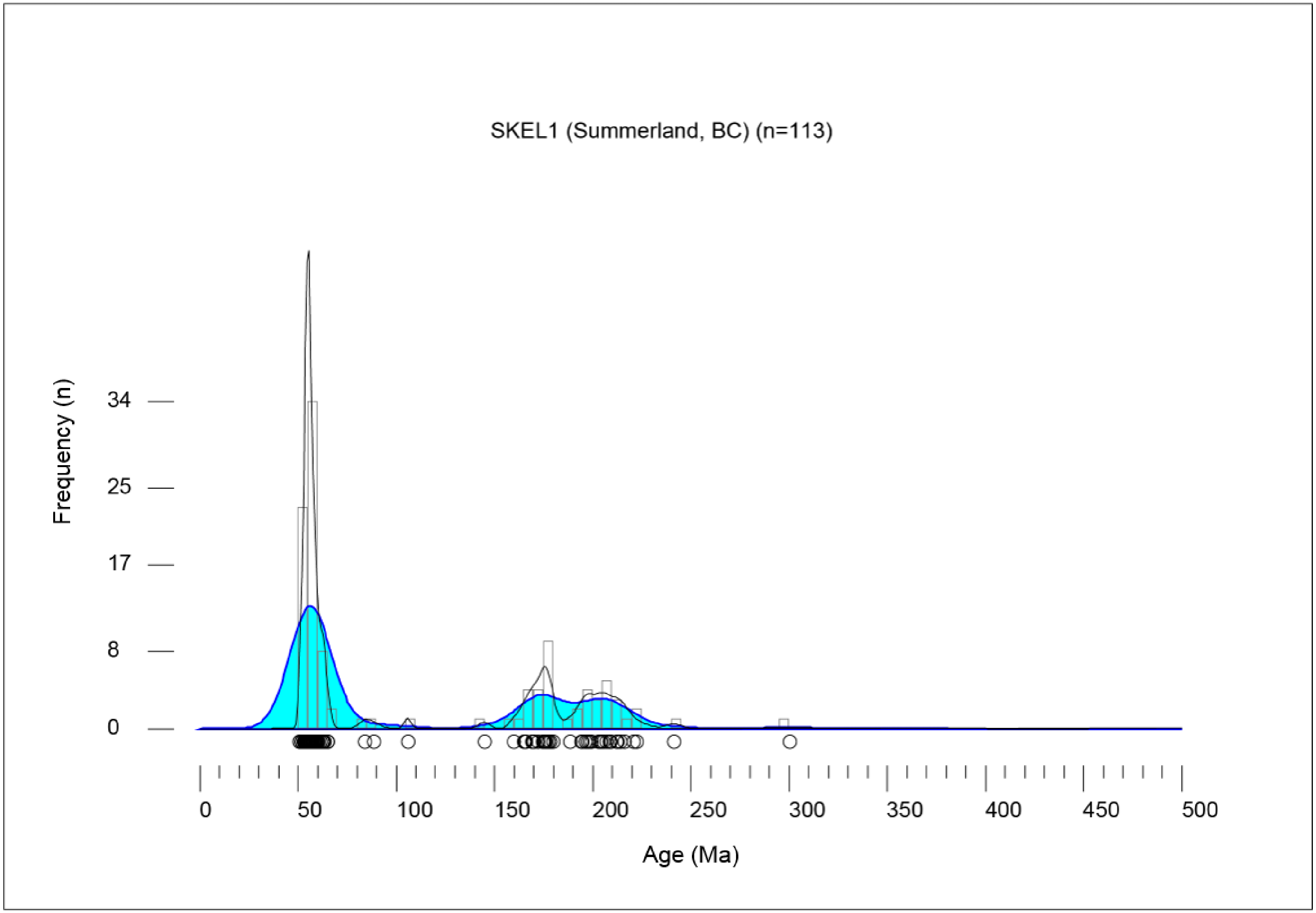

CAN-BC-1024L (Midway, BC) (n=99)
Frequency (n)
26
19
13
6
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

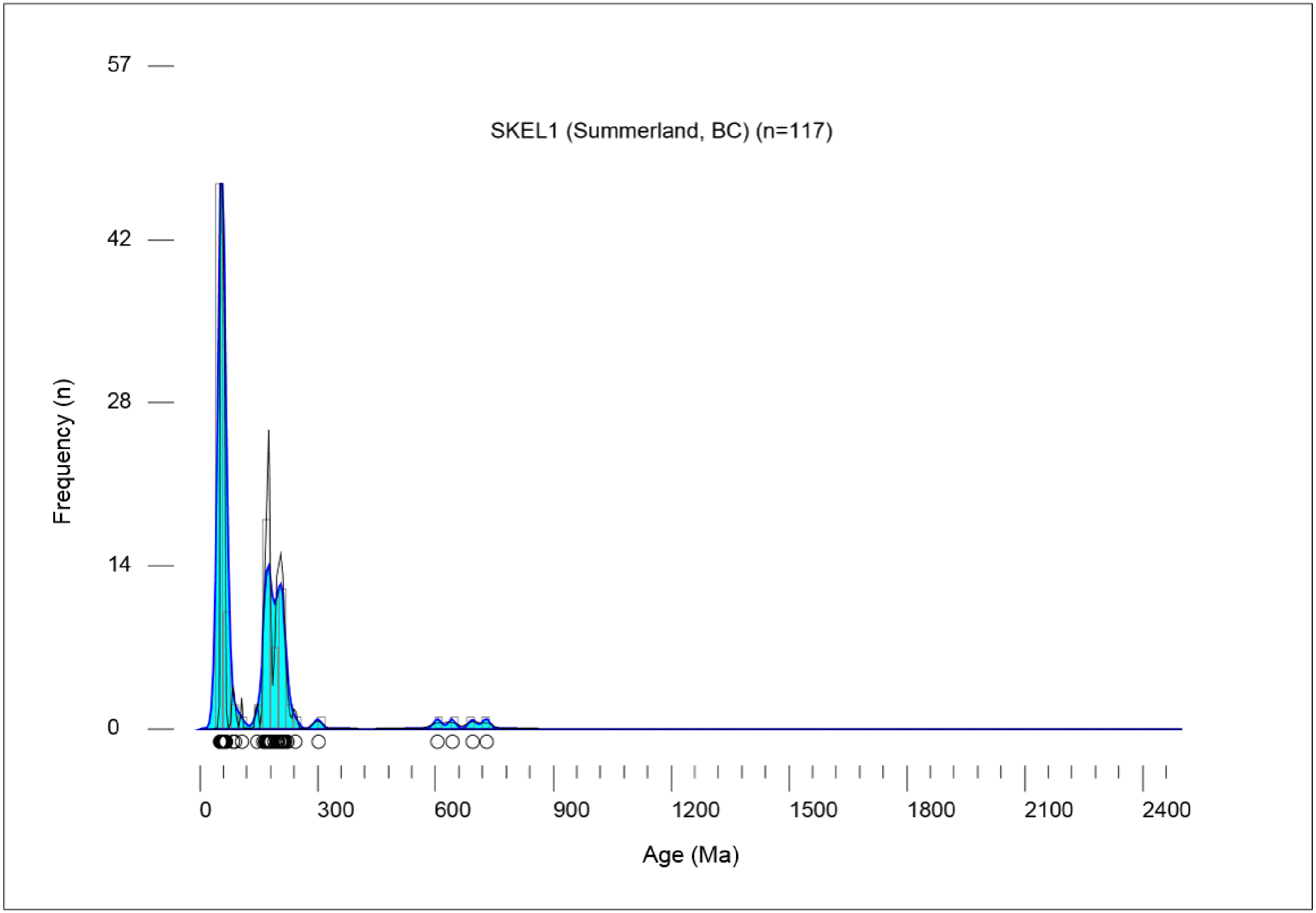

WLR1 (White Lake, BC) (n=115)
Frequency (n)
59
44
29
14
0
0 50 100 150 200 250 300 350 400 450 500
Age (Ma)

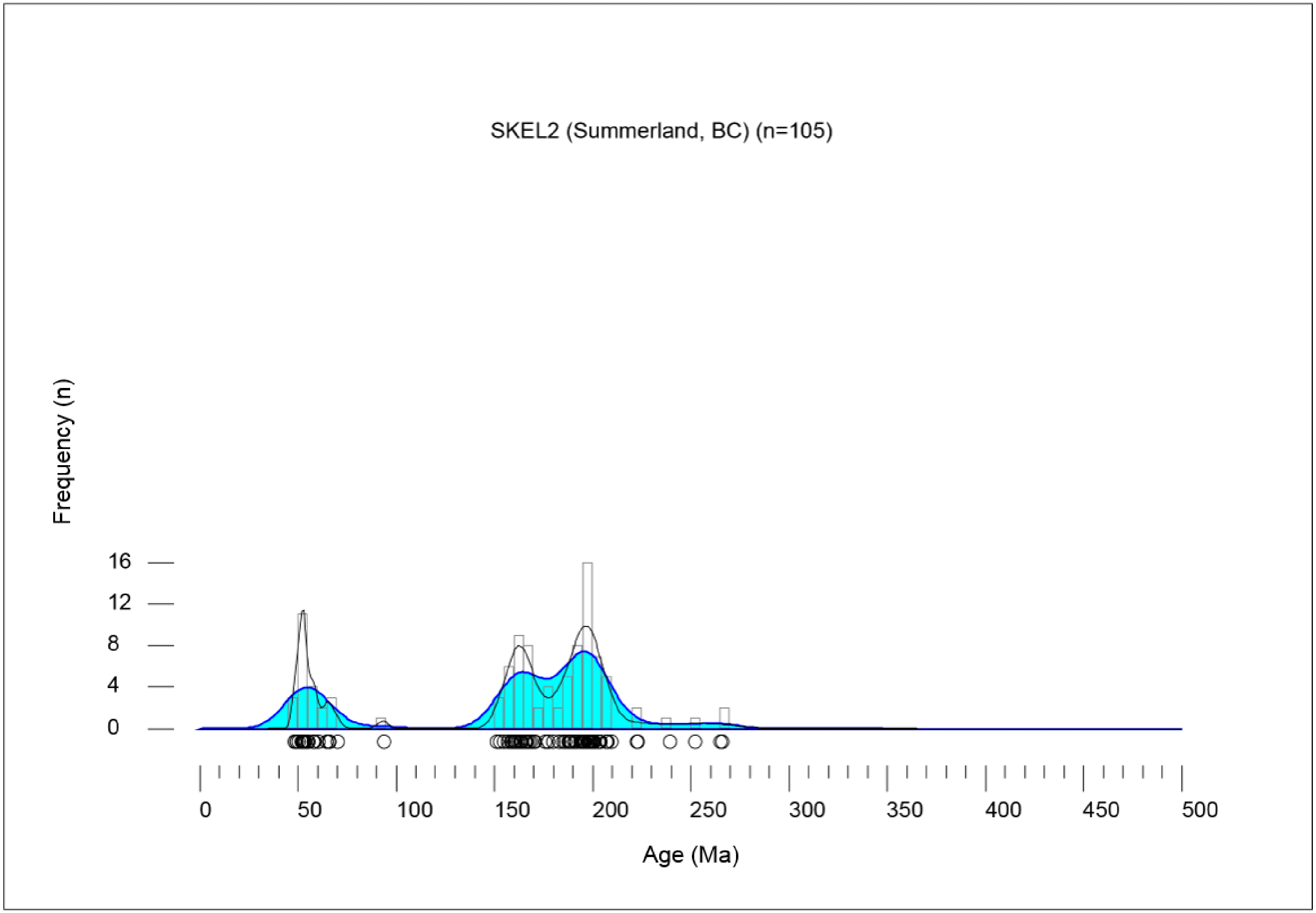

WLR1 (White Lake, BC) (n=117)
51
25
0
Frequency (n)
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

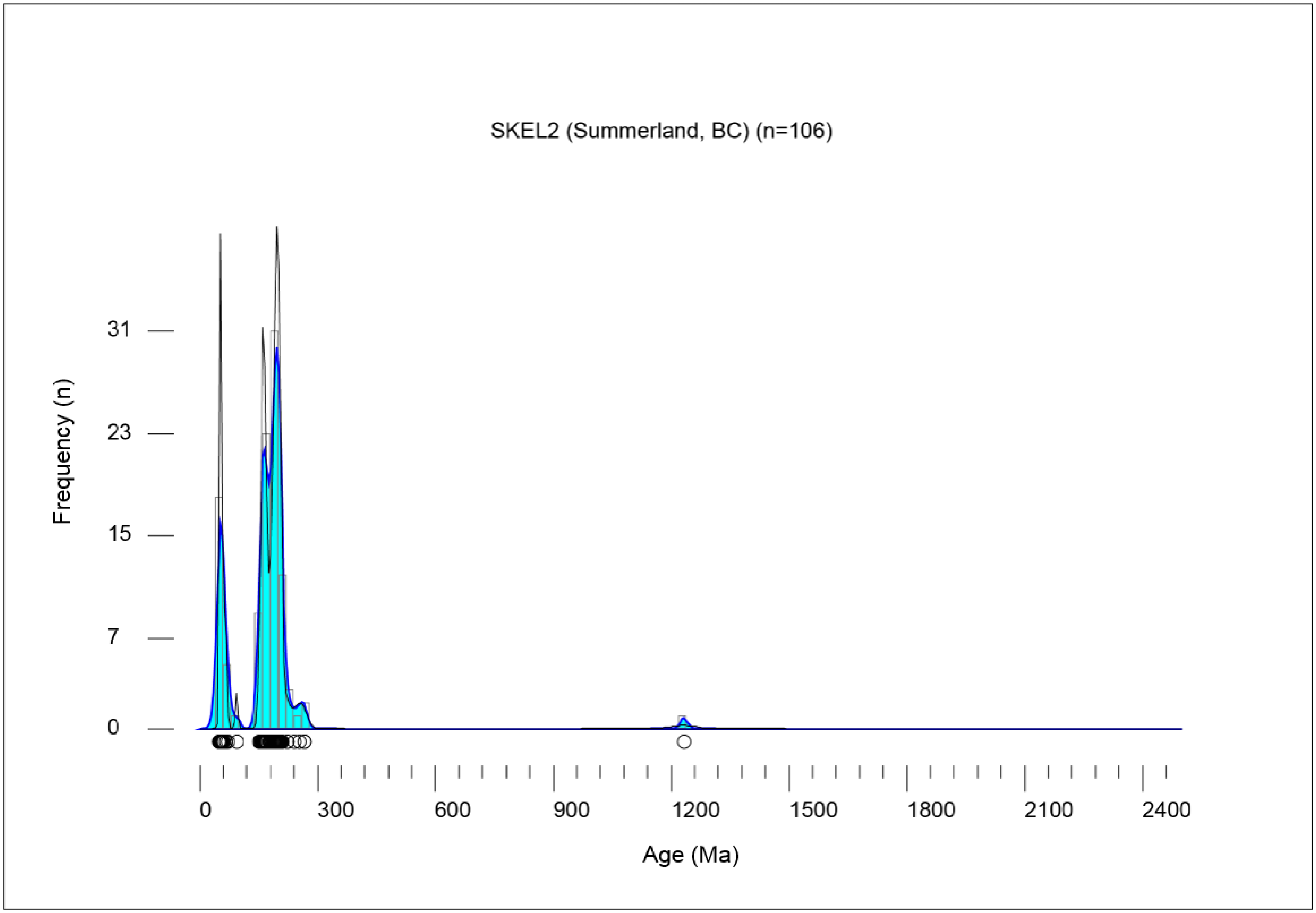

WLR2 (White Lake, BC) (n=111)
Frequency (n)
0
10
20
30
40
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

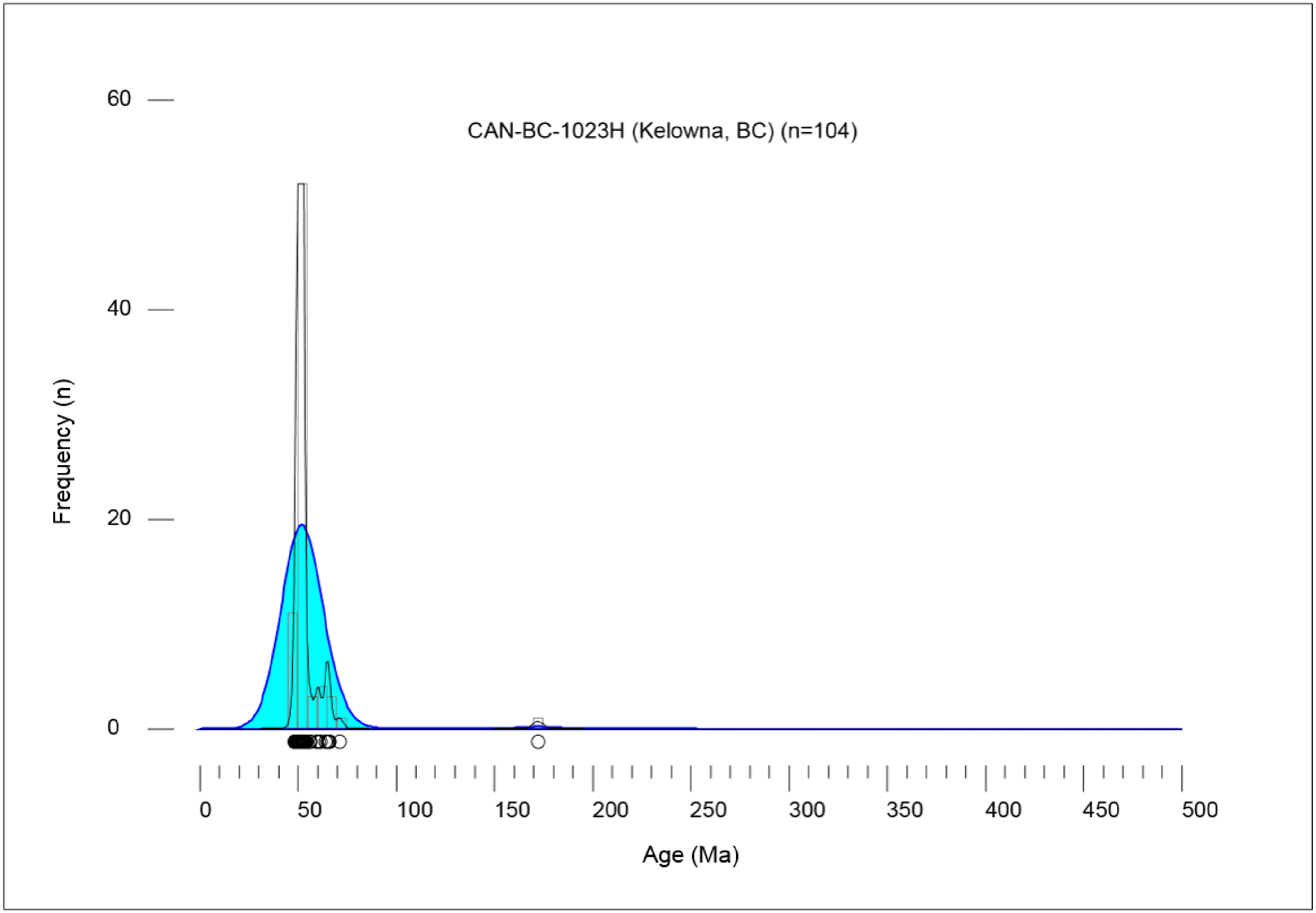

WLR2 (White Lake, BC) (n=111)
Frequency (n)
39
19
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

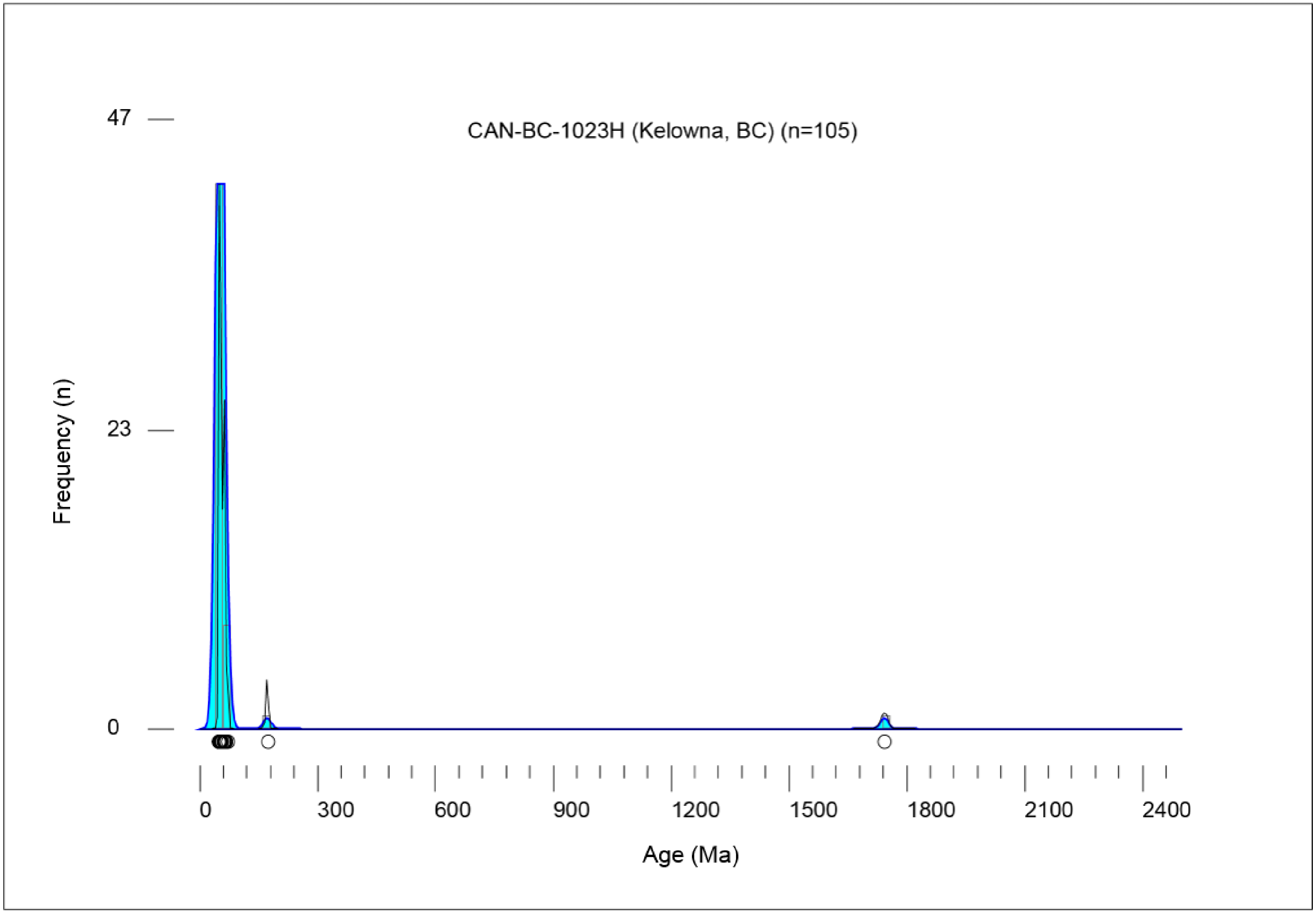

SKEL1 (Summerland, BC) (n=113)
Frequency (n)
34
25
17
8
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

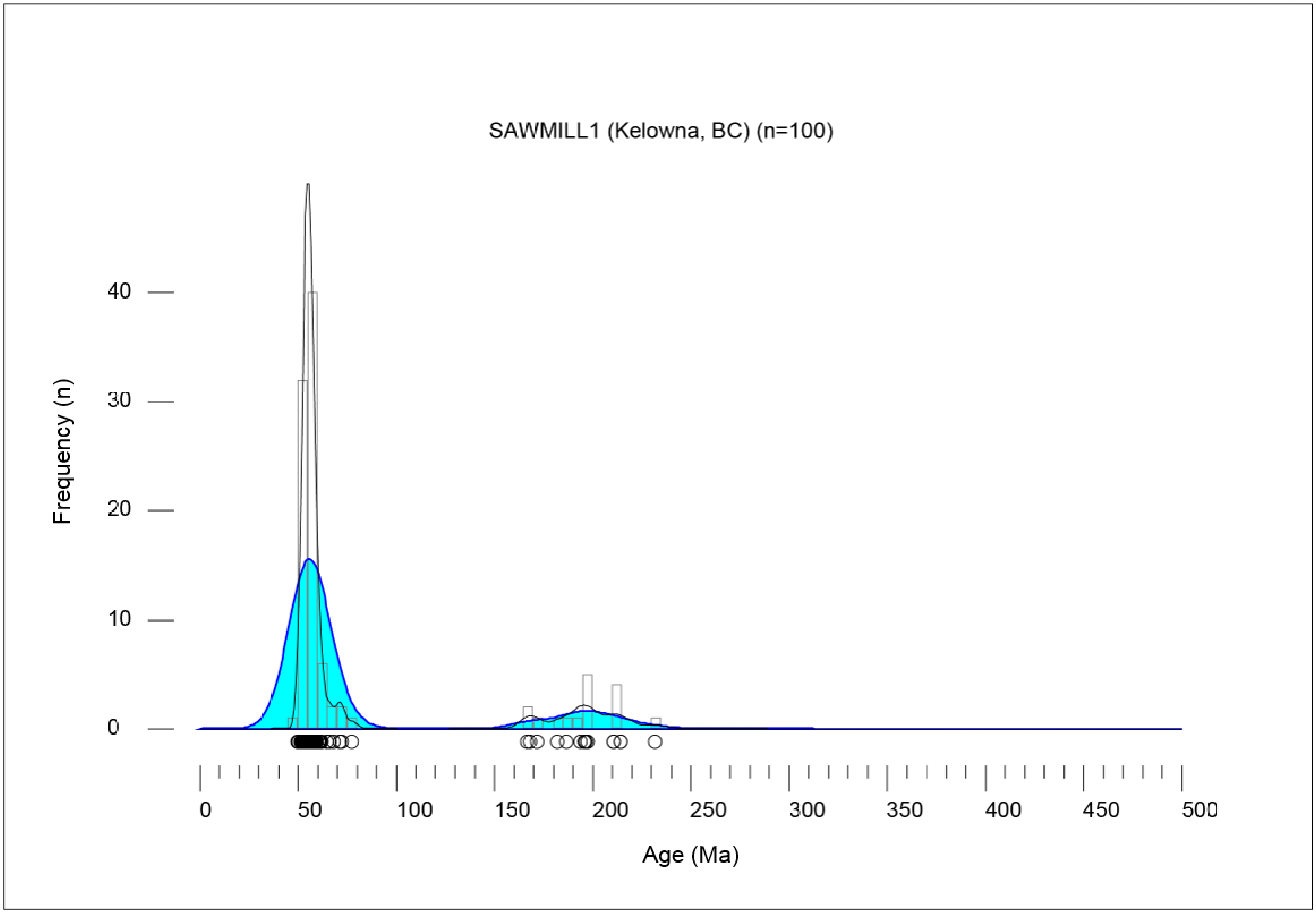

SKEL1 (Summerland, BC) (n=117)
Frequency (n)
57
42
28
14
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

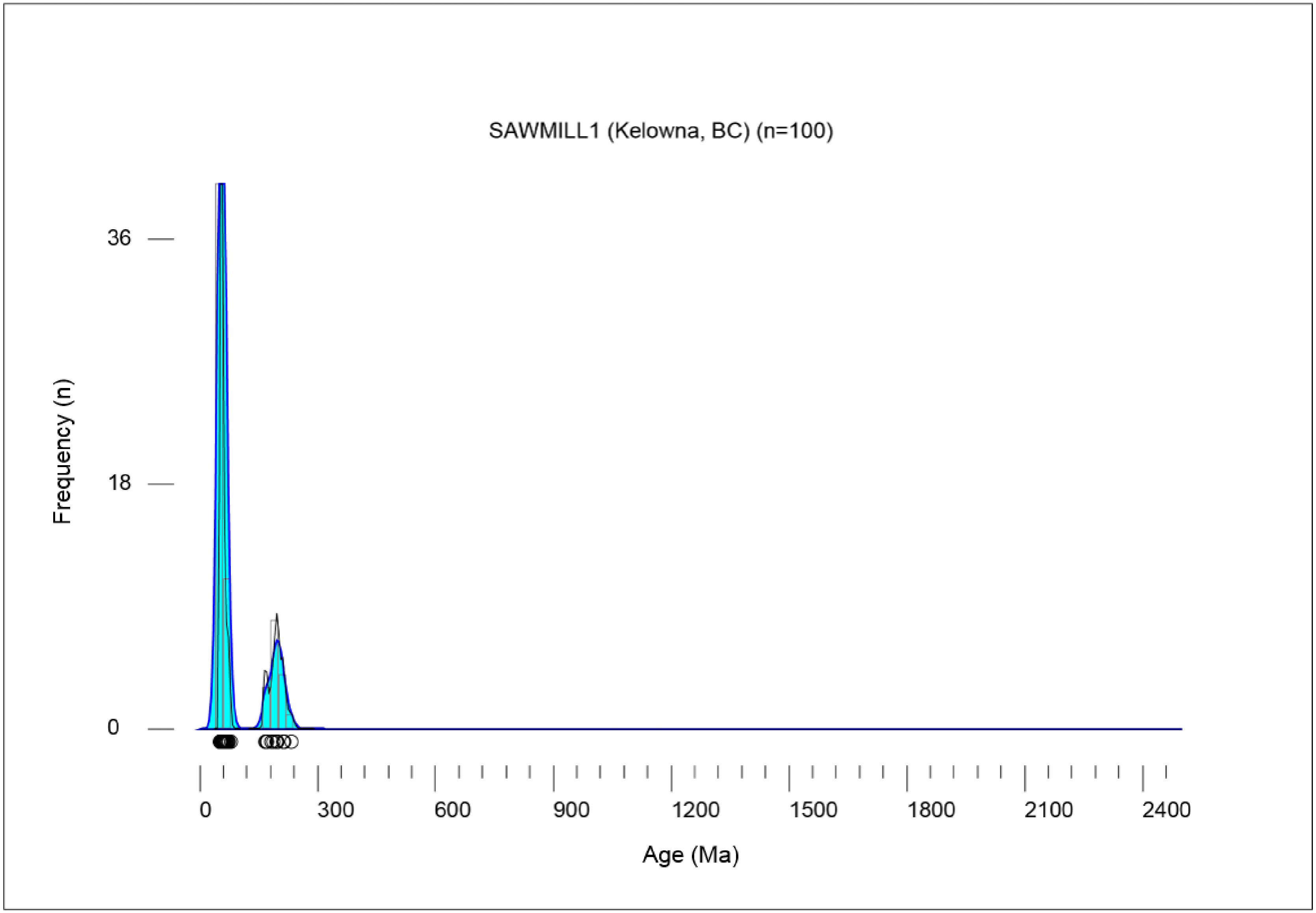

SKEL2 (Summerland, BC) (n=105)
Frequency (n)
0
4
8
12
16
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

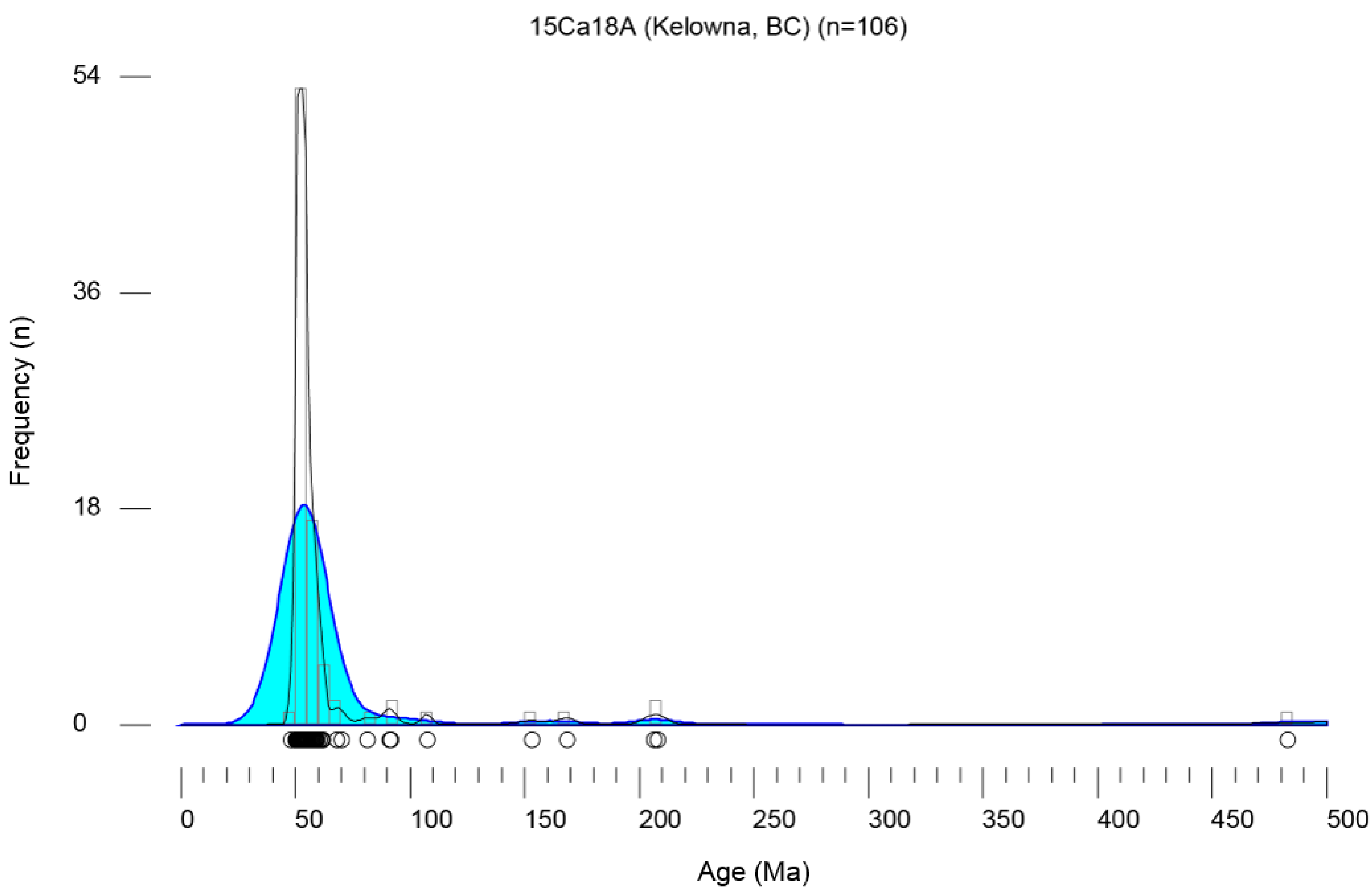

SKEL2 (Summerland, BC) (n=106)
Frequency (n)
31
23
15
7
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

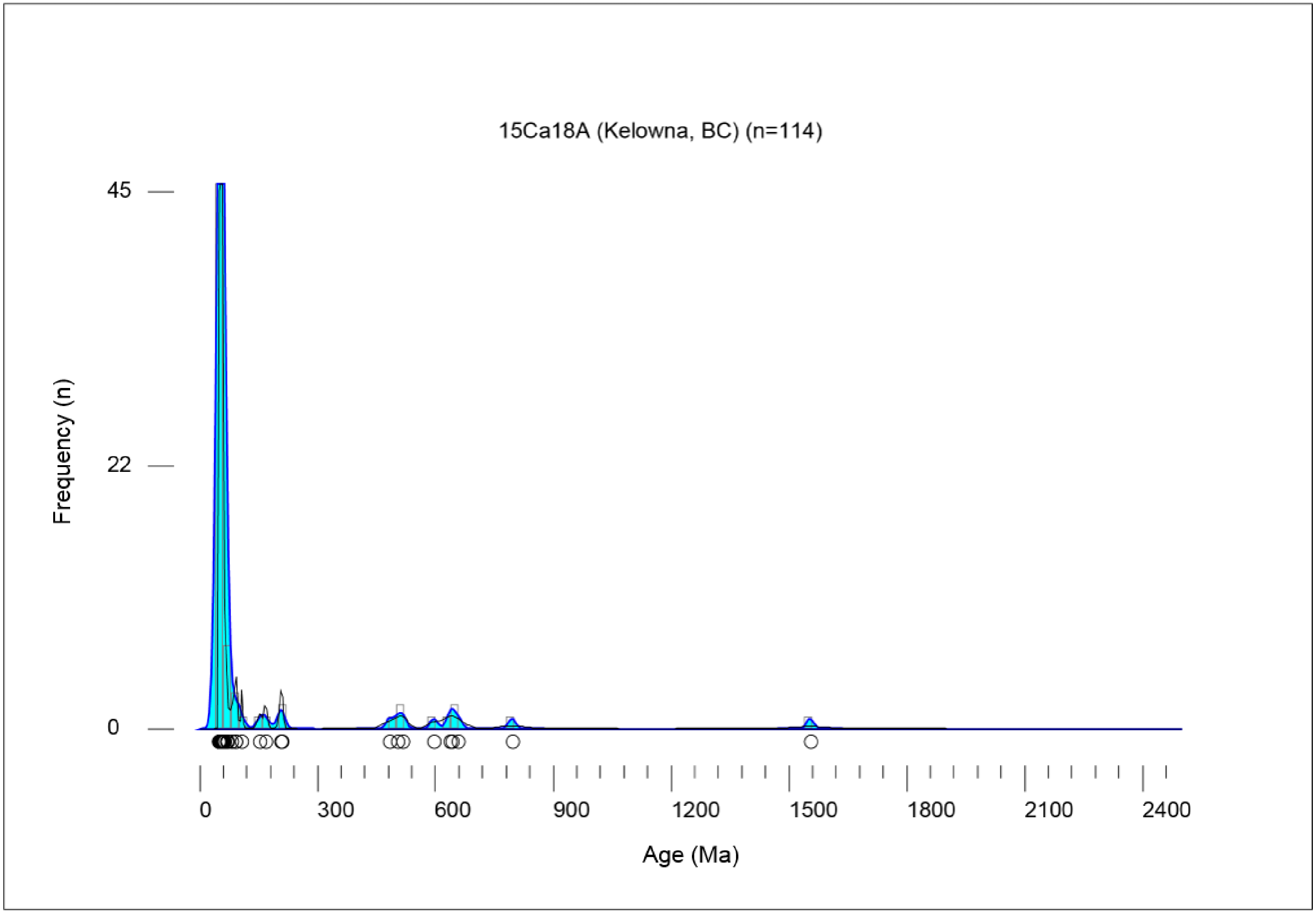

CAN-BC-1023H (Kelowna, BC) (n=104)
Frequency (n)
0
20
40
60
Age (Ma)
0
50
100
150
200
250
300
350
400
450
500

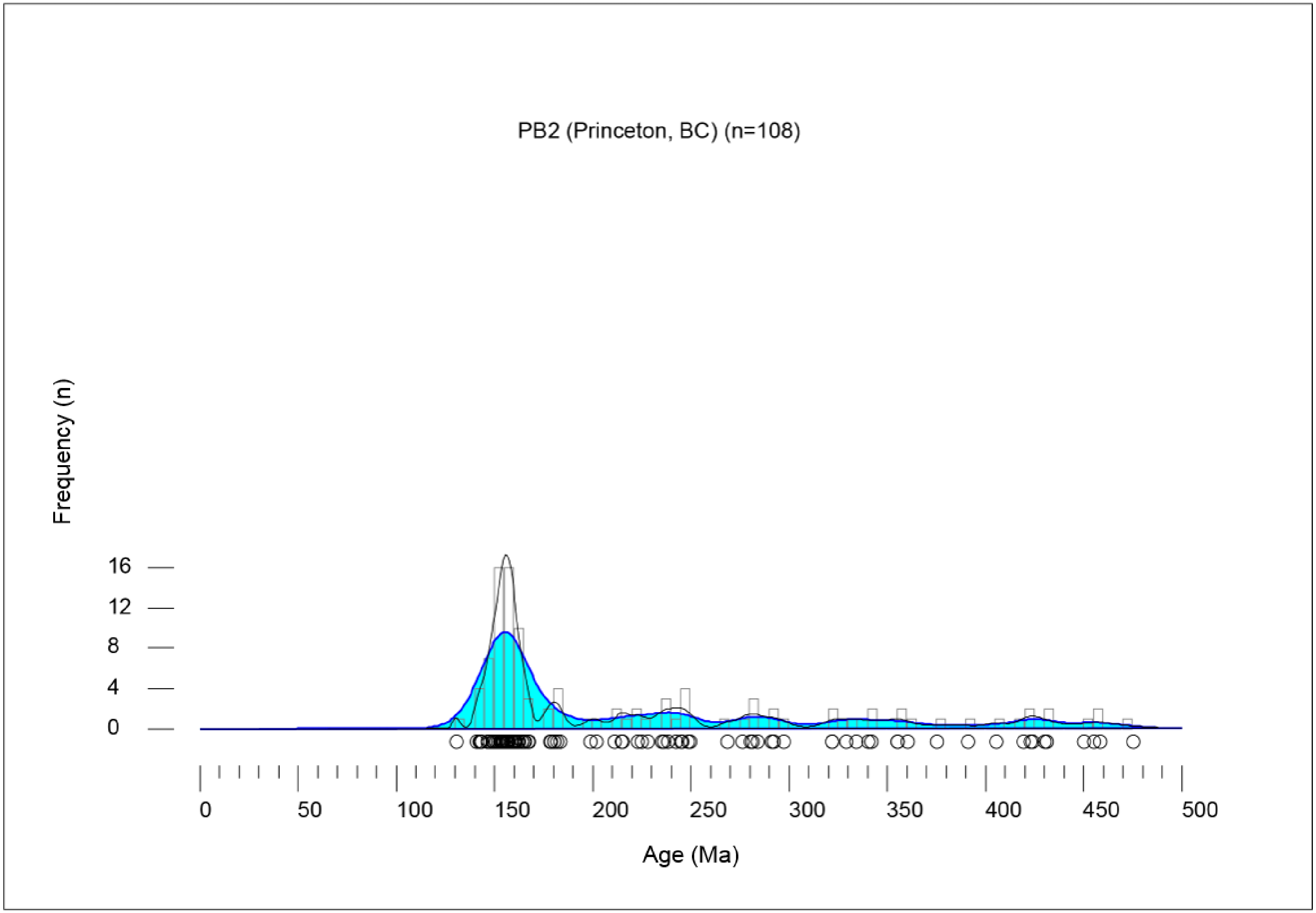

CAN-BC-1023H (Kelowna, BC) (n=105)
Frequency (n)
47
23
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

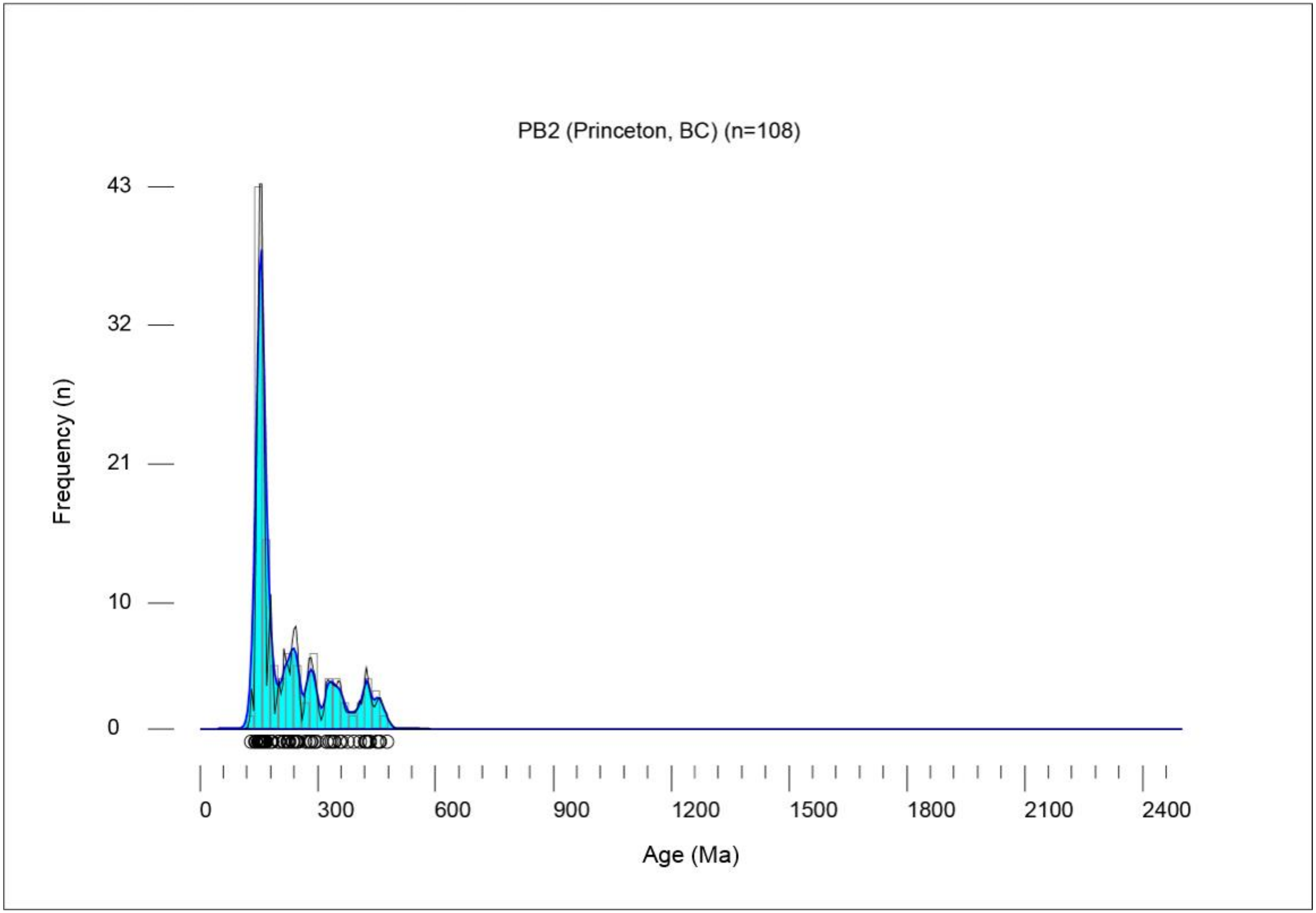

SAWMILL1 (Kelowna, BC) (n=100)
Frequency (n)
0
10
20
30
40
Age (Ma)
0
50
100
150
200
250
300
350
400
450
500

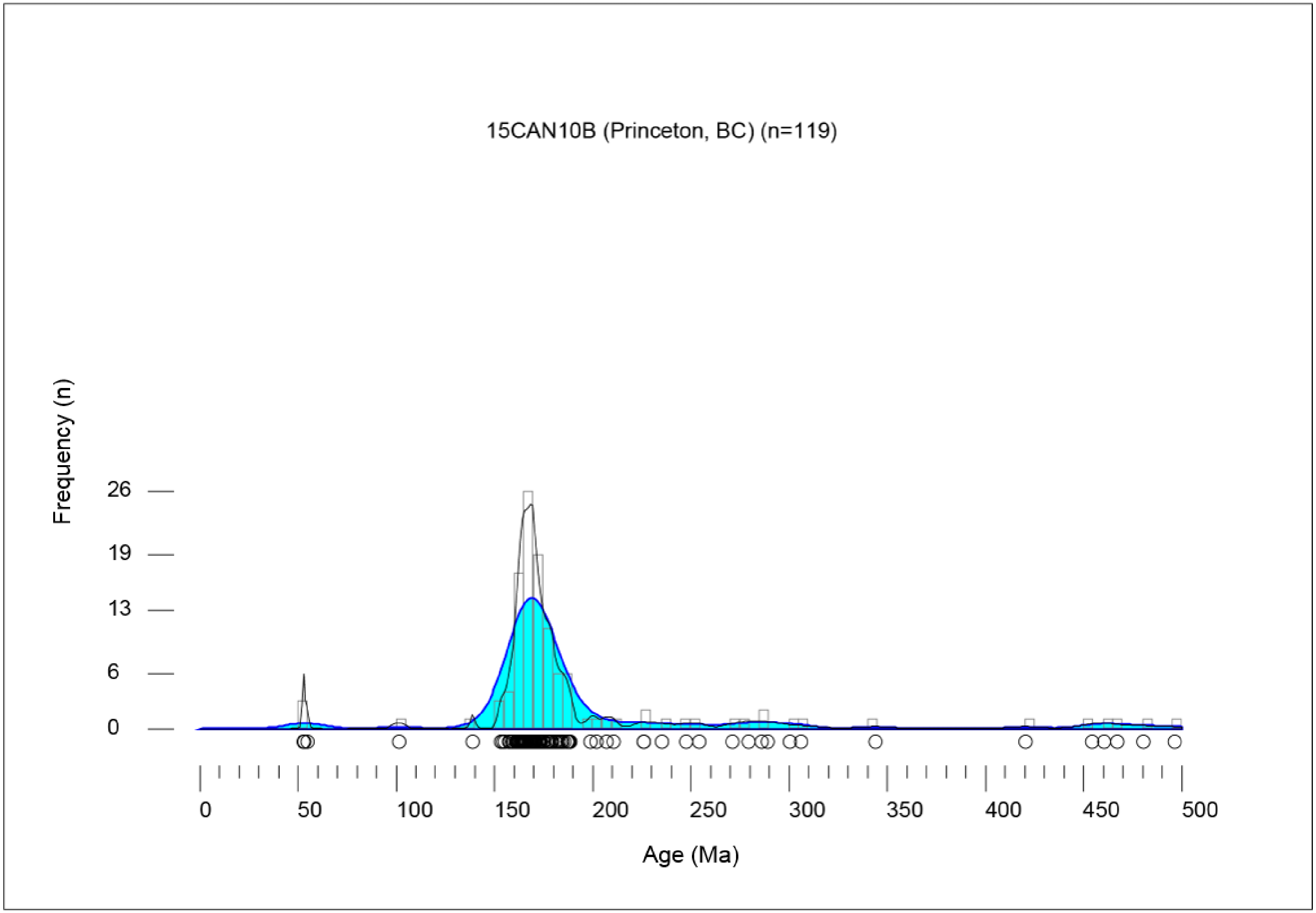

SAWMILL1 (Kelowna, BC) (n=100)
Frequency (n)
36
18
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

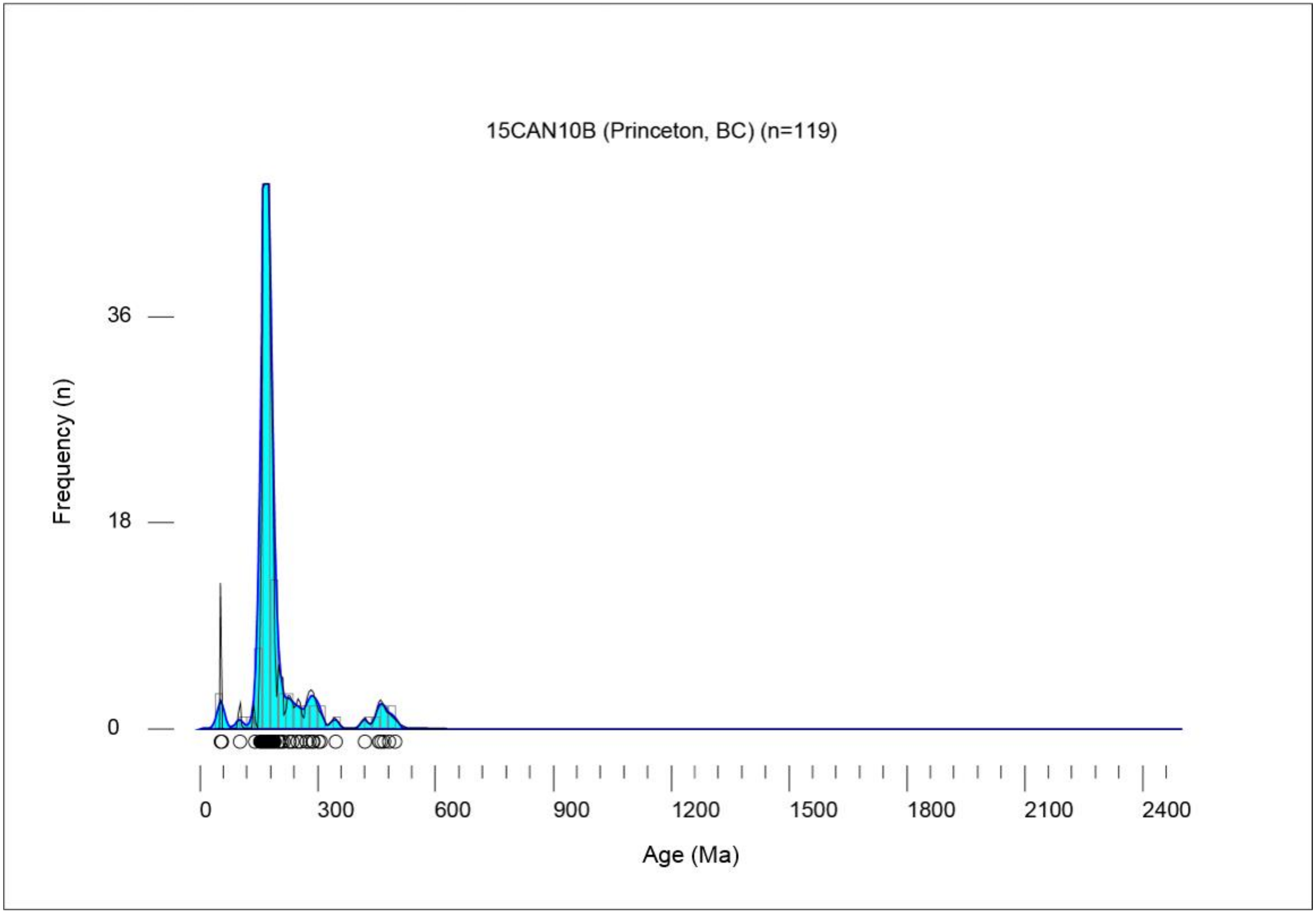

15Ca18A (Kelowna, BC) (n=106)
54
36
18
0
Frequency (n)
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

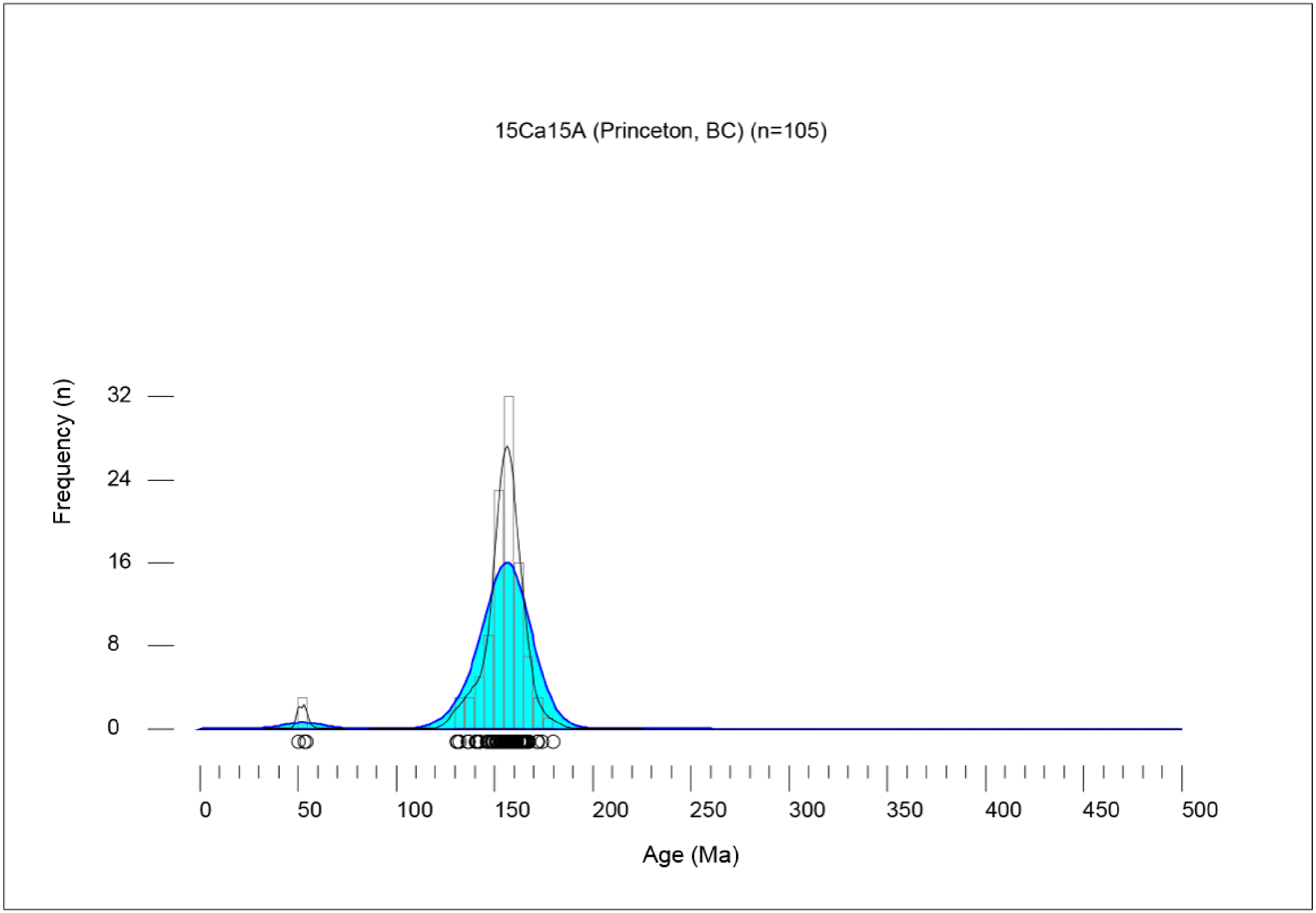

15Ca18A (Kelowna, BC) (n=114)
Frequency (n)
45
22
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

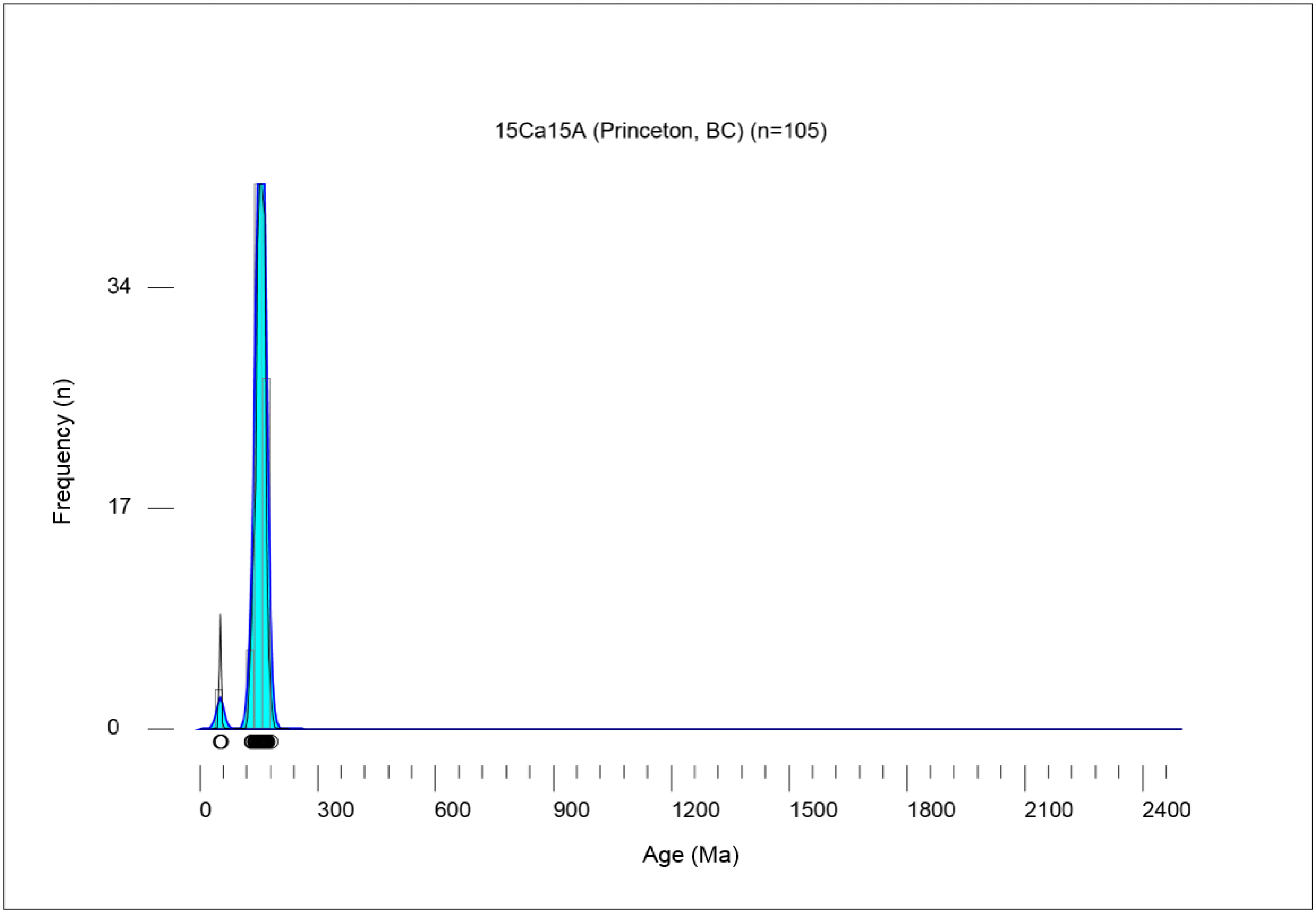

PB2 (Princeton, BC) (n=108)
Frequency (n)
16
12
8
4
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

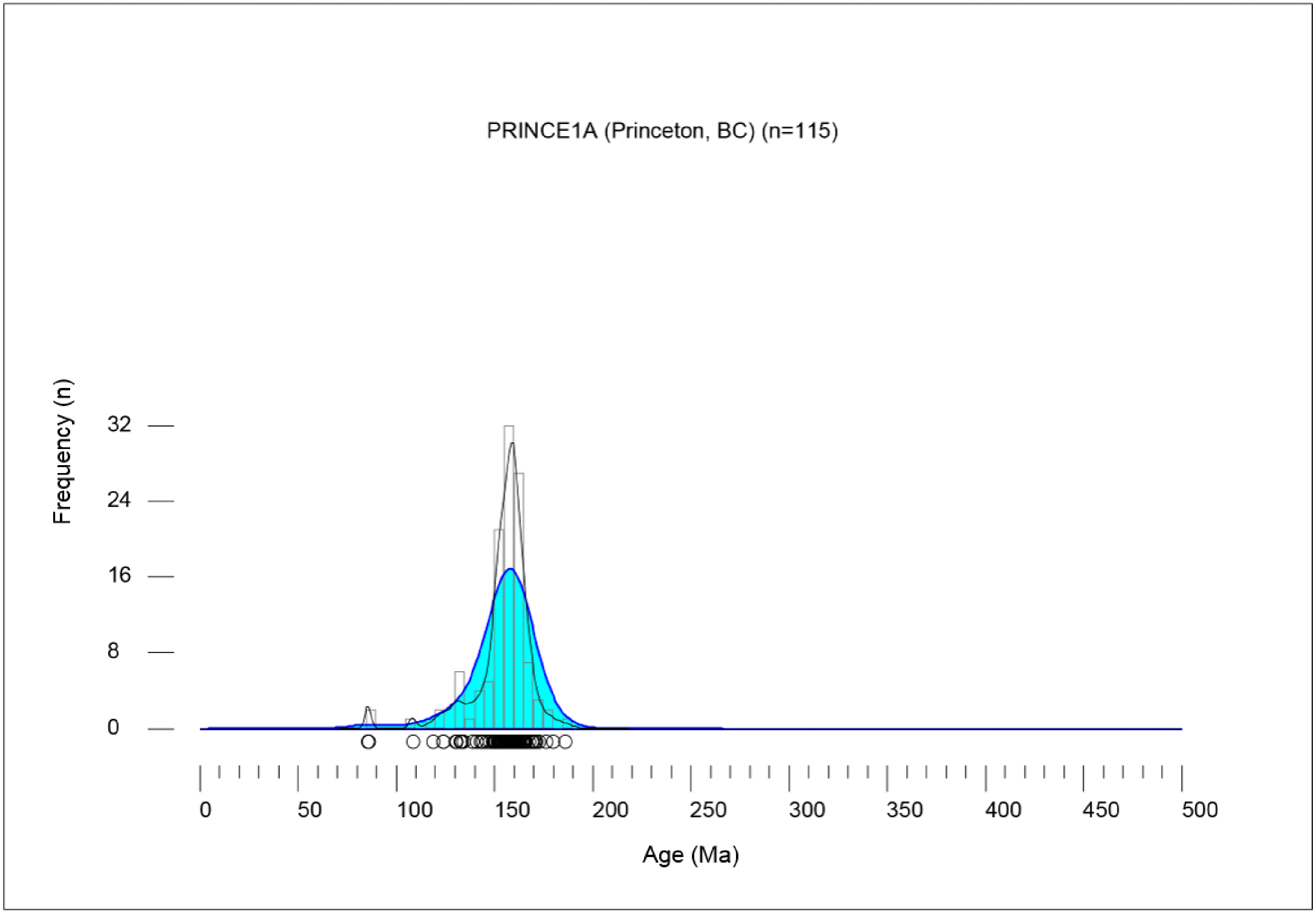

PB2 (Princeton, BC) (n=108)
Frequency (n)
43
32
21
10
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

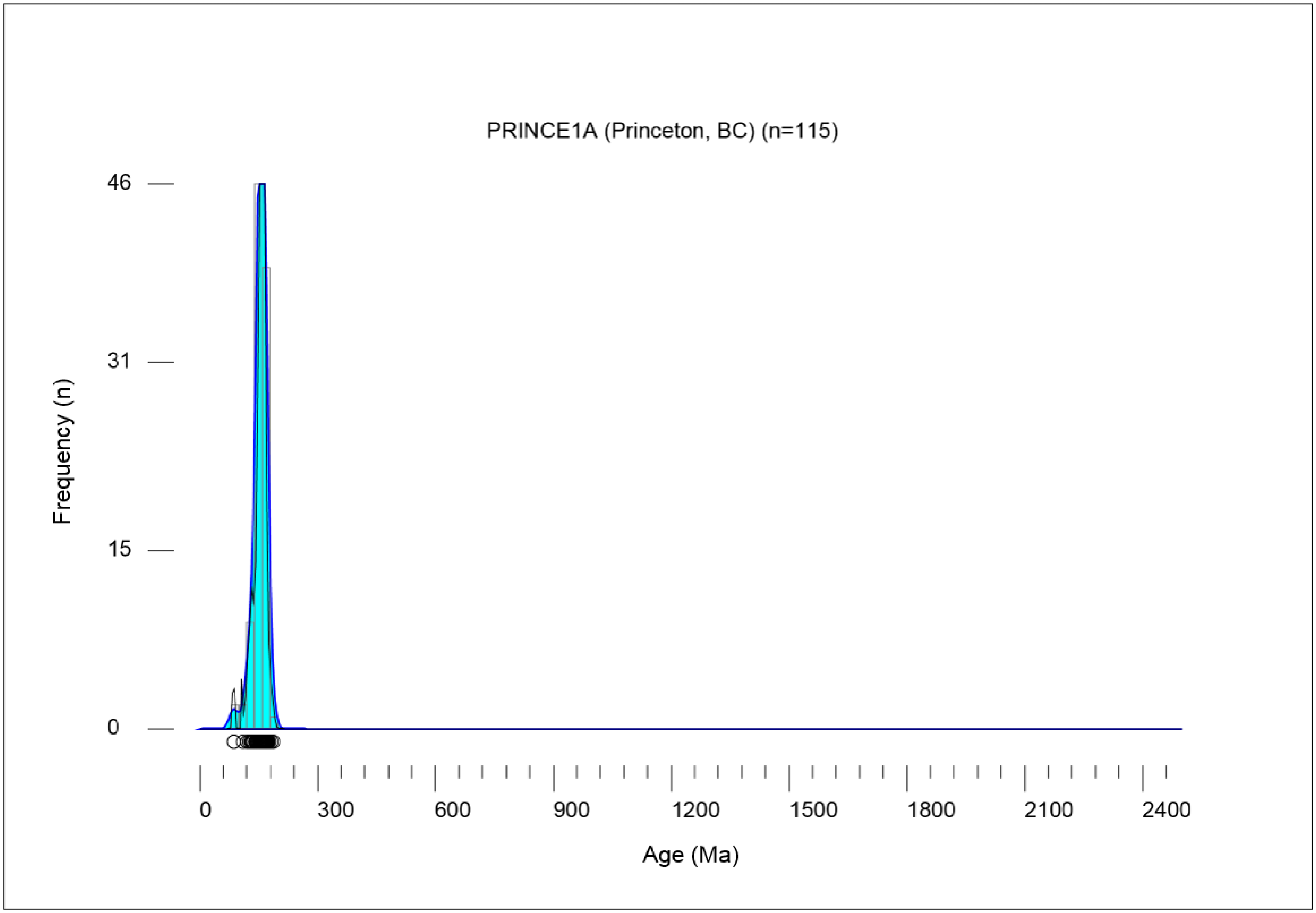

15CAN10B (Princeton, BC) (n=119)
Frequency (n)
26
19
13
6
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

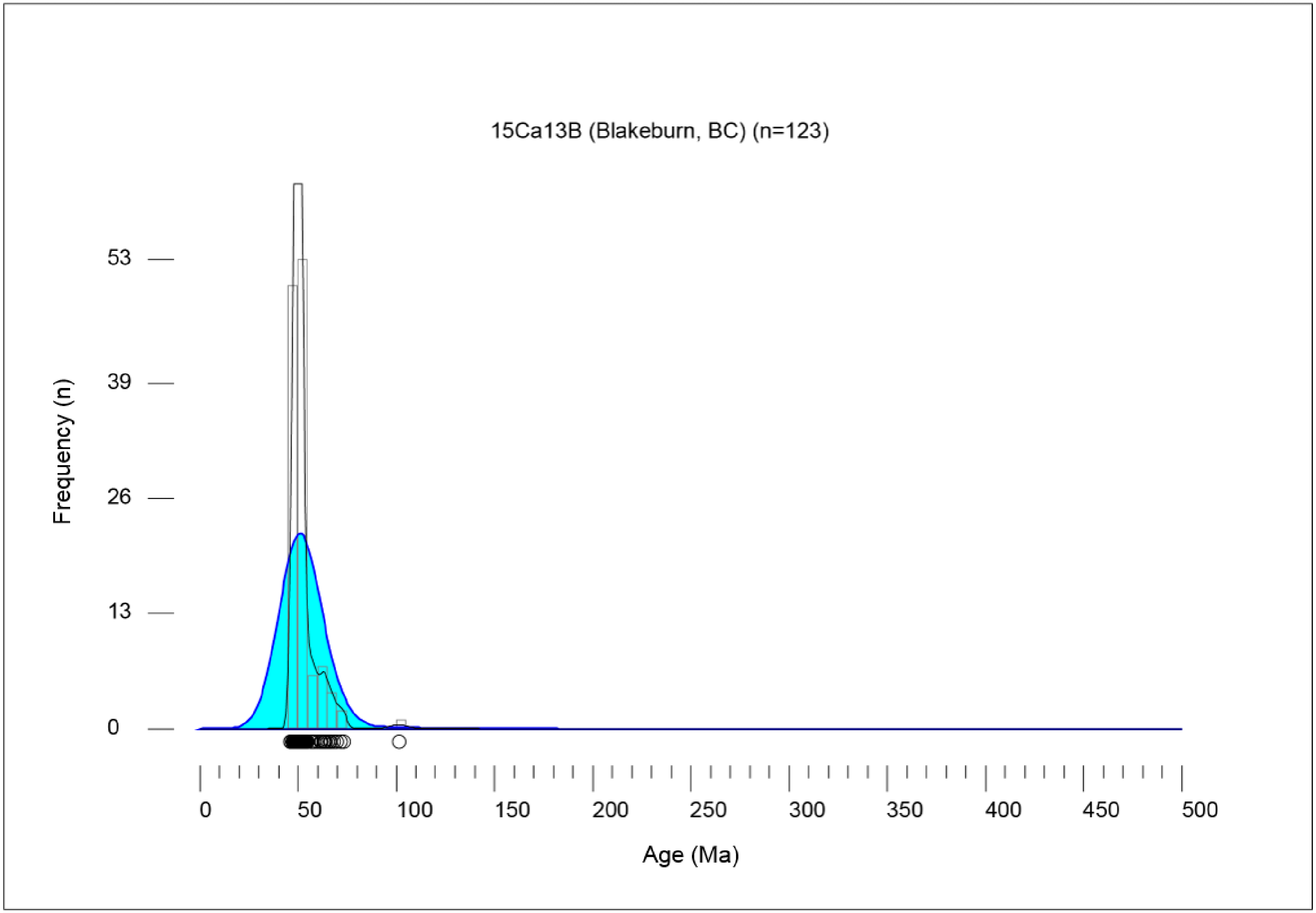

15CAN10B (Princeton, BC) (n=119)
Frequency (n)
36
18
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

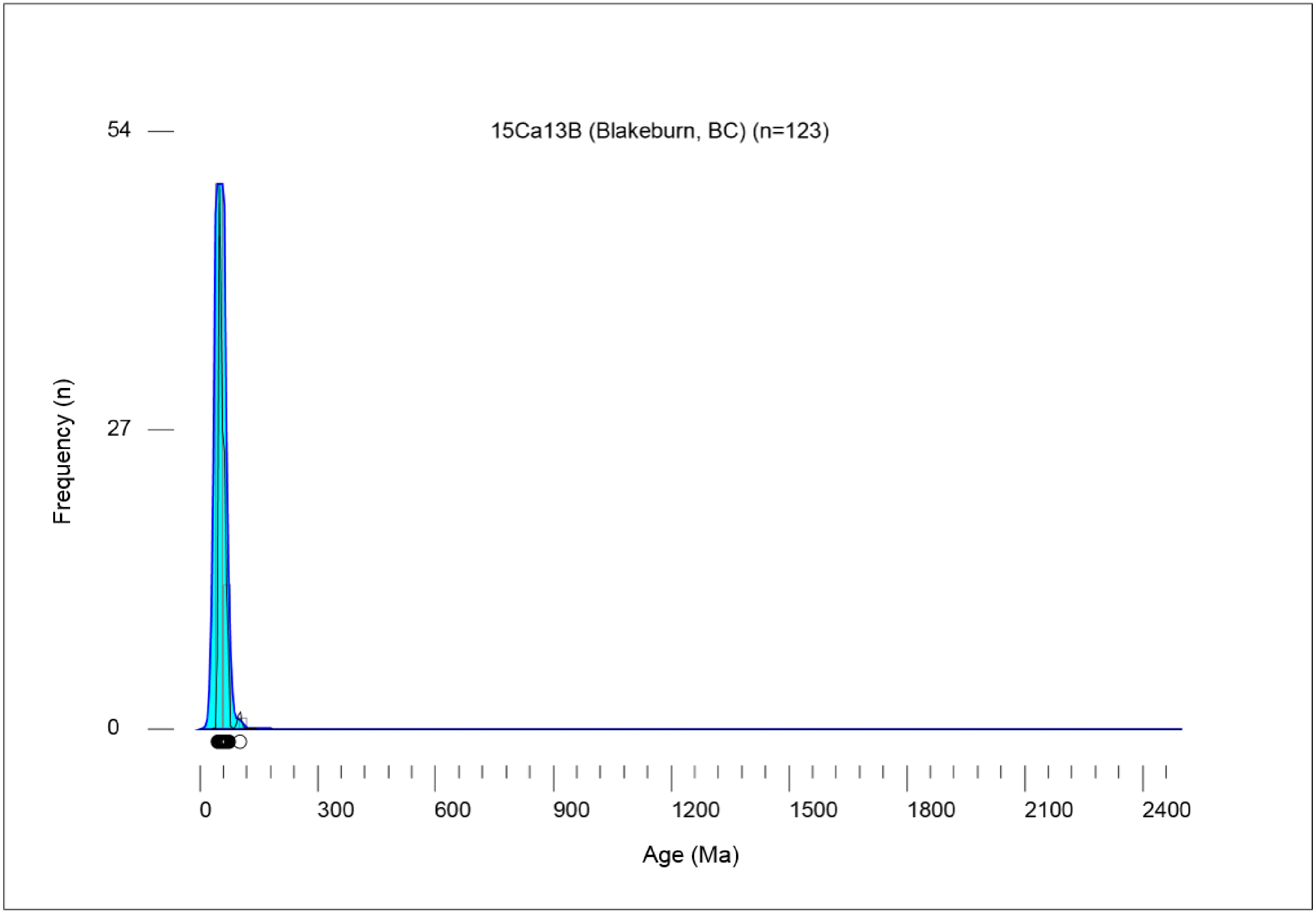

15Ca15A (Princeton, BC) (n=105)
Frequency (n)
32
24
16
8
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

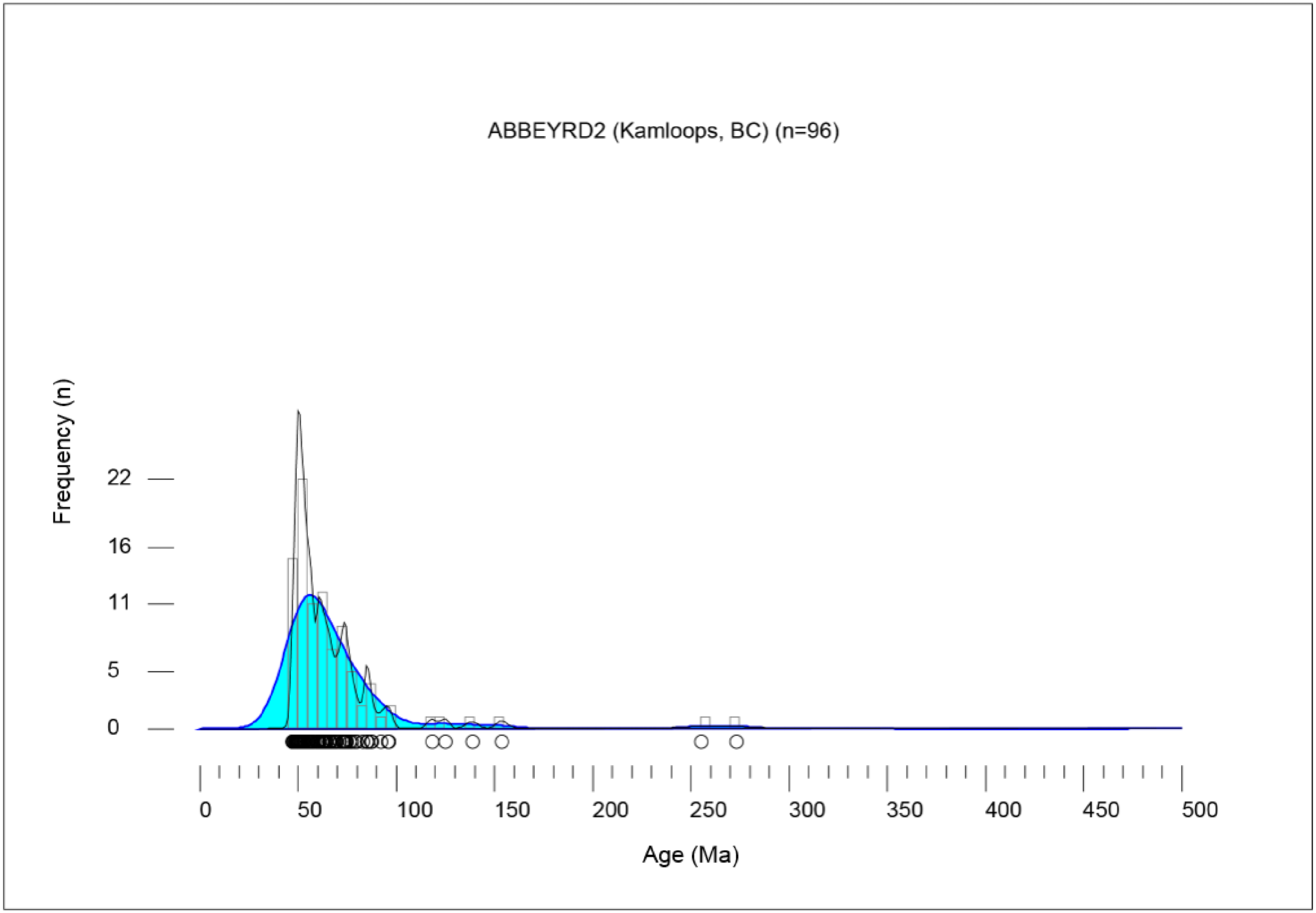

15Ca15A (Princeton, BC) (n=105)
Frequency (n)
34
17
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

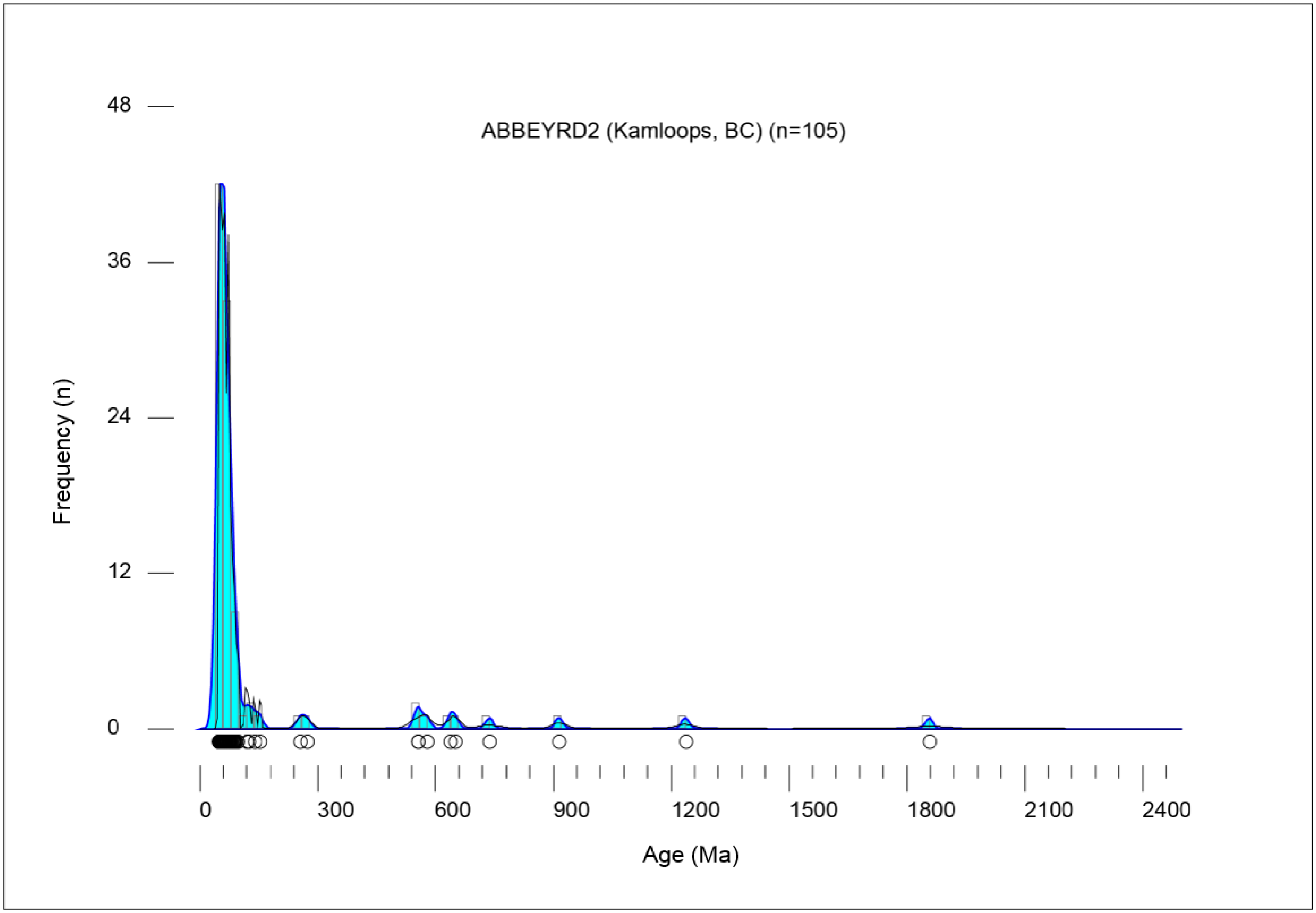

PRINCE1A (Princeton, BC) (n=115)
Frequency (n)
32
24
16
8
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

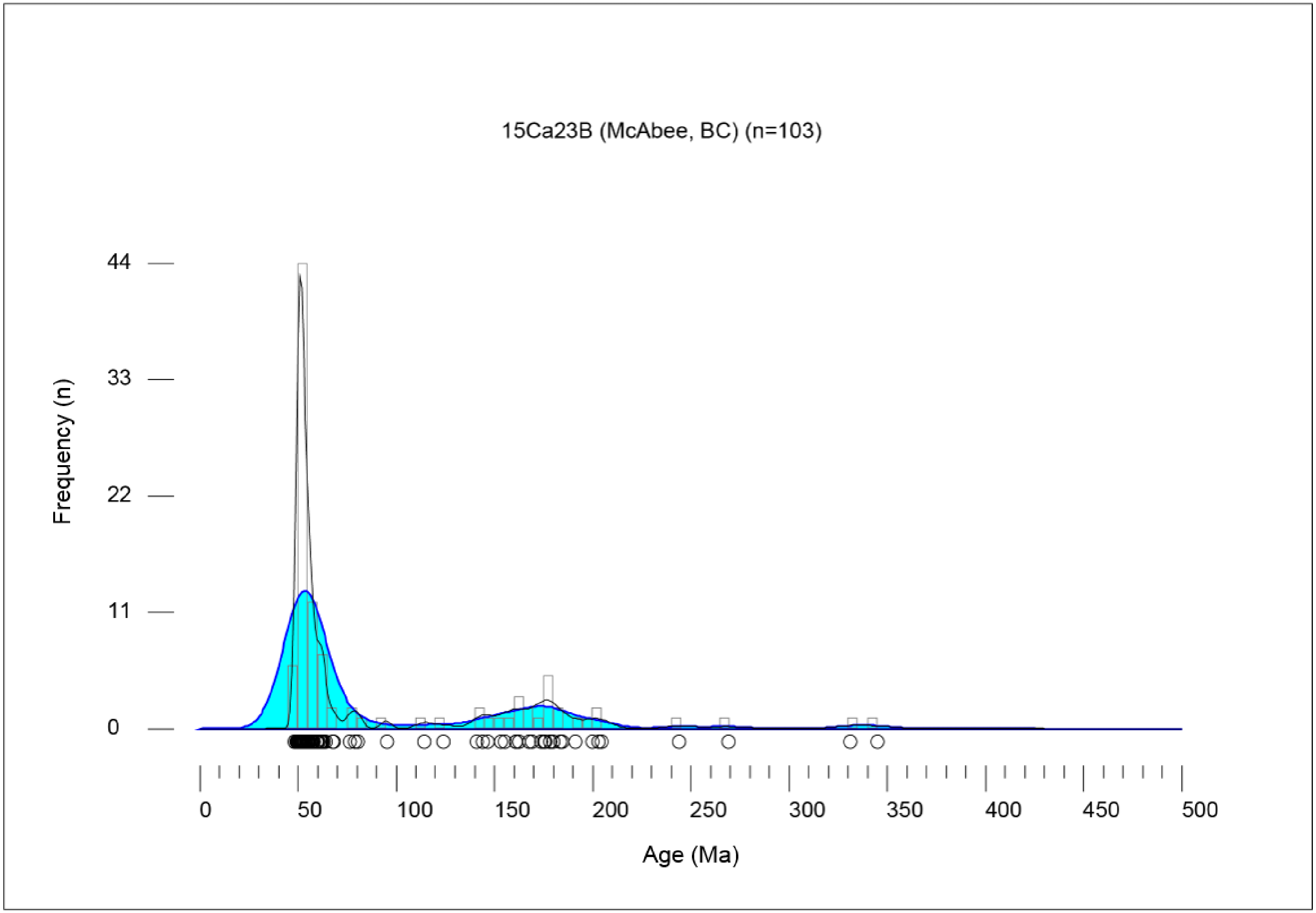

PRINCE1A (Princeton, BC) (n=115)
Frequency (n)
46
31
15
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

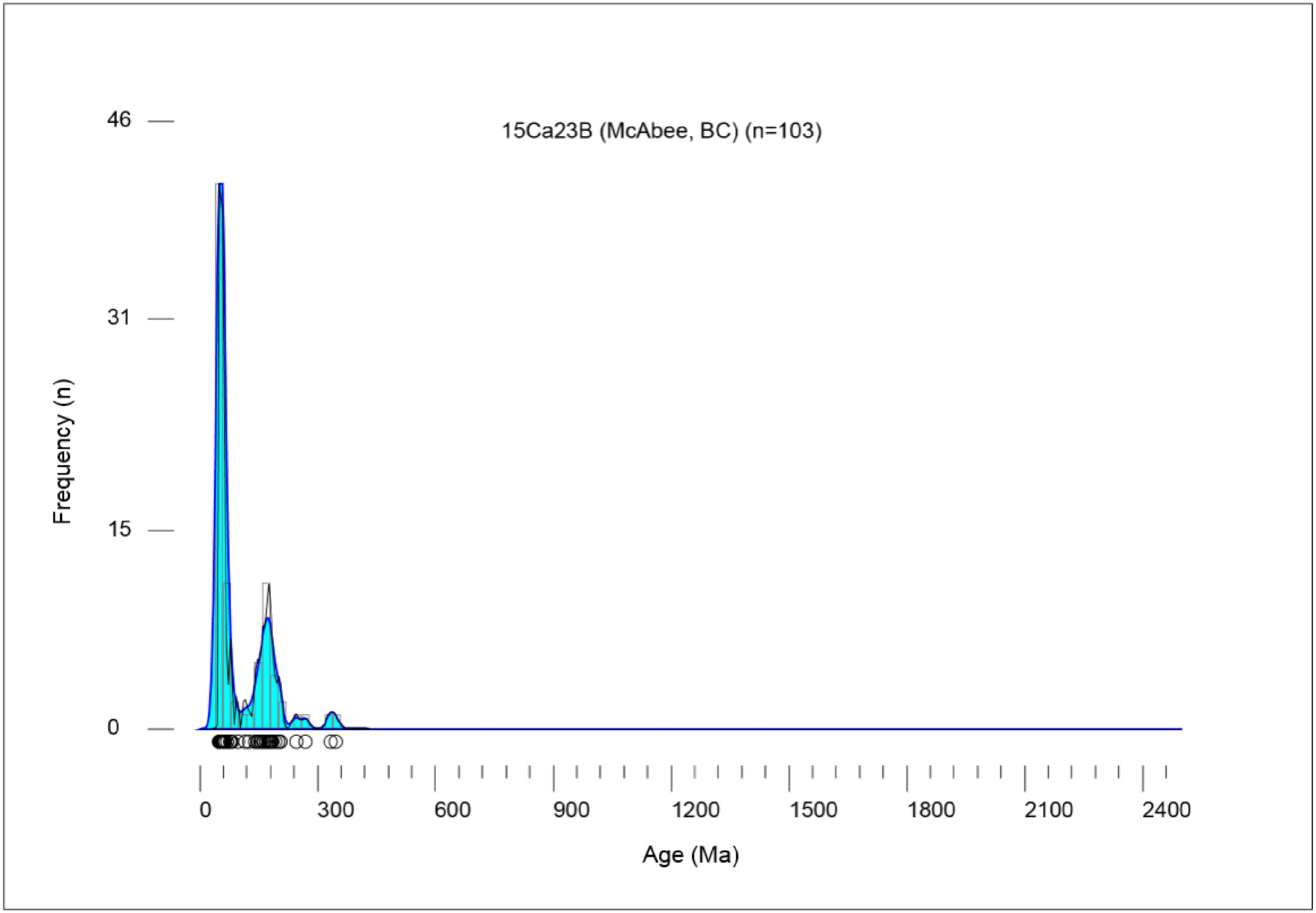

15Ca13B (Blakeburn, BC) (n=123)
Frequency (n)
53
39
26
13
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

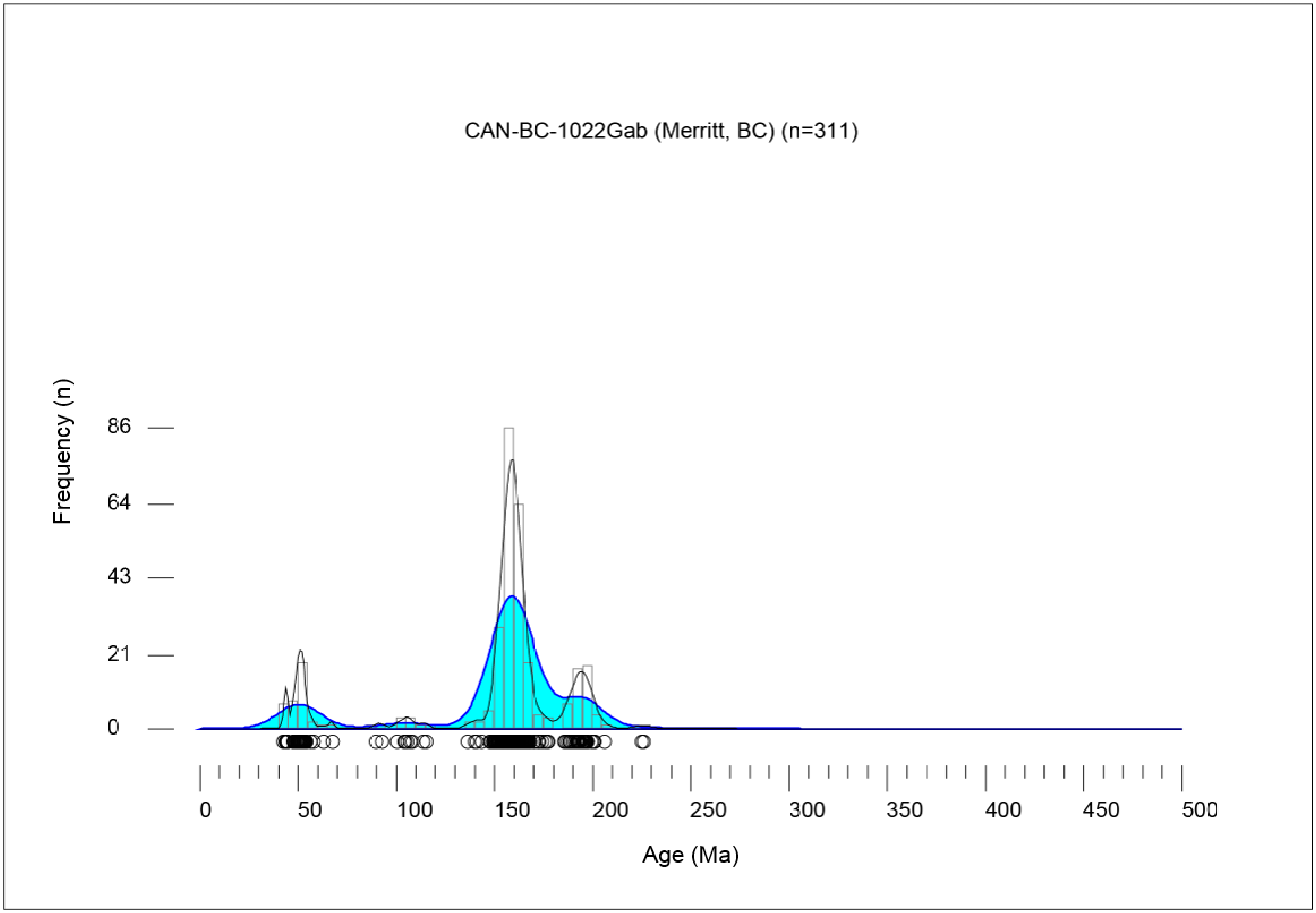

15Ca13B (Blakeburn, BC) (n=123)
54
27
0
Frequency (n)
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)


ABBEYRD2 (Kamloops, BC) (n=96)
Frequency (n)
22
16
11
5
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

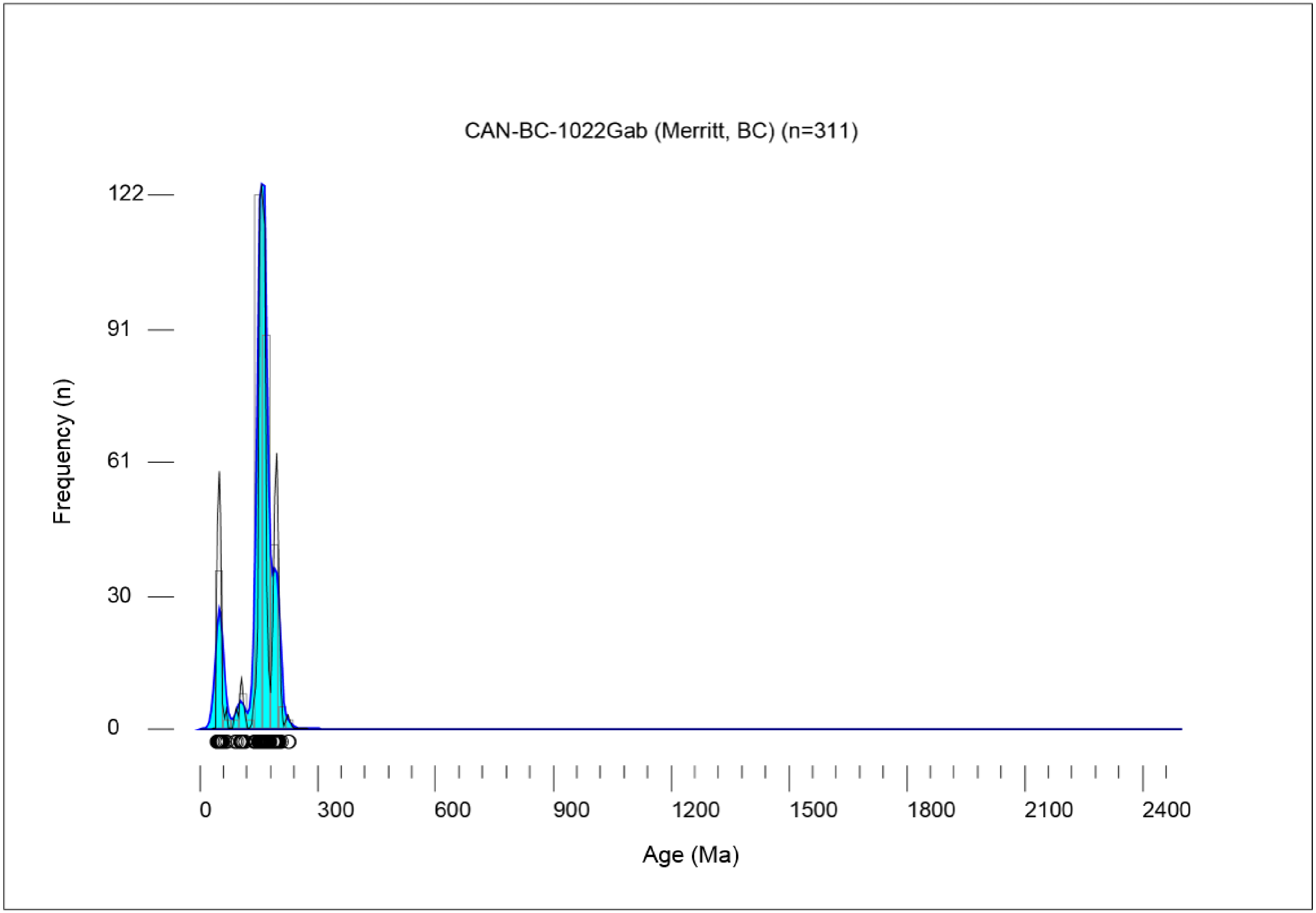

ABBEYRD2 (Kamloops, BC) (n=105)
Frequency (n)
48
36
24
12
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

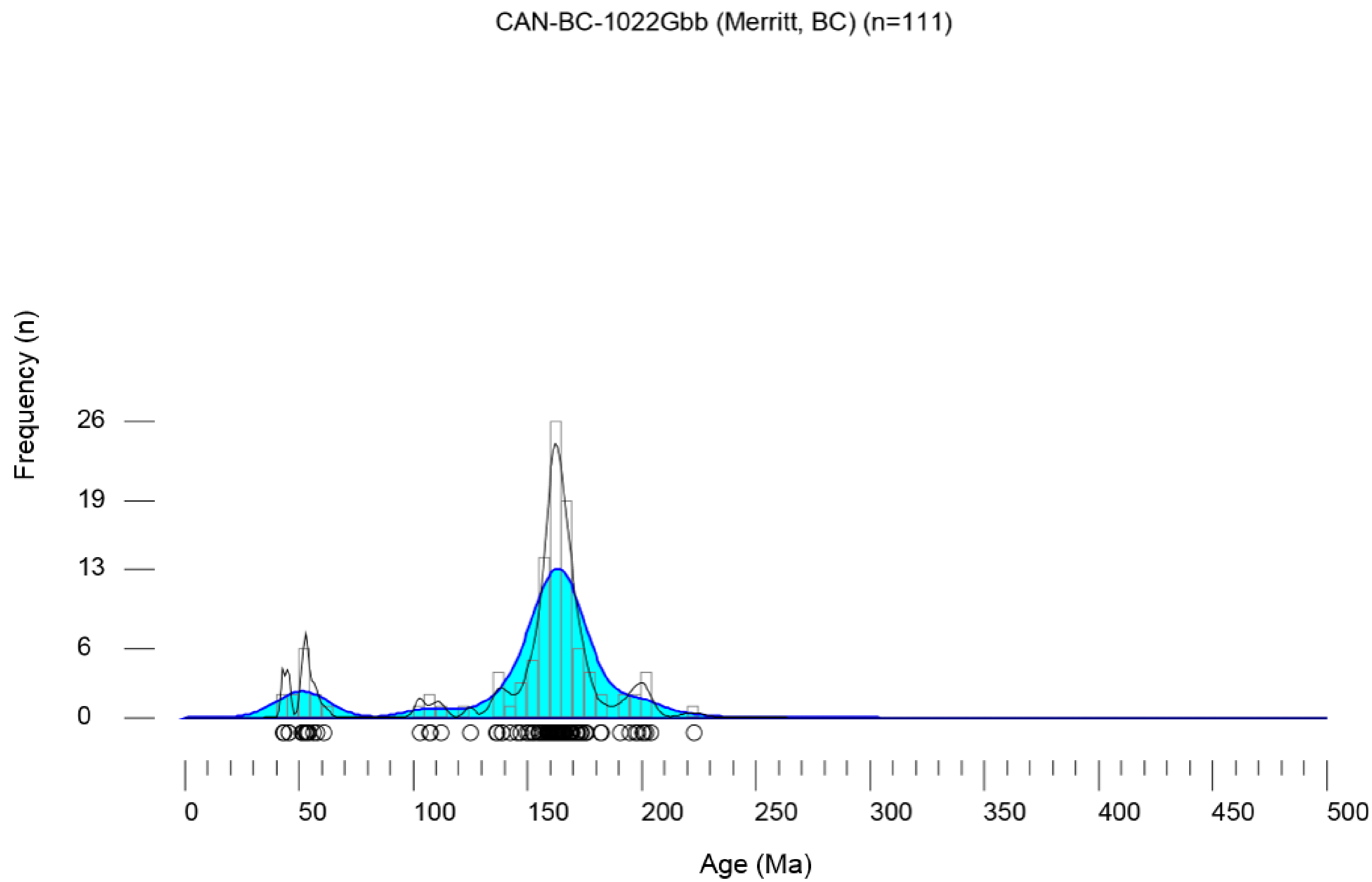

15Ca23B (McAbee, BC) (n=103)
Frequency (n)
0
11
22
33
44
Age (Ma)
0
50
100
150
200
250
300
350
400
450
500

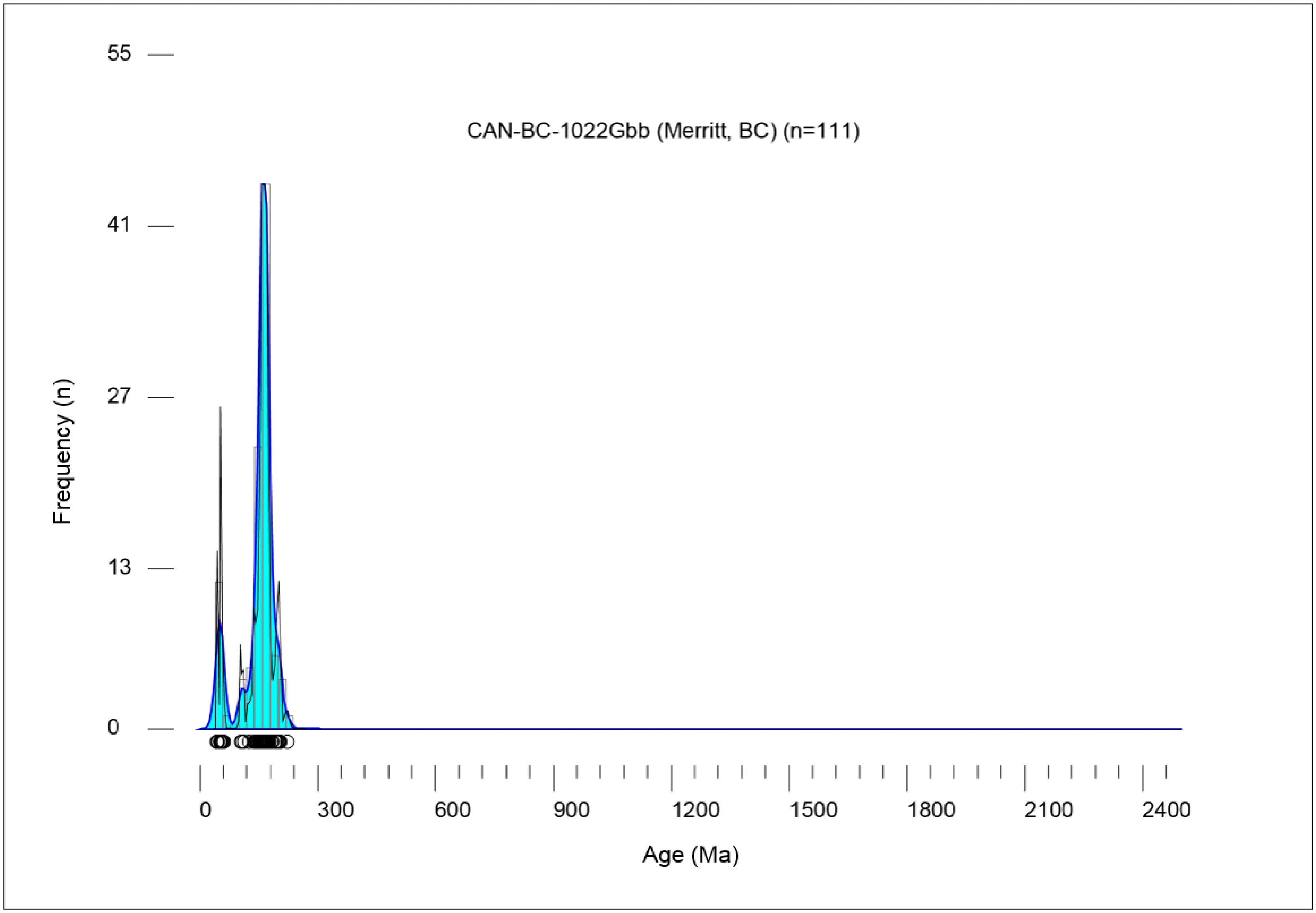

15Ca23B (McAbee, BC) (n=103)
Frequency (n)
46
31
15
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)



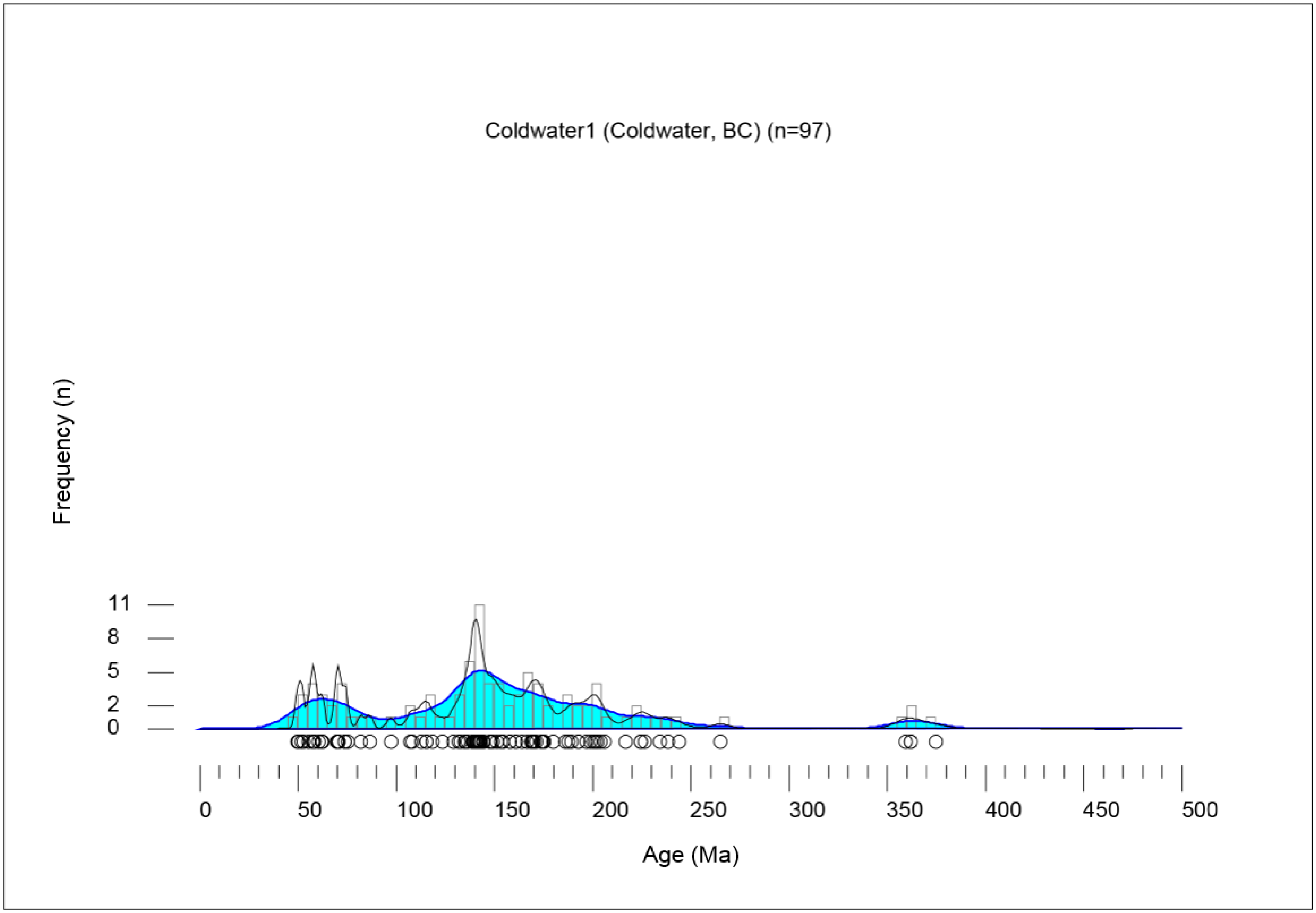
CAN-BC-1022Gab (Merritt, BC) (n=311)
Frequency (n)
86
64
43
21
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

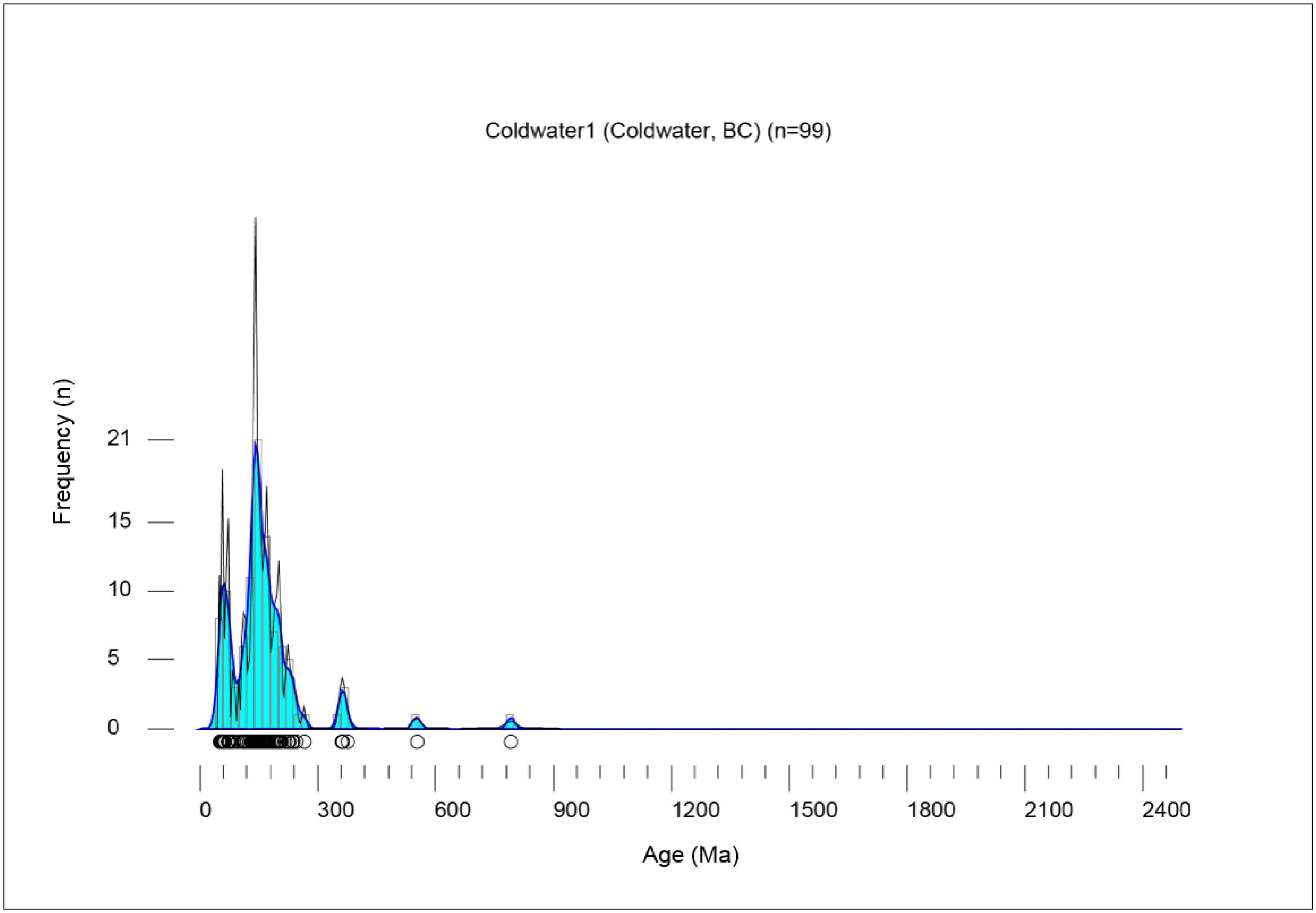

CAN-BC-1022Gab (Merritt, BC) (n=311)
Frequency (n)
122
91
61
30
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)


CAN-BC-1022Gbb (Merritt, BC) (n=111)
Frequency (n)
26
19
13
6
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)



CAN-BC-1022Gbb (Merritt, BC) (n=111)
Frequency (n)
55
41
27
13
0
Age (Ma)
0
300
600
900
1200
1500
1800
2100
2400

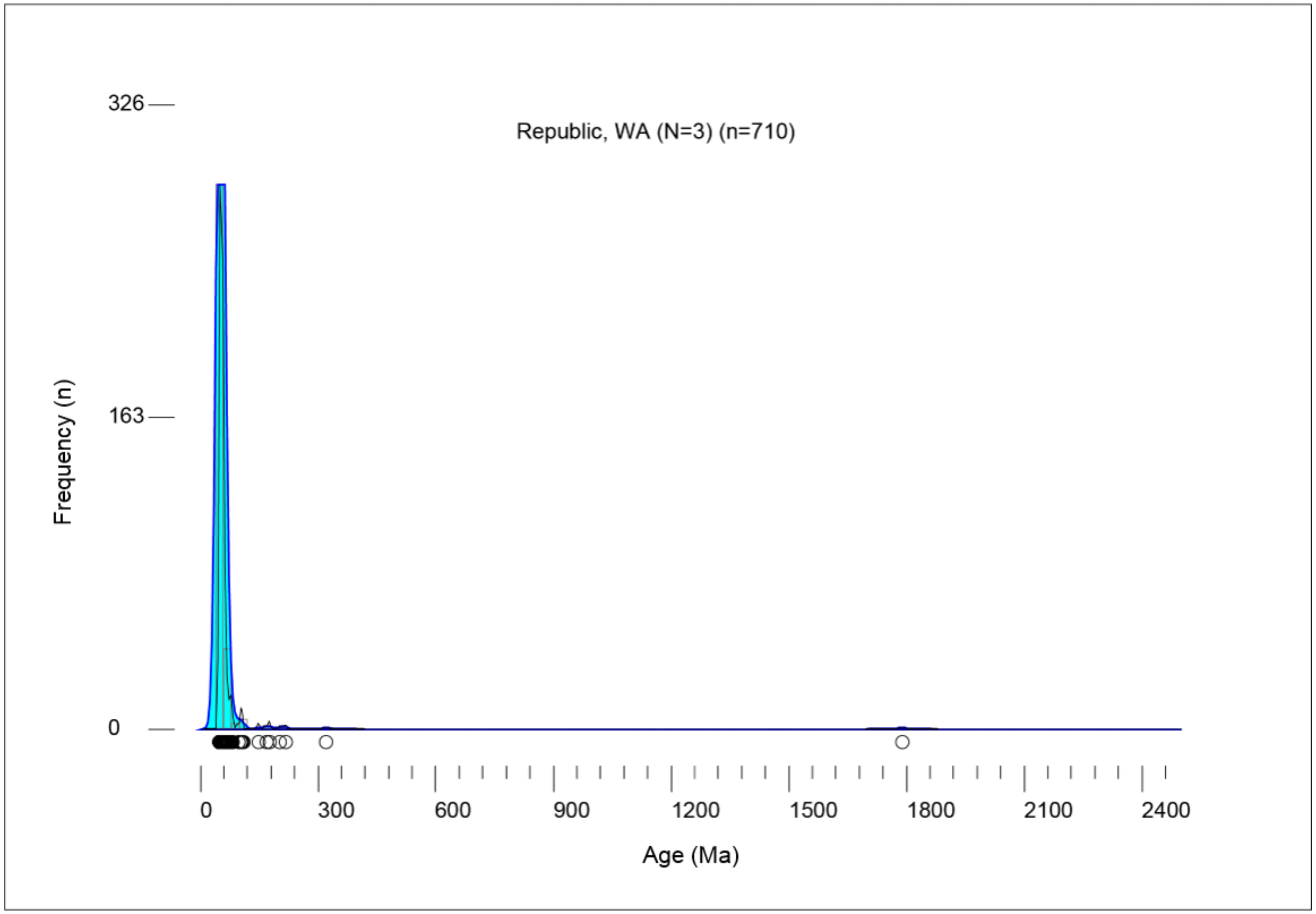

Coldwater1 (Coldwater, BC) (n=97)
Frequency (n)
11
8
5
2
0
0
50
100
150
200
250
300
350
400
450
500
Age (Ma)

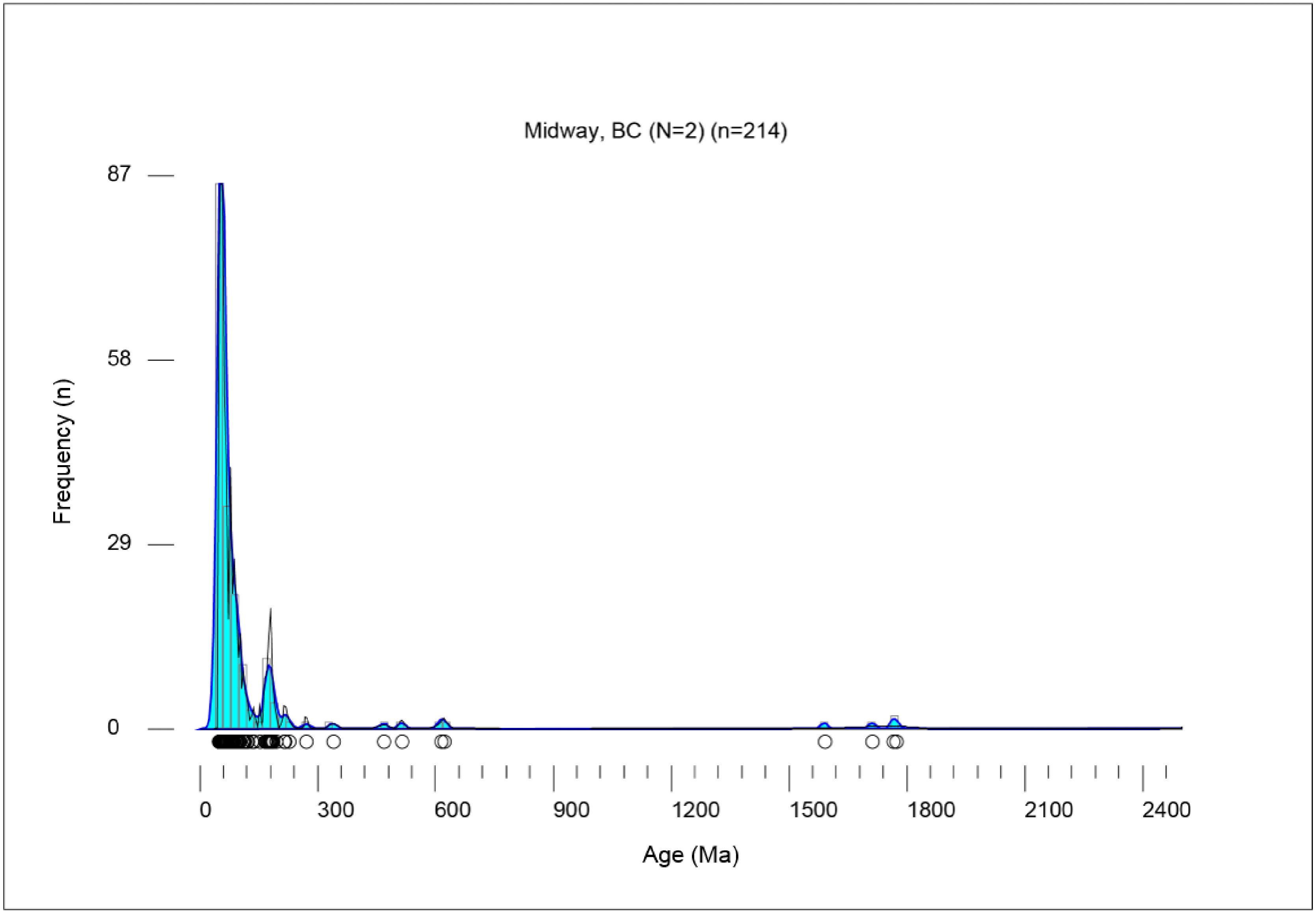

Coldwater1 (Coldwater, BC) (n=99)
Frequency (n)
21
15
10
5
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

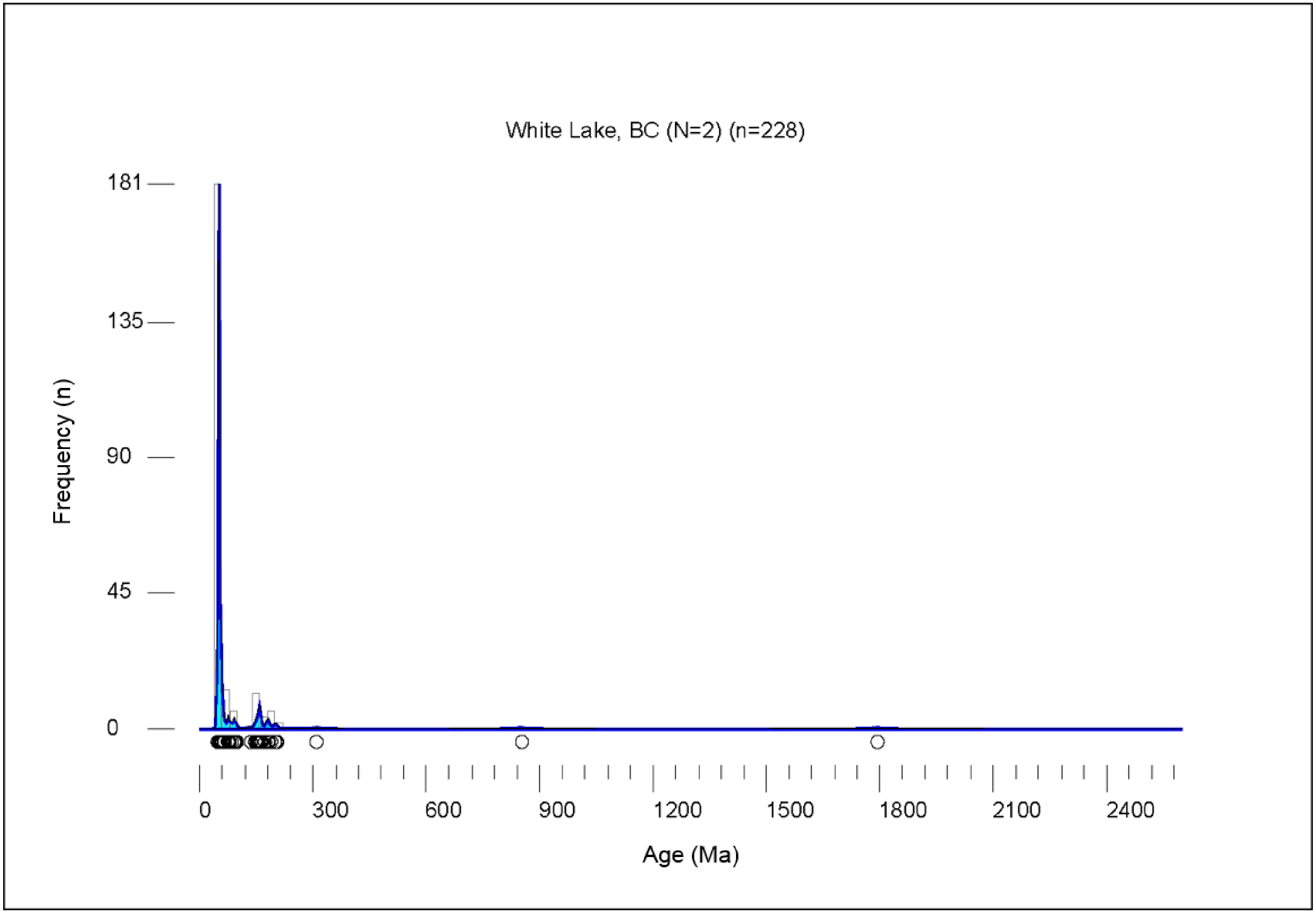
APPENDIX D

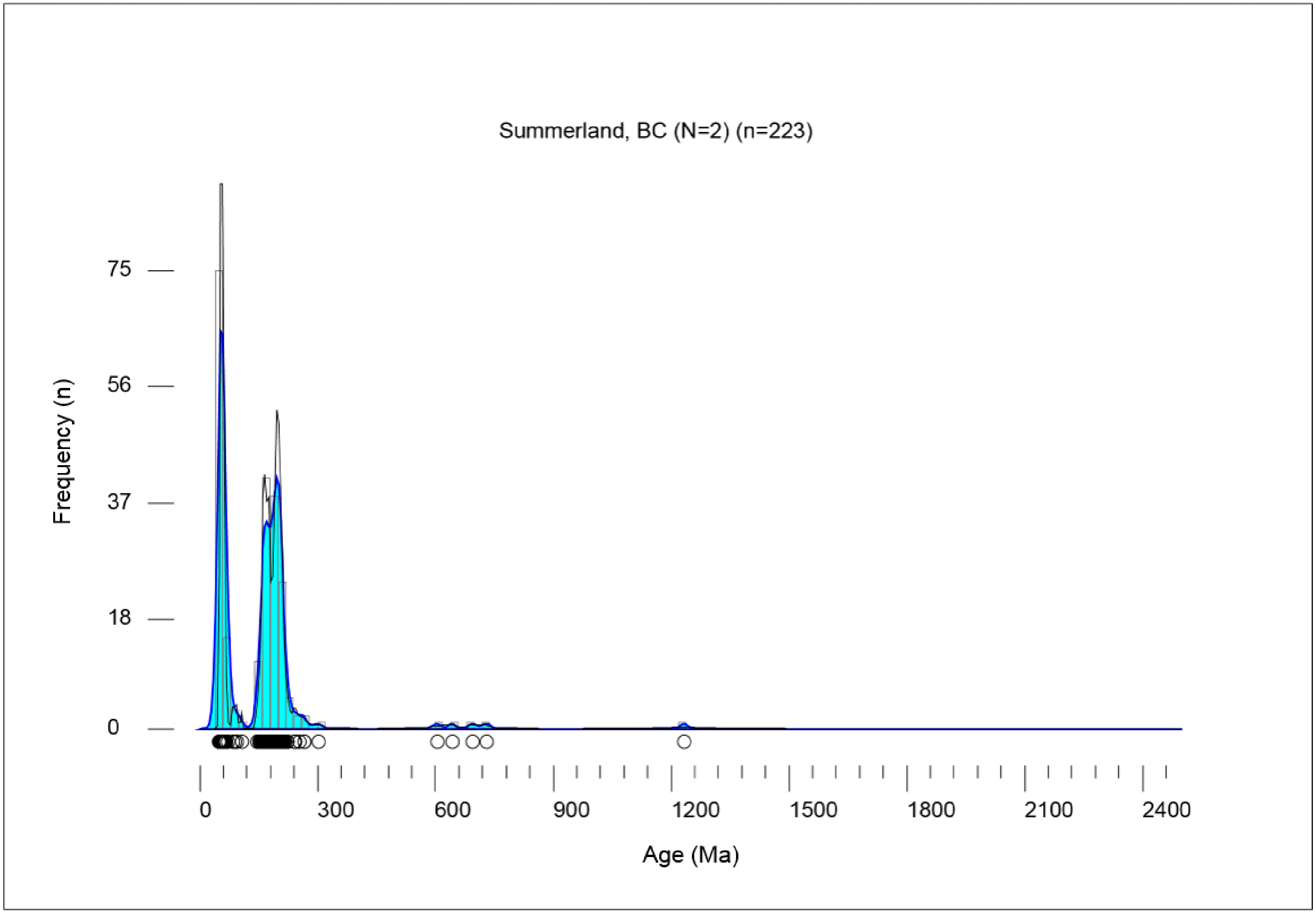
DETRITAL ZIRCON U-PB KDE (BLUE) AND PDP (BLACK) PLOTS

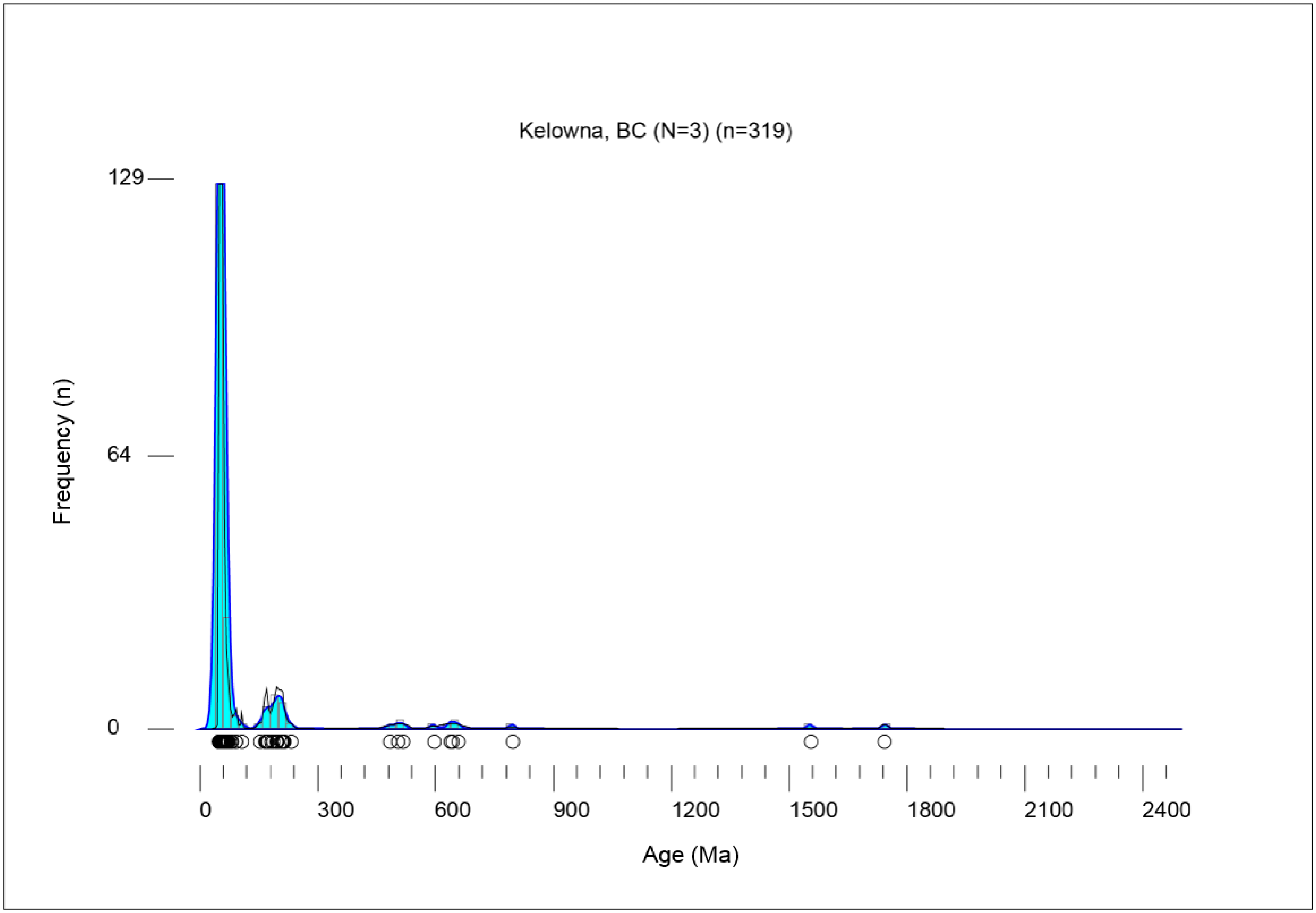
SEPARATED BY LOCATION (0-2,400 MA)

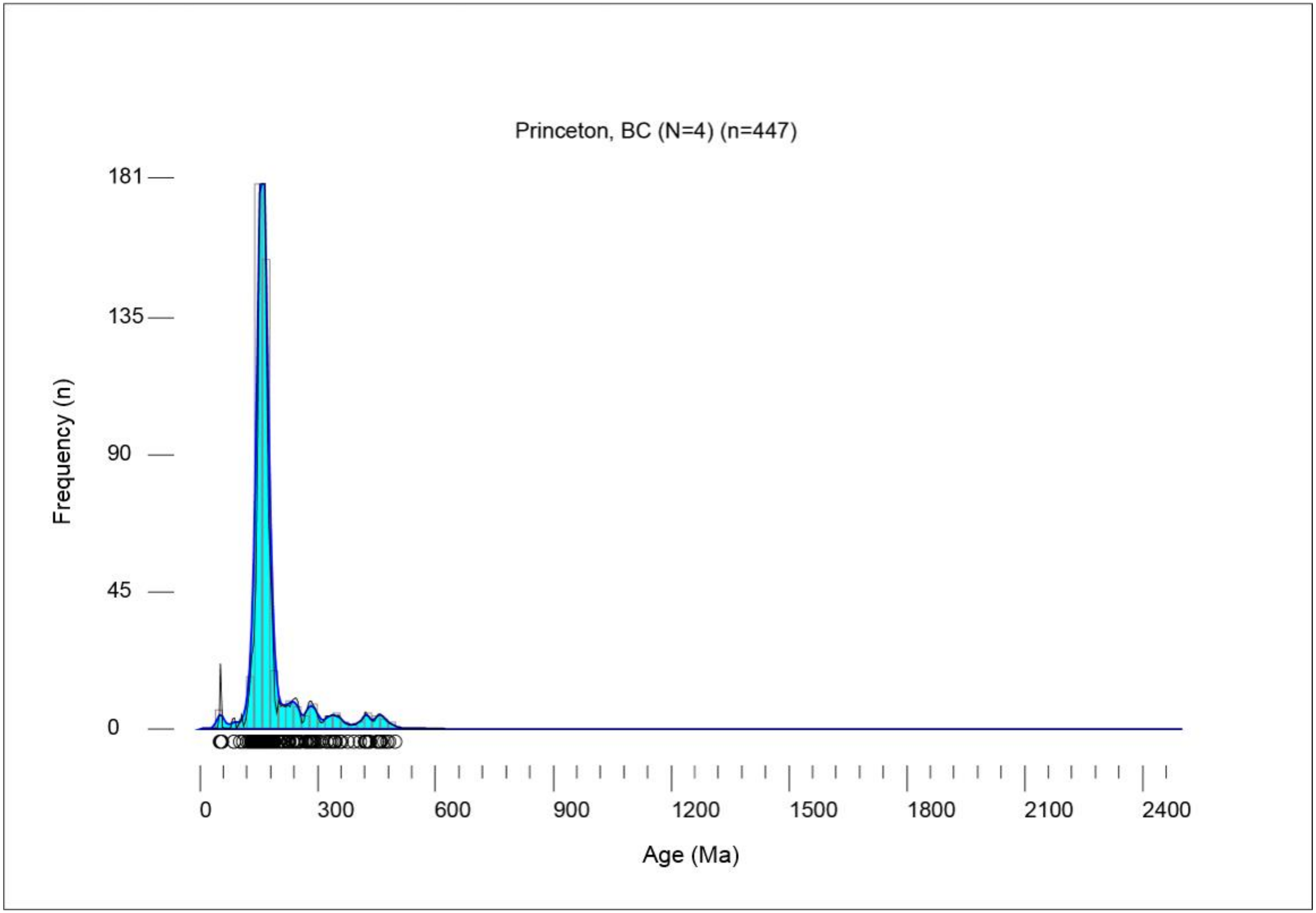


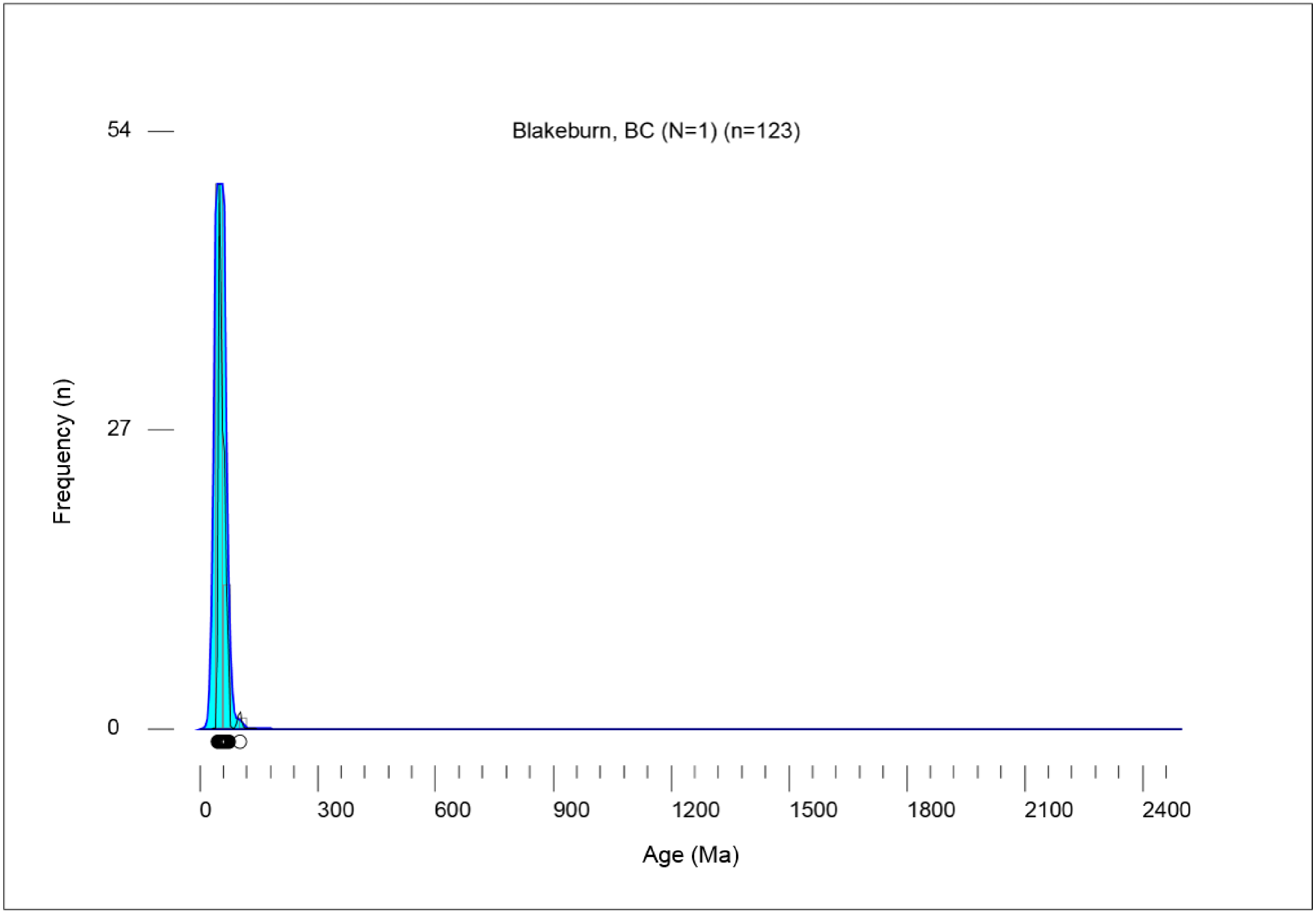

Midway, BC (N=2) (n=214)
Frequency (n)
87
58
29
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

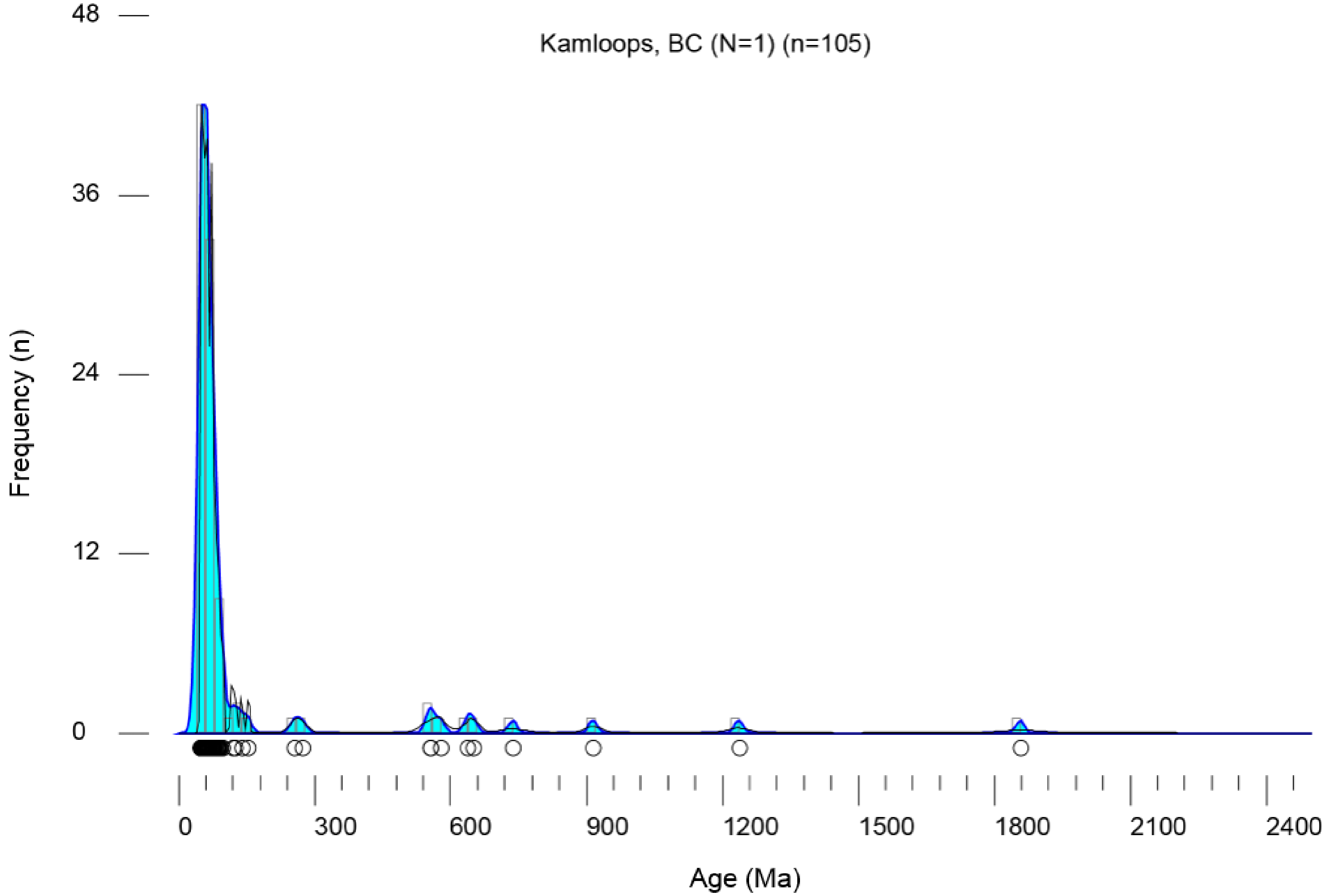

White Lake, BC (N=2) (n=228)
181
135
90
45
0
Frequency (n)
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)


Summerland, BC (N=2) (n=223)
Frequency (n)
0
18
37
56
75
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

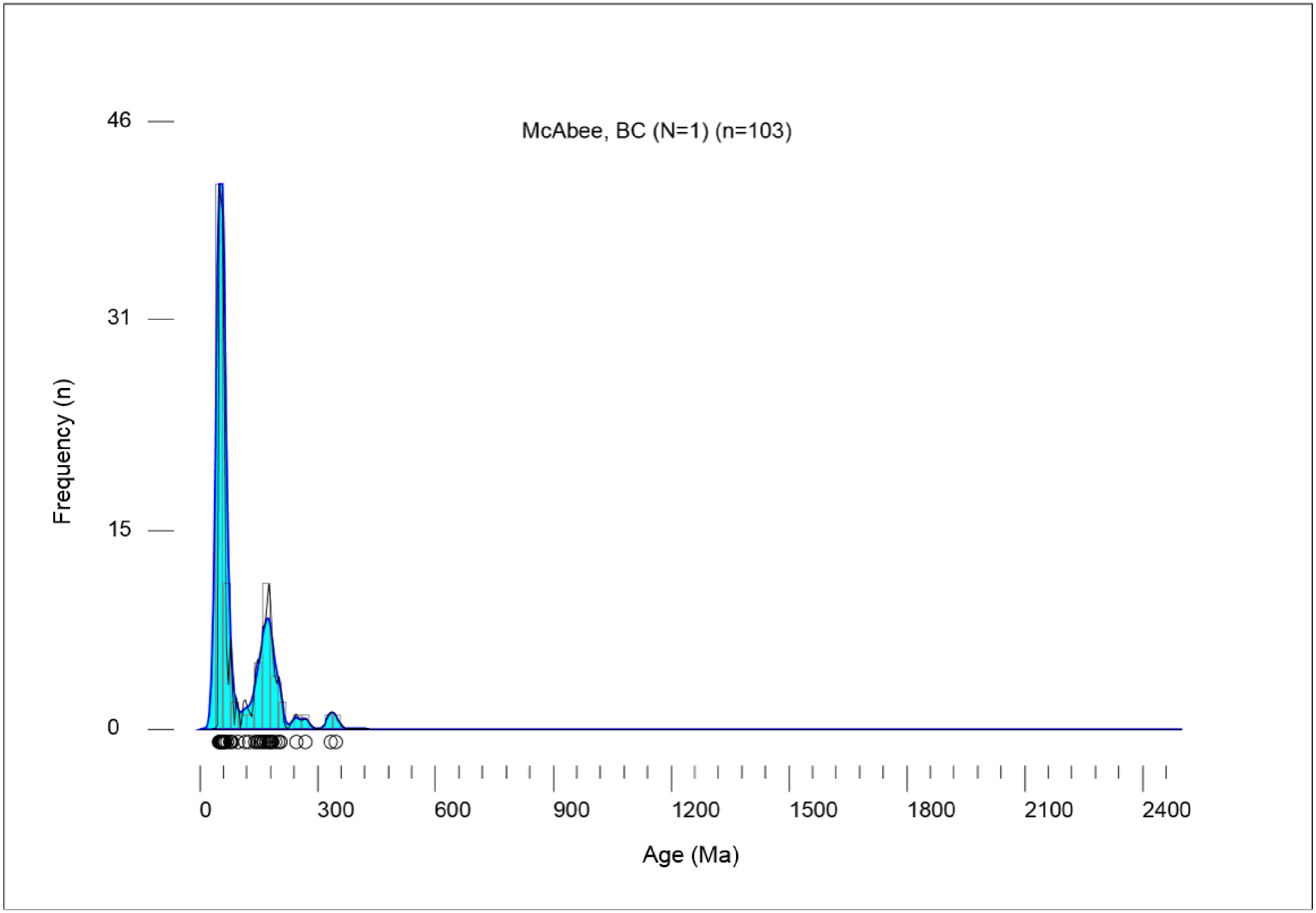

Kelowna, BC (N=3) (n=319)
129
64
0
Frequency (n)
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

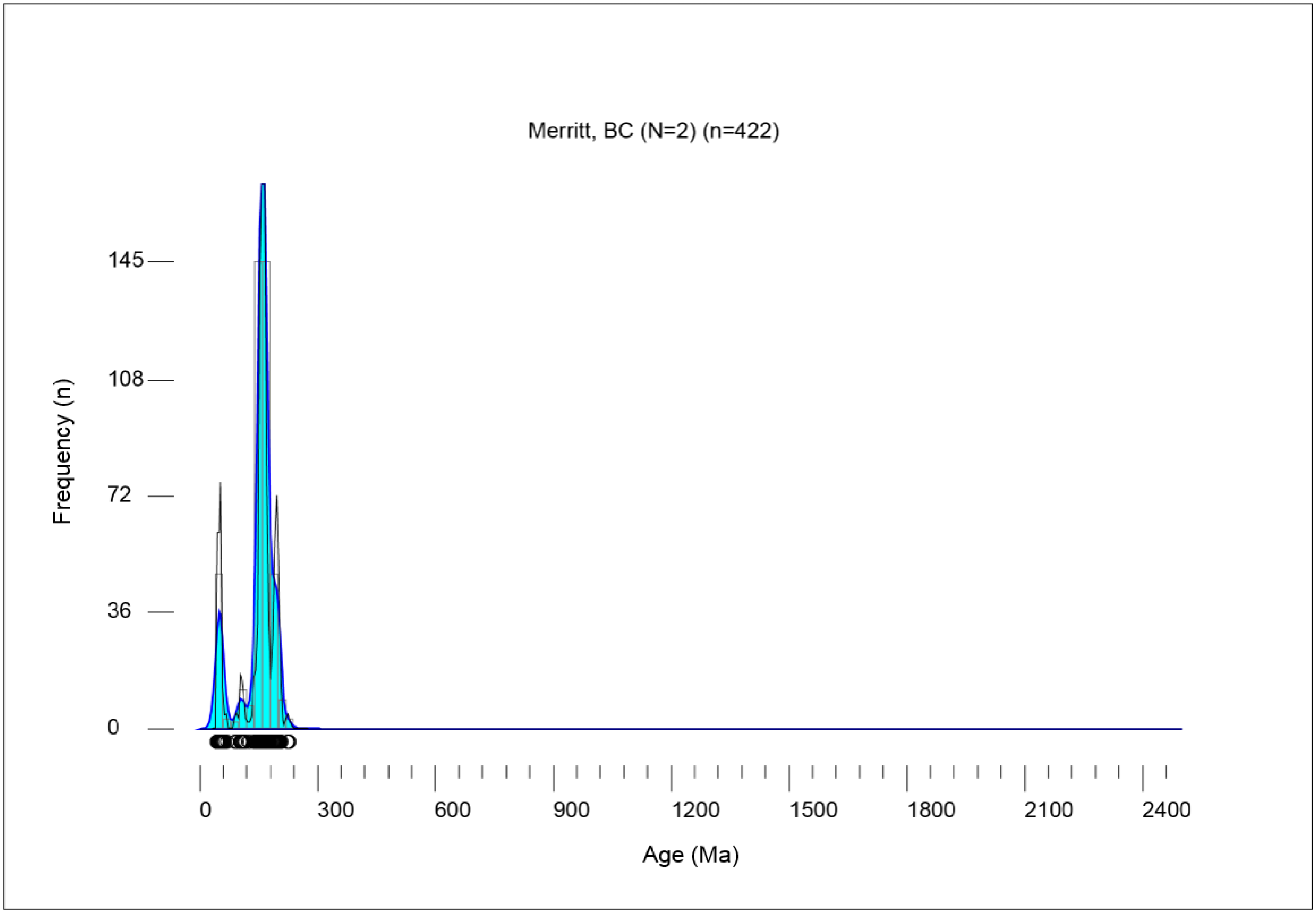

Princeton, BC (N=4) (n=447)
181
135
90
45
0
Frequency (n)
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

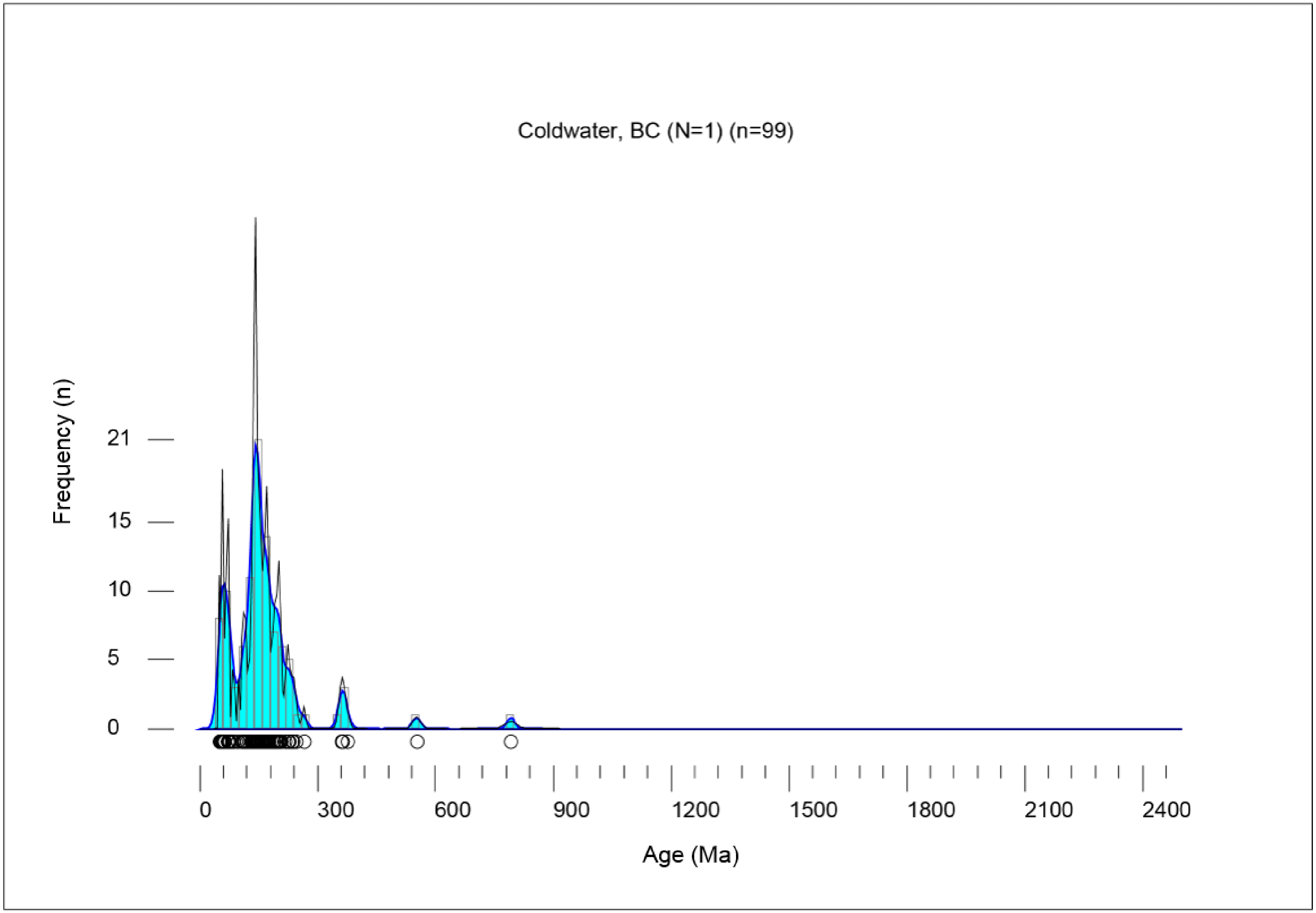

Blakeburn, BC (N=1) (n=123)
54
27
0
Frequency (n)
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)



Kamloops, BC (N=1) (n=105)
48
36
24
12
0
Frequency (n)
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)


McAbee, BC (N=1) (n=103)
Frequency (n)
46
31
15
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)


Merritt, BC (N=2) (n=422)
Frequency (n)
145
108
72
36
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)


Coldwater, BC (N=1) (n=99)
Frequency (n)
21
15
10
5
0
0
300
600
900
1200
1500
1800
2100
2400
Age (Ma)

APPENDIX E

ARIZONA LASERCHRON CENTER U-PB & HF ANALYSES

The following sections on U-Pb geochronologic analyses of detrital zircon (Nu HR ICMPS) and Hf analytical methods at the Arizona LaserChron Center (ALC) were provided by the ALC and edited to accurately express processes provided by ALC. Prior to being sent to the ALC, zircons from samples (n=4) were extracted by traditional methods of crushing and grinding, density separation with a water table, heavy liquids (LMT), and Frantz magnetic separator in the Rock Preparation Facility and Sedimentary Geology Laboratory at the University of South Carolina (USC).

E.1 U-PB GEOCHRONOLOGIC ANALYSES OF DETRITAL ZIRCON (NU HR ICPMS)

Zircon crystals extracted from samples are processed such that all zircons are retained in the final heavy mineral fraction. A large split of these grains (generally thousands of grains) is incorporated into a 1” epoxy mount together with fragments of our Sri Lanka standard zircon. The mounts are sanded down to a depth of ~20 microns, polished, imaged, and cleaned prior to isotopic analysis.

U-Pb geochronology of zircons is conducted by laser ablation multicollector inductively coupled plasma mass spectrometry (LA-MC-ICPMS) at the Arizona LaserChron Center (Gehrels et al., 2006, 2008). The analyses involve ablation of zircon with a Photon Machines Analyte G2 excimer laser (or, prior to May 2011, a New Wave

UP193HE Excimer laser) using a spot diameter of 30 microns. The ablated material is carried in helium into the plasma source of a Nu HR ICPMS, which is equipped with a flight tube of sufficient width that U, Th, and Pb isotopes are measured simultaneously. All measurements are made in static mode, using Faraday detectors with $3x10^{11}$ ohm resistors for ^{238}U, ^{232}Th, ^{208}Pb-^{206}Pb, and discrete dynode ion counters for ^{204}Pb and ^{202}Hg. Ion yields are ~0.8 mv per ppm. Each analysis consists of one 15-second integration on peaks with the laser off (for backgrounds), 15 one-second integrations with the laser firing, and a 30 second delay to purge the previous sample and prepare for the next analysis. The ablation pit is ~15 microns in depth.

For each analysis, the errors in determining $^{206}Pb/^{238}U$ and $^{206}Pb/^{204}Pb$ result in a measurement error of ~1-2% (at 2-sigma level) in the $^{206}Pb/^{238}U$ age. The errors in measurement of $^{206}Pb/^{207}Pb$ and $^{206}Pb/^{204}Pb$ also result in ~1-2% (at 2-sigma level) uncertainty in age for grains that are >1.0 Ga, but are substantially larger for younger grains due to low intensity of the ^{207}Pb signal. For most analyses, the cross-over in precision of $^{206}Pb/^{238}U$ and $^{206}Pb/^{207}Pb$ ages occurs at ~1.0 Ga.

^{204}Hg interference with ^{204}Pb is accounted for measurement of ^{202}Hg during laser ablation and subtraction of ^{204}Hg according to the natural $^{202}Hg/^{204}Hg$ of 4.35. This Hg is correction is not significant for most analyses because our Hg backgrounds are low (generally ~150 cps at mass 204).

Common Pb correction is accomplished by using the Hg-corrected ^{204}Pb and assuming an initial Pb composition from Stacey and Kramers (1975). Uncertainties of

1.5 for $^{206}Pb/^{204}Pb$ and 0.3 for $^{207}Pb/^{204}Pb$ are applied to these compositional values based on the variation in Pb isotopic composition in modern crystal rocks.

Inter-element fractionation of Pb/U is generally ~5%, whereas apparent fractionation of Pb isotopes is generally <0.2%. In-run analysis of fragments of a large zircon crystal (generally every fifth measurement) with known age of 563.5 ± 3.2 Ma (2-sigma error) is used to correct for this fractionation. The uncertainty resulting from the calibration correction is generally 1-2% (2-sigma) for both $^{206}Pb/^{207}Pb$ and $^{206}Pb/^{238}U$ ages.

Concentrations of U and Th are calibrated relative to our Sri Lanka zircon, which contains ~518 ppm of U and 68 ppm Th.

The analytical data are reported in Appendix F. Uncertainties shown in these tables are at the 1-sigma level, and include only measurement errors. Analyses that are >20% discordant (by comparison of $^{206}Pb/^{238}U$ and $^{206}Pb/^{207}Pb$ ages) or >5% reverse discordant are not considered further.

The resulting interpreted ages are shown on Pb*/U concordia diagrams and relative age-probability diagrams using the routines in Isoplot (Ludwig, 2008). The age-probability diagrams show each age and its uncertainty (for measurement error only) as a normal distribution, and sum all ages from a sample into a single curve. Composite age probability plots are made from an in-house Excel program (see Analysis Tools for link) that normalizes each curve according to the number of constituent analyses, such that each curve contains the same area, and then stacks the probability curves.

E.2 HF ANALYTICAL METHODS AT THE ARIZONA LASERCHRON CENTER

Hf isotope analyses are conducted with a Nu HR ICPMS connected to a New Wave UP193HE laser (2009-2010) or a Photon Machines Analyte G2 excimer laser (2011). Instrument settings are established first by analysis of 10 ppb solutions of JMC475 and a Spex Hf solution, and then by analysis of 10 ppb solutions containing Spex Hf, Yb, and Lu. The mixtures range in concentration of Yb and Lu, with ^{176}(Yb+Lu) up to 70% of the ^{176}Hf. When all solutions yield ^{176}Hf/^{177}Hf of ~0.28216, instrument settings are optimized for laser ablation analyses and seven different standard zircons (Mud Tank, 91500, Temora, R33, FC52, Plesovice, and Sri Lanka) are analyzed. These standards are included with unknowns on the same epoxy mounts. When precision and accuracy are acceptable, unknowns are analyzed using exactly the same acquisition parameters.

Laser ablation analyses are conducted with a laser beam diameter of 40 microns, with the ablation pits located on top of the U-Pb analysis pits. CL images are used to ensure that the ablation pits do not overlap multiple age domains or inclusions. Each acquisition consists of one 40-second integration on backgrounds (on peaks with no laser firing) followed by 60 one-second integrations with the laser firing. Using a typical laser fluence of ~5 J/cm^2 and pulse rate of 7 Hz, the ablation rate is ~0.8 microns per second. Each standard is analyzed once for every ~20 unknowns.

Isotope fractionation is accounted for using the method of Woodhead et al. (2004): βHf is determined from the measured ^{179}Hf/^{177}Hf; βYb is determined from the

measured $^{173}Yb/^{171}Yb$ (except for very low Yb signals); βLu is assumed to be the same as βYb; and an exponential formula is used for fractionation correction. Yb and Lu interferences are corrected by measurement of $^{176}Yb/^{171}Yb$ and $^{176}Lu/^{175}Lu$ (respectively), as advocated by Woodhead et al. (2004). Critical isotope ratios are $^{179}Hf/^{177}Hf$ =0.73250 (Patchett and Tatsumoto, 1980); $^{173}Yb/^{171}Yb$ = 1.132338 (Vervoort et al. 2004); $^{176}Yb/^{171}Yb$ =0.901691 (Vervoort et al., 2004; Amelin and Davis, 2005); $^{176}Lu/^{175}Lu$ = 0.02653 (Patchett, 1983). All corrections are done line-by-line. For very low Yb signals, βHf is used for fractionation of Yb isotopes. The corrected $^{176}Hf/^{177}Hf$ values are filtered for outliers (2-sigma filter), and the average and standard error are calculated from the resulting ~58 integrations. There is no capability to use only a portion of the acquired data.

All solutions, standards, and unknowns analyzed during a session are reduced together. The cutoff for using βHf versus βYb is determined by monitoring the average offset of the standards from their known values, and the cutoff is set at the minimum offset. For most data sets, this is achieved at ~6 mv of ^{171}Yb. For sessions in which the standards yield $^{176}Hf/^{177}Hf$ values that are shifted consistently from the know values, a correction factor is applied to the $^{176}Hf/^{177}Hf$ of all standards and unknowns. This correction factor, which is not necessary for most sessions, averages 1 epsilon unit.

The $^{176}Hf/^{177}Hf$ at time of crystallization is calculated from measurement of present-day $^{176}Hf/^{177}Hf$ and $^{176}Lu/^{177}Hf$, using the decay constant of ^{176}Lu ($\lambda = 1.867e^{-11}$) from Scherer et al. (2001) and Söderlund et al. (2004). No capability is provided for

calculating Hf Depleted Mantle model ages because the $^{176}Hf/^{177}Hf$ and $^{176}Lu/^{177}Hf$ of the source material(s) from which the zircon crystallized is not known.

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APPENDIX F

ARIZONA LASERCHRON CENTER

DETRITAL ZIRCON U-PB ANLYSES DATA TABLE

Sample: 15CA01B	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
15CA-01B_29Feb-Spot 1	127	1320	1.4	11.8953	5.9	0.1444	6.4	0.0125	2.4	0.38	79.8	1.9	137.0	8.1	1294.1	114.4	79.8	1.9
15CA-01B_29Feb-Spot 2	83	1016	1.3	16.7681	7.7	0.0764	8.7	0.0093	3.9	0.45	59.6	2.3	74.8	6.2	590.4	167.7	59.6	2.3
15CA-01B_29Feb-Spot 3	42	547	1.1	7.7287	7.3	0.1611	8.8	0.0090	4.9	0.56	57.9	2.8	151.7	12.4	2089.7	128.7	57.9	2.8
15CA-01B_29Feb-Spot 4	100	485	0.5	8.8294	6.2	0.1413	7.1	0.0090	3.4	0.48	58.1	2.0	134.2	8.9	1852.3	112.6	58.1	2.0
15CA-01B_29Feb-Spot 5	26	693	1.1	26.6187	23.5	0.0403	24.1	0.0078	5.6	0.23	50.0	2.8	40.1	9.5	515.7	633.5	50.0	2.8
15CA-01B_29Feb-Spot 6	42	988	1.0	13.8749	7.4	0.0870	8.5	0.0088	4.1	0.48	56.2	2.3	84.7	6.9	988.0	150.6	56.2	2.3
15CA-01B_29Feb-Spot 7	26	395	1.1	60.1790	84.8	0.0179	84.9	0.0078	4.9	0.06	50.1	2.5	18.0	15.1	0.0	892.8	50.1	2.5
15CA-01B_29Feb-Spot 8	35	1236	1.0	24.8959	5.7	0.0444	7.6	0.0080	5.0	0.66	51.4	2.6	44.1	3.3	340.2	146.9	51.4	2.6
15CA-01B_29Feb-Spot 9	56	697	1.2	29.1384	5.2	0.0376	6.9	0.0079	4.4	0.65	51.0	2.2	37.4	2.5	763.6	147.6	51.0	2.2
15CA-01B_29Feb-Spot 10	90	550	0.6	7.5967	23.8	0.1624	24.2	0.0089	4.4	0.18	57.4	2.5	152.8	34.3	2119.9	422.9	57.4	2.5
15CA-01B_29Feb-Spot 11	152	2074	0.6	15.0647	3.2	0.0749	4.2	0.0082	2.8	0.66	52.5	1.5	73.3	3.0	818.4	66.3	52.5	1.5
15CA-01B_29Feb-Spot 12	70	2534	0.7	26.1762	4.0	0.0410	5.1	0.0078	3.1	0.62	50.0	1.6	40.8	2.0	471.1	104.8	50.0	1.6
15CA-01B_29Feb-Spot 13	139	1955	1.0	22.4170	4.3	0.0488	5.3	0.0079	3.1	0.58	50.9	1.6	48.4	2.5	76.9	104.6	50.9	1.6
15CA-01B_29Feb-Spot 14	84	830	1.1	33.7542	31.2	0.0341	31.3	0.0083	3.1	0.10	53.6	1.6	34.1	10.5	1197.6	984.4	53.6	1.6
15CA-01B_29Feb-Spot 15	52	779	1.1	23.4667	10.7	0.0480	11.4	0.0082	3.8	0.34	52.4	2.0	47.6	5.3	190.1	268.2	52.4	2.0
15CA-01B_29Feb-Spot 16	30	1629	0.8	28.1721	4.3	0.0396	5.8	0.0081	3.9	0.67	51.9	2.0	39.4	2.2	669.6	117.8	51.9	2.0
15CA-01B_29Feb-Spot 17	41	500	0.8	15.0954	7.0	0.0759	8.1	0.0083	4.1	0.51	53.3	2.2	74.3	5.8	814.2	145.6	53.3	2.2
15CA-01B_29Feb-Spot 18	250	2480	0.6	20.2215	3.3	0.0546	4.6	0.0080	3.1	0.68	51.4	1.6	53.9	2.4	169.3	78.1	51.4	1.6
15CA-01B_29Feb-Spot 19	41	620	0.7	25.2079	7.7	0.0457	11.2	0.0084	8.1	0.72	53.6	4.3	45.4	5.0	372.4	200.6	53.6	4.3
15CA-01B_29Feb-Spot 20	238	1598	0.5	23.2148	2.4	0.0478	3.8	0.0080	2.9	0.77	51.6	1.5	47.4	1.8	163.2	60.3	51.6	1.5
15CA-01B_29Feb-Spot 21	31	209	0.8	24.6467	6.9	0.0459	8.3	0.0082	4.6	0.55	52.6	2.4	45.5	3.7	314.3	178.0	52.6	2.4
15CA-01B_29Feb-Spot 22	44	2010	1.1	19.4196	5.1	0.0568	7.0	0.0080	4.9	0.69	51.4	2.5	56.1	3.8	263.0	116.1	51.4	2.5
15CA-01B_29Feb-Spot 23	70	445	0.8	7.8027	3.0	0.1566	4.4	0.0089	3.3	0.75	56.9	1.9	147.7	6.1	2072.9	52.2	56.9	1.9
15CA-01B_29Feb-Spot 24	37	340	0.8	202.4902	46.6	0.0052	46.9	0.0076	5.1	0.11	48.7	2.5	5.2	2.4	0.0	0.0	48.7	2.5
15CA-01B_29Feb-Spot 25	51	466	1.0	49.6604	27.3	0.0217	27.5	0.0078	3.5	0.13	50.3	1.8	21.8	5.9	2605.7	706.5	50.3	1.8
15CA-01B_29Feb-Spot 26	59	712	1.4	12.4527	14.2	0.0972	14.8	0.0088	4.1	0.28	56.3	2.3	94.2	13.3	1204.4	280.5	56.3	2.3
15CA-01B_29Feb-Spot 27	47	917	0.9	16.8853	4.9	0.0673	6.4	0.0082	4.2	0.65	52.9	2.2	66.1	4.1	575.3	107.0	52.9	2.2
15CA-01B_29Feb-Spot 28	105	2515	1.1	24.4160	3.3	0.0444	4.8	0.0079	3.5	0.73	50.5	1.7	44.1	2.1	290.3	83.7	50.5	1.7
15CA-01B_29Feb-Spot 29	52	653	1.3	28.6689	8.5	0.0390	9.4	0.0081	4.1	0.44	52.0	2.2	38.8	3.6	718.1	236.1	52.0	2.2
15CA-01B_29Feb-Spot 30	43	1478	1.0	7.4415	4.3	0.1668	6.3	0.0090	4.6	0.73	57.8	2.7	156.6	9.2	2156.0	75.2	57.8	2.7
15CA-01B_29Feb-Spot 31	813	2453	0.4	15.2933	6.7	0.0724	7.4	0.0080	3.2	0.43	51.6	1.6	71.0	5.1	786.8	140.8	51.6	1.6
15CA-01B_29Feb-Spot 32	64	401	0.8	37.6318	15.8	0.0282	16.5	0.0077	4.6	0.28	49.5	2.3	28.3	4.6	1548.5	534.7	49.5	2.3
15CA-01B_29Feb-Spot 33	40	1341	1.0	25.6167	4.7	0.0453	6.8	0.0084	4.9	0.72	54.1	2.6	45.0	3.0	414.3	123.2	54.1	2.6
15CA-01B_29Feb-Spot 34	59	501	0.9	61.9186	28.1	0.0174	28.4	0.0078	3.6	0.13	50.1	1.8	17.5	4.9	0.0	1076.7	50.1	1.8
15CA-01B_29Feb-Spot 35	32	618	0.8	6.3219	5.6	0.2101	7.6	0.0096	5.2	0.68	61.8	3.2	193.7	13.5	2436.3	95.0	61.8	3.2
15CA-01B_29Feb-Spot 36	72	1027	1.1	27.8190	14.8	0.0398	15.3	0.0080	3.9	0.26	51.5	2.0	39.6	5.9	635.0	407.0	51.5	2.0
15CA-01B_29Feb-Spot 37	33	324	0.9	51.2238	7.4	0.0214	8.4	0.0079	3.9	0.46	51.0	2.0	21.5	1.8	2743.2	336.3	51.0	2.0
15CA-01B_29Feb-Spot 38	39	4084	0.8	21.0991	4.8	0.0527	6.7	0.0081	4.7	0.70	51.8	2.4	52.1	3.4	69.2	113.6	51.8	2.4
15CA-01B_29Feb-Spot 39	29	3637	0.9	3.1547	3.7	0.5517	6.3	0.0126	5.1	0.81	80.9	4.1	446.1	22.7	3555.3	57.2	80.9	4.1
15CA-01B_29Feb-Spot 40	86	952	1.1	25.7402	6.3	0.0419	7.0	0.0078	3.1	0.44	50.2	1.5	41.7	2.9	426.9	166.0	50.2	1.5
15CA-01B_29Feb-Spot 41	88	4571	0.9	23.1059	3.4	0.0479	5.2	0.0080	3.9	0.75	51.6	2.0	47.5	2.4	151.5	85.5	51.6	2.0
15CA-01B_29Feb-Spot 42	61	43475	0.7	20.4803	3.6	0.0555	4.9	0.0082	3.4	0.69	52.9	1.8	54.8	2.6	139.6	83.5	52.9	1.8
15CA-01B_29Feb-Spot 43	149	179186	1.3	19.8278	2.5	0.0575	3.5	0.0083	2.5	0.70	53.1	1.3	56.8	1.9	215.0	57.9	53.1	1.3
15CA-01B_29Feb-Spot 44	45	1995	0.9	21.3863	4.9	0.0528	6.0	0.0082	3.4	0.57	52.6	1.8	52.2	3.0	36.9	117.2	52.6	1.8
15CA-01B_29Feb-Spot 45	34	470	1.1	13.9521	13.2	0.0835	14.0	0.0084	4.6	0.33	54.2	2.5	81.4	10.9	976.7	270.1	54.2	2.5
15CA-01B_29Feb-Spot 46	60	1085	0.8	28.0777	8.1	0.0376	9.1	0.0076	4.2	0.46	49.1	2.0	37.4	3.3	660.4	222.6	49.1	2.0
15CA-01B_29Feb-Spot 47	102	1997	0.7	22.9269	9.0	0.0476	9.8	0.0079	3.9	0.40	50.8	2.0	47.2	4.5	132.3	222.1	50.8	2.0
15CA-01B_29Feb-Spot 48	26	315	1.2	251.9878	165.3	0.0043	165.4	0.0078	5.3	0.03	50.3	2.7	4.3	7.2	0.0	0.0	50.3	2.7
15CA-01B_29Feb-Spot 49	63	935	0.7	24.9302	3.8	0.0438	5.1	0.0079	3.4	0.67	50.9	1.7	43.6	2.2	343.7	97.3	50.9	1.7
15CA-01B_29Feb-Spot 50	88	881	0.9	19.1317	5.8	0.0598	6.8	0.0083	3.6	0.53	53.3	1.9	59.0	3.9	297.2	132.1	53.3	1.9
15CA-01B_29Feb-Spot 51	45	1107	0.8	28.9634	9.8	0.0380	11.0	0.0080	5.0	0.45	51.2	2.5	37.8	4.1	746.7	275.8	51.2	2.5
15CA-01B_29Feb-Spot 52	27	209	1.0	138.6437	11.8	0.0081	12.6	0.0081	4.5	0.36	52.0	2.3	8.2	1.0	0.0	0.0	52.0	2.3
15CA-01B_29Feb-Spot 53	217	10537	0.8	17.5980	3.9	0.0625	5.3	0.0080	3.5	0.66	51.2	1.8	61.6	3.1	484.8	87.1	51.2	1.8
15CA-01B_29Feb-Spot 54	82	1405	0.9	15.3156	4.0	0.0726	5.4	0.0081	3.5	0.66	51.8	1.8	71.2	3.7	783.8	84.8	51.8	1.8
15CA-01B_29Feb-Spot 55	89	1958	1.0	23.1560	6.0	0.0463	7.0	0.0078	3.6	0.51	49.9	1.8	45.9	3.1	156.9	148.6	49.9	1.8
15CA-01B_29Feb-Spot 56	39	574	1.0	9.6369	8.5	0.1243	9.5	0.0087	4.2	0.44	55.8	2.3	119.0	10.7	1692.6	157.8	55.8	2.3
15CA-01B_29Feb-Spot 57	58	10319	1.3	21.9785	3.8	0.0514	5.8	0.0082	4.4	0.76	52.6	2.3	50.9	2.9	28.8	90.9	52.6	2.3
15CA-01B_29Feb-Spot 58	87	1340	0.6	25.5983	6.8	0.0423	7.6	0.0079	3.3	0.43	50.4	1.6	42.1	3.1	412.4	178.5	50.4	1.6
15CA-01B_29Feb-Spot 59	37	1003	0.7	21.7815	7.2	0.0500	8.7	0.0079	4.9	0.56	50.8	2.5	49.6	4.2	7.1	174.4	50.8	2.5
15CA-01B_29Feb-Spot 60	75	2361	0.7	22.5823	4.3	0.0500	5.8	0.0082	3.9	0.67	52.6	2.0	49.5	2.8	94.9	106.4	52.6	2.0
15CA-01B_29Feb-Spot 61	52	4142	0.9	11.0059	10.7	0.1069	11.6	0.0085	4.3	0.37	54.8	2.3	103.1	11.3	1443.7	205.1	54.8	2.3
15CA-01B_29Feb-Spot 62	44	328	1.0	52.4641	16.1	0.0205	16.8	0.0078	4.5	0.27	50.1	2.3	20.6	3.4	2852.6	1055.0	50.1	2.3
15CA-01B_29Feb-Spot 63	31	6943	0.9	18.8001	5.3	0.0595	6.6	0.0081	3.9	0.60	52.1	2.0	58.7	3.7	337.0	119.2	52.1	2.0
15CA-01B_29Feb-Spot 64	100	858	1.1	30.0126	13.7	0.0362	14.1	0.0079	3.1	0.22	50.5	1.6	36.1	5.0	847.6	394.5	50.5	1.6
15CA-01B_29Feb-Spot 65	51	8711	1.0	24.1313	3.6	0.0455	5.4	0.0080	4.1	0.75	51.2	2.1	45.2	2.4	260.4	91.3	51.2	2.1
15CA-01B_29Feb-Spot 66	206	2548	0.7	23.6113	2.5	0.0466	3.6	0.0080	2.7	0.73	51.3	1.4	46.3	1.6	205.5	61.7	51.3	1.4
15CA-01B_29Feb-Spot 67	44	266	1.0	-195.3069	14.6	-0.0054	15.4	0.0077	4.9	0.32	49.6	2.4	5.5	0.9	0.0	0.0	49.6	2.4
15CA-01B_29Feb-Spot 68	53	271	1.5	-271.7717	4.3	-0.0038	6.0	0.0074	4.1	0.69	47.7	2.0	3.8	0.2	0.0	0.0	47.7	2.0
15CA-01B_29Feb-Spot 69	69	690	1.6	23.4689	12.0	0.0461	12.5	0.0078	3.4	0.27	50.4	1.7	45.7	5.6	190.3	301.1	50.4	1.7
15CA-01B_29Feb-Spot 70	68	15519	0.7	20.3344	3.7	0.0561	5.7	0.0083	4.3	0.76	53.1	2.3	55.4	3.1	156.3	86.9	53.1	2.3
15CA-01B_29Feb-Spot 71	350	9585	1.9	20.9892	1.7	0.1057	2.9	0.0161	2.3	0.81	102.9	2.4	102.1	2.8	81.6	39.9	102.9	2.4
15CA-01B_29Feb-Spot 72	65	1169	1.3	27.0100	6.6	0.0408	7.7	0.0080	4.1	0.53	51.3	2.1	40.6	3.1	554.8	177.4	51.3	2.1
15CA-01B_29Feb-Spot 73	45	2133	0.9	19.9577	5.6	0.0562	6.7	0.0081	3.5	0.53	52.3	1.8	55.5	3.6	199.9	131.2	52.3	1.8
15CA-01B_29Feb-Spot 74	70	2177	0.7	10.7171	6.7	0.1101	7.5	0.0086	3.4	0.45	54.9	1.8	106.1	7.6	1494.1	127.7	54.9	1.8
15CA-01B_29Feb-Spot 75	46	5919	1.1	22.0561	4.2	0.0516	5.6	0.0083	3.8	0.68	53.0	2.0	51.1	2.8	37.4	101.0	53.0	2.0
15CA-01B_29Feb-Spot 77	57	225	0.9	3.2414	8.6	0.4833	10.2	0.0114	5.4	0.54	72.8	3.9	400.3	33.6	3513.5	132.7	72.8	3.9
15CA-01B_29Feb-Spot 78	79	1269	1.1	10.5613	7.7	0.1090	8.9	0.0083	4.4	0.50	53.6	2.4	105.0	8.9	1521.8	145.5	53.6	2.4
15CA-01B_29Feb-Spot 79	218	601	1.3	10.6463	15.3	0.1095	15.6	0.0085	3.2	0.20	54.3	1.7	105.5	15.7	1506.7	290.8	54.3	1.7
15CA-01B_29Feb-Spot 80	50	693	1.1	4.1909	23.6	0.3342	25.5	0.0102	9.8	0.39	65.2	6.4	292.8	65.0	3110.7	381.4	65.2	6.4
15CA-01B_29Feb-Spot 81	62	594	0.7	41.8528	14.5	0.0251	14.8	0.0076	3.2	0.22	49.0	1.6	25.2	3.7	1922.1	534.8	49.0	1.6
15CA-01B_29Feb-Spot 82	36	1507	1.0	25.3695	4.8	0.0434	6.5	0.0080	4.4	0.68	51.2	2.2	43.1	2.7	389.0	124.6	51.2	2.2
15CA-01B_29Feb-Spot 83	47	603	0.8	53.6918	15.1	0.0197	15.8	0.0077	4.6	0.29	49.2	2.2	19.8	3.1	2961.4	1124.5	49.2	2.2
15CA-01B_29Feb-Spot 84	68	1198	1.2	29.6012	6.6	0.0378	7.7	0.0081	4.0	0.51	52.1	2.1	37.7	2.9	808.2	189.0	52.1	2.1
15CA-01B_29Feb-Spot 85	30	237	1.0	4.9215	13.7	0.2897	14.8	0.0103	5.6	0.38	66.3	3.7	258.3	33.8	2852.0	225.0	66.3	3.7
15CA-01B_29Feb-Spot 86	95	611	0.8	41.4763	4.5	0.0276	5.2	0.0083	2.7	0.51	53.2	1.4	27.6	1.4	1889.0	163.6	53.2	1.4
15CA-01B_29Feb-Spot 87	40	359	1.0	200.4978	100.9	0.0056	101.0	0.0081	4.7	0.05	51.9	2.4	5.6	5.7	0.0	0.0	51.9	2.4
15CA-01B_29Feb-Spot 88	68	900	0.7	28.7037	7.1	0.0375	8.0	0.0078	3.5	0.44	50.2	1.8	37.4	2.9	721.5	199.6	50.2	1.8
15CA-01B_29Feb-Spot 89	63	702	0.9	32.8822	15.6	0.0328	16.0	0.0078	3.4	0.21	50.3	1.7	32.8	5.2	1117.2	477.2	50.3	1.7
15CA-01B_29Feb-Spot 90	44	1835	1.0	23.5913	4.7	0.0467	5.8	0.0080	3.4	0.59	51.3	1.8	46.4	2.6	203.4	117.2	51.3	1.8
15CA-01B_29Feb-Spot 91	45	717	1.2	37.8242	6.5	0.0287	8.0	0.0079	4.7	0.59	50.6	2.4	28.7	2.3	1565.7	219.8	50.6	2.4

Sample: 15CA01B	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
15CA-01B_29Feb-Spot 92	112	1859	0.9	24.9790	3.1	0.0432	4.7	0.0078	3.5	0.75	50.2	1.7	42.9	2.0	348.8	80.3	50.2	1.7
15CA-01B_29Feb-Spot 94	53	1490	0.8	22.4712	5.5	0.0488	6.7	0.0079	3.8	0.56	51.0	1.9	48.4	3.2	82.8	135.5	51.0	1.9
15CA-01B_29Feb-Spot 95	36	510	0.9	48.7927	25.7	0.0221	26.1	0.0078	4.6	0.18	50.3	2.3	22.2	5.7	2529.6	712.7	50.3	2.3
15CA-01B_29Feb-Spot 96	49	4576	1.0	16.7778	5.5	0.0691	6.7	0.0084	3.7	0.56	54.0	2.0	67.8	4.4	589.2	119.8	54.0	2.0
15CA-01B_29Feb-Spot 97	149	88798	1.3	20.7975	3.1	0.0538	4.5	0.0081	3.3	0.73	52.1	1.7	53.2	2.3	103.3	72.8	52.1	1.7
15CA-01B_29Feb-Spot 98	49	426	1.3	48.4078	46.0	0.0218	46.1	0.0077	3.6	0.08	49.2	1.8	21.9	10.0	2495.9	234.8	49.2	1.8
15CA-01B_29Feb-Spot 99	48	1447	1.0	21.9967	4.4	0.0508	6.2	0.0081	4.3	0.70	52.1	2.2	50.3	3.0	30.8	106.5	52.1	2.2
15CA-01B_29Feb-Spot 100	54	15400	0.8	19.9887	3.9	0.0551	5.6	0.0080	4.0	0.71	51.3	2.0	54.5	3.0	196.3	91.4	51.3	2.0
15CA-01B_29Feb-Spot 101	30	9361	1.0	6.9718	7.5	0.1749	9.1	0.0088	5.1	0.56	56.8	2.9	163.7	13.7	2269.1	129.5	56.8	2.9
15CA-01B_29Feb-Spot 102	108	989	0.5	18.3992	8.7	0.0605	9.3	0.0081	3.5	0.37	51.9	1.8	59.7	5.4	385.6	195.0	51.9	1.8
15CA-01B_29Feb-Spot 103	114	783	0.7	27.4662	6.5	0.0403	7.2	0.0080	3.3	0.45	51.5	1.7	40.1	2.8	600.1	175.9	51.5	1.7
15CA-01B_29Feb-Spot 104	73	10101	1.0	21.0592	2.9	0.0528	4.5	0.0081	3.5	0.78	51.7	1.8	52.2	2.3	73.7	67.9	51.7	1.8
15CA-01B_29Feb-Spot 105	42	1361	1.1	15.7493	8.8	0.0688	9.7	0.0079	4.1	0.42	50.5	2.0	67.6	6.3	724.8	186.8	50.5	2.0
15CA-01B_29Feb-Spot 106	34	981	1.0	29.8186	8.5	0.0365	9.8	0.0079	4.8	0.49	50.6	2.4	36.4	3.5	829.0	244.4	50.6	2.4
15CA-01B_29Feb-Spot 107	44	870	0.8	33.3448	6.5	0.0337	7.6	0.0082	3.9	0.51	52.4	2.0	33.7	2.5	1159.9	200.5	52.4	2.0
15CA-01B_29Feb-Spot 108	38	259	0.9	1521.9178	166.2	0.0007	166.2	0.0075	5.0	0.03	48.0	2.4	0.7	1.1	0.0	0.0	48.0	2.4
15CA-01B_29Feb-Spot 109	53	1403	0.8	25.7745	4.3	0.0437	5.7	0.0082	3.7	0.65	52.5	1.9	43.4	2.4	430.3	113.2	52.5	1.9
15CA-01B_29Feb-Spot 110	41	410	1.0	29.3090	36.1	0.0386	36.4	0.0082	4.6	0.13	52.6	2.4	38.4	13.7	780.1	1048.0	52.6	2.4
15CA-01B_29Feb-Spot 111	56	1229	1.0	26.8005	4.6	0.0404	8.0	0.0078	6.5	0.82	50.4	3.3	40.2	3.1	533.9	123.1	50.4	3.3
15CA-01B_29Feb-Spot 112	130	2043	0.8	19.9923	8.2	0.0550	8.9	0.0080	3.5	0.39	51.2	1.8	54.4	4.7	195.9	191.6	51.2	1.8
15CA-01B_29Feb-Spot 113	331	21004	7.1	9.9839	2.5	0.7036	4.6	0.0510	3.9	0.85	320.4	12.2	541.0	19.4	1627.1	46.1	320.4	12.2
15CA-01B_29Feb-Spot 114	56	435	0.8	88.8641	8.0	0.0119	8.8	0.0077	3.5	0.40	49.2	1.7	12.0	1.0	0.0	0.0	49.2	1.7
15CA-01B_29Feb-Spot 115	27	229	1.1	-79.8596	147.1	-0.0130	147.2	0.0076	5.1	0.03	48.5	2.5	13.3	19.8	0.0	773.4	48.5	2.5
15CA-01B_29Feb-Spot 116	56	678	1.3	29.7564	7.7	0.0367	8.6	0.0079	3.9	0.45	50.8	2.0	36.6	3.1	823.1	220.5	50.8	2.0
15CA-01B_29Feb-Spot 117	41	685	1.1	26.8321	30.3	0.0412	30.7	0.0080	5.1	0.17	51.5	2.6	41.0	12.3	537.1	827.3	51.5	2.6
15CA-01B_29Feb-Spot 118	24	249	1.0	-72.9343	103.3	-0.0146	103.4	0.0077	4.5	0.04	49.6	2.2	14.9	15.5	0.0	1983.7	49.6	2.2
15CA-01B_29Feb-Spot 119	28	702	0.9	23.0630	25.8	0.0503	26.3	0.0084	5.0	0.19	54.1	2.7	49.9	12.8	146.9	648.1	54.1	2.7
15CA-01B_29Feb-Spot 120	65	4894	1.1	20.9157	3.9	0.0534	4.9	0.0081	2.9	0.60	52.1	1.5	52.9	2.5	89.9	93.3	52.1	1.5
15CA-01B_29Feb-Spot 121	62	2140	1.0	24.8035	3.5	0.0456	4.8	0.0082	3.2	0.67	52.6	1.7	45.2	2.1	330.6	90.7	52.6	1.7
15CA-01B_29Feb-Spot 122	42	722	1.0	22.2842	23.4	0.0494	23.7	0.0080	3.8	0.16	51.2	1.9	48.9	11.3	62.4	578.0	51.2	1.9
15CA-01B_29Feb-Spot 123	35	531	0.9	45.3854	57.5	0.0236	57.7	0.0078	4.5	0.08	49.8	2.3	23.7	13.5	2231.6	138.9	49.8	2.3
15CA-01B_29Feb-Spot 124	129	1137	0.8	29.9927	4.5	0.0366	5.5	0.0080	3.1	0.57	51.1	1.6	36.5	2.0	845.7	128.5	51.1	1.6
15CA-01B_29Feb-Spot 125	33	556	1.1	40.4003	56.2	0.0270	56.4	0.0079	4.3	0.08	50.8	2.2	27.1	15.1	1794.2	237.2	50.8	2.2
15CA-01B_29Feb-Spot 126	28	673	1.2	17.7609	6.7	0.0617	7.7	0.0079	3.8	0.49	51.0	1.9	60.8	4.5	464.4	148.9	51.0	1.9
15CA-01B_29Feb-Spot 127	54	1681	1.0	21.6138	4.5	0.0519	7.0	0.0081	5.4	0.77	52.3	2.8	51.4	3.5	11.5	107.5	52.3	2.8
15CA-01B_29Feb-Spot 128	35	846	0.9	31.8672	8.7	0.0339	9.9	0.0078	4.7	0.47	50.3	2.4	33.8	3.3	1022.8	260.3	50.3	2.4
15CA-01B_29Feb-Spot 129	48	421	0.8	43.0665	79.5	0.0248	79.6	0.0077	4.4	0.06	49.8	2.2	24.9	19.6	2028.6	927.1	49.8	2.2
15CA-01B_29Feb-Spot 130	47	371	1.0	34.2258	14.0	0.0312	14.6	0.0078	4.0	0.28	49.8	2.0	31.2	4.5	1240.8	440.6	49.8	2.0
15CA-01B_29Feb-Spot 131	46	1021	1.1	26.4884	5.0	0.0411	6.9	0.0079	4.8	0.69	50.7	2.4	40.9	2.8	502.6	132.2	50.7	2.4
15CA-01B_29Feb-Spot 132	106	11985	0.8	20.3002	3.1	0.0536	4.7	0.0079	3.6	0.76	50.7	1.8	53.0	2.4	160.3	72.3	50.7	1.8
15CA-01B_29Feb-Spot 133	41	337	0.9	107.8531	33.5	0.0097	33.7	0.0076	3.6	0.11	48.7	1.7	9.8	3.3	0.0	0.0	48.7	1.7
15CA-01B_29Feb-Spot 134	42	2145	0.8	5.7296	6.8	0.2196	7.8	0.0091	3.8	0.49	58.6	2.2	201.6	14.2	2601.6	113.2	58.6	2.2
15CA-01B_29Feb-Spot 135	53	561	1.1	44.4552	58.9	0.0240	59.1	0.0077	4.2	0.07	49.7	2.1	24.1	14.1	2150.2	201.4	49.7	2.1
15CA-01B_29Feb-Spot 136	76	67510	0.9	19.4807	3.4	0.0554	4.7	0.0078	3.2	0.68	50.2	1.6	54.7	2.5	255.8	78.4	50.2	1.6
15CA-01B_29Feb-Spot 137	40	943	1.1	24.3607	13.5	0.0452	14.1	0.0080	3.9	0.28	51.3	2.0	44.9	6.2	284.5	345.5	51.3	2.0
15CA-01B_29Feb-Spot 138	62	680	1.3	25.3064	6.2	0.0436	7.3	0.0080	3.8	0.53	51.4	2.0	43.3	3.1	382.5	160.4	51.4	2.0
15CA-01B_29Feb-Spot 140	47	639	1.1	21.7163	9.2	0.0501	10.1	0.0079	4.1	0.40	50.7	2.1	49.7	4.9	0.1	222.2	50.7	2.1
15CA-01B_29Feb-Spot 141	53	6184	1.2	18.8227	4.8	0.0582	5.7	0.0079	3.1	0.54	51.0	1.6	57.4	3.2	334.2	108.5	51.0	1.6
15CA-01B_29Feb-Spot 142	46	1240	1.2	24.8473	4.9	0.0448	6.0	0.0081	3.5	0.58	51.8	1.8	44.5	2.6	335.1	125.6	51.8	1.8
15CA-01B_29Feb-Spot 143	55	447	0.8	77.1003	135.5	0.0139	135.6	0.0077	4.6	0.03	49.7	2.3	14.0	18.8	0.0	0.0	49.7	2.3
15CA-01B_29Feb-Spot 144	56	5990	0.7	19.1053	4.4	0.0575	6.5	0.0080	4.7	0.73	51.1	2.4	56.7	3.6	300.4	100.8	51.1	2.4
15CA-01B_29Feb-Spot 145	82	718	1.1	35.7630	10.3	0.0292	11.0	0.0076	3.9	0.35	48.7	1.9	29.3	3.2	1380.6	335.0	48.7	1.9
15CA-01B_29Feb-Spot 146	47	2205	1.1	23.7957	4.4	0.0478	6.0	0.0082	4.1	0.68	52.9	2.2	47.4	2.8	225.1	111.2	52.9	2.2
15CA-01B_29Feb-Spot 147	55	6886	0.6	21.9557	3.8	0.0500	5.5	0.0080	3.9	0.72	51.1	2.0	49.6	2.6	26.3	92.5	51.1	2.0
15CA-01B_29Feb-Spot 148	43	573	0.9	44.4754	4.9	0.0246	6.4	0.0079	4.2	0.65	50.9	2.1	24.7	1.6	2152.0	190.5	50.9	2.1
15CA-01B_29Feb-Spot 149	58	2102	1.1	22.6804	8.1	0.0495	9.1	0.0081	4.0	0.44	52.3	2.1	49.1	4.3	105.6	200.6	52.3	2.1
15CA-01B_29Feb-Spot 150	89	2910	0.9	8.8044	3.0	0.1418	4.7	0.0091	3.6	0.76	58.1	2.1	134.6	5.9	1857.5	54.6	58.1	2.1
15CA-01B_29Feb-Spot 151	61	269	1.0	51.0788	3.1	0.0206	4.8	0.0076	3.8	0.77	49.0	1.8	20.7	1.0	2730.4	137.6	49.0	1.8
15CA-01B_29Feb-Spot 152	53	414	1.0	72.3179	29.4	0.0144	29.7	0.0076	4.4	0.15	48.6	2.1	14.5	4.3	0.0	1363.6	48.6	2.1
15CA-01B_29Feb-Spot 153	82	544	1.1	7.6606	15.1	0.1607	16.5	0.0089	6.5	0.40	57.3	3.7	151.3	23.2	2105.2	267.4	57.3	3.7
15CA-01B_29Feb-Spot 154	164	447	0.7	4.3513	10.7	0.3107	11.5	0.0098	4.2	0.36	62.9	2.6	274.7	27.8	3050.7	172.6	62.9	2.6
15CA-01B_29Feb-Spot 155	107	430715	0.7	20.0100	3.2	0.0547	4.4	0.0079	3.1	0.69	50.9	1.5	54.0	2.3	193.9	73.5	50.9	1.5
15CA-01B_29Feb-Spot 156	41	2112	1.0	20.5961	4.2	0.0523	6.4	0.0078	4.7	0.75	50.1	2.4	51.7	3.2	126.3	99.8	50.1	2.4
15CA-01B_29Feb-Spot 157	66	8214	0.8	9.7202	3.8	0.1203	5.8	0.0085	4.4	0.76	54.4	2.4	115.3	6.4	1676.7	69.9	54.4	2.4
15CA-01B_29Feb-Spot 158	132	1548	0.5	22.3678	3.5	0.0482	5.4	0.0078	4.0	0.75	50.2	2.0	47.8	2.5	71.6	86.3	50.2	2.0
15CA-01B_29Feb-Spot 159	46	549	1.1	46.1100	23.4	0.0236	23.7	0.0079	4.1	0.17	50.8	2.1	23.7	5.6	2294.9	953.0	50.8	2.1
15CA-01B_29Feb-Spot 160	40	549	0.9	44.1022	26.0	0.0238	26.5	0.0076	5.1	0.19	48.9	2.5	23.9	6.3	2119.3	1016.8	48.9	2.5
15CA-01B_29Feb-Spot 161	51	1599	1.0	23.7981	4.7	0.0456	6.1	0.0079	3.9	0.63	50.5	1.9	45.3	2.7	225.3	118.8	50.5	1.9
15CA-01B_29Feb-Spot 162	43	1001	1.0	28.3343	10.9	0.0387	11.7	0.0080	4.1	0.35	51.1	2.1	38.6	4.4	685.5	303.6	51.1	2.1
15CA-01B_29Feb-Spot 163	40	344	1.0	522.6321	89.7	0.0019	89.8	0.0073	4.6	0.05	47.1	2.2	2.0	1.8	0.0	1486.6	47.1	2.2
15CA-01B_29Feb-Spot 164	126	592	0.6	42.6788	3.9	0.0245	5.3	0.0076	3.6	0.67	48.8	1.7	24.6	1.3	1994.6	147.8	48.8	1.7
15CA-01B_29Feb-Spot 165	54	824	0.8	29.7427	18.0	0.0359	18.3	0.0077	3.1	0.17	49.7	1.5	35.8	6.4	821.8	517.6	49.7	1.5
15CA-01B_29Feb-Spot 166	35	3054	1.1	17.2058	6.1	0.0660	8.5	0.0082	5.9	0.69	52.9	3.1	64.9	5.4	534.3	134.5	52.9	3.1
15CA-01B_29Feb-Spot 167	31	731	1.1	11.5200	18.9	0.1034	20.2	0.0086	7.1	0.35	55.5	3.9	99.9	19.2	1356.2	368.3	55.5	3.9
15CA-01B_29Feb-Spot 168	102	7557	0.6	19.5838	3.7	0.0570	4.9	0.0081	3.1	0.63	52.0	1.6	56.3	2.7	243.7	86.4	52.0	1.6
15CA-01B_29Feb-Spot 169	37	337	0.9	6.6219	6.9	0.1951	7.5	0.0094	2.8	0.38	60.1	1.7	181.0	12.4	2357.4	118.7	60.1	1.7
15CA-01B_29Feb-Spot 170	171	49990	0.9	20.8529	2.5	0.0571	3.7	0.0086	2.8	0.74	55.4	1.5	56.4	2.0	97.0	58.7	55.4	1.5
15CA-01B_29Feb-Spot 171	26	544	1.4	37.9046	7.1	0.0279	8.8	0.0077	5.2	0.59	49.3	2.5	28.0	2.4	1572.8	241.1	49.3	2.5
15CA-01B_29Feb-Spot 172	34	803	1.2	28.1672	5.4	0.0393	7.5	0.0080	5.1	0.68	51.5	2.6	39.1	2.9	669.1	150.3	51.5	2.6
15CA-01B_29Feb-Spot 173	56	47690	0.7	19.8551	3.8	0.0556	6.7	0.0080	5.5	0.82	51.4	2.8	55.0	3.6	211.8	87.2	51.4	2.8
15CA-01B_29Feb-Spot 175	30	2771	1.0	20.8196	6.3	0.0524	7.9	0.0079	4.7	0.60	50.8	2.4	51.9	4.0	100.8	149.1	50.8	2.4
15CA-01B_29Feb-Spot 176	56	327	1.2	351.4788	45.8	0.0030	46.1	0.0076	4.7	0.10	48.7	2.3	3.0	1.4	0.0	0.0	48.7	2.3
15CA-01B_29Feb-Spot 177	34	8289	1.0	19.8784	4.6	0.0569	6.0	0.0082	3.9	0.65	52.7	2.0	56.2	3.3	209.2	105.9	52.7	2.0
15CA-01B_29Feb-Spot 178	95	3923	0.8	22.3744	2.8	0.0474	4.1	0.0077	3.0	0.74	49.4	1.5	47.1	1.9	72.3	67.7	49.4	1.5
15CA-01B_29Feb-Spot 179	54	504	0.8	30.9283	29.6	0.0356	29.9	0.0080	4.5	0.15	51.2	2.3	35.5	10.4	934.6	878.5	51.2	2.3
15CA-01B_29Feb-Spot 180	46	944	0.8	26.0952	21.4	0.0420	21.8	0.0080	3.9	0.18	51.1	2.0	41.8	8.9	462.9	571.6	51.1	2.0
15CA-01B_29Feb-Spot 181	88	897	1.1	28.6126	9.5	0.0378	10.1	0.0078	3.6	0.36	50.3	1.8	37.6	3.7	712.6	263.7	50.3	1.8
15CA-01B_29Feb-Spot 182	198	4314	0.6	13.9639	4.5	0.0830	5.3	0.0084	2.8	0.54	54.0	1.5	81.0	4.1	975.0	91.3	54.0	1.5
15CA-01B_29Feb-Spot 183	36	1107	1.1	24.9185	13.4	0.0438	13.9	0.0079	3.9	0.28	50.8	2.0	43.5	5.9	342.5	345.5	50.8	2.0
15CA-01B_29Feb-Spot 184	50	1418	0.7	23.5504	13.5	0.0447	13.9	0.0076	3.4	0.25	49.0	1.7	44.4	6.0	199.0	339.6	49.0	1.7
15CA-01B_29Feb-Spot 185	73	441	0.9	50.3110	38.4	0.0215	38.6	0.0078	3.6	0.09	50.3	1.8	21.6	8.2	2662.9	469.6	50.3	1.8

Sample: 15CA01B	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)
15CA-01B_29Feb-Spot 186	42	217	1.0	-80.1593	5.1	-0.0125	6.8	0.0073	4.5	0.67	46.8	2.1	12.8	0.9	0.0	0.0	46.8	2.1
15CA-01B_29Feb-Spot 187	151	9516	0.7	21.8520	2.8	0.0509	4.2	0.0081	3.2	0.75	51.8	1.6	50.5	2.1	14.9	67.1	51.8	1.6
15CA-01B_29Feb-Spot 188	37	290	0.9	16.5814	11.3	0.0675	12.2	0.0081	4.5	0.37	52.2	2.3	66.4	7.8	614.6	244.9	52.2	2.3
15CA-01B_29Feb-Spot 189	41	2114	1.0	20.0075	5.4	0.0567	6.7	0.0082	4.0	0.60	52.8	2.1	56.0	3.7	194.1	125.1	52.8	2.1
15CA-01B_29Feb-Spot 190	101	1655	1.2	25.8000	10.6	0.0416	11.2	0.0078	3.5	0.31	50.0	1.7	41.4	4.5	432.9	279.4	50.0	1.7
15CA-01B_29Feb-Spot 191	63	2306	1.0	23.4328	3.2	0.0472	4.9	0.0080	3.6	0.74	51.5	1.9	46.9	2.2	186.5	81.2	51.5	1.9
15CA-01B_29Feb-Spot 192	104	4633	1.2	21.9182	3.9	0.0509	5.0	0.0081	3.3	0.64	52.0	1.7	50.4	2.5	22.2	93.4	52.0	1.7
15CA-01B_29Feb-Spot 193	54	10022	0.9	20.4230	3.7	0.0556	5.1	0.0082	3.4	0.68	52.9	1.8	55.0	2.7	146.1	87.8	52.9	1.8
15CA-01B_29Feb-Spot 194	34	243	1.1	-50.6293	56.5	-0.0200	56.6	0.0074	3.9	0.07	47.3	1.8	20.6	11.8	0.0	0.0	47.3	1.8
15CA-01B_29Feb-Spot 195	34	810	1.0	29.6058	24.7	0.0375	25.3	0.0080	5.3	0.21	51.7	2.7	37.4	9.3	808.6	710.5	51.7	2.7
15CA-01B_29Feb-Spot 196	27	1021	0.8	28.4428	6.4	0.0382	7.6	0.0079	4.2	0.55	50.5	2.1	38.0	2.8	696.1	176.3	50.5	2.1
15CA-01B_29Feb-Spot 197	59	1572	0.9	7.8173	16.2	0.1580	17.3	0.0090	6.0	0.35	57.5	3.4	148.9	23.9	2069.6	287.5	57.5	3.4
15CA-01B_29Feb-Spot 198	66	3259	0.8	13.6576	7.0	0.0823	8.1	0.0082	4.0	0.50	52.3	2.1	80.3	6.3	1020.0	142.6	52.3	2.1
15CA-01B_29Feb-Spot 199	96	1815	0.7	19.9676	4.1	0.0548	5.3	0.0079	3.3	0.62	50.9	1.7	54.1	2.8	198.7	95.7	50.9	1.7
15CA-01B_29Feb-Spot 200	70	373	0.6	141.8868	38.5	0.0073	38.7	0.0075	3.9	0.10	48.1	1.9	7.4	2.8	0.0	0.0	48.1	1.9
15CA-01B_29Feb-Spot 201	38	398	0.9	89.2283	9.3	0.0122	10.3	0.0079	4.4	0.42	50.9	2.2	12.4	1.3	0.0	0.0	50.9	2.2
15CA-01B_29Feb-Spot 202	52	1678	1.2	22.0410	6.6	0.0498	7.5	0.0080	3.7	0.49	51.1	1.9	49.3	3.6	35.7	159.2	51.1	1.9
15CA-01B_29Feb-Spot 203	55	3055	0.7	17.4929	5.2	0.0653	6.6	0.0083	4.1	0.62	53.2	2.2	64.2	4.1	497.9	113.8	53.2	2.2
15CA-01B_29Feb-Spot 204	47	527	0.7	8.3709	7.0	0.1421	7.9	0.0086	3.7	0.47	55.4	2.0	134.9	10.0	1948.2	124.9	55.4	2.0
15CA-01B_29Feb-Spot 205	28	465	1.0	20.5698	7.0	0.0544	8.6	0.0081	5.1	0.59	52.1	2.6	53.8	4.5	129.3	163.7	52.1	2.6
15CA-01B_29Feb-Spot 206	51	734	1.0	19.0106	10.6	0.0583	11.3	0.0080	3.7	0.33	51.6	1.9	57.5	6.3	311.7	242.8	51.6	1.9
15CA-01B_29Feb-Spot 207	339	9924	0.4	18.3898	1.9	0.0602	3.4	0.0080	2.8	0.83	51.5	1.5	59.3	2.0	386.7	43.3	51.5	1.5
15CA-01B_29Feb-Spot 208	116	1525	0.7	21.0958	3.5	0.0518	4.6	0.0079	2.9	0.64	50.9	1.5	51.3	2.3	69.6	83.6	50.9	1.5
15CA-01B_29Feb-Spot 209	35	808	1.2	31.8411	6.0	0.0340	8.0	0.0079	5.3	0.67	50.5	2.7	34.0	2.7	1020.4	177.4	50.5	2.7
15CA-01B_29Feb-Spot 210	104	684	0.7	38.8478	32.1	0.0279	32.3	0.0079	3.4	0.11	50.5	1.7	28.0	8.9	1656.8	1131.4	50.5	1.7
15CA-01B_29Feb-Spot 211	118	3440	0.6	16.5780	3.1	0.0684	4.1	0.0082	2.6	0.64	52.8	1.4	67.2	2.7	615.1	67.8	52.8	1.4
15CA-01B_29Feb-Spot 212	59	3835	0.7	21.7023	3.5	0.0515	4.8	0.0081	3.3	0.69	52.1	1.7	51.0	2.4	1.7	83.5	52.1	1.7
15CA-01B_29Feb-Spot 213	91	8473	0.8	15.3611	3.5	0.0708	4.7	0.0079	3.2	0.67	50.7	1.6	69.5	3.2	777.5	74.1	50.7	1.6
15CA-01B_29Feb-Spot 214	29	451	0.9	39.5586	8.0	0.0278	9.9	0.0080	5.8	0.59	51.3	3.0	27.9	2.7	1719.8	282.0	51.3	3.0
15CA-01B_29Feb-Spot 216	28	3708	1.1	22.5198	5.1	0.0501	7.3	0.0082	5.3	0.72	52.6	2.8	49.7	3.6	88.1	124.9	52.6	2.8
15CA-01B_29Feb-Spot 217	111	527	0.5	21.0651	4.2	0.0526	5.3	0.0080	3.4	0.63	51.6	1.7	52.0	2.7	73.0	98.9	51.6	1.7
15CA-01B_29Feb-Spot 218	33	691	0.9	33.4919	7.2	0.0322	8.5	0.0078	4.5	0.54	50.2	2.3	32.2	2.7	1173.5	220.6	50.2	2.3
15CA-01B_29Feb-Spot 219	44	769	1.1	34.2037	34.4	0.0314	34.6	0.0078	3.7	0.11	50.0	1.9	31.4	10.7	1238.8	1101.0	50.0	1.9
15CA-01B_29Feb-Spot 220	47	362	0.8	21.2320	30.7	0.0525	30.9	0.0081	3.3	0.11	51.9	1.7	52.0	15.7	54.2	748.4	51.9	1.7
15CA-01B_29Feb-Spot 221	48	344	1.3	114.5949	31.0	0.0092	31.4	0.0076	4.6	0.15	48.9	2.3	9.3	2.9	0.0	0.0	48.9	2.3
15CA-01B_29Feb-Spot 222	40	276	0.7	15.5833	26.1	0.0754	26.3	0.0085	3.3	0.13	54.7	1.8	73.8	18.8	747.3	561.3	54.7	1.8
15CA-01B_29Feb-Spot 223	29	206	0.9	7.6991	20.8	0.1329	21.5	0.0074	5.6	0.26	47.7	2.6	126.7	25.7	2096.4	370.0	47.7	2.6
15CA-01B_29Feb-Spot 224	44	1976	0.9	25.7547	4.4	0.0435	5.4	0.0081	3.2	0.60	52.1	1.7	43.2	2.3	428.3	114.2	52.1	1.7
15CA-01B_29Feb-Spot 225	479	20245	6.0	13.3233	1.6	0.3271	3.6	0.0316	3.2	0.89	200.6	6.4	287.4	9.1	1070.0	32.8	200.6	6.4
15CA-01B_29Feb-Spot 226	43	1688	1.0	25.3096	12.2	0.0441	13.2	0.0081	5.2	0.39	52.0	2.7	43.8	5.7	382.8	317.8	52.0	2.7
15CA-01B_29Feb-Spot 227	102	3526	0.6	22.0303	3.1	0.0525	4.3	0.0084	2.9	0.68	53.8	1.5	52.0	2.2	34.5	76.3	53.8	1.5
15CA-01B_29Feb-Spot 228	42	483	0.7	52.3618	13.1	0.0207	13.9	0.0078	4.7	0.34	50.4	2.4	20.8	2.9	2843.6	1120.9	50.4	2.4
15CA-01B_29Feb-Spot 229	88	4746	0.8	17.2453	4.0	0.0649	5.2	0.0081	3.2	0.63	52.1	1.7	63.8	3.2	529.3	88.8	52.1	1.7
15CA-01B_29Feb-Spot 230	43	1625	0.8	23.5980	4.9	0.0459	6.5	0.0079	4.2	0.65	50.5	2.1	45.6	2.9	204.1	123.1	50.5	2.1
15CA-01B_29Feb-Spot 231	54	484	0.8	41.2656	21.4	0.0260	21.7	0.0078	4.0	0.18	50.0	2.0	26.1	5.6	1870.5	782.3	50.0	2.0
15CA-01B_29Feb-Spot 232	42	697	1.1	22.8320	5.6	0.0492	7.4	0.0081	4.9	0.66	52.3	2.5	48.7	3.5	122.0	137.3	52.3	2.5
15CA-01B_29Feb-Spot 233	59	3484	1.0	23.3547	4.2	0.0483	6.1	0.0082	4.4	0.73	52.5	2.3	47.9	2.9	178.2	104.7	52.5	2.3
15CA-01B_29Feb-Spot 234	66	296	0.9	3.1649	3.6	0.5353	6.7	0.0123	5.7	0.85	78.7	4.4	435.3	23.7	3550.3	54.7	78.7	4.4
15CA-01B_29Feb-Spot 235	58	804	1.2	32.8258	12.5	0.0327	13.1	0.0078	3.8	0.29	50.1	1.9	32.7	4.2	1112.0	382.3	50.1	1.9
15CA-01B_29Feb-Spot 236	32	312	1.1	24.7739	13.5	0.0456	14.0	0.0082	3.7	0.27	52.5	1.9	45.2	6.2	327.5	347.1	52.5	1.9
15CA-01B_29Feb-Spot 237	38	1027	0.8	30.1549	6.5	0.0381	7.7	0.0083	4.2	0.55	53.6	2.3	38.0	2.9	861.2	185.6	53.6	2.3
15CA-01B_29Feb-Spot 238	67	8266	0.9	9.9859	2.8	0.1219	4.8	0.0088	3.9	0.81	56.7	2.2	116.8	5.3	1626.7	52.6	56.7	2.2
15CA-01B_29Feb-Spot 239	73	1515	1.3	27.9319	7.7	0.0394	8.6	0.0080	3.9	0.45	51.3	2.0	39.3	3.3	646.1	210.4	51.3	2.0
15CA-01B_29Feb-Spot 240	62	1448	0.7	23.4000	5.9	0.0471	6.8	0.0080	3.4	0.50	51.3	1.7	46.7	3.1	183.0	147.6	51.3	1.7
15CA-01B_29Feb-Spot 241	59	683	0.7	40.2045	13.8	0.0279	14.4	0.0081	4.0	0.28	52.2	2.1	27.9	4.0	1776.9	492.6	52.2	2.1
15CA-01B_29Feb-Spot 242	127	1864	1.0	24.6623	6.4	0.0442	7.2	0.0079	3.4	0.47	50.8	1.7	43.9	3.1	315.9	163.2	50.8	1.7
15CA-01B_29Feb-Spot 243	36	8740	0.7	19.9731	5.5	0.0561	7.1	0.0081	4.4	0.62	52.1	2.3	55.4	3.8	198.1	129.0	52.1	2.3
15CA-01B_29Feb-Spot 244	36	229	1.0	-66.8985	25.8	-0.0155	26.4	0.0075	5.7	0.22	48.2	2.8	15.8	4.2	0.0	0.0	48.2	2.8
15CA-01B_29Feb-Spot 245	31	502	1.0	35.6137	26.5	0.0312	27.0	0.0081	5.4	0.20	51.8	2.8	31.2	8.3	1367.0	865.6	51.8	2.8
15CA-01B_29Feb-Spot 246	35	376	1.0	69.1854	37.6	0.0155	37.8	0.0078	3.8	0.10	49.8	1.9	15.6	5.8	0.0	1019.6	49.8	1.9
15CA-01B_29Feb-Spot 247	62	768	1.1	32.5316	9.0	0.0337	9.7	0.0080	3.5	0.36	51.1	1.8	33.7	3.2	1084.7	273.7	51.1	1.8
15CA-01B_29Feb-Spot 249	64	1859	0.8	22.6848	9.9	0.0488	10.7	0.0080	4.0	0.38	51.6	2.1	48.4	5.1	106.1	244.3	51.6	2.1
15CA-01B_29Feb-Spot 250	35	481	0.9	49.5173	14.5	0.0226	15.2	0.0081	4.6	0.30	52.1	2.4	22.7	3.4	2593.2	631.4	52.1	2.4
15CA-01B_29Feb-Spot 251	29	441	0.8	28.9060	13.0	0.0375	13.6	0.0079	4.1	0.30	50.5	2.1	37.4	5.0	741.1	365.6	50.5	2.1
15CA-01B_29Feb-Spot 252	44	344	0.7	168.4096	238.2	0.0060	238.3	0.0073	3.4	0.01	47.2	1.6	6.1	14.5	0.0	0.0	47.2	1.6
15CA-01B_29Feb-Spot 253	61	1315	1.1	29.1834	3.9	0.0367	5.6	0.0078	4.0	0.71	49.8	2.0	36.6	2.0	768.0	110.5	49.8	2.0
15CA-01B_29Feb-Spot 254	33	392	0.8	46.9615	10.5	0.0223	11.0	0.0076	3.2	0.29	48.7	1.6	22.4	2.4	2369.4	431.3	48.7	1.6
15CA-01B_29Feb-Spot 255	60	2124	1.0	14.1274	4.3	0.0830	5.5	0.0085	3.4	0.63	54.6	1.9	80.9	4.3	951.2	87.4	54.6	1.9
15CA-01B_29Feb-Spot 256	57	2661	1.5	22.5188	4.6	0.0497	6.2	0.0081	4.2	0.67	52.1	2.2	49.2	3.0	88.0	113.0	52.1	2.2
15CA-01B_29Feb-Spot 257	54	1994	1.3	25.2135	4.8	0.0443	6.3	0.0081	4.1	0.64	52.0	2.1	44.0	2.7	372.9	125.5	52.0	2.1
15CA-01B_29Feb-Spot 258	41	4547	1.1	17.1043	4.2	0.0657	6.1	0.0082	4.4	0.72	52.3	2.3	64.6	3.8	547.2	92.8	52.3	2.3
15CA-01B_29Feb-Spot 259	56	1325	0.7	22.9700	5.2	0.0491	6.7	0.0082	4.2	0.63	52.6	2.2	48.7	3.2	136.9	128.0	52.6	2.2
15CA-01B_29Feb-Spot 260	69	2638	0.7	20.1017	4.6	0.0558	5.9	0.0081	3.6	0.61	52.2	1.9	55.1	3.2	183.2	108.2	52.2	1.9
15CA-01B_29Feb-Spot 261	151	693	0.8	20.7964	6.0	0.0522	6.7	0.0079	3.0	0.45	50.6	1.5	51.7	3.4	103.5	141.4	50.6	1.5
15CA-01B_29Feb-Spot 262	46	257	1.2	10.3859	16.5	0.1143	17.2	0.0086	4.8	0.28	55.3	2.6	109.9	17.9	1553.3	312.2	55.3	2.6
15CA-01B_29Feb-Spot 263	147	464	0.6	6.9482	24.0	0.1757	24.7	0.0089	5.7	0.23	56.8	3.2	164.3	37.5	2274.9	421.0	56.8	3.2
15CA-01B_29Feb-Spot 264	50	4533	1.3	19.6010	5.4	0.0568	6.4	0.0081	3.4	0.53	51.9	1.7	56.1	3.5	241.7	124.2	51.9	1.7
15CA-01B_29Feb-Spot 265	35	312	1.2	305.2013	236.2	0.0034	236.3	0.0076	4.9	0.02	48.5	2.4	3.5	8.2	0.0	0.0	48.5	2.4
15CA-01B_29Feb-Spot 266	74	4321	1.0	21.8710	3.2	0.0510	4.2	0.0081	2.7	0.64	52.0	1.4	50.5	2.1	17.0	77.0	52.0	1.4
15CA-01B_29Feb-Spot 267	37	400	1.1	76.6836	79.8	0.0142	79.9	0.0079	4.6	0.06	50.7	2.3	14.3	11.4	0.0	379.0	50.7	2.3
15CA-01B_29Feb-Spot 268	54	324	0.9	14.0238	10.4	0.0794	11.0	0.0081	3.7	0.33	51.9	1.9	77.6	8.2	966.3	212.7	51.9	1.9
15CA-01B_29Feb-Spot 269	57	790	1.0	32.4694	7.5	0.0342	8.5	0.0080	4.0	0.47	51.7	2.1	34.1	2.9	1078.9	227.2	51.7	2.1
15CA-01B_29Feb-Spot 270	128	5156	284.2	21.3204	3.5	0.0651	4.3	0.0101	2.6	0.60	64.6	1.7	64.1	2.7	44.3	83.4	64.6	1.7
15CA-01B_29Feb-Spot 271	34	1185	0.9	27.2903	9.0	0.0400	9.8	0.0079	3.8	0.39	50.9	1.9	39.8	3.8	582.7	245.1	50.9	1.9
15CA-01B_29Feb-Spot 272	39	393	1.0	67.6899	42.4	0.0157	42.6	0.0077	4.4	0.10	49.6	2.2	15.9	6.7	0.0	834.6	49.6	2.2
15CA-01B_29Feb-Spot 273	36	3072	0.9	14.8828	8.3	0.0789	9.7	0.0085	5.0	0.52	54.7	2.7	77.1	7.2	843.7	173.9	54.7	2.7
15CA-01B_29Feb-Spot 274	35	1164	1.0	24.0499	4.8	0.0468	7.9	0.0082	6.3	0.79	52.4	3.3	46.5	3.6	251.9	122.4	52.4	3.3
15CA-01B_29Feb-Spot 275	64	550	0.8	41.2167	5.0	0.0259	6.2	0.0078	3.6	0.58	49.8	1.8	26.0	1.6	1866.2	182.4	49.8	1.8
15CA-01B_29Feb-Spot 276	54	834	1.4	26.5621	9.8	0.0413	10.8	0.0079	4.5	0.42	51.0	2.3	41.1	4.3	510.0	261.8	51.0	2.3
15CA-01B_29Feb-Spot 277	68	587	1.1	21.4834	4.5	0.0521	5.2	0.0081	2.7	0.52	52.1	1.4	51.6	2.6	26.1	107.6	52.1	1.4
15CA-01B_29Feb-Spot 278	41	4173	0.9	20.9635	5.0	0.0522	6.4	0.0079	4.0	0.62	50.9	2.0	51.6	3.2	84.5	118.8	50.9	2.0

Sample: 15CA01B	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
15CA-01B_29Feb-Spot 279	85	498	0.8	59.5735	49.0	0.0180	49.2	0.0078	4.0	0.08	50.0	2.0	18.2	8.9	0.0	440.3	50.0	2.0
15CA-01B_29Feb-Spot 280	45	932	1.0	23.3019	6.5	0.0478	7.3	0.0081	3.3	0.45	51.9	1.7	47.5	3.4	172.5	161.5	51.9	1.7
15CA-01B_29Feb-Spot 281	87	935	1.0	30.8692	24.5	0.0352	24.7	0.0079	2.6	0.11	50.6	1.3	35.1	8.5	929.0	724.6	50.6	1.3
15CA-01B_29Feb-Spot 282	34	7810	1.1	17.5228	5.6	0.0628	7.3	0.0080	4.7	0.64	51.3	2.4	61.9	4.4	494.2	123.3	51.3	2.4
15CA-01B_29Feb-Spot 283	62	2080	0.7	22.9684	8.3	0.0484	9.1	0.0081	3.8	0.42	51.7	2.0	48.0	4.3	136.7	205.4	51.7	2.0
15CA-01B_29Feb-Spot 284	42	4394	0.7	21.7987	4.9	0.0497	6.9	0.0079	4.9	0.70	50.5	2.4	49.3	3.3	9.0	118.9	50.5	2.4
15CA-01B_29Feb-Spot 285	34	1001	1.1	28.3155	4.9	0.0402	7.5	0.0083	5.6	0.75	53.0	3.0	40.0	2.9	683.7	136.0	53.0	3.0
15CA-01B_29Feb-Spot 286	55	368	1.1	10.2593	12.3	0.1156	12.8	0.0086	3.4	0.27	55.2	1.9	111.1	13.4	1576.3	231.1	55.2	1.9
15CA-01B_29Feb-Spot 287	36	1310	0.9	27.8616	8.1	0.0384	9.9	0.0078	5.7	0.57	49.8	2.8	38.3	3.7	639.2	222.8	49.8	2.8
15CA-01B_29Feb-Spot 288	63	1012	1.0	28.7431	6.9	0.0372	7.7	0.0078	3.4	0.45	49.9	1.7	37.1	2.8	725.3	191.7	49.9	1.7
15CA-01B_29Feb-Spot 289	37	336	0.8	222.8371	19.8	0.0048	20.2	0.0078	3.9	0.19	49.8	1.9	4.9	1.0	0.0	0.0	49.8	1.9
15CA-01B_29Feb-Spot 290	50	1615	0.9	7.4435	6.5	0.1683	7.9	0.0091	4.5	0.57	58.3	2.6	158.0	11.5	2155.5	113.1	58.3	2.6
15CA-01B_29Feb-Spot 291	172	98984	0.7	21.0587	2.2	0.0519	3.2	0.0079	2.3	0.73	50.9	1.2	51.4	1.6	73.8	51.6	50.9	1.2
15CA-01B_29Feb-Spot 292	31	1333	1.0	16.5884	7.9	0.0651	9.1	0.0078	4.5	0.49	50.3	2.2	64.0	5.6	613.7	171.0	50.3	2.2
15CA-01B_29Feb-Spot 293	45	2960	1.2	20.2103	4.5	0.0543	7.1	0.0080	5.5	0.77	51.1	2.8	53.7	3.7	170.6	106.1	51.1	2.8
15CA-01B_29Feb-Spot 294	55	708	1.0	33.9424	18.0	0.0307	18.4	0.0076	3.8	0.21	48.6	1.8	30.7	5.6	1214.9	562.6	48.6	1.8
15CA-01B_29Feb-Spot 295	36	568	0.7	37.9736	9.9	0.0285	11.0	0.0078	4.8	0.44	50.4	2.4	28.5	3.1	1579.0	337.1	50.4	2.4
15CA-01B_29Feb-Spot 296	36	675	1.0	34.1784	39.1	0.0313	39.4	0.0077	4.9	0.13	49.8	2.4	31.3	12.1	1236.5	1261.5	49.8	2.4
15CA-01B_29Feb-Spot 297	60	5016	0.6	10.4230	8.0	0.1205	9.2	0.0091	4.7	0.51	58.5	2.7	115.6	10.1	1546.6	150.0	58.5	2.7
15CA-01B_29Feb-Spot 298	47	1116	1.0	15.0307	4.4	0.0744	5.6	0.0081	3.5	0.63	52.1	1.8	72.8	4.0	823.1	91.3	52.1	1.8
15CA-01B_29Feb-Spot 299	340	36238	0.6	21.3023	1.9	0.0500	3.5	0.0077	2.9	0.83	49.6	1.4	49.6	1.7	46.3	45.8	49.6	1.4
15CA-01B_29Feb-Spot 300	30	278	0.9	-144.9651	56.1	-0.0072	56.4	0.0076	5.6	0.10	48.7	2.7	7.4	4.2	0.0	0.0	48.7	2.7
15CA-01B_29Feb-Spot 301	33	248	0.9	66.4064	30.4	0.0158	30.8	0.0076	5.2	0.17	48.8	2.5	15.9	4.9	0.0	1151.9	48.8	2.5
15CA-01B_29Feb-Spot 302	79	236	0.9	3.6977	13.2	0.4145	15.9	0.0111	8.9	0.56	71.3	6.3	352.1	47.3	3308.6	207.7	71.3	6.3
15CA-01B_29Feb-Spot 303	36	416	1.2	61.8934	64.3	0.0175	64.6	0.0079	6.7	0.10	50.5	3.4	17.6	11.3	0.0	22.2	50.5	3.4
15CA-01B_29Feb-Spot 304	54	2084	0.9	23.4827	4.1	0.0476	5.9	0.0081	4.2	0.72	52.1	2.2	47.3	2.7	191.8	101.6	52.1	2.2
15CA-01B_29Feb-Spot 305	167	952	0.8	31.9285	25.6	0.0342	25.9	0.0079	3.9	0.15	50.8	2.0	34.1	8.7	1028.5	773.9	50.8	2.0
15CA-01B_29Feb-Spot 306	312	8953	3.2	21.6540	1.7	0.0628	2.8	0.0099	2.2	0.80	63.3	1.4	61.9	1.7	7.1	40.4	63.3	1.4
15CA-01B_29Feb-Spot 307	55	678	0.8	18.2578	20.6	0.0621	20.9	0.0082	3.5	0.17	52.8	1.8	61.2	12.4	402.9	465.5	52.8	1.8
15CA-01B_29Feb-Spot 309	41	731	1.1	23.1510	9.1	0.0463	10.2	0.0078	4.5	0.44	49.9	2.2	45.9	4.6	156.4	226.5	49.9	2.2
15CA-01B_29Feb-Spot 310	23	306	1.2	539.6268	541.9	0.0021	541.9	0.0081	6.0	0.01	51.7	3.1	2.1	11.3	0.0	0.0	51.7	3.1
15CA-01B_29Feb-Spot 311	47	2837	1.0	15.3102	4.5	0.0703	5.7	0.0078	3.4	0.60	50.2	1.7	69.0	3.8	784.5	95.1	50.2	1.7
15CA-01B_29Feb-Spot 312	52	848	0.8	29.8499	6.1	0.0357	7.4	0.0077	4.3	0.58	49.6	2.1	35.6	2.6	832.0	173.3	49.6	2.1
15CA-01B_29Feb-Spot 313	67	611	1.1	42.7684	15.8	0.0248	16.2	0.0077	3.8	0.23	49.4	1.9	24.9	4.0	2002.5	594.3	49.4	1.9
15CA-01B_29Feb-Spot 314	41	1529	1.0	24.7240	5.0	0.0444	6.6	0.0080	4.3	0.65	51.1	2.2	44.1	2.9	322.4	128.5	51.1	2.2
15CA-01B_29Feb-Spot 315	75	563	0.8	42.2618	31.0	0.0252	31.1	0.0077	3.0	0.10	49.7	1.5	25.3	7.8	1958.0	1171.5	49.7	1.5

Sample: 15CA03A	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
15CA-03A_29Feb-Spot 1	60	272	0.9	978.4126	40.5	0.0010	40.6	0.0074	3.3	0.08	47.6	1.6	1.1	0.4	0.0	0.0	47.6	1.6
15CA-03A_29Feb-Spot 2	82	1464	1.1	26.4767	3.5	0.0414	4.5	0.0080	2.9	0.64	51.1	1.5	41.2	1.8	501.4	92.6	51.1	1.5
15CA-03A_29Feb-Spot 3	67	5752	0.9	21.1838	4.2	0.0540	5.3	0.0083	3.2	0.60	53.3	1.7	53.4	2.8	59.7	100.6	53.3	1.7
15CA-03A_29Feb-Spot 4	152	2183	0.7	17.1370	3.9	0.0623	4.5	0.0077	2.3	0.51	49.7	1.2	61.4	2.7	543.0	84.7	49.7	1.2
15CA-03A_29Feb-Spot 5	44	5373	0.8	12.3199	10.6	0.0944	11.7	0.0084	5.1	0.43	54.1	2.7	91.6	10.3	1225.5	208.3	54.1	2.7
15CA-03A_29Feb-Spot 6	64	1213	1.1	28.9280	4.2	0.0388	5.6	0.0081	3.7	0.66	52.2	1.9	38.6	2.1	743.2	118.4	52.2	1.9
15CA-03A_29Feb-Spot 7	69	1563	0.8	23.2054	6.3	0.0491	6.7	0.0083	2.1	0.32	53.1	1.1	48.7	3.2	162.2	157.4	53.1	1.1
15CA-03A_29Feb-Spot 8	115	894	1.1	27.3653	6.0	0.0402	6.5	0.0080	2.6	0.39	51.2	1.3	40.0	2.6	590.1	163.7	51.2	1.3
15CA-03A_29Feb-Spot 9	48	953	1.1	26.3747	6.5	0.0428	7.8	0.0082	4.3	0.55	52.6	2.2	42.5	3.2	491.1	171.9	52.6	2.2
15CA-03A_29Feb-Spot 10	45	3773	1.3	22.1366	4.3	0.0521	5.8	0.0084	3.9	0.67	53.7	2.1	51.5	2.9	46.2	104.5	53.7	2.1
15CA-03A_29Feb-Spot 11	33	1378	1.2	24.4285	5.8	0.0471	6.6	0.0083	3.2	0.49	53.6	1.7	46.8	3.0	291.6	148.2	53.6	1.7
15CA-03A_29Feb-Spot 12	65	695	1.2	9.5291	18.5	0.1291	19.5	0.0089	6.0	0.31	57.3	3.4	123.3	22.6	1713.3	343.7	57.3	3.4
15CA-03A_29Feb-Spot 13	60	4673	0.8	22.5079	3.7	0.0489	5.2	0.0080	3.7	0.70	51.2	1.9	48.4	2.5	86.8	90.5	51.2	1.9
15CA-03A_29Feb-Spot 14	61	4490	1.0	23.3503	3.7	0.0479	4.9	0.0081	3.1	0.64	52.1	1.6	47.5	2.3	177.7	93.4	52.1	1.6
15CA-03A_29Feb-Spot 15	52	3194	0.8	20.5593	5.0	0.0562	6.2	0.0084	3.8	0.60	53.8	2.0	55.5	3.4	130.5	117.1	53.8	2.0
15CA-03A_29Feb-Spot 16	54	2784	1.1	21.0735	4.2	0.0546	5.3	0.0083	3.2	0.61	53.6	1.7	54.0	2.8	72.1	99.3	53.6	1.7
15CA-03A_29Feb-Spot 17	84	10398	1.0	18.9853	3.7	0.0588	4.6	0.0081	2.8	0.60	52.0	1.4	58.0	2.6	314.7	83.6	52.0	1.4
15CA-03A_29Feb-Spot 18	82	474	1.0	58.6843	96.4	0.0181	96.4	0.0077	3.3	0.03	49.5	1.6	18.2	17.4	0.0	2070.3	49.5	1.6
15CA-03A_29Feb-Spot 19	42	719	1.3	28.4866	11.1	0.0380	11.7	0.0078	3.8	0.32	50.4	1.9	37.8	4.3	700.4	308.2	50.4	1.9
15CA-03A_29Feb-Spot 20	44	435	1.2	62.6619	8.9	0.0176	9.4	0.0080	3.1	0.33	51.3	1.6	17.7	1.6	0.0	1633.7	51.3	1.6
15CA-03A_29Feb-Spot 22	47	548	1.2	48.0517	31.0	0.0222	31.3	0.0077	3.9	0.12	49.6	1.9	22.2	6.9	2464.7	570.2	49.6	1.9
15CA-03A_29Feb-Spot 23	73	3977	1.1	22.8429	3.8	0.0489	5.1	0.0081	3.4	0.66	52.1	1.8	48.5	2.4	123.2	94.6	52.1	1.8
15CA-03A_29Feb-Spot 24	95	1711	1.0	24.6450	8.3	0.0441	8.7	0.0079	2.8	0.32	50.6	1.4	43.8	3.7	314.1	212.5	50.6	1.4
15CA-03A_29Feb-Spot 25	640	31325	0.9	21.1664	1.7	0.0514	2.3	0.0079	1.5	0.66	50.7	0.8	50.9	1.1	61.6	40.4	50.7	0.8
15CA-03A_29Feb-Spot 26	76	2987	0.9	24.1110	3.9	0.0473	5.4	0.0083	3.7	0.68	53.1	1.9	46.9	2.5	258.3	99.8	53.1	1.9
15CA-03A_29Feb-Spot 27	62	7233	1.2	19.1992	5.2	0.0595	6.4	0.0083	3.8	0.59	53.2	2.0	58.7	3.7	289.2	118.8	53.2	2.0
15CA-03A_29Feb-Spot 28	53	3677	1.0	22.1097	4.1	0.0498	5.5	0.0080	3.6	0.66	51.3	1.8	49.4	2.6	43.3	99.3	51.3	1.8
15CA-03A_29Feb-Spot 29	38	1027	1.1	27.1532	5.3	0.0400	6.9	0.0079	4.3	0.63	50.5	2.2	39.8	2.7	569.1	143.5	50.5	2.2
15CA-03A_29Feb-Spot 30	75	1352	1.2	26.4977	4.0	0.0425	5.0	0.0082	2.9	0.59	52.4	1.5	42.2	2.1	503.5	107.5	52.4	1.5
15CA-03A_29Feb-Spot 31	94	1435	0.9	25.3967	5.2	0.0443	6.1	0.0082	3.1	0.51	52.4	1.6	44.0	2.6	391.8	136.5	52.4	1.6
15CA-03A_29Feb-Spot 32	109	2581	1.4	24.2065	3.5	0.0447	4.4	0.0079	2.6	0.59	50.4	1.3	44.4	1.9	268.3	89.9	50.4	1.3
15CA-03A_29Feb-Spot 33	92	1074	0.7	27.4226	3.4	0.0398	4.3	0.0079	2.7	0.63	50.9	1.4	39.7	1.7	595.8	91.5	50.9	1.4
15CA-03A_29Feb-Spot 34	30	288	1.3	-472.8295	1323.4	-0.0022	1323.4	0.0077	4.7	0.00	49.4	2.3	2.3	30.2	0.0	0.0	49.4	2.3
15CA-03A_29Feb-Spot 35	33	10679	1.2	12.3376	11.2	0.0952	12.6	0.0085	5.7	0.45	54.7	3.1	92.3	11.1	1222.7	221.5	54.7	3.1
15CA-03A_29Feb-Spot 36	44	318	0.9	-202.3688	456.5	-0.0054	456.5	0.0079	3.2	0.01	50.5	1.6	5.5	25.0	0.0	0.0	50.5	1.6
15CA-03A_29Feb-Spot 37	38	1099	1.2	24.4451	5.7	0.0455	7.1	0.0081	4.3	0.60	51.8	2.2	45.2	3.1	293.3	144.6	51.8	2.2
15CA-03A_29Feb-Spot 38	38	502	1.0	29.4563	29.2	0.0391	29.4	0.0084	3.6	0.12	53.6	1.9	38.9	11.2	794.3	841.7	53.6	1.9
15CA-03A_29Feb-Spot 39	635	13824	1.2	17.8564	1.7	0.1252	2.2	0.0162	1.4	0.65	103.7	1.5	119.8	2.5	452.4	36.9	103.7	1.5
15CA-03A_29Feb-Spot 40	100	973	1.0	28.2190	12.3	0.0383	12.5	0.0078	2.5	0.20	50.3	1.2	38.1	4.7	674.2	339.3	50.3	1.2
15CA-03A_29Feb-Spot 41	40	656	1.2	55.0198	44.3	0.0200	44.5	0.0080	3.3	0.08	51.2	1.7	20.1	8.8	3079.7	453.2	51.2	1.7
15CA-03A_29Feb-Spot 42	163	1425	0.7	27.0053	12.8	0.0397	13.0	0.0078	2.3	0.18	50.0	1.2	39.6	5.0	554.3	345.2	50.0	1.2
15CA-03A_29Feb-Spot 43	100	28958	1.8	20.6679	3.4	0.0623	4.8	0.0093	3.4	0.71	59.9	2.1	61.4	2.9	118.1	79.7	59.9	2.1
15CA-03A_29Feb-Spot 44	168	2121	0.9	16.4071	5.2	0.0704	5.7	0.0084	2.4	0.42	53.8	1.3	69.1	3.8	637.5	111.1	53.8	1.3
15CA-03A_29Feb-Spot 45	64	2720	1.0	24.1230	4.4	0.0443	5.5	0.0078	3.3	0.60	49.8	1.7	44.1	2.4	259.6	112.5	49.8	1.7
15CA-03A_29Feb-Spot 46	146	1440	0.8	25.6980	2.9	0.0429	3.7	0.0080	2.3	0.62	51.3	1.2	42.6	1.6	422.6	76.8	51.3	1.2
15CA-03A_29Feb-Spot 47	59	71586	0.9	21.9885	3.9	0.0507	5.3	0.0081	3.6	0.68	51.9	1.9	50.2	2.6	29.9	94.8	51.9	1.9
15CA-03A_29Feb-Spot 48	81	517	0.8	44.5174	24.0	0.0232	24.2	0.0075	3.4	0.14	48.0	1.6	23.2	5.6	2155.6	945.5	48.0	1.6
15CA-03A_29Feb-Spot 49	53	575	1.2	45.7614	14.8	0.0232	15.4	0.0077	4.1	0.26	49.4	2.0	23.3	3.5	2264.4	596.2	49.4	2.0
15CA-03A_29Feb-Spot 50	54	2400	1.1	6.9740	17.7	0.1811	18.3	0.0092	4.3	0.24	58.8	2.5	169.0	28.4	2268.5	308.6	58.8	2.5
15CA-03A_29Feb-Spot 51	74	3691	0.9	21.3685	3.7	0.0502	5.0	0.0078	3.3	0.66	49.9	1.6	49.7	2.4	38.9	88.8	49.9	1.6
15CA-03A_29Feb-Spot 52	66	1961	0.7	20.7644	4.4	0.0518	5.8	0.0078	3.8	0.65	50.1	1.9	51.3	2.9	107.1	104.0	50.1	1.9
15CA-03A_29Feb-Spot 53	62	1992	1.0	25.1117	4.4	0.0446	5.5	0.0081	3.3	0.60	52.1	1.7	44.3	2.4	362.5	115.0	52.1	1.7
15CA-03A_29Feb-Spot 54	600	5220	0.6	21.5505	1.5	0.0510	2.2	0.0080	1.7	0.75	51.2	0.9	50.5	1.1	18.6	35.7	51.2	0.9
15CA-03A_29Feb-Spot 55	45	1076	1.1	27.9269	4.8	0.0390	5.9	0.0079	3.4	0.58	50.7	1.7	38.8	2.2	645.6	131.3	50.7	1.7
15CA-03A_29Feb-Spot 56	77	2573	0.7	22.7915	3.4	0.0499	4.5	0.0082	2.8	0.64	52.9	1.5	49.4	2.1	117.6	84.8	52.9	1.5
15CA-03A_29Feb-Spot 57	71	378	1.2	83.1842	38.1	0.0129	38.4	0.0078	4.0	0.10	50.0	2.0	13.0	5.0	0.0	1381.7	50.0	2.0
15CA-03A_29Feb-Spot 58	57	3047	1.2	22.9257	4.3	0.0476	5.4	0.0079	3.4	0.62	50.8	1.7	47.2	2.5	132.1	105.6	50.8	1.7
15CA-03A_29Feb-Spot 59	888	44637	4.1	21.2154	1.0	0.0511	1.7	0.0079	1.4	0.80	50.5	0.7	50.6	0.8	56.1	24.5	50.5	0.7
15CA-03A_29Feb-Spot 60	76	766	1.0	31.5414	20.7	0.0344	21.0	0.0079	3.6	0.17	50.6	1.8	34.4	7.1	992.3	618.9	50.6	1.8
15CA-03A_29Feb-Spot 61	58	4830	0.9	20.2666	3.6	0.0571	5.0	0.0084	3.4	0.68	53.9	1.8	56.4	2.7	164.1	85.1	53.9	1.8
15CA-03A_29Feb-Spot 62	98	117935	0.9	19.0979	4.1	0.0572	5.0	0.0079	2.9	0.58	50.9	1.5	56.5	2.7	301.3	92.4	50.9	1.5
15CA-03A_29Feb-Spot 63	52	858	1.1	32.6509	5.2	0.0327	6.2	0.0077	3.4	0.54	49.7	1.7	32.6	2.0	1095.8	158.8	49.7	1.7
15CA-03A_29Feb-Spot 64	98	3020	0.6	19.7939	4.1	0.0551	5.1	0.0079	2.9	0.58	50.8	1.5	54.5	2.7	219.0	95.8	50.8	1.5
15CA-03A_29Feb-Spot 65	140	4442	0.8	22.0937	2.3	0.0497	3.4	0.0080	2.5	0.73	51.1	1.3	49.2	1.6	41.5	56.3	51.1	1.3
15CA-03A_29Feb-Spot 66	211	11486	0.8	21.0253	1.9	0.0536	2.7	0.0082	1.9	0.70	52.5	1.0	53.1	1.4	77.5	45.7	52.5	1.0
15CA-03A_29Feb-Spot 67	85	2177	0.9	23.4233	8.5	0.0473	8.9	0.0080	2.5	0.29	51.6	1.3	46.9	4.1	185.5	213.1	51.6	1.3
15CA-03A_29Feb-Spot 68	78	2598	1.2	21.5398	3.5	0.0514	4.8	0.0080	3.2	0.68	51.6	1.7	50.9	2.4	19.8	84.0	51.6	1.7
15CA-03A_29Feb-Spot 69	57	482	1.1	65.3739	83.7	0.0165	83.7	0.0078	3.6	0.04	50.4	1.8	16.7	13.8	0.0	750.5	50.4	1.8
15CA-03A_29Feb-Spot 70	85	3366	0.9	21.2846	3.5	0.0510	4.7	0.0079	3.2	0.67	50.6	1.6	50.5	2.3	48.3	84.1	50.6	1.6
15CA-03A_29Feb-Spot 71	62	369	1.0	80.6080	8.1	0.0130	9.0	0.0076	4.0	0.44	48.8	1.9	13.1	1.2	0.0	0.0	48.8	1.9
15CA-03A_29Feb-Spot 72	81	956	1.0	27.3259	7.0	0.0408	7.6	0.0081	3.0	0.40	51.9	1.6	40.6	3.0	586.2	189.9	51.9	1.6
15CA-03A_29Feb-Spot 73	74	548	0.8	36.7186	10.9	0.0294	11.4	0.0078	3.2	0.28	50.2	1.6	29.4	3.3	1466.7	360.6	50.2	1.6
15CA-03A_29Feb-Spot 74	180	2193	0.8	25.3074	3.8	0.0436	4.4	0.0080	2.2	0.50	51.3	1.1	43.3	1.8	382.6	97.8	51.3	1.1
15CA-03A_29Feb-Spot 75	45	530	1.1	48.8516	14.3	0.0227	14.7	0.0081	3.0	0.21	51.7	1.6	22.8	3.3	2534.8	616.3	51.7	1.6
15CA-03A_29Feb-Spot 76	38	749	1.3	35.9492	27.8	0.0318	28.0	0.0083	3.8	0.14	53.2	2.0	31.8	8.8	1397.4	915.1	53.2	2.0
15CA-03A_29Feb-Spot 77	30	1578	1.3	30.3202	15.1	0.0369	15.7	0.0081	4.3	0.27	52.1	2.2	36.8	5.7	876.9	437.9	52.1	2.2
15CA-03A_29Feb-Spot 78	172	7053	0.7	19.9499	2.3	0.0555	3.3	0.0080	2.4	0.72	51.5	1.2	54.8	1.8	200.8	53.7	51.5	1.2
15CA-03A_29Feb-Spot 79	50	1311	0.8	26.9315	4.9	0.0417	5.8	0.0081	3.1	0.53	52.3	1.6	41.5	2.4	547.0	132.4	52.3	1.6
15CA-03A_29Feb-Spot 80	62	825	0.7	17.5731	4.9	0.0636	7.2	0.0081	5.2	0.73	52.0	2.7	62.6	4.4	487.8	108.0	52.0	2.7
15CA-03A_29Feb-Spot 81	137	2859	0.9	22.0363	3.2	0.0512	5.5	0.0082	4.5	0.81	52.5	2.3	50.7	2.7	35.2	77.9	52.5	2.3
15CA-03A_29Feb-Spot 83	69	1466	1.4	21.9065	6.3	0.0499	7.0	0.0079	2.9	0.42	50.9	1.5	49.4	3.4	20.9	153.8	50.9	1.5
15CA-03A_29Feb-Spot 84	204	3859	2.5	22.4592	2.2	0.0570	3.0	0.0093	2.1	0.70	59.6	1.2	56.3	1.7	81.5	53.2	59.6	1.2
15CA-03A_29Feb-Spot 85	90	1935	1.4	25.4535	8.3	0.0428	9.2	0.0079	3.9	0.42	50.8	2.0	42.6	3.8	397.6	217.8	50.8	2.0
15CA-03A_29Feb-Spot 86	38	7659	1.3	24.4967	4.5	0.0456	5.6	0.0081	3.4	0.60	52.0	1.8	45.3	2.5	298.7	115.3	52.0	1.8
15CA-03A_29Feb-Spot 87	68	12342	1.2	18.8053	3.8	0.0586	5.1	0.0080	3.4	0.67	51.3	1.7	57.8	2.9	336.3	85.2	51.3	1.7
15CA-03A_29Feb-Spot 88	92	562	1.1	41.6997	57.4	0.0254	57.5	0.0077	3.2	0.06	49.3	1.6	25.5	14.5	1908.6	231.4	49.3	1.6
15CA-03A_29Feb-Spot 89	61	1195	1.2	25.4305	5.4	0.0427	6.3	0.0079	3.3	0.52	50.5	1.7	42.4	2.6	395.2	140.3	50.5	1.7
15CA-03A_29Feb-Spot 90	58	1252	0.9	26.5908	5.3	0.0415	6.1	0.0080	2.9	0.47	51.3	1.5	41.2	2.4	512.9	142.3	51.3	1.5

Sample: 15CA03A	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U (ppm)	206Pb / 204Pb	U/Th	206Pb* / 207Pb*	± (%)	207Pb* / 235U*	± (%)	206Pb* / 238U	± (%)	error corr.	206Pb* / 238U*	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
15CA-03A_29Feb-Spot 91	61	1073	1.1	26.4265	8.2	0.0416	8.5	0.0080	2.4	0.28	51.1	1.2	41.3	3.5	496.4	218.4	51.1	1.2
15CA-03A_29Feb-Spot 92	92	2152	1.4	20.4692	3.2	0.0526	4.0	0.0078	2.4	0.61	50.2	1.2	52.1	2.0	140.9	74.5	50.2	1.2
15CA-03A_29Feb-Spot 93	49	40143	0.7	6.0347	3.4	0.2213	5.8	0.0097	4.7	0.82	62.1	2.9	203.0	10.7	2514.7	56.5	62.1	2.9
15CA-03A_29Feb-Spot 94	62	802	1.2	26.1908	16.5	0.0420	16.8	0.0080	3.0	0.18	51.2	1.5	41.7	6.9	472.6	440.5	51.2	1.5
15CA-03A_29Feb-Spot 95	67	1258	1.1	24.0141	4.8	0.0456	5.9	0.0079	3.3	0.57	51.0	1.7	45.2	2.6	248.1	122.4	51.0	1.7
15CA-03A_29Feb-Spot 96	42	1443	1.1	25.5733	5.2	0.0440	6.5	0.0082	3.9	0.60	52.4	2.1	43.7	2.8	409.8	136.1	52.4	2.1
15CA-03A_29Feb-Spot 97	54	1215	1.2	28.0461	4.5	0.0389	5.4	0.0079	3.0	0.56	50.8	1.5	38.8	2.0	657.3	123.2	50.8	1.5
15CA-03A_29Feb-Spot 98	57	3636027	1.3	21.3450	4.4	0.0527	5.8	0.0082	3.7	0.64	52.4	1.9	52.2	2.9	41.6	106.4	52.4	1.9
15CA-03A_29Feb-Spot 99	45	570	1.1	44.3390	8.7	0.0241	9.7	0.0077	4.3	0.44	49.7	2.1	24.1	2.3	2140.0	337.9	49.7	2.1
15CA-03A_29Feb-Spot 100	74	4591	0.8	20.8285	3.1	0.0519	3.9	0.0078	2.5	0.63	50.4	1.2	51.4	2.0	99.8	72.7	50.4	1.2
15CA-03A_29Feb-Spot 101	126	499	0.6	8.7394	20.3	0.1349	20.7	0.0085	3.5	0.17	54.9	1.9	128.5	24.9	1870.8	371.0	54.9	1.9
15CA-03A_29Feb-Spot 102	85	2658	1.1	22.1759	5.7	0.0484	6.7	0.0078	3.5	0.52	50.0	1.7	48.0	3.1	50.6	138.4	50.0	1.7
15CA-03A_29Feb-Spot 103	56	644	1.0	21.3478	8.2	0.0574	12.1	0.0089	8.9	0.74	57.0	5.1	56.7	6.7	41.3	195.8	57.0	5.1
15CA-03A_29Feb-Spot 104	43	1574	0.9	8.3406	16.5	0.1470	17.3	0.0089	5.1	0.29	57.1	2.9	139.3	22.5	1954.7	296.8	57.1	2.9
15CA-03A_29Feb-Spot 105	78	667	1.0	36.5928	17.4	0.0303	17.6	0.0080	2.9	0.16	51.6	1.5	30.3	5.3	1455.4	575.3	51.6	1.5
15CA-03A_29Feb-Spot 106	86	7017	0.9	21.2635	3.8	0.0504	5.0	0.0078	3.3	0.66	50.0	1.6	50.0	2.5	50.7	91.1	50.0	1.6
15CA-03A_29Feb-Spot 107	68	585	1.0	38.5801	50.9	0.0273	51.0	0.0077	2.8	0.06	49.1	1.4	27.4	13.8	1633.0	160.5	49.1	1.4
15CA-03A_29Feb-Spot 108	146	36685	0.9	20.8945	2.2	0.0522	3.4	0.0079	2.5	0.75	50.8	1.3	51.7	1.7	92.3	52.7	50.8	1.3
15CA-03A_29Feb-Spot 109	41	1477	1.2	25.0769	13.6	0.0453	14.3	0.0082	4.4	0.31	52.9	2.3	45.0	6.3	358.9	351.9	52.9	2.3
15CA-03A_29Feb-Spot 110	25	584	1.1	43.1159	16.9	0.0254	17.8	0.0079	5.6	0.32	51.0	2.9	25.5	4.5	2032.9	642.5	51.0	2.9
15CA-03A_29Feb-Spot 111	58	390	0.7	21.9413	21.3	0.0503	21.6	0.0080	3.4	0.16	51.4	1.8	49.8	10.5	24.7	521.4	51.4	1.8
15CA-03A_29Feb-Spot 112	82	921	0.7	27.2597	8.4	0.0389	8.9	0.0077	3.0	0.34	49.4	1.5	38.8	3.4	579.7	227.6	49.4	1.5
15CA-03A_29Feb-Spot 113	75	1157	1.3	29.4203	4.9	0.0369	5.6	0.0079	2.7	0.48	50.6	1.4	36.8	2.0	790.8	137.9	50.6	1.4
15CA-03A_29Feb-Spot 114	52	647	1.1	31.5669	10.6	0.0352	11.0	0.0081	3.0	0.27	51.8	1.5	35.1	3.8	994.7	315.2	51.8	1.5
15CA-03A_29Feb-Spot 115	50	353	0.9	330.2544	144.7	0.0031	144.8	0.0074	4.0	0.03	47.6	1.9	3.1	4.5	0.0	0.0	47.6	1.9
15CA-03A_29Feb-Spot 116	75	616	0.8	37.6234	19.1	0.0288	19.3	0.0079	3.0	0.16	50.5	1.5	28.9	5.5	1547.7	646.9	50.5	1.5
15CA-03A_29Feb-Spot 117	49	548	1.2	34.2236	13.4	0.0322	13.8	0.0080	3.3	0.24	51.3	1.7	32.1	4.4	1240.6	420.6	51.3	1.7
15CA-03A_29Feb-Spot 118	54	777	1.0	32.4382	7.5	0.0340	8.6	0.0080	4.2	0.49	51.3	2.2	33.9	2.9	1076.0	226.8	51.3	2.2
15CA-03A_29Feb-Spot 119	57	993	1.1	24.0321	4.7	0.0445	6.1	0.0078	3.8	0.63	49.8	1.9	44.2	2.6	250.0	120.2	49.8	1.9
15CA-03A_29Feb-Spot 120	66	1044	2.1	23.7893	16.3	0.0555	16.6	0.0096	3.3	0.20	61.5	2.0	54.9	8.9	224.4	412.6	61.5	2.0
15CA-03A_29Feb-Spot 121	58	703	1.2	28.4367	6.4	0.0375	7.3	0.0077	3.5	0.48	49.6	1.7	37.3	2.7	695.5	177.2	49.6	1.7
15CA-03A_29Feb-Spot 122	34	524	1.2	43.0666	6.7	0.0259	7.7	0.0081	3.8	0.49	51.9	2.0	26.0	2.0	2028.6	251.5	51.9	2.0
15CA-03A_29Feb-Spot 123	33	571	1.2	48.3667	17.0	0.0227	17.6	0.0079	4.6	0.26	51.0	2.3	22.7	4.0	2492.3	725.3	51.0	2.3
15CA-03A_29Feb-Spot 124	101	24600	1.3	16.6840	4.5	0.0654	5.5	0.0079	3.1	0.57	50.8	1.6	64.3	3.4	601.3	98.3	50.8	1.6
15CA-03A_29Feb-Spot 125	123	1306	0.7	27.3098	4.6	0.0402	5.4	0.0080	3.0	0.54	51.1	1.5	40.0	2.1	584.6	123.8	51.1	1.5
15CA-03A_29Feb-Spot 126	140	23482	0.6	12.4216	1.7	0.0886	3.2	0.0080	2.7	0.84	51.3	1.4	86.2	2.6	1209.4	33.4	51.3	1.4
15CA-03A_29Feb-Spot 127	47	948	0.9	24.6409	6.2	0.0445	7.1	0.0080	3.3	0.47	51.1	1.7	44.2	3.1	313.7	159.8	51.1	1.7
15CA-03A_29Feb-Spot 129	97	480	0.8	10.3825	8.1	0.1121	8.5	0.0084	2.6	0.31	54.2	1.4	107.9	8.7	1553.9	152.7	54.2	1.4
15CA-03A_29Feb-Spot 130	54	3696	1.1	19.7821	5.1	0.0563	6.1	0.0081	3.4	0.56	51.8	1.8	55.6	3.3	220.4	117.5	51.8	1.8
15CA-03A_29Feb-Spot 131	84	855	0.8	36.2801	6.4	0.0287	7.3	0.0076	3.5	0.48	48.5	1.7	28.7	2.1	1427.2	208.4	48.5	1.7
15CA-03A_29Feb-Spot 132	83	1084	0.9	26.9991	11.5	0.0399	11.9	0.0078	3.2	0.27	50.2	1.6	39.7	4.7	553.7	310.4	50.2	1.6
15CA-03A_29Feb-Spot 133	56	373	1.2	131.5643	187.5	0.0082	187.6	0.0078	3.9	0.02	50.2	2.0	8.3	15.5	0.0	0.0	50.2	2.0
15CA-03A_29Feb-Spot 134	140	2171	0.8	23.5994	4.2	0.0453	4.9	0.0077	2.6	0.53	49.7	1.3	44.9	2.2	204.2	104.3	49.7	1.3
15CA-03A_29Feb-Spot 135	251	2451	0.8	21.9192	6.7	0.0490	7.1	0.0078	2.1	0.30	50.0	1.0	48.6	3.3	22.3	163.4	50.0	1.0
15CA-03A_29Feb-Spot 136	49	672	1.3	38.8961	8.2	0.0274	8.9	0.0077	3.4	0.39	49.7	1.7	27.5	2.4	1661.1	282.6	49.7	1.7
15CA-03A_29Feb-Spot 137	92	958	0.8	31.0371	9.2	0.0348	9.6	0.0078	2.7	0.28	50.2	1.3	34.7	3.3	944.8	270.4	50.2	1.3
15CA-03A_29Feb-Spot 138	38	1032	1.0	22.9135	17.4	0.0484	17.9	0.0080	4.1	0.23	51.6	2.1	47.9	8.4	130.8	433.1	51.6	2.1
15CA-03A_29Feb-Spot 139	72	3348	1.1	21.4824	5.0	0.0518	5.6	0.0081	2.5	0.46	51.8	1.3	51.3	2.8	26.2	119.0	51.8	1.3
15CA-03A_29Feb-Spot 140	368	1462736	2.4	9.1486	0.6	4.5021	1.8	0.2987	1.7	0.93	1685.0	24.5	1731.4	14.7	1787.9	11.6	1787.9	11.6
15CA-03A_29Feb-Spot 142	87	802	0.8	29.8353	6.1	0.0372	7.1	0.0081	3.7	0.52	51.7	1.9	37.1	2.6	830.6	173.7	51.7	1.9
15CA-03A_29Feb-Spot 143	36	413	1.3	51.8533	15.9	0.0204	16.6	0.0077	4.9	0.30	49.3	2.4	20.5	3.4	2798.7	1037.9	49.3	2.4
15CA-03A_29Feb-Spot 144	42	719	1.1	47.3843	17.9	0.0229	18.2	0.0079	3.3	0.18	50.5	1.7	23.0	4.1	2406.3	746.4	50.5	1.7
15CA-03A_29Feb-Spot 145	47	730	1.2	31.5794	5.9	0.0357	7.1	0.0082	4.0	0.56	52.4	2.1	35.6	2.5	995.8	175.4	52.4	2.1
15CA-03A_29Feb-Spot 146	154	1622	0.8	9.4833	10.5	0.1214	10.8	0.0083	2.4	0.22	53.6	1.3	116.3	11.9	1722.1	194.1	53.6	1.3
15CA-03A_29Feb-Spot 147	40	362	1.1	237.0356	58.8	0.0044	59.0	0.0075	4.8	0.08	48.0	2.3	4.4	2.6	0.0	0.0	48.0	2.3
15CA-03A_29Feb-Spot 148	42	14349	1.1	19.0154	4.9	0.0598	6.8	0.0082	4.7	0.69	52.9	2.5	58.9	3.9	311.1	110.8	52.9	2.5
15CA-03A_29Feb-Spot 149	839	55725	2.2	16.8931	2.4	0.2169	4.2	0.0266	3.5	0.82	169.1	5.8	199.4	7.7	574.3	52.9	169.1	5.8
15CA-03A_29Feb-Spot 150	83	2503	1.0	22.2613	4.6	0.0489	5.3	0.0079	2.7	0.51	50.7	1.4	48.5	2.5	59.9	111.4	50.7	1.4
15CA-03A_29Feb-Spot 151	42	855	1.0	27.3508	6.6	0.0376	8.8	0.0075	5.8	0.66	47.9	2.8	37.5	3.2	588.7	178.6	47.9	2.8
15CA-03A_29Feb-Spot 152	37	3947	1.3	20.0504	5.6	0.0562	6.7	0.0082	3.7	0.55	52.5	1.9	55.5	3.6	189.1	129.2	52.5	1.9
15CA-03A_29Feb-Spot 153	55	520	0.9	51.8086	77.9	0.0199	78.0	0.0075	3.4	0.04	48.1	1.6	20.0	15.5	2794.7	685.0	48.1	1.6
15CA-03A_29Feb-Spot 154	64	1226	1.0	23.1502	4.9	0.0460	5.6	0.0077	2.6	0.47	49.6	1.3	45.7	2.5	156.3	122.2	49.6	1.3
15CA-03A_29Feb-Spot 156	72	1826	1.0	20.8675	4.7	0.0531	5.6	0.0080	2.9	0.53	51.6	1.5	52.5	2.8	95.4	112.1	51.6	1.5
15CA-03A_29Feb-Spot 157	48	525	0.9	42.5486	24.7	0.0251	25.0	0.0078	4.0	0.16	49.8	2.0	25.2	6.2	1983.2	933.1	49.8	2.0
15CA-03A_29Feb-Spot 158	53	593	0.9	41.9748	10.3	0.0252	10.9	0.0077	3.6	0.33	49.2	1.8	25.2	2.7	1932.8	380.8	49.2	1.8
15CA-03A_29Feb-Spot 159	67	567	1.2	42.5661	13.7	0.0257	13.9	0.0079	2.5	0.18	51.0	1.3	25.8	3.6	1984.7	514.2	51.0	1.3
15CA-03A_29Feb-Spot 160	121	2979	1.4	24.9279	3.3	0.0437	4.4	0.0079	3.0	0.67	50.7	1.5	43.4	1.9	343.5	85.4	50.7	1.5
15CA-03A_29Feb-Spot 161	34	616	1.1	34.7627	10.1	0.0310	11.0	0.0078	4.4	0.40	50.2	2.2	31.0	3.4	1289.8	319.9	50.2	2.2
15CA-03A_29Feb-Spot 162	213	4505	0.6	20.6559	3.0	0.0537	3.8	0.0080	2.2	0.59	51.6	1.2	53.1	2.0	119.5	71.7	51.6	1.2
15CA-03A_29Feb-Spot 163	39	626	1.1	48.8164	24.5	0.0223	24.9	0.0079	4.1	0.16	50.7	2.1	22.4	5.5	2531.7	738.6	50.7	2.1
15CA-03A_29Feb-Spot 164	64	1425	1.1	28.0697	5.3	0.0404	6.8	0.0082	4.2	0.62	52.9	2.2	40.3	2.7	659.6	147.1	52.9	2.2
15CA-03A_29Feb-Spot 165	57	783	0.8	30.9479	30.5	0.0360	30.8	0.0081	4.0	0.13	51.9	2.1	35.9	10.9	936.4	908.4	51.9	2.1
15CA-03A_29Feb-Spot 166	69	1382	1.0	12.7475	11.2	0.0918	11.5	0.0085	2.6	0.23	54.5	1.4	89.2	9.8	1158.2	223.3	54.5	1.4
15CA-03A_29Feb-Spot 167	36	356	1.1	286.4848	377.4	0.0036	377.4	0.0076	2.9	0.01	48.5	1.4	3.7	13.9	0.0	0.0	48.5	1.4
15CA-03A_29Feb-Spot 168	47	7540	1.1	20.2363	4.3	0.0552	5.9	0.0081	3.9	0.67	52.0	2.0	54.5	3.1	167.6	100.9	52.0	2.0
15CA-03A_29Feb-Spot 169	89	961	1.1	29.2691	14.0	0.0377	14.2	0.0080	2.4	0.17	51.4	1.3	37.6	5.3	776.2	397.6	51.4	1.3
15CA-03A_29Feb-Spot 170	103	1871	0.8	27.1682	9.5	0.0409	10.1	0.0081	3.4	0.34	51.7	1.8	40.7	4.0	570.6	257.7	51.7	1.8
15CA-03A_29Feb-Spot 171	138	10372	0.8	18.6615	3.7	0.0609	4.4	0.0082	2.3	0.52	52.9	1.2	60.0	2.5	353.7	83.9	52.9	1.2
15CA-03A_29Feb-Spot 172	141	1179	0.7	26.1108	6.0	0.0398	6.6	0.0075	2.6	0.40	48.4	1.3	39.6	2.5	464.5	158.9	48.4	1.3
15CA-03A_29Feb-Spot 173	62	604	1.0	36.8752	27.6	0.0281	27.8	0.0075	3.5	0.12	48.2	1.7	28.1	7.7	1480.7	926.5	48.2	1.7
15CA-03A_29Feb-Spot 174	74	2269	1.2	24.9008	8.8	0.0446	9.4	0.0081	3.4	0.36	51.7	1.7	44.3	4.1	340.7	226.7	51.7	1.7
15CA-03A_29Feb-Spot 175	30	415	1.2	74.2128	36.6	0.0138	36.9	0.0074	4.0	0.11	47.6	1.9	13.9	5.1	0.0	1187.2	47.6	1.9
15CA-03A_29Feb-Spot 177	49	364	1.1	63.5364	50.8	0.0173	50.9	0.0080	3.6	0.07	51.3	1.8	17.4	8.8	0.0	482.2	51.3	1.8
15CA-03A_29Feb-Spot 178	48	2978	1.1	22.8639	4.2	0.0474	5.6	0.0079	3.8	0.68	50.5	1.9	47.0	2.6	125.5	102.9	50.5	1.9
15CA-03A_29Feb-Spot 179	51	707	1.3	29.7260	5.9	0.0368	7.4	0.0079	4.4	0.60	50.9	2.2	36.7	2.7	820.2	169.4	50.9	2.2
15CA-03A_29Feb-Spot 180	75	3150	1.0	20.9268	3.7	0.0528	5.1	0.0080	3.5	0.69	51.4	1.8	52.2	2.6	88.7	88.4	51.4	1.8
15CA-03A_29Feb-Spot 181	87	2615	0.6	19.2251	4.4	0.0587	5.4	0.0082	3.1	0.57	52.6	1.6	58.0	3.0	286.1	101.0	52.6	1.6
15CA-03A_29Feb-Spot 182	47	1322	0.8	23.8663	12.2	0.0454	12.8	0.0079	3.8	0.30	50.5	1.9	45.1	5.6	232.5	307.8	50.5	1.9
15CA-03A_29Feb-Spot 183	54	743	0.8	41.1465	5.4	0.0253	6.4	0.0076	3.4	0.54	48.5	1.6	25.4	1.6	1860.0	194.2	48.5	1.6

Sample: 15CA03A	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
15CA-03A_29Feb-Spot 184	42	853	1.3	34.1647	9.2	0.0318	9.9	0.0079	3.5	0.35	50.6	1.8	31.8	3.1	1235.2	288.6	50.6	1.8
15CA-03A_29Feb-Spot 185	78	986	1.3	30.2988	16.2	0.0358	16.4	0.0079	2.5	0.15	50.5	1.2	35.7	5.7	874.9	468.9	50.5	1.2
15CA-03A_29Feb-Spot 186	81	6851	1.3	20.1671	2.6	0.0548	4.1	0.0080	3.2	0.77	51.4	1.6	54.1	2.2	175.6	61.3	51.4	1.6
15CA-03A_29Feb-Spot 187	43	2288	1.2	24.7199	4.7	0.0449	6.5	0.0081	4.5	0.70	51.7	2.3	44.6	2.8	321.9	120.3	51.7	2.3
15CA-03A_29Feb-Spot 188	33	599	1.1	36.5198	6.1	0.0300	7.1	0.0079	3.6	0.50	51.0	1.8	30.0	2.1	1448.8	201.3	51.0	1.8
15CA-03A_29Feb-Spot 189	40	976	1.2	28.6613	6.3	0.0380	8.2	0.0079	5.3	0.64	50.7	2.7	37.9	3.1	717.4	175.6	50.7	2.7
15CA-03A_29Feb-Spot 190	111	2194	0.8	23.4752	2.9	0.0471	4.7	0.0080	3.7	0.78	51.5	1.9	46.8	2.2	191.0	73.6	51.5	1.9
15CA-03A_29Feb-Spot 191	283	7269	0.5	22.1396	2.0	0.0485	3.0	0.0078	2.2	0.73	50.0	1.1	48.1	1.4	46.6	49.6	50.0	1.1
15CA-03A_29Feb-Spot 192	155	2285	3.9	23.7051	3.6	0.0645	4.5	0.0111	2.8	0.62	71.1	2.0	63.5	2.8	215.5	89.7	71.1	2.0
15CA-03A_29Feb-Spot 193	65	1382	0.9	27.2562	5.8	0.0397	7.0	0.0078	4.0	0.57	50.4	2.0	39.5	2.7	579.3	156.5	50.4	2.0
15CA-03A_29Feb-Spot 194	54	550	1.1	30.0516	7.1	0.0366	8.2	0.0080	4.1	0.50	51.2	2.1	36.5	2.9	851.3	202.9	51.2	2.1
15CA-03A_29Feb-Spot 195	55	1297	1.3	27.8075	4.8	0.0407	5.7	0.0082	3.1	0.55	52.6	1.6	40.5	2.3	633.8	131.7	52.6	1.6
15CA-03A_29Feb-Spot 196	49	241	1.1	-60.2263	9.3	-0.0172	10.5	0.0075	4.9	0.46	48.2	2.3	17.6	1.9	0.0	0.0	48.2	2.3
15CA-03A_29Feb-Spot 197	46	32577	1.1	19.0359	4.9	0.0594	6.3	0.0082	4.0	0.64	52.6	2.1	58.6	3.6	308.7	111.3	52.6	2.1
15CA-03A_29Feb-Spot 198	47	1599	1.1	26.2432	6.4	0.0426	7.0	0.0081	2.8	0.40	52.0	1.4	42.3	2.9	477.9	170.4	52.0	1.4
15CA-03A_29Feb-Spot 199	99	6571	1.0	20.1291	3.6	0.0543	4.4	0.0079	2.5	0.57	50.9	1.3	53.7	2.3	180.0	84.9	50.9	1.3
15CA-03A_29Feb-Spot 200	49	215	0.9	-41.4141	4.3	-0.0241	5.6	0.0072	3.7	0.65	46.4	1.7	24.7	1.4	0.0	0.0	46.4	1.7
15CA-03A_29Feb-Spot 201	40	19227	1.1	9.0998	11.0	0.1216	12.3	0.0080	5.4	0.44	51.5	2.8	116.5	13.5	1797.6	201.2	51.5	2.8
15CA-03A_29Feb-Spot 202	149	3344	0.8	22.0800	2.9	0.0496	3.3	0.0079	1.5	0.45	51.0	0.7	49.1	1.6	40.0	71.1	51.0	0.7
15CA-03A_29Feb-Spot 203	73	2132	1.3	22.1918	3.9	0.0505	4.8	0.0081	2.8	0.58	52.2	1.4	50.0	2.3	52.3	95.4	52.2	1.4
15CA-03A_29Feb-Spot 204	41	381	1.0	60.1191	67.6	0.0179	67.7	0.0078	4.7	0.07	50.1	2.3	18.0	12.1	0.0	127.5	50.1	2.3
15CA-03A_29Feb-Spot 206	110	5072	1.1	20.7624	2.9	0.0533	4.4	0.0080	3.4	0.76	51.6	1.7	52.8	2.3	107.4	68.1	51.6	1.7
15CA-03A_29Feb-Spot 207	102	3259	1.0	10.6402	7.0	0.1091	7.8	0.0084	3.5	0.44	54.0	1.9	105.1	7.8	1507.8	133.0	54.0	1.9
15CA-03A_29Feb-Spot 208	40	376	1.3	90.0452	75.6	0.0121	75.8	0.0079	5.6	0.07	50.7	2.8	12.2	9.2	0.0	14.9	50.7	2.8
15CA-03A_29Feb-Spot 209	94	12465	0.9	21.9173	2.7	0.0512	3.9	0.0081	2.9	0.72	52.3	1.5	50.7	2.0	22.1	66.0	52.3	1.5
15CA-03A_29Feb-Spot 210	42	1217	1.2	25.7168	6.6	0.0434	7.9	0.0081	4.3	0.54	52.0	2.2	43.1	3.3	424.5	173.4	52.0	2.2
15CA-03A_29Feb-Spot 211	92	2895	0.9	22.4801	2.7	0.0494	4.2	0.0080	3.2	0.76	51.7	1.6	48.9	2.0	83.8	67.4	51.7	1.6
15CA-03A_29Feb-Spot 212	46	2859	1.1	23.6798	4.7	0.0464	5.8	0.0080	3.5	0.60	51.2	1.8	46.1	2.6	212.8	117.2	51.2	1.8
15CA-03A_29Feb-Spot 213	40	1514	1.3	21.7807	5.3	0.0500	6.9	0.0079	4.4	0.64	50.7	2.2	49.5	3.3	7.0	128.0	50.7	2.2
15CA-03A_29Feb-Spot 215	222	2716	1.3	22.9615	2.7	0.0474	3.6	0.0079	2.4	0.67	50.7	1.2	47.0	1.7	136.0	66.5	50.7	1.2
15CA-03A_29Feb-Spot 216	63	793	1.1	30.4202	4.6	0.0344	6.5	0.0076	4.5	0.70	48.7	2.2	34.3	2.2	886.4	132.6	48.7	2.2
15CA-03A_29Feb-Spot 217	200	1910	0.8	23.1296	3.6	0.0470	4.1	0.0079	2.0	0.49	50.6	1.0	46.7	1.9	154.1	88.4	50.6	1.0
15CA-03A_29Feb-Spot 218	42	1142	1.4	26.2360	6.5	0.0415	7.6	0.0079	3.9	0.52	50.7	2.0	41.2	3.1	477.2	172.3	50.7	2.0
15CA-03A_29Feb-Spot 219	44	572	1.0	31.3401	42.1	0.0356	42.2	0.0081	2.9	0.07	51.9	1.5	35.5	14.7	973.4	1288.3	51.9	1.5
15CA-03A_29Feb-Spot 220	57	414	0.8	36.6276	32.3	0.0293	32.5	0.0078	3.7	0.11	49.9	1.8	29.3	9.4	1458.5	1086.5	49.9	1.8
15CA-03A_29Feb-Spot 221	43	243159	1.2	16.4190	5.5	0.0671	6.5	0.0080	3.5	0.53	51.3	1.8	65.9	4.2	635.9	118.9	51.3	1.8
15CA-03A_29Feb-Spot 222	54	412	1.1	37.9302	71.6	0.0287	71.6	0.0079	3.1	0.04	50.7	1.6	28.7	20.3	1575.1	741.6	50.7	1.6
15CA-03A_29Feb-Spot 223	55	776	1.4	26.2493	10.3	0.0406	11.0	0.0077	3.8	0.34	49.6	1.9	40.4	4.4	478.5	274.3	49.6	1.9
15CA-03A_29Feb-Spot 224	46	781	1.1	30.3717	27.3	0.0366	27.6	0.0081	3.6	0.13	51.8	1.9	36.5	9.9	881.8	801.5	51.8	1.9
15CA-03A_29Feb-Spot 225	69	38909	1.1	14.0985	2.9	0.0797	4.1	0.0082	2.9	0.71	52.3	1.5	77.9	3.0	955.4	58.5	52.3	1.5
15CA-03A_29Feb-Spot 226	33	879	1.1	23.8870	5.7	0.0449	7.3	0.0078	4.5	0.62	50.0	2.3	44.6	3.2	234.7	143.4	50.0	2.3
15CA-03A_29Feb-Spot 227	71	363	1.2	12.5131	13.5	0.0902	14.0	0.0082	3.7	0.26	52.6	1.9	87.7	11.8	1194.9	267.5	52.6	1.9
15CA-03A_29Feb-Spot 228	55	3413	1.3	22.1431	4.2	0.0522	5.8	0.0084	3.9	0.68	53.8	2.1	51.6	2.9	47.0	102.5	53.8	2.1
15CA-03A_29Feb-Spot 229	90	11452	1.0	18.9462	4.2	0.0591	4.9	0.0081	2.5	0.51	52.2	1.3	58.3	2.8	319.4	96.0	52.2	1.3
15CA-03A_29Feb-Spot 230	187	1967	0.8	25.0683	3.1	0.0432	3.9	0.0078	2.2	0.58	50.4	1.1	42.9	1.6	358.0	81.4	50.4	1.1
15CA-03A_29Feb-Spot 231	48	729	1.3	30.1639	11.2	0.0357	11.7	0.0078	3.5	0.30	50.2	1.7	35.6	4.1	862.0	322.3	50.2	1.7
15CA-03A_29Feb-Spot 232	80	1822	0.8	14.5153	9.0	0.0793	9.5	0.0084	2.9	0.31	53.6	1.6	77.5	7.1	895.5	186.9	53.6	1.6
15CA-03A_29Feb-Spot 233	511	12240	1.0	21.8932	1.7	0.0506	2.4	0.0080	1.8	0.72	51.6	0.9	50.1	1.2	19.4	41.1	51.6	0.9
15CA-03A_29Feb-Spot 234	132	2264	0.8	17.3704	4.1	0.0647	4.7	0.0082	2.3	0.49	52.3	1.2	63.7	2.9	513.4	89.8	52.3	1.2
15CA-03A_29Feb-Spot 235	81	2176	1.5	24.8846	5.0	0.0459	5.7	0.0083	2.9	0.50	53.2	1.5	45.6	2.6	339.0	127.6	53.2	1.5
15CA-03A_29Feb-Spot 236	48	5078	1.5	23.6521	3.8	0.0472	5.7	0.0081	4.3	0.75	51.9	2.2	46.8	2.6	209.8	95.2	51.9	2.2
15CA-03A_29Feb-Spot 237	34	295	1.1	4.9854	8.8	0.2647	9.9	0.0096	4.4	0.45	61.4	2.7	238.4	21.0	2831.0	144.3	61.4	2.7
15CA-03A_29Feb-Spot 238	93	1617	1.0	25.7661	12.5	0.0427	12.9	0.0080	3.2	0.25	51.3	1.7	42.5	5.4	429.5	328.8	51.3	1.7
15CA-03A_29Feb-Spot 239	40	291	1.1	127.9823	108.8	0.0085	108.9	0.0079	3.7	0.03	50.4	1.9	8.6	9.3	0.0	0.0	50.4	1.9
15CA-03A_29Feb-Spot 240	71	800	1.1	33.7701	4.4	0.0318	5.5	0.0078	3.3	0.60	50.0	1.6	31.7	1.7	1199.1	136.4	50.0	1.6
15CA-03A_29Feb-Spot 241	75	1131	1.6	27.3549	9.5	0.0399	9.9	0.0079	2.8	0.28	50.8	1.4	39.7	3.9	589.1	259.3	50.8	1.4
15CA-03A_29Feb-Spot 242	63	1771	0.9	22.2114	4.5	0.0491	5.2	0.0079	2.7	0.52	50.8	1.4	48.7	2.5	54.4	108.8	50.8	1.4
15CA-03A_29Feb-Spot 243	77	780	1.2	31.0827	5.3	0.0358	6.3	0.0081	3.3	0.53	51.9	1.7	35.8	2.2	949.1	156.3	51.9	1.7
15CA-03A_29Feb-Spot 244	81	1621	0.9	21.2993	7.9	0.0514	8.6	0.0079	3.2	0.38	51.0	1.6	50.9	4.2	46.7	189.7	51.0	1.6
15CA-03A_29Feb-Spot 245	141	2133	1.0	21.7056	8.2	0.0504	8.6	0.0079	2.6	0.31	50.9	1.3	49.9	4.2	1.4	197.5	50.9	1.3
15CA-03A_29Feb-Spot 246	25	302	1.4	220.1437	115.0	0.0050	115.1	0.0080	5.8	0.05	51.7	3.0	5.1	5.9	0.0	0.0	51.7	3.0
15CA-03A_29Feb-Spot 247	77	1089	0.7	30.0844	8.9	0.0358	9.4	0.0078	2.9	0.31	50.1	1.5	35.7	3.3	854.4	255.5	50.1	1.5
15CA-03A_29Feb-Spot 248	51	320	1.1	1105.6382	54.8	0.0010	54.9	0.0077	3.1	0.06	49.3	1.5	1.0	0.5	0.0	0.0	49.3	1.5
15CA-03A_29Feb-Spot 249	69	3318	0.9	17.4080	6.4	0.0650	7.2	0.0082	3.3	0.46	52.7	1.7	63.9	4.5	508.6	141.6	52.7	1.7
15CA-03A_29Feb-Spot 250	48	2627	1.1	21.3703	4.8	0.0530	6.5	0.0082	4.3	0.67	52.8	2.3	52.5	3.3	38.7	115.8	52.8	2.3
15CA-03A_29Feb-Spot 251	57	3190	0.9	19.5359	3.5	0.0560	5.6	0.0079	4.4	0.78	50.9	2.2	55.3	3.0	249.3	80.5	50.9	2.2
15CA-03A_29Feb-Spot 252	35	388	1.2	56.9212	18.8	0.0196	19.5	0.0081	5.4	0.27	51.9	2.8	19.7	3.8	3250.4	1152.3	51.9	2.8
15CA-03A_29Feb-Spot 253	51	962	0.8	32.9280	6.1	0.0335	6.7	0.0080	2.9	0.43	51.3	1.5	33.4	2.2	1121.4	185.1	51.3	1.5
15CA-03A_29Feb-Spot 254	32	509	1.3	29.4856	7.7	0.0368	9.0	0.0079	4.5	0.51	50.5	2.3	36.7	3.2	797.1	219.1	50.5	2.3
15CA-03A_29Feb-Spot 255	87	4608	0.8	21.2156	3.8	0.0523	4.3	0.0081	2.1	0.49	51.7	1.1	51.8	2.2	56.1	90.5	51.7	1.1
15CA-03A_29Feb-Spot 256	66	753	0.9	31.7056	19.7	0.0346	20.0	0.0080	3.2	0.16	51.1	1.6	34.6	6.8	1007.7	590.5	51.1	1.6
15CA-03A_29Feb-Spot 257	37	438	1.3	43.5729	47.4	0.0250	47.6	0.0079	4.5	0.09	50.7	2.3	25.0	11.8	2073.0	65.1	50.7	2.3
15CA-03A_29Feb-Spot 258	126	6773	1.2	21.3169	3.3	0.0527	4.0	0.0081	2.2	0.57	52.3	1.2	52.2	2.0	44.7	77.8	52.3	1.2
15CA-03A_29Feb-Spot 259	170	16078	1.0	20.4378	2.8	0.0527	3.6	0.0078	2.4	0.65	50.2	1.2	52.1	1.8	144.4	64.7	50.2	1.2
15CA-03A_29Feb-Spot 260	57	705	0.9	20.7121	20.1	0.0532	20.5	0.0080	4.1	0.20	51.3	2.1	52.6	10.5	113.1	479.2	51.3	2.1
15CA-03A_29Feb-Spot 261	45	7976	1.0	20.6068	4.2	0.0551	5.7	0.0082	3.9	0.68	52.8	2.0	54.4	3.0	125.1	99.1	52.8	2.0
15CA-03A_29Feb-Spot 262	43	491	1.1	39.6794	62.5	0.0275	62.5	0.0079	2.8	0.05	50.8	1.4	27.5	17.0	1730.5	421.2	50.8	1.4
15CA-03A_29Feb-Spot 263	53	507	0.9	45.9225	51.0	0.0235	51.1	0.0078	3.3	0.06	50.2	1.6	23.6	11.9	2278.5	44.3	50.2	1.6
15CA-03A_29Feb-Spot 264	100	714	0.9	37.4060	6.2	0.0283	6.7	0.0077	2.6	0.39	49.3	1.3	28.3	1.9	1528.3	207.4	49.3	1.3
15CA-03A_29Feb-Spot 265	40	682	1.2	34.3117	38.7	0.0337	39.0	0.0084	4.6	0.12	53.8	2.5	33.7	12.9	1248.7	1251.6	53.8	2.5
15CA-03A_29Feb-Spot 266	249	1004635	0.7	21.4986	1.5	0.0505	2.3	0.0079	1.7	0.74	50.6	0.9	50.0	1.1	24.4	36.4	50.6	0.9
15CA-03A_29Feb-Spot 267	34	496	1.0	46.7097	18.6	0.0241	19.2	0.0082	4.6	0.24	52.4	2.4	24.2	4.6	2347.3	766.0	52.4	2.4
15CA-03A_29Feb-Spot 268	54	943	0.8	36.8471	6.4	0.0302	7.5	0.0081	3.9	0.52	51.8	2.0	30.2	2.2	1478.2	213.1	51.8	2.0
15CA-03A_29Feb-Spot 269	68	4079	1.5	16.7748	4.8	0.0655	7.5	0.0080	5.8	0.77	51.2	3.0	64.4	4.7	589.6	103.7	51.2	3.0
15CA-03A_29Feb-Spot 270	33	1918	0.8	24.6197	5.5	0.0476	6.5	0.0085	3.6	0.54	54.6	1.9	47.2	3.0	311.5	140.8	54.6	1.9
15CA-03A_29Feb-Spot 271	73	1162	1.6	27.3425	4.7	0.0406	5.6	0.0081	2.9	0.53	51.7	1.5	40.4	2.2	587.9	128.3	51.7	1.5
15CA-03A_29Feb-Spot 273	118	1029	1.5	22.5822	6.6	0.0481	7.0	0.0079	2.3	0.33	50.6	1.2	47.7	3.3	94.9	162.4	50.6	1.2
15CA-03A_29Feb-Spot 274	67	1263	1.4	25.0082	6.9	0.0430	7.9	0.0078	3.7	0.47	50.1	1.9	42.8	3.3	351.8	179.2	50.1	1.9
15CA-03A_29Feb-Spot 275	237	4751	0.7	22.5568	2.2	0.0480	3.3	0.0079	2.5	0.74	50.4	1.2	47.6	1.5	92.2	54.4	50.4	1.2

Sample: 15CA03A	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
15CA-03A_29Feb-Spot 276	38	3676	1.1	20.0716	5.7	0.0549	7.2	0.0080	4.4	0.62	51.3	2.3	54.3	3.8	186.7	132.0	51.3	2.3
15CA-03A_29Feb-Spot 277	110	4501	1.3	20.9817	3.4	0.0529	4.4	0.0080	2.7	0.63	51.6	1.4	52.3	2.2	82.4	80.6	51.6	1.4
15CA-03A_29Feb-Spot 278	41	1754	1.2	21.1563	6.0	0.0501	8.0	0.0077	5.3	0.66	49.3	2.6	49.6	3.9	62.7	143.4	49.3	2.6
15CA-03A_29Feb-Spot 279	44	1468	1.3	25.1795	11.6	0.0441	12.1	0.0081	3.4	0.28	51.7	1.7	43.8	5.2	369.4	302.1	51.7	1.7
15CA-03A_29Feb-Spot 280	82	1079	1.3	29.4671	6.1	0.0362	7.7	0.0077	4.7	0.61	49.6	2.3	36.1	2.7	795.3	173.2	49.6	2.3
15CA-03A_29Feb-Spot 281	47	718	1.2	31.0656	12.7	0.0354	13.5	0.0080	4.6	0.34	51.2	2.3	35.3	4.7	947.5	373.6	51.2	2.3
15CA-03A_29Feb-Spot 282	61	1047	1.1	29.6885	5.6	0.0368	7.1	0.0079	4.4	0.61	50.9	2.2	36.7	2.6	816.6	160.9	50.9	2.2
15CA-03A_29Feb-Spot 283	62	1296	1.2	21.9781	11.2	0.0524	11.6	0.0083	2.8	0.25	53.6	1.5	51.8	5.8	28.8	272.2	53.6	1.5
15CA-03A_29Feb-Spot 284	70	1490	1.1	17.1492	6.8	0.0711	7.5	0.0088	3.1	0.41	56.8	1.8	69.8	5.1	541.5	149.6	56.8	1.8
15CA-03A_29Feb-Spot 285	45	456	0.7	54.4721	18.4	0.0200	18.9	0.0079	4.4	0.23	50.7	2.2	20.1	3.8	3030.8	1075.9	50.7	2.2
15CA-03A_29Feb-Spot 287	80	530	0.7	20.6425	10.3	0.0541	10.7	0.0081	3.1	0.28	52.0	1.6	53.5	5.6	121.0	243.1	52.0	1.6
15CA-03A_29Feb-Spot 288	51	1378	1.1	23.5070	3.8	0.0477	5.7	0.0081	4.3	0.75	52.2	2.2	47.3	2.6	194.4	94.1	52.2	2.2
15CA-03A_29Feb-Spot 289	78	430	1.2	50.6819	34.5	0.0215	34.7	0.0079	3.4	0.10	50.8	1.7	21.6	7.4	2695.5	573.4	50.8	1.7
15CA-03A_29Feb-Spot 290	448	19920	0.5	21.2984	1.5	0.0521	2.3	0.0080	1.7	0.74	51.7	0.9	51.5	1.1	46.8	36.2	51.7	0.9
15CA-03A_29Feb-Spot 291	60	547	1.1	37.0549	16.5	0.0289	16.7	0.0078	2.8	0.16	49.8	1.4	28.9	4.8	1496.8	551.5	49.8	1.4
15CA-03A_29Feb-Spot 292	44	370	1.1	56.4542	115.1	0.0190	115.1	0.0078	3.6	0.03	50.0	1.8	19.1	21.8	3208.3	0.0	50.0	1.8
15CA-03A_29Feb-Spot 293	55	574	0.8	25.0701	10.6	0.0438	11.1	0.0080	3.1	0.28	51.2	1.6	43.6	4.7	358.2	275.6	51.2	1.6
15CA-03A_29Feb-Spot 294	500	9737	0.5	21.4598	1.4	0.0496	2.3	0.0077	1.8	0.79	49.6	0.9	49.1	1.1	28.7	33.4	49.6	0.9
15CA-03A_29Feb-Spot 295	85	638	0.7	37.6338	6.5	0.0293	7.2	0.0080	3.0	0.42	51.4	1.5	29.4	2.1	1548.6	219.2	51.4	1.5
15CA-03A_29Feb-Spot 296	48	3425	1.2	17.7663	4.8	0.0623	5.9	0.0080	3.5	0.58	51.5	1.8	61.3	3.5	463.7	106.6	51.5	1.8
15CA-03A_29Feb-Spot 297	78	1527	0.8	23.7956	4.6	0.0466	5.7	0.0080	3.3	0.58	51.6	1.7	46.2	2.6	225.0	116.4	51.6	1.7
15CA-03A_29Feb-Spot 298	32	1550	1.3	21.8107	5.7	0.0500	7.3	0.0079	4.6	0.63	50.8	2.3	49.6	3.6	10.3	137.9	50.8	2.3
15CA-03A_29Feb-Spot 299	33	909	1.2	4.3439	34.0	0.3317	34.2	0.0105	3.8	0.11	67.0	2.5	290.9	86.7	3053.5	562.8	67.0	2.5
15CA-03A_29Feb-Spot 300	75	642	1.0	38.6654	4.2	0.0288	5.2	0.0081	3.2	0.60	51.8	1.6	28.8	1.5	1640.6	143.8	51.8	1.6
15CA-03A_29Feb-Spot 301	56	333	1.1	144.4013	50.5	0.0074	50.7	0.0078	3.8	0.07	49.9	1.9	7.5	3.8	0.0	0.0	49.9	1.9
15CA-03A_29Feb-Spot 302	78	1794	0.9	25.1860	4.2	0.0432	5.0	0.0079	2.8	0.56	50.7	1.4	43.0	2.1	370.1	108.3	50.7	1.4
15CA-03A_29Feb-Spot 303	38	324	1.1	526.6092	348.1	0.0021	348.1	0.0078	3.9	0.01	50.3	2.0	2.1	7.2	0.0	0.0	50.3	2.0
15CA-03A_29Feb-Spot 304	95	2504	0.8	23.6998	6.6	0.0469	7.2	0.0081	2.8	0.38	51.8	1.4	46.6	3.3	214.9	167.1	51.8	1.4
15CA-03A_29Feb-Spot 306	56	2617	1.3	22.4047	5.0	0.0502	5.8	0.0082	3.1	0.52	52.4	1.6	49.7	2.8	75.6	121.7	52.4	1.6
15CA-03A_29Feb-Spot 308	36	1433	0.8	28.1869	6.3	0.0382	7.3	0.0078	3.5	0.49	50.2	1.8	38.1	2.7	671.1	175.0	50.2	1.8
15CA-03A_29Feb-Spot 309	62	429	1.0	57.2059	25.8	0.0189	26.1	0.0078	3.9	0.15	50.3	1.9	19.0	4.9	3276.1	987.4	50.3	1.9
15CA-03A_29Feb-Spot 310	41	232	1.1	-42.8807	4.8	-0.0244	6.8	0.0076	4.8	0.71	48.7	2.3	25.1	1.7	0.0	0.0	48.7	2.3
15CA-03A_29Feb-Spot 311	237	7410	0.7	20.2855	2.3	0.0546	2.8	0.0080	1.7	0.61	51.6	0.9	54.0	1.5	161.9	52.7	51.6	0.9
15CA-03A_29Feb-Spot 312	40	3207	1.2	20.9464	4.8	0.0548	6.5	0.0083	4.4	0.67	53.5	2.3	54.2	3.4	86.5	114.8	53.5	2.3
15CA-03A_29Feb-Spot 313	53	1069	1.1	32.1623	4.2	0.0339	5.8	0.0079	4.0	0.68	50.7	2.0	33.8	1.9	1050.3	126.7	50.7	2.0
15CA-03A_29Feb-Spot 314	96	1866	1.1	24.0746	3.8	0.0454	4.8	0.0079	3.0	0.62	50.9	1.5	45.1	2.1	254.5	95.7	50.9	1.5
15CA-03A_29Feb-Spot 315	56	4777	0.9	17.9365	6.1	0.0642	7.4	0.0084	4.2	0.56	53.6	2.2	63.2	4.5	442.5	136.1	53.6	2.2

Sample: CANBC1022Gab	U-Pb geochronologic analyses					Isotope ratios					Apparent ages (Ma)							
Analysis	U (ppm)	206Pb / 204Pb	U/Th	206Pb* / 207Pb*	± (%)	207Pb* / 235U*	± (%)	206Pb* / 238U	± (%)	error corr.	206Pb* / 238U*	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
Leier-CAN-BC-1022ab-Spot 1	239	6227	1.1	21.3117	1.7	0.1642	3.4	0.0254	3.0	0.86	161.5	4.7	154.3	4.9	45.3	41.3	161.5	4.7
Leier-CAN-BC-1022ab-Spot 2	478	13693	2.1	20.6794	0.9	0.1690	2.4	0.0253	2.2	0.92	161.4	3.5	158.5	3.5	116.8	22.3	161.4	3.5
Leier-CAN-BC-1022ab-Spot 3	521	21646	1.6	20.3318	1.1	0.1729	2.1	0.0255	1.8	0.86	162.3	2.9	161.9	3.1	156.6	24.7	162.3	2.9
Leier-CAN-BC-1022ab-Spot 4	607	1519	3.8	27.0173	1.6	0.0344	2.8	0.0067	2.3	0.83	43.3	1.0	34.4	0.9	555.5	42.4	43.3	1.0
Leier-CAN-BC-1022ab-Spot 5	155	6779	1.9	20.7646	1.5	0.1719	2.6	0.0259	2.1	0.81	164.7	3.4	161.0	3.9	107.1	36.5	164.7	3.4
Leier-CAN-BC-1022ab-Spot 6	141	4968	2.8	21.5197	2.9	0.1873	4.0	0.0292	2.7	0.68	185.8	5.0	174.4	6.4	22.0	70.6	185.8	5.0
Leier-CAN-BC-1022ab-Spot 7	475	23606	1.3	20.1250	0.8	0.1701	2.0	0.0248	1.9	0.92	158.1	2.9	159.5	3.0	180.5	19.1	158.1	2.9
Leier-CAN-BC-1022ab-Spot 8	563	4996	1.2	22.8553	1.6	0.0470	2.5	0.0078	1.9	0.76	50.1	0.9	46.7	1.1	124.5	39.5	50.1	0.9
Leier-CAN-BC-1022ab-Spot 9	182	2976	1.7	21.7193	1.7	0.1611	2.9	0.0254	2.3	0.79	161.5	3.6	151.6	4.0	0.2	42.1	161.5	3.6
Leier-CAN-BC-1022ab-Spot 10	282	6403	2.3	21.2438	1.3	0.1605	2.3	0.0247	1.9	0.82	157.4	2.9	151.1	3.2	52.9	31.4	157.4	2.9
Leier-CAN-BC-1022ab-Spot 11	532	74335	2.2	20.5736	1.2	0.1700	2.3	0.0254	2.0	0.86	161.4	3.2	159.4	3.5	128.9	28.3	161.4	3.2
Leier-CAN-BC-1022ab-Spot 12	3866	40726	3.2	20.1804	0.6	0.1497	2.0	0.0219	1.8	0.94	139.7	2.5	141.6	2.6	174.1	15.1	139.7	2.5
Leier-CAN-BC-1022ab-Spot 14	438	672552	2.9	20.0803	1.1	0.1753	2.6	0.0255	2.3	0.90	162.5	3.7	164.0	3.9	185.7	25.6	162.5	3.7
Leier-CAN-BC-1022ab-Spot 15	342	3103	2.7	22.5091	2.2	0.0504	3.1	0.0082	2.1	0.69	52.8	1.1	49.9	1.5	87.0	54.6	52.8	1.1
Leier-CAN-BC-1022ab-Spot 16	680	27028	1.8	20.2956	0.7	0.1700	2.2	0.0250	2.0	0.94	159.3	3.2	159.4	3.2	160.8	17.1	159.3	3.2
Leier-CAN-BC-1022ab-Spot 17	1007	35864	1.0	20.0090	0.7	0.1747	2.1	0.0254	2.0	0.95	161.4	3.1	163.5	3.1	194.0	15.7	161.4	3.1
Leier-CAN-BC-1022ab-Spot 18	202	6489	3.1	21.0447	1.3	0.2007	2.4	0.0306	2.1	0.85	194.5	4.0	185.7	4.1	75.3	30.4	194.5	4.0
Leier-CAN-BC-1022ab-Spot 19	902	15886	2.0	19.9514	0.9	0.1691	2.0	0.0245	1.8	0.89	155.8	2.8	158.6	3.0	200.6	21.1	155.8	2.8
Leier-CAN-BC-1022ab-Spot 20	647	18245	2.3	20.4066	0.9	0.1634	2.6	0.0242	2.4	0.94	154.0	3.6	153.7	3.6	148.0	20.7	154.0	3.6
Leier-CAN-BC-1022ab-Spot 21	1055	30188	1.8	20.0061	1.4	0.1680	2.5	0.0244	2.1	0.83	155.3	3.2	157.7	3.7	194.3	33.0	155.3	3.2
Leier-CAN-BC-1022ab-Spot 22	921	148649	2.4	20.2230	0.8	0.1703	2.1	0.0250	1.9	0.93	159.0	3.0	159.6	3.1	169.1	17.8	159.0	3.0
Leier-CAN-BC-1022ab-Spot 23	778	73448	1.5	20.3540	1.1	0.1739	2.6	0.0257	2.3	0.91	163.4	3.7	162.8	3.8	154.0	25.4	163.4	3.7
Leier-CAN-BC-1022ab-Spot 24	189	184871	1.9	19.5862	1.3	0.1838	2.7	0.0261	2.3	0.86	166.1	3.8	171.3	4.2	243.4	30.8	166.1	3.8
Leier-CAN-BC-1022ab-Spot 25	617	51669	2.8	20.3501	0.8	0.1774	1.9	0.0262	1.7	0.91	166.6	2.8	165.8	2.9	154.5	17.8	166.6	2.8
Leier-CAN-BC-1022ab-Spot 26	1959	248596	3.0	20.1613	0.6	0.1639	1.9	0.0240	1.8	0.94	152.7	2.8	154.1	2.8	176.3	15.1	152.7	2.8
Leier-CAN-BC-1022ab-Spot 27	641	21949	2.8	20.5536	1.0	0.1642	2.1	0.0245	1.9	0.89	155.9	2.9	154.4	3.1	131.1	22.6	155.9	2.9
Leier-CAN-BC-1022ab-Spot 28	245	11214	2.0	20.8948	1.5	0.1655	2.6	0.0251	2.2	0.83	159.7	3.4	155.5	3.7	92.3	34.4	159.7	3.4
Leier-CAN-BC-1022ab-Spot 29	563	19442	2.4	20.5340	0.9	0.1761	2.7	0.0262	2.6	0.95	166.9	4.3	164.7	4.2	133.4	20.2	166.9	4.3
Leier-CAN-BC-1022ab-Spot 30	1592	68265	13.3	19.9623	0.7	0.2134	2.0	0.0309	1.9	0.94	196.2	3.7	196.4	3.6	199.4	16.3	196.2	3.7
Leier-CAN-BC-1022ab-Spot 31	431	23271	4.5	19.9987	1.0	0.2132	2.4	0.0309	2.1	0.90	196.4	4.1	196.3	4.2	195.2	24.2	196.4	4.1
Leier-CAN-BC-1022ab-Spot 32	256	5932	2.1	13.7312	6.1	0.2775	6.5	0.0276	2.0	0.31	175.8	3.5	248.7	14.2	1009.1	124.3	175.8	3.5
Leier-CAN-BC-1022ab-Spot 33	232	10426	2.1	20.2685	1.6	0.2074	2.6	0.0305	2.1	0.80	193.6	4.0	191.4	4.5	163.9	36.4	193.6	4.0
Leier-CAN-BC-1022ab-Spot 34	311	13583	0.9	20.5203	1.4	0.1655	2.7	0.0246	2.3	0.86	156.9	3.5	155.5	3.8	135.0	32.0	156.9	3.5
Leier-CAN-BC-1022ab-Spot 35	232	20011	3.3	20.3868	1.2	0.2083	2.3	0.0308	1.9	0.85	195.6	3.7	192.1	4.0	150.3	28.3	195.6	3.7
Leier-CAN-BC-1022ab-Spot 36	324	10006	2.1	19.1141	1.2	0.2275	2.2	0.0315	1.8	0.84	200.1	3.6	208.1	4.1	299.3	27.4	200.1	3.6
Leier-CAN-BC-1022ab-Spot 38	778	22647	2.0	20.5051	0.8	0.1753	1.6	0.0261	1.4	0.86	165.9	2.3	164.0	2.4	136.7	19.0	165.9	2.3
Leier-CAN-BC-1022ab-Spot 39	221	6970	2.2	21.2592	1.2	0.1678	2.6	0.0259	2.2	0.88	164.7	3.7	157.5	3.7	51.2	29.0	164.7	3.7
Leier-CAN-BC-1022ab-Spot 40	140	62225	3.7	20.1410	1.3	0.2101	2.7	0.0307	2.4	0.88	194.9	4.6	193.6	4.8	178.6	30.5	194.9	4.6
Leier-CAN-BC-1022ab-Spot 41	265	10074	3.0	20.7529	1.7	0.2054	2.8	0.0309	2.3	0.80	196.3	4.4	189.7	4.9	108.4	39.7	196.3	4.4
Leier-CAN-BC-1022ab-Spot 42	257	9875	2.7	20.1922	1.4	0.2017	2.2	0.0295	1.8	0.80	187.7	3.3	186.6	3.8	172.7	31.7	187.7	3.3
Leier-CAN-BC-1022ab-Spot 43	1314	35198	1.5	20.4306	0.8	0.1676	2.0	0.0248	1.8	0.92	158.2	2.9	157.4	2.9	145.2	18.3	158.2	2.9
Leier-CAN-BC-1022ab-Spot 44	566	78006	1.8	20.1318	1.0	0.1682	2.3	0.0246	2.1	0.90	156.4	3.3	157.8	3.4	179.7	24.1	156.4	3.3
Leier-CAN-BC-1022ab-Spot 45	277	208146	1.4	20.4872	1.5	0.1716	2.8	0.0255	2.4	0.85	162.3	3.8	160.8	4.1	138.7	34.2	162.3	3.8
Leier-CAN-BC-1022ab-Spot 46	117	3319	2.1	22.5004	2.5	0.1034	3.4	0.0169	2.4	0.69	107.9	2.5	99.9	3.3	86.0	61.3	107.9	2.5
Leier-CAN-BC-1022ab-Spot 47	601	2292	1.9	24.6807	2.1	0.0419	2.9	0.0075	2.0	0.68	48.2	0.9	41.7	1.2	317.9	54.5	48.2	0.9
Leier-CAN-BC-1022ab-Spot 48	1528	24431	2.3	19.5204	1.0	0.1679	2.0	0.0238	1.8	0.88	151.5	2.7	157.6	3.0	251.1	22.5	151.5	2.7
Leier-CAN-BC-1022ab-Spot 49	556	26382	0.9	20.3135	1.2	0.1730	2.1	0.0255	1.7	0.83	162.2	2.8	162.0	3.1	158.7	27.2	162.2	2.8
Leier-CAN-BC-1022ab-Spot 50	990	969606	2.0	19.8116	0.6	0.1745	1.9	0.0251	1.8	0.95	159.7	2.9	163.3	2.9	217.0	14.0	159.7	2.9
Leier-CAN-BC-1022ab-Spot 51	642	69899	2.0	20.1358	0.7	0.1780	2.0	0.0260	1.9	0.93	165.4	3.1	166.3	3.1	179.2	16.8	165.4	3.1
Leier-CAN-BC-1022ab-Spot 52	1093	297600	1.6	20.1646	0.9	0.1707	2.4	0.0250	2.2	0.93	158.9	3.4	160.0	3.5	175.9	19.9	158.9	3.4
Leier-CAN-BC-1022ab-Spot 53	1416	192192	1.7	20.2306	1.0	0.1691	1.9	0.0248	1.6	0.85	158.0	2.6	158.7	2.8	168.3	24.1	158.0	2.6
Leier-CAN-BC-1022ab-Spot 54	655	6325	0.8	22.3692	1.5	0.0424	3.2	0.0069	2.8	0.88	44.2	1.2	42.2	1.3	71.7	37.7	44.2	1.2
Leier-CAN-BC-1022ab-Spot 55	768	14347	2.5	20.6868	0.8	0.1693	2.0	0.0254	1.9	0.92	161.7	3.0	158.8	3.0	116.0	18.5	161.7	3.0
Leier-CAN-BC-1022ab-Spot 56	769	12667	0.6	20.5435	1.2	0.1627	2.7	0.0242	2.5	0.90	154.4	3.7	153.1	3.9	132.3	28.3	154.4	3.7
Leier-CAN-BC-1022ab-Spot 57	296	19969	2.2	20.0543	1.3	0.2108	2.1	0.0307	1.7	0.81	194.7	3.3	194.2	3.8	188.7	29.2	194.7	3.3
Leier-CAN-BC-1022ab-Spot 58	112	3108	0.7	21.5558	2.8	0.1612	4.0	0.0252	2.9	0.72	160.5	4.6	151.8	5.7	18.0	67.4	160.5	4.6
Leier-CAN-BC-1022ab-Spot 59	482	13222	3.2	20.2496	1.2	0.2092	2.2	0.0307	1.9	0.85	195.0	3.6	192.8	3.8	166.1	27.0	195.0	3.6
Leier-CAN-BC-1022ab-Spot 60	369	126428	1.6	19.8928	1.3	0.1738	2.3	0.0251	1.9	0.82	159.7	3.0	162.7	3.4	207.5	29.9	159.7	3.0
Leier-CAN-BC-1022ab-Spot 61	649	24528	1.9	19.8937	0.9	0.2459	2.1	0.0355	1.9	0.91	224.7	4.2	223.2	4.2	207.4	20.0	224.7	4.2
Leier-CAN-BC-1022ab-Spot 62	1431	54008	1.4	20.1124	0.8	0.1670	1.9	0.0244	1.7	0.91	155.2	2.6	156.9	2.8	181.9	18.7	155.2	2.6
Leier-CAN-BC-1022ab-Spot 63	870	12947	3.5	21.6949	1.2	0.0482	2.5	0.0076	2.2	0.89	48.7	1.1	47.8	1.2	2.5	27.9	48.7	1.1
Leier-CAN-BC-1022ab-Spot 64	142	10313	2.7	19.8394	1.6	0.1814	2.8	0.0261	2.2	0.81	166.1	3.7	169.3	4.3	213.7	37.7	166.1	3.7
Leier-CAN-BC-1022ab-Spot 65	536	32412	1.7	19.5022	1.1	0.1768	2.1	0.0250	1.8	0.85	159.2	2.9	165.3	3.3	253.3	25.5	159.2	2.9
Leier-CAN-BC-1022ab-Spot 66	1133	400684	2.0	20.1679	0.7	0.1706	2.2	0.0250	2.1	0.94	158.9	3.2	160.0	3.2	175.5	17.1	158.9	3.2
Leier-CAN-BC-1022ab-Spot 67	482	138415	3.0	19.8363	1.7	0.1802	2.6	0.0259	2.0	0.76	165.0	3.3	168.3	4.1	214.1	39.6	165.0	3.3
Leier-CAN-BC-1022ab-Spot 68	300	33310	1.5	19.4108	2.2	0.1785	2.9	0.0251	1.9	0.64	160.0	2.9	166.7	4.4	264.1	50.6	160.0	2.9
Leier-CAN-BC-1022ab-Spot 69	226	9903	3.6	20.8130	1.7	0.2016	2.8	0.0304	2.2	0.79	193.2	4.2	186.5	4.7	101.6	40.6	193.2	4.2
~~Leier-CAN-BC-1022ab-Spot 70~~	~~184~~	~~712~~	~~4.5~~	~~6.2168~~	~~22.1~~	~~0.4413~~	~~22.6~~	~~0.0199~~	~~4.7~~	~~0.21~~	~~127.0~~	~~5.9~~	~~371.2~~	~~70.2~~	~~2464.7~~	~~377.6~~	~~127.0~~	~~5.9~~
Leier-CAN-BC-1022ab-Spot 71	3691	3881	1.7	14.7313	6.2	0.2101	6.5	0.0224	1.8	0.28	143.1	2.6	193.6	11.5	865.0	129.3	143.1	2.6
Leier-CAN-BC-1022ab-Spot 72	330	17791	1.2	19.0177	2.7	0.1786	3.3	0.0246	2.0	0.59	156.9	3.0	166.9	5.2	310.8	61.8	156.9	3.0
Leier-CAN-BC-1022ab-Spot 73	172	4062	2.4	21.2927	2.9	0.1504	4.1	0.0232	2.8	0.70	148.0	4.2	142.2	5.4	47.4	69.3	148.0	4.2
Leier-CAN-BC-1022ab-Spot 74	300	35299	3.3	19.5910	1.5	0.2177	2.7	0.0309	2.3	0.83	196.3	4.4	200.0	5.0	242.8	35.4	196.3	4.4
Leier-CAN-BC-1022ab-Spot 75	389	26981	0.7	20.4383	1.9	0.0588	2.8	0.0087	2.1	0.73	56.0	1.2	58.0	1.6	144.3	45.4	56.0	1.2
Leier-CAN-BC-1022ab-Spot 76	232	5816	3.4	20.5729	1.6	0.2104	2.7	0.0314	2.2	0.81	199.2	4.2	193.9	4.7	129.0	36.7	199.2	4.2
Leier-CAN-BC-1022ab-Spot 77	1076	58648	1.9	20.1530	0.8	0.1696	2.0	0.0248	1.8	0.91	157.9	2.8	159.1	2.9	177.2	19.1	157.9	2.8
Leier-CAN-BC-1022ab-Spot 78	844	31006	1.9	20.1858	0.7	0.1744	1.7	0.0255	1.5	0.90	162.5	2.5	163.2	2.6	173.4	17.3	162.5	2.5
Leier-CAN-BC-1022ab-Spot 79	808	58384	1.8	20.1964	0.8	0.1826	2.4	0.0268	2.2	0.94	170.2	3.8	170.3	3.8	172.2	19.7	170.2	3.8
Leier-CAN-BC-1022ab-Spot 80	380	16243	1.7	20.8336	1.1	0.1653	2.5	0.0250	2.3	0.90	159.0	3.6	155.3	3.6	99.3	25.5	159.0	3.6
Leier-CAN-BC-1022ab-Spot 81	257	9109	2.7	20.2479	1.5	0.2106	2.6	0.0309	2.1	0.80	196.3	4.0	194.0	4.6	166.3	35.8	196.3	4.0
Leier-CAN-BC-1022ab-Spot 82	938	22237	1.9	20.5417	0.7	0.1551	2.2	0.0231	2.1	0.94	147.2	3.1	146.4	3.0	132.5	17.2	147.2	3.1
Leier-CAN-BC-1022ab-Spot 83	298	18438	1.9	19.3389	1.1	0.2155	2.6	0.0302	2.3	0.90	191.9	4.3	198.1	4.6	272.5	25.5	191.9	4.3
Leier-CAN-BC-1022ab-Spot 84	642	157677	2.6	20.2802	0.8	0.1740	1.9	0.0256	1.7	0.91	162.9	2.8	162.8	2.9	162.5	18.3	162.9	2.8
Leier-CAN-BC-1022ab-Spot 85	140	18328	3.8	20.3943	1.5	0.2133	3.0	0.0316	2.6	0.86	200.3	5.2	196.3	5.4	149.4	36.2	200.3	5.2
Leier-CAN-BC-1022ab-Spot 86	352	2941	1.5	23.6852	4.0	0.0493	4.6	0.0085	2.3	0.50	54.3	1.3	48.8	2.2	213.3	100.1	54.3	1.3
Leier-CAN-BC-1022ab-Spot 87	128	3369	3.1	21.8614	2.1	0.1958	3.7	0.0310	3.1	0.83	197.1	6.0	181.5	6.2	15.9	51.0	197.1	6.0
Leier-CAN-BC-1022ab-Spot 88	550	11436	2.7	20.4998	1.2	0.1669	2.3	0.0248	1.9	0.86	158.0	3.0	156.7	3.3	137.3	27.2	158.0	3.0
Leier-CAN-BC-1022ab-Spot 89	212	103146	3.7	19.6405	1.2	0.2128	2.7	0.0303	2.4	0.89	192.5	4.6	195.9	4.8	237.0	27.9	192.5	4.6
Leier-CAN-BC-1022ab-Spot 90	57	3997	1.0	20.4238	5.5	0.0563	6.5	0.0083	3.4	0.52	53.6	1.8	55.6	3.5	146.1	129.1	53.6	1.8
Leier-CAN-BC-1022ab-Spot 91	764	33208	2.1	20.3107	0.8	0.1700	2.1	0.0250	1.9	0.91	159.5	3.0	159.4	3.0	159.1	19.7	159.5	3.0
Leier-CAN-BC-1022ab-Spot 92	308	40191	2.2	20.6511	1.3	0.1705	2.3	0.0255	1.9	0.82	162.5	3.1	159.8	3.4	120.0	30.8	162.5	3.1
Leier-CAN-BC-1022ab-Spot 93	445	48549	1.1	20.4062	1.1	0.1657	1.9	0.0245	1.5	0.81	156.1	2.4	155.6	2.7	148.0	25.7	156.1	2.4
Leier-CAN-BC-1022ab-Spot 94	307	21922	1.4	19.7995	1.1	0.1718	2.4	0.0247	2.1	0.89	157.1	3.3	161.0	3.5	218.4	25.5	157.1	3.3
Leier-CAN-BC-1022ab-Spot 95	877	23919	1.7	20.3633	0.9	0.1659	1.7	0.0245	1.4	0.85	156.0	2.2	155.8	2.4	153.0	20.5	156.0	2.2
Leier-CAN-BC-1022ab-Spot 96	661	124342	1.7	20.3355	1.0	0.1630	1.8	0.0240	1.5	0.83	153.1	2.2	153.3	2.5	156.2	23.3	153.1	2.2
Leier-CAN-BC-1022ab-Spot 97	157	9465	2.7	20.4530	1.9	0.1764	2.8	0.0262	2.0	0.73	166.5	3.4	165.0	4.3	142.7	45.0	166.5	3.4
Leier-CAN-BC-1022ab-Spot 98	349	24953	2.0	20.7418	1.5	0.1648	3.3	0.0248	2.9	0.89	157.9	4.5	154.9	4.7	109.7	35.9	157.9	4.5
Leier-CAN-BC-1022ab-Spot 99	207	13449	2.3	19.1310	1.6	0.1176	3.5	0.0163	3.1	0.89	104.3	3.2	112.9	3.7	297.3	35.5	104.3	3.2

Sample: CANBC1022Gab	U-Pb geochronologic analyses					Isotope ratios					Apparent ages (Ma)							
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
Leier-CAN-BC-1022ab-Spot 100	294	10963	3.3	20.7315	1.2	0.1996	2.3	0.0300	2.0	0.86	190.7	3.7	184.8	3.9	110.8	27.3	190.7	3.7
Leier-CAN-BC-1022ab-Spot 101	282	17796	3.6	20.2555	1.4	0.2110	2.1	0.0310	1.6	0.74	196.8	3.0	194.4	3.7	165.4	33.4	196.8	3.0
Leier-CAN-BC-1022ab-Spot 102	497	13574	1.7	20.4939	1.1	0.1668	2.3	0.0248	2.0	0.86	157.8	3.1	156.6	3.3	138.0	27.0	157.8	3.1
Leier-CAN-BC-1022ab-Spot 103	284	39787	1.7	20.1820	1.4	0.1140	2.3	0.0167	1.9	0.80	106.7	2.0	109.6	2.4	173.9	32.7	106.7	2.0
Leier-CAN-BC-1022ab-Spot 104	382	92963	1.3	20.1324	1.2	0.1684	2.6	0.0246	2.3	0.89	156.6	3.6	158.0	3.8	179.6	26.9	156.6	3.6
Leier-CAN-BC-1022ab-Spot 105	457	64295	1.6	20.2462	1.1	0.1680	2.4	0.0247	2.2	0.88	157.1	3.3	157.7	3.6	166.5	26.8	157.1	3.3
Leier-CAN-BC-1022ab-Spot 106	1165	7490	1.6	19.0561	1.7	0.1545	2.8	0.0214	2.2	0.79	136.2	3.0	145.9	3.8	306.2	39.4	136.2	3.0
Leier-CAN-BC-1022ab-Spot 107	796	79279	1.8	20.3431	0.7	0.1699	1.9	0.0251	1.7	0.92	159.6	2.7	159.3	2.8	155.3	16.8	159.6	2.7
Leier-CAN-BC-1022ab-Spot 108	827	52092	2.2	19.1391	1.3	0.1787	2.0	0.0248	1.5	0.76	158.0	2.3	167.0	3.0	296.3	29.2	158.0	2.3
Leier-CAN-BC-1022ab-Spot 109	222	6125	1.0	21.7688	2.2	0.1569	3.1	0.0248	2.2	0.71	157.8	3.4	148.0	4.3	5.7	52.8	157.8	3.4
Leier-CAN-BC-1022ab-Spot 110	715	29560	2.9	20.5005	0.9	0.1691	2.0	0.0251	1.9	0.91	160.0	2.9	158.6	3.0	137.3	20.3	160.0	2.9
Leier-CAN-BC-1022ab-Spot 111	241	6349	1.5	20.5195	1.6	0.1658	2.9	0.0247	2.4	0.83	157.1	3.7	155.7	4.2	135.1	38.3	157.1	3.7
Leier-CAN-BC-1022ab-Spot 112	437	20177	1.8	20.1020	1.1	0.1630	2.3	0.0238	2.0	0.88	151.4	3.0	153.3	3.3	183.1	25.8	151.4	3.0
Leier-CAN-BC-1022ab-Spot 113	971	1016476	2.2	20.0356	0.8	0.1676	2.1	0.0244	1.9	0.92	155.2	2.9	157.4	3.0	190.9	18.8	155.2	2.9
Leier-CAN-BC-1022ab-Spot 114	1174	11255	0.5	21.1135	1.2	0.0507	2.0	0.0078	1.6	0.80	49.8	0.8	50.2	1.0	67.6	29.0	49.8	0.8
Leier-CAN-BC-1022ab-Spot 115	1195	10257	1.5	21.1134	1.0	0.0503	2.3	0.0077	2.1	0.91	49.5	1.0	49.9	1.1	67.6	23.4	49.5	1.0
Leier-CAN-BC-1022ab-Spot 116	274	12531	2.9	19.9454	1.4	0.2082	2.5	0.0301	2.1	0.84	191.3	4.0	192.0	4.4	201.3	31.8	191.3	4.0
Leier-CAN-BC-1022ab-Spot 117	1156	57670	1.5	20.1720	0.7	0.1681	2.0	0.0246	1.8	0.94	156.6	2.9	157.8	2.9	175.0	15.3	156.6	2.9
Leier-CAN-BC-1022ab-Spot 118	201	75820	1.6	17.5601	3.2	0.1891	4.0	0.0241	2.4	0.61	153.4	3.7	175.8	6.4	489.5	69.7	153.4	3.7
Leier-CAN-BC-1022ab-Spot 119	178	55848	2.4	19.8877	1.5	0.1815	3.2	0.0262	2.8	0.87	166.6	4.6	169.4	4.9	208.0	35.6	166.6	4.6
Leier-CAN-BC-1022ab-Spot 120	466	26455	3.4	20.2970	1.0	0.1735	2.2	0.0255	2.0	0.88	162.6	3.1	162.4	3.3	160.6	24.4	162.6	3.1
Leier-CAN-BC-1022ab-Spot 121	171	23941	2.0	19.1188	1.7	0.1762	3.1	0.0244	2.5	0.83	155.6	3.9	164.8	4.6	298.7	39.4	155.6	3.9
Leier-CAN-BC-1022ab-Spot 122	300	16965	2.8	20.1819	1.1	0.2101	2.4	0.0308	2.1	0.88	195.3	4.0	193.6	4.2	173.9	26.7	195.3	4.0
Leier-CAN-BC-1022ab-Spot 123	788	52226	2.5	20.1412	0.8	0.1722	2.1	0.0252	1.9	0.92	160.2	3.1	161.3	3.2	178.6	19.8	160.2	3.1
Leier-CAN-BC-1022ab-Spot 124	426	11810	3.4	20.0473	1.0	0.2061	2.0	0.0300	1.7	0.86	190.3	3.3	190.3	3.5	189.5	24.3	190.3	3.3
Leier-CAN-BC-1022ab-Spot 125	304	6032	1.9	21.3242	1.3	0.1689	2.5	0.0261	2.1	0.85	166.3	3.5	158.5	3.6	43.9	31.1	166.3	3.5
Leier-CAN-BC-1022ab-Spot 126	633	12913	4.2	20.2769	0.9	0.1760	2.3	0.0259	2.1	0.91	164.8	3.4	164.6	3.4	162.9	21.4	164.8	3.4
Leier-CAN-BC-1022ab-Spot 127	784	40716	2.2	20.2438	0.8	0.1706	1.9	0.0250	1.8	0.91	159.5	2.8	159.9	2.9	166.7	18.8	159.5	2.8
Leier-CAN-BC-1022ab-Spot 128	110	2135	3.7	22.1219	1.5	0.2225	3.1	0.0357	2.6	0.86	226.1	5.9	204.0	5.6	44.6	37.3	226.1	5.9
Leier-CAN-BC-1022ab-Spot 129	118	796	3.1	33.8054	7.3	0.0303	8.0	0.0074	3.2	0.40	47.6	1.5	30.3	2.4	1202.3	226.6	47.6	1.5
Leier-CAN-BC-1022ab-Spot 130	758	26443	2.0	20.4361	0.8	0.1688	2.0	0.0250	1.9	0.92	159.3	2.9	158.3	3.0	144.6	18.8	159.3	2.9
Leier-CAN-BC-1022ab-Spot 131	926	51892	1.9	20.3546	0.9	0.1662	2.0	0.0245	1.8	0.90	156.3	2.8	156.1	2.9	154.0	21.1	156.3	2.8
Leier-CAN-BC-1022ab-Spot 132	964	91079	1.8	19.9910	0.8	0.2015	2.2	0.0292	2.0	0.93	185.6	3.7	186.4	3.7	196.1	19.3	185.6	3.7
Leier-CAN-BC-1022ab-Spot 133	208	5321	1.3	21.9729	2.5	0.0525	3.3	0.0084	2.3	0.68	53.7	1.2	51.9	1.7	28.2	59.6	53.7	1.2
Leier-CAN-BC-1022ab-Spot 134	440	4251	1.1	21.2425	1.8	0.0524	2.6	0.0081	1.8	0.72	51.8	0.9	51.8	1.3	53.1	42.7	51.8	0.9
Leier-CAN-BC-1022ab-Spot 135	829	20845	2.2	20.2639	0.8	0.1728	2.3	0.0254	2.1	0.94	161.6	3.4	161.8	3.4	164.4	18.2	161.6	3.4
Leier-CAN-BC-1022ab-Spot 136	910	47103	2.0	20.2298	0.8	0.1704	2.2	0.0250	2.0	0.93	159.2	3.2	159.8	3.2	168.3	18.8	159.2	3.2
Leier-CAN-BC-1022ab-Spot 137	290	3090	1.1	22.3681	2.2	0.0489	2.9	0.0079	1.9	0.66	51.0	1.0	48.5	1.4	71.6	52.8	51.0	1.0
Leier-CAN-BC-1022ab-Spot 138	253	4291	1.6	20.7473	1.5	0.1656	2.5	0.0249	2.0	0.79	158.7	3.1	155.6	3.6	109.0	36.0	158.7	3.1
Leier-CAN-BC-1022ab-Spot 139	1443	522280	1.6	19.8954	0.7	0.1666	1.9	0.0240	1.8	0.93	153.1	2.7	156.4	2.7	207.2	16.1	153.1	2.7
Leier-CAN-BC-1022ab-Spot 140	303	4888	1.2	20.6495	2.7	0.1652	3.3	0.0247	1.8	0.54	157.5	2.8	155.2	4.7	120.2	64.5	157.5	2.8
Leier-CAN-BC-1022ab-Spot 141	650	23149	2.0	20.2077	1.1	0.1672	2.7	0.0245	2.4	0.91	156.1	3.8	157.0	3.9	170.9	26.6	156.1	3.8
Leier-CAN-BC-1022ab-Spot 142	229	4934	2.7	21.5000	2.1	0.1565	3.2	0.0244	2.4	0.75	155.4	3.7	147.6	4.4	24.2	50.9	155.4	3.7
Leier-CAN-BC-1022ab-Spot 143	334	10969	1.7	20.7282	1.2	0.1634	2.5	0.0246	2.3	0.89	156.4	3.5	153.7	3.6	111.2	27.3	156.4	3.5
Leier-CAN-BC-1022ab-Spot 144	117	1650	0.7	22.9879	3.9	0.0470	4.6	0.0078	2.6	0.55	50.4	1.3	46.7	2.1	138.8	95.6	50.4	1.3
Leier-CAN-BC-1022ab-Spot 145	352	22277	1.6	20.4317	1.0	0.1666	2.4	0.0247	2.1	0.90	157.2	3.3	156.4	3.4	145.1	24.2	157.2	3.3
Leier-CAN-BC-1022ab-Spot 146	341	28420	2.9	20.1576	1.2	0.2115	2.6	0.0309	2.3	0.89	196.3	4.5	194.8	4.7	176.7	28.3	196.3	4.5
Leier-CAN-BC-1022ab-Spot 147	599	16846	2.1	21.1627	1.6	0.0431	3.1	0.0066	2.6	0.85	42.5	1.1	42.8	1.3	62.1	39.1	42.5	1.1
Leier-CAN-BC-1022ab-Spot 148	237	3887	1.7	21.4732	1.3	0.1618	2.6	0.0252	2.3	0.87	160.5	3.6	152.3	3.7	27.2	30.7	160.5	3.6
Leier-CAN-BC-1022ab-Spot 149	227	5817	1.5	16.9068	1.9	0.2132	2.8	0.0261	2.1	0.75	166.4	3.5	196.2	5.0	572.5	40.4	166.4	3.5
Leier-CAN-BC-1022ab-Spot 150	483	11998	0.9	20.5885	1.5	0.1612	2.7	0.0241	2.2	0.82	153.3	3.3	151.7	3.8	127.2	36.4	153.3	3.3
Leier-CAN-BC-1022ab-Spot 151	609	4253	2.8	22.3975	1.8	0.0483	2.6	0.0079	1.9	0.74	50.4	1.0	47.9	1.2	74.8	42.9	50.4	1.0
Leier-CAN-BC-1022ab-Spot 152	671	40126	3.1	19.9133	1.2	0.1728	2.1	0.0250	1.7	0.82	158.9	2.7	161.8	3.2	205.1	27.7	158.9	2.7
Leier-CAN-BC-1022ab-Spot 153	577	72766	2.0	19.7600	0.7	0.1770	1.9	0.0254	1.7	0.92	161.4	2.8	165.4	2.9	223.0	16.8	161.4	2.8
Leier-CAN-BC-1022ab-Spot 154	175	64228	1.6	20.4248	1.7	0.1736	2.8	0.0257	2.2	0.79	163.6	3.5	162.5	4.2	145.9	39.9	163.6	3.5
Leier-CAN-BC-1022ab-Spot 155	721	192687	2.1	19.9885	0.7	0.1661	1.9	0.0241	1.8	0.94	153.4	2.7	156.0	2.7	196.4	15.5	153.4	2.7
Leier-CAN-BC-1022ab-Spot 156	814	13876	1.7	19.6603	1.2	0.1782	2.0	0.0254	1.6	0.80	161.7	2.6	166.5	3.1	234.7	27.4	161.7	2.6
Leier-CAN-BC-1022ab-Spot 157	1745	40461	2.2	20.2454	0.6	0.1601	1.7	0.0235	1.6	0.93	149.8	2.3	150.8	2.4	166.5	14.9	149.8	2.3
Leier-CAN-BC-1022ab-Spot 158	71	4517	3.0	20.8451	2.9	0.1741	4.2	0.0263	3.0	0.73	167.5	5.0	163.0	6.3	98.0	67.7	167.5	5.0
Leier-CAN-BC-1022ab-Spot 159	839	29671	2.3	19.7105	0.9	0.1738	2.3	0.0248	2.1	0.92	158.2	3.3	162.7	3.5	228.8	20.7	158.2	3.3
Leier-CAN-BC-1022ab-Spot 160	866	29243	1.3	20.9328	1.1	0.0520	2.5	0.0079	2.3	0.91	50.7	1.2	51.5	1.3	88.0	25.2	50.7	1.2
Leier-CAN-BC-1022ab-Spot 161	862	23424	2.1	20.5869	0.7	0.1681	1.9	0.0251	1.8	0.93	159.8	2.8	157.8	2.8	127.4	16.8	159.8	2.8
Leier-CAN-BC-1022ab-Spot 162	281	9441	3.7	20.5030	0.9	0.2079	2.5	0.0309	2.3	0.93	196.3	4.5	191.8	4.4	137.0	21.8	196.3	4.5
Leier-CAN-BC-1022ab-Spot 163	473	9776	8.3	20.2460	1.7	0.1729	2.4	0.0254	1.7	0.71	161.6	2.8	161.9	3.6	166.5	39.4	161.6	2.8
Leier-CAN-BC-1022ab-Spot 164	572	5791	1.6	21.3491	0.9	0.1623	2.3	0.0251	2.1	0.92	160.0	3.3	152.7	3.2	41.1	21.0	160.0	3.3
Leier-CAN-BC-1022ab-Spot 165	905	66568	1.5	20.0659	1.0	0.1692	2.2	0.0246	2.0	0.90	156.8	3.1	158.7	3.3	187.3	23.0	156.8	3.1
Leier-CAN-BC-1022ab-Spot 166	342	6772	5.3	21.0693	1.3	0.1988	2.2	0.0304	1.7	0.80	192.9	3.3	184.1	3.7	72.6	31.2	192.9	3.3
Leier-CAN-BC-1022ab-Spot 167	456	16089	2.2	20.3417	1.2	0.1687	2.5	0.0249	2.2	0.89	158.5	3.4	158.3	3.6	155.5	27.1	158.5	3.4
Leier-CAN-BC-1022ab-Spot 168	686	196845	2.8	20.4609	1.3	0.1058	2.5	0.0157	2.2	0.87	100.4	2.2	102.1	2.5	141.8	29.7	100.4	2.2
Leier-CAN-BC-1022ab-Spot 169	363	17567	2.2	20.7695	1.1	0.1698	2.1	0.0256	1.8	0.85	162.8	2.8	159.3	3.0	106.5	25.7	162.8	2.8
Leier-CAN-BC-1022ab-Spot 170	586	43910	1.8	20.2785	1.1	0.1649	2.5	0.0243	2.3	0.91	154.5	3.5	155.0	3.6	162.7	24.6	154.5	3.5
Leier-CAN-BC-1022ab-Spot 171	344	4590	3.0	20.9325	2.8	0.1789	3.5	0.0272	2.1	0.60	172.8	3.6	167.1	5.5	88.0	67.2	172.8	3.6
Leier-CAN-BC-1022ab-Spot 172	419	12498	2.6	19.5354	1.4	0.1776	2.9	0.0252	2.6	0.88	160.2	4.1	166.0	4.4	249.4	31.6	160.2	4.1
Leier-CAN-BC-1022ab-Spot 173	939	550827	2.8	20.3540	0.9	0.1722	1.9	0.0254	1.7	0.89	161.8	2.7	161.3	2.8	154.0	20.2	161.8	2.7
Leier-CAN-BC-1022ab-Spot 174	270	35931	4.1	19.8412	1.0	0.2102	2.2	0.0303	2.0	0.90	192.1	3.7	193.7	3.9	213.5	22.3	192.1	3.7
Leier-CAN-BC-1022ab-Spot 175	962	111912	2.1	19.9919	0.9	0.1677	1.9	0.0243	1.7	0.89	154.9	2.6	157.4	2.8	196.0	20.4	154.9	2.6
Leier-CAN-BC-1022ab-Spot 176	611	12892	1.3	20.5909	1.3	0.0549	2.5	0.0082	2.2	0.86	52.7	1.1	54.3	1.3	126.9	30.3	52.7	1.1
Leier-CAN-BC-1022ab-Spot 177	193	6619	2.5	19.8826	2.4	0.0972	3.3	0.0140	2.3	0.70	89.7	2.0	94.2	3.0	208.7	54.8	89.7	2.0
Leier-CAN-BC-1022ab-Spot 178	2136	190831	2.4	20.3184	0.5	0.1593	1.6	0.0235	1.6	0.96	149.5	2.3	150.0	2.3	158.2	11.2	149.5	2.3
Leier-CAN-BC-1022ab-Spot 179	968	17721	1.7	20.4493	0.8	0.1651	1.8	0.0245	1.6	0.90	155.9	2.4	155.1	2.5	143.1	18.1	155.9	2.4
Leier-CAN-BC-1022ab-Spot 180	269	56934	1.6	20.7979	1.3	0.1688	2.4	0.0255	2.1	0.85	162.0	3.3	158.3	3.6	103.3	30.6	162.0	3.3
Leier-CAN-BC-1022ab-Spot 181	404	18474	1.5	19.7262	1.3	0.1689	2.6	0.0242	2.2	0.86	153.9	3.4	158.5	3.8	226.9	30.8	153.9	3.4
Leier-CAN-BC-1022ab-Spot 182	772	28405	1.8	20.0921	0.8	0.1695	2.1	0.0247	2.0	0.93	157.3	3.0	159.0	3.1	184.3	18.6	157.3	3.0
Leier-CAN-BC-1022ab-Spot 183	692	37511168	1.9	19.3024	0.7	0.1817	1.6	0.0254	1.4	0.89	161.9	2.2	169.5	2.4	276.9	16.2	161.9	2.2
Leier-CAN-BC-1022ab-Spot 184	201	12964	0.9	20.4418	1.5	0.1679	2.9	0.0249	2.5	0.86	158.5	3.9	157.6	4.3	144.0	34.3	158.5	3.9
Leier-CAN-BC-1022ab-Spot 185	428	20976	3.2	20.4463	1.1	0.1705	2.3	0.0253	2.0	0.87	161.0	3.2	159.9	3.4	143.4	26.6	161.0	3.2
Leier-CAN-BC-1022ab-Spot 186	1397	56479	1.2	20.0989	0.8	0.1699	1.7	0.0248	1.5	0.87	157.8	2.3	159.4	2.5	183.5	19.7	157.8	2.3
Leier-CAN-BC-1022ab-Spot 187	145	34801	3.6	20.7026	1.8	0.2059	3.2	0.0309	2.6	0.83	196.3	5.1	190.1	5.5	114.2	42.5	196.3	5.1
Leier-CAN-BC-1022ab-Spot 188	238	28198	1.5	21.0004	1.6	0.1065	2.9	0.0162	2.5	0.85	103.8	2.6	102.8	2.9	80.3	37.2	103.8	2.6
Leier-CAN-BC-1022ab-Spot 189	167	4178	2.7	21.0563	1.6	0.2032	2.6	0.0310	2.0	0.77	197.0	3.9	187.8	4.4	74.0	38.6	197.0	3.9
Leier-CAN-BC-1022ab-Spot 190	397	27438	1.3	18.2080	2.3	0.1953	3.0	0.0258	2.0	0.65	164.1	3.2	181.1	5.0	409.0	51.8	164.1	3.2
Leier-CAN-BC-1022ab-Spot 191	429	2950	1.0	22.9279	2.0	0.0483	3.0	0.0080	2.3	0.75	51.5	1.2	47.9	1.4	132.4	50.0	51.5	1.2
Leier-CAN-BC-1022ab-Spot 192	232	22268	2.1	20.5272	1.6	0.1736	2.7	0.0259	2.2	0.81	164.5	3.6	162.6	4.1	134.2	37.6	164.5	3.6
Leier-CAN-BC-1022ab-Spot 193	523	42012	1.8	19.4284	1.0	0.1844	2.0	0.0260	1.8	0.87	165.3	2.9	171.8	3.2	262.0	22.8	165.3	2.9
Leier-CAN-BC-1022ab-Spot 194	1187	28740	1.8	20.3067	0.8	0.1681	2.3	0.0248	2.2	0.95	157.6	3.4	157.7	3.4	159.5	17.6	157.6	3.4
Leier-CAN-BC-1022ab-Spot 195	225	5591	3.7	21.3224	2.5	0.2043	3.2	0.0316	2.0	0.63	200.6	4.0	188.8	5.5	44.1	59.6	200.6	4.0
Leier-CAN-BC-1022ab-Spot 196	1030	12068	1.5	21.8621	1.6	0.0465	2.1	0.0074	1.5	0.69	47.3	0.7	46.1	1.0	16.0	37.5	47.3	0.7
Leier-CAN-BC-1022ab-Spot 197	573	57079	2.6	19.9478	1.1	0.1758	2.3	0.0254	2.0	0.87	161.9	3.2	164.4	3.5	201.1	26.5	161.9	3.2

Sample: CANBC1022Gab	U-Pb geochronologic analyses																	
						Isotope ratios						Apparent ages (Ma)						
Analysis	U (ppm)	206Pb / 204Pb	U/Th	206Pb* / 207Pb*	± (%)	207Pb* / 235U*	± (%)	206Pb* / 238U	± (%)	error corr.	206Pb* / 238U*	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
Leier-CAN-BC-1022ab-Spot 198	155	5720	1.9	19.3401	2.1	0.1813	3.6	0.0254	2.9	0.80	161.9	4.6	169.2	5.6	272.4	48.8	161.9	4.6
Leier-CAN-BC-1022ab-Spot 199	417	7799	1.7	20.8475	1.0	0.1612	2.2	0.0244	1.9	0.89	155.2	3.0	151.7	3.1	97.7	23.7	155.2	3.0
Leier-CAN-BC-1022ab-Spot 200	1097	47729	5.2	20.5720	0.9	0.0972	2.4	0.0145	2.3	0.93	92.8	2.1	94.2	2.2	129.1	20.7	92.8	2.1
Leier-CAN-BC-1022ab-Spot 201	703	12285	1.8	19.4658	0.7	0.1797	2.1	0.0254	2.0	0.94	161.5	3.2	167.8	3.3	257.6	16.3	161.5	3.2
Leier-CAN-BC-1022ab-Spot 202	1253	228584	1.9	20.3759	0.8	0.1608	2.4	0.0238	2.3	0.94	151.4	3.4	151.4	3.4	151.5	19.2	151.4	3.4
Leier-CAN-BC-1022ab-Spot 203	442	3765	1.3	21.8066	1.9	0.0567	3.1	0.0090	2.4	0.79	57.5	1.4	56.0	1.7	9.8	45.1	57.5	1.4
Leier-CAN-BC-1022ab-Spot 204	1353	267897	1.6	20.1316	0.8	0.1651	1.6	0.0241	1.5	0.89	153.5	2.2	155.1	2.4	179.7	17.8	153.5	2.2
Leier-CAN-BC-1022ab-Spot 205	951	6035	1.7	21.3873	1.7	0.0446	2.3	0.0069	1.6	0.67	44.4	0.7	44.3	1.0	36.8	41.8	44.4	0.7
Leier-CAN-BC-1022ab-Spot 206	645	76903	1.8	18.9415	1.2	0.1840	2.4	0.0253	2.1	0.87	160.9	3.3	171.5	3.8	320.0	26.8	160.9	3.3
Leier-CAN-BC-1022ab-Spot 207	132	5752	2.0	21.3917	1.9	0.1791	3.1	0.0278	2.4	0.79	176.6	4.3	167.2	4.7	36.3	44.9	176.6	4.3
Leier-CAN-BC-1022ab-Spot 208	617	21631	2.0	20.4011	1.1	0.1637	2.3	0.0242	2.0	0.88	154.3	3.0	153.9	3.3	148.6	25.9	154.3	3.0
Leier-CAN-BC-1022ab-Spot 209	370	9188	0.8	20.3332	1.8	0.1680	2.6	0.0248	1.9	0.72	157.7	2.9	157.6	3.8	156.5	41.7	157.7	2.9
Leier-CAN-BC-1022ab-Spot 210	154	4673	3.9	20.5345	2.8	0.1727	3.8	0.0257	2.5	0.66	163.7	4.1	161.7	5.7	133.4	66.6	163.7	4.1
Leier-CAN-BC-1022ab-Spot 211	401	54871	1.1	20.3719	1.1	0.1653	2.6	0.0244	2.4	0.91	155.6	3.7	155.4	3.8	152.0	25.8	155.6	3.7
Leier-CAN-BC-1022ab-Spot 212	995	33595	1.6	17.9569	1.7	0.1916	2.4	0.0250	1.7	0.70	158.9	2.6	178.0	3.9	440.0	38.1	158.9	2.6
Leier-CAN-BC-1022ab-Spot 213	946	20273	1.9	19.8138	0.8	0.1840	1.8	0.0264	1.6	0.89	168.2	2.6	171.5	2.8	216.7	19.1	168.2	2.6
Leier-CAN-BC-1022ab-Spot 214	332	14220	2.4	20.5413	1.3	0.1793	2.9	0.0267	2.6	0.89	169.9	4.3	167.5	4.4	132.5	30.4	169.9	4.3
Leier-CAN-BC-1022ab-Spot 215	1673	32601	2.3	20.3620	0.8	0.1601	1.8	0.0236	1.6	0.89	150.6	2.4	150.8	2.6	153.2	19.9	150.6	2.4
Leier-CAN-BC-1022ab-Spot 216	361	4683	2.2	22.3480	2.5	0.0489	3.1	0.0079	1.9	0.61	50.9	1.0	48.4	1.5	69.4	60.3	50.9	1.0
Leier-CAN-BC-1022ab-Spot 217	1128	15423	1.3	18.5450	1.7	0.1860	2.9	0.0250	2.3	0.80	159.3	3.6	173.2	4.6	367.8	38.9	159.3	3.6
Leier-CAN-BC-1022ab-Spot 218	248	8503	2.5	21.0549	2.6	0.0530	3.5	0.0081	2.3	0.67	52.0	1.2	52.5	1.8	74.2	61.9	52.0	1.2
Leier-CAN-BC-1022ab-Spot 219	1270	21926	0.4	19.8868	0.8	0.1621	1.7	0.0234	1.5	0.90	148.9	2.3	152.5	2.4	208.1	17.6	148.9	2.3
Leier-CAN-BC-1022ab-Spot 220	426	71472	1.1	20.4698	1.1	0.1635	2.6	0.0243	2.3	0.91	154.6	3.5	153.8	3.6	140.8	24.9	154.6	3.5
Leier-CAN-BC-1022ab-Spot 221	967	84518	2.1	19.2667	0.8	0.1706	1.5	0.0238	1.4	0.87	151.8	2.0	159.9	2.3	281.2	17.2	151.8	2.0
Leier-CAN-BC-1022ab-Spot 222	808	32017	2.2	20.3488	0.9	0.1726	2.2	0.0255	2.0	0.92	162.1	3.2	161.6	3.3	154.7	20.2	162.1	3.2
Leier-CAN-BC-1022ab-Spot 223	359	27870	1.5	20.0763	1.1	0.1709	2.4	0.0249	2.2	0.90	158.4	3.4	160.2	3.6	186.1	24.6	158.4	3.4
Leier-CAN-BC-1022ab-Spot 224	573	240377	2.5	18.9511	1.1	0.1854	2.1	0.0255	1.8	0.86	162.2	2.9	172.7	3.4	318.8	24.7	162.2	2.9
Leier-CAN-BC-1022ab-Spot 225	200	22352	1.8	20.8409	2.0	0.1090	3.1	0.0165	2.3	0.75	105.3	2.4	105.1	3.1	98.4	47.8	105.3	2.4
Leier-CAN-BC-1022ab-Spot 226	924	48219	1.8	19.3222	0.8	0.1815	2.3	0.0254	2.1	0.94	161.9	3.4	169.4	3.5	274.5	17.6	161.9	3.4
Leier-CAN-BC-1022ab-Spot 227	964	33222	2.5	20.3876	0.9	0.1649	2.5	0.0244	2.4	0.93	155.3	3.6	155.0	3.6	150.2	21.9	155.3	3.6
Leier-CAN-BC-1022ab-Spot 228	556	16319	5.8	20.5121	0.9	0.1193	2.1	0.0177	1.9	0.90	113.4	2.1	114.4	2.2	135.9	21.1	113.4	2.1
Leier-CAN-BC-1022ab-Spot 229	237	30061	4.1	19.0089	1.4	0.2292	2.6	0.0316	2.2	0.84	200.6	4.3	209.5	4.9	311.9	31.7	200.6	4.3
Leier-CAN-BC-1022ab-Spot 230	1747	27600	2.1	19.9440	0.6	0.1640	1.9	0.0237	1.7	0.94	151.1	2.6	154.2	2.7	201.5	15.0	151.1	2.6
Leier-CAN-BC-1022ab-Spot 231	586	27855	1.7	20.0255	1.1	0.1657	2.1	0.0241	1.8	0.85	153.3	2.8	155.7	3.1	192.1	25.9	153.3	2.8
Leier-CAN-BC-1022ab-Spot 232	411	18834	2.8	20.3129	1.1	0.1785	2.0	0.0263	1.6	0.83	167.4	2.7	166.8	3.1	158.8	26.0	167.4	2.7
Leier-CAN-BC-1022ab-Spot 233	555	23531	1.0	19.9722	0.8	0.1683	1.8	0.0244	1.6	0.90	155.3	2.5	158.0	2.7	198.2	18.7	155.3	2.5
Leier-CAN-BC-1022ab-Spot 234	939	18775	2.0	20.8154	0.6	0.1714	1.8	0.0259	1.7	0.93	164.7	2.7	160.7	2.6	101.3	15.0	164.7	2.7
Leier-CAN-BC-1022ab-Spot 235	572	10541	2.8	20.6962	0.9	0.1637	1.8	0.0246	1.6	0.86	156.5	2.4	153.9	2.6	114.8	21.7	156.5	2.4
Leier-CAN-BC-1022ab-Spot 236	1019	54673	1.7	20.1066	0.9	0.1721	1.9	0.0251	1.7	0.89	159.7	2.7	161.2	2.8	182.6	20.0	159.7	2.7
Leier-CAN-BC-1022ab-Spot 237	125	6439	1.3	20.8641	1.9	0.1678	2.9	0.0254	2.2	0.76	161.6	3.6	157.5	4.3	95.8	45.0	161.6	3.6
Leier-CAN-BC-1022ab-Spot 238	257	10241	1.6	16.0518	4.8	0.2168	5.3	0.0252	2.3	0.43	160.7	3.6	199.3	9.5	684.4	101.5	160.7	3.6
Leier-CAN-BC-1022ab-Spot 239	1141	128428	1.9	20.2246	0.8	0.1670	1.6	0.0245	1.4	0.89	156.0	2.2	156.8	2.4	169.0	17.6	156.0	2.2
Leier-CAN-BC-1022ab-Spot 240	492	30294	1.3	19.7749	1.1	0.1719	2.2	0.0247	1.9	0.85	157.0	2.9	161.0	3.2	221.2	26.2	157.0	2.9
Leier-CAN-BC-1022ab-Spot 241	130	12345	2.9	19.6719	1.6	0.1834	3.3	0.0262	2.9	0.87	166.5	4.8	170.9	5.2	233.3	37.1	166.5	4.8
Leier-CAN-BC-1022ab-Spot 242	2135	98959	1.5	20.0403	0.7	0.1517	2.2	0.0220	2.1	0.95	140.6	2.9	143.4	2.9	190.3	15.5	140.6	2.9
Leier-CAN-BC-1022ab-Spot 243	401	88112	1.9	19.5815	1.1	0.1814	2.6	0.0258	2.4	0.91	163.9	3.9	169.2	4.1	243.9	25.2	163.9	3.9
Leier-CAN-BC-1022ab-Spot 244	514	3004	1.9	24.0996	1.9	0.0397	2.8	0.0069	2.1	0.75	44.5	0.9	39.5	1.1	257.1	47.1	44.5	0.9
Leier-CAN-BC-1022ab-Spot 245	136	7417	2.0	20.3192	1.3	0.1715	3.3	0.0253	3.1	0.92	160.9	4.9	160.7	5.0	158.1	29.7	160.9	4.9
Leier-CAN-BC-1022ab-Spot 246	541	6143	1.8	22.2819	1.4	0.0471	2.5	0.0076	2.0	0.83	48.9	1.0	46.8	1.1	62.2	33.9	48.9	1.0
Leier-CAN-BC-1022ab-Spot 247	481	12141	46.0	20.8579	1.2	0.1192	2.4	0.0180	2.1	0.87	115.2	2.4	114.3	2.6	96.5	28.8	115.2	2.4
Leier-CAN-BC-1022ab-Spot 248	561	41689	1.4	20.0632	1.0	0.1744	2.3	0.0254	2.0	0.90	161.6	3.2	163.3	3.4	187.6	23.0	161.6	3.2
Leier-CAN-BC-1022ab-Spot 249	578	12619	1.9	20.5346	1.1	0.1683	2.2	0.0251	1.9	0.86	159.6	3.0	158.0	3.2	133.3	26.8	159.6	3.0
Leier-CAN-BC-1022ab-Spot 250	384	86754	1.1	19.8710	0.9	0.1654	2.4	0.0238	2.2	0.93	151.9	3.3	155.5	3.4	210.0	20.5	151.9	3.3
Leier-CAN-BC-1022ab-Spot 251	232	9677	1.1	20.7102	1.4	0.1647	2.8	0.0247	2.4	0.87	157.6	3.8	154.8	4.0	113.3	32.3	157.6	3.8
Leier-CAN-BC-1022ab-Spot 252	948	239868	3.1	19.5262	1.0	0.1787	2.0	0.0253	1.7	0.86	161.1	2.7	166.9	3.1	250.4	23.5	161.1	2.7
Leier-CAN-BC-1022ab-Spot 253	75	713	3.3	40.9472	22.3	0.0234	22.7	0.0069	3.7	0.17	44.6	1.7	23.4	5.2	1842.4	813.7	44.6	1.7
Leier-CAN-BC-1022ab-Spot 254	422	10552	2.3	20.4306	1.0	0.1654	2.5	0.0245	2.2	0.91	156.1	3.5	155.4	3.6	145.2	23.8	156.1	3.5
Leier-CAN-BC-1022ab-Spot 255	230	71287	3.5	19.3979	2.1	0.2178	3.1	0.0306	2.3	0.73	194.6	4.3	200.1	5.6	265.6	49.1	194.6	4.3
Leier-CAN-BC-1022ab-Spot 256	412	19040	0.7	20.1981	0.9	0.1718	1.6	0.0252	1.3	0.82	160.2	2.1	161.0	2.4	172.0	21.1	160.2	2.1
Leier-CAN-BC-1022ab-Spot 257	287	7124	3.2	20.4237	1.9	0.2039	2.9	0.0302	2.3	0.78	191.8	4.3	188.4	5.1	146.1	43.4	191.8	4.3
Leier-CAN-BC-1022ab-Spot 258	707	118327	2.4	19.4813	0.9	0.1781	2.3	0.0252	2.1	0.92	160.2	3.4	166.4	3.6	255.7	20.4	160.2	3.4
Leier-CAN-BC-1022ab-Spot 259	733	15637	1.3	20.0093	0.9	0.1804	2.1	0.0262	1.9	0.90	166.6	3.1	168.4	3.2	193.9	20.9	166.6	3.1
Leier-CAN-BC-1022ab-Spot 260	1071	17527	1.9	18.6147	1.3	0.1806	2.5	0.0244	2.2	0.86	155.3	3.3	168.6	3.9	359.4	29.2	155.3	3.3
Leier-CAN-BC-1022ab-Spot 261	349	17086	1.8	20.5330	1.3	0.1733	2.8	0.0258	2.5	0.89	164.2	4.0	162.2	4.2	133.5	29.9	164.2	4.0
Leier-CAN-BC-1022ab-Spot 262	737	78574	2.8	20.2463	0.9	0.1721	1.9	0.0253	1.6	0.86	160.9	2.5	161.2	2.8	166.4	22.0	160.9	2.5
Leier-CAN-BC-1022ab-Spot 263	321	7989	0.9	21.2776	1.9	0.1579	2.7	0.0244	1.8	0.68	155.2	2.8	148.9	3.7	49.1	46.4	155.2	2.8
Leier-CAN-BC-1022ab-Spot 264	209	4987	2.9	20.4164	2.7	0.2085	3.5	0.0309	2.2	0.62	196.0	4.2	192.3	6.1	146.9	64.0	196.0	4.2
Leier-CAN-BC-1022ab-Spot 265	469	30411	1.7	20.0424	1.0	0.2044	2.1	0.0297	1.9	0.89	188.7	3.6	188.8	3.7	190.1	22.3	188.7	3.6
Leier-CAN-BC-1022ab-Spot 266	731	86611	2.6	18.9797	0.9	0.1828	2.5	0.0252	2.3	0.93	160.2	3.6	170.4	3.9	315.4	20.0	160.2	3.6
Leier-CAN-BC-1022ab-Spot 267	390	42562	2.4	19.9719	1.2	0.2051	2.2	0.0297	1.9	0.86	188.7	3.6	189.4	3.9	198.2	27.0	188.7	3.6
Leier-CAN-BC-1022ab-Spot 268	220	24462	2.7	20.2876	1.2	0.2048	3.1	0.0301	2.8	0.92	191.4	5.4	189.2	5.3	161.7	28.1	191.4	5.4
Leier-CAN-BC-1022ab-Spot 269	502	48510	3.3	20.3999	1.0	0.1723	2.1	0.0255	1.8	0.87	162.3	2.9	161.5	3.1	148.8	24.3	162.3	2.9
Leier-CAN-BC-1022ab-Spot 270	871	17553	2.1	19.5924	0.8	0.1768	1.9	0.0251	1.7	0.90	159.9	2.7	165.3	2.9	242.6	19.4	159.9	2.7
Leier-CAN-BC-1022ab-Spot 271	803	649876	2.5	20.0956	0.8	0.1772	2.2	0.0258	2.1	0.93	164.3	3.3	165.6	3.4	183.9	18.9	164.3	3.3
Leier-CAN-BC-1022ab-Spot 272	656	553581	3.1	20.4060	0.8	0.1687	1.7	0.0250	1.5	0.87	159.0	2.4	158.3	2.6	148.1	19.8	159.0	2.4
Leier-CAN-BC-1022ab-Spot 273	675	5963	1.0	18.6668	1.4	0.1915	2.5	0.0259	2.1	0.82	165.0	3.4	177.9	4.1	353.1	32.2	165.0	3.4
Leier-CAN-BC-1022ab-Spot 274	551	10680	2.9	20.8134	1.0	0.1680	2.1	0.0254	1.9	0.89	161.4	3.0	157.7	3.1	101.6	23.3	161.4	3.0
Leier-CAN-BC-1022ab-Spot 275	1040	85032	1.7	20.4593	0.9	0.1677	2.5	0.0249	2.3	0.93	158.4	3.7	157.4	3.7	142.0	21.4	158.4	3.7
Leier-CAN-BC-1022ab-Spot 276	163	1838	2.7	23.6230	3.4	0.0452	4.2	0.0077	2.5	0.60	49.7	1.3	44.9	1.9	206.7	85.0	49.7	1.3
Leier-CAN-BC-1022ab-Spot 277	302	1737	1.6	12.5631	9.6	0.3056	10.0	0.0278	2.9	0.29	177.0	5.0	270.7	23.9	1187.1	190.4	177.0	5.0
Leier-CAN-BC-1022ab-Spot 278	214	46142	1.5	20.1043	1.2	0.1664	2.1	0.0243	1.6	0.80	154.5	2.5	156.3	3.0	182.9	28.7	154.5	2.5
Leier-CAN-BC-1022ab-Spot 279	225	297	0.8	5.1866	7.3	0.2613	8.8	0.0098	5.0	0.56	63.0	3.1	235.7	18.6	2766.2	119.7	63.0	3.1
Leier-CAN-BC-1022ab-Spot 280	250	49979	4.2	19.9499	1.3	0.2241	2.3	0.0324	1.9	0.82	205.8	3.9	205.4	4.3	200.8	30.9	205.8	3.9
Leier-CAN-BC-1022ab-Spot 281	136	4605	2.2	19.0465	2.6	0.1961	3.4	0.0271	2.2	0.64	172.3	3.7	181.8	5.7	307.4	59.6	172.3	3.7
Leier-CAN-BC-1022ab-Spot 282	665	3004	2.3	22.9730	1.4	0.0412	2.5	0.0069	2.0	0.82	44.1	0.9	41.0	1.0	137.2	35.2	44.1	0.9
Leier-CAN-BC-1022ab-Spot 283	618	31061	2.7	20.3770	1.0	0.1693	1.9	0.0250	1.7	0.86	159.3	2.6	158.8	2.8	151.4	23.2	159.3	2.6
Leier-CAN-BC-1022ab-Spot 284	381	15495	3.8	20.1785	1.1	0.2120	2.1	0.0310	1.8	0.86	196.9	3.6	195.2	3.8	174.3	25.4	196.9	3.6
Leier-CAN-BC-1022ab-Spot 285	552	17970	1.8	19.8963	1.0	0.2038	2.2	0.0294	2.0	0.89	186.8	3.6	188.3	3.8	207.1	23.5	186.8	3.6
Leier-CAN-BC-1022ab-Spot 286	631	9457	2.6	21.2702	1.6	0.0521	2.5	0.0080	1.9	0.76	51.6	1.0	51.6	1.3	50.0	38.6	51.6	1.0
Leier-CAN-BC-1022ab-Spot 287	1136	11878	1.3	18.3983	1.6	0.1914	2.5	0.0255	1.9	0.76	162.6	3.0	177.8	4.0	385.7	36.2	162.6	3.0
Leier-CAN-BC-1022ab-Spot 288	789	52474	6.8	18.5846	1.5	0.1794	2.3	0.0242	1.8	0.77	154.0	2.7	167.5	3.6	363.0	33.7	154.0	2.7
Leier-CAN-BC-1022ab-Spot 289	545	12116	2.3	20.5059	1.0	0.1842	2.2	0.0274	2.0	0.89	174.2	3.4	171.7	3.5	136.6	24.4	174.2	3.4
Leier-CAN-BC-1022ab-Spot 290	857	34163	3.6	20.3877	0.7	0.1714	2.0	0.0254	1.8	0.93	161.4	2.9	160.7	2.9	150.2	17.1	161.4	2.9
Leier-CAN-BC-1022ab-Spot 291	555	22259	2.3	20.6612	1.2	0.1645	2.5	0.0247	2.1	0.86	157.0	3.3	154.7	3.5	118.9	29.1	157.0	3.3
Leier-CAN-BC-1022ab-Spot 292	659	113581	2.3	19.5333	1.1	0.1764	1.9	0.0250	1.6	0.83	159.1	2.5	165.0	2.9	249.6	24.5	159.1	2.5
Leier-CAN-BC-1022ab-Spot 293	716	7568	1.2	21.5765	2.3	0.0671	2.9	0.0105	1.7	0.59	67.3	1.1	66.0	1.8	15.7	55.6	67.3	1.1
Leier-CAN-BC-1022ab-Spot 294	664	40343	2.3	20.1867	0.9	0.1700	2.0	0.0249	1.8	0.90	158.5	2.9	159.4	3.0	173.3	20.4	158.5	2.9
Leier-CAN-BC-1022ab-Spot 295	552	12857	2.8	20.4452	0.9	0.1704	2.2	0.0253	2.0	0.91	160.9	3.2	159.8	3.3	143.6	22.0	160.9	3.2

Sample: CANBC1022Gab	U-Pb geochronologic analyses																		
						Isotope ratios						Apparent ages (Ma)							
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
Leier-CAN-BC-1022ab-Spot 296	252	450974	2.7	19.6880	1.3	0.2162	2.9	0.0309	2.6	0.90	196.0	5.1	198.7	5.2	231.4	29.0	196.0	5.1
Leier-CAN-BC-1022ab-Spot 297	144	3359	3.9	21.9231	1.8	0.1907	3.2	0.0303	2.7	0.83	192.6	5.1	177.3	5.2	22.7	43.0	192.6	5.1
Leier-CAN-BC-1022ab-Spot 298	528	1847	0.4	11.9326	10.4	0.0954	11.0	0.0083	3.8	0.34	53.0	2.0	92.5	9.8	1288.0	202.4	53.0	2.0
Leier-CAN-BC-1022ab-Spot 299	648	7508	2.9	21.3343	1.0	0.1597	2.5	0.0247	2.3	0.92	157.3	3.6	150.4	3.5	42.8	23.2	157.3	3.6
Leier-CAN-BC-1022ab-Spot 300	178	32062	1.3	16.3913	2.0	0.2090	2.8	0.0249	1.9	0.68	158.2	3.0	192.7	4.9	639.5	44.0	158.2	3.0
Leier-CAN-BC-1022ab-Spot 301	839	28062	2.0	20.5995	0.9	0.1669	1.9	0.0249	1.7	0.87	158.8	2.6	156.7	2.8	125.9	22.0	158.8	2.6
Leier-CAN-BC-1022ab-Spot 302	796	16487	1.8	20.3733	0.9	0.1613	1.7	0.0238	1.5	0.84	151.8	2.2	151.8	2.4	151.8	21.7	151.8	2.2
Leier-CAN-BC-1022ab-Spot 303	225	1574	0.8	24.7503	2.7	0.0460	3.5	0.0083	2.3	0.64	53.0	1.2	45.6	1.6	325.1	69.1	53.0	1.2
Leier-CAN-BC-1022ab-Spot 304	119	2751	1.2	21.8994	5.5	0.0524	6.0	0.0083	2.6	0.42	53.4	1.4	51.8	3.1	20.1	132.5	53.4	1.4
Leier-CAN-BC-1022ab-Spot 306	391	52275	2.1	19.6494	1.9	0.1705	2.9	0.0243	2.2	0.74	154.8	3.3	159.9	4.3	235.9	44.5	154.8	3.3
Leier-CAN-BC-1022ab-Spot 307	220	117271	4.2	20.1800	1.4	0.2069	2.5	0.0303	2.0	0.82	192.3	3.9	190.9	4.3	174.1	33.4	192.3	3.9
Leier-CAN-BC-1022ab-Spot 308	353	700755	3.1	19.5640	1.2	0.2101	2.2	0.0298	1.8	0.83	189.4	3.4	193.7	3.8	246.0	27.5	189.4	3.4
Leier-CAN-BC-1022ab-Spot 309	926	25651	2.4	20.2942	0.9	0.1671	1.9	0.0246	1.7	0.89	156.6	2.6	156.9	2.8	161.0	20.4	156.6	2.6
Leier-CAN-BC-1022ab-Spot 310	356	38002	2.0	20.0799	1.2	0.1621	1.9	0.0236	1.5	0.79	150.4	2.2	152.5	2.7	185.7	27.0	150.4	2.2
Leier-CAN-BC-1022ab-Spot 311	1437	39762	1.9	20.3610	0.6	0.1647	2.1	0.0243	2.0	0.96	154.9	3.1	154.8	3.1	153.2	13.8	154.9	3.1
Leier-CAN-BC-1022ab-Spot 312	206	31945	0.8	22.2403	2.7	0.0507	3.3	0.0082	2.0	0.59	52.6	1.0	50.3	1.6	57.6	65.8	52.6	1.0
Leier-CAN-BC-1022ab-Spot 313	1145	31167	1.7	20.4300	0.8	0.1659	1.8	0.0246	1.6	0.90	156.5	2.5	155.8	2.6	145.3	18.7	156.5	2.5
Leier-CAN-BC-1022ab-Spot 314	516	11614	2.6	21.0088	1.1	0.1664	2.3	0.0254	2.1	0.88	161.4	3.3	156.3	3.4	79.4	26.3	161.4	3.3
Leier-CAN-BC-1022ab-Spot 315	1339	162433	2.1	20.3117	0.5	0.1623	1.7	0.0239	1.6	0.95	152.3	2.4	152.7	2.4	158.9	12.1	152.3	2.4

Sample: CANBC1023H	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 207Pb*	± (Ma)	Best age (Ma)	± (Ma)
Leier-CAN-BC-1023H_29Feb-Spot 1	3229	49156	1.0	20.6112	1.3	0.0526	2.1	0.0079	1.6	0.78	50.5	0.8	52.0	1.1	124.5	30.7	50.5	0.8
Leier-CAN-BC-1023H_29Feb-Spot 2	319	7400	3.2	19.9848	3.3	0.0529	3.8	0.0077	1.8	0.48	49.2	0.9	52.3	1.9	196.8	76.9	49.2	0.9
Leier-CAN-BC-1023H_29Feb-Spot 3	129	1284	1.1	24.1808	5.3	0.0455	5.8	0.0080	2.3	0.39	51.2	1.2	45.2	2.6	265.6	135.4	51.2	1.2
Leier-CAN-BC-1023H_29Feb-Spot 4	105	4204	1.1	16.7536	3.2	0.0682	4.1	0.0083	2.6	0.62	53.2	1.4	66.9	2.7	592.3	70.2	53.2	1.4
Leier-CAN-BC-1023H_29Feb-Spot 5	2779	17982	0.7	21.2274	0.8	0.0525	1.5	0.0081	1.2	0.83	51.9	0.6	52.0	0.8	54.8	20.1	51.9	0.6
Leier-CAN-BC-1023H_29Feb-Spot 6	119	1223	1.7	19.9211	5.9	0.0765	6.5	0.0111	2.7	0.42	70.9	1.9	74.9	4.7	204.1	137.2	70.9	1.9
Leier-CAN-BC-1023H_29Feb-Spot 7	314	2191	2.8	14.9637	6.2	0.0780	7.0	0.0085	3.2	0.45	54.3	1.7	76.2	5.1	832.5	130.1	54.3	1.7
Leier-CAN-BC-1023H_29Feb-Spot 9	3849	9268	0.6	18.0137	2.4	0.0626	3.6	0.0082	2.7	0.75	52.5	1.4	61.7	2.2	432.9	52.9	52.5	1.4
Leier-CAN-BC-1023H_29Feb-Spot 10	643	4551	1.0	20.1880	3.8	0.0533	4.3	0.0078	1.9	0.45	50.1	1.0	52.7	2.2	173.2	88.6	50.1	1.0
Leier-CAN-BC-1023H_29Feb-Spot 12	307	2779	2.6	23.1601	2.2	0.0460	2.9	0.0077	1.9	0.67	49.6	1.0	45.6	1.3	157.3	53.5	49.6	1.0
Leier-CAN-BC-1023H_29Feb-Spot 13	1420	9791	0.8	11.7969	4.6	0.0920	4.8	0.0079	1.2	0.25	50.5	0.6	89.4	4.1	1310.2	90.0	50.5	0.6
Leier-CAN-BC-1023H_29Feb-Spot 14	403	7134	1.0	20.4220	1.8	0.0511	2.8	0.0076	2.1	0.76	48.6	1.0	50.6	1.4	146.3	43.1	48.6	1.0
Leier-CAN-BC-1023H_29Feb-Spot 15	300	3756	0.6	21.3641	2.6	0.0501	3.2	0.0078	1.8	0.57	49.8	0.9	49.6	1.5	39.4	62.5	49.8	0.9
Leier-CAN-BC-1023H_29Feb-Spot 16	990	74769	31.1	20.2492	1.5	0.0640	2.4	0.0094	1.8	0.78	60.3	1.1	63.0	1.4	166.1	34.8	60.3	1.1
Leier-CAN-BC-1023H_29Feb-Spot 17	631	4617	3.7	21.1762	1.6	0.0520	2.2	0.0080	1.5	0.69	51.2	0.8	51.4	1.1	60.5	37.0	51.2	0.8
Leier-CAN-BC-1023H_29Feb-Spot 18	3453	66893	0.5	21.0779	0.7	0.0528	1.5	0.0081	1.3	0.88	51.8	0.7	52.3	0.7	71.6	16.1	51.8	0.7
Leier-CAN-BC-1023H_29Feb-Spot 19	793	15256	1.0	19.6483	1.9	0.0564	2.6	0.0080	1.8	0.69	51.6	0.9	55.7	1.4	236.1	43.2	51.6	0.9
Leier-CAN-BC-1023H_29Feb-Spot 20	232	12981	1.4	20.1974	2.2	0.0539	3.3	0.0079	2.5	0.75	50.7	1.2	53.3	1.7	172.1	50.7	50.7	1.2
Leier-CAN-BC-1023H_29Feb-Spot 21	2701	75679	0.8	21.2195	0.9	0.0525	1.8	0.0081	1.6	0.86	51.9	0.8	52.0	0.9	55.6	22.0	51.9	0.8
Leier-CAN-BC-1023H_29Feb-Spot 22	2396	306198	0.7	20.8330	0.7	0.0534	1.6	0.0081	1.4	0.89	51.8	0.7	52.8	0.8	99.3	16.8	51.8	0.7
Leier-CAN-BC-1023H_29Feb-Spot 23	504	513693	3.5	18.2024	2.0	0.0591	2.7	0.0078	1.8	0.66	50.1	0.9	58.3	1.5	409.7	45.1	50.1	0.9
Leier-CAN-BC-1023H_29Feb-Spot 24	671	26458	1.9	17.6089	3.6	0.0633	4.0	0.0081	1.8	0.46	51.9	0.9	62.3	2.4	483.4	78.9	51.9	0.9
Leier-CAN-BC-1023H_29Feb-Spot 25	277	18053	23.0	19.8260	2.2	0.0712	3.0	0.0102	2.0	0.67	65.6	1.3	69.8	2.0	215.3	51.8	65.6	1.3
Leier-CAN-BC-1023H_29Feb-Spot 26	98	2976	1.2	21.6368	3.7	0.0496	4.5	0.0078	2.6	0.58	50.0	1.3	49.2	2.2	9.0	88.6	50.0	1.3
Leier-CAN-BC-1023H_29Feb-Spot 27	122	7344	2.0	16.5284	3.9	0.0648	4.6	0.0078	2.4	0.53	49.9	1.2	63.8	2.8	621.6	83.3	49.9	1.2
Leier-CAN-BC-1023H_29Feb-Spot 28	361	9638	0.5	21.2990	1.4	0.0507	2.6	0.0078	2.2	0.84	50.3	1.1	50.3	1.3	46.7	33.8	50.3	1.1
Leier-CAN-BC-1023H_29Feb-Spot 29	577	10703	3.2	20.5954	1.5	0.0511	2.3	0.0076	1.7	0.75	49.0	0.8	50.6	1.1	126.4	35.7	49.0	0.8
Leier-CAN-BC-1023H_29Feb-Spot 30	311	7107	3.1	20.8057	2.5	0.0583	3.5	0.0088	2.5	0.72	56.4	1.4	57.5	2.0	102.4	58.2	56.4	1.4
Leier-CAN-BC-1023H_29Feb-Spot 31	400	13747	2.9	20.7884	1.5	0.0521	2.5	0.0078	1.9	0.78	50.4	1.0	51.5	1.2	104.4	36.5	50.4	1.0
Leier-CAN-BC-1023H_29Feb-Spot 32	3255	50982	0.5	20.9198	0.7	0.0536	1.4	0.0081	1.2	0.86	52.2	0.6	53.0	0.7	89.5	17.1	52.2	0.6
Leier-CAN-BC-1023H_29Feb-Spot 33	193	6535	1.8	19.8980	2.4	0.0542	3.4	0.0078	2.4	0.70	50.2	1.2	53.5	1.8	206.9	56.2	50.2	1.2
Leier-CAN-BC-1023H_29Feb-Spot 34	3118	9241	0.7	19.3712	0.8	0.0571	1.8	0.0080	1.6	0.89	51.5	0.8	56.4	1.0	268.7	18.5	51.5	0.8
Leier-CAN-BC-1023H_29Feb-Spot 35	2731	21053	0.1	20.7762	1.0	0.0529	1.9	0.0080	1.6	0.86	51.2	0.8	52.4	1.0	105.7	22.6	51.2	0.8
Leier-CAN-BC-1023H_29Feb-Spot 36	380	4910	25.5	21.1016	2.1	0.0622	3.6	0.0095	2.9	0.80	61.1	1.8	61.3	2.1	68.9	50.6	61.1	1.8
Leier-CAN-BC-1023H_29Feb-Spot 37	440	105695	2.7	19.7623	1.5	0.0553	2.3	0.0079	1.8	0.76	50.9	0.9	54.7	1.2	222.7	35.5	50.9	0.9
Leier-CAN-BC-1023H_29Feb-Spot 38	495	11295	2.6	20.0038	2.9	0.0558	3.3	0.0081	1.5	0.46	51.9	0.8	55.1	1.7	194.6	67.3	51.9	0.8
Leier-CAN-BC-1023H_29Feb-Spot 39	626	32947	0.9	18.5258	3.1	0.0600	3.5	0.0081	1.8	0.50	51.8	0.9	59.2	2.0	370.1	69.3	51.8	0.9
Leier-CAN-BC-1023H_29Feb-Spot 40	347	3840	1.0	20.8538	1.6	0.0523	2.5	0.0079	1.9	0.78	50.8	1.0	51.8	1.3	96.9	37.2	50.8	1.0
Leier-CAN-BC-1023H_29Feb-Spot 41	448	5801	2.8	14.3044	3.2	0.0803	3.9	0.0083	2.2	0.57	53.5	1.2	78.5	3.0	925.7	66.5	53.5	1.2
Leier-CAN-BC-1023H_29Feb-Spot 42	627	34070	3.6	20.5138	1.1	0.0524	1.7	0.0078	1.2	0.75	50.1	0.6	51.9	0.8	135.7	25.7	50.1	0.6
Leier-CAN-BC-1023H_29Feb-Spot 43	1654	512071	1.0	20.7195	0.9	0.0530	1.6	0.0080	1.4	0.85	51.2	0.7	52.5	0.8	112.2	20.3	51.2	0.7
Leier-CAN-BC-1023H_29Feb-Spot 44	2003	74084	0.8	20.6086	1.1	0.0544	1.8	0.0081	1.4	0.78	52.2	0.7	53.7	0.9	124.8	26.0	52.2	0.7
Leier-CAN-BC-1023H_29Feb-Spot 45	316	2568	1.7	22.0604	3.9	0.0481	4.3	0.0077	1.7	0.39	49.5	0.8	47.7	2.0	37.9	95.0	49.5	0.8
Leier-CAN-BC-1023H_29Feb-Spot 46	2269	53846	0.6	21.0146	0.8	0.0531	1.6	0.0081	1.4	0.86	52.0	0.7	52.5	0.8	78.7	19.3	52.0	0.7
Leier-CAN-BC-1023H_29Feb-Spot 47	2282	19389	1.4	21.2340	0.9	0.0526	1.6	0.0081	1.3	0.83	52.0	0.7	52.0	0.8	54.0	21.5	52.0	0.7
Leier-CAN-BC-1023H_29Feb-Spot 49	1073	22726	0.4	20.8089	1.0	0.0544	1.6	0.0082	1.3	0.78	52.8	0.7	53.8	0.9	102.0	24.5	52.8	0.7
Leier-CAN-BC-1023H_29Feb-Spot 50	146	121530	0.9	9.3743	0.5	3.8859	1.9	0.2642	1.9	0.97	1511.3	25.4	1610.8	15.7	1743.3	9.4	1743.3	9.4
Leier-CAN-BC-1023H_29Feb-Spot 51	251	6670	0.7	19.6916	2.7	0.0569	3.2	0.0081	1.8	0.55	52.2	0.9	56.2	1.8	231.0	62.3	52.2	0.9
Leier-CAN-BC-1023H_29Feb-Spot 52	2940	19301	0.7	21.6455	1.4	0.0518	4.3	0.0081	4.0	0.95	52.2	2.1	51.3	2.1	8.0	33.4	52.2	2.1
Leier-CAN-BC-1023H_29Feb-Spot 53	397	7140	3.0	2.8565	19.1	0.3715	19.2	0.0077	1.7	0.09	49.4	0.8	320.8	52.8	3707.3	294.3	49.4	0.8
Leier-CAN-BC-1023H_29Feb-Spot 54	270	3454	1.3	14.5215	4.4	0.0789	4.8	0.0083	1.8	0.37	53.4	0.9	77.1	3.6	894.7	91.8	53.4	0.9
Leier-CAN-BC-1023H_29Feb-Spot 55	605	14539	1.1	20.1407	1.1	0.0560	2.0	0.0082	1.7	0.85	52.5	0.9	55.3	1.1	178.7	24.5	52.5	0.9
Leier-CAN-BC-1023H_29Feb-Spot 56	294	6984	3.3	19.3390	3.5	0.0564	4.1	0.0079	2.2	0.53	50.8	1.1	55.7	2.2	272.5	80.6	50.8	1.1
Leier-CAN-BC-1023H_29Feb-Spot 58	72	1760	3.4	20.8834	9.5	0.0611	9.9	0.0093	2.8	0.28	59.4	1.6	60.2	5.8	93.6	224.7	59.4	1.6
Leier-CAN-BC-1023H_29Feb-Spot 59	3767	47879	0.8	20.8906	0.8	0.0541	1.4	0.0082	1.1	0.82	52.6	0.6	53.5	0.7	92.8	18.6	52.6	0.6
Leier-CAN-BC-1023H_29Feb-Spot 60	761	144946	4.2	19.7907	0.7	0.1886	1.8	0.0271	1.6	0.91	172.2	2.8	175.5	2.9	219.4	17.1	172.2	2.8
Leier-CAN-BC-1023H_29Feb-Spot 61	728	8411	1.3	21.2339	1.5	0.0524	2.2	0.0081	1.6	0.74	51.8	0.8	51.8	1.1	54.0	34.9	51.8	0.8
Leier-CAN-BC-1023H_29Feb-Spot 62	192	4405	1.9	20.7337	2.6	0.0542	3.3	0.0082	2.1	0.64	52.3	1.1	53.6	1.7	110.6	60.6	52.3	1.1
Leier-CAN-BC-1023H_29Feb-Spot 63	461	10708	1.0	15.2992	2.1	0.0755	2.4	0.0084	1.1	0.45	53.8	0.6	73.9	1.7	786.0	44.6	53.8	0.6
Leier-CAN-BC-1023H_29Feb-Spot 64	179	28587	1.5	19.6833	2.7	0.0574	3.4	0.0082	2.1	0.61	52.6	1.1	56.7	1.9	231.9	61.9	52.6	1.1
Leier-CAN-BC-1023H_29Feb-Spot 65	60	523	1.3	5.7036	23.3	0.2099	23.6	0.0087	3.9	0.17	55.7	2.2	193.5	41.6	2609.2	393.3	55.7	2.2
Leier-CAN-BC-1023H_29Feb-Spot 66	153	1663	1.6	14.2911	9.4	0.0777	9.9	0.0081	3.0	0.31	51.7	1.6	76.0	7.2	927.6	193.5	51.7	1.6
Leier-CAN-BC-1023H_29Feb-Spot 67	353	7534	2.3	17.5839	3.5	0.0622	4.0	0.0079	1.9	0.48	50.9	1.0	61.3	2.4	486.5	77.5	50.9	1.0
Leier-CAN-BC-1023H_29Feb-Spot 68	212	7989	3.4	15.2808	4.3	0.0717	4.9	0.0080	2.4	0.50	51.1	1.2	70.4	3.3	788.5	89.7	51.1	1.2
Leier-CAN-BC-1023H_29Feb-Spot 69	238	9479	3.0	18.9327	2.4	0.0582	5.2	0.0080	4.6	0.88	51.4	2.4	57.5	2.9	321.0	55.4	51.4	2.4
Leier-CAN-BC-1023H_29Feb-Spot 70	1146	677442	10.0	19.9371	1.2	0.0712	2.2	0.0103	1.8	0.83	66.0	1.2	69.8	1.5	202.3	27.6	66.0	1.2
Leier-CAN-BC-1023H_29Feb-Spot 72	216	5008	3.6	17.7333	3.2	0.0614	3.7	0.0079	2.0	0.53	50.7	1.0	60.5	2.2	467.8	70.4	50.7	1.0
Leier-CAN-BC-1023H_29Feb-Spot 73	1689	20392	1.0	21.1694	0.8	0.0525	2.0	0.0081	1.9	0.91	51.8	1.0	52.0	1.0	61.3	20.0	51.8	1.0
Leier-CAN-BC-1023H_29Feb-Spot 74	147	4613	1.9	20.6231	4.3	0.0539	5.7	0.0081	3.7	0.65	51.8	1.9	53.4	3.0	123.2	101.4	51.8	1.9
Leier-CAN-BC-1023H_29Feb-Spot 75	2094	25363	0.3	20.9533	1.0	0.0531	1.7	0.0081	1.3	0.79	51.8	0.7	52.5	0.9	85.7	24.3	51.8	0.7
Leier-CAN-BC-1023H_29Feb-Spot 76	1475	32869	0.5	20.1502	1.1	0.0566	1.7	0.0083	1.3	0.76	53.1	0.7	55.9	0.9	177.5	26.4	53.1	0.7
Leier-CAN-BC-1023H_29Feb-Spot 77	337	56977	0.9	19.4141	1.8	0.0720	2.7	0.0101	2.1	0.77	65.0	1.3	70.6	1.9	263.7	40.3	65.0	1.3
Leier-CAN-BC-1023H_29Feb-Spot 78	853	27071	1.1	20.5241	1.3	0.0541	2.0	0.0081	1.5	0.74	51.7	0.8	53.5	1.0	134.5	31.7	51.7	0.8
Leier-CAN-BC-1023H_29Feb-Spot 79	107	2041	0.8	23.1039	4.9	0.0469	5.7	0.0079	3.0	0.53	50.5	1.5	46.6	2.6	151.3	120.8	50.5	1.5
Leier-CAN-BC-1023H_29Feb-Spot 80	269	3511	1.3	19.3544	2.0	0.0570	2.8	0.0080	2.0	0.70	51.3	1.0	56.3	1.6	270.7	46.8	51.3	1.0
Leier-CAN-BC-1023H_29Feb-Spot 81	3072	50572	0.7	21.0402	0.7	0.0526	1.7	0.0080	1.5	0.91	51.6	0.8	52.1	0.8	75.8	16.1	51.6	0.8
Leier-CAN-BC-1023H_29Feb-Spot 82	3413	167413	0.4	20.6732	0.8	0.0535	1.3	0.0080	1.1	0.79	51.5	0.5	52.9	0.7	117.5	19.7	51.5	0.5
Leier-CAN-BC-1023H_29Feb-Spot 83	2726	151191	0.7	21.1630	0.9	0.0533	2.0	0.0082	1.8	0.89	52.5	0.9	52.7	1.0	62.0	20.9	52.5	0.9
Leier-CAN-BC-1023H_29Feb-Spot 84	3750	36089	0.5	21.1894	0.7	0.0528	1.6	0.0081	1.5	0.91	52.1	0.8	52.3	0.8	59.0	16.1	52.1	0.8
Leier-CAN-BC-1023H_29Feb-Spot 85	2506	257708	0.6	21.2978	1.4	0.0519	3.8	0.0080	3.5	0.93	51.5	1.8	51.4	1.9	46.8	33.6	51.5	1.8
Leier-CAN-BC-1023H_29Feb-Spot 86	461	2804	1.2	22.8884	1.8	0.0478	2.5	0.0079	1.7	0.68	50.9	0.9	47.4	1.2	128.1	45.6	50.9	0.9
Leier-CAN-BC-1023H_29Feb-Spot 87	85	843	1.6	16.3223	6.9	0.0678	7.6	0.0080	3.2	0.41	51.5	1.6	66.6	4.9	648.6	149.2	51.5	1.6

Sample: CANBC1023H	U-Pb geochronologic analyses																	
							Isotope ratios						Apparent ages (Ma)					
Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)
Leier-CAN-BC-1023H_29Feb-Spot 88	284	1987	3.0	22.0787	3.5	0.0492	4.1	0.0079	2.0	0.50	50.5	1.0	48.7	1.9	39.9	85.7	50.5	1.0
Leier-CAN-BC-1023H_29Feb-Spot 89	683	4818	0.4	21.9275	1.6	0.0504	2.2	0.0080	1.5	0.67	51.5	0.8	49.9	1.1	23.2	39.0	51.5	0.8
Leier-CAN-BC-1023H_29Feb-Spot 90	504	23318	30.1	20.5876	1.3	0.0669	2.4	0.0100	2.0	0.84	64.0	1.3	65.7	1.5	127.3	30.2	64.0	1.3
Leier-CAN-BC-1023H_29Feb-Spot 91	3606	38137	0.6	20.7153	0.7	0.0546	1.4	0.0082	1.2	0.88	52.6	0.7	53.9	0.7	112.7	15.8	52.6	0.7
Leier-CAN-BC-1023H_29Feb-Spot 92	3665	57074	0.5	21.1750	0.7	0.0528	1.4	0.0081	1.2	0.86	52.0	0.6	52.2	0.7	60.7	17.6	52.0	0.6
Leier-CAN-BC-1023H_29Feb-Spot 93	144	390	0.3	6.5181	1.4	0.2134	2.7	0.0101	2.3	0.86	64.7	1.5	196.4	4.8	2384.4	23.0	64.7	1.5
Leier-CAN-BC-1023H_29Feb-Spot 94	1529	16095	0.7	21.0887	1.1	0.0499	1.5	0.0076	1.1	0.71	49.0	0.5	49.4	0.7	70.4	26.0	49.0	0.5
Leier-CAN-BC-1023H_29Feb-Spot 95	1600	81846	1.0	20.4579	1.8	0.0508	3.4	0.0075	2.9	0.85	48.4	1.4	50.3	1.7	142.1	43.0	48.4	1.4
Leier-CAN-BC-1023H_29Feb-Spot 96	329	3702	3.9	19.0472	3.4	0.0579	4.1	0.0080	2.2	0.53	51.4	1.1	57.2	2.3	307.3	78.4	51.4	1.1
Leier-CAN-BC-1023H_29Feb-Spot 97	31	276	1.1	70.9367	34.4	0.0146	34.7	0.0075	4.4	0.13	48.2	2.1	14.7	5.1	0.0	1164.9	48.2	2.1
Leier-CAN-BC-1023H_29Feb-Spot 98	456	27989	2.8	19.0172	2.5	0.0575	3.1	0.0079	2.0	0.62	50.9	1.0	56.7	1.7	310.9	55.9	50.9	1.0
Leier-CAN-BC-1023H_29Feb-Spot 99	358	3874	2.4	21.3798	1.8	0.0515	2.8	0.0080	2.2	0.77	51.2	1.1	50.9	1.4	37.6	42.6	51.2	1.1
Leier-CAN-BC-1023H_29Feb-Spot 100	2177	26243	0.9	20.8885	0.7	0.0528	1.8	0.0080	1.6	0.93	51.4	0.8	52.3	0.9	93.0	15.7	51.4	0.8
Leier-CAN-BC-1023H_29Feb-Spot 101	3572	6949	0.8	18.0826	2.5	0.0627	2.9	0.0082	1.5	0.52	52.8	0.8	61.7	1.7	424.4	55.3	52.8	0.8
Leier-CAN-BC-1023H_29Feb-Spot 102	324	1822	3.8	25.0492	2.2	0.0430	2.8	0.0078	1.7	0.62	50.1	0.9	42.7	1.2	356.0	56.0	50.1	0.9
Leier-CAN-BC-1023H_29Feb-Spot 103	1257	40834	0.9	20.1200	1.8	0.0550	2.2	0.0080	1.2	0.57	51.5	0.6	54.4	1.1	181.0	41.2	51.5	0.6
Leier-CAN-BC-1023H_29Feb-Spot 104	33	511	0.9	22.5935	18.2	0.0480	18.7	0.0079	4.1	0.22	50.5	2.1	47.6	8.7	96.2	450.0	50.5	2.1
Leier-CAN-BC-1023H_29Feb-Spot 105	208	4519	1.3	21.7675	4.1	0.0501	4.7	0.0079	2.2	0.46	50.8	1.1	49.6	2.3	5.5	99.8	50.8	1.1
Leier-CAN-BC-1023H_29Feb-Spot 106	2883	19224	0.9	21.3188	0.7	0.0525	1.6	0.0081	1.5	0.92	52.1	0.8	52.0	0.8	44.5	15.6	52.1	0.8
Leier-CAN-BC-1023H_29Feb-Spot 107	1094	59517	0.7	21.0089	1.0	0.0535	1.9	0.0081	1.7	0.87	52.3	0.9	52.9	1.0	79.4	22.9	52.3	0.9
Leier-CAN-BC-1023H_29Feb-Spot 108	156	5745	1.6	21.6042	3.0	0.0512	3.9	0.0080	2.4	0.62	51.5	1.2	50.7	1.9	12.6	72.8	51.5	1.2
Leier-CAN-BC-1023H_29Feb-Spot 109	1807	30018	0.7	20.9664	0.9	0.0532	1.7	0.0081	1.5	0.85	51.9	0.8	52.6	0.9	84.2	21.5	51.9	0.8
Leier-CAN-BC-1023H_29Feb-Spot 110	60	11535	0.9	19.7288	3.3	0.0565	4.1	0.0081	2.5	0.60	51.9	1.3	55.8	2.2	226.6	76.4	51.9	1.3

APPENDIX G

ARIZONA LASERCHRON CENTER DETRITAL ZIRCON HF ANALYSES DATA TABLE

Table x. Hf Isotopic Data

Sample	Sample Location	Analysis	(^{176}Yb + ^{176}Lu)/^{176}Hf (%)	Volts Hf	$^{176}Hf/^{177}Hf$	± (1σ)	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$ (T)	E-Hf (0)	E-Hf (0) ± (1σ)	E-Hf (T)	Age (Ma)
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 196	73.56891291	1.637648134	0.282974104	4.31577E-05	0.003567	0.282970953	6.687206238	1.526166463	7.626315871	47.3
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 151	19.2558974	2.386800578	0.282842651	3.8381E-05	0.000963	0.282841744	2.038695697	1.35724858	3.125547051	50.4
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 312	14.5572636	2.623672455	0.282684679	3.7038E-05	0.000694	0.282683997	-3.547600121	1.309759012	-2.404582775	52.6
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 246	102.5947067	1.377545556	0.28307924	7.70676E-05	0.004600	0.283075038	10.40506393	2.725308508	11.34299032	48.9
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 115	13.60827141	2.633529255	0.282865314	4.14615E-05	0.000866	0.282864513	2.840103138	1.466184472	3.910788841	49.5
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 205	7.557462546	3.377613578	0.283111075	3.47382E-05	0.000486	0.283110671	11.53083046	1.228433082	12.50315672	44.4
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 215	20.19015323	2.808153674	0.282881112	2.68729E-05	0.001287	0.282877488	3.398776362	0.950292921	6.618328367	150.6
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 96	25.08439669	2.156002453	0.282833356	4.63499E-05	0.001260	0.28282975	1.70997488	1.639050531	4.985294158	153.1
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 20	29.22043802	1.937530657	0.282850838	5.65468E-05	0.001517	0.28284647	2.328186921	1.999638862	5.596796363	154
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 208	27.32721246	2.211798434	0.28283573	4.52784E-05	0.001628	0.282831033	1.793953527	1.601158358	5.057413391	154.3
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 311	18.60028998	2.671077619	0.282837262	4.67071E-05	0.001163	0.282833894	1.848109331	1.651684139	5.171988678	154.9
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 227	50.49423453	2.525739261	0.282804955	3.42555E-05	0.003182	0.282795715	0.705675479	1.21136361	3.830312658	155.3
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 95	25.91195205	2.8684763	0.282910162	3.51055E-05	0.001623	0.282905427	4.426048925	1.241418442	7.726936066	156
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 309	17.14849993	2.449109562	0.283032219	3.8893E-05	0.001075	0.283029073	8.742312771	1.375356147	12.11426655	156.6
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022ab 194	12.04304258	2.731465691	0.282869765	3.69108E-05	0.000744	0.282867573	2.997514421	1.30526175	6.423476317	157.6
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022g ab 209	77.85312508	1.172115131	0.282810542	6.4659E-05	0.003846	0.282799201	0.90323127	2.286509083	4.007050373	157.7
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022g ab 267	25.45245224	1.703667918	0.282879504	4.72731E-05	0.001507	0.282874187	3.341898406	1.671699008	7.35034416	188.7
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022g ab 265	32.22968942	1.400714633	0.283056526	5.84102E-05	0.001690	0.283050564	9.601862524	2.065532944	13.59008711	188.7
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022g ab 124	22.27263104	1.571019539	0.283015078	4.69897E-05	0.001266	0.28301057	8.136142935	1.661676785	12.21090288	190.3
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022g ab 57	20.99915151	1.662261842	0.283001411	5.31532E-05	0.001232	0.282996925	7.652850087	1.879632722	11.82628811	194.7
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022g ab 30	12.47978547	1.730181642	0.282977411	5.21758E-05	0.000766	0.282974598	6.804149476	1.845070812	11.06986212	196.2
CAN-BC-1022Gab	Merritt, BC	CAN-BC-1022g ab 31	11.06688675	1.432498997	0.282982249	5.35692E-05	0.000611	0.282980004	6.975216269	1.89434258	11.26557765	196.4
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 45	55.57592374	2.726995524	0.283083409	4.23333E-05	0.002811057	0.28308081	10.55250132	1.497013553	11.56044482	49.5
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 15	52.12429209	2.094197646	0.28272474	4.8039E-05	0.002538031	0.282722379	-2.130964423	1.698780955	-1.109328719	49.8
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 28	57.85698356	1.641222386	0.28251242	5.34993E-05	0.002877121	0.282509717	-9.639109343	1.891871878	-8.619315927	50.3
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 88	13.47577274	3.344640791	0.283017776	2.89231E-05	0.000724985	0.283017092	8.231542772	1.022794191	9.329192904	50.5
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 17	14.76979541	3.316378813	0.283098689	3.21651E-05	0.000826381	0.283097899	11.09286124	1.137441502	12.20263097	51.2
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 85	105.6138283	1.424051097	0.282593515	6.34806E-05	0.005161735	0.282588549	-6.771414736	2.24483776	-5.804675973	51.5
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 73	62.12190055	2.274192023	0.282515831	4.60121E-05	0.00282905	0.282513094	-9.518487692	1.627103809	-8.466605902	51.8
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 61	55.7305908	1.963650904	0.28256725	4.40721E-05	0.00268805	0.282564649	-7.700210092	1.558501541	-6.643294241	51.8
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 21	72.4443502	2.687747525	0.282561168	3.82821E-05	0.0034716	0.282557803	-7.915254216	1.353751745	-6.883186262	51.9
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 5	27.30474548	3.712557813	0.282567142	4.18586E-05	0.001210395	0.282565968	-7.704020418	1.480227634	-6.594400635	51.9
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 47	73.49813507	1.826025808	0.282518343	5.01908E-05	0.003524183	0.28251492	-9.429670969	1.774875868	-8.397594383	52
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 92	61.54456271	2.92222493	0.28247241	2.92732E-05	0.002996552	0.282469499	-11.05399561	1.035173691	-10.00398131	52
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 84	26.86432258	3.266651303	0.282537268	2.75263E-05	0.001334836	0.282535969	-8.760448353	0.973401223	-7.65095521	52.1
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 106	88.20103551	1.469431824	0.282691291	5.26492E-05	0.004117739	0.282687284	-3.313773565	1.861808699	-2.299432811	52.1
CAN-BC-1023H	Kelowna, BC	CAN-BC-1023H 83	35.84692203	2.172026997	0.282576628	3.9217E-05	0.001767536	0.282574894	-7.368580632	1.38681256	-6.26540906	52.5

Table x. Hf Isotopic Data													
Sample	Sample Location	Analysis	(^{176}Yb + ^{176}Lu)/^{176}Hf (%)	Volts Hf	^{176}Hf/^{177}Hf	± (1σ)	^{176}Lu/^{177}Hf	^{176}Hf/^{177}Hf (T)	E-Hf (0)	E-Hf (0) ± (1σ)	E-Hf (T)	Age (Ma)
15Ca01B	Republic, WA	15CA-01B 178	14.31962322	2.712094618	0.28230172	3.02049E-05	0.000768678	0.28230101	-17.09003009	1.068120932	-16.02050513	49.4
15Ca01B	Republic, WA	15CA-01B 299	37.35265325	2.621034033	0.282340499	3.67436E-05	0.001847991	0.282338786	-15.71870769	1.299346488	-14.68006357	49.6
15Ca01B	Republic, WA	15CA-01B 158	22.53975074	2.393744546	0.282378166	3.4093E-05	0.001214224	0.282377028	-14.38668576	1.205614373	-13.31430458	50.2
15Ca01B	Republic, WA	15CA-01B 284	15.59539547	2.682224683	0.282437566	3.83065E-05	0.000804547	0.282436807	-12.28616176	1.354614866	-11.1934657	50.5
15Ca01B	Republic, WA	15CA-01B 13	19.07127027	2.444246909	0.282311291	3.53117E-05	0.000986033	0.282310354	-16.75155611	1.248710647	-15.65680691	50.9
15Ca01B	Republic, WA	15CA-01B 278	13.54372383	2.897911275	0.282377573	3.51108E-05	0.000700552	0.282376907	-14.40766414	1.241606971	-13.30305086	50.9
15Ca01B	Republic, WA	15CA-01B 147	23.28456248	2.46266638	0.282448832	3.54755E-05	0.001185079	0.282447701	-11.88774332	1.254503165	-10.79485754	51.1
15Ca01B	Republic, WA	15CA-01B 217	27.78228284	2.990645452	0.282425682	3.6562E-05	0.001294129	0.282424435	-12.7064004	1.292924347	-11.60662568	51.6
15Ca01B	Republic, WA	15CA-01B 104	21.38884166	2.661601719	0.282397612	3.17217E-05	0.001136708	0.282396515	-13.69901637	1.121759111	-12.59184642	51.7
15Ca01B	Republic, WA	15CA-01B 192	8.308620976	3.001504135	0.282380823	3.99441E-05	0.000437861	0.282380397	-14.29274057	1.412523931	-13.15520389	52
15Ca01B	Republic, WA	15CA-01B 99	20.55178171	2.462321684	0.282357568	3.70365E-05	0.001385335	0.28235622	-15.11509361	1.309705634	-14.00807341	52.1
15Ca01B	Republic, WA	15CA-01B 277	19.06869423	2.634105396	0.282431074	3.21475E-05	0.001030497	0.282430071	-12.51572528	1.136818252	-11.39619164	52.1
15Ca01B	Republic, WA	15CA-01B 44	19.19061731	2.425486911	0.282375636	3.71225E-05	0.000995816	0.282374657	-14.47616654	1.31274819	-13.34490606	52.6
15Ca01B	Republic, WA	15CA-01B 57	16.67263379	2.939751644	0.28229673	3.12659E-05	0.000877117	0.282295868	-17.26646981	1.105643376	-16.13141046	52.6
15Ca01B	Republic, WA	15CA-01B 75	13.35114549	2.947196139	0.282331432	3.17636E-05	0.000712901	0.282330726	-16.0393263	1.123240952	-14.88973598	53
15Ca03A	Republic, WA	15-CA-03A 59	15.64886634	2.657568978	0.282966077	4.2174E-05	0.00086773	0.282965259	6.403349342	1.49138188	7.496032524	50.5
15Ca03A	Republic, WA	15-CA-03A 70	19.05356113	2.079740272	0.282434153	4.04787E-05	0.001015728	0.282433193	-12.40683989	1.431428913	-11.31905144	50.6
15Ca03A	Republic, WA	15-CA-03A 25	35.08938913	2.283014565	0.282309445	3.94247E-05	0.001761086	0.282307777	-16.81683294	1.394159264	-15.75235378	50.7
15Ca03A	Republic, WA	15-CA-03A 150	17.83916846	2.429950689	0.282425436	4.83537E-05	0.000989773	0.282424499	-12.7150958	1.70991084	-11.6243217	50.7
15Ca03A	Republic, WA	15-CA-03A 242	11.7599072	1.975032411	0.282358015	3.95858E-05	0.000675007	0.282357375	-15.0992757	1.399855351	-13.99605457	50.8
15Ca03A	Republic, WA	15-CA-03A 202	16.40144028	2.154617782	0.282422783	4.05646E-05	0.000821436	0.282422001	-12.80890459	1.434466262	-11.70601158	51
15Ca03A	Republic, WA	15-CA-03A 65	25.79938025	1.870472533	0.282405138	5.80335E-05	0.001243812	0.282403951	-13.43288892	2.052211708	-12.34216108	51.1
15Ca03A	Republic, WA	15-CA-03A 13	23.49325552	1.436856051	0.282497691	4.73552E-05	0.001357406	0.282496393	-10.15998185	1.674599617	-9.070588395	51.2
15Ca03A	Republic, WA	15-CA-03A 28	14.32650675	2.280272727	0.282367899	4.10285E-05	0.000796372	0.282367135	-14.74977351	1.450871498	-13.63976064	51.3
15Ca03A	Republic, WA	15-CA-03A 255	18.5233956	1.740815009	0.282446126	4.58089E-05	0.000922663	0.282445245	-11.98345662	1.619920626	-10.88172329	51.1
15Ca03A	Republic, WA	15-CA-03A 203	16.81555662	2.272168929	0.282397668	3.20155E-05	0.000926834	0.282396764	-13.69704937	1.13215141	-12.57192776	52.2
15Ca03A	Republic, WA	15-CA-03A 258	19.04916487	1.96331332	0.282510301	4.69299E-05	0.001089666	0.282509237	-9.714042412	1.659560533	-8.591927593	52.3
15Ca03A	Republic, WA	15-CA-03A 98	16.90444681	2.164259612	0.282363583	4.19585E-05	0.000934467	0.282362669	-14.9023657	1.483760568	-13.77333508	52.4
15Ca03A	Republic, WA	15-CA-03A 66	23.52794527	2.382702666	0.282363744	4.22487E-05	0.001242328	0.282362526	-14.89667489	1.49402248	-13.77616506	52.5
15Ca03A	Republic, WA	15-CA-03A 84	10.48754274	3.050401204	0.282529108	4.07485E-05	0.000513643	0.282528536	-9.048992061	1.440971505	-7.747375742	59.6

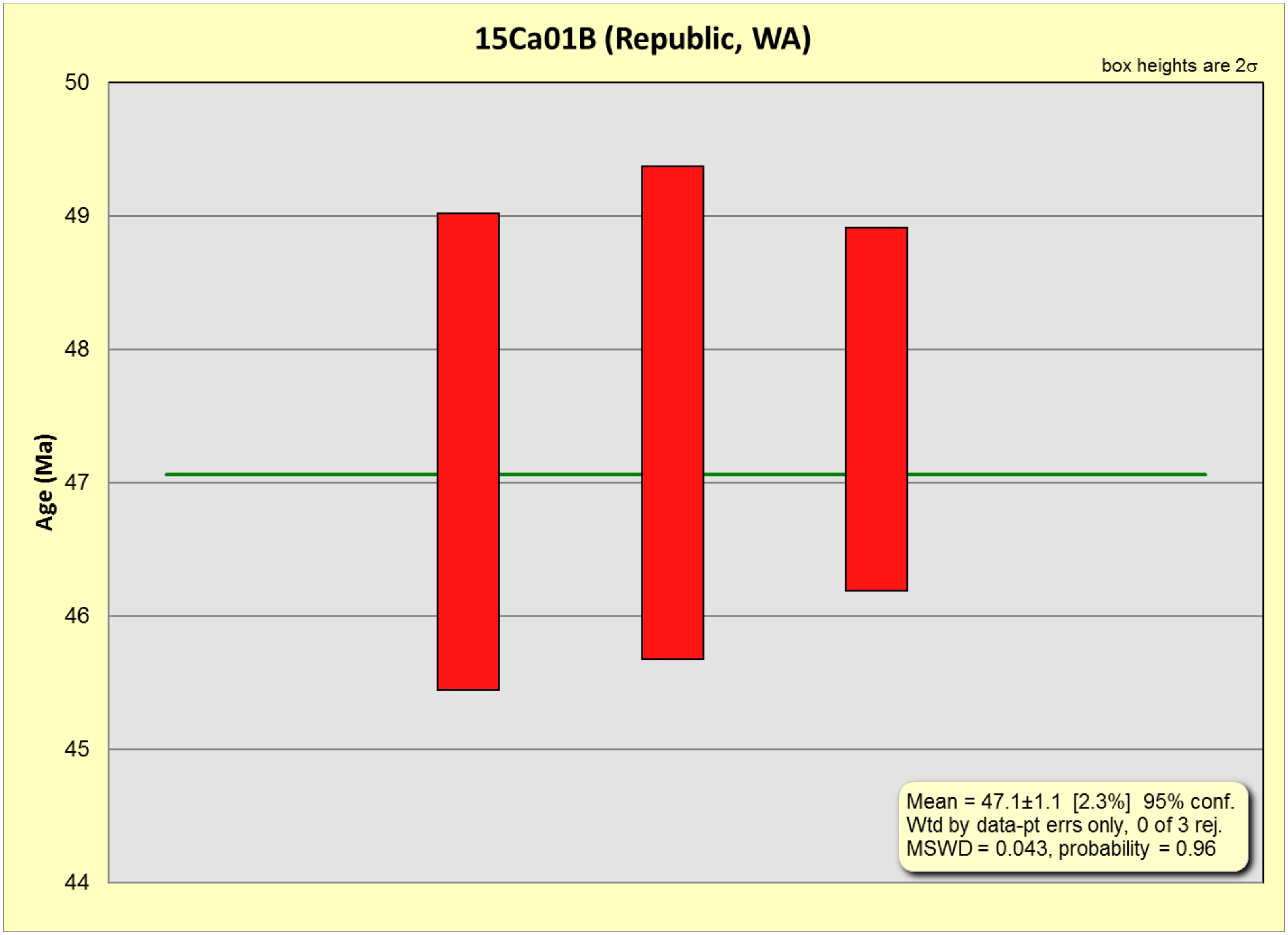
APPENDIX H

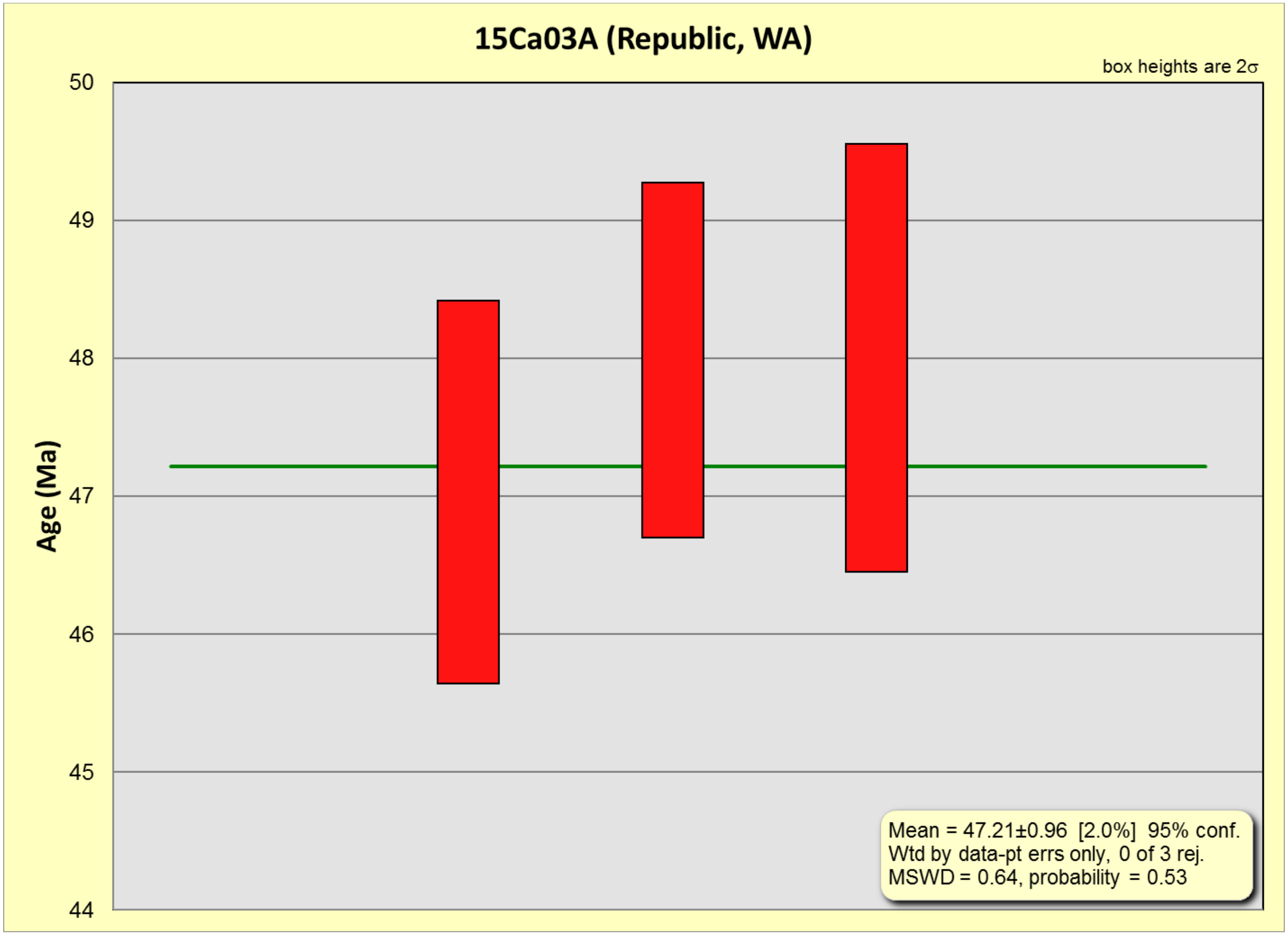
DETRITAL ZIRCON U-PB

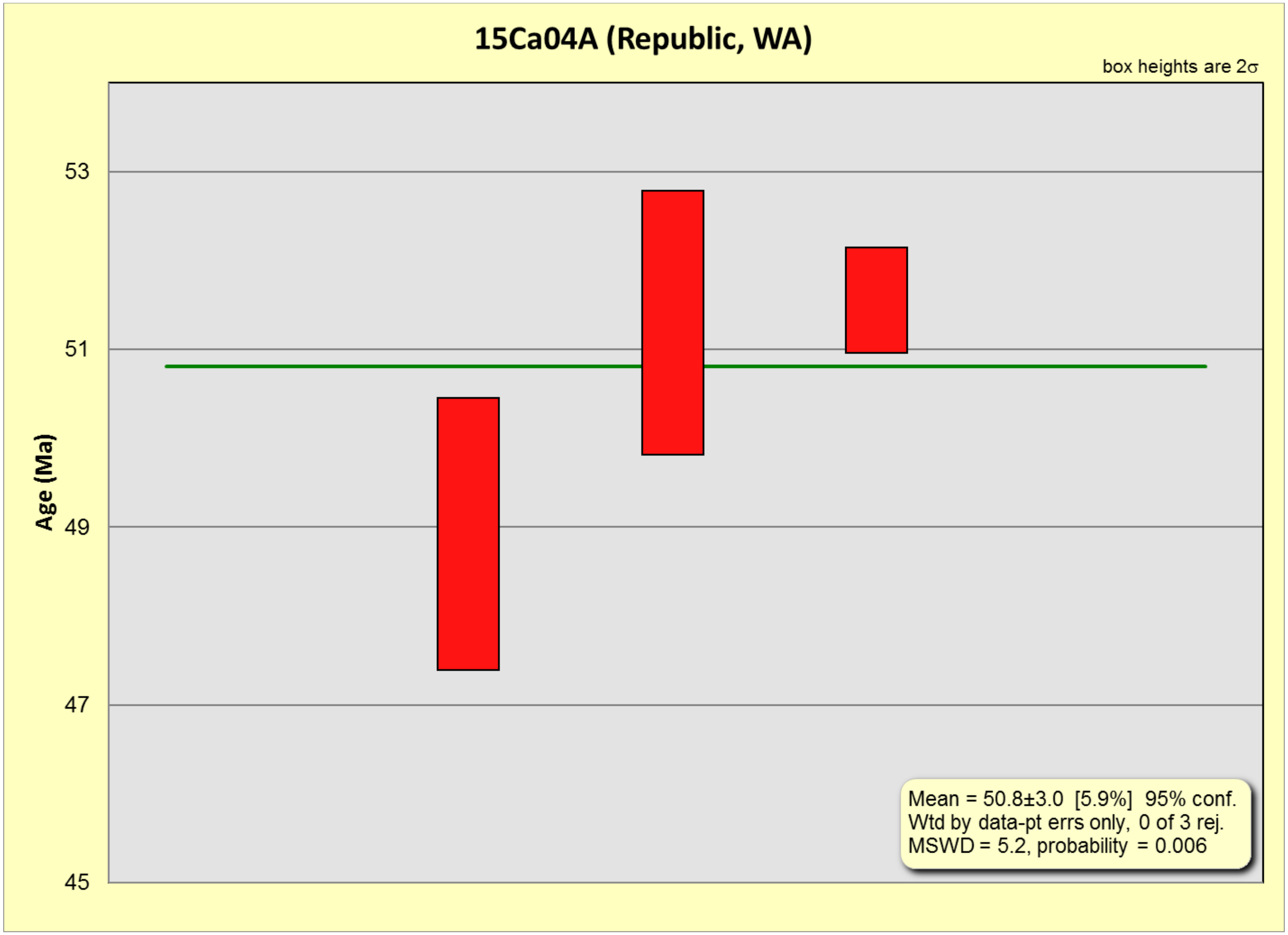
MAXIMUM DEPOSITIONAL AGE DATA AND GRAPHS

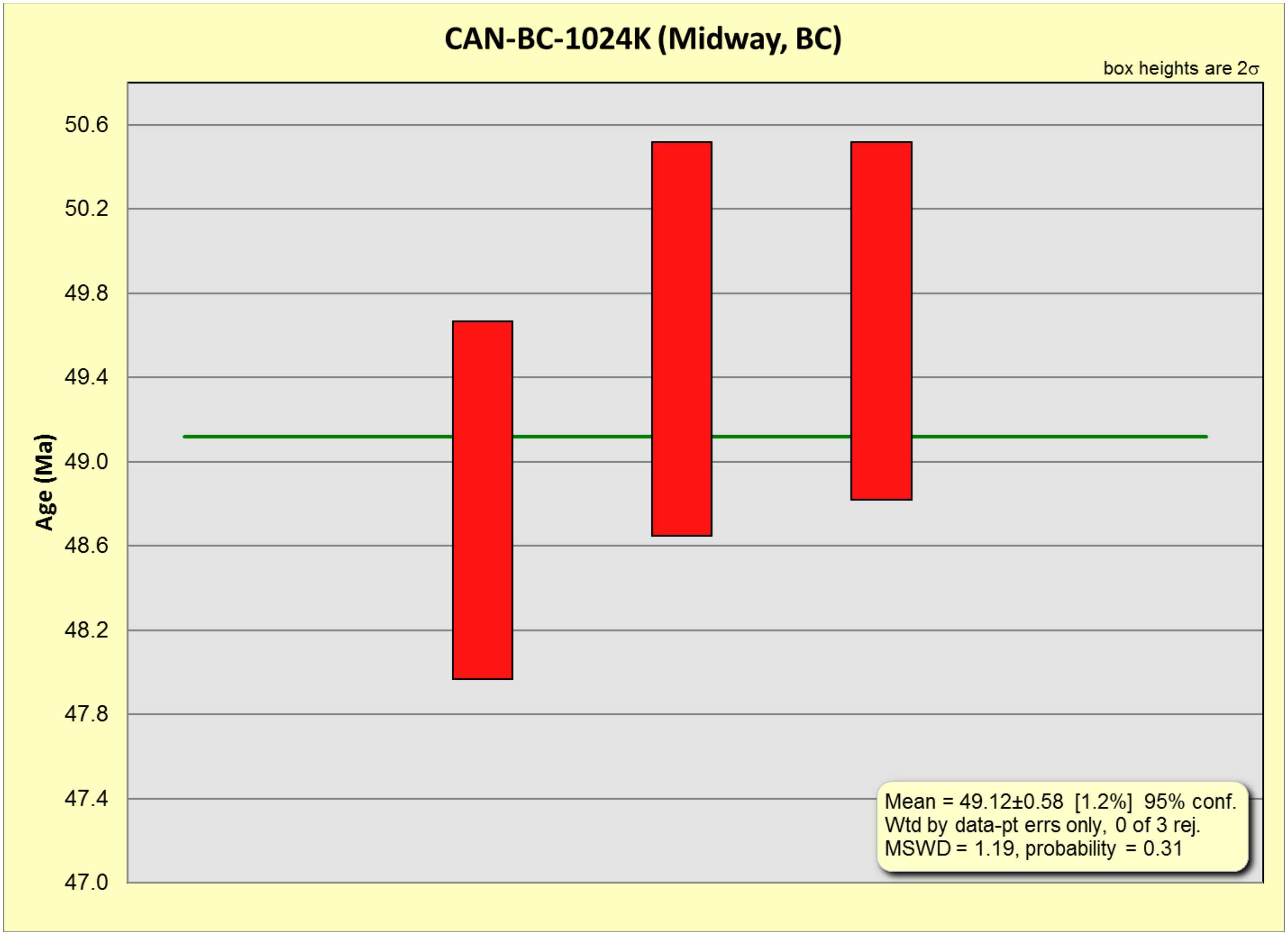
Sample	Location	Analysis	Age	2σ
15CA01B	Republic, WA	ALC	46.8	2.1
			47.1	2.2
			47.2	1.6
15Ca 03A	Republic, WA	ALC	46.4	1.7
			47.6	1.6
			47.6	1.9
15Ca04A	Republic, WA	CEMS	48.1	1.8
			50.9	1.75
			51.2	0.7
CAN-BC-1024K	Midway, BC	CEMS	48.5	1
			49.4	1.1
			49.5	1
CAN-BC-1024L	Midway, BC	CEMS	52.1	0.95
			52.4	1.25
			52.5	1.25
WLR1	White Lake, BC	CEMS	46.1	1.4
			46.2	1.5
			47.2	1.7
WLR2	White Lake, BC	CEMS	45.5	1.05
			45.9	1.1
			46.7	0.95
SKEL1	Summerland, BC	CEMS	50.6	0.85
			51.4	1.05
			51.5	0.75
SKEL2	Summerland, BC	CEMS	47.8	1.6
			48.9	1.5
			49.1	1.4

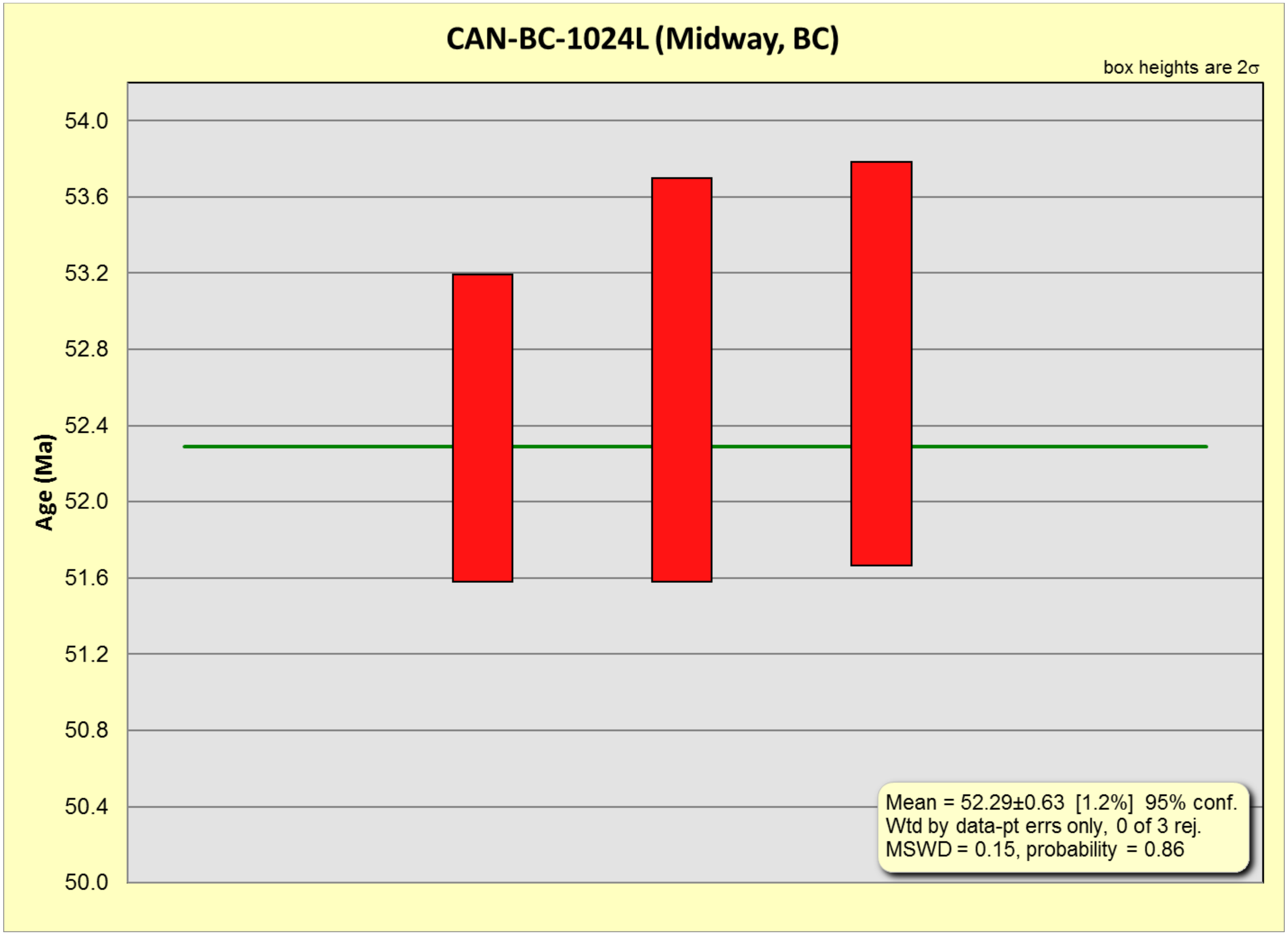
Sample	Location	Analysis	Age	2σ
CAN-BC-1024H	Kelowna, BC	ALC	48.2	2.1
			48.4	1.4
			48.6	1.0
SAWMILL1	Kelowna, BC	CEMS	49.4	1.35
			50.2	1.3
			51.2	1.75
15Ca18A	Kelowna, BC	CEMS	50	1.25
			50.1	1.2
			50.2	1.1
PB2	Princeton, BC	CEMS	140.9	2.6
			142.5	2.4
			143	1.85
15CAN10B	Princeton, BC	CEMS	52.6	0.7
			52.9	0.65
15Ca15A	Princeton, BC	CEMS	50.1	1.15
			53.3	1.35
			53.9	2.4
PRINCE1A	Princeton, BC	CEMS	85.5	1.45
			85.9	1.85
15Ca13B	Blakeburn, BC	CEMS	45.7	1.2
			46.1	1.2
			46.8	1.2
ABBEYRD2	Kamloops, BC	CEMS	47	1.1
			47.1	1.45
			47.5	1
15Ca23B	McAbee, BC	CEMS	48	1.4
			48.8	1.65
			49.4	1.6
CAN-BC-1022Gab	Merritt, BC	ALC	42.5	1.1
			43.3	1.0
			44.1	0.9
CAN-BC-1022Gbb	Merritt, BC	CEMS	42.8	0.9
			43.3	1
COLDWATER1	Coldwater, BC	CEMS	49.3	1.15
			50.1	1.25
			51.5	1.05

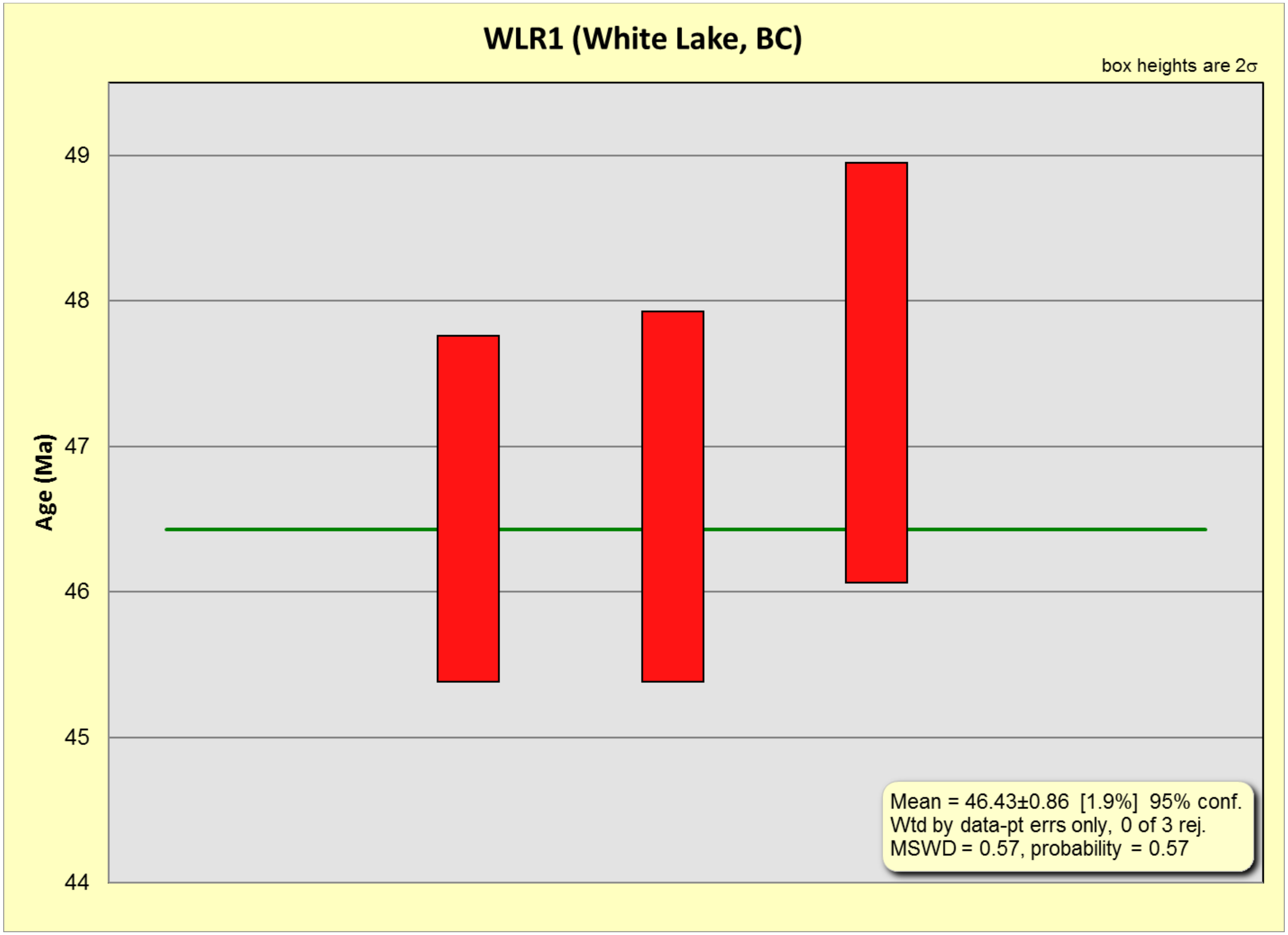

15Ca01B (Republic, WA)
box heights are 2σ
50
49
48
47
46
45
44
Age (Ma)
Mean = 47.1±1.1 [2.3%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.043, probability = 0.96

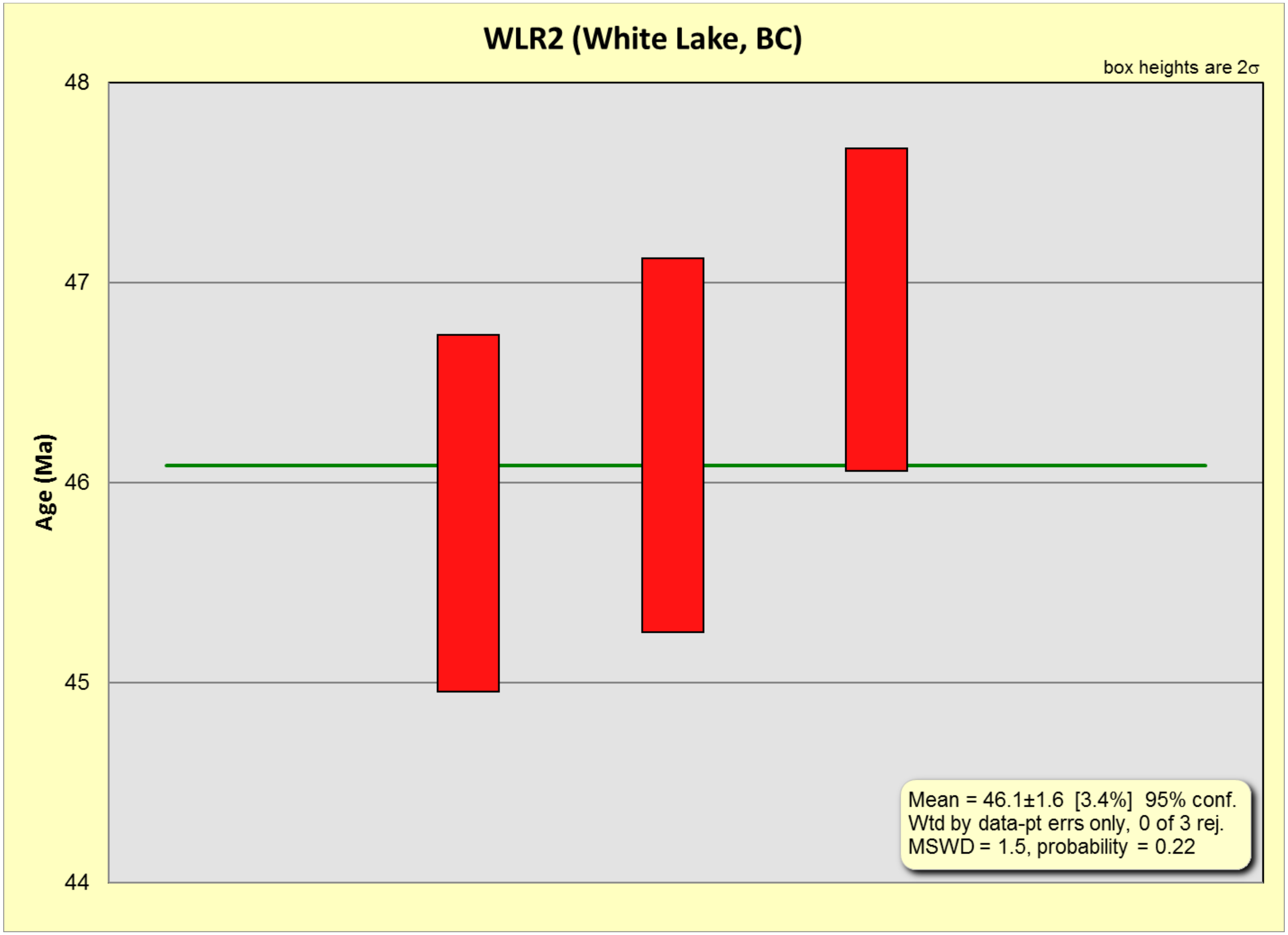

15Ca03A (Republic, WA)
box heights are 2σ
Age (Ma)
50
49
48
47
46
45
44
Mean = 47.21±0.96 [2.0%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.64, probability = 0.53

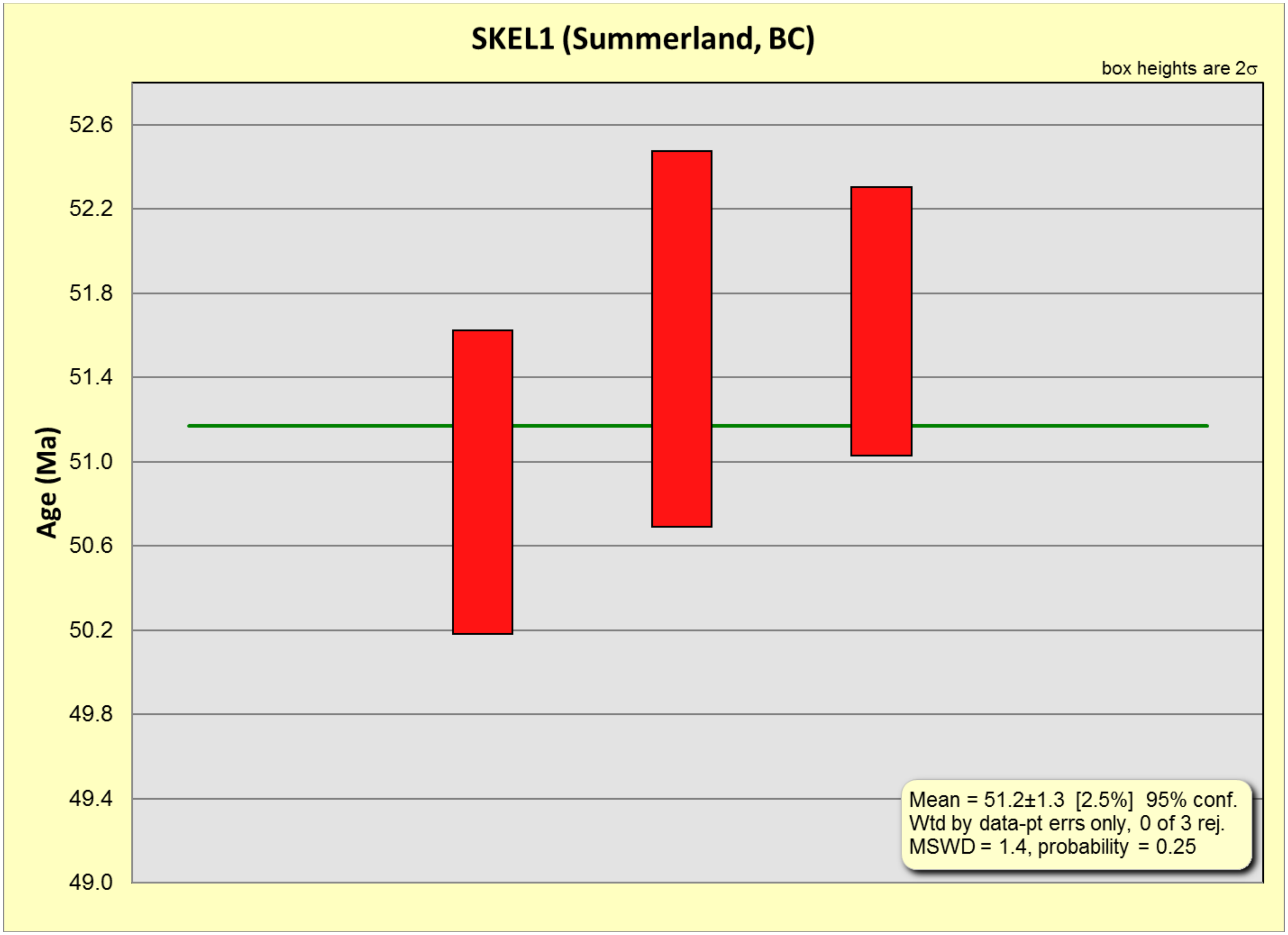

15Ca04A (Republic, WA)
box heights are 2σ
Age (Ma)
53
51
49
47
45
Mean = 50.8±3.0 [5.9%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 5.2, probability = 0.006

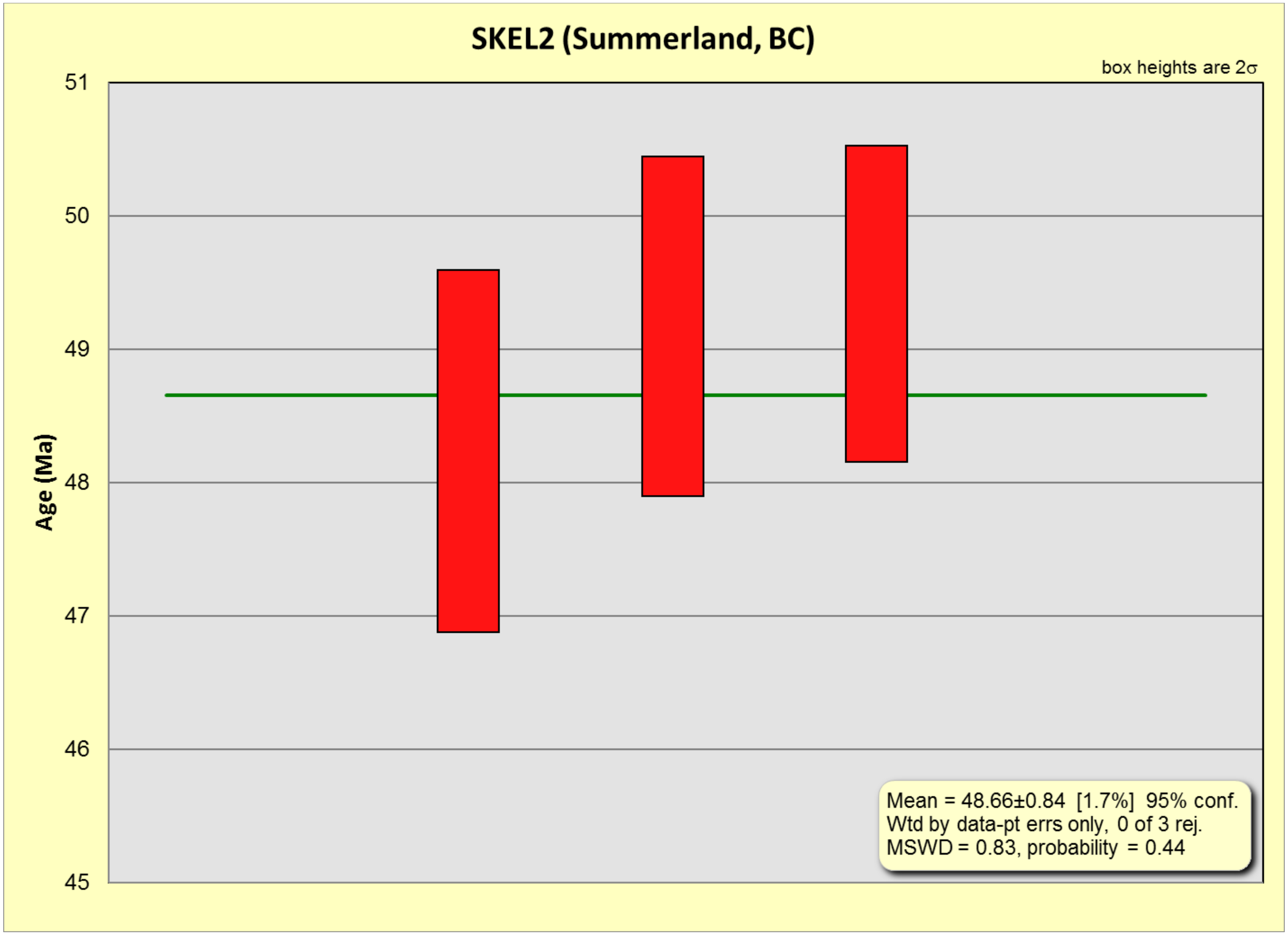

CAN-BC-1024K (Midway, BC)
box heights are 2σ
Age (Ma)
50.6
50.2
49.8
49.4
49.0
48.6
48.2
47.8
47.4
47.0
Mean = 49.12±0.58 [1.2%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 1.19, probability = 0.31

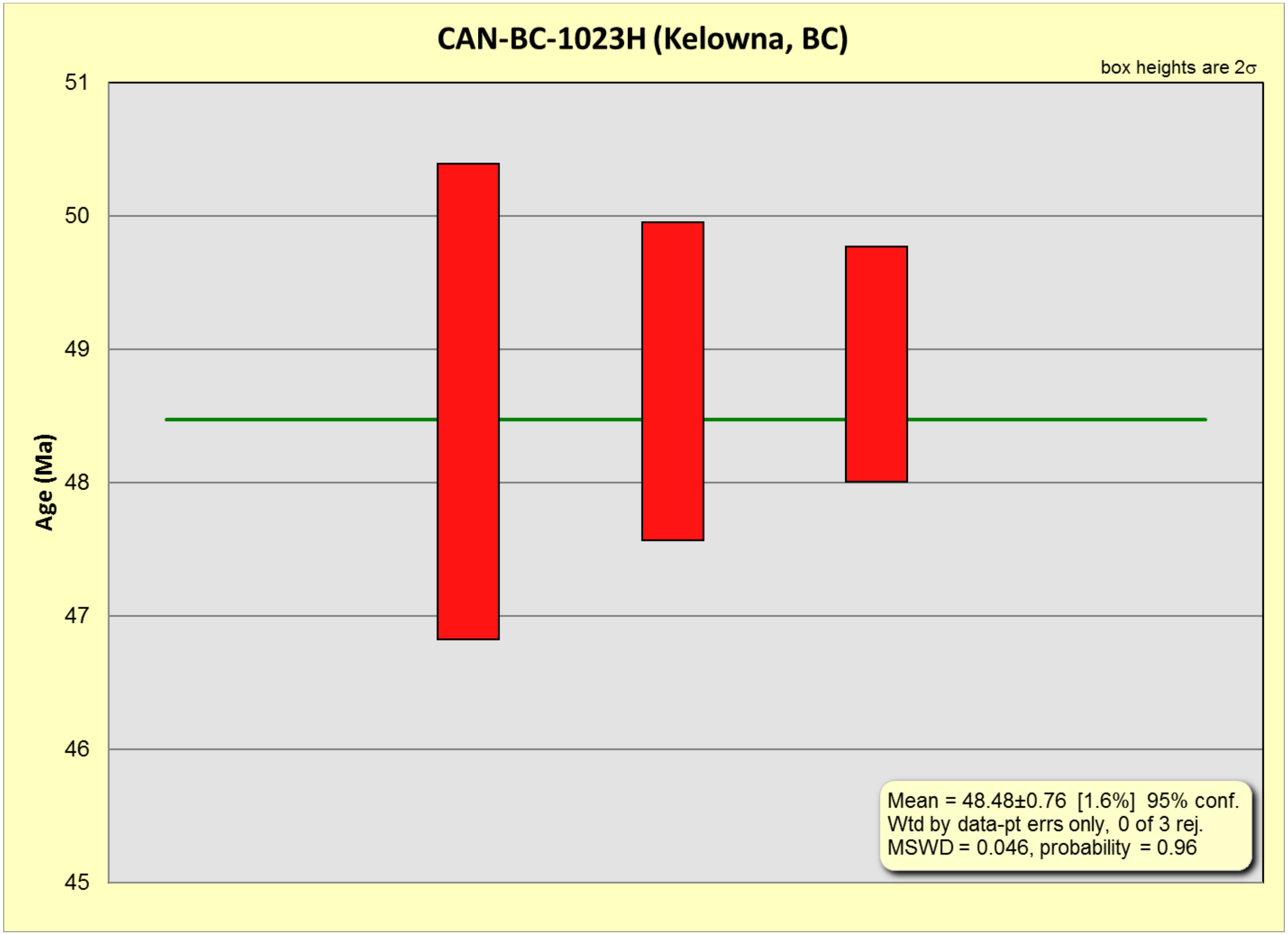

CAN-BC-1024L (Midway, BC)
box heights are 2σ
Age (Ma)
54.0
53.6
53.2
52.8
52.4
52.0
51.6
51.2
50.8
50.4
50.0
Mean = 52.29±0.63 [1.2%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.15, probability = 0.86

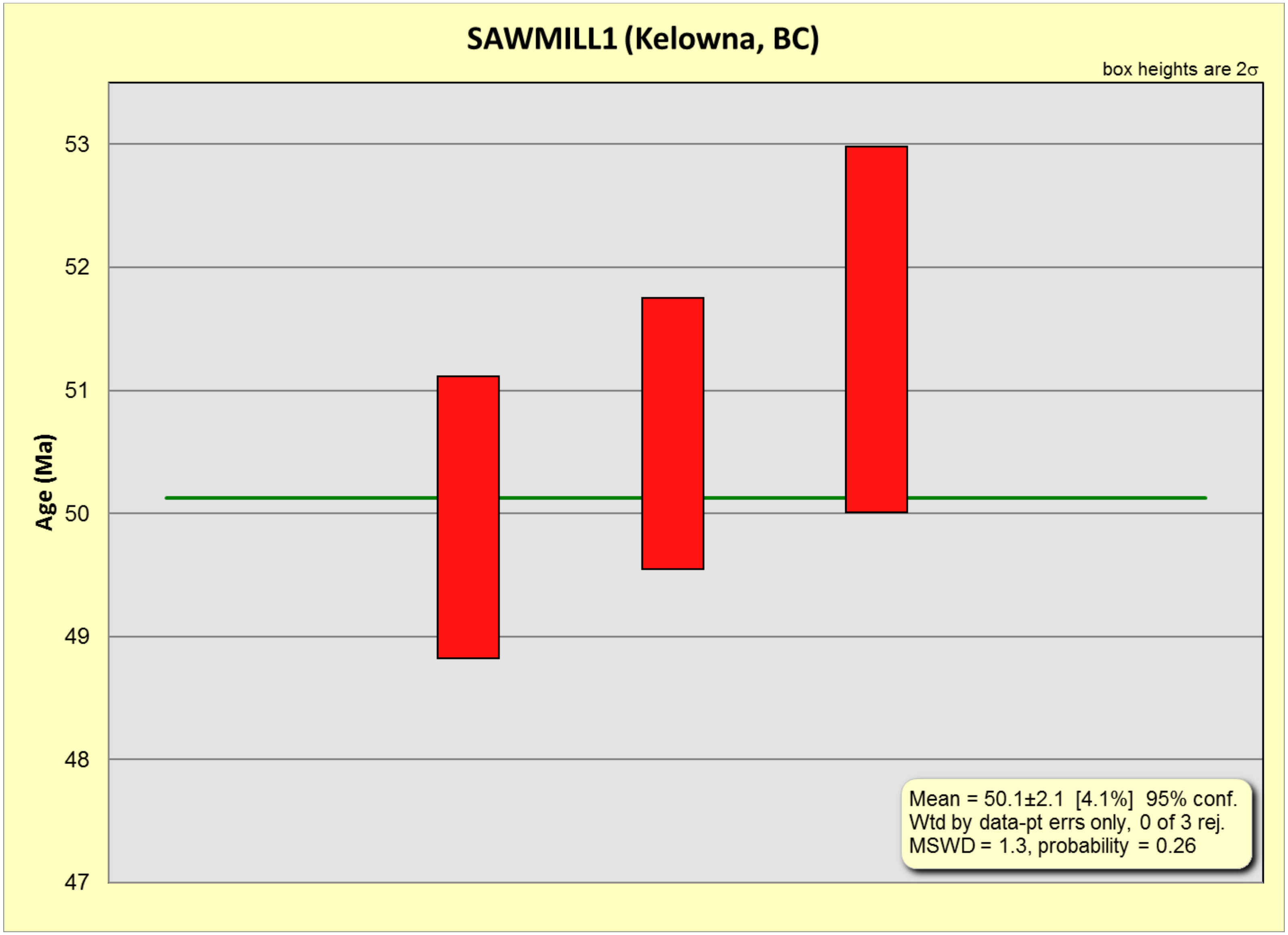

WLR1 (White Lake, BC)
box heights are 2σ
Age (Ma)
49
48
47
46
45
44
Mean = 46.43±0.86 [1.9%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.57, probability = 0.57

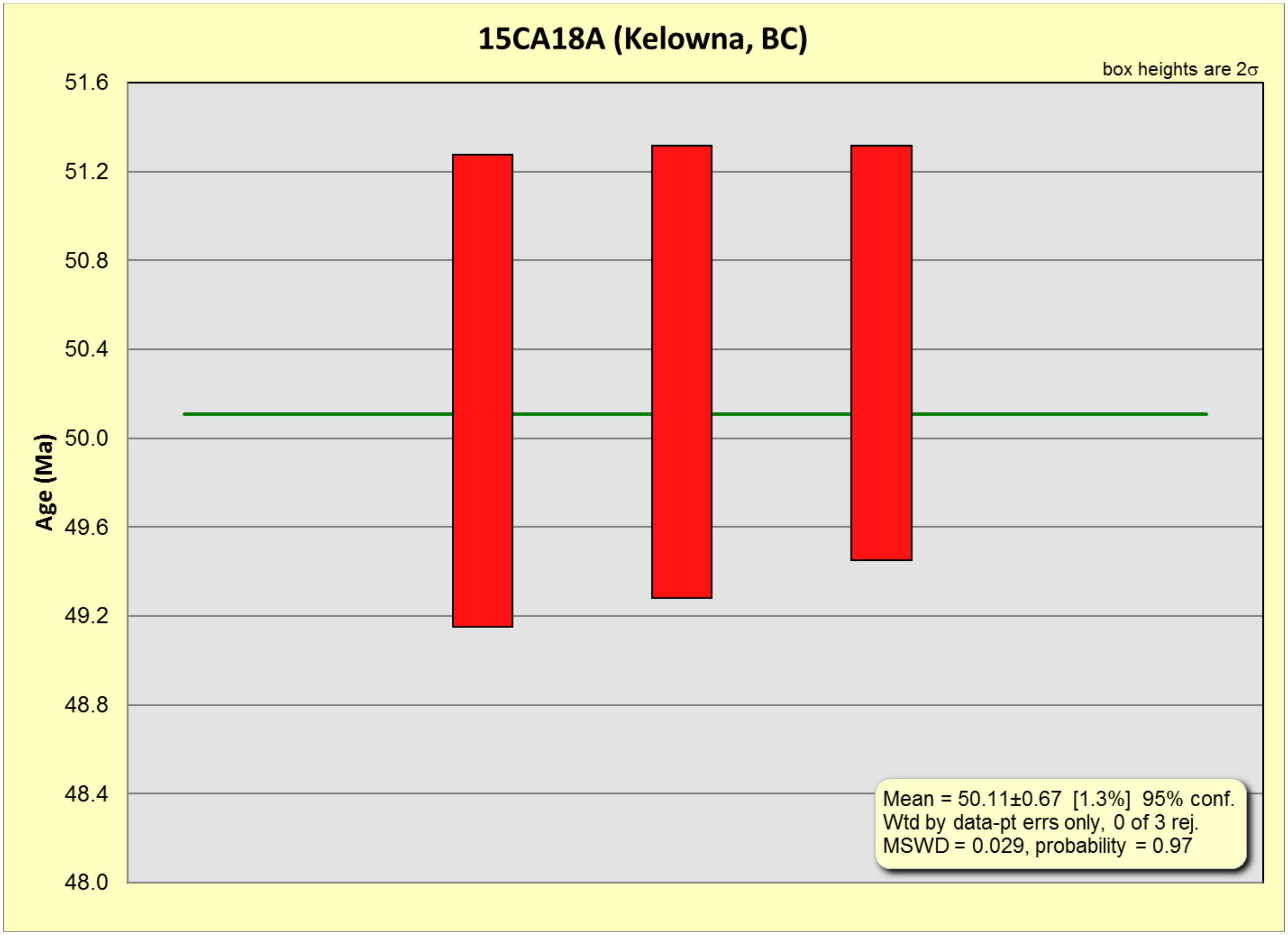

WLR2 (White Lake, BC)
box heights are 2σ
Age (Ma)
48
47
46
45
44
Mean = 46.1±1.6 [3.4%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 1.5, probability = 0.22

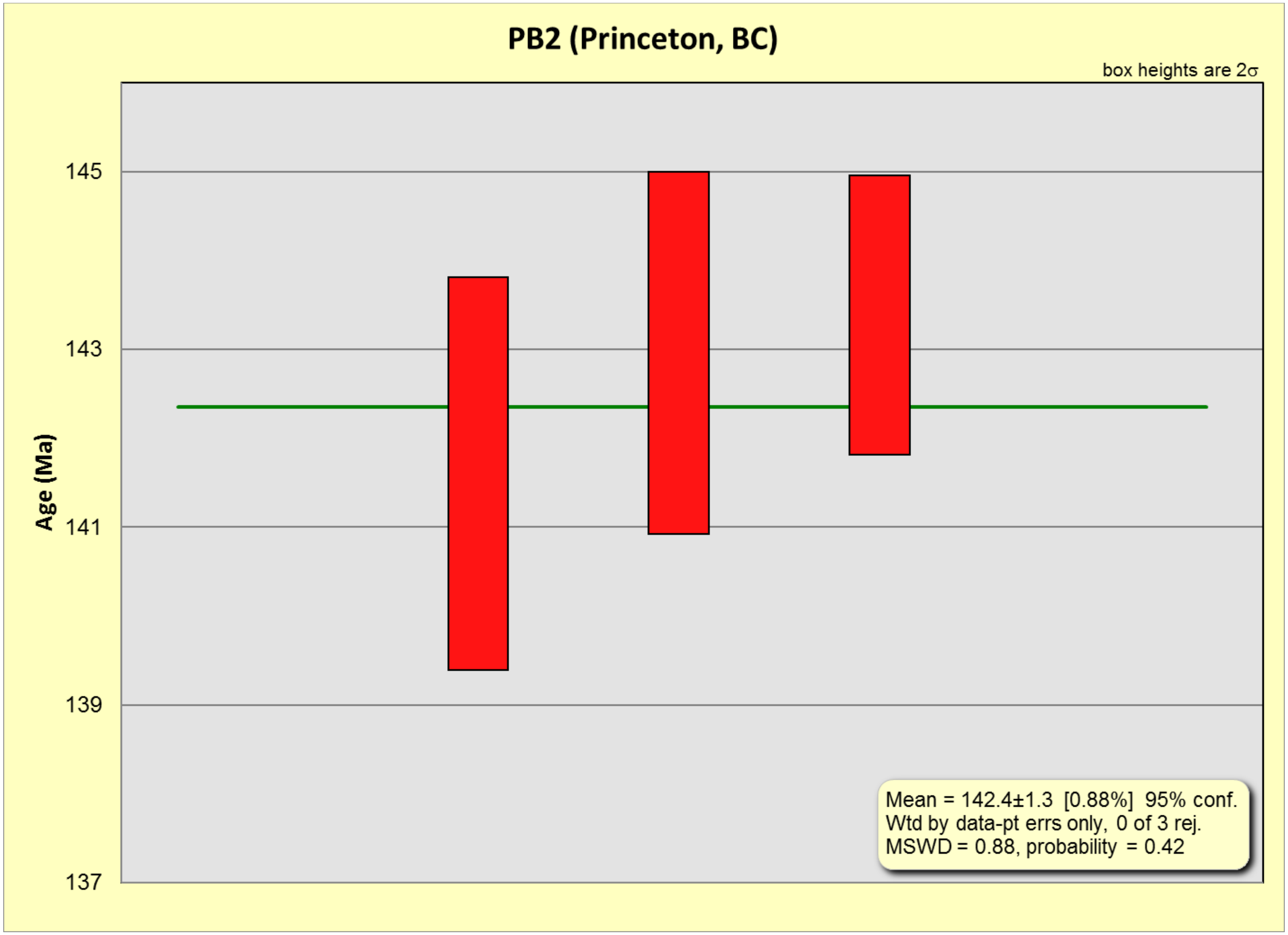

SKEL1 (Summerland, BC)
box heights are 2σ
Age (Ma)
52.6
52.2
51.8
51.4
51.0
50.6
50.2
49.8
49.4
49.0
Mean = 51.2±1.3 [2.5%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 1.4, probability = 0.25

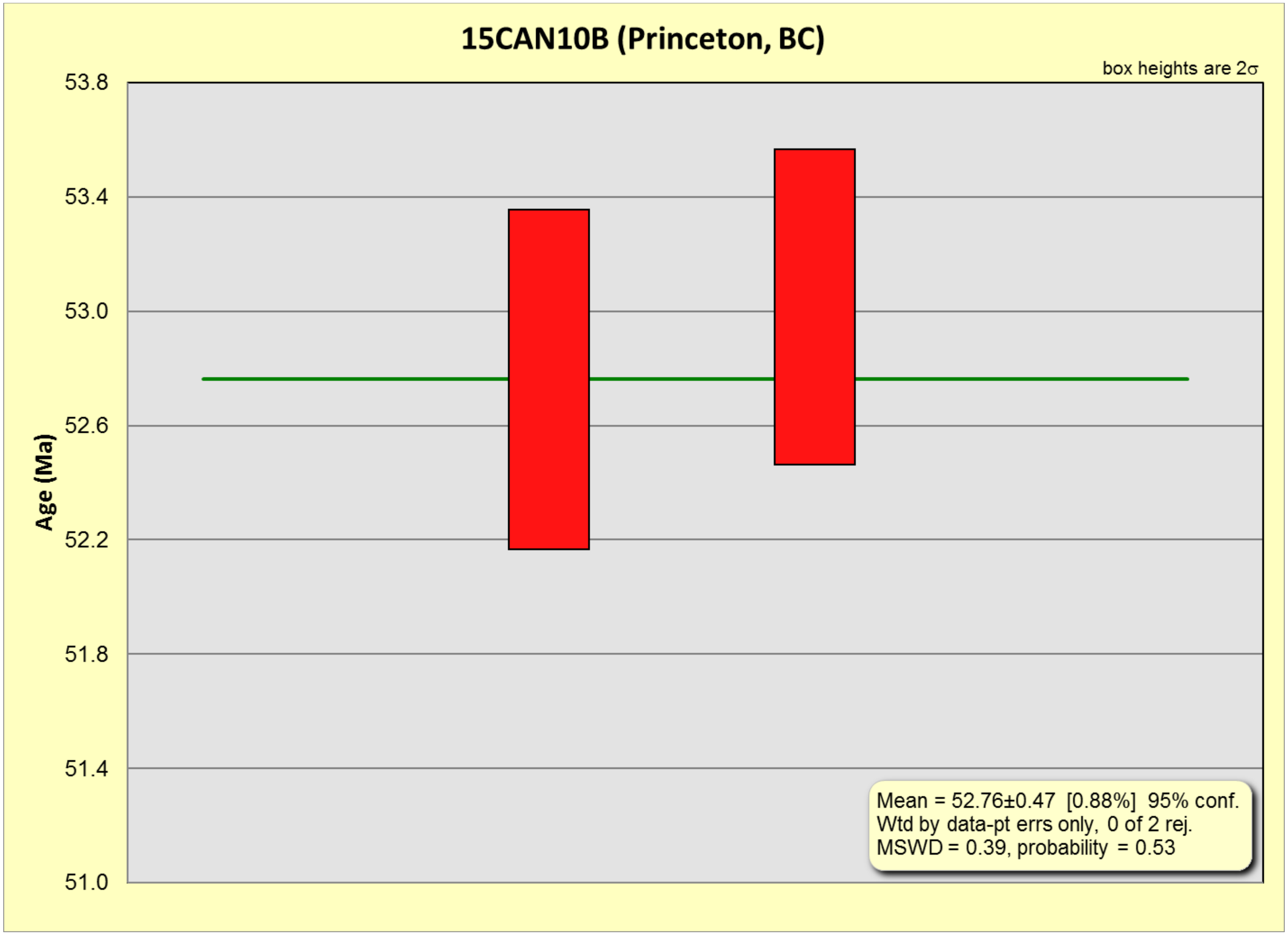

SKEL2 (Summerland, BC)
box heights are 2σ
Age (Ma)
51
50
49
48
47
46
45
Mean = 48.66±0.84 [1.7%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.83, probability = 0.44

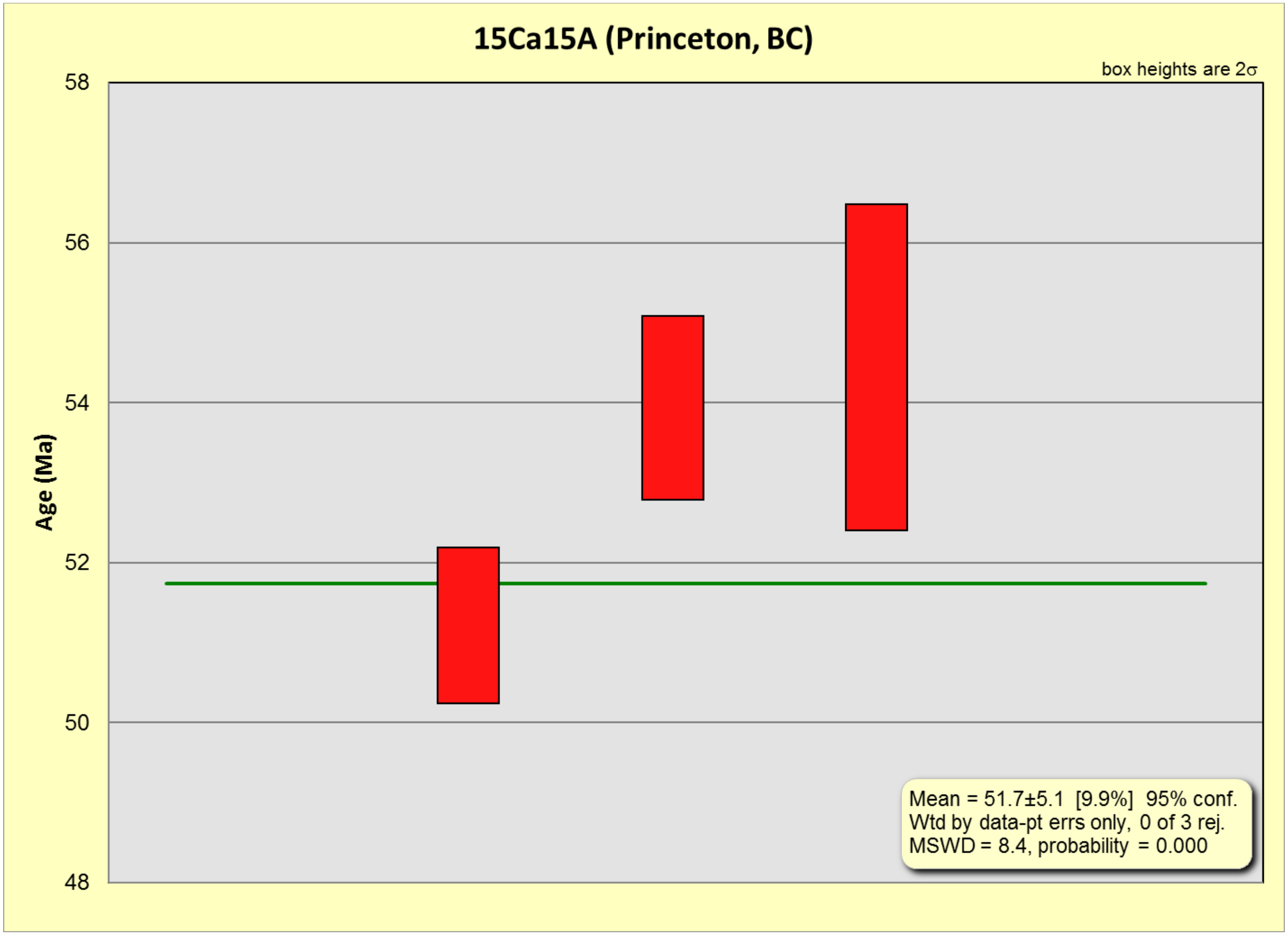

CAN-BC-1023H (Kelowna, BC)
box heights are 2σ
Age (Ma)
51
50
49
48
47
46
45
Mean = 48.48±0.76 [1.6%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.046, probability = 0.96

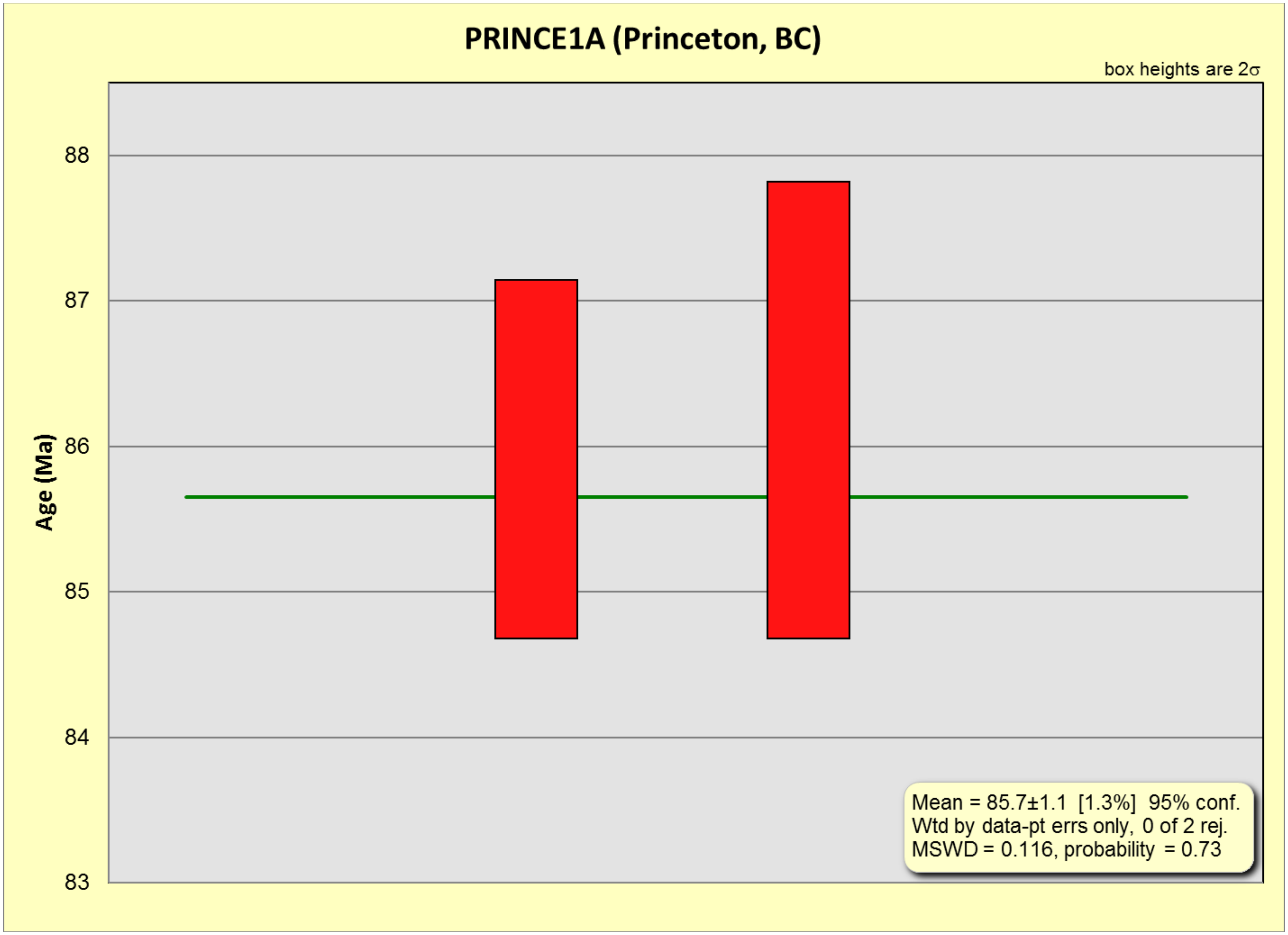

SAWMILL1 (Kelowna, BC)
box heights are 2σ
Age (Ma)
53
52
51
50
49
48
47
Mean = 50.1±2.1 [4.1%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 1.3, probability = 0.26

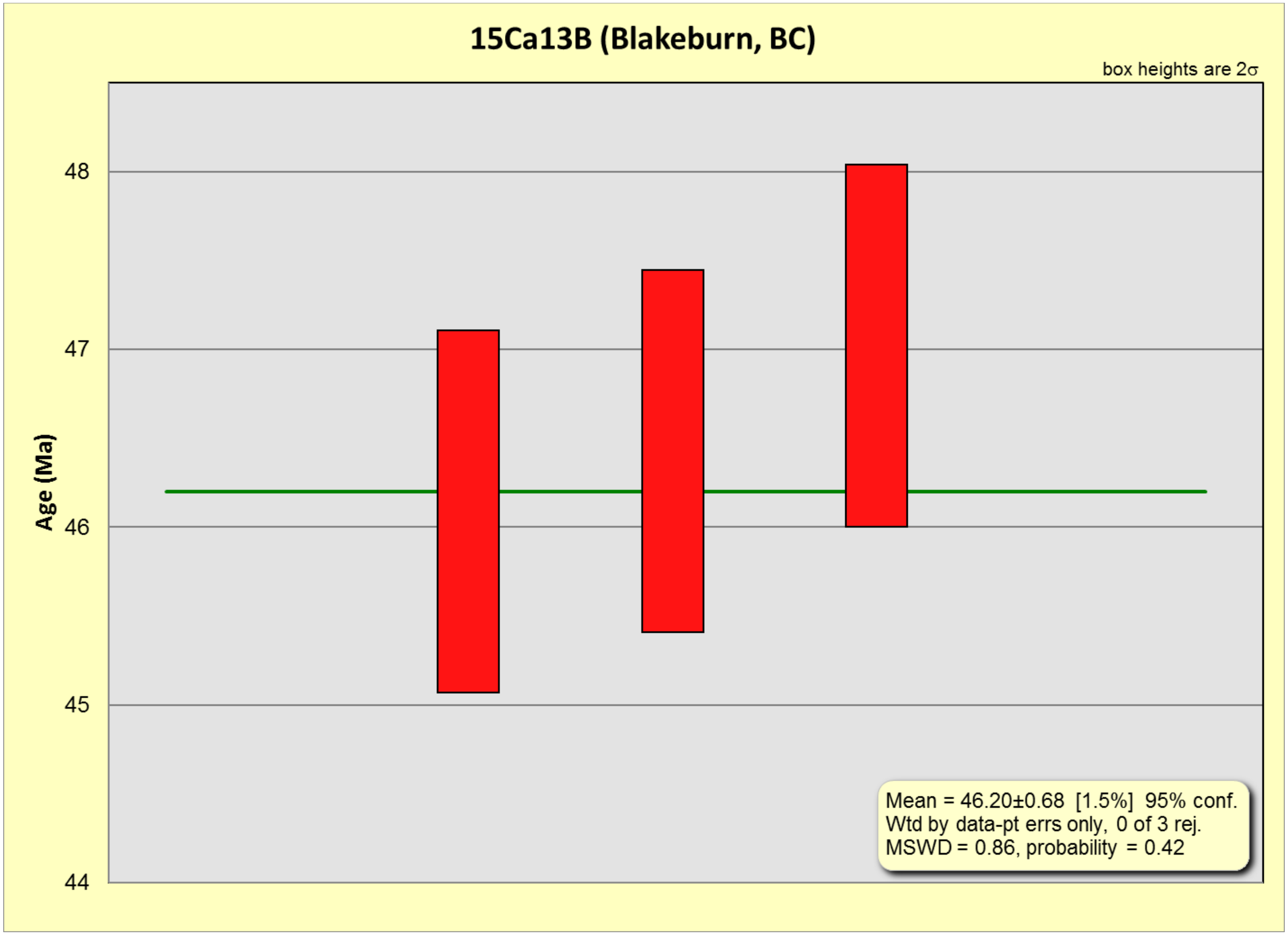

15CA18A (Kelowna, BC)
box heights are 2σ
Age (Ma)
51.6
51.2
50.8
50.4
50.0
49.6
49.2
48.8
48.4
48.0
Mean = 50.11±0.67 [1.3%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.029, probability = 0.97


PB2 (Princeton, BC)
box heights are 2σ
Age (Ma)
145
143
141
139
137
Mean = 142.4±1.3 [0.88%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.88, probability = 0.42

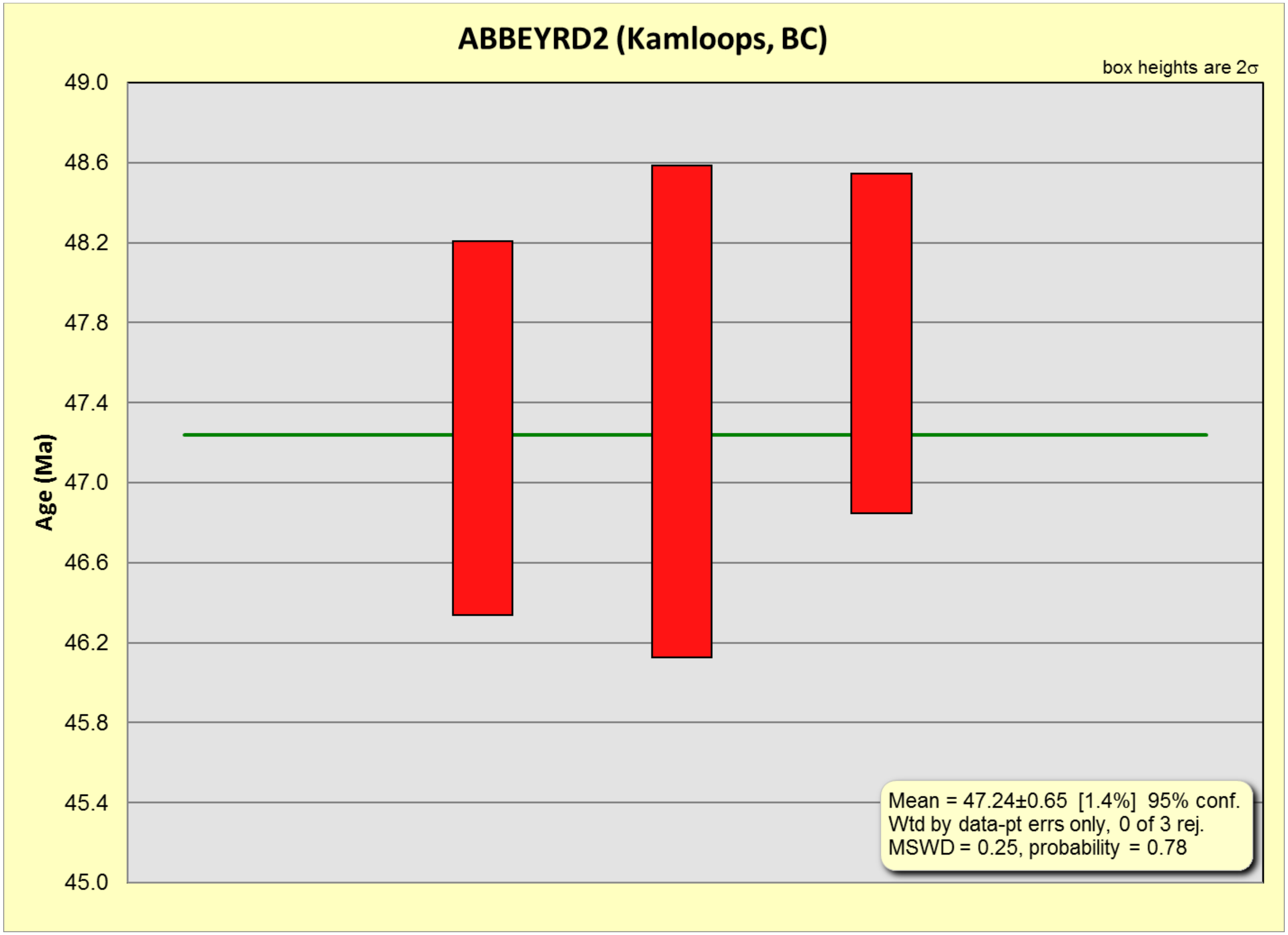

15CAN10B (Princeton, BC)
box heights are 2σ
Age (Ma)
53.8
53.4
53.0
52.6
52.2
51.8
51.4
51.0
Mean = 52.76±0.47 [0.88%] 95% conf.
Wtd by data-pt errs only, 0 of 2 rej.
MSWD = 0.39, probability = 0.53

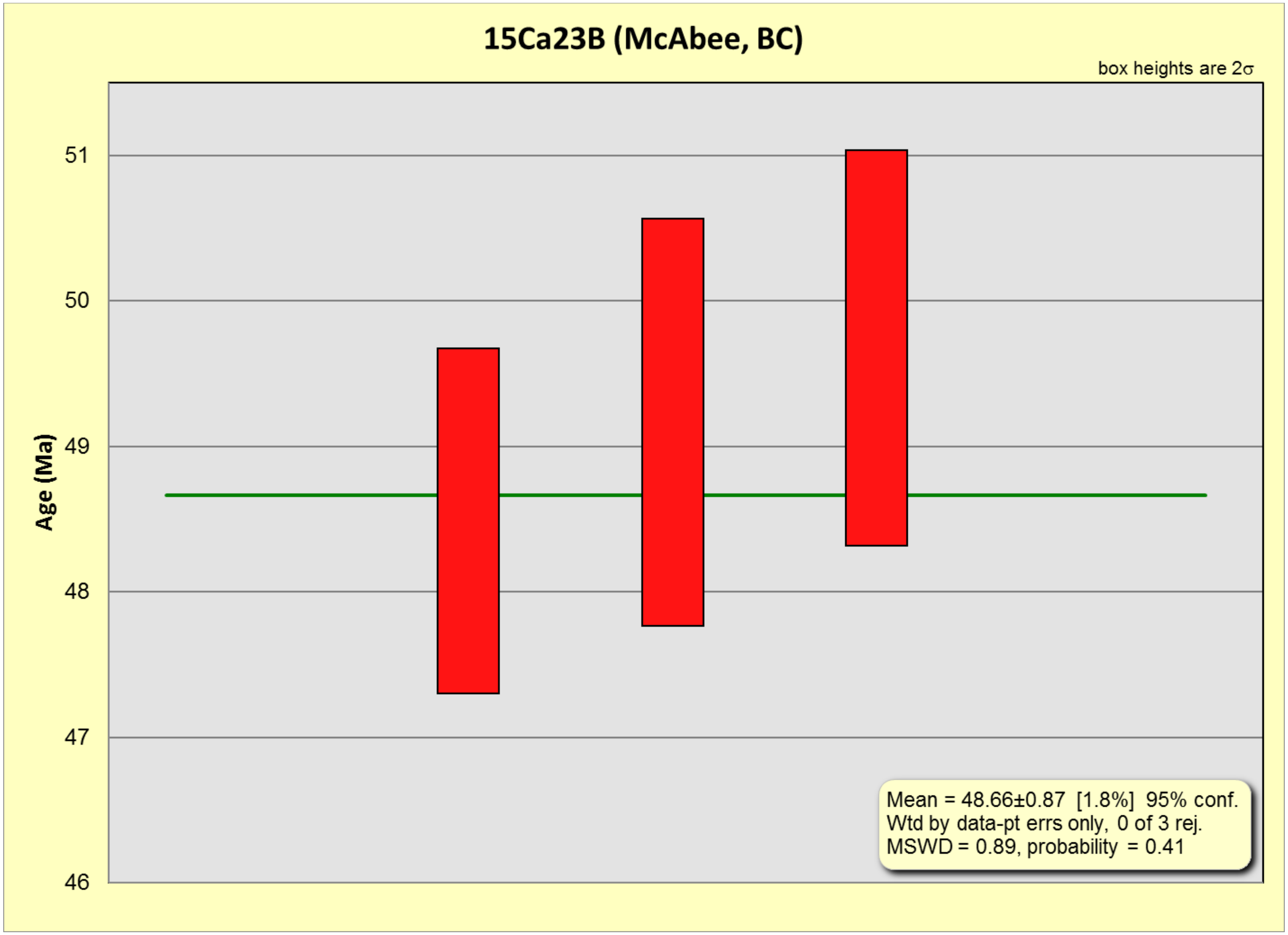

15Ca15A (Princeton, BC)
box heights are 2σ
Age (Ma)
58
56
54
52
50
48
Mean = 51.7±5.1 [9.9%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 8.4, probability = 0.000

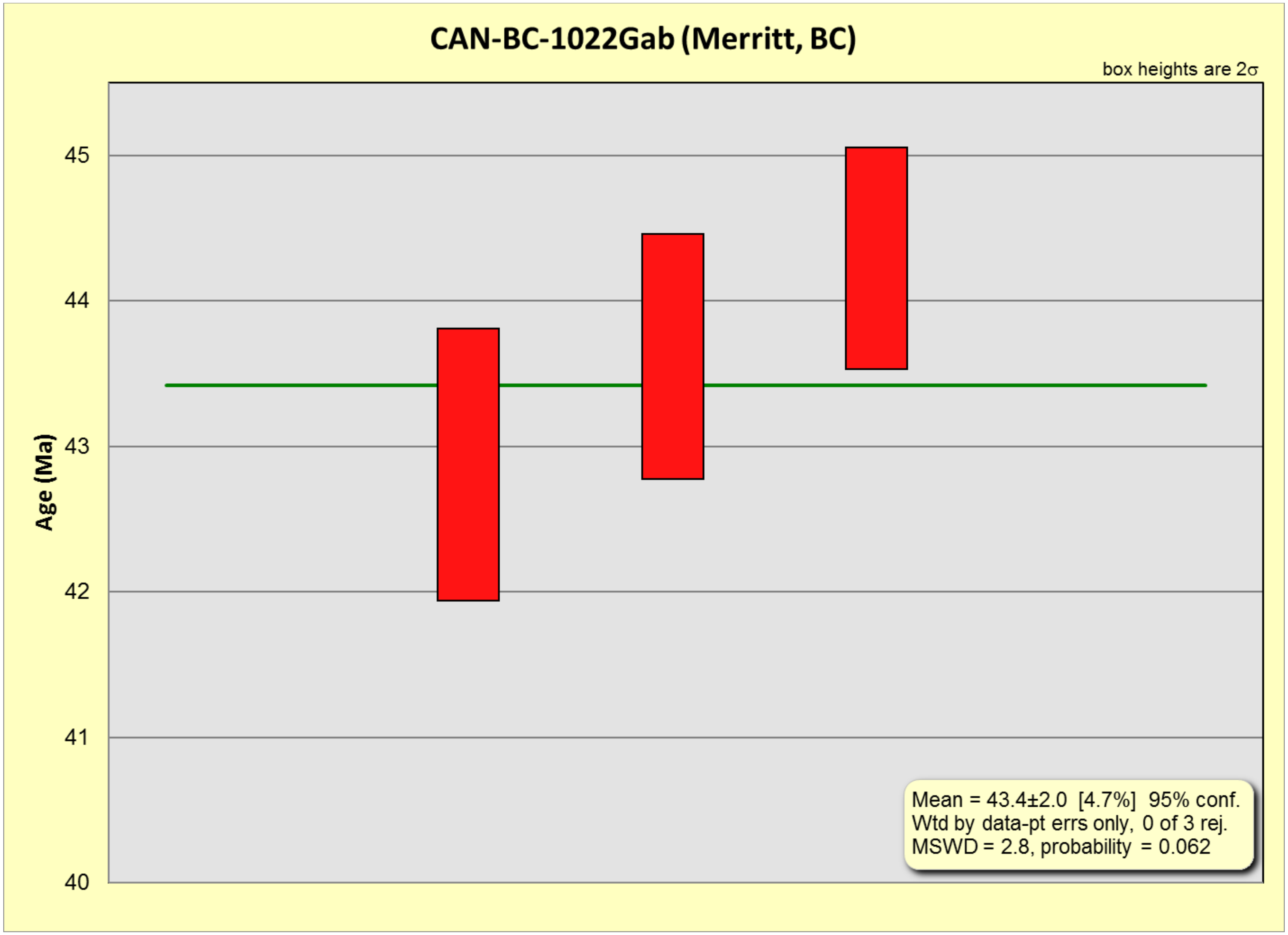

PRINCE1A (Princeton, BC)
box heights are 2σ
Age (Ma)
88
87
86
85
84
83
Mean = 85.7±1.1 [1.3%] 95% conf.
Wtd by data-pt errs only, 0 of 2 rej.
MSWD = 0.116, probability = 0.73

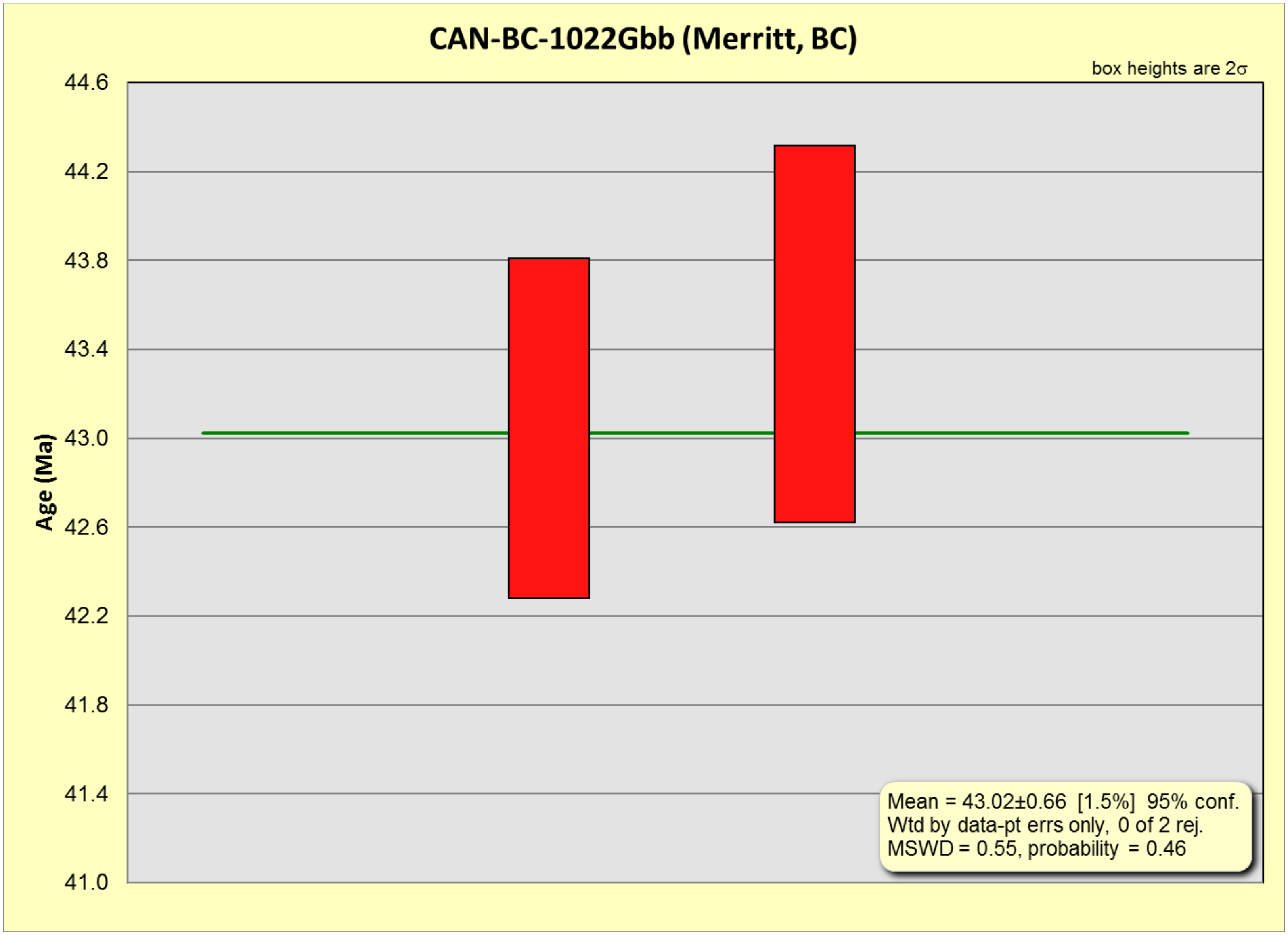


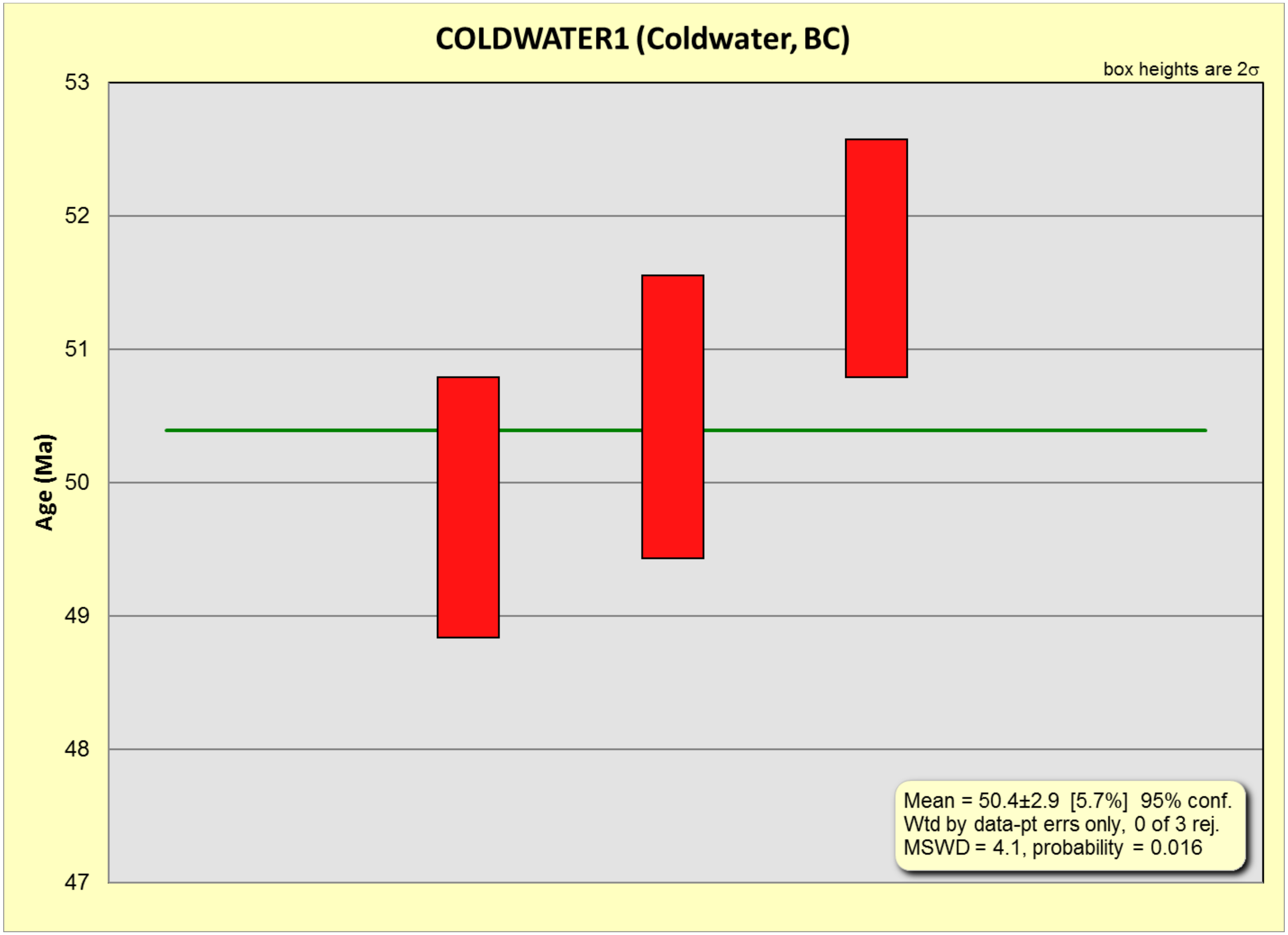
15Ca13B (Blakeburn, BC)
box heights are 2σ
Age (Ma)
48
47
46
45
44
Mean = 46.20±0.68 [1.5%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.86, probability = 0.42


ABBEYRD2 (Kamloops, BC)
box heights are 2σ
Age (Ma)
49.0
48.6
48.2
47.8
47.4
47.0
46.6
46.2
45.8
45.4
45.0
Mean = 47.24±0.65 [1.4%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.25, probability = 0.78


15Ca23B (McAbee, BC)
box heights are 2σ
Age (Ma)
51
50
49
48
47
46
Mean = 48.66±0.87 [1.8%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 0.89, probability = 0.41


CAN-BC-1022Gab (Merritt, BC)
box heights are 2σ
Age (Ma)
45
44
43
42
41
40
Mean = 43.4±2.0 [4.7%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 2.8, probability = 0.062


CAN-BC-1022Gbb (Merritt, BC)
box heights are 2σ
Age (Ma)
44.6
44.2
43.8
43.4
43.0
42.6
42.2
41.8
41.4
41.0
Mean = 43.02±0.66 [1.5%] 95% conf.
Wtd by data-pt errs only, 0 of 2 rej.
MSWD = 0.55, probability = 0.46


COLDWATER1 (Coldwater, BC)
box heights are 2σ
Age (Ma)
53
52
51
50
49
48
47
Mean = 50.4±2.9 [5.7%] 95% conf.
Wtd by data-pt errs only, 0 of 3 rej.
MSWD = 4.1, probability = 0.016