Late Triassic tectonic inversion in the upper Yangtze Block: insights from detrital zircon U–Pb geochronology

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ABSTRACT

Closure of the Paleo-Tethys Ocean during the Middle – Late Triassic saw the Sichuan Basin region, located at the western margin of the Yangtze Block, transition from a passive continental margin into a foreland basin. To understand if and how the regional sediment routing system adjusted to these changes we applied detrital zircon U-Pb analyses to representative stratigraphic samples from the southwestern edge of the Sichuan Basin to monitor sediment provenance. Integration of the results with paleocurrent and published detrital zircon data from other parts of the basin identified a marked change in provenance between Early - Middle Triassic samples, dominated by Neoproterozoic (~700-900Ma) zircons sourced mainly from the Kangdian Oldland to the south, and Late Triassic sandstones that contain a more diverse range of zircon ages similar to the Songpan-Ganzi terrane located further away to the northwest. This change reflects a major drainage adjustment in response to the Late Triassic closure of the Paleo-Tethys Ocean and significant shortening in the Longmen Shan thrust belt and the eastern Songpan-Ganzi terrane. This study highlights the importance of tectonic events in reorganizing drainage and sediment supply system in foreland basins.

INTRODUCTION

The Sichuan Basin, located in the southwest China, shares common borders with three major tectonic terrains – the Qinling-Dabie orogen to the north, the eastern Tibetan Plateau to the west and south, and the eastern Sichuan fold-and-thrust belt to the east (Fig. 1). Numerous structural, geochronological, and sedimentary studies suggested that these areas had experienced a significant phase of crustal shortening and rock exhumation during the Triassic (Zhang *et al*., 1995; Burchfiel *et al*., 1995; Yin, 1996; Meng & Zhang, 2000; Li *et al*., 2003a; Wang *et al*., 2005; Jia *et al*., 2006), and the Sichuan Basin changed from a passive continental margin to a foreland basin.

In the context of these changes, the provenance of sediments deposited in the Sichuan Basin have seen extensive study, much based on detrital zircon U-Pb geochronology work (Deng *et al*., 2008; Chen, 2011; Luo *et al*., 2014; Zhang *et al*., 2015; Shao *et al*., 2016; Li *et al*., 2016). Results from previous work suggest that the sediments in the basin were mainly sourced from the Qinling-Dabie orogen, to the north, and the Longmen Shan thrust belt and the Songpan-Ganzi terrane to the west. However, most of those previous studies focused on the post Late Triassic foreland basin sediments in the western and northern part of the Sichuan Basin. The provenance of pre-Late Triassic passive continental margin clasts remains elusive. Constraining the provenance of the sediments deposited before and after the Late Triassic tectonic inversion could provide significant insights into whether the sediment routing system into the basin had significantly changed by the inversion event.

Previous sedimentary and stratigraphic studies suggested that during the Early – Middle Triassic, the southwestern basin margin was bounded by a highland, as indicated by a lateral sedimentary facies transition from clastic to carbonate away from the basin edge to interior (Liu & Tong, 2001; Long *et al*., 2011; Zhao *et al*., 2012; Wei *et al*., 2014; Tan *et al*., 2014). The highland consists of Neoproterozoic basement and is referred to as the Kangdian Oldland or Kangdian Axis by Chinese researchers (Li, 1963; Luo, 1983; Wang *et al*., 1983; Dai *et al*., 2012; Tan *et al*., 2013) (Fig. 2). The lithology of Late Triassic sediments in the southern Sichuan Basin is similar to those in other parts of the basin, sourced mainly from the Longmen Shan thrust belt and the Qinling-Dabie orogen. This implies that a significant change in sediment provenance might have occurred during the Late Triassic basin inversion. To test this, we applied detrital zircon geochronology to nine Early - Late Triassic sandstone and one volcanic tuff outcrop samples collected from the southwestern part of the Sichuan Basin. The results are interpreted together with previously mapped stratigraphic correlations and paleocurrent data, so as to constrain the paleogeographic evolution of the southwestern margin of the Sichuan Basin during Early - Late Triassic time, and to test if the afore-mentioned tectonic events had influenced the sedimentary delivery network in the basin margin.

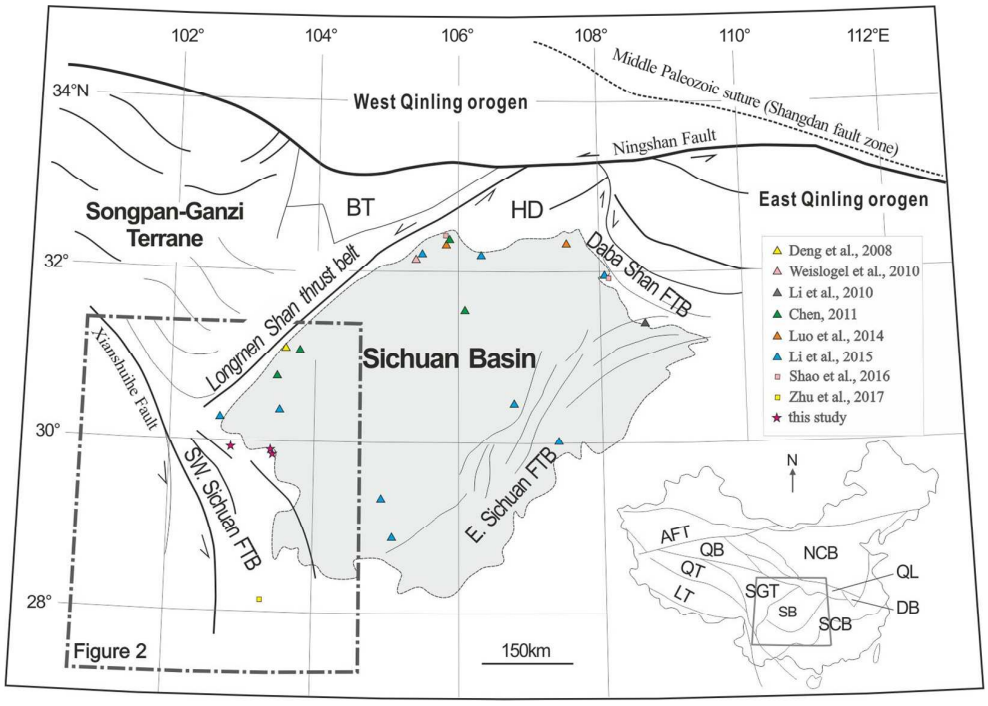

Fig. 1. Simplified tectonic map of the Sichuan Basin and adjacent regions. Sites of previous detrital zircon geochronology studies of the Sichuan Basin are shown in the figure. Inset shows main tectonic elements of China. ATF—Altyn Tagh fault; BT—Bikou terrane; DB—Dabie orogen; FTB—fold-thrust belt; HD—Hannan dome; LT—Lhasa terrane; NCB—North China Block; QB—Qaidam basin; QL—Qinling orogen; QT—Qiangtang terrane; SB—Sichuan Basin; SCB—South China Block; SGT—Songpan-Ganzi terrane. Modified from Tian *et al*. (2012a).

GEOLOGICAL SETTING

The southwestern part of Sichuan Basin is bounded by the Kangdian basement to the south and southeastern Songpan-Ganzi terrane and Longmen Shan to the west (Figs. 1, 2). The geological evolution of these major terranes is summarized below.

Sichuan Basin

The geological evolution of the Sichuan Basin can be divided into three major stages: a passive margin stage characterized by platform carbonates during Paleozoic to Middle Triassic time (Xu *et al*., 1997), a Late Triassic foreland basin characterized predominantly by continental siliciclastic sedimentation and a terrestrial foreland basin or intracratonic stage from the Jurassic to Queternary (Li *et al*., 2003a). The eastern and central Sichuan Basin experienced a prolonged phase of denudation since late Cretaceous time, as shown by thermochronological studies (Tian *et al*., 2012a, b). In this study, we focus on the Triassic strata in the southwest that consists of Feixianguan, Jialingjiang, Leikoupo, Maantang, Xiaotangzi and Xujiahe Formations, from bottom to top.

(1) The marine Feixianguan Formation is widely distributed in the Sichuan Basin, but shows marked lateral lithofacies variations. The formation consists of purple shale and sandy shale, interbedded with grey limestone, oolitic limestone, marl and sandstone in the western Sichuan Basin,

but change into limestone toward the eastern basin (BGMRSP, 1997). The biostratigraphic age of the formation is Early-Early Triassic (based on bivalves and ammonites such as *Claraia, Eumorphotis, Oxytoma, Ophiceratidae*) (BGMRSP, 1997). Several volcanic ash beds at the bottom of the formation compare well with the ash sequence of the Global Stratotype Section (Meishan section) (Huang *et al*., 2017) that has ash beds (~252Ma) (Burgess *et al*., 2014) providing a quantitative constraint for the age of the Feixianguan Formation.

(2) The marine Jialingjiang Formation conformably overlies the Feixianguan Formation, and is mainly composed of limestone and dolomite (BGMRSP, 1997). In the formation, Late-Early Triassic bivalves (including *Eumorphotis, Claraia, Myophoria, Leptochondria*), ammonites (including *Meekoceras, Paranannites, Tirolites, Dinarites*), foraminiferas (Glomospira) and conodonts (including *Hindeodalla, Neospathodus, Neogondolella*) have been discovered (BGMRSP, 1997). The top of the formation is marked by a widespread thin layer (the thickness is 10s cm – 1 m) of altered tuff (named as "green-bean rocks" in early Chinese literature) (Zhu & Wang, 1986), that has been dated to ~247 Ma (Ovtcharova *et al*., 2006; Xie *et al*., 2013; Lehrmann *et al*., 2015).

(3) The marine Leikoupo Formation mainly consists of dolomite and argillaceous dolomite, interbedded with limestone and gypsum layers (BGMRSP, 1997). It contains Middle Triassic bivalves such as *Eumorphotis (Asoella), Myophoria (Costatoria)* and ammonites such as *Progonoceratites, Beyrichites* (BGMRSP, 1997). The boundary between the Leikoupo and Jialingjiang formations is the altered tuff.

(4) The marine Maantang Formation, distributed in the western Sichuan Basin, mainly consists of marine black mudstone and shale interbedded with siltstone, marl, oolitic and bioclastic limestones and sponge reefs (BGMRSP, 1997; Li *et al*., 2003a). It is regarded as Carnian in age on the basis of its fossil content, which includes ammonoid, bivalve and conodont taxa (Shi *et al*., 2016). The Kuahongdong Formation represents equivalent coeval strata in the southwestern margin of the Sichuan Basin, and is composed of conglomerate, mudstone, argillaceous limestone and argillaceous dolomite. Marine fossils identified in the Kuahongdong Formation include bivalves (*Plagiostoma, Cassianella, Halobia, Burmesia*), brachiopods (*Aulacothyropsis*) and ammonoids (*Paratibetites, Clionites, Trachyceras*) (BGMRSP, 1997).

(5) The Xiaotangzi Formation (equivalent to the first member of the Xujiahe Formation), is composed of black marine shale, mudstone, quartz arenite, lithic arenite and siltstone, and can be divided into three parts: a lower part, composed of black shale interbedded with quartz arenite, a middle part, composed of lithic arenite and black shale, and an upper part, composed of arkose. The formation coarsens upwards and is thought to represent a transition from marine shelf to delta environments. It has an early Norian age based on its fossil content, including plants such as *Thaumatopteris sp., Lepidopteris sp., Clathropteris meniscioides*, bivalves (*Burmesia lirata Healey, Halobia cf. fallax Mojs, Myophoria (Costatoria) seperata, Pteria krumbecki, Myophoria seperata*) and spores (*Protoanemitee, Taeniaesporites, Discisporites*) (Li *et al*., 2003a).

(6) The Xujiahe Formation conformably overlies the Xiaotangzi Formation in the western Sichuan Basin, and unconformably overlies Middle Triassic limestone of the Leikoupo Formation in the central and eastern Sichuan Basin. Widely distributed in the Sichuan Basin, the lithology and facies of the formation changes from coarse-grained sediments, including alluvial conglomerate bodies in front of the Longmen Shan thrust belt, to fine-grained lacustrine deposits in the basin interior. The depocenter is located in front of the middle section of the Longmen Shan thrust belt where the Xujiahe Formation is up to 4 km thick (Meng *et al*., 2005). Depositional age of the formation is late Norian to

Rhaetian based on the fossil content that include plants, spores and bivalves (WGCMSPISB, 1984; Li *et al*., 2003a).

Previous sedimentary studies suggested that the clastic deposits of Feixianguan, Jialingjiang and Leikoupo formations in the southwestern margin of the Sichuan Basin sourced from the south, as shown by a facies transition from clastic to carbonate deposits from the margin to the interior of the basin (Feng *et al*., 1997; Tan *et al*., 2014; Sun *et al*., 2015). The Kangdian Oldland might be the source of Upper Triassic sediments, as suggested by studies on the detrital mineral assemblage, sedimentary system and conglomerate composition (Xie *et al*., 2006; Jiang *et al*., 2007; Shi *et al*., 2010). However, nonmarine Upper Triassic sediments unconformably overlie rocks of the Kangdian Oldland (BGMRSP, 1991) indicating that the region was likely an area of deposition rather than erosion (Liu & Tong, 2001; Yi *et al*., 2014).

Kangdian Oldland

The Kangdian Oldland is the western margin of the Yangtze Block and extends for over 700 km from the Kangding in the north to Yuanmou in the south (Zhou *et al*., 2002a; Zhu *et al*., 2011), is located in the western margin of the Yangtze Block (Fig. 2). It mainly consists of Precambrian basement, overlain by marine Paleozoic cover and locally by Upper Triassic to Cenozoic terrestrial sediments (Fig. 2, BGMRSP, 1991). Extensive Neoproterozoic magmatism (mainly ~740–870 Ma) is probably associated with the breakup of the supercontinent Rodinia due to a mantle plume (Li *et al*., 2003b), or the subduction of the Mozambique oceanic slab beneath the western margin of the Yangtze Block (Zhao & Zhou, 2007; Sun *et al*., 2009).

There is a debate on the geological evolution of Kangdian Oldland throughout the Paleozoic and Mesozoic. One school of thought is that the oldland was a region of erosion between the Ordovician and Carboniferous (Li, 1963), followed by a rift stage from Late Permian to Jurassic (Luo, 1983). A different point of view is that the Paleozoic - Mesozoic geological evolution of the region can be divided into three stages: a stable marine platform from the Cambrian to Early Permian, an uplift stage affected by Emeishan mantle plume from Late Permian to Middle Triassic, and foreland basin from the Late Triassic to Jurassic (Feng *et al*., 1994; Wang *et al*., 1994; He *et al*., 2003).

Longmen Shan

The Longmen Shan approximately 500km long and 30-50km wide, defines a major part of the highly dissected eastern margin of Tibetan Plateau. Neoproterozoic basement rocks, surrounded by Paleozoic sedimentary strata, outcrop in the Longmen Shan. Zircon U-Pb analyses of the basement rocks yielded ages of 770-890 Ma (Fu *et al*., 2013).

The Longmen Shan thrust belt experienced three phases of intra-continental orogenic shortening in the early Mesozoic and late Cenozoic (e.g., Burchfiel *et al*., 1995; Yan *et al*., 2011). Geochronological data suggests that the first phase of deformation had initiated before or at 237-190 Ma (Huang *et al*., 2003; Weller *et al*., 2013): (i) the oldest U–Th–Pb monazite and Sm–Nd garnet ages (204-190 Ma), derived from metamorphosed rocks in the Danba Antiform, immediately south of the Longmen Shan, were interpreted as dating the timing of Barrovian metamorphism associated with the deformation (Huang *et al*., 2003; Weller *et al*., 2013). (ii) muscovite $^{40}Ar/^{39}Ar$ dating of early Paleozoic schistose rocks from the northern Longmen Shan yielded ages between 237-208 Ma, which were interpreted as minimum age constraints for Mesozoic shortening (Yan *et al*., 2011).

A recent structural and synkinematic mica $^{40}Ar/^{39}Ar$ geochronological study by Tian *et al*. (2016) suggest a late Cretaceous – early Paleogene phase of deformation, characterized by contemporaneous hinterland-ward shearing and foreland-ward thrusting in the back and front sides of the Longmen Shan thrust belt, respectively. In the late Cenozoic, pre-existing structures were reactivated by the eastward growth of the Tibetan Plateau (e.g. Wang *et al*., 2012; Tian *et al*., 2013).

Songpan-Ganzi terrane

More than 80% of the Songpan-Ganzi terrane is covered by thick Triassic turbidites, which was mainly sourced from the Qinling-Dabie orogen to the northeast and terranes to the north (Enkelmann *et al*., 2007; Ding *et al*., 2013). By latest Triassic, the Songpan - Ganzi basin had shallowed, as documented by coeval coal-bearing clastic deposits (BGMRSP, 1991; Chang, 2000). In response to the closure of the paleo-Tethys Ocean the flysch basin evolved into a fold belt (Xu *et al*., 1992; Roger *et al*., 2011). Except for Pliocene - Quaternary glacial and fluvial sediments, Jurassic – Cenozoic deposits, are regionally absent from the terrane (Figs. 1, 3).

The Songpan-Ganzi terrane was intruded by Upper Triassic–Jurassic granitoids (Roger *et al*., 2011). Metamorphic grade varies across the Songpan-Ganzi terrane. In general, the metamorphic overprint is relatively strong along the terrane margins where mudstones were metamorphosed to phyllite, but weak within the interior (Chang, 2000).

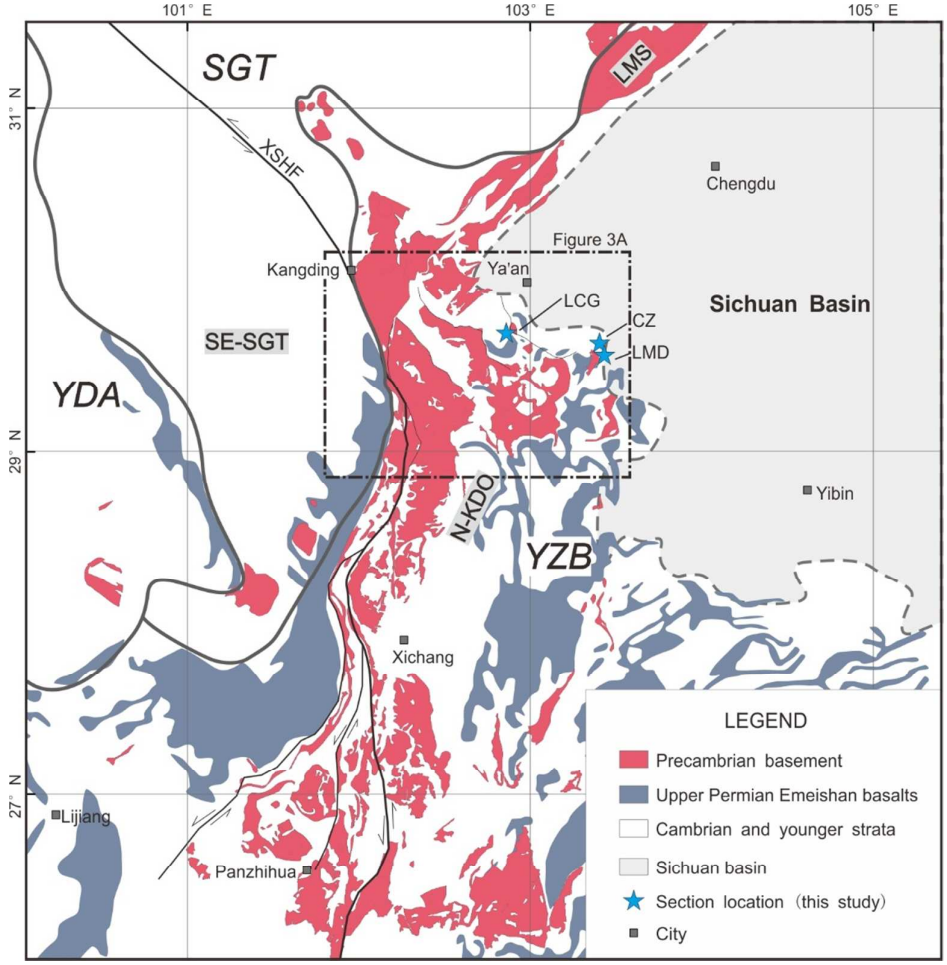

Fig. 2. Geological map of the western Yangtze Block. Modified form Wang & Pan, 2013.

LMS—Longmen Shan thrust belt; N-DKO—Northern Kangdian Oldland; SE-SGT— southeastern Songpan-Ganzi terrane; SGT—Songpan-Ganzi terrane; YZB—Yangtze Block; YDA—Yidun Arc. The distribution of the Upper Permian Emeishan basalts is modified from Xu *et al*., 2004.

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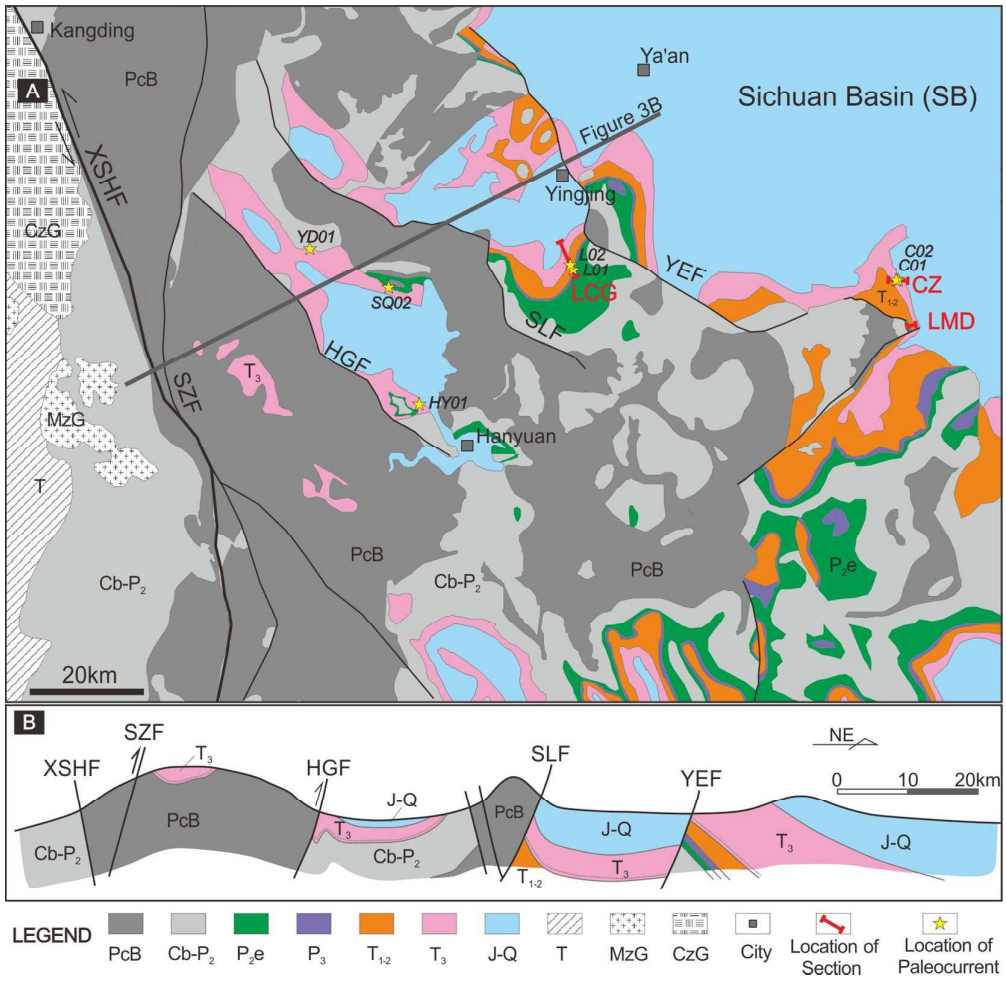

Fig. 3. Geological sketch map of the study area (A) and structural profile of northern Kangdian Oldland (B). The location of Fig.3A is shown in Fig. 2. PcB—Precambrian Basement; Cb-P_2—Cambrian- Middle Permain; P_2e—Upper Permain Emeishan basalts; P_2 —Upper Permian Xuanwei Formation; T_{1-2}—Lower and Middle Triassic; T_3—Upper Triassic; J-Q—Jurassic to Quaternary; T—Triassic in southeastern Songpan-Ganzi terrane; CzG—Cenozoic Granite; HGF—Hanyuan-Ganluo fault; MzG—Mesozoic Granite; SLF—Sanhe-Leibo fault; SZF—Shimian-Zhaojue fault; XSHF—Xianshuihe fault; YEF—Yingjing-Emei fault. Red solid lines and text makes the localities of the Longcanggou (LCG), Chuanzhu (CZ) and Longmendong (LMD) sections, from which samples were collected. Fig. 3A is modified from BGSP (1974). Fig. 3B is modified from Chen *et al*., 2011.

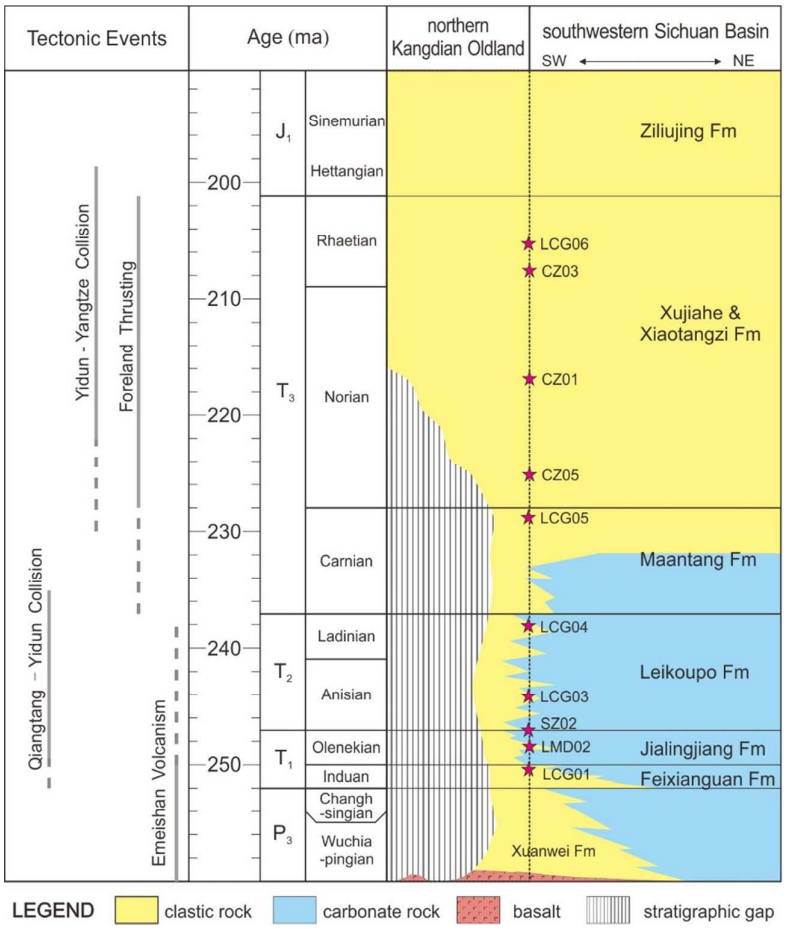

Fig. 4. Stratigraphic nomenclature, age of the southern Sichuan Basin and northern Kangdian Oldland. Tectonic events are after Hou *et al*. (2004), Reid *et al*. (2005), and Xu *et al*. (2008), Weislogel *et al*. (2010), Wang *et al*. (2011). Time scale is from Gradstein *et al*.(2012). P_3—the Late Permian; T_1—the Early Triassic; T_2—the Middle Triassic; T_3—the Late Triassic; J_1—the Early Jurassic.

PREVIOUS DETRITAL ZIRCON STUDIES

Over the past decade, the provenance of the Upper Triassic clastic sediments in the Sichuan Basin has been intensively studied, especially by detrital zircon geochronology (Fig. 1), but this has led to conflicting conclusions. Deng *et al*. (2008) reported age spectra of four Upper Triassic sandstone samples from the western Sichuan Basin and the eastern Songpan-Ganzi terrane, and suggested that the Upper Triassic Xujiahe Formation was sourced from the Songpan-Ganzi terrane and Longmen Shan thrust belt. By contrast the study of Chen (2011) based in the northern and western parts of the Sichuan Basin indicated that the Qinling orogen to the north was the main source of sediments. Recently work by Luo *et al*. (2014), Zhang *et al*., (2015) and Shao *et al*., (2016), suggest that the Longmen Shan thrust belt and the Songpan-Ganzi terrane in the west and the Qinling-Dabie orogen in the north sourced the Upper Triassic sediments in the western and northern Sichuan Basin, respectively. Zhang *et al*. (2015) and Shao *et al*. (2016) also indicated the minor role of the north Yangtze Block in supplying sediments to the northern Sichuan Basin. Shao *et al*. (2016) suggested that sediments of the western, southern and

eastern parts of basin shared the same sources that include the southern North China Block and Qinling orogen, and the eastern Songpan-Ganzi terrane via the Longmen Shan thrust belt. Zhu *et al*. (2017) reported age spectra of four Middle-Upper Triassic sandstone samples from the southwestern Sichuan Basin, and suggested that Middle Triassic sediments mainly sourced from the Kangdian Oldland and Emeishan Large Igneous Province to the south, whereas Upper Triassic sediments mainly from the Songpan-Ganzi terrane and Yidun Arc to the west with a minor component from the Qinling orogen to the north and Jiangnan Xuefeng thrust belt (southeastern Yangtze Block) to the east. Importantly, all these previous studies focused on the Upper Triassic; little is known about the source of the Lower Triassic clastic rocks. One of the core aims of this study therefore, is to try and resolve the ongoing debate about the sources of the Triassic sediments.

SAMPLING AND ANALYTICAL METHODS

Ten samples were collected, including two samples from the Early Triassic Feixianguan (T_1f) and Jialingjiang Formation (T_1j), one volcanic tuff sample from the boundary between the Jialingjiang Formation (T_1j) and Leikoupo (T_2l), two samples from the Middle Triassic Leikoupo Formation (T_2l) and five samples from the Upper Triassic Xiaotangzi (T_3xt) and Xujiahe formations (T_3x). These samples were collected from three sections, namely the Longmendong and Chuanzhu sections in the Emeishan area, and Longcanggou section in Yingjing area (Figs. 3, 5 and 6).

Where possible, more than 100 U/Pb ages were derived by LA-ICP-MS using the facilities at the London Geochronology Centre, University College London, which include a New Wave NWR193 excimer laser ablation system and an Agilent 7700x quadrupole mass spectrometer. The laser was set to produce ~2.5 J/cm^2 energy density at 8 Hz repetition rate for 25 seconds. The spot diameter was set to 25 μm for all analyses. Repeated measurements of internal U/Pb age standard Plešovice [TIMS reference age of 337.13 ± 0.37 Ma (Sláma *et al*., 2008)] and NIST-610 silicate glass (Jochum *et al*., 2011) were used to correct for instrumental mass bias and laser-pit-depth-dependent isotopic fractionation. GJ-1 (Jackson *et al*., 2004) and 91500 zircon (Wiedenbeck *et al*., 2004) were used as external standards. Data reduction was processed using the GLITTER software package (Griffin *et al*., 2008).

The paleocurrent data were determined in the field based on cross-bedding and ripples in sandstone beds. The orientations of trough cross laminations were measured using the method described by DeCelles *et al*. (1983).

RESULTS

Stratigraphy and sedimentology

Provided below is a brief description of the sedimentary features of each studied formation, which have been dated mostly by paleontology and locally by isotopic geochronology. Worth noting is that the Longmendong and Chuanzhu sections in the Emeishan have been intensively-studied by previous work (Wang & Ceng, 1982; Lin *et al*., 1982; Zhao *et al*., 1996).

Lower Triassic (Feixianguan and Jialingjiang Formation)

The Lower Triassic strata studied here are from the Longcanggou and Longmendong sections (Figs. 5 and 6). The Feixianguan Formation (~130 m and ~180 m thick) conformably overlies the Upper Permian Xuanwei Formation. The Feixianguan Formation consists of purple sandstone, fine sandstone interbedded with conglomerate and sandy conglomerate. Sedimentary features include large-scale trough cross-bedding, tabular cross-bedding, parallel bedding and scour structures that collectively indicate fluvial facies (Fig. 6). The paleocurrent in the Feixianguan formation is eastward, as determined from cross-bedding in sandstone beds (Fig. 5).

The Jialingjiang Formation (~110 m and ~240 m thick), consists of dolomites, limestones and mudstones interbedded with sandstones and conglomerates in the southwestern Sichuan Basin. This lithology is very different from the coeval carbonate deposits (dolomites and limestones) in the main part of Sichuan Basin. The formation can be divided into two parts: the lower part, composed of purple grey, greenish grey lithic sandstones and interbedded with limestones, the upper part, composed of dolomites and limestones (Fig. 6). Sedimentary features indicate upward retrogradation from fluvial to tidal flat facies (Lin *et al*., 1982).

Middle Triassic (Leikoupo Formation)

The Middle Triassic Leikoupo Formation is also from the Longcanggou and Longmendong sections. The formation (~50 m and ~460 m thick) conformably overlies altered tuff (Zhu & Wang, 1986).

The formation is composed of dolomites and limestones in the Longmendong section, but of dolomites interbedded with sandstones and mudstones in the Longcanggou section (Figs. 5, 6). Previous studies suggested that the Leikoupo Formation in the study area represents a tidal flat facies, influenced by input of terrigenous clastics (Zhao *et al*., 1996; Tan *et al*., 2014).

Upper Triassic (Maantang, Xiaotangzi and Xujiahe Formations)

The Upper Triassic strata includes the Maantang, Xiaotangzi and Xujiahe Formations, are studied here in the Longcanggou and Chuanzhu sections. In the Longcanggou section, the Mantang Formation is ~40 m thick and consists of conglomerates, sandstones, mudstones interbedded with dolomites (Fig. 5, BGSP, 1974); while it is only ~26m thick in the Chuanzhu section and composed of grey black mudstone interbedded with argillaceous limestone (Fig. 6). The Maantang Formation has a parallel unconformable contact with the overlying strata and the underlying Leikoupo Formation (Li *et al*., 2014). There is much debate as to whether the sedimentary environment of the Maantang Formation in the Sichuan Basin represents a shallow shelf (Deng *et al*., 1982), littoral (Zhao *et al*., 1996), carbonate ramp (Xu *et al*., 1996; Li *et al*., 2014), reef, lagoon, tidal flat, or delta (Shi *et al*., 2015).

The Xiaotangzi and Xujiahe Formations are ~800 m and ~730 thick in the Longcanggou and Chuanzhu sections (Fig. 5) (WGCMSPISB, 1984). They mainly consist of grey sandstones, gray black siltstones, black mudstones and interbedded with coal. Previous studies suggested that the two formations were deposited in a shallow lacustrine and delta environment (Lin *et al*., 2006a; Jiang *et al*., 2007; Li *et al*., 2014).

The paleocurrent data, measured in the Longcanggou section (L02), Chuanzhu section (C01, C02) and Hanyuan area (YD01, SQ02, HY01) from cross-bedding and current ripples in sandstone strata,

indicates eastward and southeastward paleocurrent directions for the Xiaotangzi and Xujiahe Formations (Fig.3, Fig. 5).

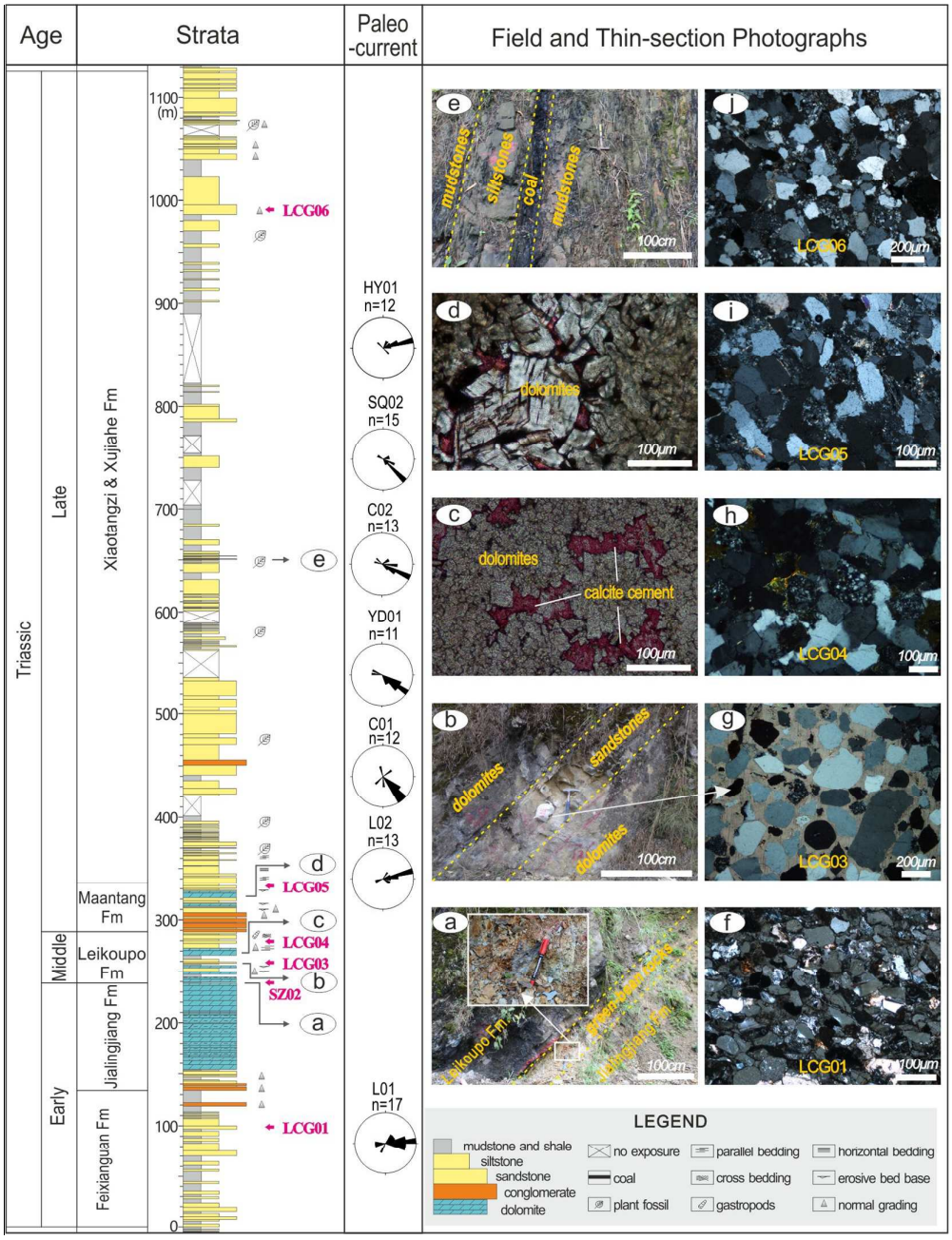

Fig. 5. Stratigraphy, rose diagrams of paleocurrent and thin-sections for the Triassic Longcanggou section. The locations of paleocurrent measurements are shown in Fig. 3. (a) Boundary (the " altered tuff") between the Lower Triassic Jialingjiang Formation and Middle Triassic Leikoupo Formation; (b) Dolomites interbedded between sandstones (sample LCG03); (c) Thin-section photograph of dolomites from the Leikoupo Formation; (d) Dolomites from the upper Mantang Formation; (e) Siltstones and mudstones interbedded with coal from upper part of Xujiahe Formation; (f, g, h, i, and j) Thin-sections

of sandstone from the LCG01, LCG03, LCG04, LCG05 and LCG06, collected from the Feixianguan (LCG01), Leikoupo (LCG03, LCG04), Mantang (LCG05) and Xujiahe (LCG06) Formations.

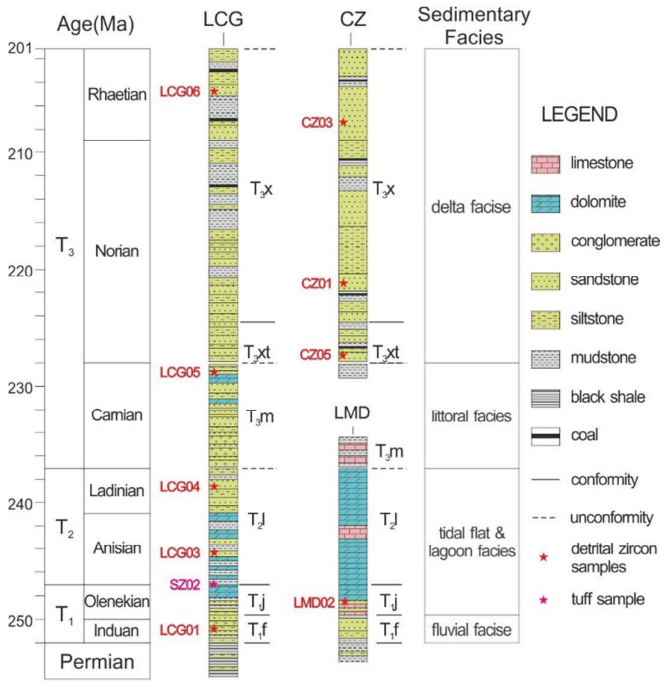

Fig. 6. Triassic stratigraphy of the western Sichuan Basin. CZ (Chuanzhu) section is compiled from (WGCMSPISB, 1984), LMD (Longmendong) section is compiled from (Lin *et al*., 1982; Xu *et al*., 1997; BGMRSP, 1997), the sedimentary facies of Lower and Middle Triassic are after Zhao *et al*., 1996; T_1f— Feixianguan Formation; T_1j—Jialingjiang Formation; T_2l—Leikoupo Formation; T_3m—Maantang Formation; T_3xt—Xiaotangzi Formation; T_3x—Xujiahe Formation; T_1—the Early Triassic; T_2—the Middle Triassic; T_3—the Late Triassic. Time scale is from the Gradstein *et al*. (2012).

Zircon U-Pb isotopic results

In total, 1132 detrital zircons from nine detrital samples analyzed in this study. The U–Pb data for each sample are presented in supplementary Table. Below, we discuss only ages that are concordant in the range of +5% to -15%. The data are visualized as kernel density estimate (KDE, Vermeesch, 2012) plots (Fig. 7).

Altered tuff

Sample SZ02 (102°51′42.92″ E, 29°40′47.12″N) of the altered tuff was collected from the boundary between the Leikoupo and Jialingjiang formations in the Longcanggou section. 30 of 34 analyses yielded concordant ages (in the range of +5% to -15%). The data are concordant within analytical error and define a weighted mean $^{206}Pb/^{238}Pb$ age of 246.5 ±1.7 Ma (n=26) (Fig. 7), which is similar to the previous studies in other sites of the Yangtze Block (Ovtcharova *et al*., 2006; Xie *et al*., 2013; Lehrmann *et al*., 2015). The complete U–Pb isotopic data and calculated dates are presented in supplementary Table 1.

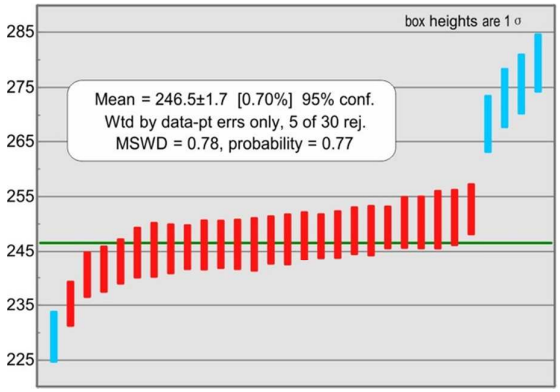

Fig. 7. U–Pb zircon ages of the altered tuff (sample SZ02 this study). Blue dates are rejected by ISOPLOT for calculating the weighted mean age.

Lower Triassic Feixianguan and Jialingjiang Formations

Sample LCG01 (102°51′42.92″ E, 29°40′47.12″N), a grey-green fine sandstone, was collected from the Feixianguan Formation in the Longcanggou section. 99 of 156 analyses yielded concordant ages (in the range of +5% to -15%), which exhibit a wide spectrum from ca. 243±3Ma to 2.4Ga, 92% of which are between 240 - 1050 Ma, the KDE plot of this sample shows a major peak at ~800Ma, and three minor peaks at ~248Ma, ~510Ma and ~950Ma (Fig. 8a).

Sample LMD02 (103°25′5.73″ E, 29°34′46.76″N), a grey-purple coarse sandstone, was collected from the Jialingjiang Formation in Longmendong section. Among 129 analyses, 123 analyses yield concordant ages (in the range of +5% to -15%). Nearly all ages are between 730 - 880 Ma, showing a dominant peak at ~800 Ma in the KDE plot (Fig. 8b).

Middle Triassic Leikoupo Formation

Two samples (grey coarse sandstone), LCG03 (102°51′35.19″ E, 29°40′51.35″N) and LCG04 (102°51′35.05″ E, 29°40′51.18″N), were collected from the Leikoupo Formation in Longcanggou section (Fig. 6). 136 out of 153 single zircon dates of the sample LCG03 are concordant. The ages exhibit a wide range from ca. 242±3Ma to 2.5Ga, with 74% lying between 730 Ma and 880 Ma, showing a dominant mode at ~800Ma (Fig. 8c), similar to the lower sample LMD02 from Jialingjiang Formation.

152 out of 157 single zircon dates of the sample LCG04 are concordant. The ages exhibit a wide range from ca. 233±3Ma to 3.0Ga; but most of them fall between 230 Ma to 1050 Ma (89%). The KDE plot of the sample shows a mode at ~800Ma, and three minor peaks at ~248Ma, ~510Ma and ~950Ma (Fig. 8d).

Upper Triassic Maantang and Xujiahe Formation

Two samples (grey sandstone), LCG05 (102°51′34.05″E, 29°40′51.18″N) and LCG06 (102°51′34.05″E, 29°40′51.18″N), were collected from the Maantang Formation and the upper part of Xujiahe Formation in the Longcanggou section (Fig. 6). 149 of 154 single zircon dates of the sample

LCG05 are concordant. Most ages cluster at ~1800 Ma, with minor peaks at ~250 Ma, ~800 Ma and ~2500 Ma (Fig. 8e). Their age spectra are significantly different from the lower ones (Fig. 8a-d). 99 of 110 single zircon dates of the upper Triassic sample LCG06 are concordant. The KDE plot shows five peaks at ~246 Ma, ~440 Ma, ~758 Ma, ~1870 Ma and ~2480 Ma, respectively (Fig. 8f).

Three samples (grey sandstone), CZ05 (103°24′6″E, 29°37′23″N), CZ01 (103°24′22″E, 29°37′20″N), and CZ03 (103°24′43.2″E, 29°37′27″N), were collected from the upper part of the Xujiahe Formation in the Chuanzhu section (Fig. 6). The KDE plots of these samples are similar, showing peaks at ~276 Ma, ~429 Ma, ~1030 Ma, ~1860 Ma and ~2470 Ma (Fig. 8g-i).

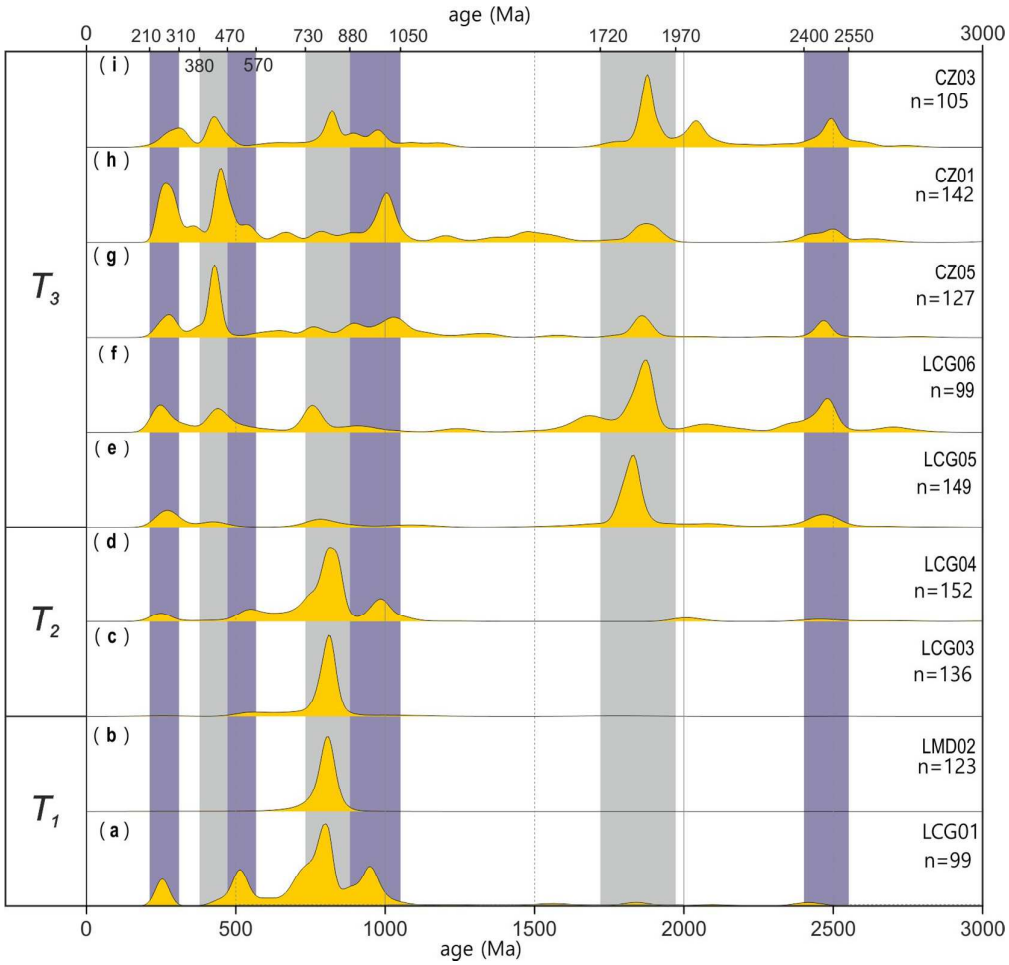

Fig. 8. Kernel Density Estimation (KDE) plots of the detrital zircon U-Pb data for samples LCG01, LMD02, LCG03, LCG04, LCG05, LCG06, CZ05, CZ01 and CZ03, respectively. T_1, T_2 and T_3 are Early, Middle and Late Triassic, respectively.

DISCUSSION

Detrital sources

Zircon spectra of potential sources

As suggested by previous detrital zircon studies of the Sichuan Basin (Deng *et al*., 2008; Weislogel *et al*., 2010; Chen, 2011; Luo *et al*., 2014; Zhang *et al*., 2015; Shao *et al*., 2016; Zhu *et al*., 2017), potential source terrains for the Triassic strata include southeastern Songpan-Ganzi terrane (SE-SGT), northern Kangdian Oldland (N-KDO), southern Kangdian Oldland (S-KDO), Longmen Shan thrust belt (LMS), Qinling orogen (QL), southeastern Yangtze Block (SE - YZB) (Figs. 9 and 10). We compiled zircon U-Pb ages of the crystalline and clastic rocks exposed in these potential source areas (Fig. 9). The detrital zircon U-Pb age spectrum of the southeastern Songpan-Ganzi terrane shows four major peaks at ~255Ma, ~ 435Ma, ~760Ma, ~1860Ma, and two minor peaks at ~1020Ma, ~2450Ma (Fig. 9f). The northern Kangdian Oldland is characterised by two major peaks at ~800Ma and ~930Ma, and a minor peak at ~260Ma (Fig. 9g); whereas the southern Kangdian Oldland is more complex, with peaks at ~810Ma, ~1840Ma, and three minor peaks at ~265Ma, ~2310Ma and ~2430Ma (Fig. 9h). The Longmen Shan thrust belt produces three major peaks at ~520Ma, ~760M and, ~945Ma (Fig. 9i). The Qinling orogen is characterised by three major peaks at ~440Ma, ~815Ma and ~ 1995Ma, and three minor peaks at ~260Ma, ~1830Ma and ~2465Ma (Fig. 9j). The southeastern Yangtze Block yields a dominant peak at ~815Ma (Fig. 9k).

Detrital sources of the Lower and Middle Triassic strata

Detrital zircon age spectra of four Lower and Middle Triassic samples (LCG01, LCG03, LCG04, LMD02) is similar and characterized by a mode at ~810 Ma, with three minor peaks at ~255Ma, ~535Ma and ~970Ma (Fig. 8). To facilitate data interpretation, the ages are combined into a single KDE plot as Fig. 8a.

The KDE plots of the Lower - Middle Triassic samples are very similar to the northern Kangdian Oldland and the southeastern Yangtze Block (Figs. 9a, g, k). In addition, detrital zircon age spectra of Lower and Middle Triassic samples include a minor peak at ~535 Ma which only occurs in the Longmen Shan (Fig. 9a, i), indicating the Longmen Shan was possibly a source of sediments for the lower - middle Triassic deposits. Considering the eastward paleocurrent directions of these strata (Fig. 5), we infer that the northern Kangdian Oldland was the main source of the Lower and Middle Triassic sandstones during the Lower to – Middle Triassic. However, we cannot rule out the southeastern Yangtze Block as a possible source. This explanation would require a long drainage system to deliver the sediments into the southwestern Sichuan Basin via the northern Kangdian Oldland, because the southeastern Yangtze Block and the southwestern Sichuan Basin is separated by deep waters, as indicated by coeval deposits composed mainly of carbonate, shale and mudstone, with a minor amount of siltstone (Hu *et al*., 2010; Tan *et al*., 2014; Sun *et al*., 2015).

Detrital sources of the Upper Triassic

In contrast to the Lower - Middle Triassic samples, detrital zircons from the Upper Triassic

samples (LCG05, LCG06, CZ05, CZ01, CZ03), which exhibit southeastward paleocurrent directions (Fig. 5), are characterized by multiple age peaks at ~270 Ma, ~435 Ma, ~775Ma and ~1010 Ma, ~1840Ma and 2480 Ma (Fig. 9b). Detrital zircon data of the coeval sediments in the southwestern, western and northern Sichuan Basin, as reported in previous studies, yield similar age spectra (Figs. 9c, d, e), indicating that they may have the same or similar sources, including the Qinling orogen, Longmen Shan thrust belt, and eastern Songpan-Ganzi terrane (Chen, 2011; Luo *et al*., 2014; Zhang *et al*., 2015; Shao *et al*., 2016).

Similar age spectra are shown by the Triassic turbidites of the southeastern Songpan-Ganzi terrane, which may have experienced marine deposition (Weislogel *et al*., 2010; Ding *et al*., 2013; Zhang, 2014), and share the similar sources as the Sichuan Basin. Alternatively, the eastern Songpan-Ganzi terrane may have experienced a phase of shortening in response to the Upper Triassic intracontinental orogeny along the Longmen Shan thrust belt (Li *et al*., 2003a; Yan *et al*., 2011; Zheng *et al*., 2016). From this perspective, it is speculated that the eastern Songpan-Ganzi terrane might also be a source region for the Upper Triassic detritus of the Sichuan Basin.

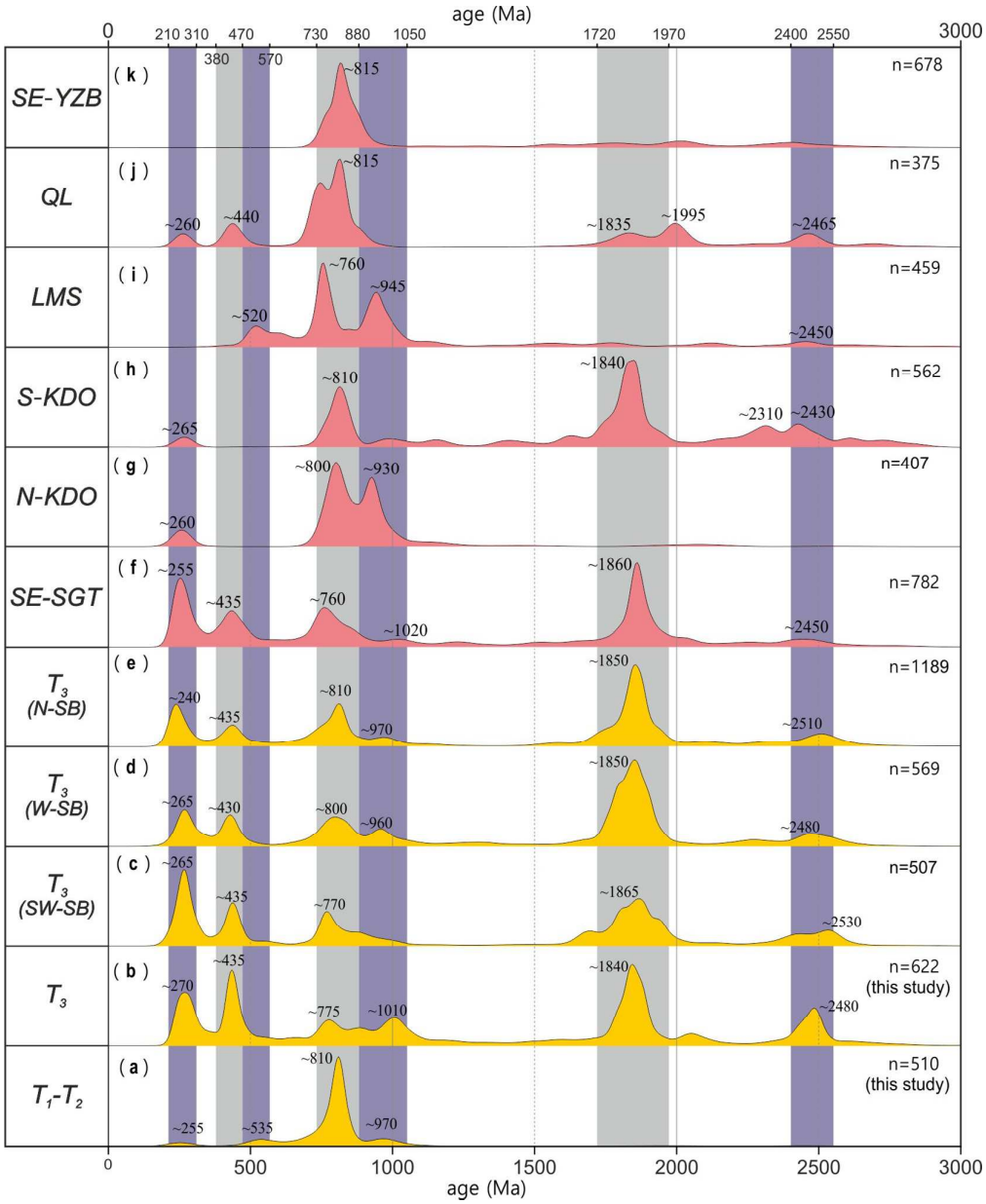

Fig. 9. KDE plots for the detrital zircon ages of the Triassic sediments of the Sichuan Basin and potential source areas. (a-b) Age spectra of the Lower-Middle and Upper Triassic sediments in the southwestern Sichuan Basin. (c-e) Spectra of the Upper Triassic sediments in the southwestern, western and northern Sichuan Basin, reported in previous studies (Deng *et al*., 2008; Weislogel *et al*., 2010; Chen, 2011; Luo *et al*., 2014; Zhang *et al*., 2015; Shao *et al*., 2016; Zhu *et al*., 2017). Spectra of potential areas, including (f) SE-SGT (southeastern Songpan-Ganzi terrane), compiled from sedimentary rocks (Weislogel *et al*., 2010; Ding *et al*., 2013; Zhang, 2014), (g) N-KDO (northern Kangdian Oldland), compiled from both crystalline (Roger & Calassou, 1997; Guo *et al*., 1998; Shen *et al*., 2000; Li *et al*., 2001; Li *et al*., 2002; Zhou *et al*., 2002b; Shen *et al*., 2003; Li *et al*., 2003b; Zhou *et al*., 2006a; Lin *et al*., 2006b; Yan *et al*., 2006; Zhao *et al*., 2006; Geng *et al*., 2007; Huang *et al*., 2009; Lin, 2010; Ruan, 2013; Meng *et al*., 2015) and sedimentary rocks (Zhou *et al*., 2006a; He *et al*., 2007; Sun *et al*., 2009), (h) S-KDO (southern Kangdian Oldland), compiled from sedimentary rocks (He *et*

al., 2007; Wang *et al*., 2012), (i) LMS (Longmen Shan thrust belt), compiled from both crystalline (Zhou *et al*., 2006b; Meng *et al*., 2015) and sedimentary rocks (Duan *et al*., 2011; Chen *et al*., 2016), (j) QL (Qinling orogen), compiled from both crystalline and (Li *et al*., 2016) and sedimentary rocks (He *et al*., 2007; Wang *et al*., 2013a), (k) SE-YZB (southeastern Yangtze Block), compiled from sedimentary rocks (Wang *et al*., 2010; Wang & Zhou, 2012).

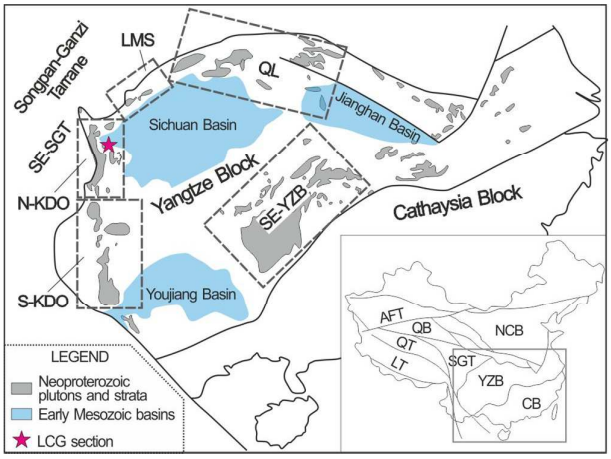

Fig. 10. Map of potential source areas for sediments of the Sichuan Basin, modified after (Li *et al*., 2003b; Sun *et al*., 2009). ATF—Altyn Tagh fault; CB—Cathaysia Block; LMS—Longmen Shan thrust belt; LT—Lhasa terrane; NCB—north China Block; YZB—Yangtze Block; N-KDO—Northern Kangdian Oldland; QB—Qaidam basin; QL—Qinling orogen; QT—Qiangtang terrane; SE-YZB—southeastern Yangtze Block; S-KDO—southern Kangdian Oldland; SE-SGT—southeastern Songpan-Ganzi terrane.

Palaeographic and tectonic implications

The Upper Triassic change in detrital zircon age spectrum probably resulted from the impacts of tectonic transition from a passive continental margin to a foreland basin in response to the intra-continental shortening in the upper Yangtze Block.

Lower - Middle Triassic detritus mainly sourced from the northern Kangdian Oldland, as shown by the detrital zircon age and paleocurrent data (Fig. 11a). The uplift and erosion of the northern Kangdian Oldland is a response to the dynamic topography of the eruption of the Emeishan large igneous province, constrained to ~260 Ma by Ar-Ar and zircon U-Pb data (Ali *et al*., 2002; Zheng *et al*., 2010; Huang *et al*., 2016). Erosion of the northern Kangdian Oldland might trace back to the latest Permian, as indicated by the Emeishan basalt detritus in the Permian Xuanwei Formation (Xu *et al*., 2004; He *et al*., 2007; He *et al*., 2010; Luo *et al*., 2012).

Upper Triassic sediments in the Sichuan Basin was mainly sourced from the coeval orogens and fold-and-thrust belts surrounding the basin, as suggested by previous studies (Fig. 11b) (Deng *et al*., 2008; Chen, 2011; Luo *et al*., 2014; Zhang *et al*., 2015; Shao *et al*., 2016; Zhu *et al*., 2017). The eastern Songpan-Ganzi terrane might also have been significantly shortened and unroofed, providing detritus for the western and southern Sichuan Basin. This inference is supported by the similar age spectra between the terrane and the basin sediments. The Late Triassic shortening of the Songpan-Ganzi turbidites might relate to several factors, (1) westward subduction of the Ganzi–Litang Ocean during

the Late Triassic (Hou *et al*., 2004), (2) collision between Yidun arc and the Songpan-Ganzi terrane at the end of the Triassic (Hou *et al*., 2004; Wang *et al*., 2013b), and (3) intra-continental shortening between the eastern Songpan-Ganzi terrane and the Sichuan Basin, forming the Longmen Shan thrust belt(e.g., Li *et al*., 2003a).

Late Triassic crustal shorting in the Longmen Shan thrust belt and adjacent regions has been intensively studied. First, the presence of klippen of Paleozoic and Precambrian rocks over Triassic sediments in the Longmen Shan thrust belt front indicate that these structures were formed during the Late Triassic or later. Second, the oldest U–Th–Pb monazite and Sm–Nd garnet ages (204-190 Ma), derived from metamorphosed rocks in the Danba Antiform, immediately south of the Longmen Shan thrust belt, were interpreted as dating the timing of Barrovian metamorphism associated with the deformation (Huang *et al*., 2003; Weller *et al*., 2013). Third, muscovite $^{40}Ar/^{39}Ar$ dating of early Paleozoic schist from the northern Longmen Shan thrust belt and Neoproterozoic Pengguan complex from the middle Longmen Shan thrust belt yielded ages between 237-208 Ma and 235-226 Ma, respectively, which were interpreted as minimum age constraints for Mesozoic crustal shortening (Yan *et al*., 2011; Zheng *et al*., 2016).

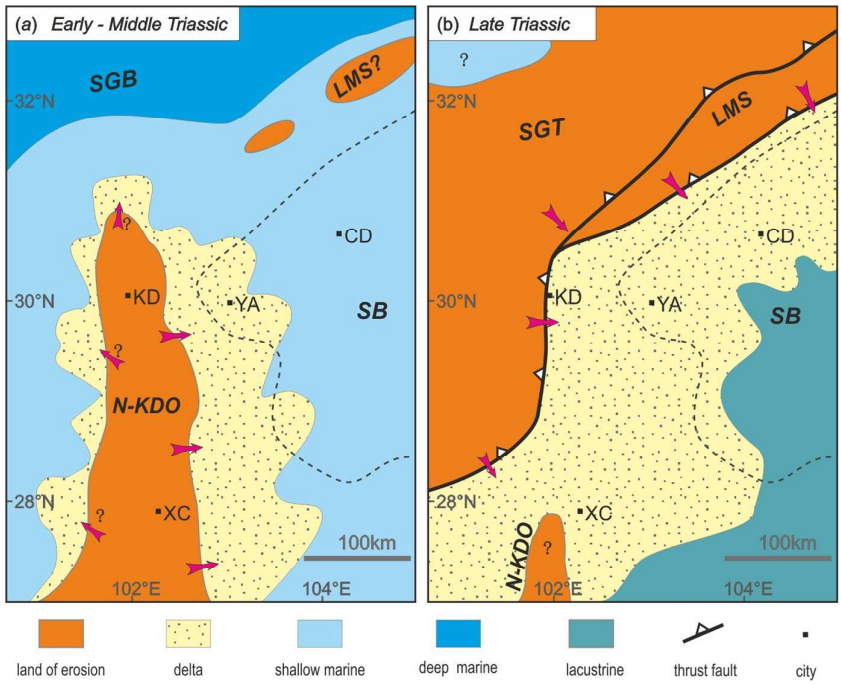

Fig. 11. A schematic map showing the different source areas and directions for the Triassic sediments of the southwestern Sichuan Basin. (a) Detritus was shed into the southwestern Sichuan Basin from the northern Kangdian Oldland to the southwest during Lower – Middle Triassic time. (b) The Longmen Shan thrust belt and possibly the eastern Songpan-Ganzi terrane to the west provided the bulk of clastic sediment flux to the southwestern Sichuan Basin during late Triassic time. CD — Chengdu, SGT —Songpan-Ganzi terrane, KD — Kangding, LMS — Longmen Shan thrust belt, N-KDO — northern Kangdian Oldland, SGB — Songpan-Ganzi basin, SB — Sichuan Basin, XC — Xichang, YA — Ya'an.

CONCLUSIONS

Triassic sediments in the southwestern Sichuan Basin record different detrital zircon geochronology signals. Detrital zircon age spectra of Lower and Middle Triassic samples are similar and characterized by a dominant age mode at ~810 Ma, with three minor peaks at ~255Ma, ~535Ma and ~970Ma. In contrast to the Lower - Middle Triassic samples, detrital zircon spectra of Upper Triassic samples are characterized by multiple age peaks at ~270 Ma, ~435 Ma, ~775Ma and ~1010 Ma, ~1840Ma and ~2480 Ma.

Our data reveal a major change of provenance during the Upper Triassic in response to multiple tectonic events. The uplift and erosion of the northern Kangdian Oldland, triggered by the eruption of the Emeishan Plume, provided the main detritus for the southwestern Sichuan Basin during the Lower – Middle Triassic. During the Upper Triassic, the Sichuan Basin was inverted into a foreland basin and the Longmen Shan thrust belt and possibly the eastern Songpan-Ganzi terrane was uplifted in response to the closure of the Paleo-Tethys Ocean and intra-continental shortening along the Longmen Shan thrust belt, becoming the main source areas of the southwestern and western Sichuan Basin. This study highlights the importance of tectonic events in reorganizing drainage and sediment supply in foreland basins.

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	ratios								ages								discordance		preferred ages	
Grains	Pb207/Pb206	1 sigma	Pb206/U238	1 sigma	Pb207/U235	1 sigma	Pb208/Th232	1 sigma	Pb207/Pb206	1 sigma	Pb206/U238	1 sigma	Pb207/U235	1 sigma	Pb208/Th232	1 sigma	%discord.68-75	%discord.68-76	preferred age	1 sigma
1	0.0513	0.002	0.0391	0.0007	0.2761	0.0106	0.0125	0.0015	254.5	85.68	247.2	4.62	247.6	8.46	251.8	29.64	0.16	2.95	247.2	4.62
2	0.0511	0.0014	0.0393	0.0007	0.2759	0.0079	0.0109	0.0012	243.8	61.59	248.2	4.2	247.4	6.29	219.9	24.3	-0.32	-1.77	248.2	4.2
3	0.0515	0.0028	0.0397	0.0008	0.2812	0.0153	0.0104	0.0014	261.4	121.47	250.9	5.18	251.6	12.13	209.1	27.98	0.28	4.18	250.9	5.18
4	0.0512	0.0017	0.039	0.0007	0.2743	0.0094	0.0085	0.001	247.9	75.11	246.3	4.38	246.1	7.46	171.4	19.63	-0.08	0.65	246.3	4.38
5	0.0604	0.0029	0.0384	0.0008	0.3189	0.015	0.0121	0.0014	617.8	99.96	242.6	5.05	281	11.57	243	28.29	15.83	154.66		
6	0.0508	0.0015	0.0394	0.0007	0.2754	0.0083	0.0116	0.0013	232.8	65.22	248.9	4.22	247	6.61	233.5	25.61	-0.76	-6.47	248.9	4.22
7	0.0516	0.0017	0.0392	0.0007	0.2786	0.0093	0.0116	0.0013	269.5	72.43	247.9	4.32	249.6	7.36	233.5	25.86	0.69	8.71	247.9	4.32
8	0.0511	0.0021	0.0387	0.0007	0.272	0.011	0.0119	0.0014	242.9	90.02	244.8	4.61	244.3	8.76	239.2	27.79	-0.20	-0.78	244.8	4.61
9	0.0885	0.0056	0.0473	0.0013	0.5759	0.035	0.0199	0.0024	1393.2	116.61	297.8	7.67	461.8	22.56	399.1	46.87	55.07	367.83		
10	0.0513	0.0025	0.0388	0.0008	0.2737	0.0131	0.0104	0.0013	252.3	107.22	245.3	4.98	245.6	10.42	209.3	25.87	0.12	2.85	245.3	4.98
11	0.0509	0.0016	0.0372	0.0006	0.2611	0.0085	0.0093	0.0009	236.9	72.59	235.4	3.97	235.5	6.87	186.6	16.93	0.04	0.64	235.4	3.97
12	0.0512	0.0021	0.0394	0.0007	0.2779	0.0116	0.0115	0.001	249.1	93.08	248.9	4.46	249	9.18	231.5	20.29	0.04	0.08	248.9	4.46
13	0.0511	0.0022	0.0389	0.0007	0.2742	0.0116	0.0118	0.0011	243.7	95.43	246.3	4.56	246	9.26	236.5	21.62	-0.12	-1.06	246.3	4.56
14	0.0765	0.0021	0.0358	0.0006	0.3773	0.0108	0.0117	0.001	1108	54.89	226.6	3.84	325	7.93	234.5	20.05	43.42	388.97		
15	0.0508	0.0026	0.0362	0.0007	0.254	0.0127	0.0098	0.001	233.5	113.11	229.4	4.51	229.8	10.3	196.7	19.82	0.17	1.79	229.4	4.51
16	0.0513	0.0022	0.0396	0.0007	0.2802	0.0118	0.0105	0.001	254.4	94.14	250.4	4.57	250.8	9.33	211.8	20.84	0.16	1.60	250.4	4.57
17	0.0509	0.0017	0.0384	0.0007	0.2699	0.0091	0.0104	0.001	237.1	74.49	243.2	4.1	242.6	7.24	209.7	19.4	-0.25	-2.51	243.2	4.1
18	0.0508	0.0013	0.0392	0.0006	0.2747	0.0075	0.0105	0.0009	232.8	59.2	247.9	3.96	246.4	5.97	211.9	18.59	-0.61	-6.09	247.9	3.96
19	0.051	0.0017	0.0381	0.0007	0.2676	0.009	0.0101	0.0009	240.6	74.53	240.8	4.12	240.8	7.17	203.9	17.03	0.00	-0.08	240.8	4.12
20	0.0509	0.0021	0.0391	0.0007	0.2744	0.0111	0.0106	0.0009	237.5	90.2	247.1	4.37	246.2	8.81	213.1	18.4	-0.36	-3.89	247.1	4.37
21	0.0514	0.0009	0.0395	0.0006	0.2797	0.0056	0.0105	0.0009	259.4	40.4	249.5	3.75	250.4	4.47	211.7	17.89	0.36	3.97	249.5	3.75
22	0.051	0.0019	0.0382	0.0007	0.2685	0.01	0.0109	0.001	238.4	82.94	241.8	4.19	241.5	7.98	219.3	20.29	-0.12	-1.41	241.8	4.19
23	0.0511	0.0016	0.0389	0.0007	0.2738	0.0087	0.0101	0.0009	245.5	70.07	245.8	4.07	245.7	6.93	203	18.1	-0.04	-0.12	245.8	4.07
24	0.051	0.0023	0.0388	0.0007	0.2732	0.012	0.0105	0.001	241.9	98.57	245.5	4.52	245.2	9.56	210.3	18.95	-0.12	-1.47	245.5	4.52
25	0.0512	0.0016	0.04	0.0007	0.2825	0.0089	0.0121	0.0017	251.8	68.41	252.8	4.5	252.6	7.08	242.6	33.1	-0.08	-0.40	252.8	4.5
26	0.0517	0.0021	0.0425	0.0008	0.3031	0.0124	0.0139	0.0018	274	90.54	268.4	5.15	268.8	9.69	278	36.63	0.15	2.09	268.4	5.15
27	0.0554	0.0015	0.028	0.0005	0.2136	0.0061	0.0051	0.0007	426.7	58.88	178	3.12	196.5	5.13	103.2	13.6	10.39	139.72		
28	0.0518	0.0018	0.0443	0.0008	0.3165	0.0113	0.0134	0.0018	277.6	77.5	279.5	5.11	279.2	8.68	269.9	36.3	-0.11	-0.68	279.5	5.11
29	0.052	0.0021	0.0437	0.0009	0.3128	0.0128	0.0137	0.0019	283.6	89.83	275.7	5.28	276.4	9.87	274.5	37.8	0.25	2.87	275.7	5.28
30	0.0512	0.0018	0.0389	0.0007	0.2747	0.0101	0.0118	0.0016	249.7	80.46	246.2	4.54	246.4	8.02	237.1	31.97	0.08	1.42	246.2	4.54
31	0.0513	0.0019	0.0396	0.0008	0.28	0.0105	0.0122	0.0017	254.8	82.43	250.4	4.67	250.7	8.32	245.5	32.95	0.12	1.76	250.4	4.67
32	0.0512	0.0023	0.0398	0.0008	0.2805	0.0127	0.0126	0.0017	250.7	100.67	251.3	4.98	251.1	10.06	252.4	33.81	-0.08	-0.24	251.3	4.98
33	0.0519	0.0021	0.0433	0.0008	0.3093	0.0127	0.0126	0.0018	278.6	90.04	273.2	5.2	273.6	9.81	252.8	35.88	0.15	1.98	273.2	5.2
34	0.0513	0.0022	0.0389	0.0008	0.2755	0.0119	0.0125	0.0017	255.6	96.03	246.3	4.85	247	9.47	250.3	34.45	0.28	3.78	246.3	4.85

FOR REVIEW PURPOSES ONLY

LCG01																				
	concentrations			ratios							ages						discordance		preferred ages	
sample	ppm U	ppm Pb	atomic Th/U	Pb207/Pb206	1 sigma	Pb207/U235	1 sigma	Pb206/U238	1 sigma	age 206/238	1 sigma	age 207/235	1 sigma	age 207/206	1 sigma	%discord.68-75	%discord.68-76	preferred age	1 sigma
LCG01-1	461.5	60.4	0.4704	0.06392	0.00089	1.09301	0.01631	0.12406	0.00153	753.9	8.8	750	9.9	739	7.3	0.5	2.0	753.9	8.8
LCG01-2	126.4	15.4	17.2335	0.76611	0.04149	25.3903	1.14056	0.24046	0.01266	1389.1	65.8	3323.3	73.8	4860	54.5	-58.2	-71.4		
LCG01-3	397.2	36.8	0.6721	0.05743	0.00092	0.65781	0.01094	0.08311	0.00105	514.7	6.2	513.3	8.2	508.1	6.4	0.3	1.3	514.7	6.2
LCG01-4	338.8	47	0.7184	0.06478	0.00093	1.09125	0.01658	0.12223	0.00152	743.4	8.7	749.1	10.1	767.2	7.7	-0.8	-3.1	743.4	8.7
LCG01-5	214.5	30.6	0.9181	0.06253	0.00102	1.03251	0.01746	0.11981	0.00153	729.5	8.8	720.2	10.7	692.3	8.2	1.3	5.4	729.5	8.8
LCG01-6	618.7	61.6	3.0869	0.4505	0.0466	4.86727	0.39114	0.07839	0.00575	486.5	34.4	1796.6	106.8	4086.9	103.2	-72.9	-88.1		
LCG01-7	97.2	111.3	3.8597	0.41269	0.01979	23.5561	1.10363	0.41414	0.01886	2233.8	86	3250.2	64.4	3956	47.7	-31.3	-43.5		
LCG01-8	179.5	22.8	1.91	0.05722	0.00105	0.66716	0.01252	0.08459	0.0011	523.5	6.5	519	9.1	500	7.2	0.9	4.7	523.5	6.5
LCG01-9	490.2	78.8	0.3145	0.07047	#######	1.53197	0.02135	0.15773	0.00192	944.1	10.7	943.3	10.8	942.1	7.8	0.1	0.2	944.1	10.7
LCG01-10	297.9	42.5	5.3816	0.5917	0.02612	10.3657	0.35961	0.1271	0.00486	771.3	27.8	2468	54.1	4487.7	44.3	-68.7	-82.8		
LCG01-11	128.5	21.4	5.8637	0.37978	0.0447	4.04795	0.38964	0.07733	0.00612	480.2	36.6	1643.9	115.5	3830.9	116.8	-70.8	-87.5		
LCG01-12	47.3	12.1	37.9446	0.65851	0.06096	23.1159	1.72528	0.25469	0.02219	1462.6	114	3231.8	123.7	4642.7	93	-54.7	-68.5		
LCG01-13	268.7	40.4	0.8222	0.06721	0.00103	1.19401	0.01915	0.1289	0.00163	781.6	9.3	797.8	11	844.3	8.8	-2.0	-7.4	781.6	9.3
LCG01-14	2129.5	97.2	0.3733	0.06919	#######	0.42769	0.006	0.04485	0.00054	282.8	3.3	361.5	5.4	904.4	7.8	-21.8	-68.7		
LCG01-15	390.3	63.9	0.4734	0.06964	0.00095	1.47469	0.02164	0.15363	0.00189	921.3	10.6	920.1	11.1	917.8	8.2	0.1	0.4	921.3	10.6
LCG01-16	43.5	21.9	16.7334	0.72278	0.02698	107.53	5.21479	1.07941	0.05584	4719.3	173.1	4759.1	64.2	4776.7	37.6	-0.8	-1.2		
LCG01-17	1120	96.8	0.7693	0.06745	0.00089	0.68784	0.00977	0.07399	#######	460.1	5.4	531.5	7.4	851.7	7.6	-13.4	-46.0	460.1	5.4
LCG01-18	439.7	21.2	0.9287	0.05211	0.00105	0.29008	0.00589	0.04039	0.00053	255.2	3.3	258.6	5.5	290.2	5.1	-1.3	-12.1	255.2	3.3
LCG01-19	102.5	26.2	32.8291	0.51699	0.03517	7.06961	0.36651	0.09922	0.00543	609.8	31.8	2120.2	77.7	4290.4	68.1	-71.2	-85.8		
LCG01-20	166.2	49.6	1.3349	0.09543	0.00133	3.15391	0.04699	0.23978	0.00303	1385.6	15.8	1446	14.5	1536.6	11	-4.2	-9.8	1536.6	11
LCG01-21	987.2	90.2	0.669	0.05929	0.00077	0.67	0.00947	0.08199	0.00099	508	5.9	520.7	7.2	577.8	5.7	-2.4	-12.1	508	5.9
LCG01-22	204.5	32.7	0.9054	0.06721	0.00101	1.23997	0.01964	0.13386	0.00168	809.8	9.6	818.9	11	844.3	8.6	-1.1	-4.1	809.8	9.6
LCG01-23	82.8	11.9	0.5862	0.06765	0.00134	1.2201	0.02434	0.13086	0.00179	792.8	10.2	809.8	13.4	857.8	11.5	-2.1	-7.6	792.8	10.2
LCG01-24	1011.1	522.9	0.1878	0.29354	0.00337	21.5297	0.27708	0.53215	0.00636	2750.5	26.8	3162.8	16.1	3436.5	11.3	-13.0	-20.0		
LCG01-25	244.3	73.5	4.2865	0.53956	0.02094	17.1738	0.57271	0.23094	0.00829	1339.4	43.4	2944.6	50.7	4353.1	38.9	-54.5	-69.2		
LCG01-26	262.9	40.9	0.9713	0.0657	0.00099	1.16222	0.01848	0.12834	0.00161	778.4	9.2	783	10.7	796.8	8.3	-0.6	-2.3	778.4	9.2
LCG01-27	218.3	20.7	0.6552	0.05736	0.00102	0.67294	0.01225	0.08512	0.0011	526.6	6.5	522.5	9	505.4	7.1	0.8	4.2	526.6	6.5
LCG01-28	653.7	94.4	0.3451	0.08589	0.00136	1.73886	0.02861	0.14688	0.00191	883.5	10.7	1023	13.2	1335.7	11.8	-13.6	-33.9	883.5	10.7
LCG01-29	494.9	67.3	0.8765	0.06478	0.00089	1.0281	0.01517	0.11515	0.00142	702.6	8.2	718	9.5	767.2	7.4	-2.1	-8.4	702.6	8.2
LCG01-30	339.9	151.7	0.6353	0.12972	0.00156	6.92008	0.09213	0.38704	0.00469	2109.1	21.8	2101.2	15.1	2094.2	10.7	0.4	0.7	2094.2	10.7
LCG01-31	508.7	79.1	0.2811	0.06958	#######	1.47699	0.02077	0.15402	0.00188	923.5	10.5	921	10.8	916	7.8	0.3	0.8	923.5	10.5
LCG01-32	1235.2	77.9	0.1015	0.09489	0.00131	0.8731	0.0128	0.06676	0.00083	416.6	5	637.2	8.8	1525.9	10.9	-34.6	-72.7		
LCG01-33	67.4	-1.9	32.2749	0.93858	0.05693	27.2271	1.26761	0.21047	0.01259	1231.3	67	3391.7	83.4	5148.1	61.2	-63.7	-76.1		
LCG01-34	154	13.1	6.1232	0.6502	0.04268	12.3191	0.61373	0.13747	0.0079	830.3	44.8	2629	81.9	4624.4	65.9	-68.4	-82.0		
LCG01-35	119.5	21	17.4689	0.57601	0.03565	10.8164	0.51875	0.13624	0.00724	823.4	41.1	2507.5	75.8	4448.6	62.1	-67.2	-81.5		
LCG01-36	1120.5	86.3	0.1557	0.06018	#######	0.66443	0.00949	0.0801	0.00097	496.7	5.8	517.3	7.3	610.1	6.1	-4.0	-18.6	496.7	5.8
LCG01-37	133.8	20.5	0.6927	0.06795	0.00113	1.26313	0.02175	0.13487	0.00175	815.6	9.9	829.3	12	867	9.7	-1.7	-5.9	815.6	9.9
LCG01-38	1058.4	106.2	0.3215	0.06847	0.00087	0.92689	0.01286	0.09822	0.00119	604	7	666	8.6	882.8	7.5	-9.3	-31.6	604	7
LCG01-39	68	36.3	0.83	0.15571	0.0021	9.39194	0.13746	0.43762	0.00566	2340	25.4	2377	17.1	2409.6	12.4	-1.6	-2.9	2409.6	12.4
LCG01-40	43.5	9.9	22.2698	0.58325	0.03136	13.9274	0.60303	0.17325	0.00824	1030	45.3	2744.8	68	4466.8	53.9	-62.5	-76.9		
LCG01-41	353.7	33.7	0.6346	0.06967	0.00107	0.83734	0.01343	0.0872	0.0011	539	6.5	617.7	9.2	918.6	9.3	-12.7	-41.3	539	6.5
LCG01-42	492.8	182	1.0193	0.15866	0.00189	6.98954	0.09251	0.31963	0.00386	1787.9	18.9	2110.1	15.1	2441.4	11	-15.3	-26.8		
LCG01-43	422.2	64.6	3.665	0.58069	0.0266	11.3783	0.41335	0.14217	0.00566	856.9	31.9	2554.6	56.6	4460.4	45.9	-66.5	-80.8		
LCG01-44	159.8	24.6	0.9238	0.07282	0.00117	1.28356	0.02144	0.12789	0.00165	775.8	9.4	838.4	11.8	1008.9	10.3	-7.5	-23.1	775.8	9.4

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LCG01-45	1245.3	NaN	1.7235	0.05122	0.00074	0.28158	0.00434	0.03989	0.00049	252.2	3	251.9	4.2	250.7	3.2	0.1	0.6	252.2	3
LCG01-46	1260.2	67.7	1.3814	0.0508	0.00074	0.27995	0.00432	0.03998	0.00049	252.7	3	250.6	4.2	231.8	3	0.8	9.0	252.7	3
LCG01-47	665.9	63.6	0.2043	0.06011	0.00082	0.80352	0.01172	0.09699	0.00119	596.7	7	598.8	8.3	607.5	6.2	-0.3	-1.8	596.7	7
LCG01-48	502.4	70.2	3.904	0.65426	0.02795	13.7596	0.46919	0.15259	0.00586	915.5	32.8	2733.3	54.4	4633.4	42.9	-66.5	-80.2		
LCG01-49	401.5	47.8	7.2268	0.63635	0.03188	11.1724	0.43311	0.12739	0.00554	773	31.7	2537.6	61.8	4593.3	50.3	-69.5	-83.2		
LCG01-50	130.6	13.6	5.8432	0.65818	0.0511	13.2173	0.80115	0.1457	0.00973	876.8	54.7	2695.3	96.7	4642	78	-67.5	-81.1		
LCG01-51	126.4	19	0.7793	0.06491	0.00114	1.16305	0.02105	0.13001	0.00171	787.9	9.8	783.4	12	771.4	9.5	0.6	2.1	787.9	9.8
LCG01-52	246.4	40.8	5.1605	0.67251	0.02878	17.3113	0.60327	0.18677	0.00739	1103.9	40.1	2952.2	55.9	4673.1	43	-62.6	-76.4		
LCG01-53	167.3	25	0.6646	0.06579	0.00101	1.20966	0.01954	0.13341	0.00169	807.3	9.6	805	11.1	799.7	8.5	0.3	0.9	807.3	9.6
LCG01-54	405.2	76	0.8552	0.06959	0.00093	1.52104	0.02197	0.15857	0.00195	948.8	10.9	938.9	11.1	916.3	8.1	1.1	3.6	948.8	10.9
LCG01-55	69.6	12.6	0.7082	0.06854	0.0013	1.50285	0.02907	0.15908	0.00216	951.7	12	931.5	14.2	884.9	11.2	2.2	7.5	951.7	12
LCG01-56	1006.9	118.7	0.2741	0.06798	0.00086	1.10696	0.01531	0.11814	0.00143	719.8	8.2	756.7	9.3	867.9	7.4	-4.9	-17.1	719.8	8.2
LCG01-57	99.3	15.3	1.217	0.0663	0.00137	1.09408	0.02264	0.11974	0.00166	729.1	9.6	750.5	13.2	815.9	11.6	-2.9	-10.6	729.1	9.6
LCG01-58	384.5	59.5	0.7845	0.06612	0.00094	1.2184	0.01837	0.13369	0.00166	808.9	9.4	809	10.5	810.2	7.9	0.0	-0.2	808.9	9.4
LCG01-59	128.5	19.1	0.9318	0.06877	0.00123	1.17968	0.02158	0.12447	0.00165	756.2	9.5	791.2	12.2	891.8	10.6	-4.4	-15.2	756.2	9.5
LCG01-60	1625.5	72.4	0.7364	0.0525	0.00073	0.28378	0.00423	0.03922	0.00048	248	3	253.7	4.2	307.2	3.7	-2.2	-19.3	248	3
LCG01-61	52.6	9.6	0.7462	0.07214	0.00141	1.56848	0.03101	0.15776	0.00218	944.3	12.1	957.8	14.8	989.9	12.4	-1.4	-4.6	944.3	12.1
LCG01-62	666.5	92.1	0.7066	0.07102	0.00094	1.20562	0.01725	0.12317	0.00151	748.8	8.7	803.2	10	958	8.2	-6.8	-21.8	748.8	8.7
LCG01-63	405.2	115.8	0.325	0.09796	0.00123	3.71318	0.05115	0.27502	0.00335	1566.2	16.9	1574.2	14	1585.6	10.1	-0.5	-1.2	1585.6	10.1
LCG01-64	303.2	47.3	0.8565	0.0669	0.00103	1.2329	0.01988	0.13372	0.00169	809.1	9.6	815.7	11.2	834.7	8.8	-0.8	-3.1	809.1	9.6
LCG01-65	592.1	68.5	4.822	0.6658	0.03345	13.6112	0.52112	0.14833	0.00672	891.6	37.7	2723	64	4658.6	50.5	-67.3	-80.9		
LCG01-66	184.8	35.3	26.1472	0.5156	0.02592	5.58793	0.21178	0.07863	0.00321	487.9	19.2	1914.2	55.8	4286.4	50.3	-74.5	-88.6		
LCG01-67	198.1	82.4	1.1598	0.11272	0.00151	5.0705	0.07354	0.32637	0.0041	1820.8	19.9	1831.2	15.6	1843.7	11.4	-0.6	-1.2	1843.7	11.4
LCG01-68	79.7	12.2	0.8553	0.06386	0.00136	1.13941	0.02434	0.12946	0.00181	784.8	10.3	772.2	13.8	737	11.2	1.6	6.5	784.8	10.3
LCG01-69	196	31.5	0.9327	0.06649	0.00108	1.22874	0.0208	0.13409	0.00172	811.2	9.8	813.8	11.6	821.8	9.2	-0.3	-1.3	811.2	9.8
LCG01-70	15.9	3.3	45.3851	0.83128	0.06243	83.029	6.86518	0.7247	0.06771	3513.6	253.1	4499.3	120.3	4976.3	75.7	-21.9	-29.4		
LCG01-71	388.2	41.5	3.4056	0.45745	0.02946	5.28012	0.25888	0.08375	0.00425	518.5	25.3	1865.7	70	4109.6	64.2	-72.2	-87.4		
LCG01-72	190.6	32.3	1.1897	0.10071	0.00149	1.92418	0.02989	0.13863	0.00177	836.9	10	1089.5	13.1	1637.2	12	-23.2	-48.9		
LCG01-73	196.5	-10.4	7.04	0.55943	0.02373	9.94283	0.33587	0.12895	0.0047	781.9	26.8	2429.5	51.6	4406	42.5	-67.8	-82.3		
LCG01-74	485.4	22.3	0.7836	0.05258	0.00099	0.29141	0.00559	0.04021	0.00052	254.1	3.2	259.7	5.2	310.7	5	-2.1	-18.2	254.1	3.2
LCG01-75	320.2	56.3	1.6188	0.06451	0.00098	1.11812	0.01781	0.12576	0.00158	763.6	9	762.1	10.6	758.4	8.1	0.2	0.7	763.6	9
LCG01-76	592.1	59.9	0.2019	0.05978	0.00085	0.85244	0.0129	0.10346	0.00128	634.7	7.5	626	8.8	595.6	6.4	1.4	6.6	634.7	7.5
LCG01-77	54.2	14.1	20.6776	0.6295	0.03353	24.5634	1.14571	0.28312	0.01447	1607.1	72.7	3291	72	4577.6	53.5	-51.2	-64.9		
LCG01-78	24.4	4.6	33.7317	0.77126	0.05034	46.6527	2.93096	0.43888	0.03138	2345.6	140.6	3923.4	96.2	4869.6	65.7	-40.2	-51.8		
LCG01-79	208.7	32.2	0.6801	0.06517	0.00098	1.2299	0.01944	0.13693	0.00172	827.3	9.8	814.3	11	779.8	8.2	1.6	6.1	827.3	9.8
LCG01-80	75.4	14.2	45.8969	0.68436	0.05472	12.1478	0.71754	0.12879	0.00895	781	51.1	2615.9	99.4	4698.2	80.4	-70.1	-83.4		
LCG01-81	329.2	28	4.0545	0.53058	0.0277	5.63011	0.21866	0.07699	0.00328	478.1	19.6	1920.7	58.1	4328.5	52.3	-75.1	-89.0		
LCG01-82	42.5	6.7	0.94	0.07381	0.00174	1.32485	0.03087	0.13023	0.00193	789.2	11	856.6	16.1	1036.3	15.3	-7.9	-23.8	789.2	11
LCG01-83	206	27.5	0.7438	0.06628	0.00105	1.08038	0.01784	0.11827	0.00151	720.6	8.7	743.8	10.7	815.2	8.9	-3.1	-11.6	720.6	8.7
LCG01-84	166.2	21.4	2.1818	0.0568	0.00107	0.63519	0.0122	0.08114	0.00107	502.9	6.4	499.3	9.1	483.8	7.2	0.7	4.0	502.9	6.4
LCG01-85	70.1	5.6	22.9795	0.79177	0.0677	18.6045	1.13875	0.17049	0.01345	1014.8	74.1	3021.5	112.1	4907	86.1	-66.4	-79.3		
LCG01-86	66.4	8.5	10.9926	0.80137	0.06726	23.1768	1.47871	0.20984	0.01666	1228	88.8	3234.4	112.5	4924.2	84.6	-62.0	-75.1		
LCG01-87	435.5	NaN	1.158	0.83136	0.01032		73.3022	26.0512	0.62457	21259	148.8	NA	27.4	4976.4	12.5	NA	327.2		
LCG01-88	450.3	57.9	0.2165	0.06582	0.00094	1.17816	0.01784	0.12988	0.00161	787.2	9.2	790.5	10.4	800.7	7.9	-0.4	-1.7	787.2	9.2
LCG01-89	40.9	NaN	1.6703	0.83914	0.02633	699.427	48.4357	6.04763	0.43508	12588	398	6652.5	79.6	4989.7	31.6	89.2	152.3		
LCG01-90	113.6	56.5	0.5856	0.1569	0.00207	9.39215	0.13512	0.43432	0.0055	2325.2	24.7	2377.1	16.8	2422.5	12.2	-2.2	-4.0	2422.5	12.2
LCG01-91	937.3	151.2	14.7235	0.3658	0.01445	3.29736	0.10558	0.0654	0.00195	408.4	11.8	1480.4	38.6	3774.1	39.1	-72.4	-89.2		
LCG01-92	138.1	21.5	0.9537	0.06221	0.00119	1.10876	0.02162	0.12932	0.00174	784	9.9	757.6	12.5	681.3	9.5	3.5	15.1	784	9.9
LCG01-93	326.1	52.4	0.8932	0.06639	0.00101	1.24477	0.01994	0.13603	0.00172	822.2	9.8	821	11.1	818.7	8.5	0.1	0.4	822.2	9.8

FOR REVIEW PURPOSES ONLY

LCG01-94	225.2	32.2	5.5265	0.42084	0.03512	4.87718	0.32109	0.08409	0.00516	520.5	30.7	1798.3	87.3	3985.3	83.1	-71.1	-86.9			
LCG01-95	245.3	42	0.4173	0.07178	0.00109	1.61118	0.02576	0.16287	0.00207	972.7	11.5	974.6	12.4	979.7	9.5	-0.2	-0.7	972.7	11.5	
LCG01-96	213.5	18.4	5.3471	0.4199	0.04997	3.42518	0.32304	0.05918	0.00479	370.6	29.2	1510.2	113.1	3981.9	118.4	-75.5	-90.7			
LCG01-97	578.8	90.6	0.1811	0.07845	0.00104	1.74791	0.02505	0.16166	0.00198	966	11	1026.4	11.7	1158.3	9.2	-5.9	-16.6	966	11	
LCG01-98	124.3	19.9	0.6708	0.06447	0.00128	1.26262	0.02538	0.14211	0.00193	856.6	10.9	829.1	13.6	757.1	10.6	3.3	13.1	856.6	10.9	
LCG01-99	177.4	31	0.4102	0.07056	0.00115	1.62057	0.02739	0.16664	0.00215	993.6	11.9	978.2	13.1	944.7	10	1.6	5.2	993.6	11.9	
LCG01-100	167.8	15.3	0.6959	0.06406	0.0013	0.71953	0.01471	0.0815	0.00111	505.1	6.6	550.4	10.4	743.6	10.7	-8.2	-32.1	505.1	6.6	
LCG01-101	265.5	45.1	0.439	0.07173	0.00104	1.60788	0.0247	0.16264	0.00203	971.4	11.3	973.3	12	978.3	9.1	-0.2	-0.7	971.4	11.3	
LCG01-102	688.2	220.5	0.3419	0.14962	0.00189	6.44365	0.08915	0.31247	0.00383	1752.9	18.8	2038.2	15.5	2341.6	11.5	-14.0	-25.1			
LCG01-103	113.6	21.3	2.0686	0.06475	0.00139	1.08417	0.02326	0.12149	0.0017	739.1	9.8	745.7	13.5	766.2	11.5	-0.9	-3.5	739.1	9.8	
LCG01-104	593.7	29	0.921	0.05218	0.00096	0.29519	0.00553	0.04105	0.00053	259.3	3.3	262.6	5.2	293.3	4.7	-1.3	-11.6	259.3	3.3	
LCG01-105	25	8.1	19.9876	0.68115	0.06073	41.1922	3.37665	0.43879	0.04048	2345.2	181.4	3799.8	127.2	4691.5	89.6	-38.3	-50.0			
LCG01-106	155.6	15	3.1385	0.20944	0.00442	1.69304	0.03345	0.05865	0.00094	367.4	5.7	1005.9	16.9	2901.2	20.2	-63.5	-87.3			
LCG01-107	676	145.3	0.5374	0.49286	0.01136	17.7713	0.3854	0.26163	0.00565	1498.2	28.9	2977.4	30.4	4220	23	-49.7	-64.5			
LCG01-108	182.7	18.7	0.6173	0.05869	0.00118	0.75512	0.01537	0.09335	0.00126	575.3	7.4	571.2	10.6	555.6	8.6	0.7	3.5	575.3	7.4	
LCG01-109	305.3	46.7	0.3898	0.06817	0.00107	1.3853	0.02267	0.14746	0.00188	886.7	10.6	882.7	11.9	873.7	9.2	0.5	1.5	886.7	10.6	
LCG01-110	349.4	67.9	1.3825	0.06888	0.00105	1.37578	0.02198	0.14493	0.00183	872.5	10.3	878.6	11.6	895.1	9.1	-0.7	-2.5	872.5	10.3	
LCG01-111	51.5	7.6	26.728	0.75205	0.05353	30.1204	1.83277	0.2906	0.02043	1644.5	102	3490.7	98.3	4833.5	71.7	-52.9	-66.0			
LCG01-112	166.2	27.8	0.3839	0.06803	0.00118	1.50609	0.02685	0.16062	0.00211	960.2	11.7	932.9	13.3	869.5	10.1	2.9	10.4	960.2	11.7	
LCG01-113	222	33.1	4.9563	0.63888	0.03071	14.3191	0.54567	0.16262	0.00705	971.3	39.1	2771.1	61.4	4599	48.3	-64.9	-78.9			
LCG01-114	13.8	3.3	24.08	0.55256	0.10661	40.8606	8.05413	0.53655	0.09899	2769	415.3	3791.8	264.6	4387.9	193.3	-27.0	-36.9			
LCG01-115	274.5	37	0.7899	0.06562	0.00105	1.06658	0.01772	0.11793	0.0015	718.6	8.6	737.1	10.7	794.3	8.8	-2.5	-9.5	718.6	8.6	
LCG01-116	279.9	23.9	0.5466	0.06999	0.00171	0.78541	0.01885	0.08142	0.00121	504.6	7.2	588.6	12.8	928.1	14.9	-14.3	-45.6	504.6	7.2	
LCG01-117	166.7	21.2	8.5248	0.70831	0.02636	20.1164	0.62478	0.20607	0.00728	1207.8	38.9	3097	49.6	4747.7	37.4	-61.0	-74.6			
LCG01-118	354.2	108.8	0.5881	0.15651	0.00213	6.1332	0.08961	0.28433	0.0036	1613.1	18.1	1995	16.2	2418.3	12.5	-19.1	-33.3			
LCG01-119	261.8	33.6	1.117	0.07203	0.00154	1.0758	0.02294	0.10837	0.00153	663.3	8.9	741.6	13.5	986.8	13.5	-10.6	-32.8	663.3	8.9	
LCG01-120	142.3	16.9	0.4313	0.06351	0.00138	0.99055	0.02155	0.11317	0.00158	691.1	9.1	699	13.1	725.4	11.3	-1.1	-4.7	691.1	9.1	
LCG01-121	234.2	54.7	1.3843	0.07065	0.00113	1.72112	0.02877	0.17676	0.00228	1049.2	12.5	1016.4	13.2	947.3	9.9	3.2	10.8	1049.2	12.5	
LCG01-122	271.9	36.2	1.022	0.07239	0.0012	1.10772	0.01894	0.11103	0.00144	678.7	8.4	757.1	11.2	996.9	10.5	-10.3	-31.9	678.7	8.4	
LCG01-123	256.5	37	1.1714	0.06809	0.00118	1.08493	0.01939	0.11561	0.00151	705.2	8.7	746	11.5	871.3	10.1	-5.5	-19.1	705.2	8.7	
LCG01-124	58.9	9.9	0.9271	0.07573	0.0028	1.49064	0.05313	0.14282	0.00279	860.6	15.7	926.6	25.4	1087.9	24.7	-7.1	-20.9	860.6	15.7	
LCG01-125	37.7	9.2	36.9501	0.68196	0.04876	29.8492	1.86458	0.31758	0.02259	1777.9	110.5	3481.9	99.1	4693.2	71.9	-48.9	-62.1			
LCG01-126	85	15.8	0.4889	0.08406	0.00174	2.01391	0.04183	0.17384	0.00251	1033.2	13.8	1120.2	17.1	1293.9	15.1	-7.8	-20.1	1033.2	13.8	
LCG01-127	145	29.8	5.5999	0.72666	0.03117	23.2894	0.83875	0.23255	0.00962	1347.8	50.3	3239.1	58	4784.4	43.2	-58.4	-71.8			
LCG01-128	396.7	80.5	4.4014	0.65332	0.02693	18.5247	0.63454	0.20574	0.0079	1206.1	42.2	3017.4	54.3	4631.3	41.4	-60.0	-74.0			
LCG01-129	25	6.1	23.3359	0.73522	0.06052	43.2383	3.34303	0.42671	0.03666	2290.9	165.6	3847.9	118.1	4801.1	82.8	-40.5	-52.3			
LCG01-130	556	50	4.0201	0.48271	0.02834	4.88748	0.21891	0.07347	0.00338	457	20.3	1800.1	62.9	4189.3	58.7	-74.6	-89.1			
LCG01-131	257	41.6	0.849	0.07128	0.00115	1.34529	0.02261	0.13694	0.00176	827.3	10	865.5	12	965.5	10.1	-4.4	-14.3	827.3	10	
LCG01-132	301.6	46.3	0.7823	0.06416	0.00099	1.17577	0.01898	0.13296	0.00168	804.7	9.6	789.3	10.9	746.9	8.2	1.9	7.7	804.7	9.6	
LCG01-133	134.4	6.4	0.7648	0.05612	0.00166	0.32159	0.00926	0.04158	0.00063	262.6	3.9	283.1	8.2	457.1	10.9	-7.2	-42.5	262.6	3.9	
LCG01-134	219.3	40.9	0.8714	0.0716	0.00112	1.5506	0.02541	0.15714	0.00201	940.9	11.2	950.7	12.5	974.6	9.8	-1.0	-3.5	940.9	11.2	
LCG01-135	176.3	35.6	1.2067	0.07094	0.00115	1.54124	0.02602	0.15764	0.00203	943.6	11.3	947	12.8	955.7	10	-0.4	-1.3	943.6	11.3	
LCG01-136	120	9	0.3973	0.06244	0.00153	0.62379	0.01509	0.07249	0.00105	451.1	6.3	492.2	11.1	689.2	12.3	-8.3	-34.5	451.1	6.3	
LCG01-137	147.6	6.2	0.5132	0.0479	0.00154	0.25974	0.00817	0.03935	0.00061	248.8	3.8	234.5	7.5	94.3	2.9	6.1	163.7			
LCG01-138	2.7	NaN	20.2447	0.83112	0.01297		492.407	38.0458	4.2966	23624	709.4	NA	115.7	4976	15.7	NA	374.8			
LCG01-139	130.1	18.9	0.8079	0.06634	0.00127	1.14244	0.02215	0.12496	0.00168	759	9.6	773.7	12.7	817.1	10.7	-1.9	-7.1	759	9.6	
LCG01-140	561.8	90.7	0.574	0.0709	0.00098	1.45911	0.02159	0.14932	0.00184	897.2	10.3	913.6	11.2	954.5	8.6	-1.8	-6.0	897.2	10.3	
LCG01-141	368.5	34.1	0.5255	0.05827	0.00095	0.69374	0.01177	0.08639	0.0011	534.2	6.5	535	8.6	539.9	6.8	-0.2	-1.1	534.2	6.5	
LCG01-142	593.2	29.2	1.0825	0.06154	0.00109	0.33296	0.00602	0.03926	0.00051	248.2	3.2	291.8	5.6	658.2	8.6	-14.9	-62.3	248.2	3.2	

FOR REVIEW PURPOSES ONLY

LCG01-143	121.1	18.2	0.677	0.06593	0.00125	1.21333	0.02335	0.13353	0.00179	808	10.2	806.7	12.9	804.2	10.5	0.2	0.5	808	10.2
LCG01-144	224.6	44.2	1.2895	0.07147	0.00111	1.48706	0.02428	0.15097	0.00192	906.4	10.8	925.1	12.2	970.9	9.7	-2.0	-6.6	906.4	10.8
LCG01-145	114.7	18.3	0.9137	0.06521	0.00128	1.19748	0.0238	0.13324	0.00181	806.3	10.3	799.4	13.2	781.1	10.7	0.9	3.2	806.3	10.3
LCG01-146	232.6	NaN	1.8313	0.78774	0.02277	133.056	5.26535	1.22558	0.05074	5157.2	147	4973.6	50.9	4899.7	29.1	3.7	5.3		
LCG01-147	95.6	15.3	0.9926	0.06476	0.00137	1.17186	0.02486	0.13131	0.00183	795.3	10.4	787.5	13.9	766.5	11.4	1.0	3.8	795.3	10.4
LCG01-148	116.8	44.2	0.5827	0.11229	0.00166	5.19313	0.08155	0.33557	0.00435	1865.3	21	1851.5	16.7	1836.8	12.6	0.7	1.6	1836.8	12.6
LCG01-149	207.6	31.9	0.731	0.06566	0.00112	1.21896	0.02149	0.1347	0.00175	814.6	9.9	809.3	12	795.6	9.4	0.7	2.4	814.6	9.9
LCG01-150	107.3	16.3	0.9244	0.06466	0.00135	1.12554	0.02359	0.12631	0.00175	766.8	10	765.6	13.5	763.3	11.2	0.2	0.5	766.8	10
LCG01-151	94	20.5	0.6905	0.08098	0.00146	2.13688	0.03948	0.19146	0.0026	1129.3	14.1	1160.8	15.6	1221	12.8	-2.7	-7.5	1221	12.8
LCG01-152	813	64.5	0.5512	0.05893	0.00089	0.59881	0.00952	0.07373	0.00092	458.6	5.5	476.5	7.5	564.5	6.5	-3.8	-18.8	458.6	5.5
LCG01-153	3112.4	327.4	0.0002	0.0568	0.00816	0.89633	0.12783	0.1145	0.00294	698.8	17	649.8	70.1	483.8	55.3	7.6	44.5		
LCG01-154	188	17.8	0.6603	0.05564	0.00103	0.64808	0.01229	0.08452	0.00111	523	6.6	507.3	9.1	438	6.6	3.1	19.4	523	6.6
LCG01-155	177.4	32.7	0.6126	0.07067	0.0012	1.62651	0.02854	0.167	0.00219	995.6	12.1	980.5	13.5	947.9	10.5	1.5	5.0	995.6	12.1
LCG01-156	158.8	20.6	0.7574	0.06302	0.00129	0.98503	0.02032	0.1134	0.00155	692.5	9	696.2	12.4	708.9	10.4	-0.5	-2.3	692.5	9

LMD02

	concentrations			ratios						ages						discordance		preferred ages	
sample	ppm U	ppm Pb	atomic Th/U	Pb207/Pb206	1 sigma	Pb207/U235	1 sigma	Pb206/U238	1 sigma	age 206/238	1 sigma	age 207/235	1 sigma	age 207/206	1 sigma	%discord.68-75	%discord.68-76	preferred age	1 sigma
LMD02_001	255.6	38.6	0.6336	0.06529	0.00106	1.22089	0.02062	0.13568	0.00175	820.2	9.9	810.2	11.6	783.7	34.1	1.2	4.7	820.2	9.9
LMD02_002	179.7	25.7	0.6288	0.06661	0.00129	1.18357	0.02325	0.12892	0.00176	781.7	10.1	793	13	825.6	40.4	-1.4	-5.3	781.7	10.1
LMD02_003	107.8	15.5	0.5158	0.06453	0.00132	1.18716	0.02458	0.13348	0.00186	807.7	10.6	794.6	13.6	759	43.1	1.6	6.4	807.7	10.6
LMD02_004	243.1	30.7	0.2979	0.06335	0.00116	1.08604	0.02032	0.12438	0.00166	755.7	9.5	746.6	12	720	38.9	1.2	5.0	755.7	9.5
LMD02_005	102.6	15.2	0.6498	0.06667	0.00147	1.2185	0.02694	0.13261	0.0019	802.7	10.8	809.1	14.7	827.5	46	-0.8	-3.0	802.7	10.8
LMD02_006	164.1	26.1	0.8027	0.0691	0.00138	1.30422	0.02637	0.13694	0.0019	827.3	10.8	847.6	14	901.7	41.2	-2.4	-8.2	827.3	10.8
LMD02_007	192.2	31	1.0616	0.06648	0.00115	1.19916	0.02143	0.13087	0.00172	792.8	9.8	800.2	12	821.5	36.1	-0.9	-3.5	792.8	9.8
LMD02_008	313.7	48.5	0.8102	0.06446	0.00099	1.18322	0.0191	0.13317	0.00169	805.9	9.6	792.8	11	756.8	32.4	1.7	6.5	805.9	9.6
LMD02_009	111.8	17.1	0.74	0.06482	0.00144	1.18985	0.02641	0.13318	0.00191	806	10.9	795.9	14.6	768.5	46.8	1.3	4.9	806	10.9
LMD02_010	138.6	18.8	0.6391	0.06417	0.00131	1.08053	0.02221	0.12217	0.00169	743	9.7	743.9	13	747.2	43.1	-0.1	-0.6	743	9.7
LMD02_011	115.7	16.7	0.5805	0.06293	0.00139	1.14409	0.02542	0.1319	0.00188	798.7	10.7	774.4	14.2	705.9	47	3.1	13.2	798.7	10.7
LMD02_012	505.2	67.4	0.7793	0.06379	0.001	1.02237	0.01688	0.11629	0.00149	709.2	8.6	715.1	10.4	734.7	33.2	-0.8	-3.5	709.2	8.6
LMD02_013	390.8	57.3	0.6168	0.06482	0.00107	1.1908	0.0204	0.13329	0.00173	806.6	9.8	796.3	11.6	768.5	34.8	1.3	5.0	806.6	9.8
LMD02_014	67.3	9.2	0.868	0.06458	0.00206	1.03964	0.03231	0.11681	0.00198	712.2	11.4	723.7	18.7	760.7	67.3	-1.6	-6.4	712.2	11.4
LMD02_015	297.4	41.3	0.9426	0.06502	0.00114	1.05939	0.01911	0.11822	0.00156	720.3	9	733.5	11.5	775	36.9	-1.8	-7.1	720.3	9
LMD02_016	351	49.4	0.4556	0.06462	0.00101	1.18283	0.01944	0.13281	0.0017	803.9	9.7	792.6	11.1	762	32.9	1.4	5.5	803.9	9.7
LMD02_017	247.7	36.5	0.5585	0.06623	0.00105	1.22978	0.0205	0.13472	0.00174	814.7	9.9	814.2	11.5	813.7	33.1	0.1	0.1	814.7	9.9
LMD02_018	579.7	66.6	0.499	0.06484	0.00096	0.96805	0.01516	0.10832	0.00137	663	8	687.5	9.7	769.1	31.2	-3.6	-13.8	663	8
LMD02_019	209.1	27.4	0.5906	0.06444	0.00145	1.0689	0.02398	0.12035	0.00173	732.6	10	738.2	14	756.1	47.5	-0.8	-3.1	732.6	10
LMD02_020	238.6	36	0.6406	0.0662	0.00107	1.23171	0.02078	0.13499	0.00175	816.3	9.9	815.1	11.6	812.7	33.8	0.1	0.4	816.3	9.9
LMD02_021	235.9	36.9	0.8462	0.06452	0.00102	1.18049	0.01953	0.13274	0.00171	803.5	9.7	791.5	11.2	758.7	33.3	1.5	5.9	803.5	9.7
LMD02_022	339.9	49.8	0.459	0.0654	0.00111	1.23592	0.02177	0.13711	0.0018	828.3	10.2	817	12	787.2	35.6	1.4	5.2	828.3	10.2
LMD02_023	81.7	12.2	0.559	0.06522	0.00148	1.23094	0.02797	0.13693	0.00199	827.3	11.3	814.8	15.1	781.4	47.7	1.5	5.9	827.3	11.3
LMD02_024	232.7	33.6	0.6181	0.06516	0.00103	1.16351	0.01931	0.12955	0.00167	785.3	9.5	783.6	11.1	779.5	33.2	0.2	0.7	785.3	9.5
LMD02_025	180.4	26.4	0.6683	0.06572	0.00109	1.1816	0.0204	0.13045	0.0017	790.4	9.7	792.1	11.6	797.5	34.8	-0.2	-0.9	790.4	9.7
LMD02_026	446.4	65.1	0.6762	0.06481	#######	1.16184	0.01748	0.13007	0.00163	788.3	9.3	782.8	10.2	768.2	29.2	0.7	2.6	788.3	9.3
LMD02_027	102.6	15.3	0.6737	0.07139	0.00143	1.30176	0.02643	0.1323	0.00185	801	10.5	846.5	14	968.6	40.9	-5.4	-17.3	801	10.5
LMD02_028	337.9	52.8	0.8675	0.06536	0.00096	1.19072	0.01869	0.13217	0.00167	800.2	9.5	796.3	10.7	785.9	30.8	0.5	1.8	800.2	9.5
LMD02_029	245.1	37.5	0.6453	0.06484	0.00107	1.22456	0.02108	0.13702	0.00179	827.8	10.1	811.9	11.8	769.1	34.7	2.0	7.6	827.8	10.1

FOR REVIEW PURPOSES ONLY

LMD02_03(	185.6	28.3	0.798	0.0651	0.00122	1.17595	0.02262	0.13106	0.00178	793.9	10.1	789.4	12.7	777.6	39.4	0.6	2.1	793.9	10.1
LMD02_031	112.4	16.8	0.7878	0.06506	0.00174	1.15744	0.0305	0.12907	0.00202	782.6	11.5	780.8	16.9	776.3	56.3	0.2	0.8	782.6	11.5
LMD02_032	227.4	37.4	0.9332	0.06552	0.00128	1.23291	0.02457	0.13653	0.00188	825	10.7	815.7	13.4	791.1	41	1.1	4.3	825	10.7
LMD02_033	112.4	16.8	0.7341	0.06461	0.00175	1.17174	0.03123	0.13158	0.00207	796.9	11.8	787.5	17.2	761.7	57.1	1.2	4.6	796.9	11.8
LMD02_034	46.4	6.6	0.6876	0.0633	0.00239	1.08908	0.03994	0.12482	0.00233	758.2	13.4	748.1	22.3	718.3	80.2	1.4	5.6	758.2	13.4
LMD02_035	130.1	19.2	1.0983	0.06349	0.00154	1.1034	0.02664	0.12609	0.00188	765.5	10.8	755	15.2	724.7	51.4	1.4	5.6	765.5	10.8
LMD02_036	182.4	26.9	0.7583	0.06475	0.00131	1.14715	0.02353	0.12855	0.00179	779.6	10.2	775.9	13.3	766.2	42.6	0.5	1.7	779.6	10.2
LMD02_037	332.7	48.9	0.6338	0.06539	0.00108	1.19402	0.02056	0.13248	0.00173	802	9.8	797.8	11.6	786.9	34.7	0.5	1.9	802	9.8
LMD02_038	113.1	18.5	1.1832	0.06533	0.00155	1.15004	0.02715	0.12772	0.00189	774.8	10.8	777.3	15.2	785	49.8	-0.3	-1.3	774.8	10.8
LMD02_039	305.9	46.5	0.8023	0.06427	0.00111	1.15997	0.02083	0.13094	0.00173	793.2	9.9	781.9	11.9	750.5	36.5	1.4	5.7	793.2	9.9
LMD02_040	63.4	8.4	0.8568	0.06596	0.0019	1.02937	0.02902	0.11322	0.00183	691.4	10.6	718.6	17	805.1	60.3	-3.8	-14.1	691.4	10.6
LMD02_041	477.8	69.9	0.7728	0.06611	0.00103	1.17021	0.01922	0.12843	0.00165	778.9	9.4	786.7	11.1	809.9	32.6	-1.0	-3.8	778.9	9.4
LMD02_042	89.5	14.5	1.0273	0.06506	0.00166	1.21066	0.03069	0.13501	0.00206	816.4	11.7	805.5	16.5	776.3	53.7	1.4	5.2	816.4	11.7
LMD02_043	157.5	24.3	0.8499	0.06532	0.00136	1.18312	0.02487	0.13142	0.00185	796	10.5	792.8	13.8	784.7	43.7	0.4	1.4	796	10.5
LMD02_044	105.2	16.1	0.7417	0.06461	0.00157	1.18969	0.02873	0.13359	0.002	808.3	11.4	795.8	15.7	761.7	51.2	1.6	6.1	808.3	11.4
LMD02_045	38.6	5.8	0.8642	0.06527	0.00249	1.15712	0.04279	0.12862	0.00246	780	14.1	780.6	23.2	783.1	80.2	-0.1	-0.4	780	14.1
LMD02_046	234.6	34.9	0.5921	0.06617	0.0012	1.23092	0.02306	0.13497	0.00182	816.2	10.3	814.8	12.7	811.8	37.9	0.2	0.5	816.2	10.3
LMD02_047	125.5	19	0.7067	0.06695	0.00138	1.23195	0.02569	0.13351	0.00188	807.9	10.7	815.2	14	836.2	42.9	-0.9	-3.4	807.9	10.7
LMD02_048	346.4	50.2	0.8304	0.0638	0.00107	1.08942	0.01902	0.12389	0.00162	752.9	9.3	748.2	11.3	735	35.5	0.6	2.4	752.9	9.3
LMD02_049	346.4	51.7	0.701	0.06703	0.00107	1.21433	0.02042	0.13145	0.00171	796.1	9.7	807.2	11.5	838.7	33.2	-1.4	-5.1	796.1	9.7
LMD02_050	166.7	26.4	0.805	0.06748	0.0012	1.26236	0.0232	0.13572	0.00182	820.4	10.3	829	12.6	852.6	37	-1.0	-3.8	820.4	10.3
LMD02_051	139.9	21.6	0.9927	0.06733	0.00152	1.1772	0.02657	0.12685	0.00185	769.9	10.6	790	14.8	848	46.9	-2.5	-9.2	769.9	10.6
LMD02_052	207.8	33.8	1.501	0.0645	0.00116	1.0602	0.01975	0.11926	0.0016	726.3	9.2	733.9	11.7	758.1	37.9	-1.0	-4.2	726.3	9.2
LMD02_053	177.8	28.3	0.667	0.06735	0.00125	1.31704	0.02505	0.14188	0.00193	855.3	10.9	853.2	13.3	848.6	38.6	0.2	0.8	855.3	10.9
LMD02_054	378.4	35.9	0.9917	0.07366	0.00185	0.82419	0.02038	0.08119	0.00124	503.2	7.4	610.4	13.5	1032.2	50.8	-17.6	-51.2		
LMD02_055	207.2	30.9	0.7842	0.06403	0.00112	1.13808	0.0206	0.12897	0.00171	782	9.8	771.6	11.9	742.6	37	1.3	5.3	782	9.8
LMD02_056	757.5	71.8	0.7756	0.06704	0.00112	0.77973	0.01356	0.08439	0.00111	522.3	6.6	585.3	9.5	839	34.8	-10.8	-37.8	522.3	6.6
LMD02_057	180.4	26.9	0.6943	0.06663	0.00138	1.21224	0.02551	0.132	0.00186	799.3	10.6	806.2	13.9	826.2	43.2	-0.9	-3.3	799.3	10.6
LMD02_058	323.5	51.2	0.7791	0.06488	0.00109	1.22508	0.02157	0.13701	0.00181	827.7	10.3	812.1	12	770.4	35.4	1.9	7.4	827.7	10.3
LMD02_059	194.8	30.4	0.8385	0.06434	0.00123	1.17867	0.02312	0.13291	0.00182	804.4	10.4	790.7	12.9	752.8	40.4	1.7	6.9	804.4	10.4
LMD02_060	96.1	14.1	0.5779	0.06627	0.00158	1.21639	0.02897	0.13318	0.00199	806	11.3	808.1	15.7	814.9	49.8	-0.3	-1.1	806	11.3
LMD02_061	289.5	44.8	0.7083	0.06516	0.00116	1.22889	0.02268	0.13683	0.00183	826.7	10.4	813.8	12.5	779.5	37.4	1.6	6.1	826.7	10.4
LMD02_062	117.6	19.5	1.1976	0.0653	0.00161	1.17376	0.02885	0.13042	0.00197	790.3	11.2	788.4	15.9	784	51.8	0.2	0.8	790.3	11.2
LMD02_063	96.1	14.1	0.6036	0.06643	0.00161	1.21335	0.02926	0.13251	0.00199	802.2	11.3	806.7	15.9	820	50.6	-0.6	-2.2	802.2	11.3
LMD02_064	277.1	40.8	0.5808	0.06448	0.00125	1.19599	0.02379	0.13457	0.00185	813.9	10.5	798.7	13.1	757.4	40.9	1.9	7.5	813.9	10.5
LMD02_065	261.4	37.7	0.6099	0.06419	0.00122	1.15579	0.02256	0.13064	0.00178	791.5	10.1	780	12.7	747.9	40.2	1.5	5.8	791.5	10.1
LMD02_066	314.4	49.8	1.2558	0.06438	0.00123	1.09379	0.02147	0.12327	0.00169	749.4	9.7	750.3	12.5	754.1	40.3	-0.1	-0.6	749.4	9.7
LMD02_067	233.3	36.2	0.7766	0.06734	0.00163	1.25431	0.03031	0.13514	0.00204	817.1	11.6	825.3	16.1	848.3	50.3	-1.0	-3.7	817.1	11.6
LMD02_068	124.2	18.3	0.5838	0.06595	0.00153	1.21999	0.02834	0.13421	0.00198	811.8	11.3	809.8	15.3	804.8	48.6	0.3	0.9	811.8	11.3
LMD02_069	394.1	57.1	0.6058	0.06619	0.00126	1.19004	0.0232	0.13044	0.00179	790.4	10.2	796	12.9	812.4	39.8	-0.7	-2.7	790.4	10.2
LMD02_070	293.5	41.3	0.7705	0.0636	0.00122	1.07719	0.02113	0.12288	0.00168	747.1	9.6	742.3	12.4	728.4	40.7	0.7	2.6	747.1	9.6
LMD02_071	108.5	18.2	0.8694	0.06669	0.00167	1.29697	0.03242	0.1411	0.00216	850.9	12.2	844.4	16.8	828.1	52.2	0.8	2.7	850.9	12.2
LMD02_072	314.4	54.2	1.6577	0.06366	0.00124	1.08886	0.02169	0.12409	0.00171	754.1	9.8	747.9	12.6	730.4	41.3	0.8	3.2	754.1	9.8
LMD02_073	292.8	45.4	0.6989	0.0648	0.00123	1.22376	0.0239	0.13701	0.00188	827.7	10.7	811.5	13.1	767.8	40	2.0	7.8	827.7	10.7
LMD02_074	165.4	26	1.0265	0.06489	0.00148	1.14472	0.02627	0.128	0.00187	776.4	10.7	774.7	14.7	770.8	48	0.2	0.7	776.4	10.7
LMD02_075	73.9	10.2	0.485	0.069	0.0024	1.23705	0.04185	0.13008	0.00239	788.3	13.6	817.5	22.1	898.7	71.8	-3.6	-12.3	788.3	13.6
LMD02_076	190.2	28.9	0.5713	0.06731	0.00149	1.28576	0.02877	0.13859	0.00202	836.7	11.4	839.4	15.1	847.4	46	-0.3	-1.3	836.7	11.4
LMD02_077	709.8	100.9	0.6332	0.06459	0.00116	1.1408	0.02119	0.12815	0.00172	777.3	9.8	772.9	12.1	761	37.9	0.6	2.1	777.3	9.8
LMD02_078	417	65.1	0.8635	0.06552	0.00113	1.19814	0.0216	0.13269	0.00177	803.2	10.1	799.7	12.1	791.1	36.2	0.4	1.5	803.2	10.1

LMD02_07	250.3	40.1	0.8766	0.06768	0.00161	1.2592	0.0299	0.13498	0.00203	816.2	11.5	827.5	15.9	858.8	49.4	-1.4	-5.0	816.2	11.5
LMD02_08	322.2	49.1	0.7082	0.06764	0.0012	1.25649	0.0232	0.13477	0.00181	815	10.3	826.3	12.6	857.5	36.8	-1.4	-5.0	815	10.3
LMD02_081	79.7	13.6	1.1323	0.06904	0.00216	1.29316	0.03964	0.13589	0.00234	821.4	13.3	842.7	20.5	899.9	64.5	-2.5	-8.7	821.4	13.3
LMD02_082	132	20.2	0.7644	0.06474	0.00165	1.18689	0.03006	0.13301	0.00205	805	11.7	794.5	16.4	765.9	53.7	1.3	5.1	805	11.7
LMD02_083	523.5	78	0.6712	0.06533	0.00114	1.19796	0.02178	0.13305	0.00178	805.2	10.1	799.6	12.2	785	36.7	0.7	2.6	805.2	10.1
LMD02_084	220.9	36.5	1.075	0.06458	0.00143	1.18576	0.02647	0.13322	0.00193	806.2	11	794	14.6	760.7	46.7	1.5	6.0	806.2	11
LMD02_085	117	20.1	1.1724	0.06468	0.0017	1.21044	0.03159	0.13579	0.00211	820.8	12	805.4	17	763.9	55.4	1.9	7.4	820.8	12
LMD02_086	97.4	17.4	1.3613	0.06554	0.00175	1.2165	0.03218	0.13467	0.00212	814.5	12	808.2	17.3	791.7	56	0.8	2.9	814.5	12
LMD02_087	391.5	59.9	0.8281	0.06422	0.00118	1.16402	0.0221	0.1315	0.00178	796.4	10.1	783.8	12.5	748.9	38.8	1.6	6.3	796.4	10.1
LMD02_088	321.6	51.5	0.7198	0.06467	0.00123	1.25465	0.02457	0.14075	0.00193	848.9	10.9	825.5	13.3	763.6	40.1	2.8	11.2	848.9	10.9
LMD02_089	111.1	16.9	0.6555	0.06597	0.00172	1.24055	0.03213	0.13644	0.00212	824.5	12	819.1	17.1	805.4	54.6	0.7	2.4	824.5	12
LMD02_090	371.9	62.2	0.9003	0.06726	0.00124	1.30443	0.02491	0.14072	0.00192	848.7	10.9	847.7	13.2	845.8	38.3	0.1	0.3	848.7	10.9
LMD02_091	45.8	6.9	0.8788	0.06541	0.00255	1.13609	0.04304	0.12601	0.00241	765.1	13.8	770.7	23.5	787.6	81.8	-0.7	-2.9	765.1	13.8
LMD02_092	537.9	69.9	0.938	0.06568	0.0014	1.02174	0.02202	0.11287	0.00161	689.4	9.3	714.8	13.2	796.2	44.7	-3.6	-13.4	689.4	9.3
LMD02_093	187.6	29.6	0.8324	0.06574	0.00148	1.22348	0.02772	0.13503	0.00197	816.5	11.2	811.4	15	798.1	47.2	0.6	2.3	816.5	11.2
LMD02_094	63.4	9.9	0.8269	0.06186	0.00209	1.13965	0.03774	0.13366	0.00235	808.7	13.4	772.3	20.6	669.3	72.3	4.7	20.8	808.7	13.4
LMD02_095	173.9	27.8	0.714	0.067	0.00201	1.29661	0.03822	0.1404	0.00237	846.9	13.4	844.2	19.7	837.8	62.5	0.3	1.1	846.9	13.4
LMD02_096	158.2	24	0.6029	0.06742	0.00163	1.27707	0.03093	0.13744	0.00208	830.2	11.8	835.5	16.2	850.8	50.2	-0.6	-2.4	830.2	11.8
LMD02_097	162.7	35.4	1.4281	0.07051	0.00193	1.57284	0.04263	0.16185	0.00263	967	14.6	959.5	19.8	943.2	56.1	0.8	2.5	967	14.6
LMD02_098	364	50	1.0969	0.06479	0.00124	1.01982	0.02011	0.1142	0.00157	697.1	9.1	713.8	12.1	767.5	40.3	-2.3	-9.2	697.1	9.1
LMD02_099	489.5	74.6	0.7195	0.06702	0.00132	1.23831	0.0251	0.13405	0.00187	810.9	10.6	818.1	13.6	838.4	41	-0.9	-3.3	810.9	10.6
LMD02_100	191.3	28.9	0.6935	0.06578	0.00093	1.21799	0.01854	0.13447	0.00173	813.3	9.8	808.9	10.7	799.4	7.8	0.6	1.7	813.3	9.8
LMD02_101	252.1	40	1.1548	0.06542	#######	1.18835	0.01766	0.13191	0.00169	798.8	9.6	795.2	10.4	787.9	7.5	0.4	1.4	798.8	9.6
LMD02_102	112.2	20.3	5.9655	0.44526	0.05899	5.3264	0.55469	0.08687	0.00821	537	48.7	1873.1	139.2	4069.4	132.1	-71.3	-86.8		
LMD02_103	144.6	26.5	4.8029	0.44638	0.03691	7.34781	0.46155	0.11953	0.00797	727.9	45.9	2154.6	94.9	4073.2	82.4	-66.2	-82.1		
LMD02_104	171.5	28.8	0.909	0.06422	0.00095	1.24549	0.01959	0.14084	0.00183	849.4	10.3	821.4	11.1	748.9	7.8	3.4	13.4	849.4	10.3
LMD02_105	288.5	44.2	0.6238	0.06478	0.00084	1.23468	0.01762	0.1384	0.00175	835.6	9.9	816.5	10.2	767.2	7	2.3	8.9	835.6	9.9
LMD02_106	196.8	29.4	0.66	0.06219	0.00107	1.15159	0.02049	0.13447	0.0018	813.3	10.2	778	11.9	680.6	8.5	4.5	19.5	813.3	10.2
LMD02_107	530.4	73.1	0.6924	0.06515	0.00078	1.12053	0.0151	0.12489	0.00155	758.6	8.9	763.2	9.3	779.2	6.5	-0.6	-2.6	758.6	8.9
LMD02_108	325.6	49.8	0.7256	0.06406	0.00082	1.19333	0.01689	0.13527	0.0017	817.9	9.7	797.5	9.9	743.6	6.7	2.6	10.0	817.9	9.7
LMD02_109	82.2	12.8	0.574	0.07462	0.00136	1.45589	0.02714	0.14167	0.00197	854.1	11.1	912.3	13.8	1058.3	12	-6.4	-19.3	854.1	11.1
LMD02_110	118.6	17.8	0.7492	0.06311	0.0011	1.14588	0.02061	0.13184	0.00178	798.4	10.1	775.3	12	711.9	8.9	3.0	12.1	798.4	10.1
LMD02_111	236.3	21.8	4.5292	0.54909	0.04638	5.41092	0.33394	0.07155	0.00481	445.5	28.9	1886.6	92.5	4378.7	84.6	-76.4	-89.8		
LMD02_112	39.5	6.1	24.337	0.70424	0.0367	26.1728	1.16104	0.26984	0.01382	1540	70.2	3353	71.5	4739.4	52.4	-54.1	-67.5		
LMD02_113	170.7	20.4	4.9847	0.39153	0.03646	3.8329	0.27895	0.07108	0.00477	442.7	28.7	1599.7	92.5	3876.9	92.5	-72.3	-88.6		
LMD02_114	205.5	22.5	11.0979	0.52167	0.03787	5.07779	0.27036	0.07067	0.00408	440.2	24.6	1832.4	78.7	4303.6	72.6	-76.0	-89.8		
LMD02_115	554.1	91	0.9221	0.06506	0.00077	1.22723	0.01633	0.13695	0.0017	827.4	9.6	813.1	9.6	776.3	6.4	1.8	6.6	827.4	9.6
LMD02_116	216.1	36.5	1.2527	0.06808	0.00124	1.23693	0.02298	0.1318	0.00175	798.1	10	817.5	12.7	871	10.7	-2.4	-8.4	798.1	10
LMD02_117	65.9	9.6	0.8661	0.06866	0.00183	1.16254	0.03045	0.12283	0.0019	746.8	10.9	783.1	16.8	888.5	15.8	-4.6	-15.9	746.8	10.9
LMD02_118	105.5	17.8	1.3801	0.06317	0.00142	1.08661	0.02432	0.12479	0.00177	758.1	10.1	746.9	14.1	714	11.5	1.5	6.2	758.1	10.1
LMD02_119	35	5.2	0.7569	0.06905	0.00232	1.22065	0.03973	0.12825	0.00228	777.9	13	810.1	21.2	900.2	20.1	-4.0	-13.6	777.9	13
LMD02_120	265.8	41.3	0.4623	0.06764	0.0011	1.36019	0.02286	0.1459	0.00187	877.9	10.5	872	12.1	857.5	9.4	0.7	2.4	877.9	10.5
LMD02_121	84.7	3.6	0.4022	0.05418	0.00285	0.30831	0.01558	0.04129	0.00086	260.8	5.3	272.9	13.5	378.5	16.6	-4.4	-31.1	260.8	5.3
LMD02_122	304.4	47.7	0.7382	0.06501	0.00113	1.21795	0.02178	0.13593	0.00177	821.6	10	808.8	12.1	774.7	9.4	1.6	6.1	821.6	10
LMD02_123	135.9	21	0.6104	0.06736	0.00147	1.28815	0.02818	0.13874	0.00197	837.5	11.2	840.5	14.9	848.9	12.6	-0.4	-1.3	837.5	11.2
LMD02_124	96.4	14.5	0.6726	0.06897	0.00163	1.25458	0.02948	0.13198	0.00195	799.2	11.1	825.5	15.8	897.8	14.1	-3.2	-11.0	799.2	11.1
LMD02_125	229.3	36.9	2.2397	0.07074	0.00129	1.04025	0.01935	0.10671	0.00142	653.6	8.3	724	11.7	949.9	11.3	-9.7	-31.2	653.6	8.3
LMD02_126	82.7	13.1	0.6994	0.0687	0.00184	1.31215	0.03457	0.1386	0.00217	836.7	12.3	851.1	17.9	889.7	15.9	-1.7	-6.0	836.7	12.3
LMD02_127	241.5	39.3	0.8706	0.06545	0.00111	1.23036	0.0216	0.1364	0.00177	824.3	10	814.5	12	788.8	9.3	1.2	4.5	824.3	10

FOR REVIEW PURPOSES ONLY

LMD02_128	125.8	20.1	0.7855	0.06614	0.00138	1.2531	0.02637	0.13749	0.00191	830.5	10.8	824.8	14.2	810.8	11.7	0.7	2.4	830.5	10.8
LMD02_129	243.5	36.8	0.6414	0.06705	0.00117	1.24079	0.02233	0.13429	0.00176	812.3	10	819.2	12.3	839.3	10	-0.8	-3.2	812.3	10

LCG03

	concentrations			ratios						ages						discordance		preferred ages	
sample	ppm U	ppm Pb	atomic Th/U	Pb207/Pb206	1 sigma	Pb207/U235	1 sigma	Pb206/U238	1 sigma	age 206/238	1 sigma	age 207/235	1 sigma	age 207/206	1 sigma	%discord.68-75	%discord.68-76	preferred age	1 sigma
LCG03-1	58.8	9.3	0.6696	0.06699	0.00178	1.29322	0.03392	0.1401	0.00217	845.2	12.3	842.7	17.6	837.5	15.2	0.3	0.9	845.2	12.3
LCG03-2	133.9	22.1	0.9601	0.06702	0.00132	1.24832	0.02494	0.13517	0.00184	817.3	10.4	822.6	13.5	838.4	11.2	-0.7	-2.5	817.3	10.4
LCG03-3	17.2	2.5	0.6536	0.06926	0.00317	1.25261	0.05515	0.13125	0.00285	795	16.2	824.6	28.6	906.5	27.4	-3.6	-12.3	795	16.2
LCG03-4	135.4	24.6	0.7251	0.1136	0.00189	2.41376	0.04118	0.1542	0.00207	924.5	11.6	1246.7	15.4	1857.8	14.2	-25.8	-50.2		
LCG03-5	196.8	31.2	0.9818	0.06666	0.00117	1.18624	0.02137	0.12914	0.00169	783	9.6	794.2	12.1	827.2	9.9	-1.4	-5.3	783	9.6
LCG03-6	75.1	11.6	0.8835	0.07132	0.00169	1.269	0.02974	0.12912	0.00191	782.8	10.9	831.9	15.9	966.6	14.8	-5.9	-19.0	782.8	10.9
LCG03-7	119.2	19	0.8304	0.06916	0.00137	1.28678	0.02582	0.13501	0.00185	816.4	10.5	839.9	13.8	903.5	11.9	-2.8	-9.6	816.4	10.5
LCG03-8	268.3	41	0.8239	0.06601	0.00108	1.18178	0.02008	0.12993	0.00166	787.5	9.5	792.1	11.4	806.7	9.1	-0.6	-2.4	787.5	9.5
LCG03-9	94.4	15.7	1.2788	0.06343	0.00148	1.10029	0.02556	0.12588	0.00182	764.3	10.4	753.5	14.6	722.7	12.1	1.4	5.8	764.3	10.4
LCG03-10	144.1	28.4	1.0877	0.07116	0.00128	1.53508	0.02829	0.15654	0.00208	937.5	11.6	944.5	13.8	962	11.2	-0.7	-2.5	937.5	11.6
LCG03-11	18.3	-0.3	0.8761	0.87223	0.03895	4.24802	0.12479	0.03534	0.00136	223.9	8.5	1683.4	48.5	5044.5	45	-86.7	-95.6		
LCG03-12	349	54.1	0.7727	0.06574	0.00102	1.21344	0.01974	0.13394	0.00169	810.3	9.6	806.8	11.1	798.1	8.6	0.4	1.5	810.3	9.6
LCG03-13	139	23.1	1.0588	0.0662	0.0013	1.21326	0.02412	0.13299	0.0018	804.9	10.2	806.7	13.3	812.7	11	-0.2	-1.0	804.9	10.2
LCG03-14	44.1	6.1	0.6251	0.06663	0.00209	1.14417	0.03498	0.12462	0.0021	757.1	12	774.5	19.3	826.2	17.7	-2.2	-8.4	757.1	12
LCG03-15	190.2	32.9	0.18	0.07448	0.00123	1.8067	0.03096	0.17603	0.00229	1045.2	12.6	1047.9	13.7	1054.5	10.8	-0.3	-0.9	1045.2	12.6
LCG03-16	110.1	17.6	0.9022	0.06468	0.00141	1.18945	0.02593	0.13345	0.00188	807.5	10.7	795.7	14.3	763.9	11.7	1.5	5.7	807.5	10.7
LCG03-17	98.4	16.2	0.8713	0.06649	0.00148	1.27221	0.02832	0.13885	0.00198	838.2	11.2	833.4	15	821.8	12.5	0.6	2.0	838.2	11.2
LCG03-18	377.9	53	0.3136	0.06655	0.00103	1.25971	0.02048	0.13738	0.00174	829.8	9.9	827.8	11.3	823.7	8.7	0.2	0.7	829.8	9.9
LCG03-19	258.2	39.2	0.9032	0.06686	0.00113	1.16996	0.02054	0.12699	0.00164	770.7	9.4	786.6	11.6	833.4	9.6	-2.0	-7.5	770.7	9.4
LCG03-20	70.5	11	0.9682	0.0597	0.00165	1.05135	0.02874	0.12781	0.00198	775.4	11.3	729.6	16.5	592.7	12.4	6.3	30.8		
LCG03-21	222.2	35.2	0.6832	0.06589	0.00115	1.26886	0.02276	0.13974	0.00182	843.2	10.3	831.9	12.4	802.9	9.7	1.4	5.0	843.2	10.3
LCG03-22	302.3	43.4	0.6458	0.06527	0.00105	1.1457	0.01918	0.12738	0.00162	772.9	9.3	775.2	11.1	783.1	8.8	-0.3	-1.3	772.9	9.3
LCG03-23	116.7	18.1	0.8028	0.06601	0.00135	1.20069	0.02484	0.132	0.00182	799.3	10.4	800.9	13.7	806.7	11.4	-0.2	-0.9	799.3	10.4
LCG03-24	45.7	7.1	0.7508	0.06378	0.00188	1.18415	0.03423	0.13474	0.00218	814.8	12.4	793.2	18.5	734.3	15.4	2.7	11.0	814.8	12.4
LCG03-25	141.5	21.8	0.6055	0.06581	0.00126	1.25875	0.02448	0.1388	0.00187	837.9	10.6	827.3	13.3	800.3	10.6	1.3	4.7	837.9	10.6
LCG03-26	140	21	0.7479	0.06545	0.00128	1.17563	0.0234	0.13035	0.00177	789.9	10.1	789.3	13.1	788.8	10.7	0.1	0.1	789.9	10.1
LCG03-27	702.1	191.8	13.3263	0.70131	0.02254	48.1939	1.59021	0.49871	0.01769	2608.2	76.1	3955.7	47.6	4733.4	32.3	-34.1	-44.9		
LCG03-28	119.2	18.3	0.6676	0.06775	0.00135	1.27383	0.02565	0.13646	0.00187	824.6	10.6	834.1	13.8	860.9	11.6	-1.1	-4.2	824.6	10.6
LCG03-29	168.4	25.9	0.7293	0.06569	0.0012	1.20992	0.02265	0.13367	0.00177	808.8	10.1	805.2	12.5	796.5	10.1	0.4	1.5	808.8	10.1
LCG03-30	539.7	55.7	0.2499	0.06179	0.00093	0.8849	0.01411	0.10394	0.0013	637.5	7.6	643.6	9.3	666.8	7.4	-1.0	-4.4	637.5	7.6
LCG03-31	137	24	1.3662	0.0651	0.00129	1.17295	0.0236	0.13075	0.00178	792.1	10.1	788	13.2	777.6	10.8	0.5	1.9	792.1	10.1
LCG03-32	112.1	16.4	0.5734	0.06917	0.00141	1.26845	0.0261	0.13307	0.00184	805.4	10.5	831.7	14	903.8	12.2	-3.2	-10.9	805.4	10.5
LCG03-33	26.4	4.4	1.1888	0.06697	0.00247	1.179	0.04216	0.12776	0.00238	775.1	13.6	790.8	22.7	836.8	21	-2.0	-7.4	775.1	13.6
LCG03-34	2166.5	260.6	0.0012	0.34411	0.01985	6.36752	0.32134	0.13429	0.00539	812.3	30.6	2027.8	61.7	3681.1	57	-59.9	-77.9		
LCG03-35	50.2	8.2	0.975	0.06682	0.00186	1.23746	0.03392	0.1344	0.00213	812.9	12.1	817.7	18	832.2	15.8	-0.6	-2.3	812.9	12.1
LCG03-36	98.4	58	3.3217	0.10831	0.0017	4.58331	0.076	0.30711	0.00408	1726.5	20.1	1746.2	17.1	1771.2	13.2	-1.1	-2.5	1771.2	13.2
LCG03-37	1169.7	232.6	1.0944	0.07955	0.00106	1.69149	0.02449	0.1543	0.00189	925	10.6	1005.3	11.6	1185.9	9.3	-8.0	-22.0	925	10.6
LCG03-38	148.6	23.3	0.6663	0.06984	0.0013	1.3391	0.0255	0.13916	0.00187	839.9	10.6	862.8	13.3	923.7	11.3	-2.7	-9.1	839.9	10.6
LCG03-39	106.5	16.2	0.8184	0.06684	0.00142	1.19607	0.02562	0.12987	0.00182	787.1	10.4	798.8	14.1	832.8	12.1	-1.5	-5.5	787.1	10.4
LCG03-40	205.4	34.9	0.9937	0.06674	0.00115	1.27795	0.0228	0.13896	0.00181	838.8	10.2	835.9	12.3	829.7	9.8	0.3	1.1	838.8	10.2
LCG03-41	136.5	20.4	0.6158	0.06832	0.00133	1.26627	0.02496	0.1345	0.00182	813.5	10.3	830.7	13.5	878.3	11.4	-2.1	-7.4	813.5	10.3

FOR REVIEW PURPOSES ONLY

LCG03-42	365.2	59.8	0.7015	0.06935	0.00105	1.37378	0.02204	0.14376	0.00181	865.9	10.2	877.8	11.6	909.2	9.1	-1.4	-4.8	865.9	10.2
LCG03-43	189.7	28.7	0.7019	0.06742	0.00119	1.23545	0.02243	0.13298	0.00174	804.8	9.9	816.8	12.3	850.8	10.2	-1.5	-5.4	804.8	9.9
LCG03-44	-91235	-19550	0.0293	0.21521	0.00899	5.91013	0.22736	0.1993	0.00591	1171.6	31.8	1962.7	44.5	2945.2	40.1	-40.3	-60.2		
LCG03-45	81.2	12.5	0.6514	0.06553	0.00151	1.23668	0.02843	0.13696	0.00198	827.4	11.2	817.4	15.3	791.4	12.7	1.2	4.6	827.4	11.2
LCG03-46	174.5	27.2	0.6551	0.06794	0.00121	1.29768	0.02373	0.13862	0.00183	836.9	10.4	844.7	12.7	866.7	10.4	-0.9	-3.4	836.9	10.4
LCG03-47	218.6	30.5	0.8888	0.06547	0.00116	1.06011	0.01937	0.11751	0.00154	716.2	8.9	733.9	11.5	789.5	9.7	-2.4	-9.3	716.2	8.9
LCG03-48	263.3	41.8	0.8565	0.06762	0.00111	1.24377	0.02123	0.1335	0.00171	807.8	9.7	820.6	11.7	856.9	9.5	-1.6	-5.7	807.8	9.7
LCG03-49	58.8	9.1	0.4362	0.07293	0.00179	1.47018	0.03576	0.1463	0.00222	880.2	12.5	918.2	17.4	1012	15.7	-4.1	-13.0	880.2	12.5
LCG03-50	378.9	47.6	0.5925	0.0638	0.00101	0.99885	0.01658	0.11361	0.00144	693.7	8.3	703.2	10.3	735	8.3	-1.4	-5.6	693.7	8.3
LCG03-51	91.3	14.3	0.7537	0.06429	0.00142	1.20569	0.02674	0.1361	0.00193	822.6	11	803.2	14.6	751.2	11.7	2.4	9.5	822.6	11
LCG03-52	96.9	14.4	0.5883	0.06629	0.00143	1.22321	0.02643	0.13392	0.00188	810.2	10.7	811.2	14.4	815.5	12.1	-0.1	-0.7	810.2	10.7
LCG03-53	226.7	35.1	1.3352	0.06246	0.00111	1.0018	0.01829	0.11639	0.00152	709.8	8.8	704.7	11.2	689.9	8.9	0.7	2.9	709.8	8.8
LCG03-54	54.8	8.4	0.6901	0.06353	0.00171	1.18103	0.03136	0.13492	0.00209	815.9	11.9	791.8	17.1	726	14	3.0	12.4	815.9	11.9
LCG03-55	192.3	18.8	0.6955	0.0581	0.0012	0.69268	0.01448	0.08653	0.00117	535	6.9	534.4	10.3	533.5	8.6	0.1	0.3	535	6.9
LCG03-56	108.6	16.2	0.5515	0.06821	0.00141	1.28322	0.02673	0.13654	0.0019	825.1	10.8	838.3	14.2	874.9	12.1	-1.6	-5.7	825.1	10.8
LCG03-57	154.7	25.8	0.7481	0.09834	0.00168	1.92017	0.03379	0.14171	0.00189	854.3	10.7	1088.1	14.5	1592.9	13.7	-21.5	-46.4		
LCG03-58	221.2	33.2	0.6322	0.06861	0.00116	1.27092	0.02233	0.13443	0.00174	813.1	9.9	832.8	12.1	887	10	-2.4	-8.3	813.1	9.9
LCG03-59	519.9	66.4	0.9988	0.06057	0.00093	0.87026	0.01414	0.10427	0.00131	639.4	7.6	635.7	9.4	624	7.2	0.6	2.5	639.4	7.6
LCG03-60	182.1	27.6	0.711	0.06897	0.00125	1.26388	0.02345	0.13299	0.00176	804.9	10	829.6	12.7	897.8	10.8	-3.0	-10.4	804.9	10
LCG03-61	123.8	19.4	0.6558	0.06664	0.00131	1.2776	0.0255	0.13915	0.00189	839.9	10.7	835.8	13.6	826.5	11.1	0.5	1.6	839.9	10.7
LCG03-62	200.9	31	0.6166	0.06811	0.00117	1.30371	0.02321	0.13892	0.00181	838.6	10.2	847.4	12.4	871.9	10.1	-1.0	-3.8	838.6	10.2
LCG03-63	169.9	15.3	0.3878	0.05789	0.00126	0.68994	0.01506	0.08649	0.00119	534.7	7.1	532.8	10.7	525.6	8.9	0.4	1.7	534.7	7.1
LCG03-64	283.6	63	0.5377	0.07845	0.00117	2.18363	0.03468	0.20201	0.00255	1186.1	13.7	1175.8	13.6	1158.3	10.3	0.9	2.4	1158.3	10.3
LCG03-65	383	55.1	0.6082	0.0687	0.00107	1.23182	0.02013	0.13012	0.00165	788.6	9.4	815.2	11.3	889.7	9.2	-3.3	-11.4	788.6	9.4
LCG03-66	215.1	33.9	0.9835	0.06922	0.00119	1.22307	0.02175	0.12823	0.00167	777.8	9.5	811.2	12.1	905.3	10.3	-4.1	-14.1	777.8	9.5
LCG03-67	134.9	21.5	0.9158	0.06539	0.0013	1.19596	0.02419	0.13273	0.00181	803.4	10.3	798.7	13.3	786.9	10.9	0.6	2.1	803.4	10.3
LCG03-68	46.2	2.5	0.9568	0.04783	0.00269	0.28748	0.01561	0.04362	0.00091	275.2	5.6	256.6	13.6	90.9	4.9	7.3	202.9		
LCG03-69	2543.9	NaN	0.5375	0.87775	0.09144	40.7333	3.78368	0.3368	0.03744	1871.3	180.5	3788.7	151	5053.5	105	-50.6	-63.0		
LCG03-70	101.5	15.6	0.8369	0.06734	0.00152	1.20818	0.0273	0.1302	0.00187	789	10.7	804.4	14.9	848.3	13	-1.9	-7.0	789	10.7
LCG03-71	141	25.2	1.5179	0.06437	0.00127	1.12451	0.02255	0.12678	0.00172	769.5	9.8	765.1	12.9	753.8	10.5	0.6	2.1	769.5	9.8
LCG03-72	146.6	19.5	0.5774	0.06624	0.0013	1.09752	0.02193	0.12025	0.00163	732	9.4	752.2	12.7	814	11	-2.7	-10.1	732	9.4
LCG03-73	210.5	34	0.8696	0.06656	0.00116	1.2381	0.02223	0.13499	0.00176	816.3	10	818	12.2	824	9.8	-0.2	-0.9	816.3	10
LCG03-74	108.6	18.9	1.374	0.06629	0.00145	1.176	0.02574	0.12876	0.00182	780.8	10.4	789.4	14.3	815.5	12.3	-1.1	-4.3	780.8	10.4
LCG03-75	446.4	70	0.8922	0.06521	0.001	1.17834	0.0191	0.13113	0.00165	794.3	9.4	790.5	10.9	781.1	8.4	0.5	1.7	794.3	9.4
LCG03-76	110.6	19.6	1.4782	0.06605	0.00141	1.16414	0.02502	0.12792	0.00179	776	10.2	783.9	13.9	808	11.9	-1.0	-4.0	776	10.2
LCG03-77	173	26.6	0.776	0.06981	0.00127	1.27075	0.02365	0.13211	0.00175	799.9	10	832.7	12.8	922.8	11	-3.9	-13.3	799.9	10
LCG03-78	20.8	3.4	0.6661	0.06765	0.00265	1.33454	0.0506	0.14317	0.00282	862.6	15.9	860.9	25.5	857.8	22.7	0.2	0.5	862.6	15.9
LCG03-79	78.6	12.5	0.881	0.06739	0.00156	1.22566	0.02836	0.132	0.00192	799.3	10.9	812.4	15.3	849.9	13.3	-1.6	-6.0	799.3	10.9
LCG03-80	349.5	53.3	0.6603	0.06636	0.00105	1.23529	0.02055	0.1351	0.00172	816.9	9.8	816.7	11.4	817.8	8.9	0.0	-0.1	816.9	9.8
LCG03-81	71.5	11.4	0.9666	0.06072	0.00151	1.09343	0.02697	0.13069	0.00193	791.8	11	750.2	15.3	629.3	11.7	5.5	25.8		
LCG03-82	910.5	NaN	1.4119	0.90189	0.02659	569.296	40.4076	4.58122	0.33126	11084	382.6	6443.8	79.2	5091.8	29.7	72.0	117.7		
LCG03-83	217.1	32.7	0.737	0.06681	0.00117	1.2103	0.02196	0.13148	0.00172	796.3	9.8	805.3	12.2	831.9	9.9	-1.1	-4.3	796.3	9.8
LCG03-84	155.2	23.8	0.8214	0.06579	0.00127	1.17809	0.02308	0.12996	0.00175	787.6	10	790.4	12.9	799.7	10.7	-0.4	-1.5	787.6	10
LCG03-85	0	NaN	0.8803	0.3419	0.2427	326.921	309.985	6.93973	5.39785	13356	4382.6	5881.9	1066	3671.3	701.4	127.1	263.8		
LCG03-86	164.4	30.2	1.1663	0.0645	0.00119	1.27049	0.02407	0.14296	0.0019	861.4	10.7	832.6	12.9	758.1	9.9	3.5	13.6	861.4	10.7
LCG03-87	143.6	24	1.0051	0.06786	0.0013	1.26467	0.02474	0.13525	0.00183	817.7	10.4	830	13.3	864.3	11.1	-1.5	-5.4	817.7	10.4
LCG03-88	247	39.3	0.9082	0.06829	0.00116	1.24485	0.022	0.1323	0.00172	801	9.8	821.1	12	877.4	10	-2.4	-8.7	801	9.8
LCG03-89	458.1	57.4	0.675	0.05974	0.00096	0.91842	0.01546	0.11157	0.00141	681.9	8.2	661.5	9.9	594.2	7.2	3.1	14.8	681.9	8.2
LCG03-90	686.8	NaN	2.862	0.74849	0.01904	83.7915	2.5118	0.81248	0.02533	3833.7	90.1	4508.5	40.4	4826.7	25.6	-15.0	-20.6		

FOR REVIEW PURPOSES ONLY

LCG03-91	427.6	58.3	0.4284	0.06502	0.00102	1.15436	0.01907	0.12885	0.00163	781.3	9.3	779.3	11	775	8.5	0.3	0.8	781.3	9.3
LCG03-92	108	14	0.9641	0.06475	0.0015	0.94839	0.02188	0.1063	0.00153	651.2	8.9	677.3	13.5	766.2	12.5	-3.8	-15.0	651.2	8.9
LCG03-93	131.4	18.7	0.6269	0.0708	0.00141	1.23274	0.02488	0.12636	0.00173	767.1	9.9	815.6	13.6	951.6	12.3	-5.9	-19.4	767.1	9.9
LCG03-94	292.7	32.1	0.7628	0.06467	0.00116	0.8388	0.01546	0.09414	0.00123	580	7.2	618.5	10.3	763.6	9.6	-6.2	-24.0	580	7.2
LCG03-95	65.9	10.2	0.9892	0.06501	0.00168	1.1271	0.02885	0.12583	0.00191	764	10.9	766.4	16.1	774.7	14	-0.3	-1.4	764	10.9
LCG03-96	173.5	95.2	0.5802	0.16712	0.00236	10.8418	0.16529	0.47084	0.00597	2487.2	26.2	2509.7	17.6	2529	13.2	-0.9	-1.7	2529	13.2
LCG03-97	1000.8	89.2	0.4859	0.07415	0.00112	0.84059	0.0134	0.08227	0.00103	509.7	6.1	619.5	9.1	1045.6	9.9	-17.7	-51.3		
LCG03-98	200.9	30.8	0.691	0.06666	0.00121	1.23854	0.02309	0.13486	0.00178	815.5	10.1	818.2	12.6	827.2	10.3	-0.3	-1.4	815.5	10.1
LCG03-99	588.4	173.2	0.1419	0.10508	0.00146	4.28599	0.06421	0.29603	0.00366	1671.6	18.2	1690.7	15.3	1715.7	11.5	-1.1	-2.6	1715.7	11.5
LCG03-100	340.4	53	0.6876	0.06532	0.00107	1.23557	0.02108	0.1373	0.00176	829.4	10	816.9	11.7	784.7	9	1.5	5.7	829.4	10
LCG03-101	92.8	18.6	0.8779	0.07934	0.00162	1.87958	0.0389	0.17195	0.00243	1022.8	13.4	1073.9	16.5	1180.6	14.3	-4.8	-13.4	1022.8	13.4
LCG03-102	131.9	22	1.1824	0.06648	0.00136	1.18637	0.0246	0.12951	0.00179	785.1	10.2	794.3	13.6	821.5	11.5	-1.2	-4.4	785.1	10.2
LCG03-103	712.2	66.7	0.4341	0.05965	0.00094	0.72866	0.01204	0.08866	0.00112	547.6	6.6	555.8	8.6	590.9	7.1	-1.5	-7.3	547.6	6.6
LCG03-104	136.5	21.2	0.7232	0.06859	0.00135	1.28319	0.02562	0.13578	0.00185	820.8	10.5	838.3	13.7	886.4	11.6	-2.1	-7.4	820.8	10.5
LCG03-105	129.9	20.3	0.7157	0.0703	0.00139	1.33043	0.02671	0.13735	0.00188	829.7	10.7	859.1	13.9	937.1	12.1	-3.4	-11.5	829.7	10.7
LCG03-106	121.7	18.8	0.756	0.06673	0.0014	1.22741	0.02605	0.13351	0.00186	807.9	10.6	813.2	14.1	829.4	11.9	-0.7	-2.6	807.9	10.6
LCG03-107	184.1	28.3	0.6887	0.0669	0.00124	1.24703	0.02376	0.13529	0.0018	818	10.2	822.1	12.9	834.7	10.5	-0.5	-2.0	818	10.2
LCG03-108	94.4	13	1.0144	0.07046	0.00167	1.10141	0.02595	0.11346	0.00167	692.8	9.7	754	14.9	941.8	14.5	-8.1	-26.4	692.8	9.7
LCG03-109	893.3	259.9	0.1504	0.11438	0.0016	4.60965	0.06952	0.29249	0.00363	1654	18.1	1751	15.6	1870.1	12	-5.5	-11.6	1870.1	12
LCG03-110	109.6	13.9	1.5615	0.05778	0.00148	0.72129	0.01826	0.09061	0.00133	559.1	7.9	551.4	12.6	521.4	10.4	1.4	7.2	559.1	7.9
LCG03-111	178.6	28.2	0.7958	0.06529	0.00122	1.21506	0.02333	0.13506	0.0018	816.7	10.2	807.5	12.8	783.7	10.2	1.1	4.2	816.7	10.2
LCG03-112	152.2	24.2	0.7912	0.06941	0.00133	1.30083	0.02547	0.13603	0.00184	822.2	10.4	846.1	13.5	910.9	11.5	-2.8	-9.7	822.2	10.4
LCG03-113	187.2	32.4	1.1617	0.06714	0.00125	1.25101	0.02381	0.13523	0.0018	817.6	10.2	823.9	12.9	842.1	10.7	-0.8	-2.9	817.6	10.2
LCG03-114	442.3	48.5	0.5526	0.06592	0.00114	0.91541	0.01634	0.1008	0.00131	619.1	7.7	659.9	10.5	803.8	9.6	-6.2	-23.0	619.1	7.7
LCG03-115	79.6	14.8	1.4454	0.06749	0.00156	1.26724	0.02926	0.13629	0.00198	823.6	11.2	831.2	15.5	852.9	13.3	-0.9	-3.4	823.6	11.2
LCG03-116	296.7	43.6	0.8142	0.06556	0.00112	1.12893	0.02	0.12499	0.00162	759.2	9.3	767.2	11.6	792.4	9.4	-1.0	-4.2	759.2	9.3
LCG03-117	114.1	17.5	0.7112	0.06615	0.0014	1.22243	0.02604	0.13412	0.00187	811.3	10.6	810.9	14.2	811.1	11.8	0.1	0.0	811.3	10.6
LCG03-118	44.6	NaN	1.5776	0.07451	0.00207	1.39907	0.03815	0.13629	0.0022	823.6	12.5	888.5	19	1055.3	18.2	-7.3	-22.0	823.6	12.5
LCG03-119	97.4	15.2	0.6866	0.06931	0.00153	1.31101	0.02899	0.1373	0.00196	829.4	11.1	850.6	15.1	908	13.2	-2.5	-8.7	829.4	11.1
LCG03-120	327.7	36.3	1.0075	0.06088	0.00111	0.75281	0.01412	0.08976	0.00118	554.1	7	569.9	9.8	635	8.6	-2.8	-12.7	554.1	7
LCG03-121	176.5	36.9	1.1184	0.07392	0.00129	1.67741	0.03033	0.16471	0.00217	982.9	12	1000	13.9	1039.3	11.4	-1.7	-5.4	982.9	12
LCG03-122	585.4	81.8	0.3386	0.07121	0.0011	1.32278	0.02161	0.13482	0.0017	815.3	9.7	855.7	11.5	963.4	9.6	-4.7	-15.4	815.3	9.7
LCG03-123	178	28.6	0.9228	0.06616	0.00124	1.21314	0.02333	0.13309	0.00178	805.5	10.1	806.6	12.8	811.4	10.5	-0.1	-0.7	805.5	10.1
LCG03-124	302.3	45.4	0.5273	0.06633	0.00112	1.26221	0.02213	0.13811	0.00178	834	10.1	828.9	12	816.8	9.5	0.6	2.1	834	10.1
LCG03-125	43.6	4.7	0.5587	0.05819	0.00193	0.78875	0.02551	0.09838	0.00165	604.9	9.7	590.5	16.6	536.9	13.8	2.4	12.7	604.9	9.7
LCG03-126	189.7	27.4	0.4918	0.0678	0.00126	1.25991	0.02393	0.13487	0.0018	815.6	10.2	827.9	13	862.4	10.8	-1.5	-5.4	815.6	10.2
LCG03-127	903.4	182.9	0.589	0.07893	0.00114	1.98417	0.03077	0.18245	0.00227	1080.3	12.4	1110.1	12.9	1170.4	10	-2.7	-7.7	1080.3	12.4
LCG03-128	322.6	35.6	0.5163	0.06746	0.00158	0.94663	0.02211	0.10185	0.00148	625.2	8.7	676.3	13.6	852	13.5	-7.6	-26.6	625.2	8.7
LCG03-129	74.6	11.8	0.7709	0.06473	0.0016	1.22296	0.03016	0.13713	0.00204	828.4	11.6	811.1	16.1	765.6	13.3	2.1	8.2	828.4	11.6
LCG03-130	309.4	46.3	0.751	0.0664	0.00113	1.1952	0.02117	0.13064	0.00169	791.5	9.6	798.4	11.8	819	9.6	-0.9	-3.4	791.5	9.6
LCG03-131	250.6	38.5	1.0644	0.06432	0.00117	1.09324	0.02047	0.12337	0.00163	749.9	9.4	750.1	11.9	752.2	9.7	0.0	-0.3	749.9	9.4
LCG03-132	159.3	22.4	0.955	0.0666	0.00136	1.08467	0.02244	0.11821	0.00162	720.3	9.3	745.9	13	825.3	11.5	-3.4	-12.7	720.3	9.3
LCG03-133	401.2	59.5	0.7042	0.06948	0.00122	1.24922	0.02261	0.1305	0.00171	790.7	9.8	823.1	12.4	913	10.6	-3.9	-13.4	790.7	9.8
LCG03-134	242	39.3	0.9552	0.06566	0.00118	1.20677	0.02236	0.13339	0.00175	807.2	10	803.7	12.4	795.6	9.9	0.4	1.5	807.2	10
LCG03-135	133.9	23.8	1.1677	0.06517	0.00132	1.245	0.02558	0.13865	0.0019	837	10.8	821.1	13.8	779.8	11	1.9	7.3	837	10.8
LCG03-136	236.9	24.9	0.9545	0.05729	0.00117	0.68314	0.01418	0.08654	0.00117	535	6.9	528.7	10.1	502.7	8.1	1.2	6.4	535	6.9
LCG03-137	255.2	39.1	0.6716	0.06698	0.00117	1.25045	0.02264	0.1355	0.00177	819.2	10	823.6	12.3	837.2	10	-0.5	-2.1	819.2	10
LCG03-138	133.4	16	0.2818	0.06212	0.00133	1.02214	0.02211	0.11942	0.00166	727.2	9.6	715	13.1	678.2	10.6	1.7	7.2	727.2	9.6
LCG03-139	221.2	21.2	0.6338	0.05522	0.00116	0.65121	0.01384	0.08559	0.00116	529.4	6.9	509.2	10	421.1	7.2	4.0	25.7	529.4	6.9

FOR REVIEW PURPOSES ONLY

LCG03-140	394.7	16.8	0.6488	0.05215	0.00119	0.27475	0.00629	0.03824	0.00053	241.9	3.3	246.5	5.8	292	5.8	-1.9	-17.2	241.9	3.3
LCG03-141	256.7	36.2	0.6785	0.06853	0.0012	1.17565	0.02131	0.12451	0.00163	756.5	9.3	789.3	12	884.6	10.3	-4.2	-14.5	756.5	9.3
LCG03-142	18.8	-13.6	220.628	1.13746	0.20305	105.942	18.0336	0.67603	0.14524	3329.1	558.6	4744.2	281	5417.7	180.4	-29.8	-38.6		
LCG03-143	175.5	28.9	1.063	0.06876	0.00137	1.25594	0.02537	0.13257	0.00181	802.5	10.3	826.1	13.7	891.5	11.8	-2.9	-10.0	802.5	10.3
LCG03-144	273.9	42.4	0.7454	0.0679	0.00119	1.25829	0.02279	0.13451	0.00176	813.5	10	827.1	12.4	865.5	10.2	-1.6	-6.0	813.5	10
LCG03-145	108	18.2	1.1612	0.06481	0.00144	1.17956	0.02632	0.1321	0.00187	799.8	10.6	791.1	14.5	768.2	12	1.1	4.1	799.8	10.6
LCG03-146	417.5	364.4	5.1794	0.33928	0.02085	19.2395	1.15158	0.4116	0.02254	2222.2	102.9	3053.9	79.5	3659.5	60.7	-27.2	-39.3		
LCG03-147	1189	NaN	1.7296	0.05311	0.00092	0.30617	0.00548	0.04184	0.00053	264.2	3.3	271.2	5.1	333.5	4.9	-2.6	-20.8	264.2	3.3
LCG03-148	81.2	11.9	0.5021	0.06545	0.00157	1.23477	0.0295	0.13693	0.00201	827.3	11.4	816.5	15.8	788.8	13.2	1.3	4.9	827.3	11.4
LCG03-149	276.5	41.7	0.744	0.06603	0.00116	1.1895	0.02162	0.13075	0.00171	792.1	9.7	795.7	12.1	807.3	9.8	-0.5	-1.9	792.1	9.7
LCG03-150	98.9	16.8	0.8505	0.06748	0.00148	1.3315	0.02932	0.14322	0.00203	862.8	11.4	859.5	15.1	852.6	12.7	0.4	1.2	862.8	11.4
LCG03-151	90.3	14	0.6592	0.06662	0.00152	1.264	0.02883	0.13772	0.00198	831.8	11.2	829.7	15.3	825.9	12.9	0.2	0.7	831.8	11.2
LCG03-152	245	37.3	0.648	0.06737	0.00121	1.2619	0.02331	0.13594	0.00179	821.7	10.2	828.8	12.6	849.2	10.3	-0.9	-3.2	821.7	10.2

LCG04

	concentrations			ratios						ages						discordance		preferred ages	
sample	ppm U	ppm Pb	atomic Th/U	Pb207/Pb206	1 sigma	Pb207/U235	1 sigma	Pb206/U238	1 sigma	age 206/238	1 sigma	age 207/235	1 sigma	age 207/206	1 sigma	%discord.68-75	%discord.68-76	preferred age	1 sigma
LCG04-001	166.8	25.9	0.6652	0.06666	0.00098	1.288	0.02023	0.14028	0.00182	846.2	10.3	840.4	11.2	827.2	8.3	0.7	2.3	846.2	10.3
LCG04-002	226.1	35.6	0.6365	0.06674	0.00092	1.30582	0.01944	0.14204	0.00181	856.2	10.2	848.3	10.8	829.7	7.8	0.9	3.2	856.2	10.2
LCG04-003	133.6	19.8	0.5647	0.06704	0.00105	1.26236	0.0209	0.1367	0.0018	826	10.2	829	11.6	839	8.9	-0.4	-1.6	826	10.2
LCG04-004	155.7	23.1	0.4215	0.06432	0.00099	1.25446	0.02046	0.14159	0.00185	853.6	10.4	825.4	11.4	752.2	8.2	3.4	13.5	853.6	10.4
LCG04-005	132.8	11.2	1.8151	0.05815	0.00165	0.52862	0.01467	0.066	0.00103	412	6.2	430.9	11.4	535.4	11.8	-4.4	-23.0	412	6.2
LCG04-006	133.6	84.6	0.534	0.17806	0.00197	13.0197	0.16691	0.53083	0.00668	2744.9	28.1	2681.1	15.8	2634.9	10.4	2.4	4.2	2634.9	10.4
LCG04-007	262.4	39.2	0.7504	0.06699	0.00091	1.221	0.01798	0.13232	0.00168	801.1	9.6	810.2	10.4	837.5	7.7	-1.1	-4.3	801.1	9.6
LCG04-008	335.1	57	0.422	0.06961	0.00087	1.54724	0.0214	0.16135	0.00202	964.3	11.2	949.4	10.9	916.9	7.5	1.6	5.2	964.3	11.2
LCG04-009	106.7	17	0.8716	0.06663	0.00116	1.25074	0.02244	0.13627	0.00184	823.5	10.4	823.7	12.4	826.2	9.8	0.0	-0.3	823.5	10.4
LCG04-010	28.5	4.3	0.5756	0.07057	0.00296	1.36028	0.05491	0.13992	0.00297	844.2	16.8	872	27.5	945	25.8	-3.2	-10.7	844.2	16.8
LCG04-011	564.3	69.5	0.9874	0.06589	0.00081	0.96937	0.01326	0.10679	0.00133	654.1	7.7	688.1	8.7	802.9	6.8	-4.9	-18.5	654.1	7.7
LCG04-012	520.1	297.9	0.7481	0.18915	0.00199	12.9459	0.15896	0.49682	0.00607	2600.1	26.1	2675.7	15.2	2734.8	10	-2.8	-4.9	2734.8	10
LCG04-013	214.2	23.7	1.2763	0.06035	0.00101	0.71093	0.01232	0.08551	0.00112	528.9	6.7	545.3	9	616.1	7.7	-3.0	-14.2	528.9	6.7
LCG04-014	494	61.3	1.2132	0.06638	0.00084	0.99113	0.01386	0.10839	0.00135	663.4	7.9	699.3	9	818.4	7.1	-5.1	-18.9	663.4	7.9
LCG04-015	245	32	0.9903	0.06994	0.00101	1.11569	0.01717	0.11579	0.00149	706.3	8.6	760.9	10.4	926.6	8.8	-7.2	-23.8	706.3	8.6
LCG04-016	34	8	1.6908	0.06941	0.00175	1.58187	0.03964	0.16543	0.0026	986.9	14.4	963.1	18.5	910.9	15.2	2.5	8.3	986.9	14.4
LCG04-017	222.1	9.6	0.8009	0.05137	0.00172	0.26585	0.00863	0.03757	0.00061	237.8	3.8	239.4	7.9	257.5	7.6	-0.7	-7.7	237.8	3.8
LCG04-018	216.6	34.9	0.8722	0.06615	0.00094	1.24628	0.01897	0.13675	0.00175	826.3	9.9	821.7	10.8	811.1	7.9	0.6	1.9	826.3	9.9
LCG04-019	168.4	28.6	1.1747	0.0636	0.001	1.16917	0.01935	0.13344	0.00174	807.5	9.9	786.3	11.2	728.4	8.2	2.7	10.9	807.5	9.9
LCG04-020	100.4	15.6	0.624	0.06277	0.00112	1.2078	0.02218	0.13966	0.00188	842.7	10.6	804.2	12.4	700.4	9	4.8	20.3	842.7	10.6
LCG04-021	350.1	43.6	0.4655	0.06636	0.00087	1.10186	0.01576	0.12053	0.00151	733.6	8.7	754.2	9.7	817.8	7.4	-2.7	-10.3	733.6	8.7
LCG04-022	210.2	30.2	0.4678	0.06428	0.00095	1.19875	0.01888	0.13535	0.00174	818.3	9.9	800	10.8	750.9	7.8	2.3	9.0	818.3	9.9
LCG04-023	2120.6	221.7	0.2537	0.09674	0.00105	1.43273	0.01786	0.1075	0.00131	658.2	7.6	902.7	9.8	1562.2	8.7	-27.1	-57.9		
LCG04-024	96.4	14.7	0.8227	0.06383	0.00119	1.14728	0.02195	0.13047	0.00179	790.5	10.2	776	12.6	736	9.8	1.9	7.4	790.5	10.2
LCG04-025	86.2	14.1	0.6569	0.06833	0.00119	1.41743	0.02546	0.15056	0.00203	904.1	11.4	896.3	13.1	878.6	10.2	0.9	2.9	904.1	11.4
LCG04-026	442.6	73.8	1.8807	0.06461	0.00083	1.00575	0.01421	0.11299	0.00141	690.1	8.2	706.7	9.1	761.7	6.9	-2.4	-9.4	690.1	8.2
LCG04-027	119.3	17.4	0.6622	0.06424	0.0011	1.15703	0.02049	0.13073	0.00174	792	9.9	780.6	11.8	749.5	9.1	1.5	5.7	792	9.9
LCG04-028	752.4	130.6	0.3975	0.07191	0.00086	1.64931	0.02212	0.16648	0.00206	992.7	11.4	989.3	10.9	983.4	7.5	0.3	0.9	992.7	11.4
LCG04-029	242.6	104.9	0.5259	0.1253	0.0014	6.64033	0.08517	0.38463	0.00476	2097.9	22.2	2064.7	14.7	2033	9.8	1.6	3.2	2033	9.8
LCG04-030	198.4	33.8	0.8817	0.06437	0.00092	1.2744	0.0196	0.14368	0.00184	865.4	10.4	834.4	10.9	753.8	7.6	3.7	14.8	865.4	10.4

FOR REVIEW PURPOSES ONLY

LCG04-031	99.6	15.1	0.7798	0.0626	0.00112	1.13326	0.02094	0.13139	0.00177	795.8	10.1	769.3	12.1	694.7	9	3.4	14.6	795.8	10.1
LCG04-032	264.8	38.6	0.5143	0.06522	0.00089	1.21972	0.01807	0.13574	0.00172	820.5	9.8	809.6	10.4	781.4	7.4	1.3	5.0	820.5	9.8
LCG04-033	97.2	54.4	0.9419	0.15658	0.00185	9.63293	0.1288	0.4465	0.00569	2379.7	25.4	2400.3	16	2419.1	10.9	-0.9	-1.6	2419.1	10.9
LCG04-034	213.4	96.1	1.9333	0.12269	0.00141	5.13888	0.06705	0.304	0.00378	1711.1	18.7	1842.6	14.4	1995.7	10	-7.1	-14.3	1995.7	10
LCG04-035	42.7	6.8	0.9375	0.06252	0.0016	1.14137	0.02898	0.13249	0.00202	802.1	11.5	773.2	16.1	691.9	12.8	3.7	15.9	802.1	11.5
LCG04-036	307.5	44.9	0.5436	0.06541	0.00086	1.21354	0.01746	0.13465	0.00169	814.3	9.6	806.8	10.1	787.6	7.2	0.9	3.4	814.3	9.6
LCG04-037	154.9	32	0.5385	0.07518	0.00104	1.96186	0.02933	0.18939	0.00242	1118.1	13.1	1102.5	12.7	1073.3	9.2	1.4	4.2	1073.3	9.2
LCG04-038	234	42	0.4228	0.07163	0.00094	1.68024	0.02403	0.17023	0.00214	1013.4	11.8	1001.1	11.6	975.4	8.2	1.2	3.9	1013.4	11.8
LCG04-039	98	14.6	0.6374	0.06583	0.00116	1.21748	0.02214	0.13422	0.0018	811.9	10.2	808.6	12.3	801	9.8	0.4	1.4	811.9	10.2
LCG04-040	217.4	33.8	0.2898	0.07008	0.00095	1.51262	0.02215	0.15664	0.00198	938.1	11	935.5	11.3	930.7	8.3	0.3	0.8	938.1	11
LCG04-041	193.6	29.1	1.1225	0.067	0.001	1.16133	0.01834	0.12578	0.00162	763.7	9.3	782.6	10.8	837.8	8.5	-2.4	-8.8	763.7	9.3
LCG04-042	292.4	42.8	0.6406	0.06694	0.00089	1.22852	0.01775	0.13318	0.00167	806	9.5	813.7	10.2	835.9	7.6	-0.9	-3.6	806	9.5
LCG04-043	30	4.7	0.6113	0.06644	0.00193	1.29732	0.03708	0.1417	0.00232	854.3	13.1	844.5	19.1	820.3	16.3	1.2	4.1	854.3	13.1
LCG04-044	114.6	17.4	0.5947	0.06558	0.00112	1.24746	0.02207	0.13805	0.00184	833.6	10.4	822.3	12.2	793	9.4	1.4	5.1	833.6	10.4
LCG04-045	246.6	31.6	0.9045	0.06694	0.00097	1.06174	0.01641	0.1151	0.00147	702.3	8.5	734.7	10.1	835.9	8.3	-4.4	-16.0	702.3	8.5
LCG04-046	309	50	0.3215	0.0697	0.00089	1.51944	0.02135	0.1582	0.00197	946.8	11	938.3	10.9	919.5	7.7	0.9	3.0	946.8	11
LCG04-047	362	62.2	0.5282	0.07052	0.00088	1.55871	0.02145	0.1604	0.00199	959	11.1	954	10.9	943.5	7.7	0.5	1.6	959	11.1
LCG04-048	77.5	10	1.6918	0.06058	0.00139	0.76612	0.01748	0.09177	0.00132	566	7.8	577.5	11.9	624.4	10.7	-2.0	-9.3	566	7.8
LCG04-049	264	42.8	0.2561	0.07277	0.00095	1.65508	0.02351	0.16505	0.00206	984.8	11.4	991.5	11.4	1007.6	8.3	-0.7	-2.3	984.8	11.4
LCG04-050	355.7	68.2	0.9557	0.06777	0.00085	1.47221	0.02034	0.15763	0.00195	943.6	10.9	919	10.7	861.5	7.3	2.7	9.5	943.6	10.9
LCG04-051	578.6	101.7	0.4945	0.07302	0.00085	1.65182	0.02171	0.16415	0.00201	979.8	11.1	990.2	10.7	1014.5	7.5	-1.1	-3.4	979.8	11.1
LCG04-052	286.9	41.7	0.715	0.06427	0.00087	1.13954	0.01676	0.12866	0.00161	780.2	9.2	772.3	10	750.5	7.2	1.0	4.0	780.2	9.2
LCG04-053	162	23.3	0.6363	0.06442	0.001	1.15493	0.01891	0.1301	0.00168	788.4	9.6	779.6	11	755.4	8.3	1.1	4.4	788.4	9.6
LCG04-054	255.3	38.1	0.63	0.06527	0.00092	1.21877	0.01841	0.13549	0.00171	819.1	9.7	809.2	10.6	783.1	7.7	1.2	4.6	819.1	9.7
LCG04-055	150.2	23.5	0.6927	0.0658	0.00105	1.25946	0.021	0.13888	0.00181	838.3	10.2	827.7	11.7	800	8.8	1.3	4.8	838.3	10.2
LCG04-056	372.3	152.2	0.5005	0.12587	0.00141	6.40439	0.08198	0.36921	0.00452	2025.7	21.3	2032.9	14.6	2041.1	9.9	-0.4	-0.8	2041.1	9.9
LCG04-057	60.9	9.3	0.5715	0.06637	0.00148	1.27303	0.0284	0.13918	0.00203	840	11.5	833.7	15.2	818.1	12.5	0.8	2.7	840	11.5
LCG04-058	130.4	20.5	0.6698	0.06445	0.00105	1.23898	0.02103	0.13949	0.00182	841.8	10.3	818.4	11.7	756.4	8.7	2.9	11.3	841.8	10.3
LCG04-059	198.4	18.8	0.632	0.05626	0.00097	0.66234	0.01178	0.08543	0.00111	528.5	6.6	516	8.7	462.6	6.4	2.4	14.2	528.5	6.6
LCG04-060	360.4	63.1	0.3605	0.07042	0.00088	1.63746	0.02252	0.16873	0.00208	1005.1	11.5	984.7	11.1	940.6	7.7	2.1	6.9	1005.1	11.5
LCG04-061	384.9	56.8	0.8938	0.06887	#######	1.21168	0.01724	0.12766	0.00159	774.5	9.1	806	10	894.8	7.8	-3.9	-13.4	774.5	9.1
LCG04-062	236.3	24.5	0.2116	0.05909	0.00093	0.85621	0.01412	0.10515	0.00135	644.5	7.9	628.1	9.5	570.4	6.9	2.6	13.0	644.5	7.9
LCG04-063	283.7	42.2	0.5179	0.06472	0.00087	1.22879	0.01797	0.13776	0.00172	832	9.7	813.8	10.3	765.2	7.2	2.2	8.7	832	9.7
LCG04-064	88.5	3.9	0.598	0.0541	0.00181	0.2984	0.00971	0.04003	0.00065	253	4	265.1	8.7	375.2	10.5	-4.6	-32.6	253	4
LCG04-065	180.2	27.3	0.6337	0.06629	0.00105	1.2531	0.02086	0.13717	0.00178	828.6	10.1	824.8	11.6	815.5	8.9	0.5	1.6	828.6	10.1
LCG04-066	158.9	64.8	0.3231	0.12252	0.00146	6.4245	0.08595	0.38046	0.00474	2078.4	22.1	2035.6	15.1	1993.2	10.4	2.1	4.3	1993.2	10.4
LCG04-067	550.9	103.1	0.091	0.08083	0.00094	2.18237	0.02863	0.19592	0.00239	1153.4	12.9	1175.4	11.7	1217.3	8.2	-1.9	-5.3	1217.3	8.2
LCG04-068	315.4	41	0.633	0.06893	0.00101	1.13261	0.01754	0.11922	0.00152	726.1	8.8	769	10.5	896.6	8.7	-5.6	-19.0	726.1	8.8
LCG04-069	176.3	25.7	0.5128	0.06681	0.00103	1.25135	0.02023	0.1359	0.00175	821.4	9.9	824	11.3	831.9	8.8	-0.3	-1.3	821.4	9.9
LCG04-070	349.4	43.3	0.3524	0.06366	0.00086	1.05799	0.01546	0.12059	0.0015	734	8.6	732.8	9.6	730.4	7	0.2	0.5	734	8.6
LCG04-071	302.7	43.9	0.5469	0.06593	0.00089	1.22096	0.01783	0.13438	0.00168	812.8	9.5	810.2	10.3	804.2	7.5	0.3	1.1	812.8	9.5
LCG04-072	117	13.7	0.7387	0.05795	0.00114	0.80079	0.01601	0.10026	0.00136	615.9	8	597.3	10.8	527.9	8.1	3.1	16.7	615.9	8
LCG04-073	1123.1	239.2	0.0742	0.10132	0.00114	3.11656	0.03982	0.22317	0.0027	1298.6	14.2	1436.8	12.7	1648.4	9.2	-9.6	-21.2		
LCG04-074	377.8	56.8	1.0013	0.06823	0.00091	1.1708	0.01695	0.12451	0.00155	756.5	8.9	787	10	875.5	7.8	-3.9	-13.6	756.5	8.9
LCG04-075	153.3	6.6	0.5352	0.0504	0.00134	0.2777	0.00727	0.03998	0.00058	252.7	3.6	248.8	6.7	213.5	5.1	1.6	18.4	252.7	3.6
LCG04-076	627.6	126.9	0.3824	0.07535	0.00088	2.00544	0.02636	0.1931	0.00235	1138.1	12.7	1117.4	11.4	1077.9	7.8	1.9	5.6		
LCG04-077	190.5	87.6	0.9152	0.15946	0.00195	8.66668	0.11807	0.39434	0.00499	2142.9	23.1	2303.6	16	2449.9	11.3	-7.0	-12.5	2449.9	11.3
LCG04-078	275.1	44.8	0.7731	0.06539	0.00089	1.2719	0.0187	0.14113	0.00176	851	9.9	833.2	10.5	786.9	7.5	2.1	8.2	851	9.9
LCG04-079	85.4	12.8	0.4302	0.06496	0.00121	1.27363	0.02432	0.14226	0.00193	857.4	10.9	834	13.1	773	10.1	2.8	10.9	857.4	10.9

FOR REVIEW PURPOSES ONLY

LCG04-080	111.4	15.6	0.7195	0.06723	0.00118	1.17715	0.02129	0.12704	0.00169	771	9.7	790	12.1	844.9	10.1	-2.4	-8.8	771	9.7
LCG04-081	411.8	58.1	0.4558	0.06514	0.00085	1.1948	0.01694	0.13308	0.00164	805.4	9.3	798.2	9.9	778.9	7.1	0.9	3.4	805.4	9.3
LCG04-082	473.4	82.8	0.4551	0.06997	0.00086	1.58392	0.02161	0.16423	0.00201	980.2	11.1	963.9	10.8	927.5	7.5	1.7	5.7	980.2	11.1
LCG04-083	287.7	43.4	1.0628	0.06355	0.00089	1.08102	0.01622	0.12341	0.00154	750.2	8.8	744.1	9.9	726.7	7.3	0.8	3.2	750.2	8.8
LCG04-084	304.3	63.1	1.1012	0.0748	0.00096	1.72652	0.02426	0.16747	0.00207	998.2	11.4	1018.5	11.5	1063.1	8.5	-2.0	-6.1	998.2	11.4
LCG04-085	475	67.1	0.6516	0.06661	0.00086	1.18872	0.01672	0.12949	0.00159	785	9.1	795.4	9.8	825.6	7.3	-1.3	-4.9	785	9.1
LCG04-086	163.6	15.8	0.7467	0.06792	0.00123	0.79868	0.01474	0.08532	0.00114	527.8	6.8	596.1	10.1	866.1	10.6	-11.5	-39.1	527.8	6.8
LCG04-087	388.1	31.5	0.0188	0.05876	0.00084	0.71191	0.0108	0.0879	0.0011	543.1	6.5	545.9	8	558.2	6.1	-0.5	-2.7	543.1	6.5
LCG04-088	209.5	31.8	0.8694	0.06939	0.00105	1.26058	0.02004	0.1318	0.00168	798.1	9.6	828.2	11.2	910.4	9.1	-3.6	-12.3	798.1	9.6
LCG04-089	117	18.4	0.6736	0.06663	0.00111	1.2857	0.02222	0.14001	0.00183	844.7	10.3	839.4	12.1	826.2	9.4	0.6	2.2	844.7	10.3
LCG04-090	101.2	4.9	0.9104	0.05382	0.00174	0.30349	0.00957	0.04091	0.00065	258.5	4	269.1	8.5	363.5	9.9	-4.0	-28.9	258.5	4
LCG04-091	277.4	39.8	0.5121	0.06573	0.00091	1.21309	0.01806	0.13391	0.00167	810.1	9.5	806.6	10.4	797.8	7.7	0.4	1.5	810.1	9.5
LCG04-092	106.7	11.6	0.8929	0.07093	0.00151	0.94287	0.02003	0.09644	0.00137	593.5	8.1	674.4	12.6	955.4	13.2	-12.0	-37.9	593.5	8.1
LCG04-093	290.1	53.6	0.4594	0.07405	0.00101	1.81357	0.02666	0.17769	0.00222	1054.3	12.2	1050.4	12.1	1042.8	8.9	0.4	1.1	1054.3	12.2
LCG04-094	121.7	18.1	0.3078	0.06412	0.00109	1.28996	0.02267	0.14595	0.00191	878.2	10.7	841.3	12.3	745.6	9	4.4	17.8	878.2	10.7
LCG04-095	451.3	80.7	0.3683	0.08215	0.00102	2.00307	0.02733	0.1769	0.00217	1050	11.9	1116.6	11.8	1249.1	8.9	-6.0	-15.9	1050	11.9
LCG04-096	448.1	64.6	0.6955	0.06418	0.00085	1.12848	0.01613	0.12756	0.00157	773.9	9	767	9.7	747.6	7	0.9	3.5	773.9	9
LCG04-097	628.4	58.3	0.8538	0.05971	0.00081	0.66774	0.00973	0.08113	0.001	502.9	6	519.3	7.5	593.1	6.1	-3.2	-15.2	502.9	6
LCG04-098	190.5	27.6	0.5403	0.06483	0.00099	1.19212	0.01922	0.1334	0.0017	807.2	9.7	796.9	11	768.8	8.2	1.3	5.0	807.2	9.7
LCG04-099	362.8	51.7	0.4544	0.06507	0.00087	1.2091	0.01754	0.1348	0.00167	815.2	9.5	804.8	10.1	776.6	7.3	1.3	5.0	815.2	9.5
LCG04-100	108.3	15.9	1.045	0.06748	0.00124	1.14726	0.02153	0.12335	0.00166	749.8	9.5	775.9	12.4	852.6	10.6	-3.4	-12.1	749.8	9.5
LCG04-101	90.1	59	0.5517	0.22323	0.00304	17.4319	0.26106	0.56654	0.00779	2893.6	32.1	2958.9	18.6	3004.1	13.1	-2.2	-3.7	3004.1	13.1
LCG04-102	288.5	184.9	1.1716	0.16055	0.00187	10.6086	0.13852	0.47938	0.00584	2524.6	25.4	2489.5	15.6	2461.5	10.8	1.4	2.6	2461.5	10.8
LCG04-103	851.2	87.7	0.7231	0.063	#######	0.80157	0.01218	0.09231	0.00115	569.2	6.8	597.7	8.6	708.2	7.3	-4.8	-19.6	569.2	6.8
LCG04-104	275.1	13.2	0.3593	0.0542	0.0013	0.35383	0.00839	0.04736	0.00067	298.3	4.1	307.6	7.4	379.4	7.6	-3.0	-21.4	298.3	4.1
LCG04-105	83.8	13.9	1.1288	0.06386	0.00125	1.14801	0.02285	0.13042	0.00178	790.3	10.2	776.3	13	737	10.3	1.8	7.2	790.3	10.2
LCG04-106	227.6	30	1.5953	0.06708	0.00106	0.95709	0.0158	0.10351	0.00132	634.9	7.7	681.8	10.1	840.3	9	-6.9	-24.4	634.9	7.7
LCG04-107	1726.2	148	0.0621	0.08478	0.00101	1.0829	0.01436	0.09267	0.00112	571.3	6.6	745	9	1310.5	8.8	-23.3	-56.4		
LCG04-108	151	22.3	0.4813	0.06621	0.00105	1.2551	0.02071	0.13752	0.00176	830.6	10	825.7	11.5	813	8.9	0.6	2.2	830.6	10
LCG04-109	294.8	29	0.5841	0.05913	0.00092	0.75898	0.01235	0.09312	0.00118	574	7	573.4	8.8	571.9	6.8	0.1	0.4	574	7
LCG04-110	138.3	19.8	0.6208	0.06768	0.00115	1.21756	0.02129	0.13052	0.00171	790.8	9.8	808.7	12	858.8	9.8	-2.2	-7.9	790.8	9.8
LCG04-111	86.2	15.5	1.1037	0.06807	0.00124	1.34257	0.02504	0.14309	0.00192	862.1	10.8	864.3	13.2	870.7	10.7	-0.3	-1.0	862.1	10.8
LCG04-112	349.4	53.1	0.4145	0.06959	0.00093	1.39343	0.02018	0.14526	0.00179	874.3	10.1	886.2	10.7	916.3	8.1	-1.3	-4.6	874.3	10.1
LCG04-113	299.6	44.5	0.4402	0.06478	#######	1.24986	0.01857	0.13998	0.00174	844.5	9.8	823.3	10.5	767.2	7.5	2.6	10.1	844.5	9.8
LCG04-114	328	59.1	0.5009	0.071	0.00094	1.62916	0.02341	0.16648	0.00205	992.7	11.3	981.5	11.4	957.4	8.2	1.1	3.7	992.7	11.3
LCG04-115	113.8	19	0.3048	0.07045	0.00114	1.58732	0.02664	0.16347	0.00212	976	11.7	965.2	12.9	941.5	9.9	1.1	3.7	976	11.7
LCG04-116	58.5	8.6	0.6179	0.06764	0.00146	1.24007	0.02674	0.13302	0.00189	805.1	10.8	818.9	14.5	857.5	12.5	-1.7	-6.1	805.1	10.8
LCG04-117	277.4	42.7	0.5764	0.06605	0.00093	1.27216	0.01907	0.13974	0.00174	843.2	9.8	833.4	10.7	808	7.8	1.2	4.4	843.2	9.8
LCG04-118	215.8	41.2	0.6929	0.07129	0.00101	1.64713	0.02483	0.16763	0.00209	999	11.5	988.5	11.9	965.7	8.8	1.1	3.4	999	11.5
LCG04-119	706.6	49	0.2744	0.05806	#######	0.57106	0.00846	0.07135	0.00088	444.3	5.3	458.7	6.8	532	5.7	-3.1	-16.5	444.3	5.3
LCG04-120	49	6.5	0.903	0.06923	0.00237	1.11766	0.03699	0.11712	0.00211	714	12.2	761.9	20.7	905.6	20.5	-6.3	-21.2	714	12.2
LCG04-121	392	58.9	0.5315	0.06975	0.00099	1.32599	0.01995	0.13791	0.00172	832.8	9.7	857.1	10.9	921	8.6	-2.8	-9.6	832.8	9.7
LCG04-122	103.5	16.8	0.3767	0.0706	0.00119	1.54627	0.02687	0.15889	0.00208	950.6	11.6	949	13.2	945.9	10.4	0.2	0.5	950.6	11.6
LCG04-123	141.5	20.9	0.5406	0.06516	0.00109	1.21624	0.02098	0.13541	0.00175	818.7	9.9	808.1	11.8	779.5	9.1	1.3	5.0	818.7	9.9
LCG04-124	412.6	46.9	0.8382	0.06166	0.00096	0.84039	0.01369	0.09888	0.00125	607.8	7.3	619.4	9.3	662.3	7.6	-1.9	-8.2	607.8	7.3
LCG04-125	381	68.1	0.4102	0.0712	0.00093	1.66545	0.02362	0.16971	0.00208	1010.5	11.5	995.5	11.4	963.2	8.1	1.5	4.9	1010.5	11.5
LCG04-126	239.5	33.2	1.0022	0.06581	0.00101	1.08576	0.01742	0.1197	0.00151	728.8	8.7	746.4	10.5	800.3	8.5	-2.4	-8.9	728.8	8.7
LCG04-127	145.4	21.5	0.4657	0.06568	0.0011	1.25098	0.02169	0.13819	0.00179	834.4	10.1	823.8	11.9	796.2	9.2	1.3	4.8	834.4	10.1
LCG04-128	21.3	2.7	1.0576	0.05661	0.00232	0.79736	0.03165	0.10218	0.0019	627.2	11.1	595.3	20.3	476.4	15.6	5.3	31.7		

FOR REVIEW PURPOSES ONLY

LCG04-129	305.1	60.2	0.571	0.07261	0.00113	1.79131	0.02919	0.179	0.00229	1061.5	12.5	1042.3	13.1	1003.1	9.9	1.8	5.8	1061.5	12.5
LCG04-130	256.1	34.4	1.1258	0.06621	0.001	1.05257	0.01665	0.11534	0.00145	703.7	8.4	730.2	10.2	813	8.4	-3.6	-13.4	703.7	8.4
LCG04-131	337.5	62.7	0.4455	0.07098	0.00095	1.70392	0.0245	0.17417	0.00214	1035	11.7	1010	11.6	956.8	8.3	2.5	8.2	1035	11.7
LCG04-132	50.6	7.9	0.6247	0.06668	0.0015	1.28551	0.02885	0.13987	0.00201	843.9	11.4	839.3	15.2	827.8	12.7	0.6	1.9	843.9	11.4
LCG04-133	37.1	6.7	2.3287	0.06438	0.00173	1.06286	0.02815	0.11977	0.00185	729.2	10.7	735.2	16.2	754.1	14.3	-0.8	-3.3	729.2	10.7
LCG04-134	463.2	49.4	0.2423	0.05996	0.00084	0.88533	0.01318	0.10713	0.00132	656.1	7.7	643.9	8.9	602.1	6.4	1.9	9.0	656.1	7.7
LCG04-135	309	45	0.5694	0.06543	0.00093	1.19905	0.01815	0.13295	0.00165	804.7	9.4	800.1	10.4	788.2	7.8	0.6	2.1	804.7	9.4
LCG04-136	66.4	6.5	0.8546	0.05814	0.00151	0.66578	0.01705	0.08307	0.00122	514.4	7.3	518.1	12.1	535	10.8	-0.7	-3.9	514.4	7.3
LCG04-137	437.9	51.7	0.1286	0.0674	0.00092	1.14539	0.01678	0.1233	0.00151	749.5	8.7	775.1	9.9	850.2	7.9	-3.3	-11.8	749.5	8.7
LCG04-138	133.6	21.4	0.2908	0.07467	0.00117	1.65666	0.02708	0.16097	0.00206	962.2	11.4	992.1	12.8	1059.6	10.3	-3.0	-9.2	962.2	11.4
LCG04-139	298.8	29.3	0.3316	0.0595	0.00093	0.79171	0.01287	0.09653	0.00121	594	7.1	592.1	9	585.4	7	0.3	1.5	594	7.1
LCG04-140	561.2	173.7	0.2642	0.12303	0.00168	5.24326	0.07675	0.30919	0.00391	1736.7	19.3	1859.7	15.9	2000.6	11.9	-6.6	-13.2	2000.6	11.9
LCG04-141	48.2	7.2	0.7661	0.06727	0.0016	1.19371	0.0281	0.12875	0.00189	780.7	10.8	797.7	15.4	846.1	13.7	-2.1	-7.7	780.7	10.8
LCG04-142	307.5	44.1	0.6129	0.06637	0.00099	1.18989	0.01864	0.13008	0.00163	788.3	9.3	795.9	10.8	818.1	8.4	-1.0	-3.6	788.3	9.3
LCG04-143	1101	114.8	0.0027	0.06917	0.01967	1.06545	0.2951	0.11176	0.00865	683	50.2	736.5	154.4	903.8	170.2	-7.3	-24.4	683	50.2
LCG04-144	158.1	20.5	0.4449	0.06391	0.00109	1.08222	0.019	0.12285	0.00159	746.9	9.1	744.7	11.3	738.7	9	0.3	1.1	746.9	9.1
LCG04-145	637.1	55.6	0.24	0.0572	########	0.69475	0.01039	0.08813	0.00108	544.5	6.4	535.7	7.7	499.3	5.5	1.6	9.1	544.5	6.4
LCG04-146	74.3	10.7	0.5363	0.06826	0.00141	1.24789	0.02581	0.13263	0.00184	802.9	10.5	822.5	14	876.5	12.1	-2.4	-8.4	802.9	10.5
LCG04-147	277.4	43.6	1.1584	0.06376	0.00096	1.08735	0.01714	0.12374	0.00154	752.1	8.8	747.2	10.3	733.7	7.9	0.6	2.5	752.1	8.8
LCG04-148	275.8	29.8	0.9493	0.05706	0.00094	0.69904	0.01187	0.08888	0.00112	548.9	6.6	538.2	8.7	493.9	6.4	2.0	11.1	548.9	6.6
LCG04-149	305.9	44.3	0.8782	0.06886	0.00105	1.18891	0.01899	0.12527	0.00158	760.8	9.1	795.5	10.9	894.5	9.1	-4.4	-14.9	760.8	9.1
LCG04-150	289.3	167.6	0.6537	0.16484	0.00205	10.9542	0.14941	0.48215	0.00587	2536.6	25.5	2519.2	16.2	2505.9	11.6	0.7	1.2	2505.9	11.6
LCG04-151	155.7	23.6	0.5325	0.06632	0.00107	1.2711	0.02123	0.13906	0.00177	839.3	10	832.9	11.7	816.5	9.1	0.8	2.8	839.3	10
LCG04-152	290.1	42.4	0.6505	0.06647	0.00096	1.20155	0.01828	0.13116	0.00162	794.5	9.2	801.3	10.5	821.2	8.1	-0.9	-3.3	794.5	9.2
LCG04-153	809.4	37.6	0.8319	0.05101	########	0.27878	0.00453	0.03965	0.00049	250.7	3	249.7	4.4	241.3	3.4	0.4	3.9	250.7	3
LCG04-154	117	5.3	0.7832	0.05387	0.00159	0.2903	0.00836	0.0391	0.00058	247.3	3.6	258.8	7.5	365.6	9.1	-4.5	-32.4	247.3	3.6
LCG04-155	334.3	13.6	0.7678	0.05358	0.00109	0.27158	0.00553	0.03677	0.00048	232.8	3	244	5.2	353.4	6.1	-4.6	-34.1	232.8	3
LCG04-156	189.7	25.5	0.625	0.06996	0.00124	1.19709	0.02161	0.12416	0.00163	754.5	9.3	799.2	12.2	927.2	10.8	-5.6	-18.6	754.5	9.3
LCG04-157	164.4	26.4	0.9174	0.07423	0.00123	1.45315	0.02487	0.14204	0.00184	856.2	10.4	911.2	12.7	1047.7	10.8	-6.0	-18.3	856.2	10.4

LCG05

	concentrations			ratios						ages						discordance		preferred ages	
sample	ppm U	ppm Pb	atomic Th/U	Pb207/Pb206	1 sigma	Pb207/U235	1 sigma	Pb206/U238	1 sigma	age 206/238	1 sigma	age 207/235	1 sigma	age 207/206	1 sigma	%discord.68-75	%discord.68-76	preferred age	1 sigma
LCG05_001	749.89	564.19	0.7524	1.10032	0.0164	0.12224	0.00156	0.06527	9.00E-04	753.5	7.93	783.1	28.6	743.4	8.94	5.3	1.4	743.4	8.94
LCG05_002	1066.83	914.89	0.8576	1.10332	0.0153	0.12783	0.0016	0.06259	0.00078	755	7.39	694.2	26.34	775.5	9.13	-10.5	-2.6	775.5	9.13
LCG05_003	1978.02	524.89	0.2654	6.03695	0.07418	0.36743	0.0045	0.11914	0.00124	1981.2	10.7	1943.4	18.56	2017.3	21.2	-3.7	-1.8	1943.4	18.56
LCG05_004	1004.57	586.31	0.5836	0.28861	0.00533	0.04186	0.00055	0.04999	0.00089	257.5	4.2	194.6	41	264.4	3.4	-26.4	-2.6	264.4	3.4
LCG05_005	506.53	316.09	0.6240	4.98001	0.06666	0.32094	0.00407	0.11252	0.00133	1815.9	11.32	1840.4	21.24	1794.3	19.85	2.6	1.2	1840.4	21.24
LCG05_006	4114.51	55.84	0.0136	5.36134	0.06542	0.35177	0.00429	0.11052	0.00114	1878.7	10.44	1807.9	18.67	1943.1	20.46	-7.0	-3.3	1807.9	18.67
LCG05_007	1313.02	455.24	0.3467	5.39926	0.06772	0.35339	0.00436	0.11079	0.00119	1884.7	10.74	1812.4	19.42	1950.7	20.76	-7.1	-3.4	1812.4	19.42
LCG05_008	2204.40	662.99	0.3008	0.28537	0.00445	0.04232	0.00054	0.0489	0.00071	254.9	3.52	143	33.77	267.2	3.31	-46.5	-4.6	267.2	3.31
LCG05_009	410.32	174.37	0.4250	5.45046	0.07224	0.35177	0.00444	0.11236	0.00131	1892.8	11.37	1837.9	20.91	1943	21.18	-5.4	-2.6	1837.9	20.91
LCG05_010	2034.62	1803.92	0.8866	5.19234	0.06408	0.33679	0.00413	0.1118	0.00117	1851.4	10.51	1828.8	18.93	1871.2	19.9	-2.3	-1.1	1828.8	18.93
LCG05_011	469.74	147.50	0.3140	5.3827	0.07183	0.34827	0.00441	0.11207	0.00132	1882.1	11.43	1833.3	21.12	1926.3	21.09	-4.8	-2.3	1833.3	21.12
LCG05_012	223.55	176.68	0.7903	1.06055	0.02299	0.12241	0.00176	0.06283	0.00135	734.1	11.33	702.4	45.12	744.4	10.09	-5.6	-1.4	744.4	10.09
LCG05_013	133.00	83.74	0.6296	4.38075	0.07146	0.31039	0.00428	0.10235	0.00156	1708.7	13.48	1667.1	27.97	1742.6	21.04	-4.3	-1.9	1667.1	27.97
LCG05_014	1615.81	1111.12	0.6877	8.54417	0.1055	0.43457	0.00534	0.14257	0.0015	2290.6	11.22	2258.7	18.01	2326.3	23.98	-2.9	-1.5	2258.7	18.01

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LCG05_015	113.19	82.24	0.7265	4.14967	0.07232	0.30934	0.00438	0.09728	0.00161	1664.1	14.26	1572.6	30.62	1737.4	21.55	-9.5	-4.2	1572.6	30.62
LCG05_016	6887.70	961.80	0.1396	2.41362	0.02959	0.16191	0.00198	0.1081	0.00113	1246.7	8.8	1767.6	18.94	967.4	10.97	82.7	28.9	967.4	10.97
LCG05_017	413.15	311.59	0.7542	1.23634	0.02016	0.13924	0.00182	0.06439	0.00099	817.2	9.15	754.4	32.1	840.4	10.29	-10.2	-2.8	840.4	10.29
LCG05_018	670.66	278.76	0.4156	5.25773	0.0675	0.34709	0.00432	0.10985	0.00122	1862	10.95	1796.9	20.11	1920.7	20.67	-6.4	-3.1	1796.9	20.11
LCG05_019	976.28	1292.17	1.3236	6.21406	0.07817	0.27652	0.00343	0.16296	0.00177	2006.4	11	2486.6	18.15	1573.8	17.32	58.0	27.5	2486.6	18.15
LCG05_020	882.89	434.09	0.4917	2.04251	0.02741	0.19574	0.00244	0.07567	9.00E-04	1129.8	9.15	1086.3	23.63	1152.4	13.18	-5.7	-2.0	1086.3	23.63
LCG05_021	3364.62	2316.25	0.6884	0.3601	0.00503	0.0497	0.00062	0.05255	0.00066	312.3	3.76	309.3	28.38	312.6	3.8	-1.1	-0.1	312.6	3.8
LCG05_022	956.47	189.46	0.1981	5.53584	0.07207	0.3646	0.00457	0.1101	0.00125	1906.2	11.2	1801.1	20.46	2004	21.57	-10.1	-4.9	1801.1	20.46
LCG05_023	1460.17	211.65	0.1449	0.31687	0.00532	0.04513	0.00058	0.05091	0.00081	279.5	4.1	236.9	36.37	284.6	3.58	-16.8	-1.8	284.6	3.58
LCG05_024	625.38	434.74	0.6952	3.52226	0.04689	0.27421	0.00344	0.09315	0.00109	1532.2	10.53	1490.9	22.02	1562.1	17.41	-4.6	-1.9	1490.9	22.02
LCG05_025	498.04	501.07	1.0061	1.12764	0.0182	0.12958	0.00168	0.06311	0.00096	766.6	8.69	711.8	31.91	785.5	9.61	-9.4	-2.4	785.5	9.61
LCG05_026	840.45	319.93	0.3807	5.16664	0.06595	0.34164	0.00424	0.10967	0.00121	1847.1	10.86	1793.9	19.95	1894.6	20.38	-5.3	-2.5	1793.9	19.95
LCG05_027	331.09	709.54	2.1431	10.8466	0.14166	0.49112	0.00624	0.16016	0.00181	2510.1	12.14	2457.3	18.99	2575.5	26.97	-4.6	-2.5	2457.3	18.99
LCG05_028	523.51	288.09	0.5503	8.26058	0.1061	0.3956	0.00496	0.15143	0.00168	2260	11.63	2362.1	18.83	2148.7	22.91	9.9	5.2	2362.1	18.83
LCG05_029	1352.64	198.47	0.1467	1.74677	0.02301	0.17566	0.00218	0.07211	0.00083	1026	8.51	989.2	23.34	1043.2	11.95	-5.2	-1.6	1043.2	11.95
LCG05_030	1516.77	397.84	0.2623	4.9466	0.06192	0.32351	0.00398	0.11088	0.00119	1810.2	10.57	1814	19.32	1806.8	19.4	0.4	0.2	1814	19.32
LCG05_031	223.55	128.38	0.5743	5.04941	0.07357	0.33642	0.00442	0.10885	0.00144	1827.6	12.35	1780.1	23.91	1869.4	21.33	-4.8	-2.2	1780.1	23.91
LCG05_032	1734.66	806.90	0.4652	1.26993	0.01795	0.17223	0.00213	0.05347	0.00068	832.4	8.03	348.8	28.22	1024.4	11.72	-66.0	-18.7	1024.4	11.72
LCG05_033	1494.13	462.36	0.3094	5.12567	0.06418	0.33661	0.00415	0.11043	0.00118	1840.4	10.64	1806.5	19.34	1870.3	19.99	-3.4	-1.6	1806.5	19.34
LCG05_034	758.38	617.16	0.8138	4.52716	0.06829	0.31226	0.00416	0.10514	0.00145	1736	12.54	1716.8	25.2	1751.8	20.43	-2.0	-0.9	1716.8	25.2
LCG05_035	464.09	706.22	1.5217	1.18177	0.01942	0.13161	0.00172	0.06512	0.00101	792.1	9.04	778.2	32.3	797	9.82	-2.4	-0.6	797	9.82
LCG05_036	1146.06	148.74	0.1298	5.45157	0.06999	0.35231	0.00439	0.11222	0.00125	1893	11.02	1835.6	19.96	1945.6	20.91	-5.7	-2.7	1835.6	19.96
LCG05_037	679.15	1007.69	1.4838	0.27504	0.00616	0.03949	0.00055	0.05051	0.00113	246.7	4.91	218.5	50.78	249.7	3.4	-12.5	-1.2	249.7	3.4
LCG05_038	415.98	222.53	0.5350	5.30877	0.07155	0.34518	0.00439	0.11154	0.00132	1870.3	11.52	1824.6	21.39	1911.5	21.02	-4.5	-2.2	1824.6	21.39
LCG05_039	962.13	328.22	0.3411	5.31219	0.06774	0.34566	0.00429	0.11145	0.00122	1870.8	10.9	1823.2	19.8	1913.9	20.55	-4.7	-2.3	1823.2	19.8
LCG05_040	1171.53	172.55	0.1473	5.09772	0.06577	0.3374	0.00421	0.10957	0.00122	1835.7	10.95	1792.3	20.23	1874.1	20.27	-4.4	-2.0	1792.3	20.23
LCG05_041	237.70	116.85	0.4916	4.46766	0.06787	0.31736	0.00423	0.10209	0.00142	1725	12.6	1662.5	25.56	1776.8	20.7	-6.4	-2.9	1662.5	25.56
LCG05_042	772.53	329.90	0.4270	5.00106	0.06469	0.33454	0.00417	0.10841	0.00122	1819.5	10.95	1772.8	20.36	1860.4	20.16	-4.7	-2.2	1772.8	20.36
LCG05_043	684.81	503.94	0.7359	2.10192	0.02956	0.1968	0.00249	0.07746	0.00098	1149.4	9.68	1133	24.98	1158.1	13.43	-2.2	-0.8	1133	24.98
LCG05_044	987.60	435.77	0.4412	5.02584	0.06421	0.33242	0.00413	0.10965	0.00121	1823.7	10.82	1793.5	19.94	1850.1	19.96	-3.1	-1.4	1793.5	19.94
LCG05_045	577.28	518.88	0.8988	0.26839	0.00661	0.03731	0.00054	0.05217	0.00129	241.4	5.29	292.8	55.56	236.1	3.34	24.0	2.2	236.1	3.34
LCG05_046	928.17	434.20	0.4678	10.6824	0.13418	0.47239	0.00586	0.164	0.00176	2495.9	11.66	2497.3	17.93	2494	25.64	0.1	0.1	2497.3	17.93
LCG05_047	1146.06	456.27	0.3981	5.28182	0.06711	0.33621	0.00417	0.11393	0.00124	1865.9	10.85	1863	19.6	1868.4	20.1	-0.3	-0.1	1863	19.6
LCG05_048	2793.00	454.05	0.1626	3.73159	0.04658	0.2434	0.00299	0.11119	0.00119	1578.2	10	1818.9	19.23	1404.3	15.51	29.5	12.4	1818.9	19.23
LCG05_049	882.89	1120.51	1.2691	8.87349	0.1121	0.43455	0.00539	0.14809	0.0016	2325.1	11.53	2324	18.4	2326.2	24.24	-0.1	0.0	2324	18.4
LCG05_050	2781.68	282.87	0.1017	4.90462	0.06094	0.32537	0.00399	0.10932	0.00116	1803.1	10.48	1788.1	19.17	1815.9	19.42	-1.5	-0.7	1788.1	19.17
LCG05_051	826.30	180.15	0.2180	5.23218	0.06759	0.33607	0.00419	0.11291	0.00126	1857.9	11.01	1846.8	20.09	1867.8	20.22	-1.1	-0.5	1846.8	20.09
LCG05_052	299.96	266.05	0.8869	4.8602	0.06968	0.32334	0.00421	0.10901	0.00141	1795.4	12.07	1782.9	23.39	1806	20.53	-1.3	-0.6	1782.9	23.39
LCG05_053	628.21	482.51	0.7681	0.28644	0.00703	0.03853	0.00055	0.05392	0.00133	255.8	5.55	367.7	54.62	243.7	3.44	50.9	5.0	243.7	3.44
LCG05_054	1013.06	252.14	0.2489	5.05471	0.06499	0.33076	0.00411	0.11083	0.00123	1828.5	10.9	1813.1	20.03	1842.1	19.93	-1.6	-0.7	1813.1	20.03
LCG05_055	206.57	177.56	0.8596	1.11738	0.02523	0.12601	0.00185	0.06431	0.00145	761.7	12.1	751.9	46.79	765	10.57	-1.7	-0.4	765	10.57
LCG05_056	1064.00	310.90	0.2922	2.23919	0.0303	0.20774	0.0026	0.07818	0.00094	1193.4	9.5	1151.3	23.58	1216.7	13.9	-5.4	-1.9	1151.3	23.58
LCG05_057	1219.64	315.59	0.2588	5.12375	0.06535	0.34057	0.00422	0.10911	0.0012	1840.1	10.84	1784.6	19.89	1889.4	20.3	-5.5	-2.6	1784.6	19.89
LCG05_058	2280.81	229.51	0.1006	1.35827	0.01792	0.14621	0.00181	0.06737	0.00078	871.1	7.72	849.3	23.84	879.7	10.19	-3.5	-1.0	879.7	10.19
LCG05_059	384.85	688.47	1.7889	6.04356	0.08266	0.35419	0.00455	0.12375	0.0015	1982.1	11.92	2011	21.32	1954.6	21.64	2.9	1.4	2011	21.32
LCG05_060	540.49	89.58	0.1657	0.34461	0.00829	0.04807	0.00069	0.05199	0.00125	300.7	6.26	285	54.19	302.7	4.22	-5.8	-0.7	302.7	4.22
LCG05_061	964.96	327.05	0.3389	5.4042	0.06986	0.34009	0.00424	0.11525	0.00129	1885.5	11.08	1883.8	20	1887.1	20.41	-0.2	-0.1	1883.8	20
LCG05_062	679.15	518.91	0.7641	0.29559	0.00652	0.03931	0.00055	0.05454	0.0012	263	5.11	393.3	48.24	248.5	3.41	58.3	5.8	248.5	3.41
LCG05_063	950.81	390.10	0.4103	5.08823	0.06555	0.33377	0.00415	0.11056	0.00123	1834.1	10.93	1808.7	20.08	1856.6	20.08	-2.6	-1.2	1808.7	20.08

FOR REVIEW PURPOSES ONLY

LCG05_064	1032.87	1285.41	1.2445	0.25635	0.00521	0.0366	0.00049	0.05079	0.00101	231.7	4.21	231.5	45.48	231.8	3.07	-0.1	0.0	231.8	3.07
LCG05_065	161.30	106.74	0.6618	6.86711	0.10429	0.39334	0.00535	0.12662	0.00175	2094.4	13.46	2051.6	24.21	2138.3	24.74	-4.1	-2.1	2051.6	24.21
LCG05_066	546.15	130.47	0.2389	5.11992	0.06832	0.33419	0.00422	0.11112	0.0013	1839.4	11.33	1817.7	21.07	1858.7	20.4	-2.2	-1.0	1817.7	21.07
LCG05_067	2476.06	601.41	0.2429	0.4985	0.00714	0.06665	0.00083	0.05424	7.00E-04	410.7	4.83	381	28.95	416	5.04	-8.4	-1.3	416	5.04
LCG05_068	1672.40	822.36	0.4917	0.26684	0.00469	0.03984	0.00052	0.04857	0.00082	240.2	3.76	127.2	39.03	251.9	3.21	-49.5	-4.6	251.9	3.21
LCG05_069	2391.17	1351.28	0.5651	0.50539	0.00728	0.06717	0.00084	0.05457	0.00071	415.3	4.91	394.5	28.85	419.1	5.09	-5.9	-0.9	419.1	5.09
LCG05_070	2102.53	1134.20	0.5394	0.51699	0.00783	0.0658	0.00084	0.05698	8.00E-04	423.1	5.24	490.2	30.95	410.8	5.05	19.3	3.0	410.8	5.05
LCG05_071	614.06	538.21	0.8765	4.08684	0.05535	0.28179	0.00357	0.10519	0.00126	1651.7	11.05	1717.6	21.82	1600.4	17.96	7.3	3.2	1717.6	21.82
LCG05_072	254.68	72.76	0.2857	9.83227	0.13486	0.44849	0.00584	0.15901	0.00192	2419.2	12.64	2445.1	20.27	2388.5	25.99	2.4	1.3	2445.1	20.27
LCG05_073	2040.28	1456.64	0.7139	0.31229	0.00506	0.0438	0.00056	0.05172	0.00079	276	3.92	272.8	34.52	276.3	3.46	-1.3	-0.1	276.3	3.46
LCG05_074	973.45	332.90	0.3420	0.53665	0.00956	0.07078	0.00093	0.05499	0.00094	436.2	6.32	411.8	37.51	440.9	5.62	-6.6	-1.1	440.9	5.62
LCG05_075	1403.57	812.15	0.5786	0.3356	0.00588	0.04544	0.00059	0.05357	9.00E-04	293.8	4.47	353	37.54	286.4	3.66	23.3	2.6	286.4	3.66
LCG05_076	90.55	138.09	1.5250	6.79137	0.12399	0.37636	0.00573	0.13088	0.00227	2084.6	16.16	2109.8	30.08	2059.3	26.81	2.5	1.2	2109.8	30.08
LCG05_077	1788.43	1144.84	0.6401	0.26606	0.0056	0.03983	0.00054	0.04845	0.00101	239.5	4.49	121.1	48.19	251.8	3.36	-51.9	-4.9	251.8	3.36
LCG05_078	2524.17	814.07	0.3225	6.12181	0.07655	0.36592	0.0045	0.12134	0.00129	1993.4	10.91	1976.1	18.82	2010.2	21.24	-1.7	-0.8	1976.1	18.82
LCG05_079	546.15	243.76	0.4463	7.09284	0.09346	0.40378	0.0051	0.12741	0.00146	2123.1	11.73	2062.5	20.04	2186.4	23.4	-5.7	-2.9	2062.5	20.04
LCG05_080	1018.72	652.79	0.6408	4.95906	0.06531	0.32489	0.00408	0.11071	0.00127	1812.4	11.13	1811.1	20.69	1813.6	19.84	-0.1	-0.1	1811.1	20.69
LCG05_081	469.74	324.95	0.6918	5.04866	0.07096	0.33125	0.00428	0.11054	0.00139	1827.5	11.91	1808.4	22.61	1844.5	20.72	-2.0	-0.9	1808.4	22.61
LCG05_082	1208.32	150.38	0.1245	10.0165	0.13084	0.47153	0.00596	0.15407	0.00174	2436.3	12.06	2391.6	19.06	2490.3	26.09	-4.0	-2.2	2391.6	19.06
LCG05_083	404.66	263.66	0.6516	10.9212	0.14467	0.48736	0.00622	0.16253	0.00187	2516.4	12.32	2482.2	19.23	2559.3	26.95	-3.0	-1.7	2482.2	19.23
LCG05_084	2328.92	1290.31	0.5540	5.12435	0.06484	0.33872	0.00418	0.10973	0.00119	1840.2	10.75	1794.9	19.58	1880.5	20.13	-4.6	-2.1	1794.9	19.58
LCG05_085	376.36	181.20	0.4815	4.81912	0.0691	0.32125	0.00418	0.10881	0.0014	1788.2	12.06	1779.4	23.35	1795.8	20.4	-0.9	-0.4	1779.4	23.35
LCG05_086	755.55	566.97	0.7504	0.36891	0.00886	0.05126	0.00074	0.0522	0.00126	318.8	6.57	294.3	53.95	322.2	4.51	-8.7	-1.1	322.2	4.51
LCG05_087	5031.36	909.03	0.1807	3.99514	0.04999	0.25965	0.00319	0.1116	0.00119	1633.2	10.16	1825.7	19.18	1488	16.32	22.7	9.8	1825.7	19.18
LCG05_088	4278.64	506.94	0.1185	10.3591	0.12913	0.45189	0.00556	0.16627	0.00176	2467.4	11.54	2520.5	17.64	2403.7	24.67	4.9	2.7	2520.5	17.64
LCG05_089	673.49	441.88	0.6561	11.4191	0.14695	0.4161	0.00523	0.19905	0.0022	2558	12.01	2818.4	17.96	2242.7	23.8	25.7	14.1	2818.4	17.96
LCG05_090	367.87	317.27	0.8624	9.71064	0.13034	0.44128	0.00566	0.15961	0.00187	2407.7	12.36	2451.5	19.67	2356.4	25.33	4.0	2.2	2451.5	19.67
LCG05_091	362.21	484.10	1.3365	0.64511	0.01393	0.08254	0.00116	0.05669	0.00121	505.5	8.6	478.8	46.97	511.3	6.9	-6.4	-1.1	511.3	6.9
LCG05_092	820.64	310.99	0.3790	10.3718	0.1326	0.46126	0.00575	0.1631	0.00178	2468.5	11.84	2488	18.32	2445.1	25.38	1.8	1.0	2488	18.32
LCG05_093	1547.89	91.32	0.0590	1.25326	0.01828	0.14032	0.00178	0.06478	0.00086	824.9	8.24	767.2	27.65	846.5	10.07	-9.4	-2.6	846.5	10.07
LCG05_094	752.72	617.42	0.8202	1.16921	0.01793	0.12893	0.00166	0.06578	0.00093	786.3	8.39	799.3	29.39	781.8	9.46	2.2	0.6	781.8	9.46
LCG05_095	257.51	109.12	0.4238	5.34905	0.07869	0.33858	0.00447	0.11459	0.00152	1876.7	12.58	1873.4	23.8	1879.9	21.55	-0.3	-0.2	1873.4	23.8
LCG05_096	189.60	116.28	0.6133	5.3093	0.08157	0.3309	0.00447	0.11638	0.00164	1870.4	13.13	1901.3	25.1	1842.7	21.65	3.2	1.5	1901.3	25.1
LCG05_097	648.02	232.01	0.3580	0.51705	0.0106	0.06911	0.00095	0.05426	0.00109	423.2	7.1	381.8	44.55	430.8	5.72	-11.4	-1.8	430.8	5.72
LCG05_098	1881.81	419.78	0.2231	5.18073	0.0658	0.33538	0.00414	0.11205	0.00122	1849.5	10.81	1832.9	19.55	1864.4	20	-1.7	-0.8	1832.9	19.55
LCG05_099	1089.47	429.60	0.3943	5.35106	0.07008	0.34464	0.00431	0.11262	0.00128	1877.1	11.2	1842.1	20.4	1909	20.68	-3.5	-1.7	1842.1	20.4
LCG05_100	1126.26	640.18	0.5684	5.25063	0.0679	0.3383	0.00421	0.11258	0.00125	1860.9	11.03	1841.4	20.04	1878.5	20.29	-2.0	-0.9	1841.4	20.04
LCG05_101	1477.15	701.87	0.4752	5.34823	0.06842	0.344	0.00426	0.11277	0.00124	1876.6	10.94	1844.5	19.71	1905.9	20.44	-3.2	-1.5	1844.5	19.71
LCG05_102	599.92	174.66	0.2911	9.87196	0.1286	0.45244	0.00569	0.15827	0.00178	2422.9	12.01	2437.2	18.89	2406.1	25.28	1.3	0.7	2437.2	18.89
LCG05_103	322.60	193.18	0.5988	6.68289	0.09341	0.37336	0.00484	0.12983	0.00161	2070.4	12.34	2095.7	21.62	2045.2	22.74	2.5	1.2	2095.7	21.62
LCG05_104	2238.36	1235.35	0.5519	9.24985	0.11645	0.43275	0.00534	0.15504	0.00166	2363.1	11.54	2402.3	18.08	2318.1	24.01	3.6	1.9	2402.3	18.08
LCG05_105	2988.26	1623.36	0.5432	5.18534	0.06598	0.33627	0.00416	0.11185	0.00122	1850.2	10.83	1829.7	19.59	1868.7	20.05	-2.1	-1.0	1829.7	19.59
LCG05_106	1129.09	169.90	0.1505	5.14796	0.06745	0.33213	0.00416	0.11243	0.00128	1844.1	11.14	1839.1	20.41	1848.7	20.11	-0.5	-0.2	1839.1	20.41
LCG05_107	2011.98	679.22	0.3376	1.79608	0.02446	0.10555	0.00134	0.12343	0.0015	1044	8.88	2006.4	21.47	646.8	7.8	210.2	61.4	646.8	7.8
LCG05_108	178.28	279.86	1.5698	10.3658	0.1685	0.4595	0.00668	0.16363	0.00244	2468	15.05	2493.6	24.87	2437.3	29.52	2.3	1.3	2493.6	24.87
LCG05_109	390.51	260.03	0.6659	10.9466	0.15057	0.47572	0.0062	0.16691	0.00201	2518.6	12.8	2526.9	20.09	2508.6	27.08	0.7	0.4	2526.9	20.09
LCG05_110	449.94	254.66	0.5660	7.36464	0.10241	0.40813	0.00529	0.13089	0.00161	2156.7	12.43	2109.9	21.38	2206.4	24.2	-4.4	-2.3	2109.9	21.38
LCG05_111	551.81	166.49	0.3017	10.4524	0.1604	0.47901	0.00669	0.15828	0.00219	2475.7	14.22	2437.4	23.26	2522.9	29.15	-3.4	-1.9	2437.4	23.26
LCG05_112	899.87	593.94	0.6600	3.90089	0.05364	0.28529	0.00362	0.09918	0.00121	1613.9	11.11	1608.8	22.49	1617.9	18.18	-0.6	-0.2	1608.8	22.49

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LCG05_113	2292.13	205.43	0.0896	8.94249	0.11378	0.41352	0.00513	0.15686	0.0017	2332.1	11.62	2422.1	18.31	2231	23.37	8.6	4.5	2422.1	18.31
LCG05_114	899.87	421.37	0.4683	4.76051	0.06428	0.32091	0.00406	0.1076	0.00127	1778	11.33	1759.2	21.43	1794.2	19.81	-2.0	-0.9	1759.2	21.43
LCG05_115	766.87	125.41	0.1635	5.30447	0.07236	0.33888	0.00431	0.11354	0.00136	1869.6	11.65	1856.8	21.53	1881.3	20.77	-1.3	-0.6	1856.8	21.53
LCG05_116	2722.26	1505.83	0.5532	10.1822	0.12886	0.45603	0.00564	0.16196	0.00174	2451.5	11.7	2476.2	18.05	2422	24.95	2.2	1.2	2476.2	18.05
LCG05_117	987.60	366.65	0.3713	4.49802	0.06125	0.29134	0.0037	0.11199	0.00134	1730.6	11.31	1832	21.58	1648.2	18.47	11.2	5.0	1832	21.58
LCG05_118	1847.85	1983.52	1.0734	0.36929	0.00694	0.04769	0.00064	0.05617	0.00102	319.1	5.15	458.7	39.78	300.3	3.92	52.7	6.3	300.3	3.92
LCG05_119	843.28	480.16	0.5694	12.8307	0.16741	0.5218	0.00658	0.17837	0.002	2667.3	12.29	2637.7	18.49	2706.8	27.88	-2.6	-1.5	2637.7	18.49
LCG05_120	993.26	1112.99	1.1205	4.9669	0.06741	0.32182	0.00408	0.11196	0.00133	1813.7	11.47	1831.4	21.45	1798.6	19.91	1.8	0.8	1831.4	21.45
LCG05_121	472.57	330.15	0.6986	1.15267	0.0225	0.10184	0.00144	0.0821	0.00158	778.5	10.61	1248	37.06	625.2	8.45	99.6	24.5	625.2	8.45
LCG05_122	1163.04	198.52	0.1707	7.83622	0.10253	0.41747	0.00524	0.13616	0.00154	2212.4	11.78	2178.9	19.51	2249	23.82	-3.1	-1.6	2178.9	19.51
LCG05_123	399.00	202.06	0.5064	1.48826	0.03203	0.15737	0.0023	0.0686	0.00146	925.6	13.07	886.7	43.29	942.1	12.79	-5.9	-1.8	942.1	12.79
LCG05_124	611.23	241.14	0.3945	5.35236	0.07511	0.34687	0.00447	0.11193	0.00139	1877.3	12.01	1831	22.41	1919.6	21.4	-4.6	-2.2	1831	22.41
LCG05_125	2125.17	68.02	0.0320	5.28954	0.06837	0.34316	0.00426	0.11181	0.00124	1867.2	11.04	1829.1	20	1901.9	20.46	-3.8	-1.8	1829.1	20
LCG05_126	1562.04	464.53	0.2974	5.4788	0.07248	0.35282	0.00443	0.11264	0.00129	1897.3	11.36	1842.5	20.63	1948	21.1	-5.4	-2.6	1842.5	20.63
LCG05_127	1191.34	656.13	0.5508	5.3955	0.07298	0.34266	0.00434	0.11422	0.00135	1884.1	11.59	1867.6	21.22	1899.5	20.86	-1.7	-0.8	1867.6	21.22
LCG05_128	133.00	157.63	1.1852	5.34264	0.10094	0.34138	0.00515	0.11353	0.00205	1875.7	16.16	1856.6	32.28	1893.3	24.75	-1.9	-0.9	1856.6	32.28
LCG05_129	636.70	1608.08	2.5256	1.05824	0.02043	0.11743	0.00162	0.06537	0.00123	733	10.08	786.2	38.97	715.8	9.35	9.8	2.4	715.8	9.35
LCG05_130	475.40	290.07	0.6102	0.32059	0.01197	0.04481	0.00078	0.0519	0.00199	282.4	9.2	280.8	85.4	282.6	4.79	-0.6	-0.1	282.6	4.79
LCG05_131	1148.89	354.62	0.3087	5.24469	0.06905	0.33506	0.00419	0.11355	0.00129	1859.9	11.23	1856.9	20.46	1862.9	20.25	-0.3	-0.2	1856.9	20.46
LCG05_132	3755.13	2622.45	0.6984	1.20863	0.01706	0.13113	0.00165	0.06686	0.00084	804.6	7.84	833.4	26.1	794.3	9.41	4.9	1.3	794.3	9.41
LCG05_133	1406.40	491.36	0.3494	1.38261	0.02054	0.14259	0.00182	0.07034	0.00095	881.6	8.76	938.2	27.53	859.3	10.29	9.2	2.6	859.3	10.29
LCG05_134	438.62	309.38	0.7054	0.37451	0.01249	0.04572	0.00078	0.05941	0.00204	323	9.23	582.3	72.97	288.2	4.79	102.0	12.1	288.2	4.79
LCG05_135	1884.64	170.34	0.0904	5.05503	0.07396	0.32938	0.00432	0.11133	0.00147	1828.6	12.4	1821.2	23.72	1835.4	20.96	-0.8	-0.4	1821.2	23.72
LCG05_136	3726.83	330.62	0.0887	10.0807	0.12814	0.45855	0.00567	0.15947	0.00172	2442.2	11.74	2450.1	18.18	2433.2	25.04	0.7	0.4	2450.1	18.18
LCG05_137	1030.04	152.45	0.1480	5.45207	0.07419	0.34838	0.00442	0.11352	0.00135	1893.1	11.67	1856.6	21.4	1926.9	21.15	-3.6	-1.8	1856.6	21.4
LCG05_138	622.55	253.00	0.4064	11.1196	0.15332	0.48385	0.00629	0.16671	0.00201	2533.2	12.85	2524.9	20.11	2544	27.34	-0.8	-0.4	2524.9	20.11
LCG05_139	749.89	623.12	0.8309	12.5818	0.1682	0.50898	0.0065	0.17932	0.00207	2648.9	12.58	2646.6	19.06	2652.3	27.79	-0.2	-0.1	2646.6	19.06
LCG05_140	563.13	395.23	0.7018	4.75602	0.07036	0.32756	0.0043	0.10533	0.00141	1777.2	12.41	1720.1	24.35	1826.5	20.9	-5.8	-2.7	1720.1	24.35
LCG05_141	755.55	198.67	0.2629	4.96253	0.07169	0.32193	0.0042	0.11182	0.00145	1813	12.21	1829.3	23.31	1799.1	20.46	1.7	0.8	1829.3	23.31
LCG05_142	846.11	1128.61	1.3339	0.43478	0.0102	0.05621	0.00081	0.05611	0.00132	366.6	7.22	456.4	51.15	352.5	4.93	29.5	4.0	352.5	4.93
LCG05_143	868.74	427.08	0.4916	10.7108	0.14414	0.47185	0.00603	0.16467	0.00192	2498.4	12.5	2504.2	19.53	2491.7	26.43	0.5	0.3	2504.2	19.53
LCG05_144	843.28	434.60	0.5154	0.55617	0.01132	0.07053	0.00097	0.0572	0.00114	449	7.39	498.9	43.92	439.3	5.84	13.6	2.2	439.3	5.84
LCG05_145	761.21	335.68	0.4410	4.90406	0.06876	0.32711	0.0042	0.10876	0.00135	1803	11.83	1778.6	22.55	1824.4	20.4	-2.5	-1.2	1778.6	22.55
LCG05_146	3588.17	4254.38	1.1857	5.29981	0.06805	0.33849	0.00419	0.11358	0.00125	1868.8	10.97	1857.5	19.7	1879.4	20.17	-1.2	-0.6	1857.5	19.7
LCG05_147	755.55	271.88	0.3598	5.55427	0.07857	0.35091	0.00454	0.11482	0.00144	1909	12.17	1877.1	22.49	1938.9	21.65	-3.2	-1.5	1877.1	22.49
LCG05_148	2875.06	163.07	0.0567	5.53555	0.07253	0.3567	0.00445	0.11258	0.00127	1906.1	11.27	1841.4	20.31	1966.5	21.15	-6.4	-3.1	1841.4	20.31
LCG05_149	520.68	336.53	0.6463	1.87689	0.03405	0.17982	0.00248	0.07572	0.00132	1073	12.02	1087.6	34.47	1066	13.55	2.0	0.7	1066	13.55
LCG05_150	594.26	253.23	0.4261	5.99636	0.08833	0.36674	0.00485	0.11861	0.00157	1975.3	12.82	1935.4	23.53	2014.1	22.86	-3.9	-1.9	1935.4	23.53
LCG05_151	1114.94	488.09	0.4378	5.41058	0.07528	0.34873	0.00447	0.11255	0.00138	1886.5	11.92	1841	22.08	1928.5	21.36	-4.5	-2.2	1841	22.08
LCG05_152	4742.72	892.47	0.1882	4.82791	0.06243	0.31892	0.00395	0.10982	0.00122	1789.8	10.88	1796.4	20.06	1784.5	19.32	0.7	0.3	1796.4	20.06
LCG05_153	829.13	387.67	0.4676	5.30573	0.07487	0.34291	0.00442	0.11225	0.00141	1869.8	12.06	1836.1	22.52	1900.6	21.22	-3.4	-1.6	1836.1	22.52
LCG05_154	2447.77	625.09	0.2554	5.9284	0.07809	0.35969	0.0045	0.11956	0.00136	1965.4	11.44	1949.7	20.19	1980.7	21.34	-1.6	-0.8	1949.7	20.19

LCG06

	concentrations			ratios						ages						discordance		preferred ages	
sample	ppm U	ppm Pb	atomic Th/U	Pb207/Pb206	1 sigma	Pb207/U235	1 sigma	Pb206/U238	1 sigma	age 206/238	1 sigma	age 207/235	1 sigma	age 207/206	1 sigma	%discord.68-75	%discord.68-76	preferred age	1 sigma
LCG06_001	390.68	173.93	0.4452	0.54373	0.01714	0.07275	0.00112	0.05422	0.00176	440.9	11.28	380.2	71.35	452.7	6.72	-16.0	-2.6	452.7	6.72

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LCG06_002	788.65	699.51	0.8870	1.0925	0.02021	0.12234	0.00155	0.06479	0.00121	749.7	9.81	767.5	38.71	744	8.9	3.2	0.8	744	8.9
LCG06_003	501.47	267.30	0.5330	5.09132	0.07387	0.32564	0.00401	0.11343	0.00159	1834.7	12.31	1855.1	25.15	1817.2	19.49	2.1	1.0	1855.1	25.15
LCG06_004	427.13	157.89	0.3697	1.10812	0.02703	0.12669	0.00181	0.06346	0.00158	757.3	13.02	723.7	52.06	768.9	10.37	-5.9	-1.5	768.9	10.37
LCG06_005	179.31	81.45	0.4542	4.19653	0.08677	0.29953	0.00447	0.10165	0.0021	1673.3	16.95	1654.4	37.88	1689	22.18	-2.0	-0.9	1654.4	37.88
LCG06_006	4004.49	1293.09	0.3229	0.5249	0.00766	0.06775	0.00078	0.05621	8.00E-04	428.4	5.1	459.9	31.5	422.6	4.73	8.8	1.4	422.6	4.73
LCG06_007	3247.91	1202.45	0.3702	2.22221	0.03787	0.08203	0.00116	0.19655	0.00355	1188.1	11.94	2797.8	29.28	508.2	6.94	450.5	133.8	508.2	6.94
LCG06_008	1141.43	259.87	0.2277	1.54022	0.0233	0.15643	0.00187	0.07143	0.00106	946.6	9.31	969.8	30	936.9	10.4	3.5	1.0	936.9	10.4
LCG06_009	276.98	275.14	0.9934	0.43915	0.01858	0.05428	0.00101	0.0587	0.00259	369.7	13.11	555.9	93.53	340.7	6.2	63.2	8.5	340.7	6.2
LCG06_010	96.21	131.64	1.3683	1.19888	0.0523	0.12212	0.00255	0.07123	0.00324	800.1	24.15	963.9	89.79	742.7	14.66	29.8	7.7	742.7	14.66
LCG06_011	432.96	591.72	1.3667	5.15275	0.07706	0.32637	0.00409	0.11454	0.00166	1844.8	12.72	1872.7	25.95	1820.8	19.87	2.9	1.3	1872.7	25.95
LCG06_012	833.84	324.45	0.3891	4.67527	0.06419	0.3054	0.00364	0.11106	0.00147	1762.8	11.48	1816.9	23.76	1718	17.98	5.8	2.6	1816.9	23.76
LCG06_013	362.98	349.40	0.9626	5.07489	0.08005	0.31926	0.00413	0.11532	0.00178	1831.9	13.38	1884.9	27.52	1786.1	20.16	5.5	2.6	1884.9	27.52
LCG06_014	269.69	256.84	0.9524	5.66583	0.1039	0.36656	0.00521	0.11214	0.00202	1926.2	15.83	1834.3	32.33	2013.2	24.57	-8.9	-4.3	1834.3	32.33
LCG06_015	329.46	158.87	0.4822	0.26719	0.01367	0.0358	0.00072	0.05415	0.00289	240.4	10.95	377.2	115.2	226.7	4.49	66.4	6.0	226.7	4.49
LCG06_016	1247.85	300.70	0.2410	4.89079	0.06352	0.31087	0.00361	0.11414	0.00141	1800.7	10.95	1866.4	22.14	1745	17.77	7.0	3.2	1866.4	22.14
LCG06_017	654.54	916.01	1.3995	0.28766	0.0095	0.03361	0.00055	0.0621	0.00215	256.7	7.49	677.6	72.22	213.1	3.41	218.0	20.5	213.1	3.41
LCG06_018	71.43	65.27	0.9137	4.35103	0.12176	0.30349	0.00565	0.10401	0.00295	1703.1	23.1	1696.9	51.43	1708.6	27.97	-0.7	-0.3	1696.9	51.43
LCG06_019	505.85	297.83	0.5888	8.27073	0.11253	0.38698	0.00471	0.15506	0.00201	2261.1	12.32	2402.5	21.91	2108.8	21.89	13.9	7.2	2402.5	21.91
LCG06_020	647.25	220.68	0.3409	4.97842	0.06893	0.31089	0.00374	0.11618	0.00155	1815.7	11.71	1898.2	23.75	1745.1	18.37	8.8	4.0	1898.2	23.75
LCG06_021	2428.64	835.11	0.3439	0.5368	0.00839	0.06839	0.00081	0.05694	0.00088	436.3	5.54	488.6	34.1	426.5	4.86	14.6	2.3	426.5	4.86
LCG06_022	263.86	120.94	0.4583	0.79303	0.02357	0.10042	0.00155	0.05729	0.00175	592.9	13.35	502.3	66.49	616.9	9.06	-18.6	-3.9	616.9	9.06
LCG06_023	1995.69	371.69	0.1862	5.05009	0.06253	0.31851	0.00362	0.11503	0.00134	1827.8	10.49	1880.3	20.88	1782.4	17.7	5.5	2.5	1880.3	20.88
LCG06_024	387.77	187.75	0.4842	4.91579	0.07396	0.31882	0.004	0.11186	0.00164	1805	12.69	1829.9	26.27	1784	19.54	2.6	1.2	1829.9	26.27
LCG06_025	415.46	182.86	0.4401	5.45198	0.07951	0.3323	0.00412	0.11903	0.00168	1893.1	12.51	1941.7	25.01	1849.5	19.95	5.0	2.4	1941.7	25.01
LCG06_026	141.40	94.72	0.6699	0.62573	0.029	0.05175	0.00117	0.08773	0.00433	493.4	18.11	1376.5	91.91	325.2	7.15	323.3	51.7	325.2	7.15
LCG06_027	84.55	58.25	0.6889	9.59807	0.19038	0.43136	0.00701	0.16143	0.00313	2397	18.24	2470.7	32.4	2311.9	31.56	6.9	3.7	2470.7	32.4
LCG06_028	1010.23	505.01	0.4999	4.45851	0.05909	0.25824	0.00304	0.12526	0.00159	1723.3	10.99	2032.4	22.32	1480.8	15.57	37.3	16.4	2032.4	22.32
LCG06_029	294.47	235.48	0.7997	0.61739	0.02027	0.0759	0.00124	0.05901	0.00201	488.2	12.73	567.5	72.48	471.6	7.4	20.3	3.5	471.6	7.4
LCG06_030	195.34	237.56	1.2161	4.17524	0.07874	0.29146	0.00412	0.10393	0.00195	1669.2	15.45	1695.4	34.23	1648.8	20.55	2.8	1.2	1695.4	34.23
LCG06_031	1774.11	440.02	0.2480	0.74242	0.01169	0.09183	0.00109	0.05865	0.00091	563.8	6.81	554.2	33.56	566.4	6.43	-2.2	-0.5	566.4	6.43
LCG06_032	693.90	99.24	0.1430	3.42881	0.04959	0.25205	0.00305	0.09869	0.00139	1511	11.37	1599.6	25.99	1449	15.7	10.4	4.3	1599.6	25.99
LCG06_033	507.30	278.81	0.5496	13.9204	0.18118	0.52272	0.00628	0.1932	0.00236	2744.3	12.33	2769.6	19.9	2710.7	26.58	2.2	1.2	2769.6	19.9
LCG06_034	214.29	347.66	1.6224	6.56048	0.10733	0.36518	0.00492	0.13034	0.00208	2054.1	14.41	2102.5	27.76	2006.7	23.25	4.8	2.4	2102.5	27.76
LCG06_035	1078.75	566.05	0.5247	1.12157	0.01806	0.12296	0.00149	0.06618	0.00106	763.7	8.64	812	32.99	747.6	8.54	8.6	2.2	747.6	8.54
LCG06_036	431.50	351.53	0.8147	0.56907	0.01618	0.06754	0.00102	0.06113	0.0018	457.4	10.47	643.7	62.07	421.3	6.15	52.8	8.6	421.3	6.15
LCG06_037	521.88	302.41	0.5795	5.22587	0.07486	0.32473	0.00398	0.11675	0.00161	1856.8	12.21	1907.1	24.61	1812.8	19.38	5.2	2.4	1907.1	24.61
LCG06_038	578.73	244.43	0.4224	5.48329	0.0763	0.34506	0.00417	0.11529	0.00154	1898	11.95	1884.4	23.84	1910.9	19.97	-1.4	-0.7	1884.4	23.84
LCG06_039	724.51	479.76	0.6622	1.15194	0.02037	0.12763	0.0016	0.06548	0.00116	778.2	9.61	789.8	36.7	774.3	9.13	2.0	0.5	774.3	9.13
LCG06_040	2193.94	1105.56	0.5039	2.91007	0.03692	0.19727	0.00226	0.10702	0.00129	1384.5	9.59	1749.3	21.86	1160.7	12.15	50.7	19.3	1749.3	21.86
LCG06_041	803.23	274.79	0.3421	5.01646	0.0677	0.32089	0.00381	0.11342	0.00146	1822.1	11.43	1854.8	23.14	1794.1	18.57	3.4	1.6	1854.8	23.14
LCG06_042	476.69	391.07	0.8204	10.9578	0.14775	0.47899	0.00585	0.16597	0.00211	2519.6	12.55	2517.4	21.25	2522.9	25.48	-0.2	-0.1	2517.4	21.25
LCG06_043	1224.53	339.51	0.2773	5.20432	0.06736	0.33267	0.00387	0.11349	0.00139	1853.3	11.02	1856.1	22.03	1851.3	18.7	0.3	0.1	1856.1	22.03
LCG06_044	80.18	85.94	1.0719	6.19465	0.21321	0.29426	0.00734	0.15273	0.00544	2003.7	30.09	2376.7	59.42	1662.8	36.58	42.9	20.5	2376.7	59.42
LCG06_045	1332.40	744.40	0.5587	0.27378	0.00667	0.03596	0.00049	0.05523	0.00138	245.7	5.32	421.4	54.45	227.7	3.05	85.1	7.9	227.7	3.05
LCG06_046	586.02	361.21	0.6164	11.4717	0.15028	0.48519	0.00581	0.17153	0.00212	2562.3	12.24	2572.6	20.47	2549.8	25.24	0.9	0.5	2572.6	20.47
LCG06_047	846.96	295.74	0.3492	13.0319	0.16367	0.51347	0.00599	0.18413	0.00216	2682	11.84	2690.4	19.3	2671.4	25.51	0.7	0.4	2690.4	19.3
LCG06_048	424.21	221.61	0.5224	4.66627	0.07166	0.30845	0.0039	0.10975	0.00164	1761.2	12.84	1795.3	27.01	1733.1	19.23	3.6	1.6	1795.3	27.01
LCG06_049	469.40	178.26	0.3798	3.34809	0.05574	0.25974	0.00335	0.09352	0.00154	1492.3	13.02	1498.4	30.75	1488.5	17.17	0.7	0.3	1498.4	30.75
LCG06_050	53.94	44.63	0.8274	4.33611	0.15041	0.31577	0.00688	0.09962	0.00351	1700.3	28.62	1617	64.29	1769	33.72	-8.6	-3.9	1617	64.29

FOR REVIEW PURPOSES ONLY

LCG06_051	125.37	111.30	0.8878	4.61215	0.13993	0.32525	0.00645	0.10288	0.00316	1751.5	25.32	1676.7	55.69	1815.3	31.39	-7.6	-3.5	1676.7	55.69
LCG06_052	150.15	154.77	1.0307	10.1378	0.1783	0.45045	0.00668	0.16327	0.00278	2447.4	16.25	2489.9	28.4	2397.3	29.69	3.9	2.1	2489.9	28.4
LCG06_053	247.82	195.26	0.7879	0.55783	0.02384	0.07168	0.00134	0.05646	0.00251	450.1	15.54	469.6	96.13	446.3	8.07	5.2	0.9	446.3	8.07
LCG06_054	988.37	162.00	0.1639	0.60108	0.01383	0.08026	0.00108	0.05433	0.00127	477.9	8.77	384.7	51.67	497.7	6.42	-22.7	-4.0	497.7	6.42
LCG06_055	497.10	540.57	1.0874	0.26981	0.01219	0.03949	0.00072	0.04956	0.00232	242.5	9.75	174.5	105.78	249.7	4.45	-30.1	-2.9	249.7	4.45
LCG06_056	240.53	145.96	0.6068	10.0224	0.15364	0.44548	0.00595	0.16322	0.0024	2436.8	14.15	2489.3	24.56	2375.1	26.52	4.8	2.6	2489.3	24.56
LCG06_057	80.18	89.43	1.1154	4.04724	0.13392	0.26797	0.00576	0.10957	0.00373	1643.7	26.94	1792.2	60.81	1530.5	29.27	17.1	7.4	1792.2	60.81
LCG06_058	3618.18	4227.67	1.1685	2.25951	0.02838	0.20169	0.00229	0.08128	0.00097	1199.8	8.84	1228.1	23.14	1184.4	12.26	3.7	1.3	1228.1	23.14
LCG06_059	291.55	184.26	0.6320	11.9787	0.18053	0.4688	0.00627	0.18537	0.00267	2602.7	14.12	2701.5	23.54	2478.3	27.53	9.0	5.0	2701.5	23.54
LCG06_060	2226.01	501.52	0.2253	7.30756	0.08939	0.39362	0.00445	0.13468	0.00154	2149.7	10.93	2159.9	19.85	2139.6	20.59	0.9	0.5	2159.9	19.85
LCG06_061	1957.78	850.24	0.4343	7.99082	0.09926	0.4608	0.00524	0.1258	0.00146	2230	11.21	2040.2	20.44	2443.1	23.14	-16.5	-8.7	2040.2	20.44
LCG06_062	912.56	214.00	0.2345	4.19222	0.0649	0.28677	0.00363	0.10605	0.0016	1672.5	12.69	1732.6	27.49	1625.4	18.18	6.6	2.9	1732.6	27.49
LCG06_063	2877.64	753.89	0.2620	3.91616	0.04778	0.21489	0.00243	0.13221	0.00152	1617	9.87	2127.5	19.96	1254.8	12.89	69.5	28.9	2127.5	19.96
LCG06_064	934.43	382.56	0.4094	5.9233	0.07707	0.34216	0.004	0.12559	0.00155	1964.7	11.3	2037.1	21.67	1897.1	19.2	7.4	3.6	2037.1	21.67
LCG06_065	1027.73	900.30	0.8760	6.9951	0.08882	0.33842	0.00393	0.14995	0.0018	2110.8	11.28	2345.4	20.38	1879.1	18.94	24.8	12.3	2345.4	20.38
LCG06_066	737.63	407.89	0.5530	0.29365	0.00819	0.03933	0.00057	0.05417	0.00156	261.4	6.43	378.1	63.43	248.6	3.53	52.1	5.1	248.6	3.53
LCG06_067	393.60	367.99	0.9349	4.82297	0.07604	0.30608	0.00395	0.11431	0.00176	1788.9	13.26	1869.1	27.56	1721.4	19.5	8.6	3.9	1869.1	27.56
LCG06_068	483.98	427.42	0.8831	0.51343	0.01362	0.07032	0.00099	0.05297	0.00144	420.8	9.14	327.3	60.58	438.1	5.97	-25.3	-3.9	438.1	5.97
LCG06_069	698.27	134.34	0.1924	1.35332	0.02245	0.14474	0.00178	0.06783	0.00112	869	9.68	863.4	33.74	871.4	10.03	-0.9	-0.3	871.4	10.03
LCG06_070	497.10	295.78	0.5950	6.33301	0.08844	0.35594	0.00434	0.12908	0.00173	2023	12.25	2085.4	23.35	1962.9	20.65	6.2	3.1	2085.4	23.35
LCG06_071	4826.68	4269.65	0.8846	22.2435	0.26374	0.62841	0.00703	0.25679	0.00283	3194.4	11.52	3227.1	17.29	3143.3	27.85	2.7	1.6	3227.1	17.29
LCG06_072	1217.24	645.51	0.5303	-0.0295	0.01397	0.06631	0.00093	-0.0032	0.00153	-30.4	14.61	0.1	0	413.9	5.6	-100.0	-107.3	413.9	5.6
LCG06_073	255.11	167.16	0.6552	0.31773	0.02061	0.04222	0.00106	0.0546	0.00371	280.2	15.88	395.8	144.74	266.6	6.54	48.5	5.1	266.6	6.54
LCG06_074	68.52	39.91	0.5825	1.10744	0.06323	0.12761	0.00307	0.06296	0.00372	756.9	30.47	706.8	120.97	774.2	17.55	-8.7	-2.2	774.2	17.55
LCG06_075	543.75	651.51	1.1982	10.2093	0.13249	0.45599	0.00541	0.16243	0.00199	2453.9	12	2481.1	20.47	2421.8	23.93	2.4	1.3	2481.1	20.47
LCG06_076	1692.47	184.21	0.1088	5.32916	0.06621	0.33654	0.00384	0.11488	0.00134	1873.6	10.62	1878	20.91	1870	18.51	0.4	0.2	1878	20.91
LCG06_077	418.38	274.62	0.6564	10.4498	0.14009	0.46268	0.00561	0.16385	0.00207	2475.5	12.42	2495.8	21.17	2451.4	24.73	1.8	1.0	2495.8	21.17
LCG06_078	892.16	711.30	0.7973	6.55824	0.08472	0.30453	0.00358	0.15623	0.00192	2053.8	11.38	2415.3	20.69	1713.8	17.67	40.9	19.8	2415.3	20.69
LCG06_079	4355.82	2087.34	0.4792	0.28559	0.0045	0.03875	0.00046	0.05347	0.00083	255.1	3.56	348.5	34.78	245.1	2.83	42.2	4.1	245.1	2.83
LCG06_080	1311.99	779.26	0.5940	1.73082	0.02483	0.17165	0.00202	0.07315	0.00102	1020.1	9.23	1018.1	27.93	1021.2	11.13	-0.3	-0.1	1021.2	11.13
LCG06_081	1215.78	444.33	0.3655	0.32149	0.00735	0.04498	0.00059	0.05185	0.00121	283	5.65	278.9	52.56	283.6	3.67	-1.7	-0.2	283.6	3.67
LCG06_082	688.07	128.16	0.1863	5.26134	0.07404	0.33089	0.00402	0.11535	0.00156	1862.6	12.01	1885.4	24.14	1842.7	19.47	2.3	1.1	1885.4	24.14
LCG06_083	244.91	225.04	0.9189	4.8494	0.08555	0.30308	0.00419	0.11608	0.00203	1793.5	14.85	1896.7	31.07	1706.5	20.72	11.1	5.1	1896.7	31.07
LCG06_084	454.82	449.64	0.9886	10.3654	0.14734	0.46238	0.00584	0.16263	0.0022	2468	13.16	2483.2	22.59	2450.1	25.74	1.4	0.7	2483.2	22.59
LCG06_085	1692.47	551.64	0.3259	9.28393	0.1153	0.42841	0.00492	0.15721	0.00183	2366.4	11.38	2425.9	19.61	2298.6	22.22	5.5	2.9	2425.9	19.61
LCG06_086	900.90	473.50	0.5256	5.1058	0.06947	0.32838	0.00391	0.1128	0.00147	1837.1	11.55	1845	23.34	1830.5	18.98	0.8	0.4	1845	23.34
LCG06_087	685.15	518.86	0.7573	0.27213	0.00925	0.03739	0.00059	0.0528	0.00186	244.4	7.39	320.3	78.25	236.6	3.67	35.4	3.3	236.6	3.67
LCG06_088	223.04	175.42	0.7865	1.07842	0.03471	0.12518	0.00209	0.0625	0.00208	742.9	16.96	691.1	69.33	760.3	12	-9.1	-2.3	760.3	12
LCG06_089	1297.41	130.16	0.1003	5.00386	0.06569	0.31989	0.00374	0.11348	0.00142	1820	11.11	1855.8	22.37	1789.2	18.28	3.7	1.7	1855.8	22.37
LCG06_090	1612.29	12.67	0.0079	-0.5455	0.01266	0.03351	0.00055	-0.1181	0.003	NA	28.29	NA	0	NA	3.42	NA	NA	NA	3.42
LCG06_091	820.72	192.28	0.2343	9.66428	0.12531	0.443	0.00524	0.15826	0.00193	2403.3	11.93	2437.2	20.55	2364.1	23.39	3.1	1.7	2437.2	20.55
LCG06_092	1535.03	836.94	0.5452	6.74168	0.08594	0.35544	0.00411	0.1376	0.00166	2078.1	11.27	2197.2	20.75	1960.5	19.55	12.1	6.0	2197.2	20.75
LCG06_093	532.09	315.08	0.5922	8.76404	0.12117	0.42365	0.00521	0.15007	0.00197	2313.8	12.6	2346.8	22.3	2277	23.57	3.1	1.6	2346.8	22.3
LCG06_094	425.67	336.86	0.7914	0.26696	0.01192	-0.1216	0.00194	-0.0159	0.00073	240.3	9.56	0.1	0	-835.7	14.25	-100.0	-128.8	-835.7	14.25
LCG06_095	1371.76	670.66	0.4889	3.9584	0.05276	0.28221	0.00331	0.10176	0.00129	1625.7	10.8	1656.4	23.36	1602.5	16.62	3.4	1.4	1656.4	23.36
LCG06_096	392.14	909.23	2.3186	0.68099	0.0193	0.08344	0.00126	0.05921	0.00173	527.4	11.66	574.8	62.32	516.6	7.48	11.3	2.1	516.6	7.48
LCG06_097	895.07	557.56	0.6229	8.81987	0.11487	0.42062	0.00497	0.15212	0.00187	2319.5	11.88	2369.9	20.82	2263.3	22.56	4.7	2.5	2369.9	20.82
LCG06_098	69.97	74.71	1.0676	4.32501	0.12233	0.28078	0.00532	0.11175	0.00323	1698.1	23.33	1828	51.47	1595.3	26.8	14.6	6.4	1828	51.47
LCG06_099	2482.58	247.59	0.0997	4.64752	0.05829	0.3038	0.00347	0.11098	0.00131	1757.8	10.48	1815.5	21.3	1710.1	17.17	6.2	2.8	1815.5	21.3

FOR REVIEW PURPOSES ONLY

LCG06_100	137.03	78.92	0.5760	9.6487	0.16292	0.44108	0.0063	0.1587	0.00259	2401.8	15.53	2441.8	27.37	2355.5	28.18	3.7	2.0	2441.8	27.37
LCG06_101	137.03	71.84	0.5243	4.38412	0.09638	0.29919	0.00469	0.1063	0.00235	1709.3	18.18	1737	39.89	1687.3	23.28	2.9	1.3	1737	39.89
LCG06_102	97.67	99.71	1.0208	9.80059	0.19483	0.43956	0.00717	0.16175	0.00314	2416.2	18.32	2474	32.39	2348.7	32.12	5.3	2.9	2474	32.39
LCG06_103	1446.11	346.35	0.2395	1.51228	0.02265	0.15306	0.00183	0.07168	0.00105	935.4	9.15	976.8	29.54	918.1	10.22	6.4	1.9	918.1	10.22
LCG06_104	2575.88	1855.14	0.7202	2.33449	0.0304	0.20529	0.00236	0.0825	0.00102	1222.8	9.26	1257.3	23.86	1203.7	12.62	4.5	1.6	1257.3	23.86
LCG06_105	578.73	609.70	1.0535	4.35858	0.06358	0.29467	0.00362	0.1073	0.00151	1704.5	12.05	1754.1	25.54	1664.8	18.02	5.4	2.4	1754.1	25.54
LCG06_106	247.82	270.90	1.0931	4.96948	0.084	0.31325	0.00422	0.11509	0.00191	1814.1	14.29	1881.2	29.66	1756.7	20.7	7.1	3.3	1881.2	29.66
LCG06_107	756.58	578.91	0.7652	0.33884	0.00943	0.04805	0.00069	0.05116	0.00147	296.3	7.15	248	64.64	302.5	4.24	-18.0	-2.0	302.5	4.24
LCG06_108	596.23	440.06	0.7381	0.42926	0.01561	0.05476	0.00092	0.05687	0.00215	362.7	11.09	485.9	81.94	343.7	5.63	41.4	5.5	343.7	5.63
LCG06_109	129.74	123.94	0.9553	1.10973	0.04251	0.11832	0.00226	0.06804	0.00271	758	20.46	869.9	80.45	720.9	13.01	20.7	5.1	720.9	13.01
LCG06_110	297.39	159.40	0.5360	1.20678	0.03171	0.13782	0.00207	0.06352	0.00171	803.7	14.59	725.8	56.07	832.3	11.72	-12.8	-3.4	832.3	11.72

CZ05

	concentrations			ratios						ages						discordance		preferred ages	
sample	ppm U	ppm Pb	atomic Th/U	Pb207/Pb206	1 sigma	Pb207/U235	1 sigma	Pb206/U238	1 sigma	age 206/238	1 sigma	age 207/235	1 sigma	age 207/206	1 sigma	%discord.68-75	%discord.68-76	preferred age	1 sigma
CZ05-001	518	57	0.11	5.48193	0.08841	0.34499	0.00397	0.11529	0.00181	1897.8	27.7	1910.7	38.1	1884.4	56.1	-0.7	-1.4	1884.4	56.1
CZ05-002	535	509	0.95	0.54017	0.01356	0.06988	0.00086	0.05609	0.00141	438.5	17.88	435.4	10.4	455.4	110.0	0.7	4.4	435.4	10.4
CZ05-003	386	167	0.43	1.77861	0.03865	0.17423	0.00212	0.07406	0.00161	1037.7	28.26	1035.4	23.3	1043.2	86.5	0.2	0.7	1035.4	23.3
CZ05-004	219	182	0.83	1.43275	0.03393	0.14628	0.00181	0.07106	0.00169	902.7	28.32	880.1	20.4	959.2	95.7	2.6	8.2	880.1	20.4
CZ05-005	359	18	0.05	0.79061	0.01817	0.09468	0.00115	0.06059	0.00139	591.5	20.6	583.1	13.5	624.6	97.7	1.4	6.6	583.1	13.5
CZ05-006	321	242	0.75	1.38256	0.03083	0.1541	0.00184	0.06509	0.00145	881.5	26.28	923.9	20.5	777.3	92.1	-4.6	-18.9	923.9	20.5
CZ05-007	323	120	0.37	0.33342	0.01067	0.04699	0.00061	0.05148	0.00167	292.2	16.24	296	7.5	262.1	145.2	-1.3	-12.9	296	7.5
CZ05-008	697	213	0.31	1.52301	0.02918	0.14525	0.00171	0.07607	0.00145	939.7	23.48	874.3	19.3	1097	74.9	7.5	20.3	874.3	19.3
CZ05-009	277	220	0.80	0.53917	0.01678	0.07107	0.00093	0.05504	0.00173	437.9	22.14	442.6	11.2	413.9	136.5	-1.1	-6.9	442.6	11.2
CZ05-010	278	123	0.44	5.5004	0.10316	0.34638	0.00418	0.11521	0.00214	1900.7	32.22	1917.3	40.0	1883.2	66.3	-0.9	-1.8	1883.2	66.3
CZ05-011	136	82	0.60	1.20173	0.03446	0.12978	0.0017	0.06718	0.00195	801.4	31.78	786.6	19.4	843.4	118.5	1.9	6.7	786.6	19.4
CZ05-012	721	361	0.50	1.14435	0.02151	0.12419	0.00145	0.06685	0.00124	774.6	20.36	754.6	16.7	833.2	76.6	2.7	9.4	754.6	16.7
CZ05-013	552	414	0.75	9.19166	0.15408	0.41585	0.00489	0.16036	0.00264	2357.3	30.7	2241.6	44.5	2459.5	55.1	5.2	8.9	2459.5	55.1
CZ05-014	484	215	0.45	0.56628	0.01469	0.07218	0.0009	0.05692	0.00149	455.6	19.06	449.3	10.8	487.7	114.5	1.4	7.9	449.3	10.8
CZ05-015	400	261	0.65	1.66251	0.03238	0.16963	0.002	0.07111	0.00137	994.3	24.7	1010.1	22.1	960.5	78.0	-1.6	-5.2	1010.1	22.1
CZ05-016	389	172	0.44	0.53875	0.01455	0.07091	0.00089	0.05512	0.0015	437.6	19.2	441.6	10.7	417	118.1	-0.9	-5.9	441.6	10.7
CZ05-017	609	97	0.16	5.12799	0.08378	0.32432	0.00373	0.11471	0.00183	1840.8	27.76	1810.8	36.4	1875.4	57.1	1.7	3.4	1875.4	57.1
CZ05-018	969	923	0.95	0.52692	0.0113	0.06762	0.0008	0.05654	0.00121	429.8	15.02	421.8	9.7	472.8	94.3	1.9	10.8	421.8	9.7
CZ05-019	335	167	0.50	0.33323	0.01127	0.04419	0.00059	0.05471	0.00188	292	17.16	278.8	7.3	400.1	148.9	4.7	30.3	278.8	7.3
CZ05-020	1705	421	0.25	4.25282	0.06964	0.28416	0.00327	0.10858	0.00174	1684.3	26.92	1612.3	32.8	1775.7	58.0	4.5	9.2	1775.7	58.0
CZ05-021	59	37	0.62	0.40458	0.02782	0.05787	0.00107	0.05072	0.00355	345	40.22	362.7	13.0	228.2	308.1	-4.9	-58.9	362.7	13.0
CZ05-022	398	382	0.96	2.11797	0.03912	0.19873	0.00233	0.07732	0.00141	1154.7	25.48	1168.5	25.0	1129.5	72.0	-1.2	-3.5	1129.5	72.0
CZ05-023	553	140	0.25	1.86147	0.03331	0.17733	0.00206	0.07616	0.00134	1067.5	23.64	1052.4	22.6	1099.2	69.9	1.4	4.3	1052.4	22.6
CZ05-024	971	360	0.37	0.52755	0.01061	0.06907	0.00081	0.05541	0.00111	430.2	14.1	430.6	9.8	428.5	86.9	-0.1	-0.5	430.6	9.8
CZ05-025	208	186	0.89	0.28677	0.01222	0.03974	0.00057	0.05235	0.00227	256	19.3	251.2	7.1	300.8	191.9	1.9	16.5	251.2	7.1
CZ05-026	902	39	0.04	5.31244	0.08589	0.33848	0.00388	0.11386	0.0018	1870.9	27.64	1879.4	37.4	1862	56.5	-0.5	-0.9	1862	56.5
CZ05-027	198	150	0.75	0.9606	0.03875	0.10836	0.00162	0.06431	0.00265	683.6	40.14	663.2	18.9	751.9	169.1	3.1	11.8	663.2	18.9
CZ05-028	464	135	0.29	0.46144	0.01177	0.06083	0.00075	0.05503	0.00141	385.3	16.36	380.7	9.1	413.5	111.3	1.2	7.9	380.7	9.1
CZ05-029	192	202	1.05	1.77174	0.03975	0.17616	0.00216	0.07297	0.00164	1035.2	29.12	1045.9	23.6	1013.1	89.2	-1.0	-3.2	1045.9	23.6
CZ05-030	134	93	0.69	0.32871	0.01614	0.0433	0.00068	0.05507	0.00276	288.6	24.68	273.3	8.4	415.2	216.1	5.6	34.2	273.3	8.4
CZ05-031	289	194	0.67	4.93917	0.11659	0.30904	0.00407	0.11595	0.00277	1809	39.86	1736	40.1	1894.7	84.6	4.2	8.4	1894.7	84.6
CZ05-032	21	1	0.03	5.36076	0.21517	0.32755	0.00593	0.11873	0.0049	1878.6	68.7	1826.5	57.6	1937.3	144.2	2.9	5.7	1937.3	144.2

FOR REVIEW PURPOSES ONLY

CZ05-033	249	122	0.49	2.56909	0.04995	0.21997	0.00262	0.08473	0.00164	1291.9	28.42	1281.7	27.7	1309.3	74.3	0.8	2.1	1309.3	74.3
CZ05-034	140	107	0.76	0.51419	0.02017	0.06692	0.00095	0.05574	0.00222	421.3	27.04	417.6	11.5	441.9	172.6	0.9	5.5	417.6	11.5
CZ05-035	441	183	0.42	0.36217	0.01033	0.05051	0.00063	0.05202	0.0015	313.8	15.4	317.6	7.8	286.5	128.8	-1.2	-10.9	317.6	7.8
CZ05-036	904	164	0.18	0.4546	0.01028	0.05961	0.00071	0.05533	0.00125	380.5	14.36	373.2	8.7	425.3	98.4	2.0	12.3	373.2	8.7
CZ05-037	559	421	0.75	1.946	0.03567	0.18532	0.00216	0.07618	0.00138	1097.1	24.58	1096	23.5	1099.8	71.7	0.1	0.3	1096	23.5
CZ05-038	575	220	0.38	9.91877	0.16111	0.45376	0.00521	0.15858	0.00252	2427.3	29.96	2411.9	46.2	2440.6	53.3	0.6	1.2	2440.6	53.3
CZ05-039	757	623	0.82	0.52001	0.01127	0.0685	0.00081	0.05507	0.00119	425.2	15.06	427.1	9.8	415.1	94.0	-0.4	-2.9	427.1	9.8
CZ05-040	502	210	0.42	0.4316	0.01111	0.05722	0.00071	0.05472	0.00142	364.3	15.76	358.7	8.6	400.1	114.9	1.6	10.3	358.7	8.6
CZ05-041	1733	1113	0.64	0.29067	0.00591	0.03853	0.00045	0.05473	0.00111	259.1	9.3	243.7	5.6	401.1	88.7	6.3	39.2	243.7	5.6
CZ05-042	534	82	0.15	0.33658	0.00927	0.04716	0.00059	0.05178	0.00144	294.6	14.08	297.1	7.2	275.6	124.8	-0.8	-7.8	297.1	7.2
CZ05-043	978	678	0.69	0.32138	0.00745	0.04257	0.00051	0.05477	0.00127	283	11.46	268.7	6.3	402.8	101.8	5.3	33.3	268.7	6.3
CZ05-044	558	175	0.31	2.03066	0.03776	0.18744	0.00219	0.07859	0.00145	1125.8	25.3	1107.5	23.8	1161.9	72.2	1.7	4.7	1161.9	72.2
CZ05-045	270	115	0.43	0.52881	0.01607	0.06958	0.0009	0.05513	0.00169	431	21.34	433.7	10.8	417.4	133.4	-0.6	-3.9	433.7	10.8
CZ05-046	460	137	0.30	9.76394	0.16268	0.4496	0.00519	0.15755	0.00258	2412.8	30.7	2393.5	46.2	2429.5	55.0	0.8	1.5	2429.5	55.0
CZ05-047	478	160	0.34	0.57574	0.01421	0.07285	0.00089	0.05733	0.00142	461.7	18.32	453.3	10.7	503.8	108.4	1.9	10.0	453.3	10.7
CZ05-048	82	38	0.46	1.52675	0.04832	0.15834	0.00216	0.06995	0.00225	941.2	38.84	947.5	24.1	926.9	129.3	-0.7	-2.2	947.5	24.1
CZ05-049	687	394	0.57	0.5177	0.01182	0.06624	0.0008	0.0567	0.0013	423.6	15.82	413.4	9.6	479.2	100.2	2.5	13.7	413.4	9.6
CZ05-050	388	179	0.46	1.44652	0.02995	0.15099	0.0018	0.0695	0.00144	908.4	24.86	906.5	20.2	913.7	84.0	0.2	0.8	906.5	20.2
CZ05-051	338	158	0.47	2.11812	0.04179	0.19807	0.00235	0.07758	0.00152	1154.7	27.22	1164.9	25.3	1136.1	77.2	-0.9	-2.5	1136.1	77.2
CZ05-052	364	124	0.34	0.32089	0.01047	0.04516	0.00059	0.05154	0.0017	282.6	16.1	284.8	7.3	265.1	148.2	-0.8	-7.4	284.8	7.3
CZ05-053	217	146	0.67	1.74261	0.03866	0.16896	0.00206	0.07482	0.00167	1024.4	28.62	1006.4	22.7	1063.7	88.3	1.8	5.4	1006.4	22.7
CZ05-054	712	585	0.82	0.74173	0.01548	0.08919	0.00106	0.06033	0.00126	563.4	18.06	550.8	12.5	615.3	88.7	2.3	10.5	550.8	12.5
CZ05-055	1248	683	0.55	0.55008	0.01097	0.07088	0.00083	0.0563	0.00112	445.1	14.36	441.5	10.0	463.3	87.4	0.8	4.7	441.5	10.0
CZ05-056	282	211	0.75	0.8475	0.02183	0.10199	0.00127	0.06028	0.00157	623.3	24	626	14.9	613.7	110.2	-0.4	-2.0	626	14.9
CZ05-057	1098	390	0.36	0.28575	0.00673	0.03939	0.00047	0.05263	0.00124	255.2	10.62	249	5.9	312.7	105.5	2.5	20.4	249	5.9
CZ05-058	132	103	0.78	1.15734	0.03515	0.13058	0.00173	0.0643	0.00198	780.7	33.08	791.2	19.7	751.4	127.4	-1.3	-5.3	791.2	19.7
CZ05-059	263	346	1.32	0.53072	0.01596	0.06744	0.00087	0.05709	0.00174	432.3	21.18	420.7	10.5	494.3	132.7	2.8	14.9	420.7	10.5
CZ05-060	251	274	1.09	1.62984	0.03603	0.16121	0.00196	0.07334	0.00163	981.8	27.82	963.5	21.8	1023.4	88.5	1.9	5.9	963.5	21.8
CZ05-061	1181	197	0.17	2.72948	0.04693	0.22785	0.00262	0.0869	0.00147	1336.5	25.56	1323.2	27.5	1358.3	64.6	1.0	2.6	1358.3	64.6
CZ05-062	101	46	0.46	1.12225	0.03728	0.12348	0.0017	0.06593	0.00223	764.1	35.68	750.6	19.5	804.1	138.3	1.8	6.7	750.6	19.5
CZ05-063	689	340	0.49	1.82414	0.03379	0.1786	0.00208	0.07409	0.00136	1054.2	24.3	1059.3	22.8	1043.9	73.2	-0.5	-1.5	1059.3	22.8
CZ05-064	850	346	0.41	0.52637	0.01145	0.0698	0.00083	0.0547	0.00119	429.4	15.24	435	10.0	400.1	95.2	-1.3	-8.7	435	10.0
CZ05-065	77	38	0.50	1.92209	0.05798	0.18337	0.00249	0.07604	0.00233	1088.8	40.3	1085.4	27.1	1096.1	120.3	0.3	1.0	1085.4	27.1
CZ05-066	460	207	0.45	1.82583	0.0356	0.18095	0.00213	0.0732	0.00142	1054.8	25.58	1072.1	23.3	1019.4	77.0	-1.6	-5.2	1072.1	23.3
CZ05-067	284	174	0.61	0.52214	0.01563	0.06982	0.0009	0.05425	0.00164	426.6	20.86	435.1	10.8	381.2	133.0	-2.0	-14.1	435.1	10.8
CZ05-068	179	127	0.71	14.3959	0.25406	0.53721	0.00636	0.1944	0.0034	2776.2	33.52	2771.7	53.3	2779.7	56.7	0.2	0.3	2779.7	56.7
CZ05-069	573	327	0.57	0.32351	0.00909	0.0443	0.00056	0.05297	0.0015	284.6	13.96	279.4	6.9	327.6	126.4	1.9	14.7	279.4	6.9
CZ05-070	1322	398	0.30	0.26075	0.00781	0.0368	0.00047	0.05139	0.00156	235.3	12.58	233	5.8	258.5	136.3	1.0	9.9	233	5.8
CZ05-071	660	734	1.11	0.54686	0.0126	0.07101	0.00085	0.05587	0.00129	442.9	16.54	442.2	10.3	446.9	100.7	0.2	1.1	442.2	10.3
CZ05-072	840	703	0.84	0.51646	0.01148	0.0661	0.00079	0.05668	0.00126	422.8	15.38	412.6	9.5	478.5	97.7	2.5	13.8	412.6	9.5
CZ05-073	113	92	0.82	4.80856	0.10252	0.31814	0.00395	0.10964	0.00235	1786.4	35.84	1780.6	38.6	1793.5	77.0	0.3	0.7	1793.5	77.0
CZ05-074	783	69	0.09	5.03525	0.09146	0.31792	0.00373	0.11489	0.00207	1825.3	30.78	1779.5	36.5	1878.2	64.3	2.6	5.3	1878.2	64.3
CZ05-075	732	409	0.56	0.50622	0.01239	0.0668	0.00081	0.05497	0.00135	415.9	16.7	416.9	9.8	410.9	106.8	-0.2	-1.5	416.9	9.8
CZ05-076	644	481	0.75	10.2881	0.17584	0.46157	0.00532	0.16169	0.00273	2461	31.64	2446.5	46.9	2473.4	56.3	0.6	1.1	2473.4	56.3
CZ05-077	431	144	0.33	1.75061	0.04121	0.17319	0.00214	0.07333	0.00174	1027.4	30.42	1029.6	23.5	1023	94.5	-0.2	-0.6	1029.6	23.5
CZ05-078	594	778	1.31	1.73905	0.03471	0.17105	0.00202	0.07375	0.00147	1023.1	25.74	1017.9	22.3	1034.7	79.4	0.5	1.6	1017.9	22.3
CZ05-079	228	184	0.81	0.50434	0.01839	0.06422	0.00089	0.05697	0.00211	414.6	24.82	401.2	10.8	489.7	160.8	3.3	18.1	401.2	10.8
CZ05-080	413	106	0.26	1.59029	0.03261	0.1634	0.00194	0.0706	0.00145	966.4	25.56	975.6	21.5	945.8	83.2	-0.9	-3.2	975.6	21.5
CZ05-081	663	277	0.42	1.75366	0.03321	0.1714	0.002	0.07422	0.0014	1028.5	24.5	1019.8	22.0	1047.4	75.0	0.9	2.6	1019.8	22.0

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CZ05-082	176	138	0.78	2.30096	0.05199	0.20427	0.00252	0.08171	0.00186	1212.6	31.98	1198.2	26.9	1238.6	87.5	1.2	3.3	1238.6	87.5
CZ05-083	443	196	0.44	0.55791	0.01417	0.07396	0.00091	0.05472	0.0014	450.2	18.46	459.9	10.9	400.1	113.5	-2.1	-14.9	459.9	10.9
CZ05-084	163	72	0.44	10.5225	0.19416	0.46568	0.00556	0.16391	0.00301	2481.9	34.22	2464.6	48.9	2496.4	61.2	0.7	1.3	2496.4	61.2
CZ05-085	412	160	0.39	5.04493	0.09144	0.32264	0.00377	0.11343	0.00204	1826.9	30.72	1802.6	36.7	1855	64.3	1.3	2.8	1855	64.3
CZ05-086	159	213	1.33	0.92371	0.02786	0.10871	0.00142	0.06163	0.00188	664.3	29.4	665.3	16.6	661.5	128.4	-0.2	-0.6	665.3	16.6
CZ05-087	102	36	0.36	6.35656	0.13319	0.36388	0.00453	0.12672	0.00267	2026.3	36.76	2000.5	42.8	2052.9	73.4	1.3	2.6	2052.9	73.4
CZ05-088	540	1025	1.90	1.11617	0.02315	0.12344	0.00146	0.06559	0.00136	761.1	22.22	750.3	16.8	793.4	85.8	1.4	5.4	750.3	16.8
CZ05-089	407	194	0.48	1.09332	0.02404	0.12385	0.00149	0.06403	0.00141	750.1	23.32	752.7	17.1	742.8	91.9	-0.3	-1.3	752.7	17.1
CZ05-090	651	636	0.98	1.51035	0.02942	0.152	0.00178	0.07208	0.0014	934.6	23.8	912.1	20.0	987.9	78.5	2.5	7.7	912.1	20.0
CZ05-091	542	474	0.87	0.27429	0.00809	0.03869	0.00049	0.05142	0.00153	246.1	12.88	244.7	6.1	259.7	134.1	0.6	5.8	244.7	6.1
CZ05-092	201	157	0.78	1.34349	0.03398	0.14151	0.00177	0.06886	0.00176	864.7	29.44	853.2	20.0	894.7	103.7	1.3	4.6	853.2	20.0
CZ05-093	829	984	1.19	3.61716	0.06523	0.26737	0.0031	0.09813	0.00176	1553.3	28.7	1527.4	31.5	1589	66.1	1.7	3.9	1589	66.1
CZ05-094	431	251	0.58	0.52961	0.01881	0.06739	0.00093	0.05701	0.00206	431.6	24.98	420.4	11.2	491.2	156.7	2.7	14.4	420.4	11.2
CZ05-095	892	759	0.85	10.3596	0.18405	0.43924	0.00511	0.17108	0.00301	2467.4	32.9	2347.2	45.8	2568.2	58.3	5.1	8.6	2568.2	58.3
CZ05-096	1281	513	0.40	1.59513	0.03066	0.15174	0.00178	0.07625	0.00146	968.3	24	910.7	19.9	1101.8	75.7	6.3	17.3	910.7	19.9
CZ05-097	275	339	1.23	0.45917	0.01578	0.06173	0.00083	0.05395	0.00188	383.7	21.96	386.1	10.1	369	153.2	-0.6	-4.6	386.1	10.1
CZ05-098	847	574	0.68	0.52173	0.01202	0.06804	0.00082	0.05562	0.00129	426.3	16.04	424.3	9.9	437	100.7	0.5	2.9	424.3	9.9
CZ05-099	376	259	0.69	9.87779	0.17921	0.442	0.00517	0.1621	0.00292	2423.4	33.46	2359.6	46.3	2477.7	60.2	2.7	4.8	2477.7	60.2
CZ05-100	494	298	0.60	1.44681	0.03131	0.14793	0.00178	0.07094	0.00154	908.5	25.98	889.4	20.0	955.7	87.6	2.1	6.9	889.4	20.0
CZ05-101	503	273	0.54	4.91864	0.09199	0.31471	0.00369	0.11337	0.00211	1805.5	31.56	1763.8	36.2	1854.1	66.6	2.4	4.9	1854.1	66.6
CZ05-102	261	121	0.46	5.22613	0.10156	0.33722	0.00401	0.11241	0.00218	1856.9	33.12	1873.3	38.7	1838.8	69.5	-0.9	-1.9	1838.8	69.5
CZ05-103	355	128	0.36	7.94485	0.14798	0.39537	0.00466	0.14576	0.0027	2224.8	33.6	2147.7	43.1	2296.7	63.1	3.6	6.5	2296.7	63.1
CZ05-104	222	138	0.62	0.63669	0.01996	0.07712	0.00102	0.05989	0.00191	500.3	24.76	478.9	12.2	599.5	134.9	4.5	20.1	478.9	12.2
CZ05-105	389	226	0.58	0.54787	0.01519	0.07119	0.0009	0.05582	0.00157	443.6	19.92	443.3	10.8	444.9	122.1	0.1	0.4	443.3	10.8
CZ05-106	662	399	0.60	0.33448	0.00908	0.04639	0.00058	0.05229	0.00143	293	13.82	292.3	7.1	298.3	122.6	0.2	2.0	292.3	7.1
CZ05-107	354	150	0.42	10.2741	0.18999	0.46345	0.00545	0.1608	0.00296	2459.8	34.22	2454.8	48.1	2464.1	61.5	0.2	0.4	2464.1	61.5
CZ05-108	509	90	0.18	4.72764	0.09138	0.30588	0.00362	0.11211	0.00216	1772.2	32.4	1720.4	35.8	1833.9	69.2	3.0	6.2	1833.9	69.2
CZ05-109	230	177	0.77	3.53169	0.07713	0.26415	0.00325	0.09698	0.00213	1534.3	34.56	1511	33.1	1566.8	81.3	1.5	3.6	1566.8	81.3
CZ05-110	638	188	0.30	0.73071	0.01708	0.09466	0.00113	0.05599	0.00131	557	20.04	583	13.4	451.7	102.3	-4.5	-29.1	583	13.4
CZ05-111	1156	29	0.03	0.53021	0.01606	0.06846	0.00089	0.05618	0.00173	431.9	21.3	426.9	10.7	458.5	134.4	1.2	6.9	426.9	10.7
CZ05-112	1268	969	0.76	1.89332	0.03548	0.17732	0.00206	0.07744	0.00145	1078.7	24.9	1052.3	22.6	1132.7	73.4	2.5	7.1	1052.3	22.6
CZ05-113	714	373	0.52	2.41555	0.04629	0.20962	0.00245	0.08358	0.0016	1247.2	27.52	1226.8	26.1	1282.7	73.7	1.7	4.4	1282.7	73.7
CZ05-114	293	153	0.52	10.535	0.20988	0.47353	0.00579	0.16137	0.00322	2483	36.94	2499	50.7	2470	66.7	-0.6	-1.2	2470	66.7
CZ05-115	47	9	0.18	10.2523	0.25421	0.46062	0.00645	0.16144	0.00407	2457.8	45.88	2442.3	56.9	2470.8	83.9	0.6	1.2	2470.8	83.9
CZ05-116	423	210	0.50	1.3943	0.03066	0.14448	0.00174	0.07	0.00155	886.5	26	870	19.6	928.2	89.5	1.9	6.3	870	19.6
CZ05-117	137	189	1.38	1.65979	0.04681	0.16104	0.00211	0.07476	0.00214	993.3	35.74	962.6	23.4	1061.9	113.2	3.2	9.4	962.6	23.4
CZ05-118	624	436	0.70	2.66374	0.05257	0.22311	0.00263	0.08659	0.00171	1318.5	29.14	1298.3	27.7	1351.5	75.2	1.6	3.9	1351.5	75.2
CZ05-119	998	193	0.19	5.08479	0.09435	0.32672	0.0038	0.11288	0.00209	1833.6	31.48	1822.5	36.9	1846.3	66.1	0.6	1.3	1846.3	66.1
CZ05-120	648	285	0.44	1.66398	0.03371	0.16711	0.00197	0.07222	0.00146	994.9	25.7	996.1	21.8	992.3	81.4	-0.1	-0.4	996.1	21.8
CZ05-121	598	403	0.67	0.97135	0.02201	0.11303	0.00136	0.06233	0.00142	689.2	22.68	690.3	15.8	685.6	95.8	-0.2	-0.7	690.3	15.8
CZ05-122	1025	634	0.62	0.51145	0.01147	0.06845	0.00082	0.05419	0.00122	419.4	15.4	426.8	9.9	378.8	99.6	-1.7	-12.7	426.8	9.9
CZ05-123	171	164	0.96	1.17261	0.03462	0.13237	0.00173	0.06425	0.00193	787.9	32.36	801.4	19.7	749.9	124.1	-1.7	-6.9	801.4	19.7
CZ05-124	405	265	0.66	0.51282	0.01494	0.06717	0.00086	0.05537	0.00164	420.3	20.06	419.1	10.3	427.1	128.4	0.3	1.9	419.1	10.3
CZ05-125	781	654	0.84	1.74959	0.0362	0.16561	0.00197	0.07662	0.00159	1027	26.74	987.9	21.8	1111.4	81.8	4.0	11.1	987.9	21.8
CZ05-126	642	225	0.35	0.92771	0.0258	0.10353	0.00132	0.06499	0.00183	666.4	27.18	635.1	15.5	774	116.5	4.9	17.9	635.1	15.5
CZ05-127	380	246	0.65	4.97638	0.09702	0.32072	0.00379	0.11254	0.0022	1815.3	32.96	1793.3	37.0	1840.8	69.8	1.2	2.6	1840.8	69.8

CZ01					
concentrations		ratios		ages	discordance	preferred ages

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sample	ppm U	ppm Pb	atomic Th/U	Pb207/Pb206	1 sigma	Pb207/U235	1 sigma	Pb206/U238	1 sigma	age 206/238	1 sigma	age 207/235	1 sigma	age 207/206	1 sigma	%disc ord.68-75	%disc ord.68-76	preferred age	1 sigma
CZ01-001	429	128	0.30	0.44598	0.0108	0.05945	0.00073	0.05442	0.00132	374.5	15.16	372.3	8.9	388.4	106.2	0.6	4.1	372.3	8.9
CZ01-002	447	386	0.86	0.29797	0.00803	0.04287	0.00053	0.05041	0.00136	264.8	12.56	270.6	6.6	214.1	122.7	-2.1	-26.4	270.6	6.6
CZ01-003	196	82	0.42	0.35134	0.01245	0.04716	0.00064	0.05404	0.00194	305.7	18.7	297.1	7.9	372.4	157.1	2.9	20.2	297.1	7.9
CZ01-004	120	21	0.18	2.26748	0.05019	0.20538	0.00255	0.08008	0.00177	1202.2	31.2	1204.1	27.2	1199.1	85.7	-0.2	-0.4	1199.1	85.7
CZ01-005	392	146	0.37	0.59046	0.0134	0.07646	0.00093	0.05602	0.00126	471.2	17.12	474.9	11.1	452.8	98.4	-0.8	-4.9	474.9	11.1
CZ01-006	147	92	0.63	0.42888	0.01566	0.05709	0.00079	0.05449	0.00202	362.4	22.26	357.9	9.6	391.4	160.4	1.3	8.6	357.9	9.6
CZ01-007	53	56	1.05	0.70965	0.03269	0.09016	0.00139	0.0571	0.00267	544.5	38.82	556.5	16.4	494.7	200.3	-2.2	-12.5	556.5	16.4
CZ01-008	1788	459	0.26	0.30391	0.00568	0.03928	0.00046	0.05612	0.00103	269.5	8.86	248.4	5.7	456.9	79.9	8.5	45.6	248.4	5.7
CZ01-009	653	589	0.90	0.63305	0.01257	0.07913	0.00094	0.05803	0.00113	498	15.62	490.9	11.2	530.5	85.4	1.4	7.5	490.9	11.2
CZ01-010	186	73	0.39	5.65043	0.09784	0.35277	0.00417	0.11619	0.00196	1923.8	29.88	1947.8	39.8	1898.3	60.0	-1.2	-2.6	1898.3	60.0
CZ01-011	1088	155	0.14	0.46081	0.00883	0.06239	0.00073	0.05357	0.00101	384.8	12.28	390.2	8.9	353.1	84.0	-1.4	-10.5	390.2	8.9
CZ01-012	95	128	1.35	1.69196	0.04378	0.17052	0.00219	0.07197	0.00187	1005.5	33.02	1015	24.2	985.2	104.0	-0.9	-3.0	1015	24.2
CZ01-013	572	600	1.05	0.55826	0.01179	0.07338	0.00088	0.05519	0.00115	450.4	15.36	456.5	10.5	419.6	90.7	-1.3	-8.8	456.5	10.5
CZ01-014	305	119	0.39	5.99155	0.09964	0.36597	0.00428	0.11876	0.00191	1974.6	28.94	2010.4	40.4	1937.6	57.0	-1.8	-3.8	1937.6	57.0
CZ01-015	559	258	0.46	0.29526	0.00769	0.04125	0.00051	0.05192	0.00135	262.7	12.06	260.6	6.3	281.8	117.0	0.8	7.5	260.6	6.3
CZ01-016	665	30	0.04	0.92593	0.0171	0.10969	0.00129	0.06123	0.00111	665.5	18.04	670.9	15.0	647.4	76.6	-0.8	-3.6	670.9	15.0
CZ01-017	141	86	0.61	1.36982	0.03365	0.14705	0.00185	0.06757	0.00166	876.1	28.84	884.4	20.8	855.4	100.4	-0.9	-3.4	884.4	20.8
CZ01-018	1517	211	0.14	0.29515	0.00582	0.03835	0.00045	0.05582	0.00108	262.6	9.12	242.6	5.6	445	84.4	8.2	45.5	242.6	5.6
CZ01-019	238	146	0.61	5.03663	0.08672	0.32373	0.00382	0.11286	0.00189	1825.5	29.18	1807.9	37.2	1845.9	59.9	1.0	2.1	1845.9	59.9
CZ01-020	149	120	0.80	2.38057	0.05015	0.21447	0.00263	0.08052	0.00168	1236.8	30.12	1252.6	27.9	1209.6	81.1	-1.3	-3.6	1209.6	81.1
CZ01-021	339	232	0.69	1.75547	0.03331	0.17017	0.00202	0.07483	0.00139	1029.2	24.56	1013	22.3	1064	73.9	1.6	4.8	1013	22.3
CZ01-022	295	293	0.99	0.56365	0.01458	0.07145	0.00089	0.05722	0.00148	453.9	18.94	444.9	10.8	499.7	113.1	2.0	11.0	444.9	10.8
CZ01-023	510	220	0.43	1.76467	0.03143	0.17398	0.00204	0.07357	0.00128	1032.6	23.08	1034	22.4	1029.8	69.3	-0.1	-0.4	1034	22.4
CZ01-024	374	188	0.50	0.35235	0.0097	0.04831	0.00061	0.05291	0.00146	306.5	14.56	304.1	7.5	325	122.9	0.8	6.4	304.1	7.5
CZ01-025	162	80	0.50	0.35455	0.01382	0.04866	0.00069	0.05285	0.00209	308.1	20.72	306.3	8.4	322.3	174.5	0.6	5.0	306.3	8.4
CZ01-026	437	326	0.75	1.59577	0.02956	0.16388	0.00194	0.07064	0.00128	968.6	23.12	978.3	21.5	946.9	73.2	-1.0	-3.3	978.3	21.5
CZ01-027	161	188	1.17	1.64456	0.0373	0.16707	0.00207	0.0714	0.00161	987.5	28.64	996	22.9	969	90.7	-0.9	-2.8	996	22.9
CZ01-028	175	64	0.37	30.4783	0.49114	0.71457	0.0084	0.3094	0.00478	3502.4	31.68	3475.7	63.2	3517.9	47.3	0.8	1.2	3517.9	47.3
CZ01-029	212	130	0.61	0.35273	0.0124	0.04691	0.00064	0.05454	0.00194	306.8	18.62	295.5	7.9	393.5	154.2	3.8	24.9	295.5	7.9
CZ01-030	353	246	0.70	3.72362	0.06432	0.27817	0.00327	0.0971	0.00162	1576.5	27.66	1582.1	33.0	1569.2	62.0	-0.4	-0.8	1569.2	62.0
CZ01-031	1141	512	0.45	0.33691	0.00696	0.04554	0.00054	0.05367	0.00109	294.8	10.56	287.1	6.7	356.9	90.7	2.7	19.6	287.1	6.7
CZ01-032	234	180	0.77	0.32003	0.01109	0.04112	0.00058	0.05645	0.00199	281.9	17.06	259.8	7.2	469.4	153.8	8.5	44.7	259.8	7.2
CZ01-033	858	530	0.62	0.26194	0.00625	0.03765	0.00046	0.05047	0.0012	236.2	10.06	238.2	5.7	216.6	108.0	-0.8	-10.0	238.2	5.7
CZ01-034	154	102	0.66	1.86077	0.04153	0.18289	0.00227	0.07381	0.00163	1067.3	29.48	1082.7	24.7	1036.2	88.2	-1.4	-4.5	1082.7	24.7
CZ01-035	174	290	1.67	0.52838	0.01704	0.07055	0.00094	0.05432	0.00177	430.7	22.64	439.5	11.3	384.4	142.3	-2.0	-14.3	439.5	11.3
CZ01-036	238	293	1.23	4.83352	0.08616	0.32891	0.00391	0.1066	0.00185	1790.7	30	1833.1	38.0	1742.1	62.6	-2.3	-5.2	1742.1	62.6
CZ01-037	313	197	0.63	0.40591	0.01138	0.055	0.0007	0.05353	0.0015	345.9	16.44	345.2	8.6	351.4	124.5	0.2	1.8	345.2	8.6
CZ01-038	149	133	0.89	0.60402	0.01964	0.07777	0.00104	0.05634	0.00185	479.8	24.86	482.8	12.5	465.1	142.5	-0.6	-3.8	482.8	12.5
CZ01-039	134	72	0.54	0.43221	0.01676	0.05765	0.00082	0.05439	0.00214	364.7	23.78	361.3	10.0	387	170.4	0.9	6.6	361.3	10.0
CZ01-040	464	177	0.38	11.1875	0.1838	0.49365	0.00577	0.1644	0.00259	2538.9	30.62	2586.5	49.8	2501.4	52.5	-1.8	-3.4	2501.4	52.5
CZ01-041	1357	454	0.33	0.37098	0.00736	0.05157	0.00061	0.05219	0.00101	320.4	10.9	324.1	7.5	293.6	87.4	-1.1	-10.4	324.1	7.5
CZ01-042	799	357	0.45	0.65398	0.01294	0.08188	0.00098	0.05794	0.00112	510.9	15.9	507.3	11.6	527.2	84.5	0.7	3.8	507.3	11.6
CZ01-043	150	103	0.68	1.67788	0.03936	0.17149	0.00215	0.07098	0.00166	1000.2	29.84	1020.3	23.6	956.8	93.9	-2.0	-6.6	1020.3	23.6
CZ01-044	386	253	0.66	0.30965	0.009	0.04331	0.00056	0.05186	0.00151	273.9	13.96	273.3	6.9	279.2	130.6	0.2	2.1	273.3	6.9
CZ01-045	558	247	0.44	0.54135	0.01201	0.06995	0.00085	0.05614	0.00123	439.3	15.82	435.8	10.2	457.6	95.7	0.8	4.8	435.8	10.2
CZ01-046	334	207	0.62	1.65794	0.03271	0.16747	0.00201	0.07182	0.00139	992.6	25	998.2	22.2	980.7	77.7	-0.6	-1.8	998.2	22.2

FOR REVIEW PURPOSES ONLY

CZ01-047	250	229	0.92	5.36408	0.09582	0.34348	0.00409	0.11329	0.00196	1879.1	30.58	1903.4	39.3	1852.8	61.9	-1.3	-2.7	1852.8	61.9
CZ01-048	738	434	0.59	0.57977	0.01193	0.07572	0.00091	0.05555	0.00112	464.3	15.34	470.5	10.9	434	87.9	-1.3	-8.4	470.5	10.9
CZ01-049	74	61	0.82	3.43252	0.08047	0.27205	0.0035	0.09153	0.00214	1511.9	36.86	1551.2	35.5	1457.5	87.7	-2.5	-6.4	1457.5	87.7
CZ01-050	311	200	0.64	3.28213	0.06034	0.26596	0.00317	0.08952	0.0016	1476.8	28.62	1520.2	32.3	1415.3	67.4	-2.9	-7.4	1415.3	67.4
CZ01-051	36	33	0.92	1.52797	0.0639	0.15913	0.0025	0.06966	0.00296	941.7	51.32	951.9	27.8	918.2	170.2	-1.1	-3.7	951.9	27.8
CZ01-052	431	24	0.06	5.49545	0.0955	0.34439	0.00407	0.11576	0.00194	1899.9	29.86	1907.8	39.0	1891.7	59.6	-0.4	-0.9	1891.7	59.6
CZ01-053	266	187	0.70	1.782	0.037	0.17705	0.00216	0.07301	0.00149	1038.9	27.02	1050.8	23.6	1014.4	81.1	-1.1	-3.6	1050.8	23.6
CZ01-054	431	126	0.29	0.29777	0.00862	0.04181	0.00054	0.05167	0.0015	264.7	13.48	264	6.6	270.9	130.2	0.3	2.5	264	6.6
CZ01-055	369	236	0.64	0.27029	0.00837	0.03838	0.0005	0.05109	0.00159	242.9	13.38	242.8	6.2	244.7	140.1	0.0	0.8	242.8	6.2
CZ01-056	229	75	0.33	5.53018	0.10065	0.35133	0.00421	0.11419	0.00201	1905.3	31.3	1940.9	40.2	1867.1	63.0	-1.8	-4.0	1867.1	63.0
CZ01-057	584	217	0.37	0.52497	0.01188	0.06865	0.00084	0.05547	0.00124	428.5	15.82	428	10.1	431.1	97.3	0.1	0.7	428	10.1
CZ01-058	291	90	0.31	0.56415	0.01558	0.07333	0.00094	0.05581	0.00154	454.2	20.22	456.2	11.3	444.5	120.2	-0.4	-2.6	456.2	11.3
CZ01-059	35	17	0.49	1.42407	0.06346	0.15257	0.00244	0.06771	0.00307	899.1	53.16	915.3	27.3	859.8	182.6	-1.8	-6.5	915.3	27.3
CZ01-060	177	178	1.00	1.20737	0.0305	0.13206	0.00168	0.06632	0.00167	804	28.06	799.6	19.1	816.6	103.5	0.6	2.1	799.6	19.1
CZ01-061	307	165	0.54	2.19958	0.04341	0.19976	0.00241	0.07988	0.00154	1180.9	27.56	1174	25.9	1194	75.1	0.6	1.7	1194	75.1
CZ01-062	190	164	0.87	0.61937	0.01865	0.07758	0.00102	0.05792	0.00175	489.5	23.38	481.6	12.2	526.4	130.5	1.6	8.5	481.6	12.2
CZ01-063	293	84	0.29	0.29687	0.00976	0.03928	0.00053	0.05483	0.00182	264	15.28	248.4	6.5	405.3	143.5	6.3	38.7	248.4	6.5
CZ01-064	44	20	0.45	1.27777	0.05242	0.14326	0.00219	0.0647	0.00269	835.9	46.74	863.1	24.7	764.7	170.7	-3.2	-12.9	863.1	24.7
CZ01-065	463	278	0.60	3.39671	0.06203	0.25968	0.00309	0.09489	0.00167	1503.6	28.64	1488.2	31.7	1525.9	65.8	1.0	2.5	1525.9	65.8
CZ01-066	657	350	0.53	3.85843	0.06854	0.28769	0.0034	0.0973	0.00166	1605	28.66	1630	34.1	1572.9	63.4	-1.5	-3.6	1572.9	63.4
CZ01-067	891	257	0.29	2.68001	0.04782	0.22263	0.00263	0.08733	0.0015	1323	26.38	1295.7	27.8	1367.8	65.3	2.1	5.3	1367.8	65.3
CZ01-068	103	108	1.05	3.29571	0.07426	0.26016	0.0033	0.0919	0.00205	1480	35.1	1490.7	33.7	1465.2	83.8	-0.7	-1.7	1465.2	83.8
CZ01-069	447	218	0.49	2.72413	0.05101	0.22666	0.00271	0.08719	0.00158	1335.1	27.82	1317	28.5	1364.7	69.0	1.4	3.5	1364.7	69.0
CZ01-070	221	123	0.56	0.54118	0.01646	0.06936	0.00092	0.0566	0.00173	439.2	21.68	432.3	11.0	475.4	132.3	1.6	9.1	432.3	11.0
CZ01-071	297	157	0.53	10.7883	0.19256	0.48172	0.00575	0.16247	0.00279	2505.1	33.18	2534.8	50.0	2481.5	57.3	-1.2	-2.1	2481.5	57.3
CZ01-072	408	181	0.44	0.89021	0.01977	0.10653	0.00131	0.06062	0.00133	646.5	21.24	652.6	15.2	625.9	92.9	-0.9	-4.3	652.6	15.2
CZ01-073	263	193	0.73	8.99398	0.16286	0.41433	0.00497	0.15747	0.00275	2337.4	33.1	2234.7	45.3	2428.7	58.6	4.6	8.0	2428.7	58.6
CZ01-074	239	225	0.94	1.61735	0.03554	0.16489	0.00203	0.07116	0.00154	977	27.58	983.9	22.5	962	87.1	-0.7	-2.3	983.9	22.5
CZ01-075	121	50	0.42	1.70752	0.04437	0.17406	0.00225	0.07117	0.00184	1011.4	33.28	1034.5	24.7	962.2	104.1	-2.2	-7.5	1034.5	24.7
CZ01-076	312	114	0.37	5.17675	0.09649	0.32103	0.00386	0.11698	0.00211	1848.8	31.72	1794.8	37.7	1910.6	64.0	3.0	6.1	1910.6	64.0
CZ01-077	149	92	0.62	2.59901	0.05779	0.22511	0.00282	0.08376	0.00184	1300.4	32.6	1308.8	29.7	1286.8	84.3	-0.6	-1.7	1286.8	84.3
CZ01-078	657	206	0.31	12.3418	0.21845	0.51398	0.00609	0.1742	0.00295	2630.8	33.26	2673.6	51.8	2598.4	56.0	-1.6	-2.9	2598.4	56.0
CZ01-079	1192	323	0.27	0.27577	0.00628	0.03829	0.00047	0.05225	0.00117	247.3	10	242.2	5.8	296.3	100.7	2.1	18.3	242.2	5.8
CZ01-080	174	166	0.95	13.3255	0.24582	0.52877	0.0064	0.18283	0.00325	2703	34.84	2736.3	54.0	2678.7	58.3	-1.2	-2.2	2678.7	58.3
CZ01-081	214	249	1.16	0.55935	0.01686	0.07334	0.00096	0.05533	0.00167	451.1	21.96	456.2	11.6	425.5	131.2	-1.1	-7.2	456.2	11.6
CZ01-082	128	219	1.71	1.77734	0.04475	0.17795	0.00229	0.07246	0.00181	1037.2	32.72	1055.8	25.0	998.9	100.0	-1.8	-5.7	1055.8	25.0
CZ01-083	498	207	0.42	10.9655	0.19811	0.48185	0.00574	0.1651	0.00286	2520.2	33.62	2535.3	50.0	2508.5	57.8	-0.6	-1.1	2508.5	57.8
CZ01-084	405	413	1.02	1.75917	0.03575	0.17077	0.00207	0.07473	0.00148	1030.5	26.32	1016.4	22.8	1061.3	78.7	1.4	4.2	1016.4	22.8
CZ01-085	710	274	0.39	1.45866	0.02856	0.1528	0.00184	0.06926	0.00131	913.5	23.6	916.6	20.5	906.4	77.3	-0.3	-1.1	916.6	20.5
CZ01-086	177	68	0.38	18.9133	0.34874	0.59909	0.00725	0.22903	0.00406	3037.4	35.56	3026.2	58.4	3045.3	56.3	0.4	0.6	3045.3	56.3
CZ01-087	82	85	1.04	11.4187	0.22947	0.50089	0.0063	0.16538	0.00324	2558	37.52	2617.6	54.1	2511.5	65.1	-2.3	-4.2	2511.5	65.1
CZ01-088	160	89	0.56	0.54445	0.01898	0.07095	0.00098	0.05567	0.00195	441.4	24.96	441.9	11.8	439	152.6	-0.1	-0.7	441.9	11.8
CZ01-089	290	161	0.55	0.55359	0.016	0.07273	0.00095	0.05522	0.00159	447.3	20.92	452.6	11.4	421	125.4	-1.2	-7.5	452.6	11.4
CZ01-090	459	595	1.30	4.29013	0.08172	0.28466	0.00343	0.10934	0.00201	1691.5	31.38	1614.8	34.4	1788.4	66.3	4.7	9.7	1788.4	66.3
CZ01-091	450	132	0.29	0.73676	0.01726	0.0887	0.0011	0.06026	0.00139	560.5	20.18	547.8	13.0	612.9	98.2	2.3	10.6	547.8	13.0
CZ01-092	548	145	0.26	5.19712	0.09775	0.3355	0.00402	0.11238	0.00204	1852.1	32.04	1865	38.8	1838.3	64.9	-0.7	-1.5	1838.3	64.9
CZ01-093	226	289	1.28	1.65423	0.03845	0.16627	0.00209	0.07218	0.00165	991.2	29.42	991.5	23.1	991	91.8	0.0	-0.1	991.5	23.1
CZ01-094	222	119	0.54	0.55638	0.01723	0.07124	0.00095	0.05666	0.00176	449.2	22.48	443.6	11.4	477.5	135.8	1.3	7.1	443.6	11.4
CZ01-095	258	240	0.93	3.46448	0.07088	0.26493	0.00325	0.09487	0.00189	1519.2	32.24	1515	33.1	1525.5	74.1	0.3	0.7	1525.5	74.1

FOR REVIEW PURPOSES ONLY

CZ01-096	110	118	1.08	3.1952	0.0747	0.24806	0.00318	0.09345	0.00216	1456	36.16	1428.4	32.8	1497	86.1	1.9	4.6	1497	86.1
CZ01-097	227	352	1.55	0.72694	0.02026	0.0855	0.00111	0.06168	0.00171	554.8	23.82	528.9	13.2	663.2	116.9	4.9	20.3	528.9	13.2
CZ01-098	530	448	0.85	0.67684	0.01564	0.08475	0.00105	0.05794	0.00131	524.9	18.94	524.4	12.5	527.2	98.6	0.1	0.5	524.4	12.5
CZ01-099	87	33	0.38	0.32946	0.01869	0.0463	0.00078	0.05162	0.00297	289.2	28.54	291.8	9.6	268.7	254.1	-0.9	-8.6	291.8	9.6
CZ01-100	825	133	0.16	0.9885	0.02093	0.11175	0.00136	0.06418	0.00132	698	21.38	682.9	15.8	747.5	86.0	2.2	8.6	682.9	15.8
CZ01-101	210	203	0.97	0.72301	0.02149	0.08815	0.00117	0.0595	0.00177	552.4	25.32	544.6	13.8	585.5	126.4	1.4	7.0	544.6	13.8
CZ01-102	523	315	0.60	0.2839	0.0082	0.03828	0.0005	0.05381	0.00155	253.7	12.96	242.1	6.2	362.9	127.1	4.8	33.3	242.1	6.2
CZ01-103	750	388	0.52	1.66431	0.03359	0.16767	0.00203	0.07201	0.00141	995	25.6	999.3	22.4	986.3	78.5	-0.4	-1.3	999.3	22.4
CZ01-104	987	70	0.07	0.51654	0.01145	0.06785	0.00083	0.05523	0.0012	422.8	15.34	423.2	10.0	421.5	94.1	-0.1	-0.4	423.2	10.0
CZ01-105	113	76	0.67	1.24129	0.03676	0.13452	0.00181	0.06695	0.00198	819.5	33.3	813.6	20.5	836.1	121.0	0.7	2.7	813.6	20.5
CZ01-106	203	184	0.91	1.63629	0.03965	0.1627	0.00207	0.07296	0.00174	984.3	30.54	971.8	22.9	1013	95.4	1.3	4.1	971.8	22.9
CZ01-107	927	598	0.64	1.25637	0.02579	0.12844	0.00156	0.07096	0.00141	826.3	23.22	779	17.8	956.4	80.2	6.1	18.5	779	17.8
CZ01-108	704	542	0.77	0.5387	0.01256	0.06968	0.00086	0.05609	0.00128	437.6	16.58	434.2	10.4	455.6	99.7	0.8	4.7	434.2	10.4
CZ01-109	803	1458	1.81	0.55205	0.01299	0.07147	0.00089	0.05604	0.00129	446.3	17	445	10.7	453.6	100.7	0.3	1.9	445	10.7
CZ01-110	454	227	0.50	9.90486	0.19445	0.45405	0.0055	0.15826	0.00299	2426	36.22	2413.3	48.8	2437.2	63.3	0.5	1.0	2437.2	63.3
CZ01-111	845	897	1.06	0.56485	0.01276	0.07315	0.0009	0.05602	0.00124	454.7	16.56	455.1	10.8	453	96.2	-0.1	-0.5	455.1	10.8
CZ01-112	575	271	0.47	0.28616	0.00831	0.04034	0.00052	0.05146	0.00149	255.5	13.12	254.9	6.5	261.7	129.9	0.2	2.6	254.9	6.5
CZ01-113	208	162	0.78	5.185	0.10948	0.32009	0.00397	0.11752	0.00241	1850.2	35.94	1790.1	38.8	1918.9	72.7	3.4	6.7	1918.9	72.7
CZ01-114	54	37	0.68	10.635	0.24168	0.49083	0.00646	0.1572	0.0035	2491.8	42.18	2574.3	55.8	2425.7	74.6	-3.2	-6.1	2425.7	74.6
CZ01-115	1166	548	0.47	4.20502	0.0835	0.30541	0.00369	0.09989	0.00191	1675	32.58	1718.1	36.5	1622	70.2	-2.5	-5.9	1622	70.2
CZ01-116	409	160	0.39	1.65886	0.03669	0.16853	0.00209	0.07141	0.00154	992.9	28.02	1004	23.0	969.3	86.7	-1.1	-3.6	1004	23.0
CZ01-117	678	279	0.41	12.2746	0.24459	0.5026	0.0061	0.17719	0.00339	2625.6	37.42	2625	52.3	2626.7	63.0	0.0	0.1	2626.7	63.0
CZ01-118	481	40	0.08	0.59474	0.01507	0.07731	0.00098	0.05581	0.00139	473.9	19.2	480	11.7	444.6	108.7	-1.3	-8.0	480	11.7
CZ01-119	283	138	0.49	5.28504	0.1109	0.33919	0.00418	0.11304	0.00229	1866.4	35.84	1882.8	40.3	1848.9	72.5	-0.9	-1.8	1848.9	72.5
CZ01-120	305	141	0.46	0.32792	0.01111	0.04659	0.00063	0.05106	0.00173	288	16.98	293.6	7.8	243.6	152.7	-1.9	-20.5	293.6	7.8
CZ01-121	413	646	1.56	0.9282	0.02249	0.11028	0.00139	0.06106	0.00145	666.7	23.68	674.4	16.1	641.5	100.6	-1.1	-5.1	674.4	16.1
CZ01-122	58	93	1.61	11.1548	0.25448	0.49316	0.00647	0.16411	0.00366	2536.1	42.52	2584.3	55.9	2498.4	74.2	-1.9	-3.4	2498.4	74.2
CZ01-123	216	61	0.28	5.56287	0.12068	0.34966	0.00437	0.11543	0.00243	1910.4	37.34	1933	41.7	1886.5	74.9	-1.2	-2.5	1886.5	74.9
CZ01-124	450	205	0.46	0.56187	0.01495	0.07246	0.00093	0.05626	0.00148	452.7	19.44	451	11.2	461.7	115.5	0.4	2.3	451	11.2
CZ01-125	188	175	0.93	1.75643	0.04479	0.17233	0.00223	0.07395	0.00186	1029.5	33	1024.9	24.5	1040.1	99.9	0.4	1.5	1024.9	24.5
CZ01-126	785	367	0.47	0.32874	0.00871	0.04523	0.00058	0.05273	0.00138	288.6	13.3	285.2	7.1	317.2	116.5	1.2	10.1	285.2	7.1
CZ01-127	1292	148	0.11	0.31585	0.00766	0.04395	0.00055	0.05214	0.00124	278.7	11.82	277.3	6.8	291.4	106.6	0.5	4.8	277.3	6.8
CZ01-128	187	95	0.51	1.81522	0.04569	0.16039	0.00207	0.08211	0.00204	1051	32.96	958.9	23.0	1248.2	95.4	9.6	23.2	958.9	23.0
CZ01-129	137	112	0.81	0.58254	0.02235	0.07758	0.00111	0.05448	0.0021	466.1	28.68	481.6	13.3	391	167.4	-3.2	-23.2	481.6	13.3
CZ01-130	188	148	0.79	0.4097	0.01557	0.05743	0.00081	0.05176	0.00198	348.7	22.44	360	9.9	274.7	170.2	-3.1	-31.1	360	9.9
CZ01-131	202	130	0.65	1.74836	0.04454	0.162	0.0021	0.0783	0.00197	1026.6	32.9	967.9	23.3	1154.6	98.0	6.1	16.2	967.9	23.3
CZ01-132	508	264	0.52	0.30154	0.00907	0.04205	0.00055	0.05203	0.00156	267.6	14.14	265.5	6.8	286.7	133.7	0.8	7.4	265.5	6.8
CZ01-133	263	193	0.74	1.23729	0.03164	0.12808	0.00165	0.07009	0.00176	817.7	28.72	776.9	18.8	931	101.6	5.3	16.6	776.9	18.8
CZ01-134	221	156	0.71	0.72873	0.02153	0.08855	0.00118	0.05971	0.00175	555.8	25.3	547	13.9	593.3	124.1	1.6	7.8	547	13.9
CZ01-135	216	123	0.57	8.82759	0.19249	0.4162	0.00522	0.15389	0.00325	2320.3	39.78	2243.2	47.5	2389.6	70.9	3.4	6.1	2389.6	70.9
CZ01-136	103	137	1.33	3.40458	0.08771	0.26819	0.00353	0.09211	0.00234	1505.5	40.44	1531.6	35.9	1469.4	95.1	-1.7	-4.2	1469.4	95.1
CZ01-137	234	149	0.64	0.32663	0.01239	0.04507	0.00064	0.05258	0.002	287	18.96	284.2	7.9	310.9	169.0	1.0	8.6	284.2	7.9
CZ01-138	313	196	0.63	0.85983	0.02266	0.10238	0.00132	0.06093	0.00158	630	24.74	628.4	15.4	636.8	109.7	0.3	1.3	628.4	15.4
CZ01-139	195	153	0.79	0.56478	0.01864	0.07396	0.00101	0.05541	0.00183	454.6	24.2	459.9	12.1	428.4	143.2	-1.2	-7.4	459.9	12.1
CZ01-140	496	638	1.29	1.35676	0.03204	0.1461	0.00184	0.06738	0.00155	870.5	27.6	879	20.6	849.5	94.1	-1.0	-3.5	879	20.6
CZ01-141	261	150	0.58	1.6889	0.04183	0.1682	0.00215	0.07285	0.00176	1004.3	31.6	1002.2	23.7	1009.8	96.1	0.2	0.8	1002.2	23.7
CZ01-142	252	122	0.49	1.16167	0.03053	0.12717	0.00164	0.06628	0.00171	782.7	28.68	771.7	18.8	815.2	106.2	1.4	5.3	771.7	18.8

CZ03

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	concentrations			ratios						ages						discordance		preferred ages	
sample	ppm U	ppm Pb	atomic Th/U	Pb207/Pb206	1 sigma	Pb207/U235	1 sigma	Pb206/U238	1 sigma	age 206/238	1 sigma	age 207/235	1 sigma	age 207/206	1 sigma	%discord.68-75	%discord.68-76	preferred age	1 sigma
CZ03-001	409	126	0.31	0.46401	0.01121	0.05959	0.00073	0.0565	0.00137	387	15.56	373.2	8.9	471.5	106.1	3.7	20.8	373.2	8.9
CZ03-002	327	535	1.63	1.26435	0.02426	0.13653	0.00161	0.0672	0.00127	829.9	21.76	825	18.3	844.1	77.8	0.6	2.3	825	18.3
CZ03-003	132	177	1.34	1.39432	0.03498	0.14635	0.00185	0.06914	0.00174	886.5	29.66	880.5	20.8	902.9	102.1	0.7	2.5	880.5	20.8
CZ03-004	652	443	0.68	1.63601	0.02826	0.15697	0.00183	0.07564	0.00128	984.2	21.76	939.9	20.4	1085.5	66.9	4.7	13.4	939.9	20.4
CZ03-005	366	240	0.66	9.44019	0.14083	0.42901	0.00497	0.15968	0.00229	2381.7	27.4	2301.3	44.8	2452.3	48.1	3.5	6.2	2452.3	48.1
CZ03-006	446	288	0.65	4.83439	0.07729	0.30411	0.00355	0.11536	0.00179	1790.9	26.9	1711.6	35.1	1885.5	55.3	4.6	9.2	1885.5	55.3
CZ03-007	248	216	0.87	0.25827	0.01009	0.03626	0.0005	0.05169	0.00205	233.3	16.28	229.6	6.3	271.5	176.4	1.6	15.4	229.6	6.3
CZ03-008	271	121	0.45	5.2651	0.08286	0.33147	0.00385	0.11527	0.00176	1863.2	26.86	1845.5	37.3	1884.1	54.3	1.0	2.0	1884.1	54.3
CZ03-009	880	101	0.11	2.04966	0.03117	0.18839	0.00215	0.07895	0.00115	1132.2	20.76	1112.6	23.3	1171	57.3	1.8	5.0	1171	57.3
CZ03-010	150	89	0.59	2.14246	0.04553	0.19487	0.00239	0.07979	0.00169	1162.6	29.42	1147.7	25.8	1191.7	82.4	1.3	3.7	1191.7	82.4
CZ03-011	197	71	0.36	0.59297	0.02056	0.07492	0.00102	0.05744	0.00202	472.8	26.22	465.7	12.2	508	151.7	1.5	8.3	465.7	12.2
CZ03-012	298	54	0.18	6.80177	0.10286	0.38056	0.00439	0.1297	0.00189	2086	26.78	2078.9	41.0	2093.9	50.7	0.3	0.7	2093.9	50.7
CZ03-013	126	113	0.90	1.51996	0.04222	0.1501	0.00198	0.07349	0.00206	938.5	34.02	901.5	22.2	1027.4	111.4	4.1	12.3	901.5	22.2
CZ03-014	212	108	0.51	11.0207	0.16413	0.47398	0.00549	0.16873	0.00241	2524.9	27.72	2501	48.0	2545.1	47.5	1.0	1.7	2545.1	47.5
CZ03-015	198	101	0.51	0.38049	0.0137	0.05089	0.00069	0.05425	0.00198	327.4	20.14	320	8.5	381.5	158.7	2.3	16.1	320	8.5
CZ03-016	284	127	0.45	5.21716	0.08997	0.33361	0.00397	0.11349	0.00192	1855.4	29.38	1855.8	38.4	1856	60.4	0.0	0.0	1856	60.4
CZ03-017	410	65	0.16	5.80878	0.0864	0.33288	0.00382	0.12663	0.00181	1947.7	25.78	1852.3	37.0	2051.7	50.0	5.2	9.7	2051.7	50.0
CZ03-018	469	10	0.02	0.56105	0.01943	0.06734	0.00093	0.06046	0.00212	452.2	25.28	420.1	11.2	620.2	148.1	7.6	32.3	420.1	11.2
CZ03-019	461	226	0.49	5.31808	0.07911	0.33502	0.00384	0.11519	0.00164	1871.8	25.42	1862.7	37.1	1882.9	51.0	0.5	1.1	1882.9	51.0
CZ03-020	472	225	0.48	1.64451	0.02944	0.16369	0.00192	0.07291	0.00128	987.4	22.6	977.2	21.2	1011.3	70.4	1.0	3.4	977.2	21.2
CZ03-021	454	346	0.76	9.88317	0.1418	0.44438	0.00507	0.16139	0.00221	2423.9	26.46	2370.2	45.3	2470.3	45.8	2.3	4.1	2470.3	45.8
CZ03-022	265	375	1.42	1.10281	0.02408	0.12369	0.0015	0.0647	0.00141	754.7	23.26	751.8	17.2	764.6	90.3	0.4	1.7	751.8	17.2
CZ03-023	249	72	0.29	6.01474	0.09383	0.34616	0.00402	0.12609	0.0019	1978	27.16	1916.2	38.5	2044.2	52.9	3.2	6.3	2044.2	52.9
CZ03-024	208	80	0.38	4.85861	0.07976	0.32078	0.00376	0.10991	0.00176	1795.1	27.64	1793.5	36.7	1797.9	57.6	0.1	0.2	1797.9	57.6
CZ03-025	481	177	0.37	8.85192	0.12718	0.42477	0.00485	0.15123	0.00207	2322.9	26.22	2282.1	43.8	2359.8	46.4	1.8	3.3	2359.8	46.4
CZ03-026	675	97	0.14	5.62869	0.08144	0.34121	0.00388	0.11971	0.00165	1920.5	24.94	1892.5	37.3	1951.9	49.0	1.5	3.0	1951.9	49.0
CZ03-027	296	125	0.42	7.94086	0.11881	0.39168	0.00452	0.14712	0.00212	2224.3	26.98	2130.6	41.9	2312.7	49.0	4.4	7.9	2312.7	49.0
CZ03-028	328	196	0.60	5.1136	0.07895	0.32175	0.00372	0.11533	0.00172	1838.4	26.22	1798.3	36.3	1885	53.2	2.2	4.6	1885	53.2
CZ03-029	392	72	0.18	0.5061	0.01254	0.06657	0.00082	0.05517	0.00137	415.8	16.92	415.4	9.9	419	107.8	0.1	0.9	415.4	9.9
CZ03-030	1041	581	0.56	1.64055	0.02519	0.16423	0.00187	0.07249	0.00107	985.9	19.38	980.2	20.7	999.7	59.5	0.6	2.0	980.2	20.7
CZ03-031	362	139	0.39	1.57073	0.02876	0.15228	0.00179	0.07485	0.00135	958.7	22.72	913.7	20.0	1064.4	71.6	4.9	14.2	913.7	20.0
CZ03-032	534	4	0.01	0.51366	0.01128	0.06759	0.00081	0.05515	0.0012	420.9	15.14	421.6	9.8	418.1	94.9	-0.2	-0.8	421.6	9.8
CZ03-033	99	91	0.92	9.54502	0.16045	0.44293	0.00534	0.15638	0.00257	2391.9	30.9	2363.8	47.7	2416.8	55.4	1.2	2.2	2416.8	55.4
CZ03-034	732	172	0.24	5.58633	0.08087	0.35192	0.004	0.11519	0.00159	1914	24.94	1943.8	38.2	1882.8	49.4	-1.5	-3.2	1882.8	49.4
CZ03-035	419	308	0.74	9.12467	0.13262	0.419	0.00479	0.15803	0.0022	2350.6	26.6	2255.9	43.6	2434.7	46.8	4.2	7.3	2434.7	46.8
CZ03-036	253	65	0.26	5.56867	0.08669	0.34432	0.00399	0.11736	0.00177	1911.3	26.8	1907.4	38.2	1916.4	53.5	0.2	0.5	1916.4	53.5
CZ03-037	355	162	0.46	0.60897	0.01415	0.07722	0.00094	0.05723	0.00133	482.9	17.86	479.5	11.2	499.8	101.6	0.7	4.1	479.5	11.2
CZ03-038	35	38	1.08	7.07447	0.19273	0.36835	0.00549	0.13937	0.00387	2120.8	48.48	2021.6	51.8	2219.4	94.7	4.9	8.9	2219.4	94.7
CZ03-039	54	59	1.09	4.68347	0.1084	0.31364	0.00411	0.10836	0.00252	1764.3	38.74	1758.6	40.3	1771.9	83.9	0.3	0.8	1771.9	83.9
CZ03-040	464	303	0.65	6.67945	0.09817	0.3706	0.00424	0.13079	0.00184	2069.9	25.96	2032.2	39.8	2108.6	49.0	1.9	3.6	2108.6	49.0
CZ03-041	129	96	0.75	0.36415	0.01727	0.0461	0.00071	0.05732	0.00277	315.3	25.7	290.5	8.8	503.4	206.7	8.5	42.3	290.5	8.8
CZ03-042	236	50	0.21	5.44179	0.08727	0.33939	0.00396	0.11635	0.00181	1891.5	27.52	1883.7	38.1	1900.9	55.5	0.4	0.9	1900.9	55.5
CZ03-043	747	565	0.76	10.5752	0.15	0.47073	0.00534	0.16302	0.0022	2486.5	26.32	2486.8	46.8	2487.2	45.2	0.0	0.0	2487.2	45.2
CZ03-044	659	330	0.50	1.48537	0.02476	0.14825	0.00171	0.07271	0.00118	924.4	20.22	891.1	19.2	1005.8	65.2	3.7	11.4	891.1	19.2
CZ03-045	276	199	0.72	10.6215	0.15838	0.46567	0.00537	0.16551	0.00237	2490.6	27.68	2464.6	47.3	2512.8	47.8	1.1	1.9	2512.8	47.8

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CZ03-046	576	375	0.65	1.0525	0.01923	0.11738	0.00137	0.06507	0.00117	730.1	19.02	715.5	15.8	776.4	74.7	2.0	7.8	715.5	15.8
CZ03-047	468	210	0.45	1.27004	0.02331	0.13683	0.0016	0.06736	0.00122	832.4	20.86	826.7	18.2	848.8	74.2	0.7	2.6	826.7	18.2
CZ03-048	138	151	1.09	1.25791	0.03295	0.13614	0.00173	0.06705	0.00177	827	29.64	822.8	19.7	839.2	107.9	0.5	2.0	822.8	19.7
CZ03-049	356	94	0.27	0.96679	0.02039	0.10886	0.0013	0.06444	0.00135	686.8	21.06	666.1	15.2	756.2	87.3	3.1	11.9	666.1	15.2
CZ03-050	1033	263	0.25	4.71983	0.06829	0.30559	0.00347	0.11208	0.00155	1770.8	24.24	1719	34.2	1833.3	49.7	3.0	6.2	1833.3	49.7
CZ03-051	510	364	0.71	0.31483	0.00852	0.04347	0.00054	0.05255	0.00143	277.9	13.16	274.3	6.7	309.5	121.3	1.3	11.4	274.3	6.7
CZ03-052	81	60	0.74	0.39363	0.02175	0.05157	0.00086	0.05539	0.00312	337	31.7	324.1	10.5	427.7	242.3	4.0	24.2	324.1	10.5
CZ03-053	171	70	0.41	1.63897	0.03618	0.16405	0.00201	0.0725	0.0016	985.3	27.84	979.2	22.2	999.9	88.3	0.6	2.1	979.2	22.2
CZ03-054	234	190	0.81	0.55453	0.01608	0.07116	0.00091	0.05655	0.00165	448	21.02	443.1	11.0	473.2	127.2	1.1	6.4	443.1	11.0
CZ03-055	346	126	0.37	5.98252	0.09147	0.34907	0.00402	0.12436	0.00184	1973.3	26.6	1930.2	38.4	2019.7	52.0	2.2	4.4	2019.7	52.0
CZ03-056	207	73	0.35	5.34423	0.08799	0.33996	0.00398	0.11407	0.00183	1876	28.16	1886.5	38.3	1865.2	57.4	-0.6	-1.1	1865.2	57.4
CZ03-057	773	13	0.02	5.58355	0.08175	0.34275	0.0039	0.11821	0.00166	1913.6	25.22	1899.9	37.4	1929.3	49.9	0.7	1.5	1929.3	49.9
CZ03-058	727	368	0.51	0.60124	0.01184	0.07011	0.00083	0.06223	0.00121	478	15.02	436.8	10.0	682	82.2	9.4	36.0	436.8	10.0
CZ03-059	349	234	0.67	5.22011	0.08095	0.33163	0.00382	0.11422	0.00171	1855.9	26.42	1846.3	37.0	1867.6	53.7	0.5	1.1	1867.6	53.7
CZ03-060	669	527	0.79	0.38657	0.01004	0.05017	0.00062	0.05591	0.00146	331.9	14.7	315.6	7.6	448.4	113.7	5.2	29.6	315.6	7.6
CZ03-061	241	195	0.81	5.61275	0.0917	0.33468	0.00392	0.12169	0.00194	1918.1	28.16	1861	37.9	1981.1	56.3	3.1	6.1	1981.1	56.3
CZ03-062	408	164	0.40	0.5596	0.01697	0.06737	0.00088	0.06027	0.00185	451.3	22.1	420.3	10.7	613.4	129.9	7.4	31.5	420.3	10.7
CZ03-063	144	50	0.35	5.35238	0.09407	0.33765	0.00403	0.11502	0.00199	1877.3	30.08	1875.4	38.8	1880.2	61.7	0.1	0.3	1880.2	61.7
CZ03-064	851	204	0.24	0.64308	0.01219	0.07491	0.00088	0.06229	0.00117	504.2	15.08	465.7	10.5	684.2	78.9	8.3	31.9	465.7	10.5
CZ03-065	113	76	0.67	11.1963	0.18363	0.48258	0.00576	0.16835	0.0027	2539.6	30.58	2538.5	50.1	2541.3	53.2	0.0	0.1	2541.3	53.2
CZ03-066	208	212	1.02	1.71386	0.03584	0.17	0.00205	0.07315	0.00152	1013.7	26.82	1012.1	22.6	1018.2	83.2	0.2	0.6	1012.1	22.6
CZ03-067	173	87	0.51	0.53473	0.01812	0.06838	0.00092	0.05675	0.00195	434.9	23.98	426.4	11.1	481	149.6	2.0	11.4	426.4	11.1
CZ03-068	278	296	1.07	1.33042	0.02776	0.13747	0.00165	0.07022	0.00146	859.1	24.2	830.4	18.7	934.8	84.1	3.5	11.2	830.4	18.7
CZ03-069	306	107	0.35	1.96534	0.03651	0.18546	0.00219	0.07689	0.00141	1103.7	25	1096.7	23.8	1118.5	72.3	0.6	1.9	1096.7	23.8
CZ03-070	443	723	1.63	6.30032	0.09584	0.36911	0.00423	0.12385	0.00182	2018.5	26.66	2025.2	39.9	2012.4	51.7	-0.3	-0.6	2012.4	51.7
CZ03-071	984	349	0.35	5.36607	0.07886	0.33375	0.00379	0.11666	0.00165	1879.5	25.16	1856.5	36.6	1905.7	50.3	1.2	2.6	1905.7	50.3
CZ03-072	28	32	1.15	5.16639	0.15047	0.33128	0.00486	0.11316	0.00335	1847.1	49.56	1844.6	47.1	1850.8	105.3	0.1	0.3	1850.8	105.3
CZ03-073	689	111	0.16	6.03466	0.0897	0.3492	0.00398	0.12539	0.00179	1980.9	25.9	1930.8	38.0	2034.4	50.2	2.6	5.1	2034.4	50.2
CZ03-074	46	50	1.09	1.1952	0.05134	0.13117	0.00203	0.06612	0.00289	798.4	47.5	794.5	23.1	810.1	178.0	0.5	1.9	794.5	23.1
CZ03-075	124	103	0.83	6.61434	0.1156	0.37873	0.00453	0.12672	0.00218	2061.3	30.84	2070.3	42.4	2053	60.1	-0.4	-0.8	2053	60.1
CZ03-076	513	312	0.61	1.29597	0.02351	0.13606	0.00159	0.06911	0.00123	843.9	20.8	822.3	18.0	902.2	72.8	2.6	8.9	822.3	18.0
CZ03-077	241	120	0.50	12.163	0.18604	0.50386	0.00583	0.17515	0.00259	2617.1	28.7	2630.4	50.0	2607.5	48.9	-0.5	-0.9	2607.5	48.9
CZ03-078	292	248	0.85	13.6051	0.20454	0.51981	0.00598	0.18991	0.00276	2722.6	28.44	2698.4	50.7	2741.4	47.3	0.9	1.6	2741.4	47.3
CZ03-079	275	132	0.48	5.34559	0.08861	0.33735	0.00395	0.11498	0.00186	1876.2	28.36	1873.9	38.0	1879.5	57.8	0.1	0.3	1879.5	57.8
CZ03-080	143	121	0.84	5.30675	0.09493	0.34077	0.00407	0.113	0.00199	1870	30.56	1890.4	39.2	1848.1	63.1	-1.1	-2.3	1848.1	63.1
CZ03-081	261	150	0.58	0.29804	0.01099	0.04074	0.00056	0.05309	0.00198	264.9	17.18	257.4	6.9	332.4	165.2	2.9	22.6	257.4	6.9
CZ03-082	396	145	0.37	6.38267	0.11857	0.37949	0.00463	0.12204	0.00224	2029.9	32.62	2073.9	43.3	1986.2	64.6	-2.1	-4.4	1986.2	64.6
CZ03-083	609	429	0.70	0.76578	0.0151	0.09405	0.00111	0.05908	0.00115	577.3	17.36	579.5	13.0	569.9	83.9	-0.4	-1.7	579.5	13.0
CZ03-084	325	159	0.49	0.31819	0.01046	0.04356	0.00057	0.053	0.00176	280.5	16.12	274.9	7.1	328.8	147.6	2.0	16.4	274.9	7.1
CZ03-085	138	244	1.77	10.5232	0.17273	0.46812	0.00554	0.16311	0.00262	2482	30.44	2475.3	48.6	2488.1	53.6	0.3	0.5	2488.1	53.6
CZ03-086	738	337	0.46	5.30077	0.0805	0.3376	0.00385	0.11393	0.00167	1869	25.94	1875.1	37.1	1862.9	52.5	-0.3	-0.7	1862.9	52.5
CZ03-087	306	105	0.34	7.18966	0.11793	0.38699	0.00453	0.1348	0.00216	2135.2	29.24	2108.9	42.1	2161.4	55.4	1.2	2.4	2161.4	55.4
CZ03-088	528	521	0.99	1.38718	0.03228	0.13596	0.00169	0.07403	0.00173	883.5	27.46	821.8	19.1	1042.2	92.9	7.5	21.1	821.8	19.1
CZ03-089	45	54	1.21	6.25298	0.15507	0.3543	0.0049	0.12806	0.00322	2011.9	43.42	1955.1	46.7	2071.5	87.2	2.9	5.6	2071.5	87.2
CZ03-090	670	108	0.16	1.99075	0.03525	0.18186	0.00212	0.07943	0.00138	1112.4	23.94	1077.1	23.2	1182.8	68.1	3.3	8.9	1077.1	23.2
CZ03-091	394	180	0.46	5.03729	0.08198	0.31827	0.00369	0.11484	0.00182	1825.6	27.58	1781.3	36.1	1877.3	56.7	2.5	5.1	1877.3	56.7
CZ03-092	357	295	0.83	11.6821	0.17859	0.48514	0.00557	0.17471	0.00259	2579.3	28.6	2549.6	48.4	2603.3	48.9	1.2	2.1	2603.3	48.9
CZ03-093	118	87	0.74	1.35024	0.03827	0.14284	0.00187	0.06859	0.00197	867.7	33.06	860.7	21.1	886.3	116.3	0.8	2.9	860.7	21.1
CZ03-094	309	188	0.61	5.6181	0.09146	0.34813	0.00404	0.11709	0.00186	1918.9	28.06	1925.7	38.6	1912.3	56.5	-0.4	-0.7	1912.3	56.5

FOR REVIEW PURPOSES ONLY

CZ03-095	122	135	1.11	6.57406	0.11898	0.37989	0.00458	0.12556	0.00225	2055.9	31.9	2075.8	42.8	2036.7	62.6	-1.0	-1.9	2036.7	62.6
CZ03-096	242	120	0.49	1.21368	0.02998	0.13398	0.00167	0.06572	0.00163	806.9	27.5	810.6	19.0	797.6	102.4	-0.5	-1.6	810.6	19.0
CZ03-097	327	499	1.53	10.7712	0.16698	0.47669	0.00549	0.16394	0.00247	2503.6	28.8	2512.9	47.9	2496.8	50.2	-0.4	-0.6	2496.8	50.2
CZ03-098	432	170	0.39	5.35222	0.0852	0.33997	0.00391	0.11423	0.00177	1877.2	27.24	1886.5	37.7	1867.7	55.4	-0.5	-1.0	1867.7	55.4
CZ03-099	503	58	0.12	0.93879	0.0189	0.10203	0.00121	0.06676	0.00134	672.2	19.8	626.3	14.2	830.2	82.4	7.3	24.6	626.3	14.2
CZ03-100	124	97	0.79	1.59781	0.0412	0.16208	0.00207	0.07152	0.00186	969.4	32.2	968.3	22.9	972.5	104.2	0.1	0.4	968.3	22.9
CZ03-101	441	119	0.27	10.9871	0.16857	0.48592	0.00557	0.16405	0.00244	2522	28.56	2553	48.3	2497.9	49.6	-1.2	-2.2	2497.9	49.6
CZ03-102	1349	225	0.17	10.6633	0.15928	0.47188	0.00535	0.16396	0.00236	2494.2	27.74	2491.8	46.9	2496.9	48.1	0.1	0.2	2496.9	48.1
CZ03-103	60	54	0.89	4.37614	0.12699	0.29857	0.00431	0.10634	0.00314	1707.8	47.96	1684.2	42.8	1737.6	106.3	1.4	3.1	1737.6	106.3
CZ03-104	64	43	0.67	1.21622	0.04761	0.12928	0.00193	0.06826	0.00272	808	43.62	783.8	22.1	876.4	161.0	3.1	10.6	783.8	22.1
CZ03-105	290	193	0.67	0.3884	0.01246	0.05122	0.00067	0.05501	0.00179	333.2	18.22	322	8.2	412.7	140.7	3.5	22.0	322	8.2

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