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New U-Pb zircon data and patterns of collision magmatism in the Northern Highlands of Scotland

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Abstract

The Northern Highlands Terrane of the Scottish Caledonides contain a record of Palaeozoic collision magmatism which overlaps with Baltica – Laurentia convergence and the Scandian Orogeny. Here, there remain gaps in our understanding of the relationship between collision dynamics and the spatial-temporal distribution of Caledonian intrusions. In this study, the Strontian and Helmsdale plutons and the Abriachan stock are newly dated using laser ablation U-Pb zircon mass spectrometry. Strontian data (weighted mean $^{206}Pb/^{238}U$ results of 426.7 ± 1.8 Ma, 2σ; 425.6 ± 2.0 and 418.6 ± 6.3 Ma); corroborate previous findings that the complex was emplaced over the period ~427 - ~417 Ma. New emplacement dates are confirmed for Helmsdale (419.3 ± 3.3 Ma) and Abriachan (420.1 ± 3.4 Ma). Furthermore, 4 of 6 complexes so far analysed by in-situ geochronology methods preserve evidence for antecrystic zircon growth (Ross of Mull, Strontian, Cluanie, and Helmsdale). This finding substantiates the development of a lower crustal hot zone during Iapetus subduction beneath the Laurentian margin. Spatially limited amounts of mid-crustal emplacement occurred from ~448 - ~428 Ma, overlapping the onset of the Scandian Orogeny at ~437 Ma. Emplacement at this time was likely triggered by subduction, accelerated slab roll-back,

sporadic hot zone remobilisation, and localised trans-tension. There followed two spatially greater phases of emplacement during the Scandian Orogeny. The most significant, around 425 Ma, is associated with sinistral faulting and may have been triggered by lithospheric delamination. A second phase, around 419 Ma, includes the Sanda facies of the Strontian pluton, previously associated with dextral Great Glen Fault motion. This phase may further correlate uplift at the end of the Scandian Orogeny, which only terminated by ~415 Ma, and the effect of peri-Gondwanan terrane accretion further to the south and west along the Laurentian margin.

1. Introduction

Mantle-derived magmatism is an under-appreciated component of continental collision. Such magmatism, termed 'collisional' (*sensu* Harris et al., 1986) and following slab breakoff, 'post-subduction' (sensu Richards, 2009), may contribute to continental crustal growth and geochemical budgets, and is responsible for many mineral deposits (Annen et al., 2006; Richards, 2009; Neill et al., 2015; Couzinié et al., 2016; Lebedev et al., 2021; Gómez Frutos and Castro, 2023). Such magmatism has multiple sources, including the convecting asthenosphere, the mantle lithosphere, and the crust (e.g., England and Thompson, 1986; Annen et al., 2006; Kaislaniemi et al., 2014). There is no unique cause of partial melting of these various sources, but posited triggers have included combinations of slab breakoff (Davies and von Blanckenburg, 1995; Keskin, 2003), lithospheric delamination (Pearce et al., 1990; Turner et al., 1992; Kay and Kay, 1993; Elkins-Tanton, 2007; Kaislaniemi et al., 2014), melting of hydrous phases during lithospheric mantle thickening (Allen et al., 2013), edge convection (Missenard and Cadoux, 2012), radiogenic heating (England and Thompson, 1986), and deep continental subduction (Zhao et al., 2013). Once collision magmas have been generated, their subsequent evolution and ascent through the crust are topics of considerable importance. Much emphasis is now placed on relationships between crustal stress, the long-term storage of magma in lower crustal hot zones, and eventual ascent and emplacement or eruption (e.g., Chiaradia et al., 2022).

In deep time, the Caledonian-Appalachian orogenic belt is an ideal location to study collision magmatism. It represents the Palaeozoic convergence of Baltica, Laurentia, and peri-Gondwanan continental masses during and after closure of the Iapetus Ocean (Dewey and Strachan, 2003; Bird et al., 2013; Dewey et al., 2015; Fig. 1). Extensive magmatic activity occurred simultaneously with continental collision in various terranes along the Laurentian margin (Van Staal et al., 1998; Oliver et al., 2008). Today the middle to shallow crust of much of this orogenic belt is exposed, presenting

an excellent proxy for events occurring deep beneath modern collision zones such as the Turkish and Iranian plateaux today (e.g., Keskin, 2003; Neill et al., 2015).

This paper is about the Northern Highlands Terrane in mainland Scotland and the Orkney and Shetland Islands (Fig. 1). This terrane was part of the Laurentian upper plate during collision of Baltica, an event which caused the Scandian Orogeny (Chew and Strachan, 2014). The Scandian Orogeny occurred between ~437 – 415 Ma (e.g., Strachan et al., 2020a) though some consider Baltica-Laurentia collision to have commenced as early as ~450 Myr ago (Slagstad and Kirkland, 2017; Milne et al., 2023). The Scandian event in the Northern Highlands of Scotland included extensive collision magmatism exposed as plutons, stocks, and suites of minor intrusions (Smith, 1979; Watson, 1984; Johnson and Mykura, 1989). Their petrogenesis has been ascribed to melting of the subduction-modified sub-continental lithospheric mantle (e.g., Fowler et al., 2008; Neilson et al., 2009; Lawrence et al., 2023). Many of these intrusive bodies have popularly been associated with Iapetus slab breakoff (Atherton and Ghani, 2002; Fowler et al., 2008; Neilson et al., 2009; Miles et al., 2016; Lawrence et al., 2023). However, the timing of breakoff and whether it is ultimately the driving force behind collision magmatism are equivocal and there remain uncertainties about the absolute age of plutonic activity (e.g., Lawrence et al., 2022, 2023; Milne et al., 2023). Modern understanding of continental arc and collision magmatism as long-lived, trans-crustal magma systems have not been explored in depth here either (Hildreth and Moorbath, 1988; Annen et al., 2006; Cashman et al., 2016). This knowledge gap is set against a backdrop of increasing interest in Scottish Caledonian intrusions for both mineralisation and geothermal energy (e.g., Deady et al., 2023). Therefore, it is necessary to have a robust geological baseline to explain the geodynamic setting, geochemistry, and resource potential of these bodies.

The aims of this paper are therefore to 1) augment knowledge of the timing of magmatism in the Northern Highlands of Scotland via new geochronological data from the Strontian, Helmsdale and Abriachan intrusions, 2) analyse the extent to which there is evidence of formation of a lower crustal hot zone prior to and during the Scandian Orogeny, 3) relate the timing of emplacement events to processes and structures associated with closure of the Iapetus Ocean and convergence of Baltica and peri-Gondwanan terranes with Laurentia, 4) recommend further study including updated assessment of the resource potential of the Scandian intrusions.

2. Geological Background

2.1. The Caledonian orogeny in the Northern Highlands of Scotland

The Northern Highland Terrane in Scotland lies between the Caledonian Moine Thrust and the Great Glen Fault (Fig. 1). The surface geology consists largely of Neoproterozoic (~1000 – 870 Ma) meta-sedimentary and meta-igneous rocks, the meta-sedimentary successions recently assigned to the Wester Ross and Loch Ness Supergroups (Strachan et al. 2002; Krabbendam et al. 2021 and references therein). These rocks sit on a Meso-Paleoproterozoic basement of Laurentian and proposed Baltican gneisses (Strachan et al. 2020b; Bird et al., 2023). All these rocks record evidence of poly-metamorphism, including Renlandian events (960 to 920 Ma; Bird et al. 2018) in the Wester Ross Supergroup and Knoydartian events (820 to 725 Ma; Rogers et al. 1998; Vance et al., 1998; Tanner and Evans, 2003; Cutts et al., 2009; 2010) across the terrane.

By the end of the Proterozoic, the Northern Highlands of Scotland lay on the Laurentian margin bordering the Iapetus Ocean. The Palaeozoic closure of Iapetus led to further tectono-thermal activity. The Grampian Orogeny at ~488 – 450 Ma includes an arc-continent collision followed by deformation lasting from ~488 – 465 Ma, followed by a further tectono-thermal event at ~450 Ma of debated origin (Bird et al. 2013; Johnson et al. 2017; Dunk et al. 2019; Walker et al. 2020; Milne et al., 2023). Terminal oblique continent–continent collision between Baltica and Laurentia is recorded in the Northern Highlands as the Scandian Orogeny (c. 437–415 Ma; Strachan et al. 2020a). Scandian events overlap with soft docking between peri-Gondwanan terranes and today's Southern Uplands-Down-Longford terranes in Southern Scotland and Ireland (Soper et al., 1992; Dewey and Strachan, 2003). At the time of collision, these terranes lay several hundreds of km along-strike to the south and west of the Northern Highlands (Strachan, 2012). Collision-related magmatism occurred across Scotland throughout this period, with magmatism in the Northern Highlands apparently being most voluminous from ~428 – 418 Ma (Oliver et al., 2008; Milne et al., 2023; Table 1). After the end of the Scandian Orogeny, there is also overlap between spatially limited magmatism in the Northern Highlands and the ~405 - ~390 Ma Acadian Orogeny, which occurred during collision of Armorica with the already-accreted pre-Gondwanan terranes (Woodcock et al., 2019).

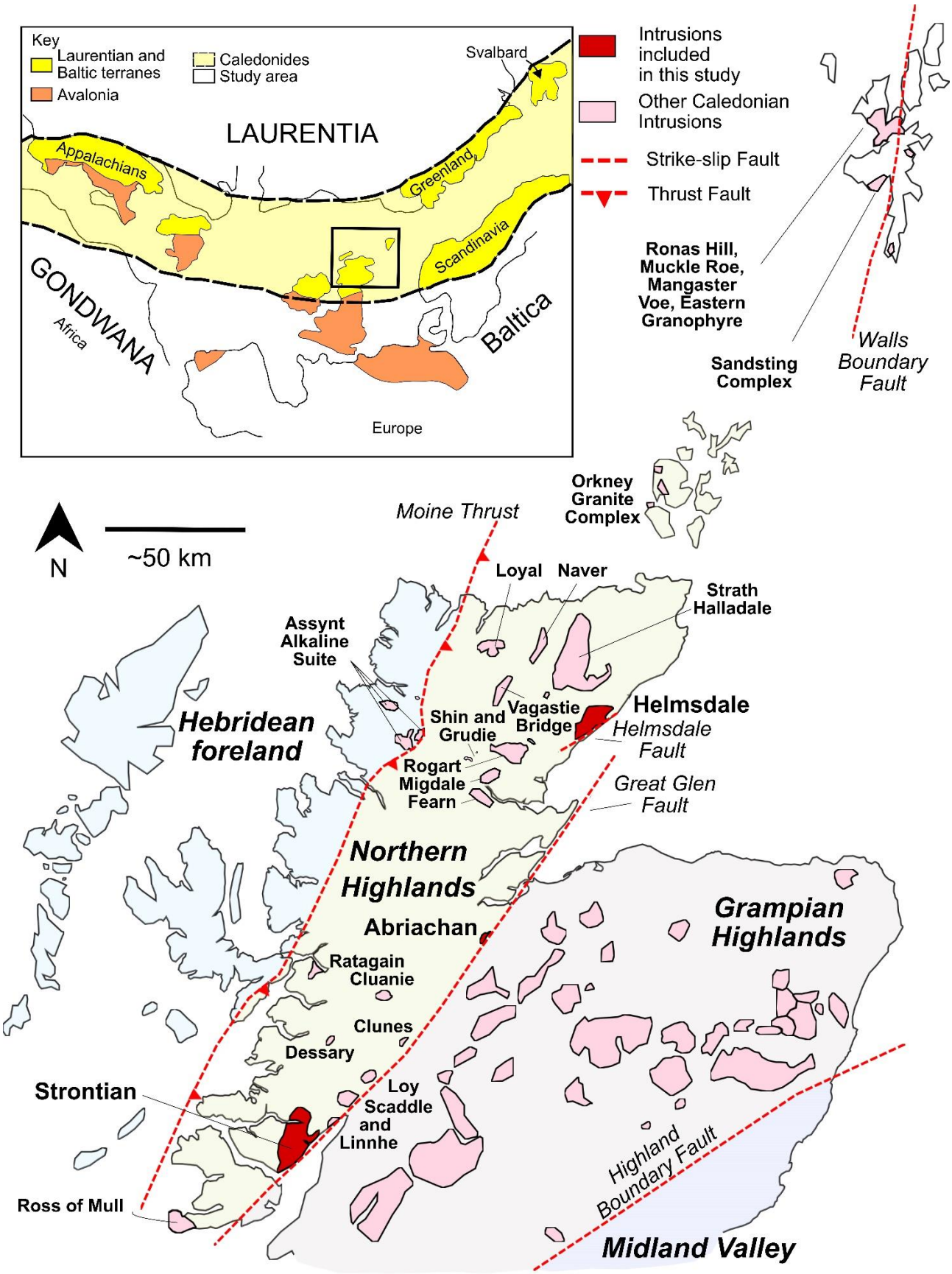

Figure 1. Overview map of Northern Scotland highlighting the main terranes and bounding faults, and the distribution of Caledonian magmatic bodies. Inset: Palaeozoic reconstruction showing the

distribution of the Caledonian – Appalachian Mountain Belt. Map adapted from McKerrow et al., 2000; Fowler et al., 2008; Lancaster et al., 2017; Searle, 2022; Strachan et al., 2020a).

2.2. Caledonian magmatism in the Northern Highlands

A summary of the post-Grampian Caledonian magmatic events in the Northern Highlands of Scotland, including Orkney and Shetland, are presented in Table 1. It has been traditional to refer to many of the intrusive bodies – particularly those emplaced from ~432 Ma onwards – as "Newer Granites" (sensu Read, 1961). However, as a range of issues with this classification are summarised in Milne et al. (2023), we avoid this term throughout. The oldest intrusive bodies pre-date the Scandian Orogeny on the Shetland Islands and the Scottish mainland and probably relate to Iapetus subduction (Fowler, 1992; Milne et al., 2023). There follows a slew of magmatic activity from ~428 - ~417 Ma, covered in more detail in Section 5. These are complexes of various sizes, from ~200 km^2 plutonic complexes to stocks just a few km^2 in surface area, as well as associated minor intrusions (e.g., Fettes and MacDonald, 1978; Smith, 1979). Most, but not all, contain mafic or even ultramafic facies, mafic magmatic enclaves, and exhibit degrees of petrological and geochemical zonation. These patterns are consistent with important roles for the addition of mafic, mantle-derived magmas and the occurrence of fractional crystallisation and hybridisation processes during their petrogenesis (Fowler et al., 2001; 2008; Zaniewski, 2018; Lawrence et al., 2023; Milne et al., 2023). The complexes have subduction-like geochemical characteristics, some with a classic high Ba-Sr signature thought to relate to dewatering of the subducting Iapetus lithosphere (Fowler et al., 2008). Whole rock radiogenic and stable isotope studies have been used to identify that crustal contamination had limited to moderate effects on magma chemistry, with typical contaminants including Archaean – Palaeoproterozoic Lewisianoid basement, and the Neoproterozoic Wester Ross or Loch Ness Supergroups (Fowler et al., 2001; 2008; Lawrence et al., 2023; Milne et al., 2023).

A recent body of geochemical work has identified that these Caledonian intrusions in the Northern Highlands of Scotland have a petrogenetic pathway involving recycling of earlier-formed crystal mushes as well as repeated injection of new magma batches. Evidence includes interpretation of titanite chemistry from the Ross of Mull (McLeod et al., 2011), and titanite, apatite and zircon chemistry from Strontian and Rogart (Bruand et al., 2014). Milne et al. (2023) used U-Pb laser ablation mass spectrometry to date antecrystic zircon at the ~432 Ma Cluanie pluton to ~441 Ma. They concluded that the pluton was partly constructed from remobilised lower crustal mushes

which had initially consolidated during prior Iapetus subduction. Elsewhere in the British and Irish Caledonides in-situ geochronology is increasingly being used to identify pre-emplacement magmatism (Miles et al. 2014; Hines et al. 2018; Fritschle et al. 2018; Miles and Woodcock 2018; Woodcock et al. 2019; Archibald et al. 2021, 2022; Gemmell et al., 2023).

A notable characteristic of Northern Highlands geochronology is the abundance of isotope dilution ages based on small numbers of zircon or titanite aliquots (Table 1; Rogers and Dunning, 1991; Strachan and Evans, 2008; Goodenough et al., 2011; Lundmark et al., 2019; Strachan et al., 2020). This method involves targeted selection of zircons likely to have formed during emplacement, so despite generating very precise age data, it is possible to miss evidence of hot zone development and therefore any attendant geodynamic significance (Milne et al., 2023). This work seeks to redress that balance by providing further in-situ laser ablation zircon U-Pb analysis of three bodies with incomplete geochronological records, namely the Strontian and Helmsdale plutons and the Abriachan stock. The results give us further opportunity to address the distribution of Caledonian magmatism in space and time in the Northern Highlands. Additionally, Helmsdale and Abriachan have previously been recognised as high heat producing granitoids (Scottish Government, 2013), so further constraints on their origin are important to determine if there is value in further geothermal exploration.

*Table 1. Geochronology of Northern Highlands Caledonian intrusions, west of the Great Glen or Walls Boundary Fault systems, adapted from Milne et al. (2023). Z = zircon; MB = molybdenite; M = monazite; B = baddeleyite; T = titanite; ID-TIMS = isotope dilution thermal ionisation mass spectrometry; LA-ICP-MS = laser ablation inductively-coupled plasma mass spectrometry; SHRIMP = sensitive high resolution ion microprobe. *Unpublished MSc thesis.*

Granitoid	Types	Emplacement timing (Ma)	Methodology (U-Pb unless stated)	Presence of antecrystic zircon growth (Ma)	Reference
Glen Dessary	Syenite; stock	447.9±2.9	Z ID-TIMS	Not identified	Goodenough *et al.* (2011)
Glen Loy*	Gabbro to granite; stock	441.6±2.3	Z LA-ICP-MS	~457 - 447	Milne (2019)
Linnhe*	Granite; pluton dissected by Great Glen Fault	441.3±2.3	Z LA-ICP-MS	~462 - 450	Milne (2019)
Northmaven, Shetland	Granite, granophyre, and other more mafic rocks; sheets	438.0±7.6 to 389.3±2.6	Z LA-ICP-MS	Not identified	Lancaster *et al.* (2017)
Naver Suite incl. Vagastie, Creag	Granite to monzo-diorite; sheets	432.4±0.5 to	Z ID-TIMS	Not identified	Strachan *et al.* (2020)

nan Suibheag, Creag Mhor		425.7±0.2			
Orkney granite complex	Granite, pegmatite, aplite; sheets	431.9±0.5 to 428.5±0.3	Z ID-TIMS	Not identified	Lundmark *et al.* (2019)
Cluanie	Trondhjemite; stock	431.9±1.7	Z LA-ICP-MS	~447 - 438	Milne et al. (2023)
Assynt Alkaline Suite	Syenite and other alkaline rocks; small plutons, sheets, stocks	431.1±1.2 to 429.2±0.5	Z ID-TIMS	Not identified	Goodenough *et al.* (2011)
Grudie Bridge and Loch Shin	Monzogranite; stock and minor intrusions	429.9±5.2 to 427.9±2.8	Re-Os MB TIMS	Not identified	Holdsworth *et al.* (2015)
Clunes	Tonalite; sheet	427.8±1.9	Z ID-TIMS	Not identified	Stewart *et al.* (2001)
Loch Loyal	Syenite and associated rocks; pluton	426±9	Z ID-TIMS	Not identified	Halliday *et al.* (1987)
Strath Halladale	Ultramafic to granite; pluton	426±2	M ID-TIMS	Not identified	Kocks *et al.* (2006)
Glen Scaddle	Mafic to granite; stock	426±3	Z ID-TIMS	Not identified	Strachan & Evans (2008)
Rogart	Ultramafic to granite; pluton	425±1.5	Z ID-TIMS	Not identified	Kocks *et al.* (2014)
Ratagain	Ultramafic to granite; stock	425±3	Z+B ID-TIMS	Not identified	Rogers & Dunning (1991)
Strontian	**Appinite to granodiorite (Sunart); pluton**	**426.7±1.8** **425.6±2.0** 425±3	**Z LA-ICP-MS** **Z LA-ICP-MS** Z+T ID-TIMS	***~451 – 437*** ***~442 - 437*** ***Possible ~440 - 436***	***This study*** ***This study*** Rogers & Dunning (1991)
	Biotite granite (Sanda)	**418.6±6.3 or 422.9±4.7** 418±1	**Z LA-ICP-MS** M unknown	***~443 – 430*** Not identified	***This study*** Paterson *et al.* (1993)
Abriachan	**Granite; stock**	**420.1±3.4**	**Z LA-ICP-MS**	***Not identified***	***This study***
Helmsdale	**Granite; pluton**	**419.3±3.3**	**Z LA-ICP-MS**	***~439 – 429***	***This study***
Ross of Mull	Appinite to granite; pluton	418±5	Z SHRIMP	~432-430	Oliver *et al.* (2008)
Rosemarkie	Leucogranite veins	400.8±2.6	Z+M ID-TIMS	Not identified	Mendum & Noble (2010)

2.3. The Strontian Pluton

Strontian outcrops over ~200 km^2, intruding the Loch Ness Supergroup (Krabbendam et al., 2021) and truncated to the southeast by the Great Glen Fault (Sabine, 1963) (Fig. 2a). The earliest part of the intrusion lies towards its north and west and consists of a granodiorite containing extensive mafic magmatic enclaves and bodies of hornblende diorite, also termed appinite. The granodiorite grades inwards from non-porphyritic to porphyritic varieties. The outermost non-porphyritic granodiorite is herein referred to as the **Sunart facies (outer)**, whilst the porphyritic variety is referred to as the **Sunart facies (inner)**, after the naming of Paterson et al. (1992). The Sunart

granodiorite is cut sharply by sheets of a younger biotite granite which makes up all the south and east of the intrusion. This phase is referred to as the **Sanda facies**, which includes the ~1 km^2 Glensanda Superquarry. Both the Sunart and Sanda facies are cut by felsic aplite and pegmatite veins, appinites and lamprophyres of presumed Caledonian age. There are much younger ~Permian to ~Carboniferous alkaline minor intrusions, including lamprophyres, and a WNW – ESE trending Pb-Zn-carbonate vein (Gallagher, 1958, 1963; Sabine, 1963; Munro, 1965; Castro and Stephens, 1992; Fowler et al., 2008). The Sanda facies is interpreted to have been emplaced into a dextral shear zone with a sheeted structure at its northern extent preserved in extensional splays at the termination of the shear zone (Hutton, 1988). This mechanism requires dextral shearing on the Great Glen Fault, and therefore an accurate emplacement age for the Glensanda facies can constrain the motion history of the Great Glen Fault system. It should be noted that most of the sampling for both geochemistry (see Section 2.2) and geochronology has been from the Sunart facies.

The most up to date geochronology for the Sunart facies comes from air abrasion isotope dilution U-Pb methods on zircon and titanite. Two zircon fractions have a $^{207}Pb/^{206}Pb$ age of 425 ±3 Ma and one titanite fraction a $^{206}Pb/^{238}U$ age of 423 ± 3 Ma (Rogers and Dunning, 1991). The Sunart granodiorite mostly lacks inherited zircon (Halliday et al., 1979; Pidgeon and Aftalion, 1978; Rogers and Dunning, 1991). Pidgeon and Aftalion (1978) did note that Sunart zircons are zoned and grew over multiple stages, and Rogers and Dunning (1991) identified two discordant analyses with $^{206}Pb/^{238}U$ ages of ~436-440 Ma, extrapolated to an upper intercept of ~1700 Ma. An age of ~436 - 440 Ma is in line with the timing of hot zone growth identified at Cluanie by Milne et al. (2023). A U-Pb monazite age of 418 ± 1 Ma has been obtained for the Sanda facies, but no further details have been published (Paterson et al., 1993). Paterson et al. (1992) showed that Sanda facies zircons had older cores with magmatic zoning. The Sanda granodiorite was previously interpreted to contain an inherited component dated at c. 1462 Ma based on extrapolation from discordant analyses of c. 500 Ma (Halliday et al., 1979).

2.4. Helmsdale

The Helmsdale pluton (100 km^2) is a large intrusion in the Northern Highlands, on the coast of the Moray Firth adjacent to the Helmsdale Fault (Fig. 2b). The pluton intrudes the Neoproterozoic Loch Ness Supergroup (Krabbendam et al., 2021) and is unconformably overlain by the Langwell, Braemore, and Ousdale formations of the Devonian Lower Old Red Sandstone (Trewin and Thirlwall, 2002). The pluton has an outer phase of porphyritic alkali feldspar granite, and an inner phase comprising aphyric microgranite. The boundary between the two phases is said to be

gradational (Tweedie, 1979, Kocks, 2002). Helmsdale is of high heat production type (Scottish Government, 2013). The surrounding area is sparsely populated, but with respect to future geothermal exploration, the coastal village of Helmsdale (pop. ~750) lies within and just beyond the margins of the granite, respectively. Helmsdale is notable for high U concentrations both within the granite and, along with Se, Cu and Mo enrichment, within younger sedimentary rocks and the Helmsdale Fault network (Simpson et al., 1979; Tweedie, 1981; Parnell, 1988; Pointer et al., 1989; Bullock et al., 2018). The regional geochemical study of Fowler et al. (2008) identified Helmsdale as having an incompatible element-enriched and radiogenic mantle source, with limited involvement of Loch Ness Supergroup crust in its petrogenesis, in contrast to evidence of zircon inheritance (Pidgeon and Aftalion, 1978; *this study*). Leucogranite, from a quarry in the inner granite at Old Helmsdale, has been dated at ~420 Ma via isotope dilution of zircon by Pidgeon and Aftalion (1978). However, this is derived from a $^{206}Pb/^{238}U$ vs $^{207}Pb/^{235}U$ concordia lower intercept from ~2 Byr old inherited grains (Pidgeon and Aftalion, 1978). Biotite K-Ar cooling ages of 410 ± 15 Ma and 397 ± 14 Ma were obtained by Miller and Brown (1965). Pluton emplacement may have re-deformed Scandian age deformation fabrics in the host rocks and therefore occurred towards the end of the ~435 – 417 Ma Scandian episode, likely <426 Ma (Kocks, 2002; Strachan and Evans, 2008; Strachan et al., 2020).

2.5. Abriachan

Covering 2.7 km^2 on the banks of Loch Ness, the Abriachan stock intrudes siliciclastic and carbonate meta-sedimentary rocks of the Loch Ness Supergroup (Krabbendam et al., 2021) (Fig. 2c). The stock is classified as a high heat producing granite (Scottish Government, 2013), and its proximity to the city limits of Inverness mean it may be of value for future exploration if similar rock types continue at depth. The rock type is a distinctive highly fractured orange monzogranite, rich in alkali feldspar, the northern half of which is strongly affected by the carbonatite metasomatism which is extensive across 100s of km^2 nearby (Garson et al. 1984; Heptinstall et al. 2023). U-F mineralisation has also been noted in association with fenitisation (Simpson et al. 1979). Ryder and Gillis (1994) produced rare earth element data showing that Abriachan was broadly comparable to other studied Scandian intrusions. More recently, extensive apatite geochemistry was undertaken as part of a regional provenance study (Ansberque et al., 2019). The granite is interpreted to have been affected by faulting shortly after its emplacement (Watson and Plant, 1979), but was found unsuitable for apatite U-Pb geochronology (Ansberque et al., 2019). Deans et al. (1971) obtained an approximate K-Ar date for metasomatic crocidolite from Learnie Quarry on the nearby Black Isle of 394 ± 15 Myr, giving the granite a minimum age of the complex.

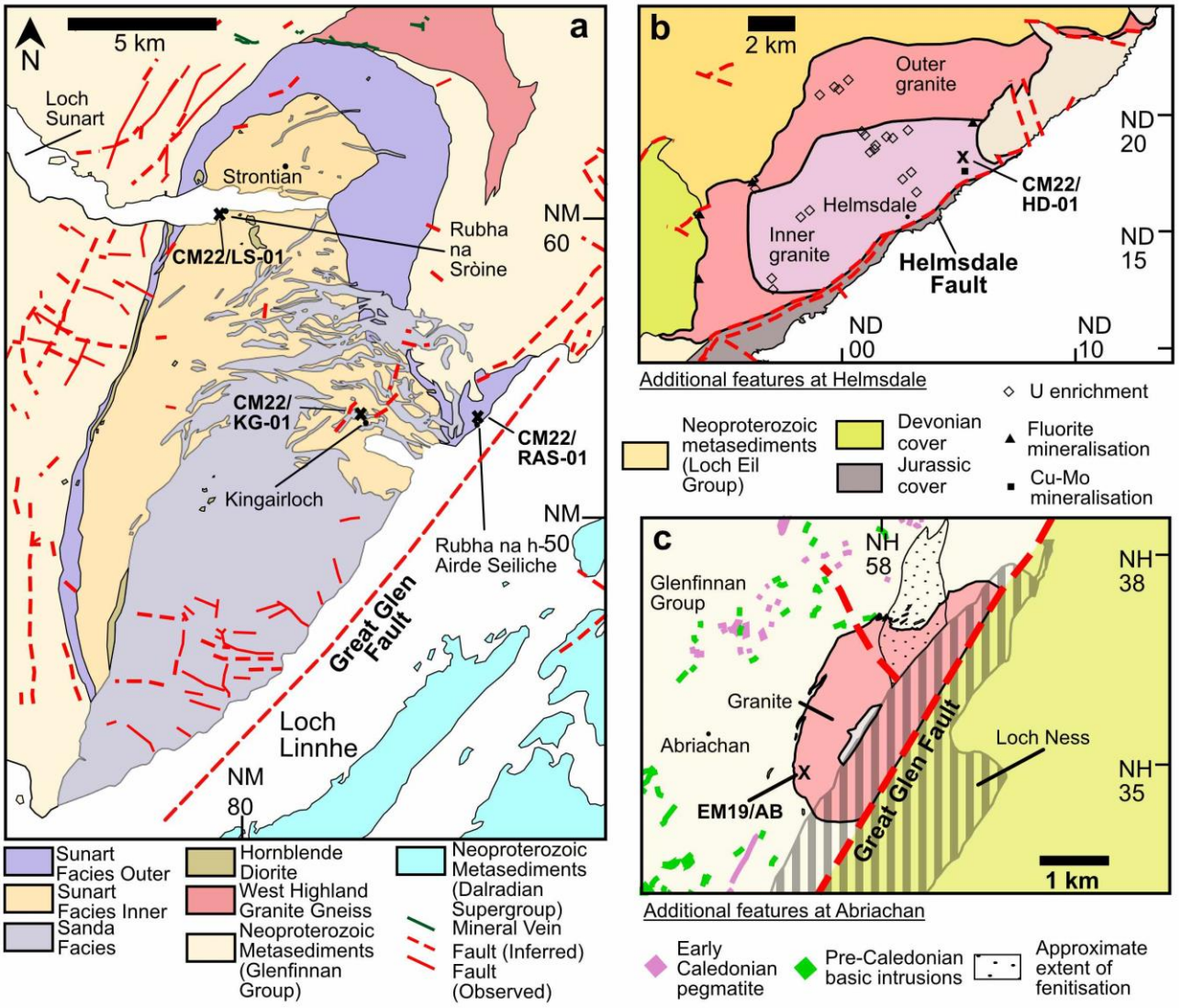

Figure 2. Summary geological maps of a) Strontian, b) Helmsdale, and c) Abriachan intrusions, with sample locations marked. Map data from Sabine (1963), Garson et al. (1984), Johnson and Mykura (1989), British Geological Survey (1998), and British Geological Survey Digimap (2023).

*Table 2. Summary of the studied intrusive complexes, with sample names and grid references marked in **bold**. The phase or facies names and their descriptions are adapted from the numbered references as follows: [1]Kocks (2002), [2]Pigeon and Aftalion (1978), [3]Garson et al. (1984), [4]Paterson et al. (1993), [5]Rogers and Dunning (1991).*

Phase or facies names	Descriptions and sample names	Comments
Helmsdale pluton		
Inner	Aphyric microgranite (**HD-01, ND 0530 1812**)	[1,2]Exhibits gradational contact with the older outer zone. [2]Provided an original approximate emplacement age of ~420 Ma.

Outer	Porphyritic alkali feldspar granite	[1]Cuts Scandian fabrics in surrounding Loch Ness Supergroup.
Abriachan stock		
n/a	Medium-grained orange monzogranite (**AB-01, NH 5689 3487**)	[3]Around 1km^2 of the northern half of the stock is extensively fenitized, with replacement of primary mineralogy by albite, crocidolite, aegirine, titanite, zircon, anatase, apatite; avoided for this study.
Strontian pluton		
Minor intrusions	Wide range from felsic (aplite/felsite/pegmatite) to intermediate/mafic (appinite/lamprophyre)	Minor intrusions at Liddesdale Burn (felsite) and Drumnatorran (microdiorite) have been sampled with limited zircon and apatite yield.
Sanda facies	Coarse porphyritic alkali feldspar-biotite granite (**KG-01, NM 8395 5337**)	Sheet-like masses at northern end which dominate sample sets. Rest of intrusion including Glensanda Superquarry not analysed in detail. [4]Provided original monazite age of ~418 Ma.
Sunart facies (inner)	Coarse, porphyritic alkali feldspar granodiorite (**LS-01, NM 7925 6000**)	[5]Provided original zircon and titanite ages of ~425 Ma.
Sunart facies (outer)	Coarse, aphyric granodiorite (**RAS-01, NM 8789 5327**)	

3. Methods

Samples were collected during fieldwork by CM, IN and CG in 2022, by IN from Helmsdale in 2023, and by Eilidh Milne from Abriachan in 2018 (Table 2). These samples were prepared and analysed at the University of Glasgow. Rock samples were inspected by thin section for the presence of accessory phases. Selected samples were passed through a Retsch jaw crusher and sieved to obtain <500 μm size fractions. Standard shaking table, heavy liquid and electromagnetic separation methods were then used to isolate zircon crystals for mounting on resin pucks. Back-scatter electron and cathodoluminescence imaging was carried out using a Quanta 200F environmental scanning electron microscope at the Geo-analytical and Electron Microscopy Centre. A sub-set of zircons from each sample were selected for laser ablation - inductively coupled plasma mass spectrometry (LA-ICP-MS) analysis. Site selection on each grain was based on the availability of >30 μm areas devoid of alteration, fracturing, and mineral inclusions.

LA-ICP-MS analysis was conducted using an Australian Scientific Instruments RESOlution laser with 3.3 J fluence and 10 Hz repetition rate. Spot size was 30 μm and ablation lasted 30 s per spot. Material was carried in Ar to a Thermo iCAP-RQ single collector mass spectrometer in the Themochronology facility. Semi-random sample bracketing was used to scatter reference materials throughout each run, with an average of ~4 unknowns between reference materials. The data were generated in 4 separate runs and the raw data were processed in Iolite v.4 (Paton et al., 2011). Data

were individually picked over in Iolite to monitor ^{204}Pb counts, remove components of signals associated with inclusions or Pb loss, and to snip signals where multiple zones were abraded. For each run, data were normalised to reference zircon 91500 ($^{206}Pb/^{238}U$ age of 1062.4 Ma ± 0.4 Ma, Wiedenbeck et al., 1995), with Plesovice ($^{206}Pb/^{238}U$ age of 337.1 ± 0.4 Ma, Slama et al., 2008), Temora2 and NIST-610 as secondary standards. All individual and weighted mean ages are herein reported to 2σ (absolute). Plesovice produced weighted means $^{206}Pb/^{238}U$ ages of 342.2 ± 1.8 Ma (MSWD = 0.48, n = 22) during analysis of RAS-01, 338.6 ± 1.6 Ma (MSWD = 0.84, n = 27) during analysis of AB, KG-01, DT-01 and LB-01, and 340.3 ± 1.5 Ma (MSWD = 0.69, n = 27) during analysis of HD-01 and LS-01.

4. Results

Results are summarised on Figures 3-5. Complete data are available in the Supplementary Items, including thin sections (Item A), zircon cathodoluminescence images (Item B), textural descriptions (Item C) and processed U-Pb data (Item D).

4.1. Strontian

4.1.1. Ruadh na h-Airde Seiliche, Sunart Facies Outer, CM22/RAS-01

Zircons are predominantly subhedral, and range in size from c. 80 – 250 µm, though dominantly measure c. 125 – 200 µm. Analysed grains are comprised of well developed, often complex, oscillatory zoning, with homogeneous or patchy cores. Zoning is often locally cross-cut by homogeneous to convolute zoning. Many zircons have a narrow dark rim. Inclusions occur commonly in both cores and rims, sometimes overlapping both, and are up to ~40 µm in length. Many are fractured. Grains which were not suitable for analysis comprised complex or very narrow zonation or heavy fracturing. Of the 87 grains imaged, 63 were analysed with 88 spots, 36 of which are >98% concordant. Three are concordant but rejected due to evidence of Pb loss (48.1, 70.1, 75.1). The concordant points range in $^{206}Pb/^{238}U$ age from ~413 - ~443 Ma (Fig. 3a,b). Concordant spots are from oscillatory rims and four cores and give a weighted mean $^{206}Pb/^{238}U$ age of **425.6 ± 2.0 Ma (n = 30, MSWD = 1), which we interpret as the time of emplacement** (Fig. 3c). Spots outwith the potential emplacement population range in $^{206}Pb/^{238}U$ age from 437.4 ± 10.7 to 442.0 ± 10.3 Ma and are interpreted as antecrystic (Fig. 3c).

4.1.2. Rubha na Sròine, Sunart Facies Inner, CM22/LS-01

Zircons are subhedral to euhedral, and range from c. 70 – 400 μm, though dominantly measure within c. 125 – 250 μm. Analysed grains are dominated by oscillatory zoning, often complex but well-developed, and sometimes convolute. Inclusions are common within both cores and rim, sometimes overlapping both, as are cross-cutting homogeneous zones, sometimes orientated sub-parallel to zonation and sometimes with convolute boundaries. Open fractures are common, but dominantly < 50 μm long and often spatially limited to grain margins or the vicinity of a larger fracture or damaged zone. Occasionally fractures cross-cut the length of grains, and they are sometimes distributed radially about the core. Grains which were not analysed often consist of complex zonation or heavy fracturing. Of the 99 grains imaged, 122 spots were analysed from 82 grains, 31 of those spots (25 %) being >98 % concordant. Two spots are concordant but rejected due to evidence of Pb loss (008.1, 051.1). Concordant spots from samples range in $^{206}Pb/^{238}U$ age from ~ 419 – ~451 Ma (Fig. 3d,e). Of these, spots from oscillatory zones and a lone homogeneous core give a weighted mean $^{206}Pb/^{238}U$ age of **426.7 ± 1.8 Ma (n = 27, MSWD = 0.97) which we interpret as the time of emplacement** (Fig. 3f). Spots outwith the uncertainty of this age range in $^{206}Pb/^{238}U$ age from 436.8 ± 10.2 to 451.3 ± 10.2 Ma (Fig. 3f).

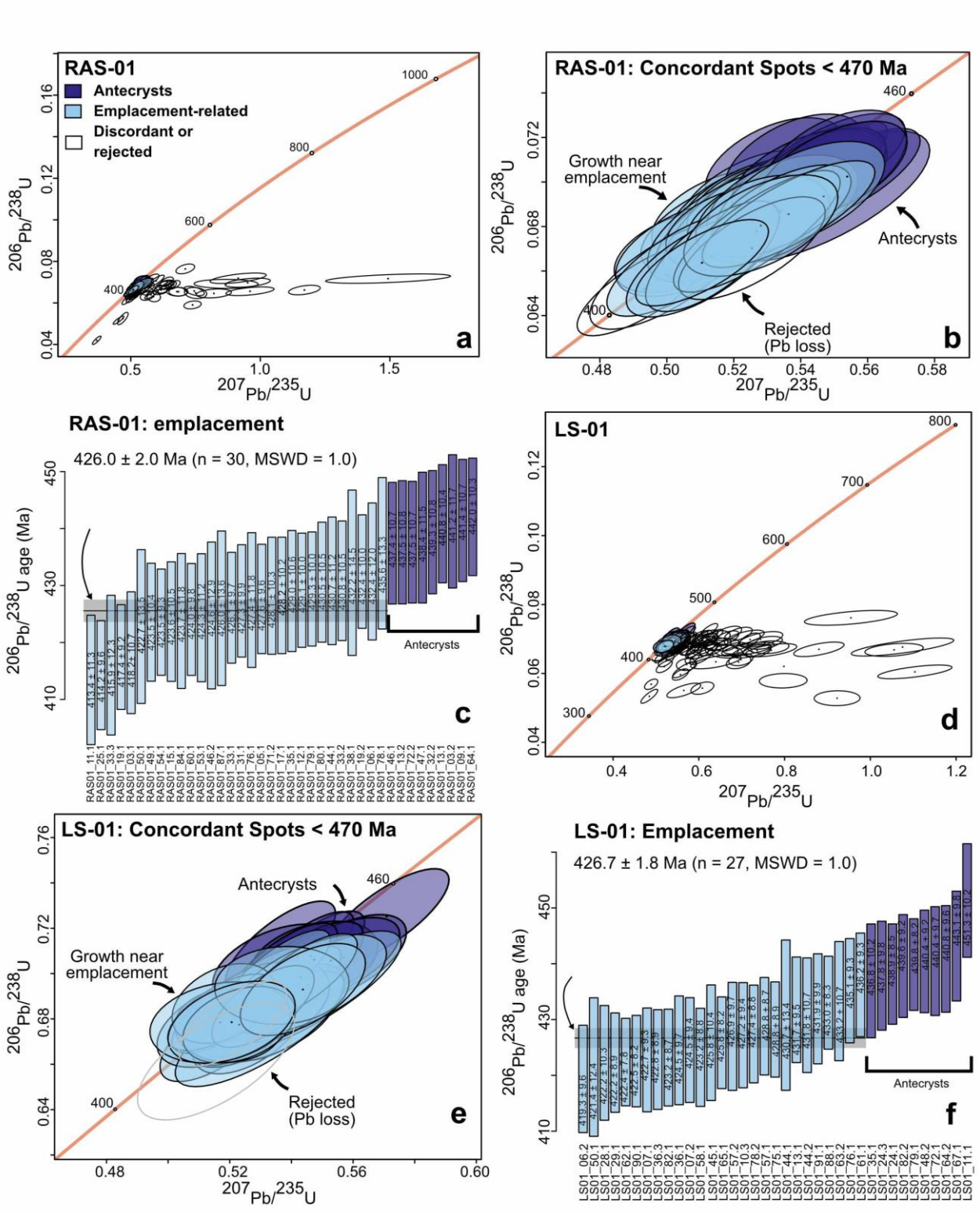

Figure 3. Summary U-Pb zircon data for sample RAS-01, Sunart Facies outer, and sample LS-01, Sunart Facies inner.

4.1.3. Kingairloch, Sanda Facies, CM22/KG-01

Grains are dominantly subhedral, ranging c. 80 – 300 µm, though dominantly in the range c. 100 – 200 µm. Those picked onto mount 2 are of smaller average size than mount 1, ranging from c. 80 –

200 µm, though are dominantly c. 100 – 150 µm; cf. mount 1 for which zircons range 100 – 300 µm and are dominantly 100 – 200 µm. Analysed grains frequently contain homogeneous to patchy zoned cores, often partially resorbed, and magmatic overgrowths with poorly to well-developed oscillatory zoning. Oscillatory zoning is finely to moderately spaced and often complex. Of the 100 spots analysed, 29 were >98% concordant, two of which were rejected due to evidence of Pb loss (29.1, 43.2) and the remaining 71 were discordant. Concordant spots older than Caledonian age are from oscillatory zoned cores and rims, and semi-homogeneous cores often with hints of oscillatory zoning. These older spots form a slew of isolated spots from c. 1825 – 1317 Ma and c. 808 – 830 Ma (Fig. 4a). Caledonian concordant spots range in $^{206}Pb/^{238}U$ age from c. ~415 – ~448 Ma (Fig 4a,b). Twelve concordant Caledonian points are from cores or mantles with magmatic oscillatory zoning and two homogeneous cores. The youngest three of these give a weighted mean $^{238}U/^{206}Pb$ age of 418.6 ± 6.3 Ma, within error of the unpublished monazite result of 418 ± 1 Ma of Paterson et al. (1993). However, this result gives an MSWD of 0.29, narrowly within the acceptable limits of Wendt and Carl (1991) and Spencer et al. (2016). If the youngest five points are included in the weighted mean $^{206}Pb/^{238}U$ age, this becomes **422.9 ± 4.7 (MSWD = 1.3, n = 5)**, still within uncertainty of Paterson et al. (1993), and well within uncertainty of the Sunart facies results (Fig. 4c). Remaining concordant points range in $^{206}Pb/^{238}U$ age from 430.4 ± 9.9 to 443.1 ± 11.3 Ma and are considered antecrystic (Fig. 4c).

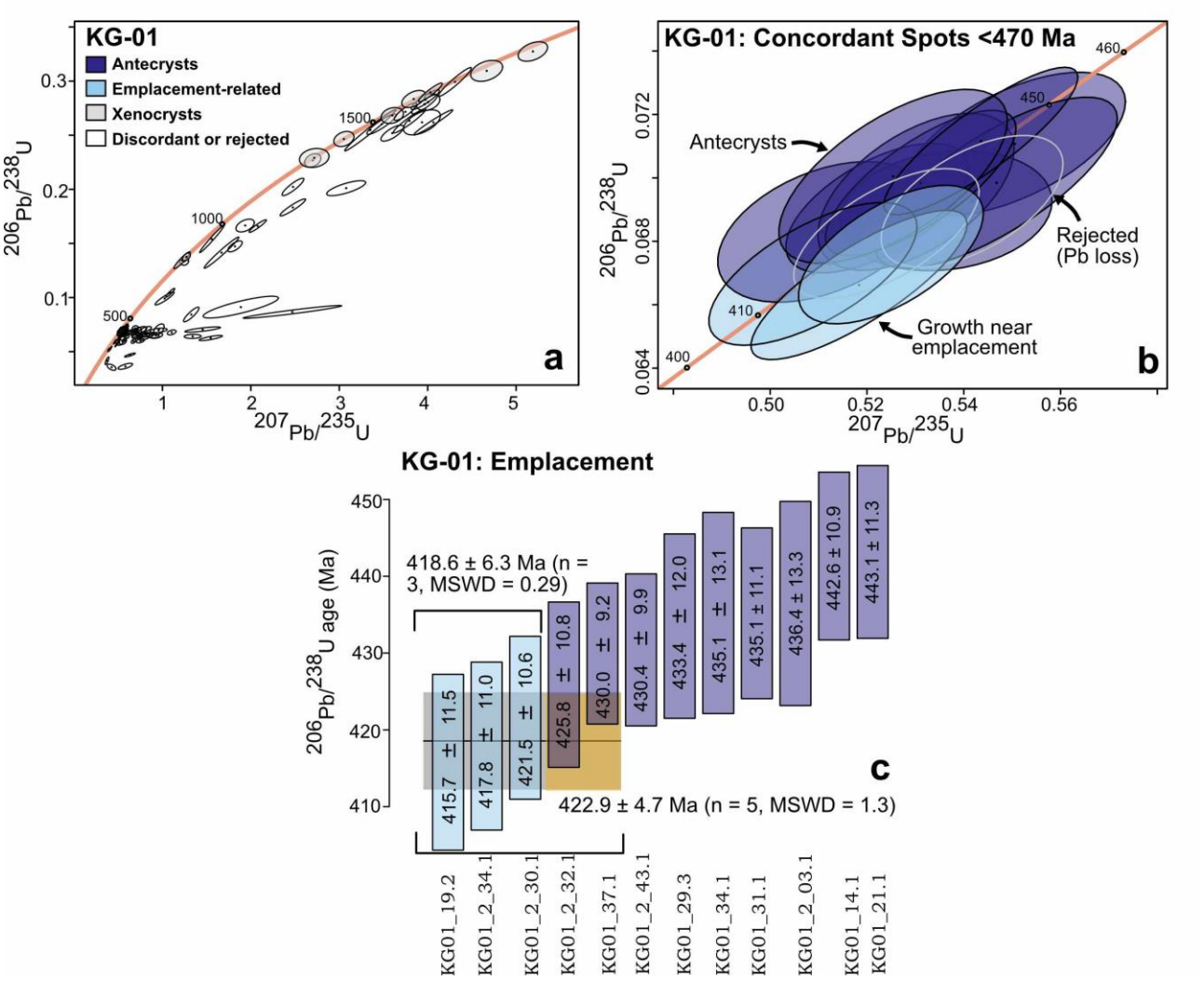

Figure 4. Summary U-Pb zircon data for sample KG-01, Sanda facies.

4.2. Helmsdale

Zircons are dominantly subhedral, between 70 and 240 µm, though dominantly between 100 and 175 µm. Analysed grains often contain patchy zoned or heterogeneous cores with partially resorbed to resorbed boundaries. Bright narrow zones around core margins are also common. Rims are commonly dark, homogeneous to oscillatory zoned and narrow with respect to cores. Other analysed grains are more strongly euhedral with fine oscillatory zoning throughout, often with no clear core-rim distinction though sometimes a very small homogeneous core. Open fractures are also common, particularly around grain margins approximately parallel to grain edges, though some grains contain fractures throughout. Occasional large open fractures which cross-cut the length or width of grains occur. Of 91 grains imaged, 61 were analysed with 87 spots, of which 38 are >98% concordant. Five of these were rejected due to evidence of Pb loss (01.2, 34.1, 44.2, 51.2, 79.1). Older concordant spots include an isolated spot at ~1780 Ma, and spreads of ages from ~1600 - ~1720 Ma and ~1460 - ~1540 Ma (Fig. 5a). Further isolated points occur at ~1260, ~1100, ~1000,

and ~930 Ma. Three spots have Grampian ages of ~470 - 480 Ma (Fig. 5a). Most concordant points lie between ~390 - ~450 Ma (Fig. 5b). Concordant spots aged 470 Ma and older, are from oscillatory zoned zircon rims and cores, and three homogeneous to semi-homogeneous core zones and may be considered xenocrystic. Concordant spots younger than 450 Ma are from oscillatory zoned rims and cores and three homogeneous to patchy zoned cores. These points produced a weighted **$^{206}Pb/^{238}U$ age of 419.3 ± 3.3 Ma (n = 9, MSWD = 1) which we interpret as consistent with emplacement** (Fig. 5c). Some spots lie outwith the uncertainty of this age, ranging from 429.0 ± 10.3 Ma to 439.0 ± 9.0 Ma, and may be considered antecrystic (Fig. 5c).

4.3. Abriachan

Zircons from sample AB are dominantly subhedral, and range in size from 60 to 200 μm, though dominantly measure 130 – 175 μm. Analysed grains contain complex oscillatory zoned, heterogenous or homogeneous cores with partially resorbed to resorbed boundaries, with oscillatory zoned or homogeneous rims. Core diameter is often larger than the rim width, though the core-rim ratio is variable, and some analysed grains are oscillatory zoned throughout with no distinct core and rim. Very bright, narrow, homogeneous zones are common at core-rim boundaries. Minor bright homogeneous zones which cross-cut oscillatory zoning occur, and occasionally small inclusions occur within rims. Of the 91 grains imaged, 50 were suitable for laser ablation analysis with 66 spots measured, 26 of which are >98% concordant. Two concordant spots were rejected due to evidence of Pb loss (50.2, 58.1). Inherited concordant spots from broad to oscillatory zoned cores and rims provided $^{206}Pb/^{238}U$ ages of ~1750, ~1630, and between ~1530 - ~1365 Ma (Fig. 5d). Inherited spots from homogeneous to semi-homogeneous cores give a cluster at ~1020 Ma and single points at ~980 and ~477 Ma (Fig. 5d). All these points are likely of magmatic origin, except spot 52.1 which is more likely metamorphic indicated by a Th/U value of 0.03 (Supplementary Item D). Younger, Caledonian aged concordant spots (Fig. 5e) are from homogeneous to sector zoned cores, and oscillatory zoned cores and rims. These grains give a mean weighted $^{206}Pb/^{238}U$ age of **420.1 ± 3.4 Ma (n = 9, MSWD = 0.93) which we interpret as representing emplacement** (Fig. 5f).

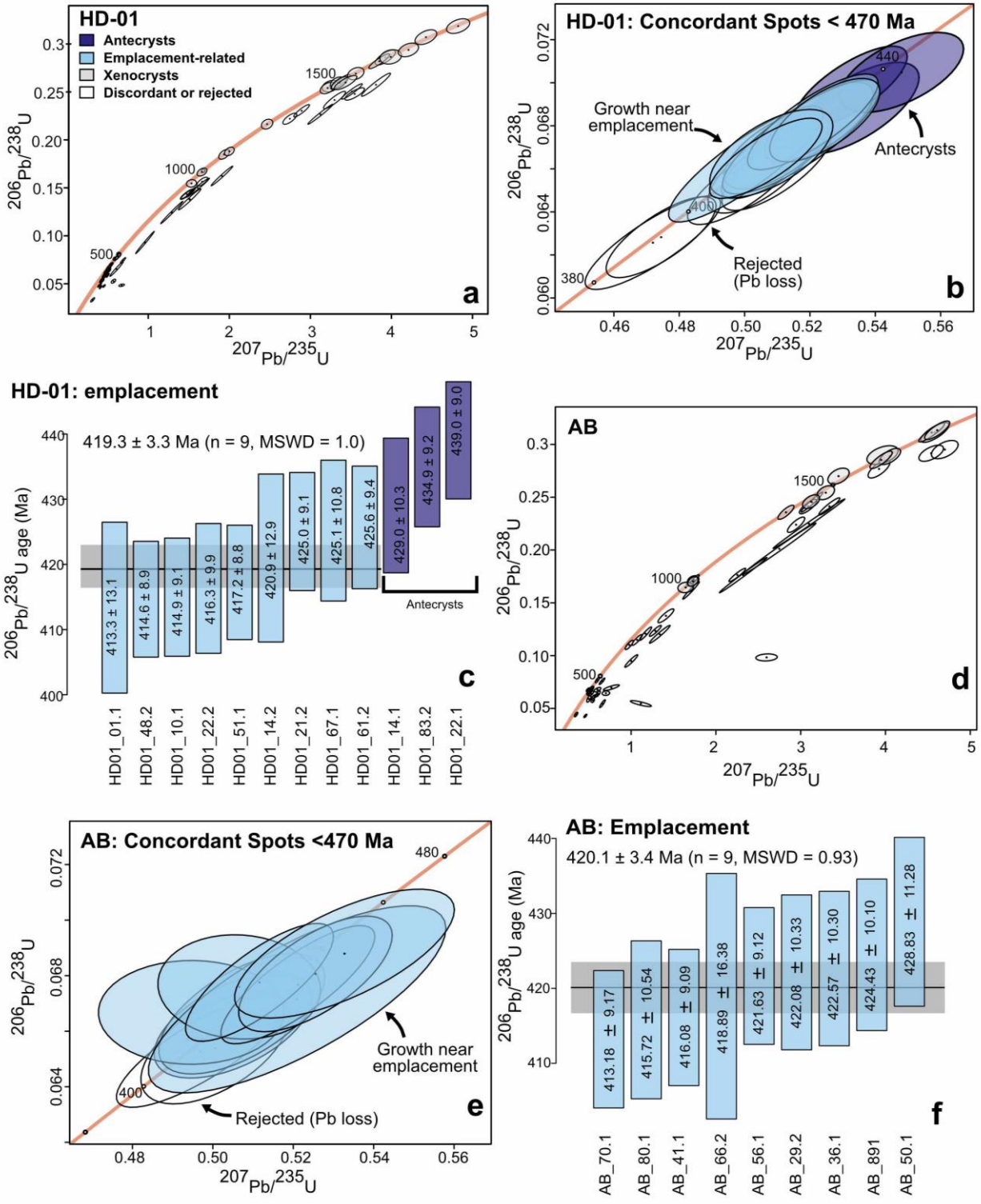

Figure 5. Summary U-Pb zircon data for Helmsdale (a-c) and Abriachan (d-f).

5. Discussion

5.1. Evidence for a Lower Crustal Hot Zone

One feature of past studies in the Northern Highlands and the British and Irish Caledonides more widely is the lack of discussion about the timescale over which petrogenetic processes occur (Milne et al., 2023). Many papers have nevertheless identified that plutonic complexes have been constructed in multiple stages, or that hybridisation events occurred between magmas of different compositions, to explain their geochemical character (e.g., Fowler et al., 2001; 2008; Zaniewski, 2018; Lawrence et al., 2023). More widespread recent application of in situ geochronology, particularly in Ireland, Northern England, and Southern Scotland, has led to the recognition that the Caledonian – Acadian plutons are the end product of tens of millions of years of crustal processing (Fritschle, 2016; Hines et al., 2018; Woodcock et al., 2019; Gemmell et al., 2023).

In this study, the presence of magmatic zircons similar in texture to those associated with emplacement (Supplementary Items B-C), but typically older than the accepted weighted mean $^{206}Pb/^{238}U$ age of this event, are interpreted to reflect antecrystic populations. These are apparent in both Strontian facies (from ~451 – 430 Ma) and at Helmsdale (from ~439 – 429 Ma). The ~432 Ma Cluanie pluton was previously interpreted to contain antecrystic zircon dating from ~447 – 438 Ma (Milne et al., 2023). Unpublished results from an MSc thesis for the older ~441 Ma Glen Loy and Linnhe bodies have ranges of antecrystic growth from ~457 – 447 and ~462 – 450 Ma (Milne, 2019). A couple of grains analysed by ion probe from the Ross of Mull granite, with $^{206}Pb/^{238}U$ ages of 431.9 ± 6.4 and 430.8 ± 7.3 Ma respectively, may also be antecrystic (Oliver et al., 2008). These results are summarised on Figure 6a. There is an apparent correlation of antecrystic zircon occurrences with plutonism close to the Great Glen Fault, however, this may reflect a lack of in-situ data rather than any geological feature.

5.2. Geodynamics and tectonics

There has long been debate over the spatial distribution of Caledonian magmatism in the Northern Highlands and its relationship to subduction and slab breakoff (e.g., Atherton and Ghani, 2002; Miles et al., 2016; Lawrence et al., 2023). The absence through strike-slip faulting of a Laurentian forearc in this portion of the Caledonides is one barrier to better understanding of this problem, as the arc-trench distance is unknown. Some authors do not factor in strike-slip faulting in presuming that evidence for the timing of geodynamic events in one terrane may be transferrable to another. A further matter of debate is around when the Baltica-Laurentia collision started, which impacts on whether magmatism is truly of continental arc or collisional origin (Slagstad and Kirkland, 2017; Milne et al., 2023). Finally, there is an implicit assumption in much of the literature that igneous *emplacement* ages can be correlated to very deep geodynamic processes such as slab breakoff. For

example, such magmatism has been linked to post breakoff upwelling of hot asthenosphere to trigger partial melting in the lithospheric mantle and/or lower crust (e.g., Atherton and Ghani, 2002; Neilson et al., 2009; Miles et al., 2016). It is now better understood that slab breakoff occurs at depths too great to strongly influence melting and collision magmatism (e.g., Freeburn et al., 2018). Undoubtedly the loss of the slab can result in uplift and changes in lithospheric stresses in the overriding plate (Fernández-García et al., 2019; Boonma et al., 2023). However, breakoff is only one factor conditioning middle to upper crustal igneous emplacement, alongside the effects on crustal stress of the relative plate motions of Baltica, Laurentia, and the encroaching peri-Gondwanan terranes to the south and west of Baltica. Also, the antecrystic records indicate that magmatism *started* to occur shortly after the end of the Grampian Orogeny, some ~20 Myr before published timings of slab breakoff (Table 3). Hence, the onset of addition to the lower crustal hot zone is unrelated to breakoff and more likely reflects subduction and accelerated slab roll-back during the onset of collision (e.g., Milne et al., 2023; Gemmell et al., 2023).

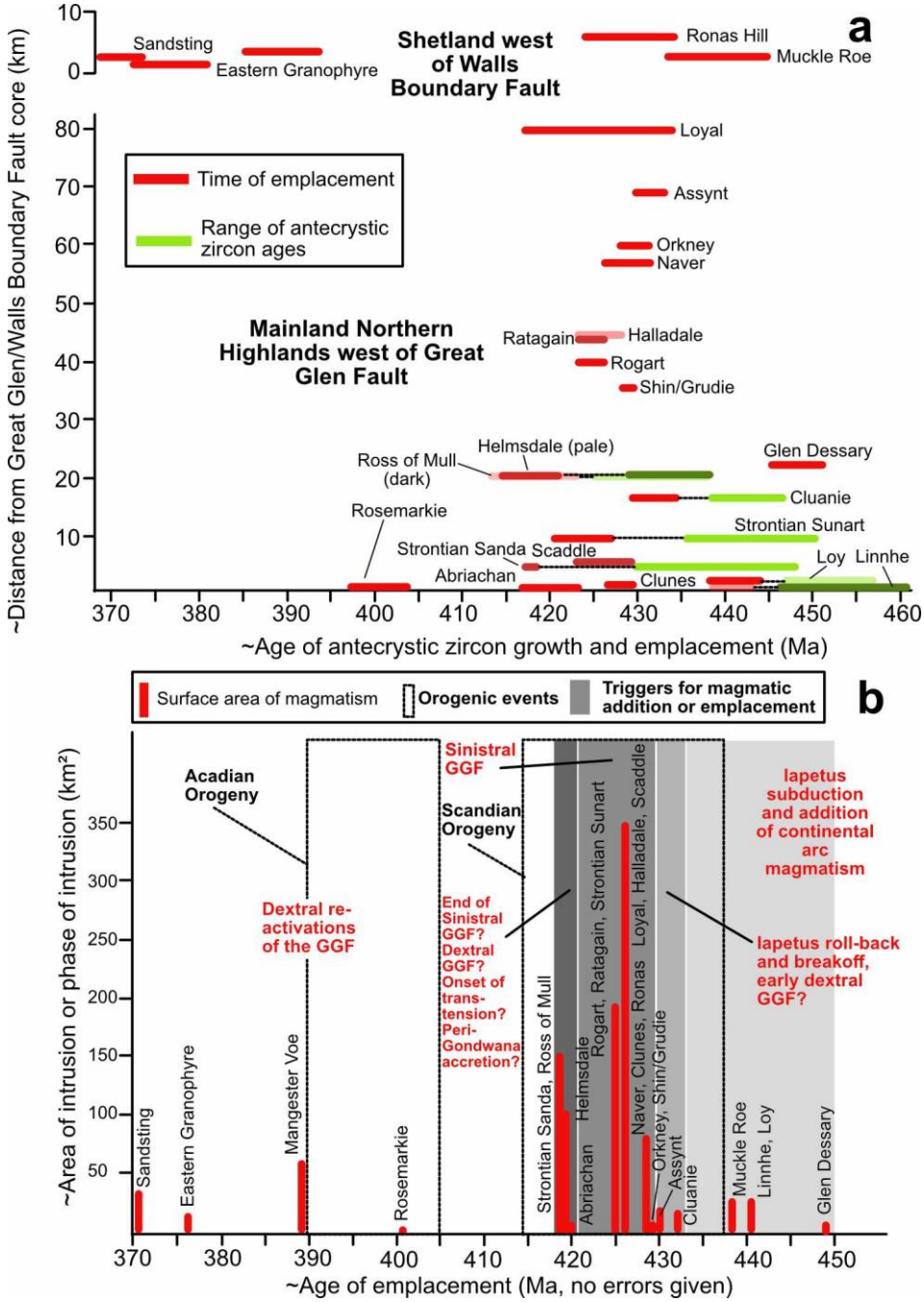

Figure 6. a) distance of magmatic emplacement from the Great Glen Fault – Walls Boundary Fault systems vs the timing of magmatic activity, including error margins and patterns of antecrystic growth. b) cumulative area of intrusions vs age of emplacement, given to the nearest Myr, with interpretations of the major geodynamic and tectonic events which may have influenced magmatism. Data and references as per Table 1. British Geological Survey Digimap (2023) measurement tools were used to calculate emplacement areas.

On Figure 6b, we show the absolute ages of emplacement to the nearest whole million years against the present area of exposure, with the caveat that we do not know the perhaps much more meaningful value of the absolute volume of Caledonian magmatism through time. Any relative

amount of magmatism reported here must be treated as a gross estimate as the Northern Highlands is only a small part of the collision zone, and emplacement is limited to middle crustal levels or shallower, based on extremely sparse and imprecise intrusion depths (Tyler and Ashworth, 1983; Neill and Stephens, 2009).

However, it is still possible to discern peaks and troughs in emplacement across the Northern Highlands Terrane. Post-Grampian magmatism prior to ~430 Ma includes few intrusions, with an extent of <100 km^2. As shown on Figure 6a, such intrusions are all within 20 km of the Great Glen or Walls Boundary faults. In other words, they record magmatism somewhat closer to the Iapetus suture than if emplacement had occurred further to the northwest. However, at ~425 Ma, there is a cluster of intrusions, with an extent of ~500 km^2, this time distributed across the whole terrane. At ~418 Ma, there is a further cluster of intrusions covering ~250 km^2, but these are again spatially restricted to <20 km from the terrane-bounding faults. The Banavie and Glen Garry felsic minor intrusion suites and the more mafic microdiorite suite (e.g., Fettes and MacDonald, 1978; Smith, 1979) are also rather proximal to the Great Glen Fault, though their geochronology is uncertain. Finally, Devonian post-Scandian magmatism from ~401 – 371 Ma is similar in surficial extent to the earliest post-Grampian magmatism but occurs only in very close proximity to the Great Glen or Walls Boundary Faults (<<10 km).

What evidence do we have for the geological conditions which enabled magmatic *emplacement* in these apparent clusters of activity? As mentioned above, deep geodynamic events such as breakoff are not likely to be a direct contributing factor, but other larger-scale events, such as lithospheric delamination have hardly been considered. Crustal tectonics has been considered as important in relation to magmatism, including the Grampian II event (Bird et al., 2013), the Scandian Orogeny (Strachan et al., 2020a), and perhaps the far-field effects of the Acadian Orogeny (Miles et al., 2016), however none show a direct correlation to emplacement patterns (Figure 6b). Our understanding of the implications of these events is hampered somewhat by their debated origins, particularly that of the ~450 Grampian II event (e.g., Bird et al., 2013; Milne et al., 2023). Yet, obvious conundrums arise, such as why magmatic emplacement is so voluminous during the supposed peak of collisional orogenesis in the middle of the Scandian Orogeny. The timing of trans-pression and trans-tension on the major fault systems, and their role in allowing long-stored lower crustal mushes to remobilise and rise to emplacement depths are therefore other important aspects of this debate. Some intrusions, e.g., Cluanie, Clunes, Ratagain, Strontian, the Glen Garry Vein Complex, granitic veins at Rosemarkie, have previously been directly associated with one or another direction of fault motion (Fettes and MacDonald, 1978; Hutton, 1988; Hutton and

McErlean, 1991; Stewart et al., 2001; Neill and Stephens, 2009; Mendum and Noble, 2010), but others have not, or are related instead to emplacement along Caledonian thrust planes (Strachan et al., 2020a). Below, we outline some broad discussion points about how different geodynamic and tectonic events and processes *may* relate to one another, and to the overall patterns of magmatism in the Northern Highlands Terrane.

5.2.1 ~450 - ~430 Ma: The onset of Baltica-Laurentia collision; Iapetus subduction and roll-back

During the ~20 Myr following the end of the Grampian Orogeny, magmatic emplacement into the middle crust is on first glance, limited in volume and narrowly distributed. Many authors previously interpreted this period as one of little or no magmatism and therefore one of highly oblique, flat, or non-existent Iapetus subduction processes (see Dewey et al., 2015). However, the more recent geochronology studies (Table 1) and the antecrystic zircon record implies that partial melting of mantle sources and magmatic addition to the lower crust was significant at this time (Goodenough et al., 2011; Milne et al. 2023; *this study*). Milne et al. (2023) suggested that this was a period of crustal compression brought about by the indentation of Baltican promontories on the Laurentian margin, in line with Slagstad and Kirkland (2017). Thus magmatism, though present in the form of continental arc-style addition to the lower crust, was not able to frequently 'escape the hot zone'. The onset of Scandian orogenesis at ~437 Ma (Strachan et al., 2020) is likely to mark the point at which the Iapetus Ocean had completely closed in this part of the collision zone, and hard continent-continent collision began. The compilation of Oliver et al. (2008) indicates that there is a much more extensive record of pluton emplacement in the Grampian Highlands overlapping the first half of the Scandian Orogeny. The Grampian Highlands at the time lay to the south and west of the zone of Baltica-Laurentia convergence, so may have represented the Laurentian continental arc axis for a longer period of Iapetus subduction than the Northern Highlands, prior to the arrival of peri-Gondwanan terranes at the Southern Uplands-Down-Longford Accretionary prism (Chew and Strachan, 2014).

5.2.2. ~430 - ~425 Ma: Lithospheric delamination (?), sinistral strike-slip faulting and the peak of the Scandian Orogeny

Studies such as Mako et al. (2019) and Spencer et al. (2020) indicate that a thermal peak was reached in the nappes of the Northern Highlands during Scandian orogenesis around ~425 Ma, at pressures of ~7 – 8.5 kbar, equivalent to ~26 – 31 km, and that rapid exhumation occurred thereafter (Spencer et al., 2020). As has previously been argued (Milne et al., 2023) a thermal peak in the

region may in part relate to extensive magmatic addition. Some of the largest bodies of magma were certainly emplaced at this time, including Halladale, Ratagain, Rogart, and the Sunart facies of the Strontian pluton (Table 1, Fig. 6a). These were emplaced across all parts of the terrane up to 80 km from the Great Glen Fault, and by proxy, at greater distances from the Baltica-Laurentia suture that magmatism before or after this time (Figure 6a). The presence of mafic facies in many plutons as well as whole rock major and trace element geochemical constraints (e.g., Fowler et al., 2008; Lawrence et al., 2023) indicate the involvement of mantle melting in petrogenesis at this time. The appearance of antecrystic zircons in those bodies closer to the Great Glen Fault, however, indicates that this was also a time of remobilisation of crystal mushes stored within the lower crustal hot zone. Further evidence from intrusions such as the Clunes tonalite (Stewart et al., 2001) indicate that the Great Glen Fault was undergoing left-lateral motion simultaneously with emplacement.

The very wide distribution of magmatism, its ultimate mantle derivation, and its temporal association with the onset of rapid exhumation and strike slip faulting clearly indicate a major change in the tectonics of the Northern Highlands Caledonides during the Scandian Orogeny. The geographical spread of magmatism towards the foreland, whilst continuing to occur in the southeast of the terrane near sites of earlier ~450 – 430 Ma supra-subduction magmatism, likely negates processes like slab flattening or breakoff in petrogenesis. The former would cause crustal compression and shut off magmatism closer to the suture (Dewey et al., 2015), whilst the latter typically occurs only in a narrow belt close to the suture (Freeman et al., 2018).

Instead, we propose that the wider loss of mantle lithosphere beneath the region might be one reason why mantle melting, and consequently heating and re-mobilisation of the hot zone, occurred. Lithospheric delamination or detachment (e.g., Pearce et al., 1990) has rarely considered for the British and Irish Caledonides, and it is naturally difficult to prove owing to a lack of contemporary geophysical evidence. However, it is a globally-recognised geodynamic process which is thought to trigger partial melting of lithospheric mantle which remains to the upper plate, both via exposure to hot asthenosphere and by dewatering of the detached and sinking lithosphere (Kay and Kay, 1993; Lustrino, 2005; Elkins-Tanton, 2005). Therein may lie a further explanation for the unusually potassic rocks of the far NW Highlands (e.g., Thompson and Fowler, 1986; Fowler, 1988) in that an additional small-volume asthenospheric component or lithospheric mantle-derived components may have been involved in their petrogenesis. Lithospheric detachment is also linked to uplift (Chalot-Prat and Gurbacea, 2000; Göğüş and Pysklywec, 2008) and could enable strike-slip faulting to localise within the thinned, hot, and weak lithosphere of the Northern Highlands (Molnar and Dayem, 2010), complementing the orogenic collapse hypothesis for rapid exhumation of Spencer et

al. (2020). Continental convergence itself is independent of slab breakoff or lithospheric delamination, as evidenced by locations today such as Eastern Anatolia, the Caucasus and Iran (Neill et al., 2015), explaining the continuation of Scandian folding until ~415 Ma, some ~10 – 15 Myr after the initial onset of voluminous magmatism.

5.2.3. ~420 - ~417 Ma: Ganderia – Avalonia docking affects the Laurentian margin? Scadian exhumation continues.

The second peak in emplacement ages occurs around ~420 - ~417 Ma and returns to being spatially restricted to areas <20 km from the Great Glen and Walls Boundary Faults, the same location as the earlier phase of subduction-related magmatism. Granites at Helmsdale, Ross of Mull, and the Sanda facies at Strontian are not necessarily texturally or chemically dissimilar from those emplaced from ~430 - ~425 Ma (Fowler et al., 2008), implying similar petrogenetic processes involving additional mantle melting and hot zone remobilisation. It is possible that continued motion of the Great Glen and Walls Boundary Faults were important factors sustaining magmatic emplacement, as well as the availability of partial melt from the hot zone, which happened to previously exist in this part of the terrane. The time period further overlaps with accretion of peri-Gondwanan terranes to the Laurentian margin to the south and west of the Northern Highlands. In particular, the under-thrusting of peri-Gondwanan lithosphere (Halliday et al., 1980, Soper et al., 1992, Stone et al., 2012, Brown et al., 2008; Miles et al., 2014), could both affect the stress state of the nearby crust, and potentially mark the end of Great Glen sinistral strike-slip faulting. The timing is also in the middle of a period of sustained exhumation towards the end of Scandian orogenesis (Mako et al., 2019; Spencer et al., 2020; Strachan et al., 2020a), so it is possible that decompression of the Northern Highlands, regardless of far-field effects of ongoing collision, were responsible for further melting and magma ascent.

6. Conclusions and Recommendations for further Work

- This study has extended recent work in highlighting that the Northern Highlands Caledonian intrusions contain evidence of lower crustal hot zone development during the period ~450 - ~430 Ma (Milne et al., 2023). We underline the importance of extensive in situ geochronology studies, alongside high precision dating of emplacement events, in identifying the ultimate longevity of collision-related magmatism.
- Our new emplacement ages are comparable to previous Strontian data, demonstrating that the complex was emplaced over the period ~427 - ~417 Ma, and that only the older Sunart

facies contains a substantive record of zircon inheritance. An emplacement date of ~420 Ma, previously estimated for the Helmsdale pluton by Pigeon and Aftalion (1978) is confirmed. A new age of ~419 Ma is assigned to the Abriachan stock.

- The transition from subduction to collision to post-subduction magmatism is not particularly well constrained in the Northern Highlands of Scotland. Qualitative discussion of the timing and location of igneous emplacement indicates there were, however, peaks and troughs in magmatic output during the Caledonian – Acadian Orogenies. We propose that magmatism prior to ~430 Ma relates to subduction of Iapetus lithosphere beneath the Laurentian margin as the jagged leading edge of the lower-plate Baltican margin began to accrete. From then on, magmatism is inherently collisional in nature and peaks of emplacement may relate to a combination of geodynamic and tectonic processes as described above. >430 Ma subduction-related and <425 Ma collision-related magmatism – at least large-scale pluton emplacement - is spatially restricted to areas close to the Great Glen and Walls Boundary Faults. Between these times, an upsurge in magmatism from ~430 - ~425 Ma occurs across the whole terrane, which we argue may be a short-lived effect of a lithospheric delamination event from the base of the orogenic belt.

Key improvements to Northern Highlands and Scottish Caledonian geochronology more generally have already been suggested by various authors, including Lawrence et al. (2022) and Milne et al. (2023). Firstly, laser ablation studies should be routinely used (and critically, published) as a preliminary component of targeted high precision methodologies. Secondly, in situ studies should target large datasets, potentially hundreds of spots per sample, and if possible, include trace element and isotope analysis via split stream LA-ICP-MS methods as routine. The collection of large volumes of in situ data make it less likely that antecrystic zircon populations will escape analysis, whilst the integration of geochemical data with geochronological control should make it possible to track the evolution of the magmas from the hot zone to emplacement level. As noted, much of the current Northern Highlands geochronological record relies on the original air ablation mass spectrometry work of Rogers and Dunning (1991). Today, chemical abrasion and sequential isotope dilution methods can produce highly precise emplacement ages on 10’s to 100’s of thousand year timescales, which may be advantageous for various plutons already known to have multiple phases of intrusion (e.g., Ratagain, Helmsdale, Rogart, Strontian, Ross of Mull). With the exception of the original Strontian isotope dilution data (Rogers and Dunning, 1991; Paterson et al., 1993), nowhere else in the Scottish Caledonides are there distinct emplacement ages of different plutonic zones.

Furthermore, the Northern Highlands have largely been considered non-prospective for critical raw materials, though a recent UK-government commissioned study has indicated areas of interest including the Caledonian intrusions at Strontian and Loyal (Hughes et al., 2013; Deady et al., 2023). The designation of some intrusions as essentially continental arc plutons, and others to collision or the post-subduction phase of orogeny may be helpful in cataloguing their economic potential (Richards, 2009; Chiaradia et al., 2022). Intrusions from ~425 Ma to ~417 Ma clearly overlap a time of rapid exhumation in the Northern Highlands (Spencer et al., 2020) so present an obvious association with the potential for porphyry mineralisation. Hornblende, biotite and/or titanite geobarometry could be applied to most Caledonian intrusions to obtain a pattern of emplacement depth with time. For geothermal energy prospects, recent studies of Scottish granites have been largely limited to heat flow calculations based on geochemical analyses (Scottish Government et al., 2013), and little attention has been paid to the systematic collection of fault and fracture orientations and degrees of openness to model fluid flow capacities. Both Helmsdale and Abriachan are in close proximity to fault systems which have repeatedly re-activated over the last ~400 million years, with evidence of the passage of magmatic and basinal fluids (Tamas et al., 2023). Intensive magnetic susceptibility studies have been successfully conducted on Caledonian intrusions in Scotland and Ireland to help model their emplacement mechanisms and 3D structures (Bouchez, 1997; Kocks, 2002; Petronis et al., 2012; McCarthy et al., 2015; Lawrence et al., 2022). This work should be repeated much more widely in the high-heat producing granites to judge whether they are likely to be present at the 2-5 km depths required to reach sustained high temperatures.

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List of supplementary items

Supplementary Item A: Thin section photographs of the dated rocks in this study.

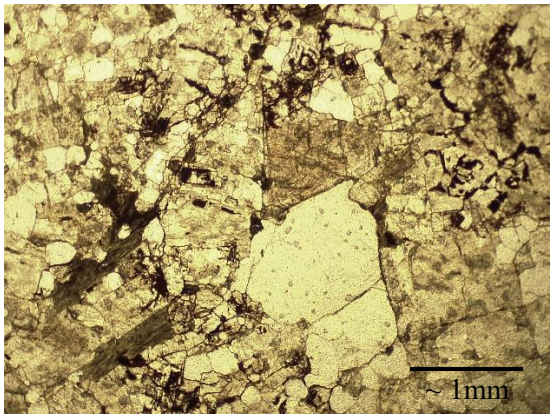
Supplementary Item B: Cathodoluminescence images of mounted zircon crystals marked up with spot locations and references.

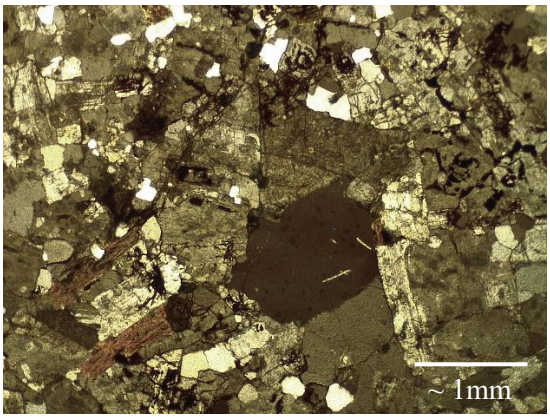
Supplementary Item C: Verbal descriptions and classifications of imaged zircon crystals.

Supplementary Item D: U-Pb zircon laser ablation data for standards and unknowns.

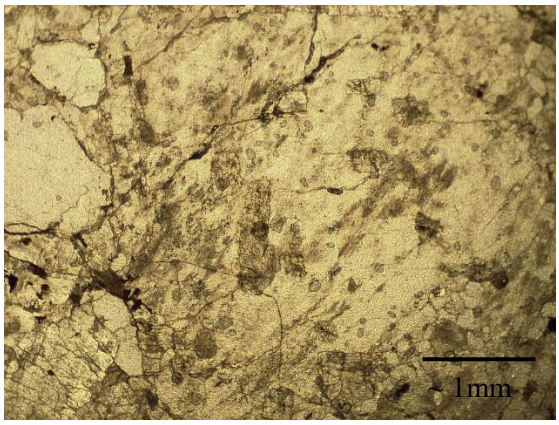
Supplementary Item A – Thin Section Photographs of the Dated Rocks in this Study

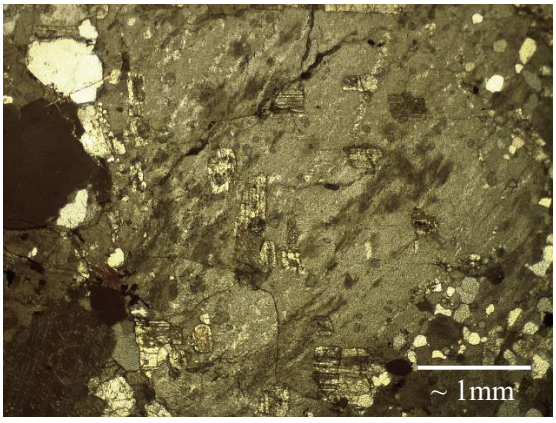
CM22/HD-01: Granite with quartz, plagioclase, alkali feldspar and biotite. Secondary mineralogy of haematite and sericite.



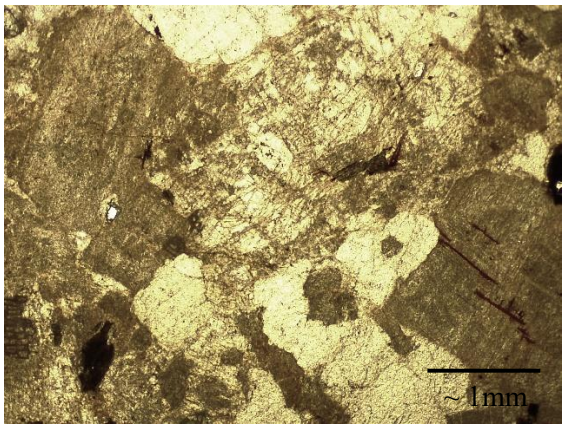


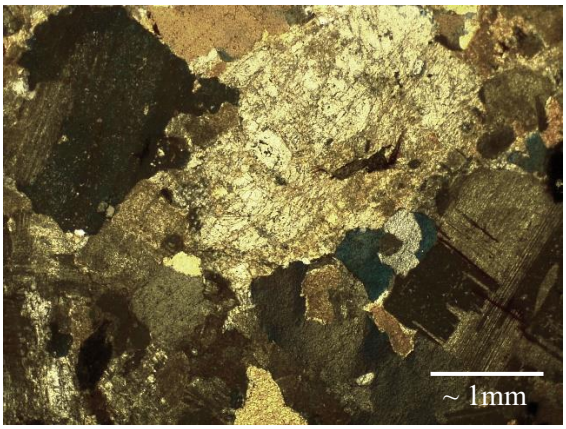
CM22/HD-01: Granite containing perthitic alkali feldspar megacryst with plagioclase inclusions.



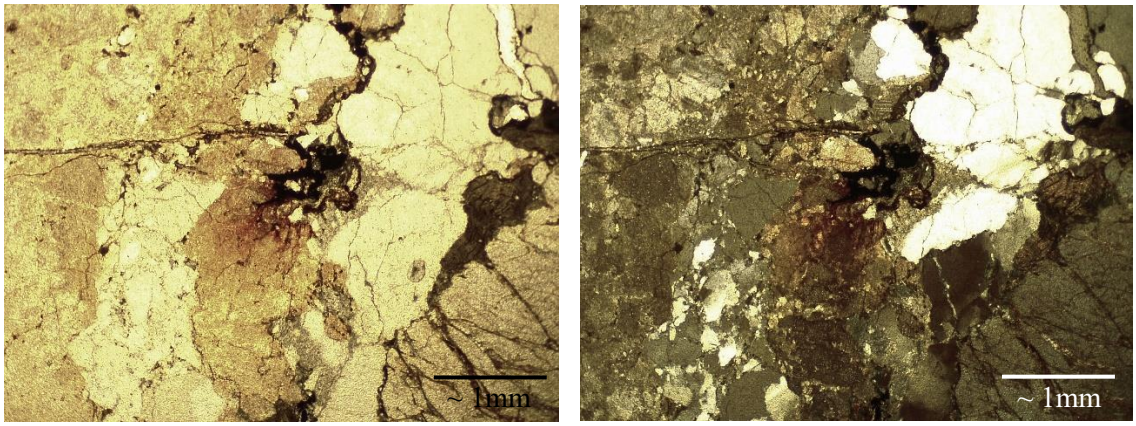


AB: Granite with quartz, plagioclase, alkali feldspar and hornblende. Secondary mineralogy of haematite and sericite. Quartz displays undulose extinction, titanite ocurs but is not shown.

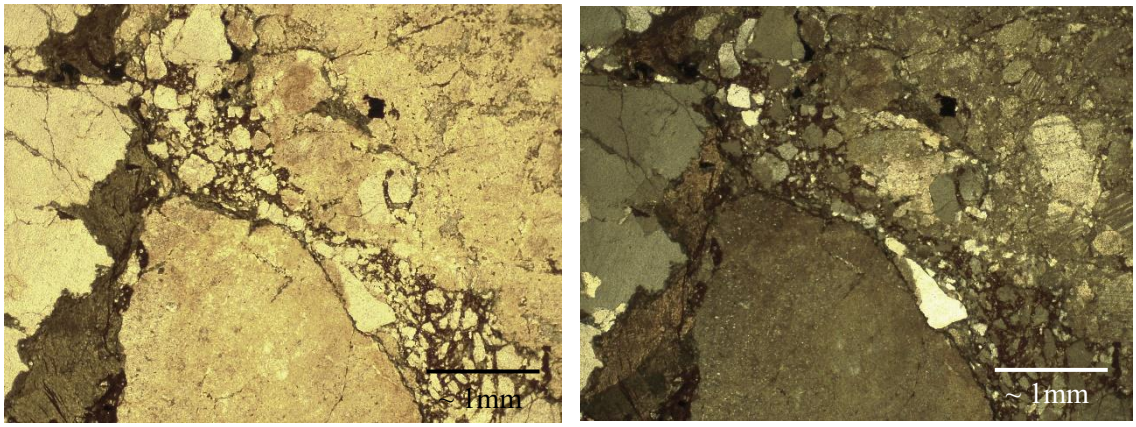




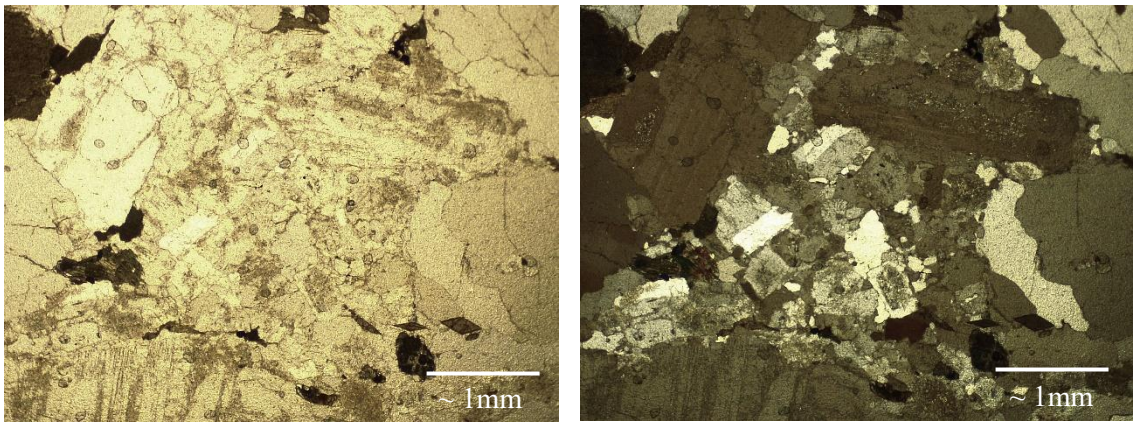
CM22/RAS-01: Granodiorite with quartz, plagioclase, alkali feldpsar and biotite. Secondary mineralogy occurs as extensive haematite. Biotite often displays curved cleavage planes and undulose extinction. Quartz also displays undulose extinction.



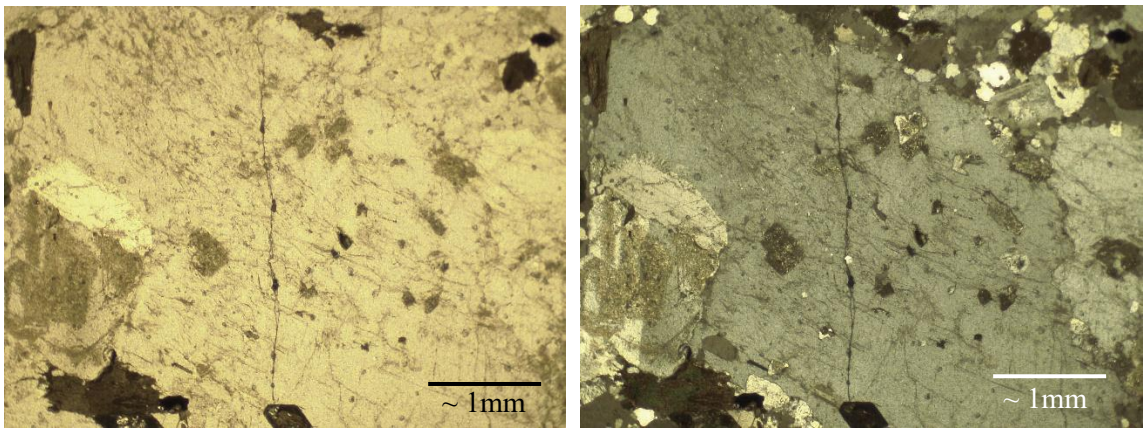
CM22/RAS-01: Granodiorite with curved biotite and a micro deformation zone dominated by quartz particles.



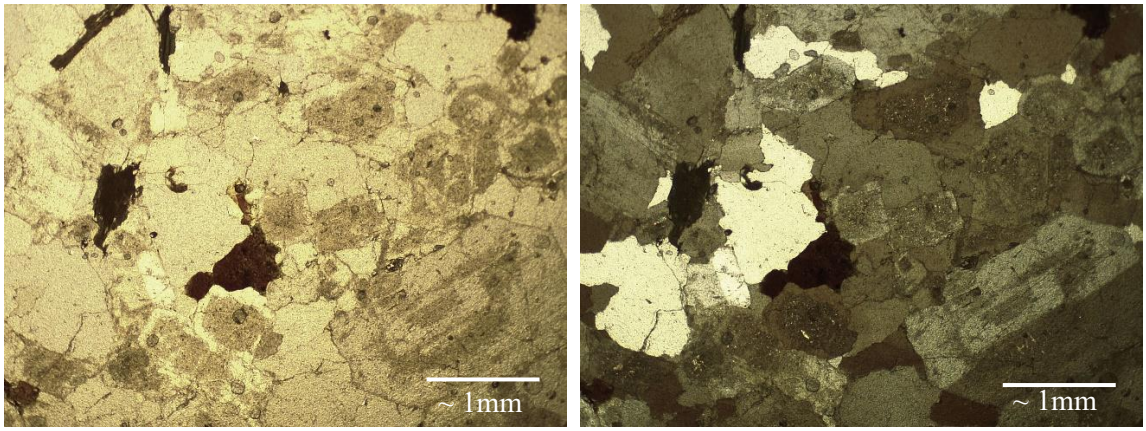
CM22/LS-01: Granodiorite with quartz, plagioclase, alkali feldspar, hornblende and titanite. Secondary mineralogy occurs as sericite alteration of feldspar.



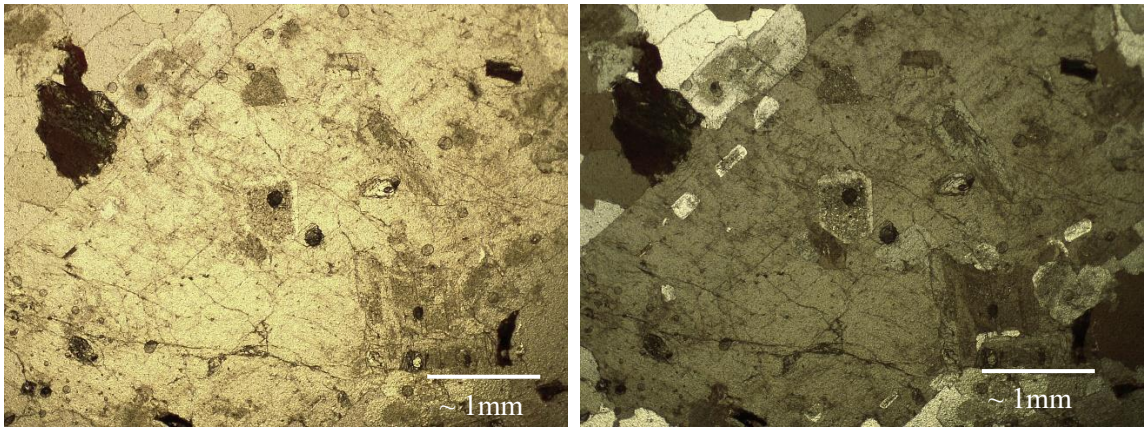
CM22/LS-01: Granodiorite containing fractured alkali feldspar megacryst with feldspar inclusions.



CM22/KG-01: Granodiorite with quartz, plagioclase, alkali feldspar and biotite. Feldspars are moderately sericitised, particularly in grain cores. Plagioclase is sometimes zoned.



CM22/KG-01: Granodiorite with alkali feldspar megacryst containing aligned feldspar inclusions.



CM22/RAS-01

Emplacement

Antecryst

Xenocryst

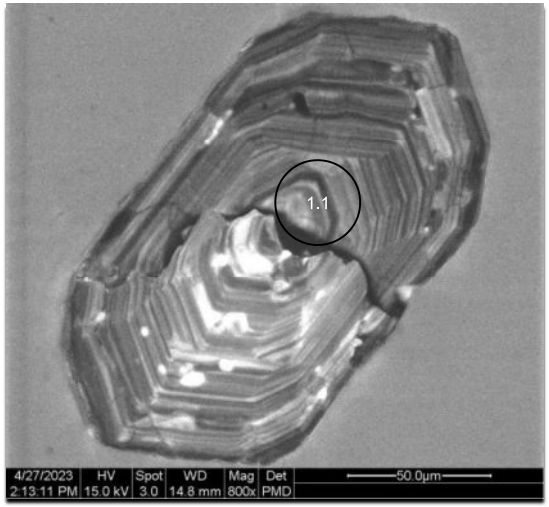
Discordant

Rejected due to Pb loss

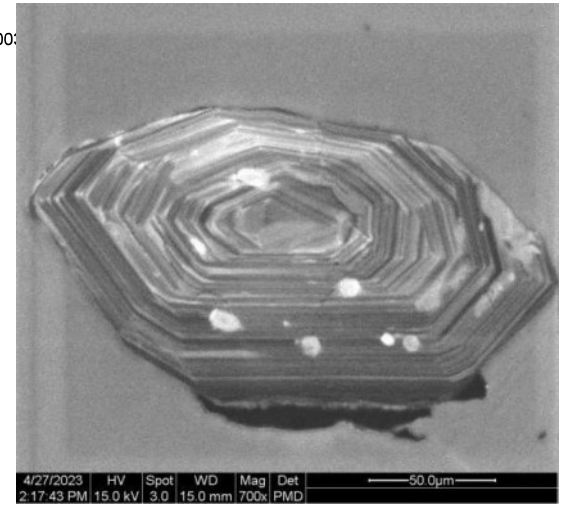
Reserved for future trace element analysis

22/12/2023

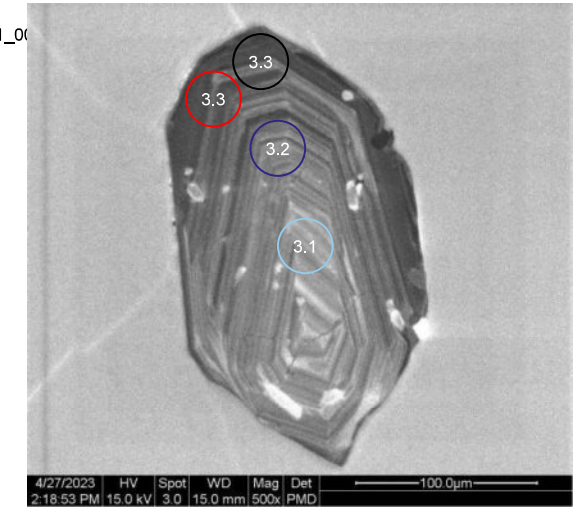
Grain 001
Image CM22RAS01_001



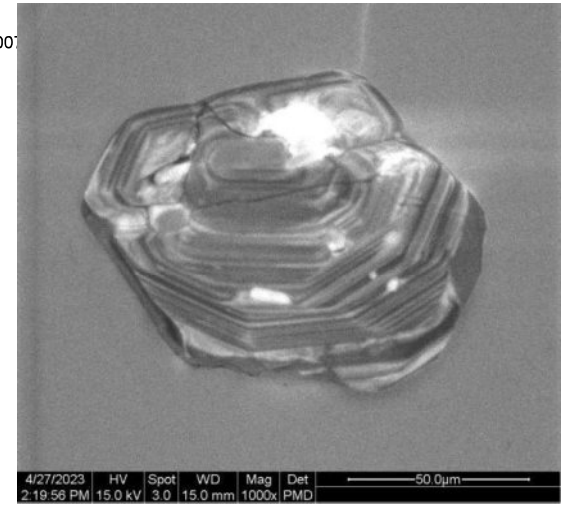
Grain 002
Image CM22RAS01_00



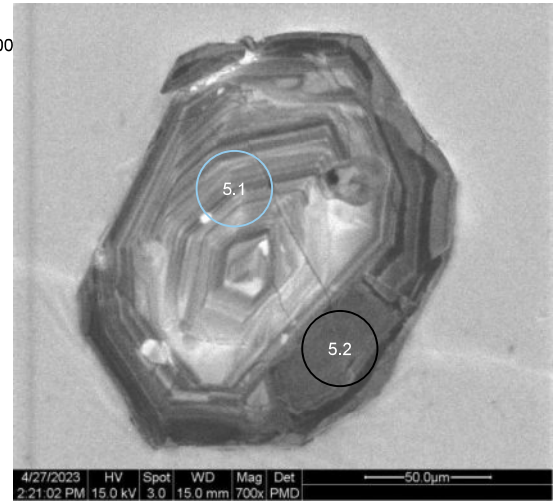
Grain 003
Image CM22RAS01_0



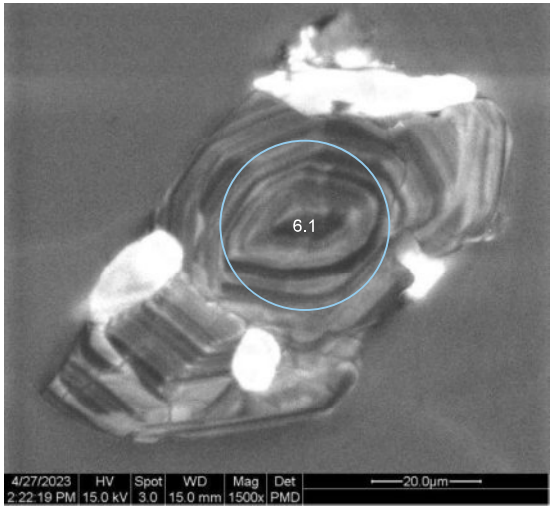
Grain 004
Image CM22RAS01_007



Grain 005
Image CM22RAS01_00



Grain 006
Image CM22RAS01_011



Grain 007
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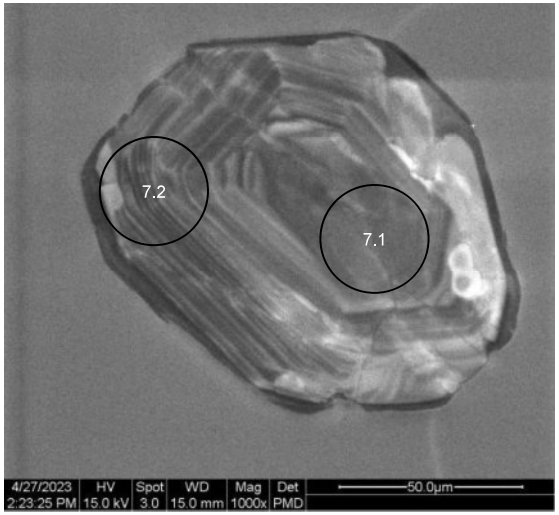

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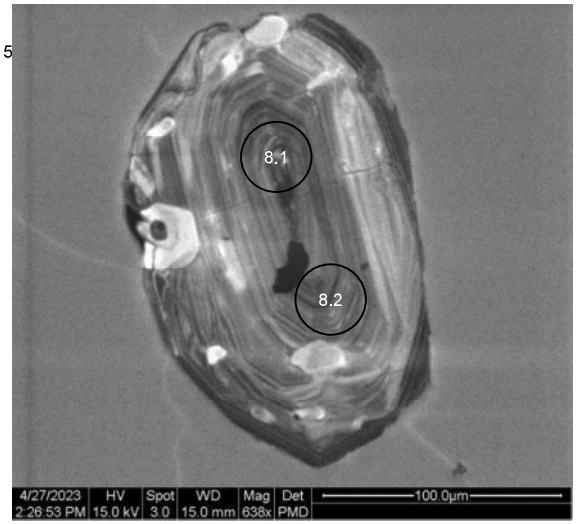
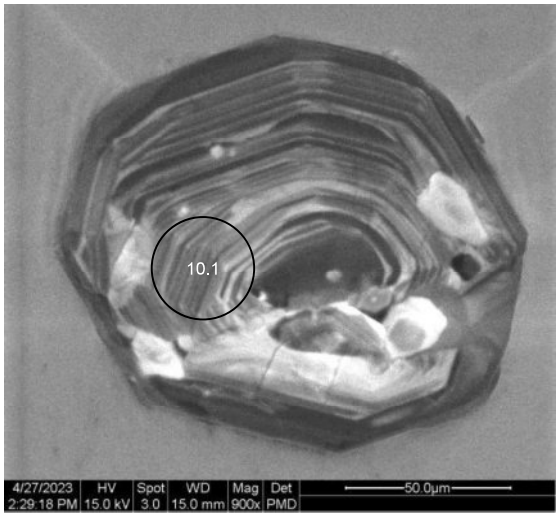
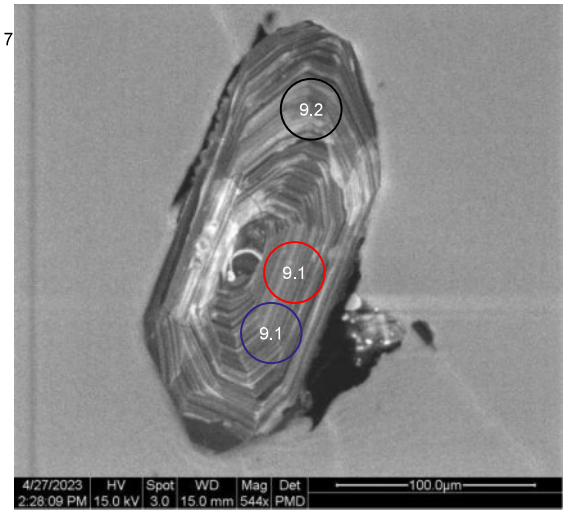
Grain 008
Image CM22RAS01_015



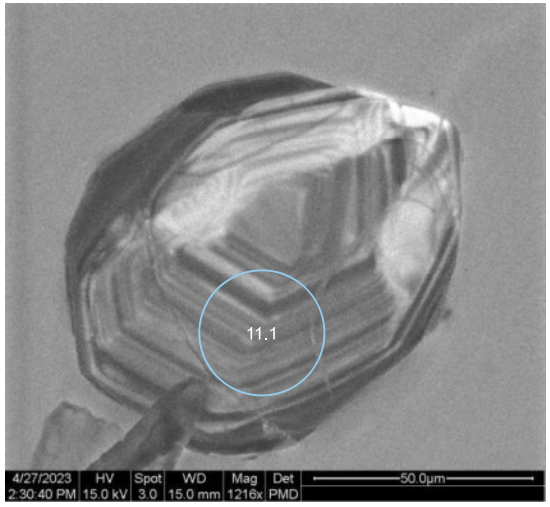
Grain 010
Image CM22RAS01_019



Grain 009
Image CM22RAS01_017



Grain 011
Image CM22RAS01_021



Grain 012
Image CM22RAS01_023

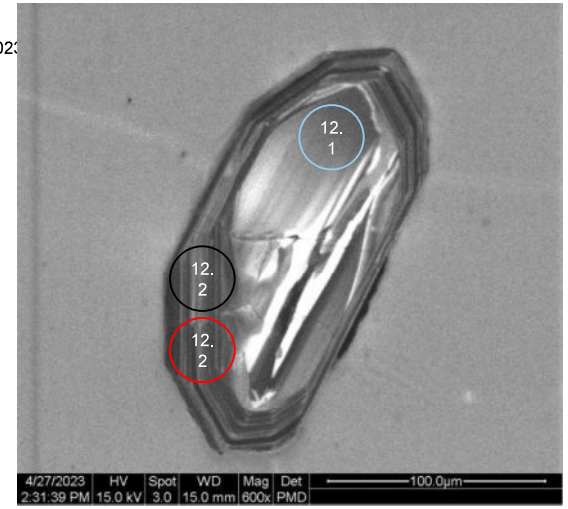


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Image CM22RAS01_02

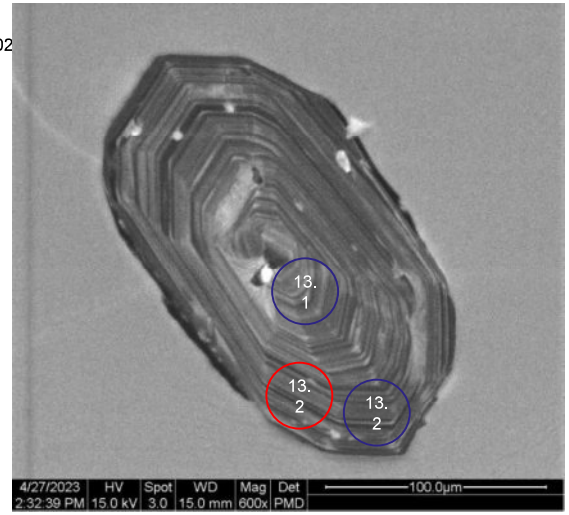

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Image CM22RAS01_027

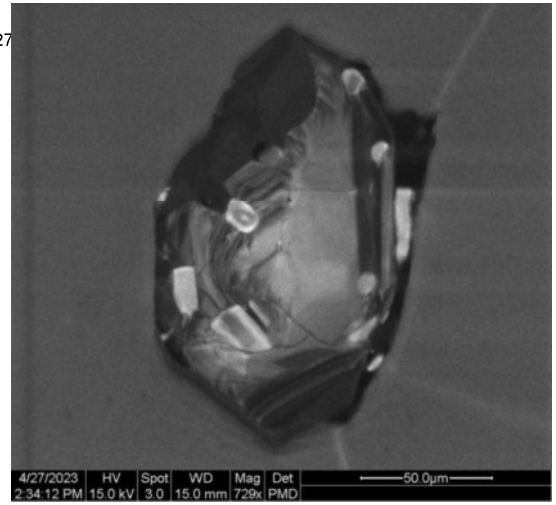

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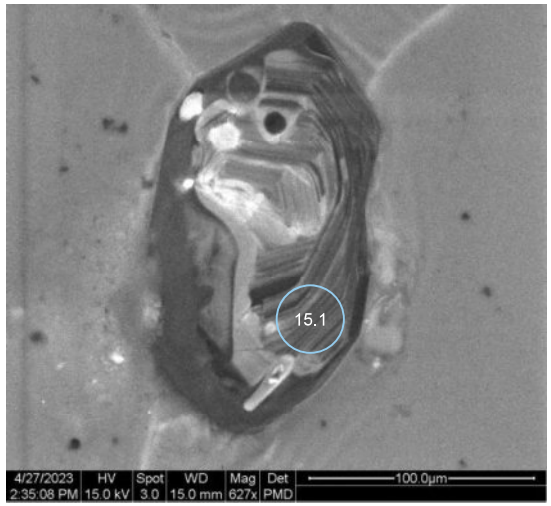
Image CM22RAS01_029



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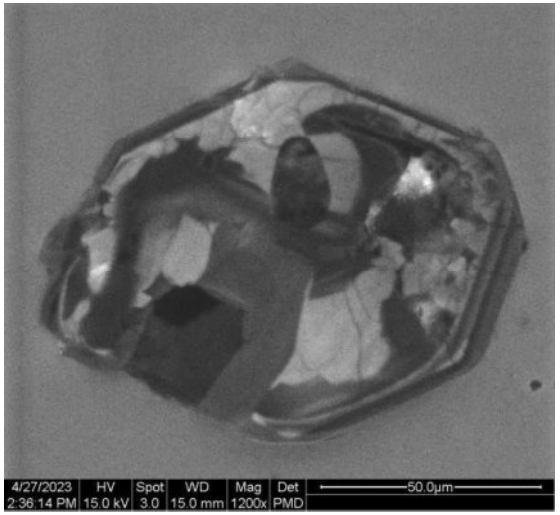
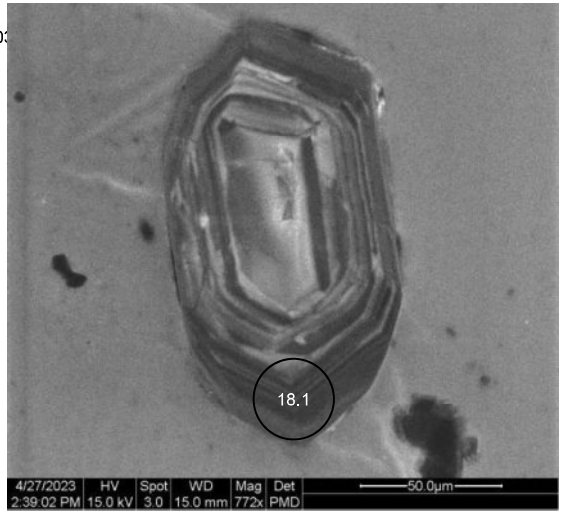
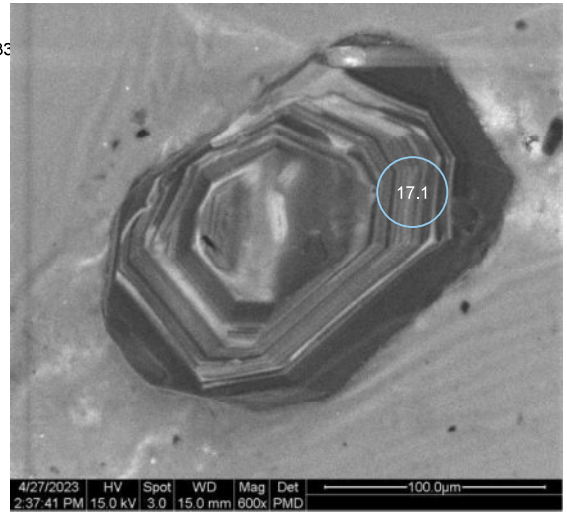
Grain 016
Image CM22RAS01_031



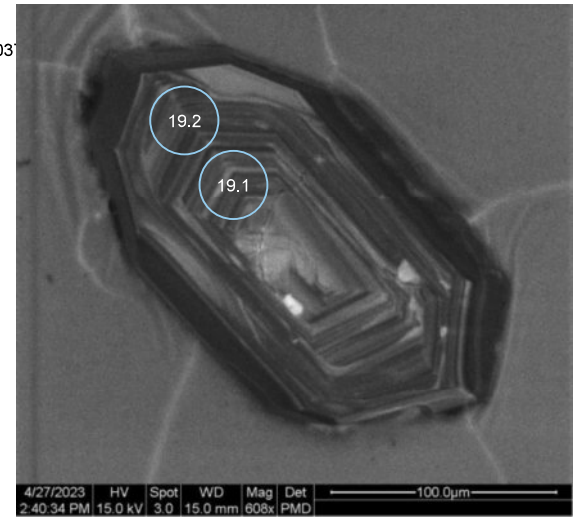
Grain 018
Image CM22RAS01_03



Grain 017
Image CM22RAS01_033

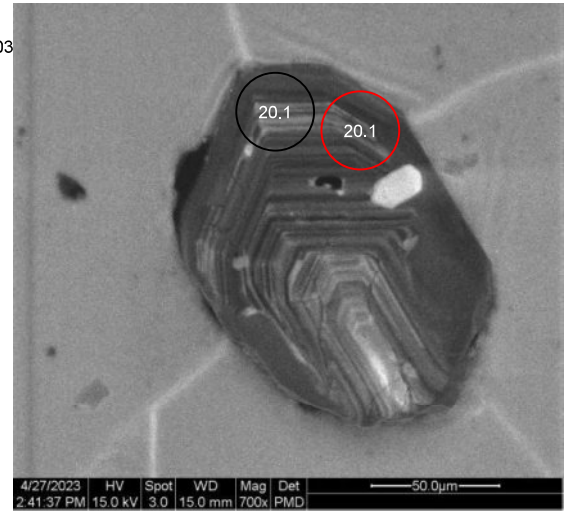


Grain 019
Image CM22RAS01_03



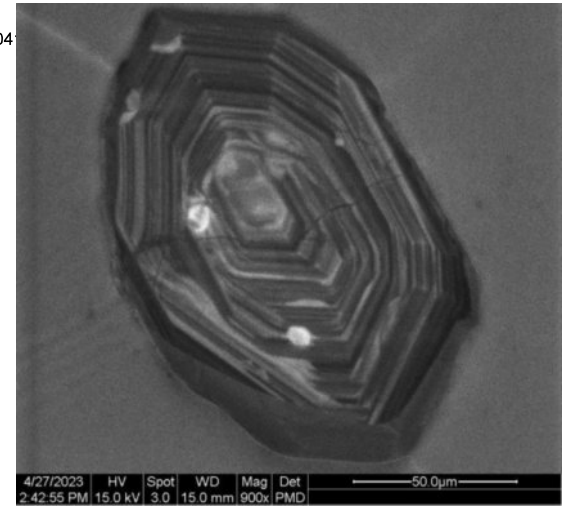
Grain 020

Image CM22RAS01_03



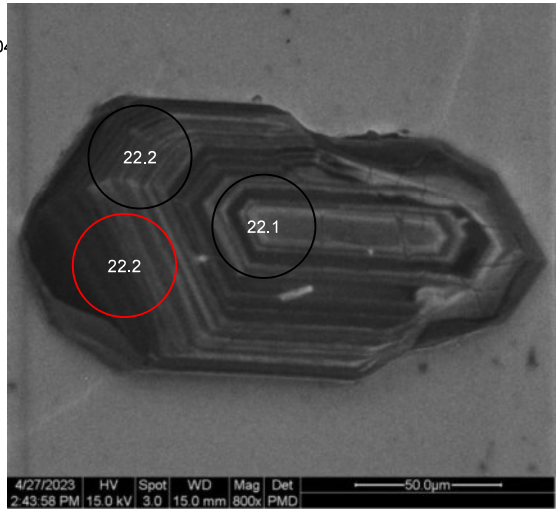
Grain 021

Image CM22RAS01_04



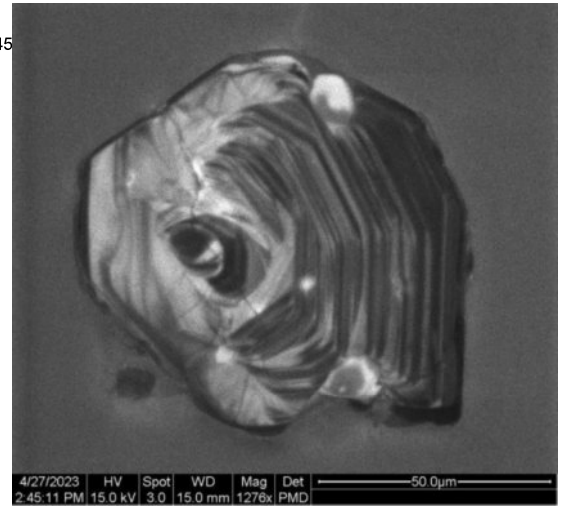
Grain 022

Image CM22RAS01_04

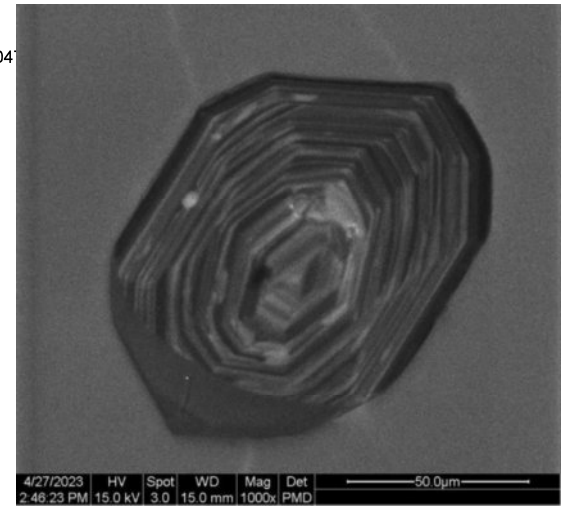


Grain 023

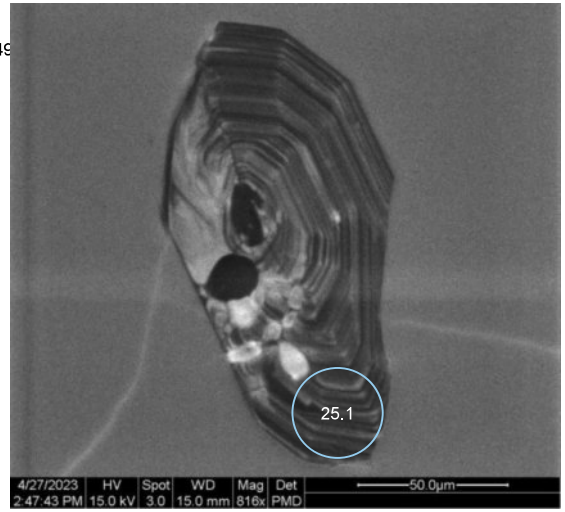
Image CM22RAS01_045



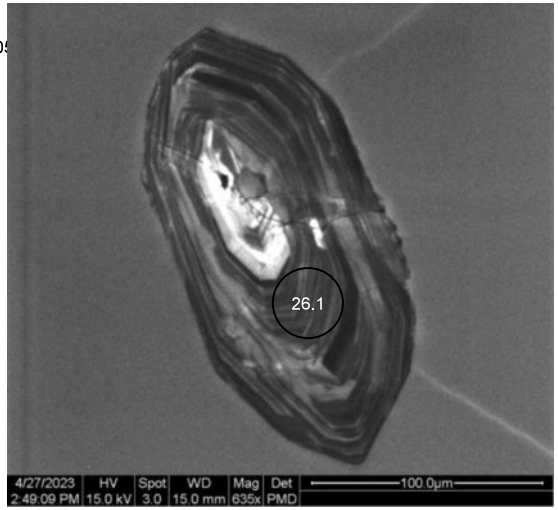
Grain 024
Image CM22RAS01_047



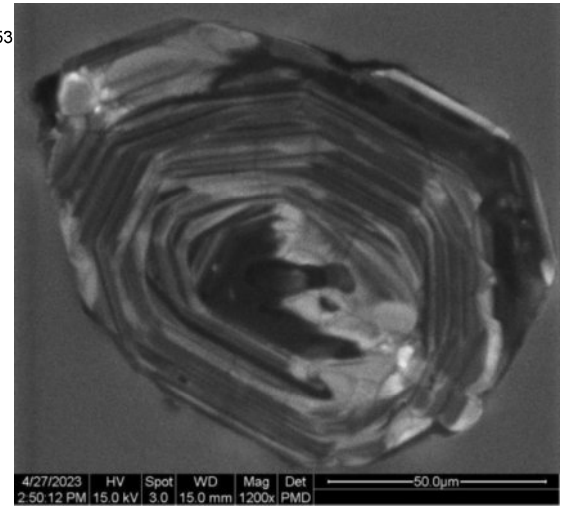
Grain 025
Image CM22RAS01_049



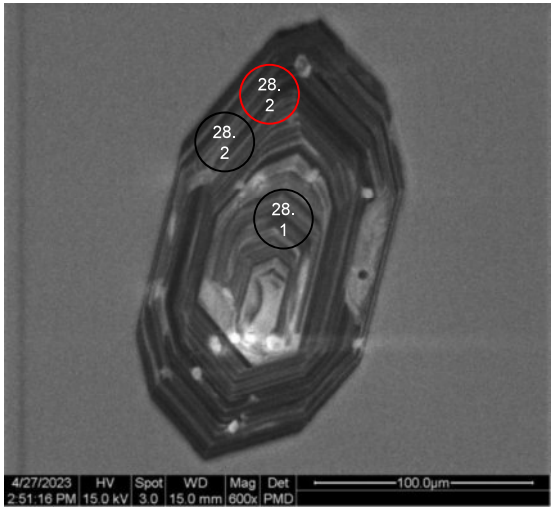
Grain 026
Image CM22RAS01_05



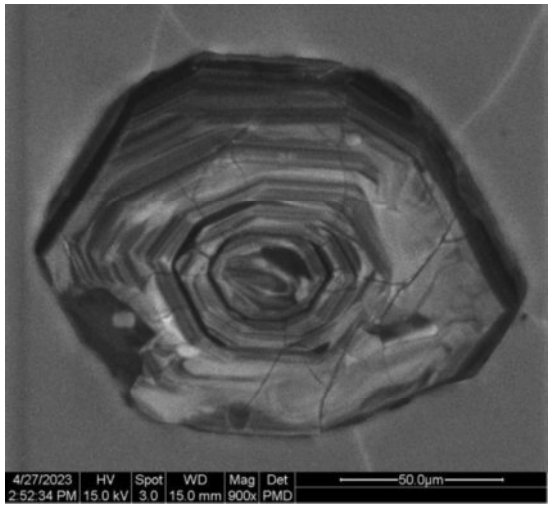
Grain 027
Image CM22RAS01_053



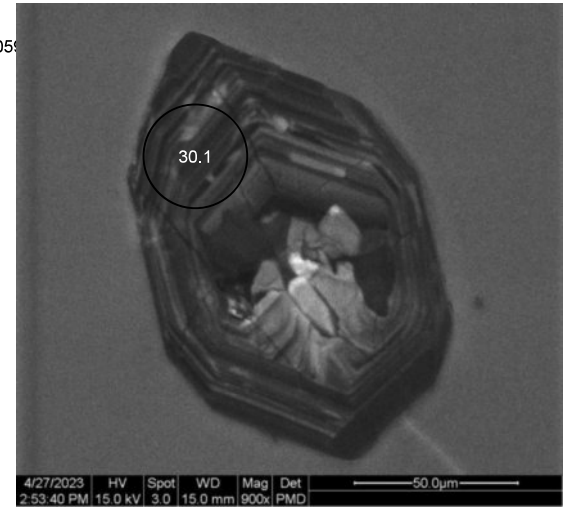
Grain 028
Image CM22RAS01_055



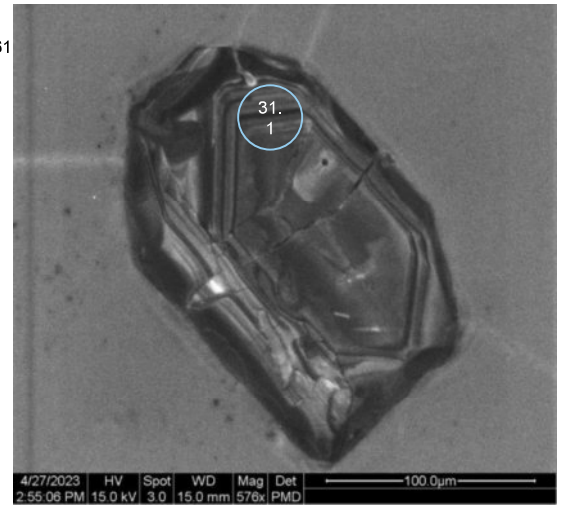
Grain 029
Image CM22RAS01_057



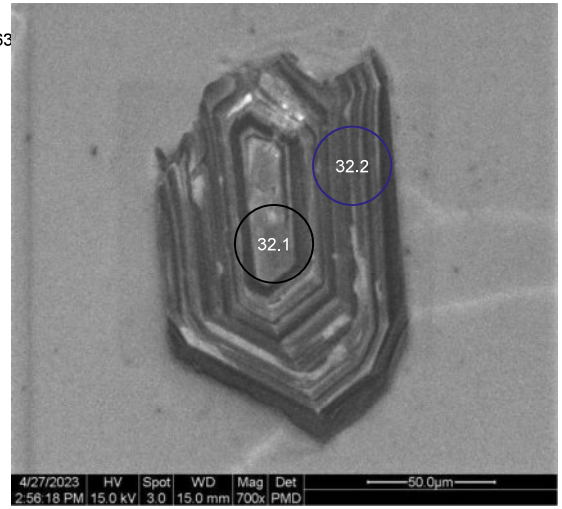
Grain 030
Image CM22RAS01_059



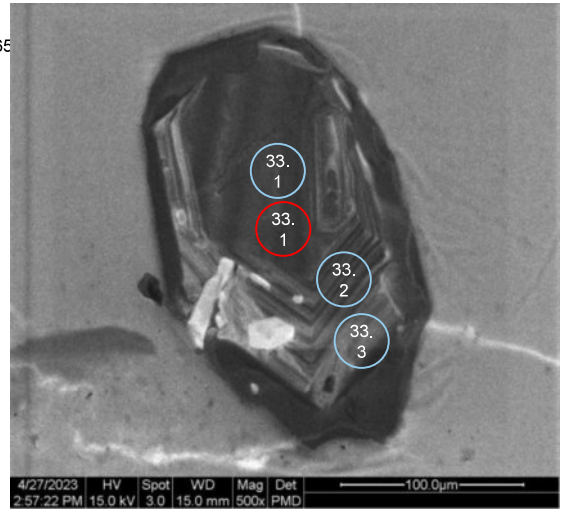
Grain 031
Image CM22RAS01_061



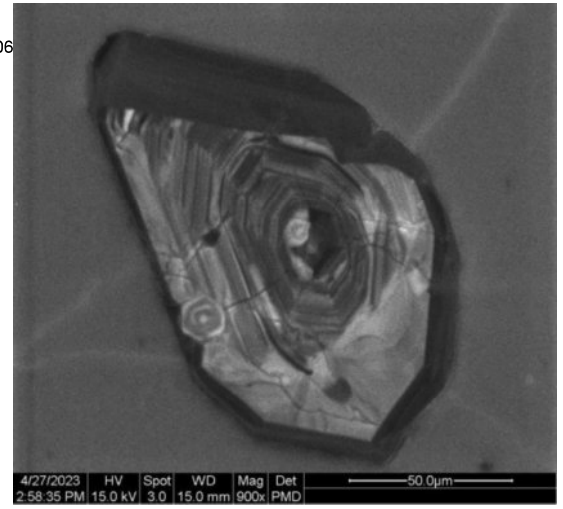
Grain 032
Image CM22RAS01_063



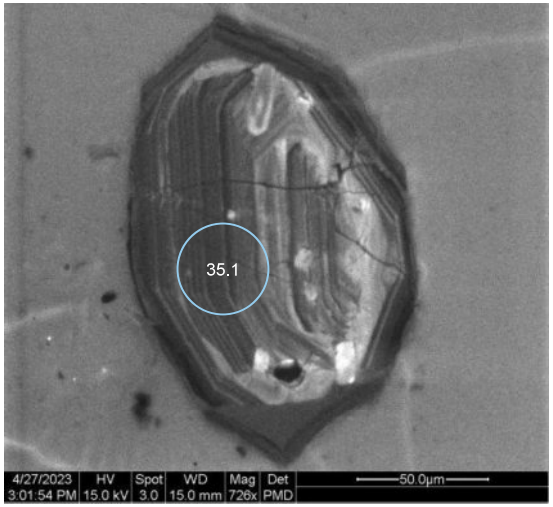
Grain 033
Image CM22RAS01_065



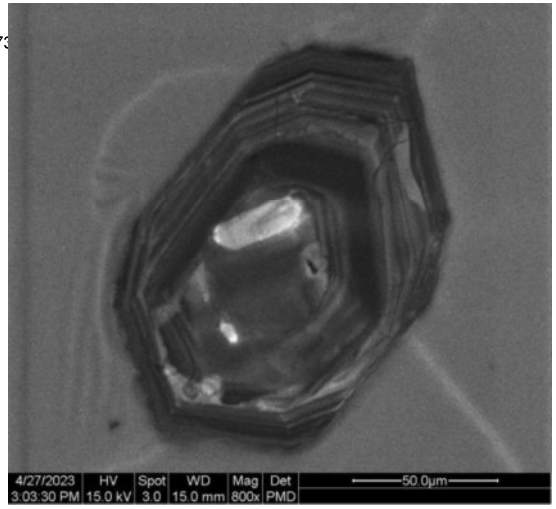
Grain 034
Image CM22RAS01_06



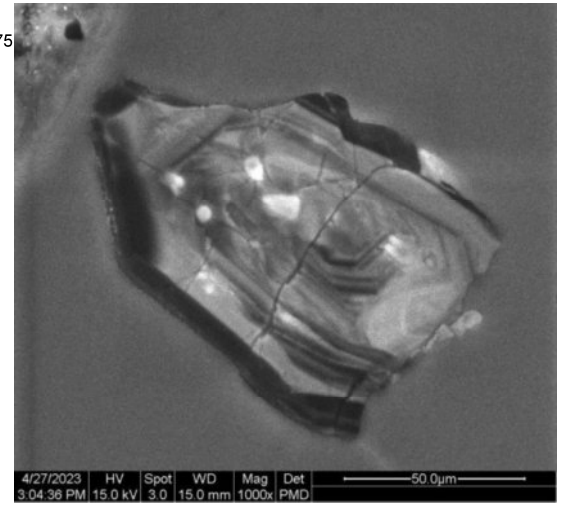
Grain 035
Image CM22RAS01_071



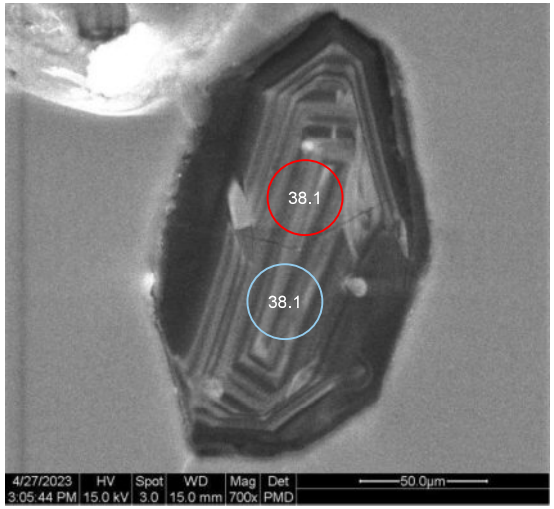
Grain 036
Image CM22RAS01_073



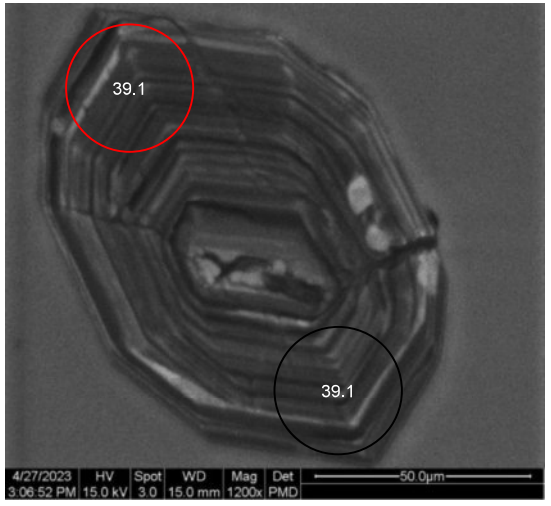
Grain 037
Image CM22RAS01_075



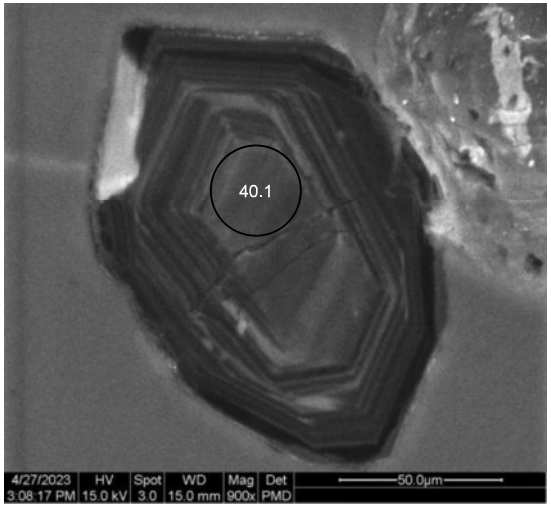
Grain 038
Image CM22RAS01_077



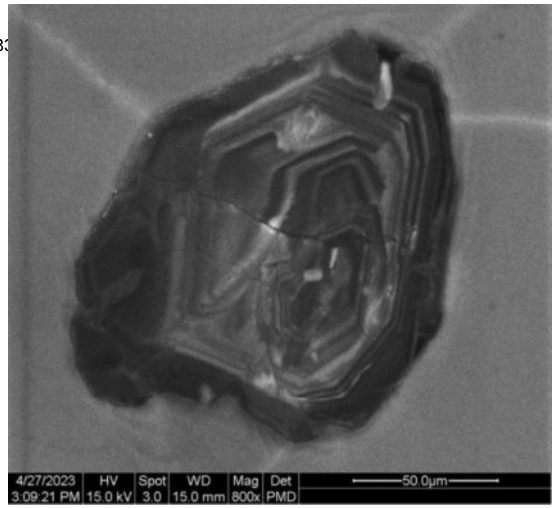
Grain 039
Image CM22RAS01_079



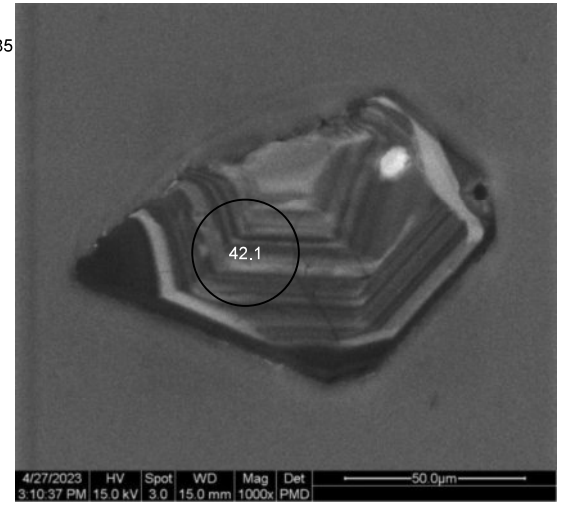
Grain 040
Image CM22RAS01_081



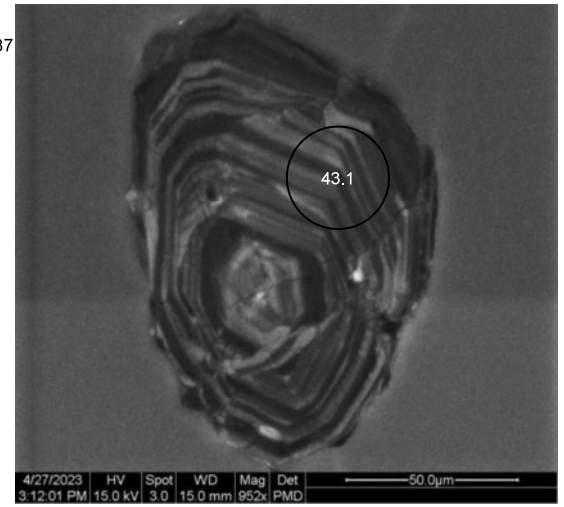
Grain 041
Image CM22RAS01_083



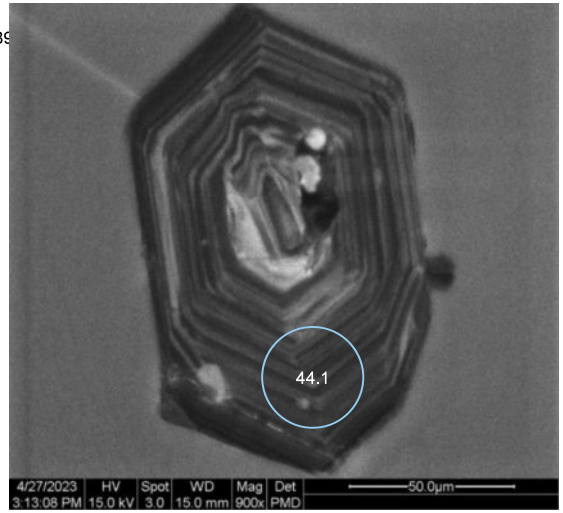
Grain 042
Image CM22RAS01_085



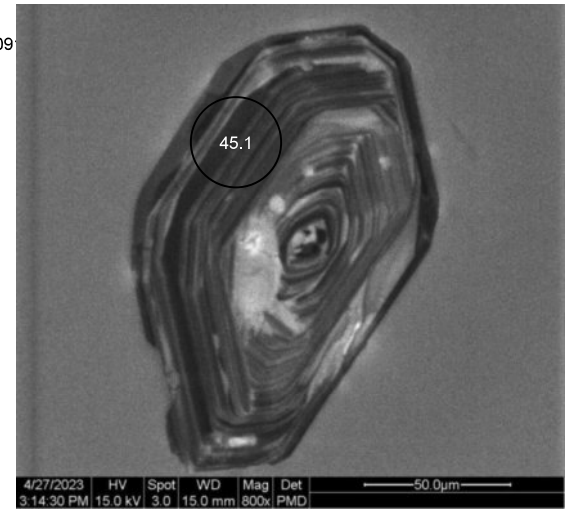
Grain 043
Image CM22RAS01_087



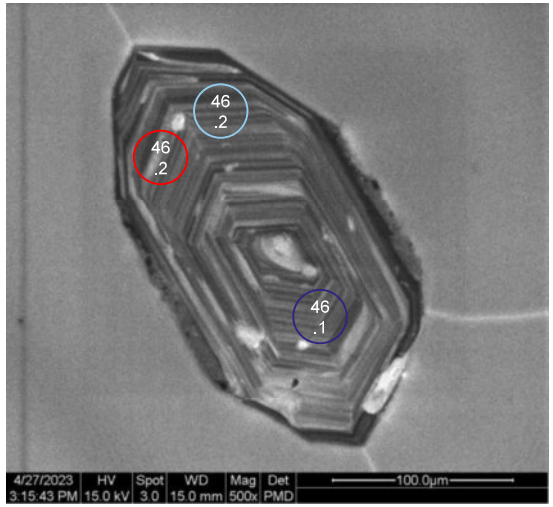
Grain 044
Image CM22RAS01_089



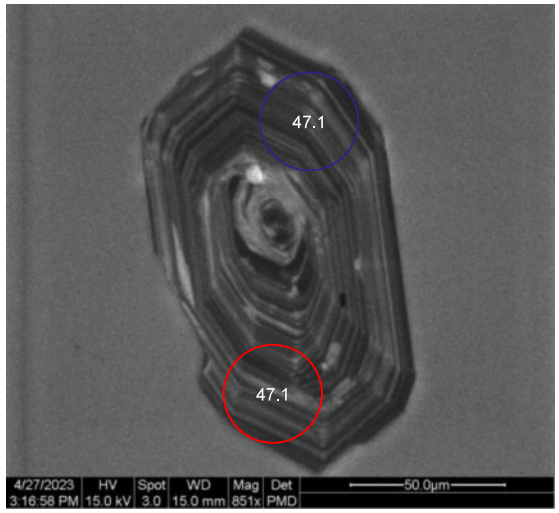
Grain 045
Image CM22RAS01_091



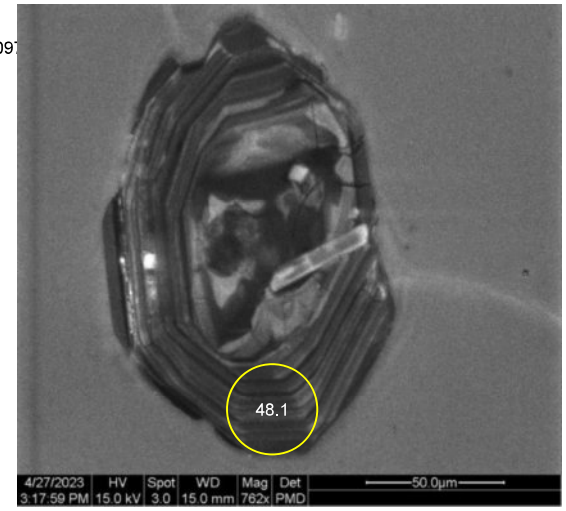
Grain 046
Image CM22RAS01_093



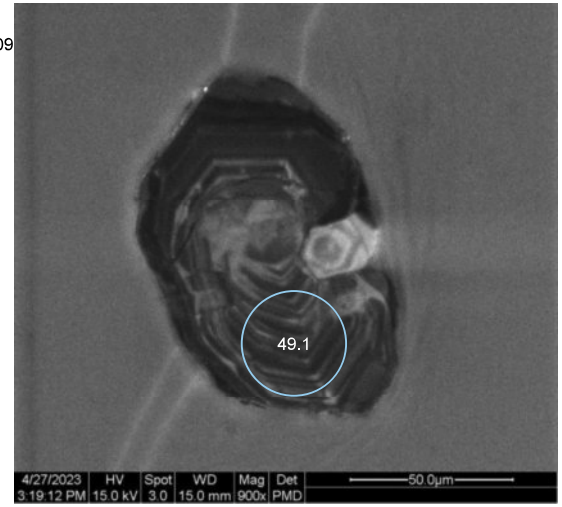
Grain 047
Image CM22RAS01_095



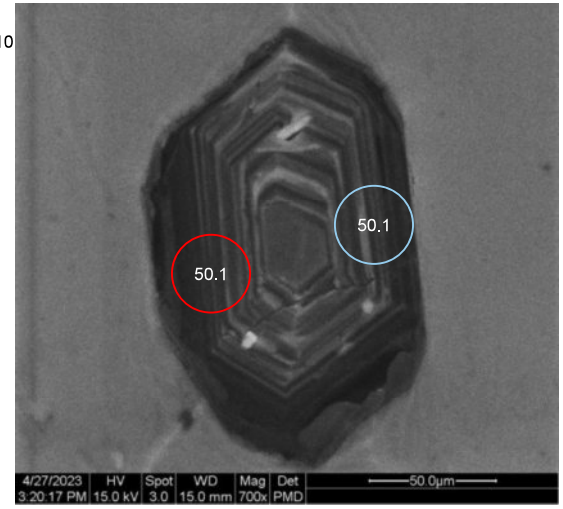
Grain 048
Image CM22RAS01_097



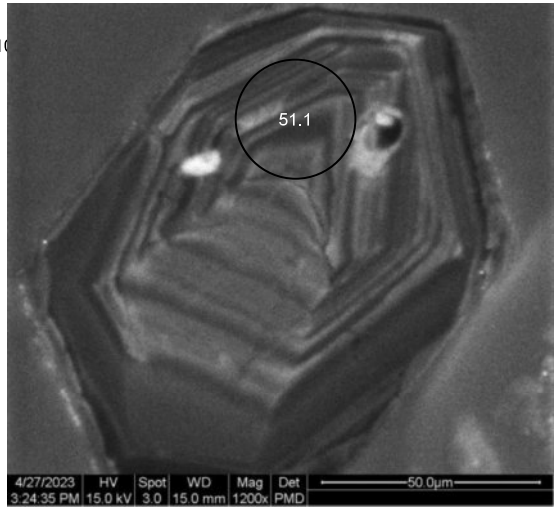
Grain 049
Image CM22RAS01_099



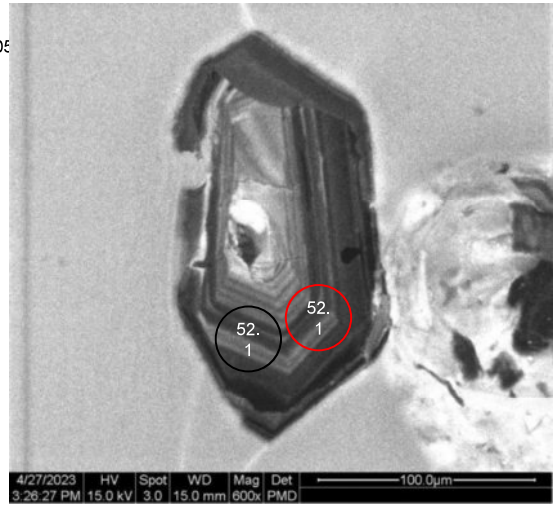
Grain 050
Image CM22RAS01_101



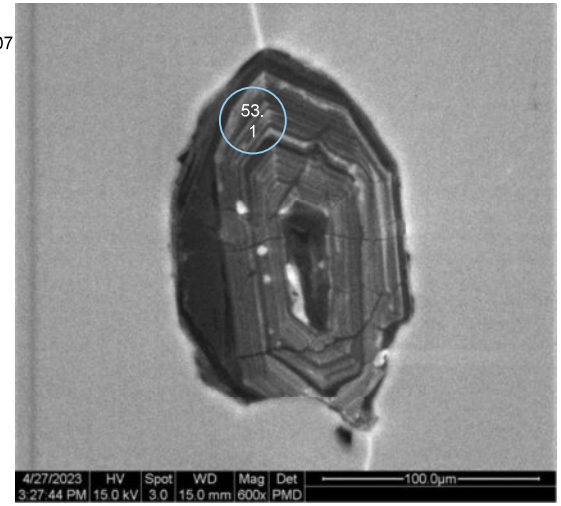
Grain 051
Image CM22RAS01_103



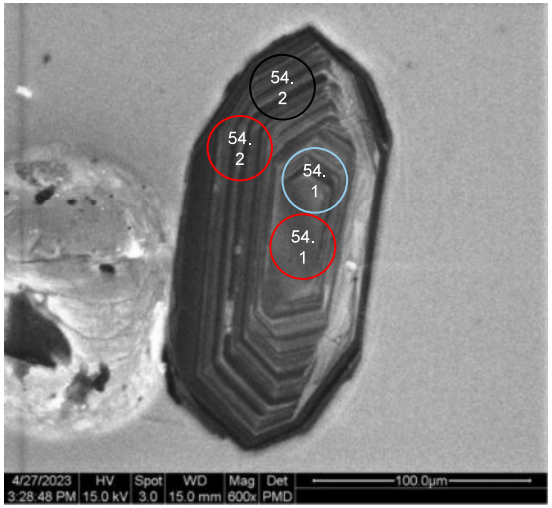
Grain 052
Image CM22RAS01_105



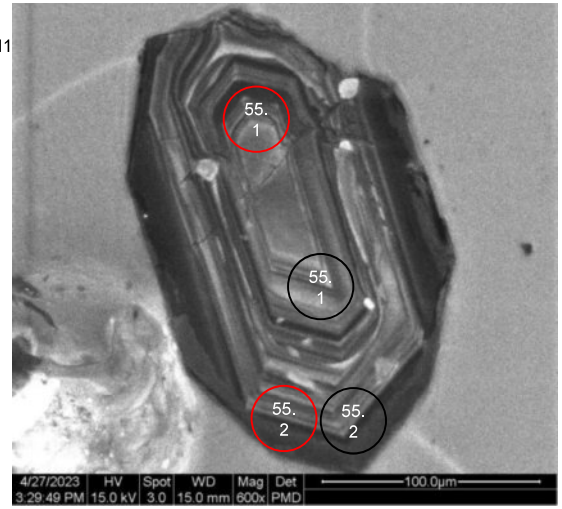
Grain 053
Image CM22RAS01_107



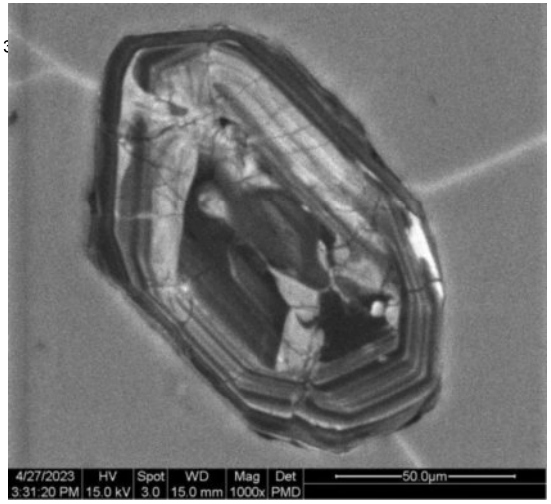
Grain 054
Image CM22RAS01_109



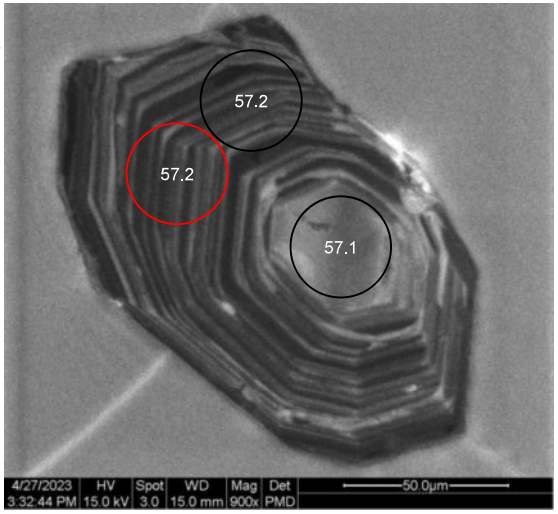
Grain 055
Image CM22RAS01_111



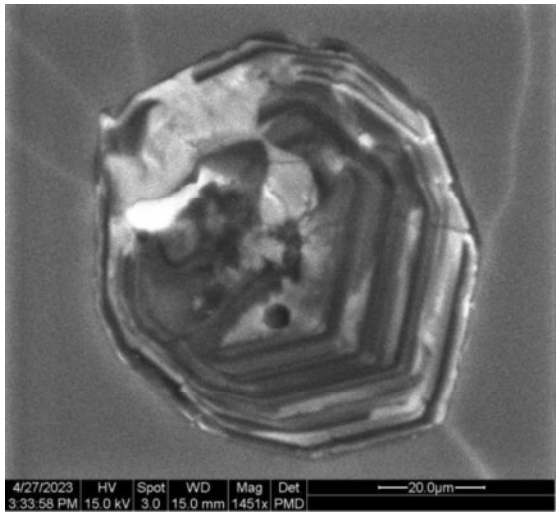
Grain 056
Image CM22RAS01_113



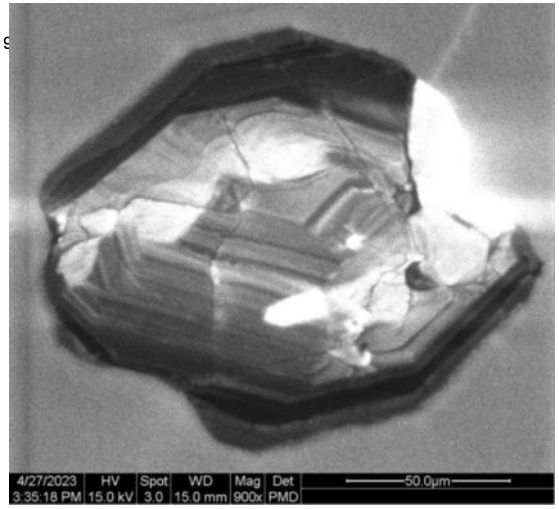
Grain 057
Image CM22RAS01_115



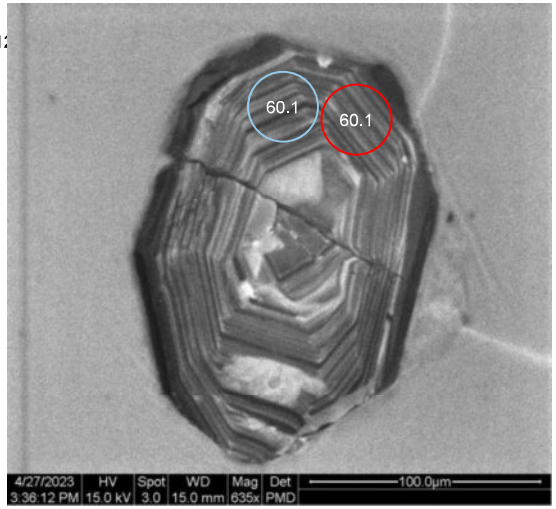
Grain 058
Image CM22RAS01_117



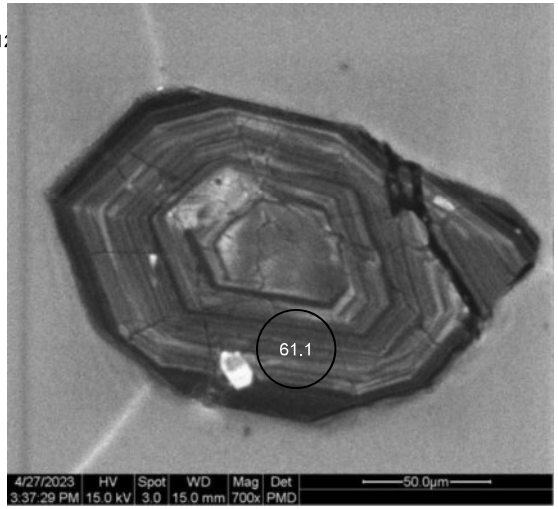
Grain 059
Image CM22RAS01_119



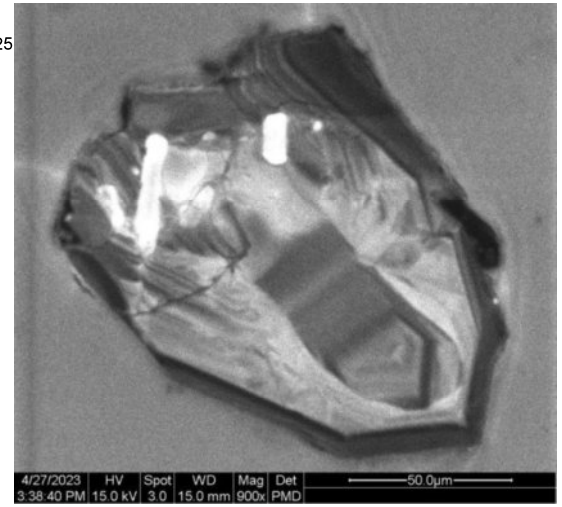
Grain 060
Image CM22RAS01_12



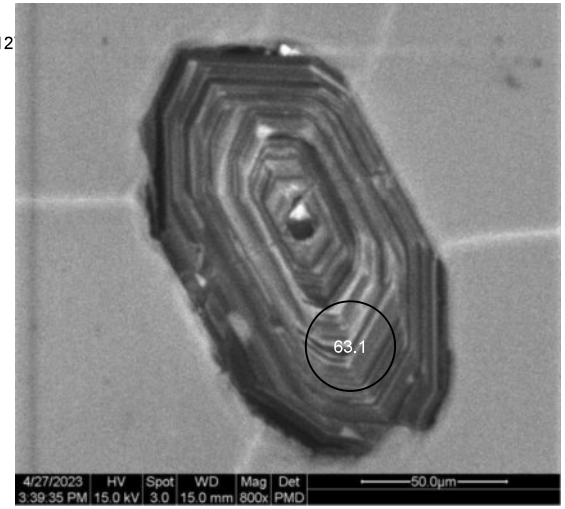
Grain 061
Image CM22RAS01_12



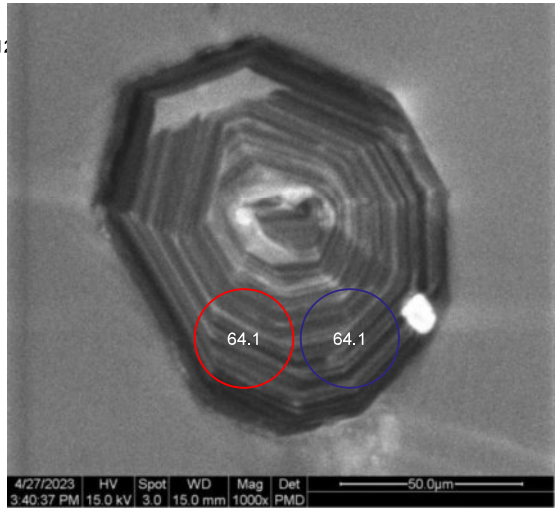
Grain 062
Image CM22RAS01_125



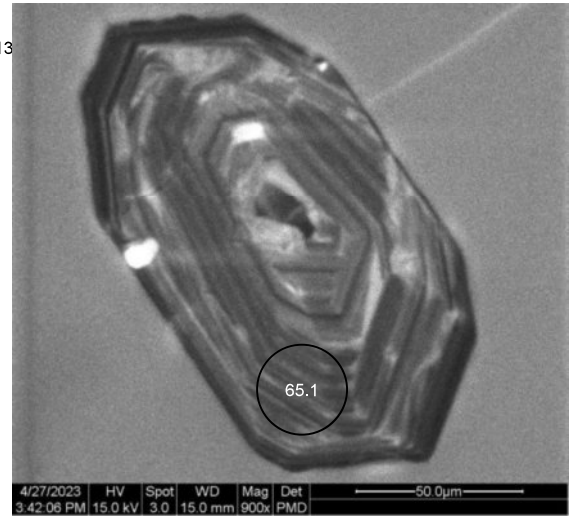
Grain 063
Image CM22RAS01_12



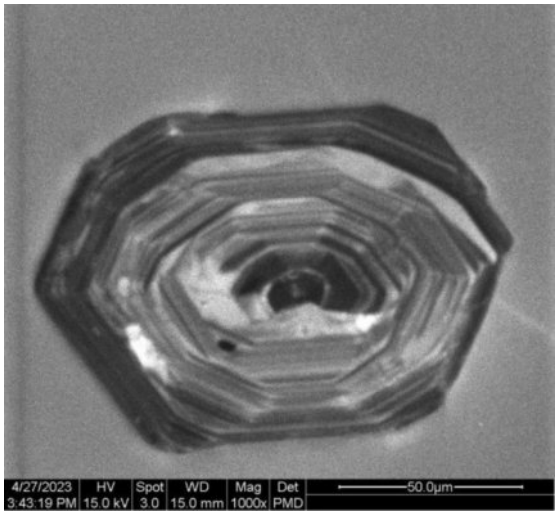
Grain 064
Image CM22RAS01_12



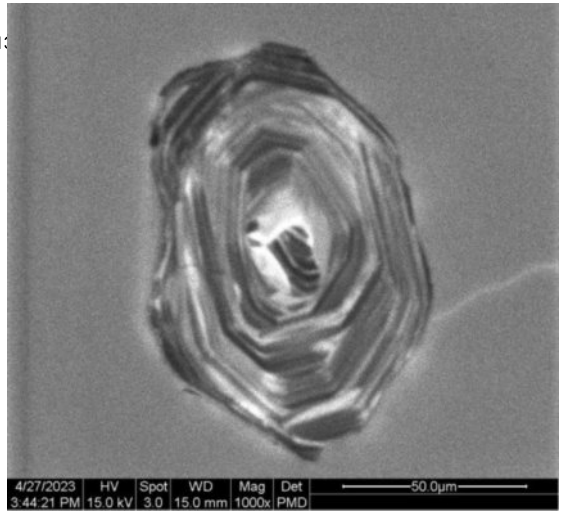
Grain 065
Image CM22RAS01_13



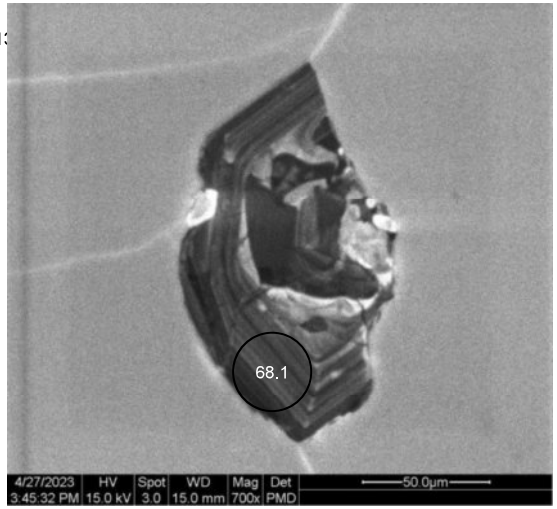
Grain 066
Image CM22RAS01_133



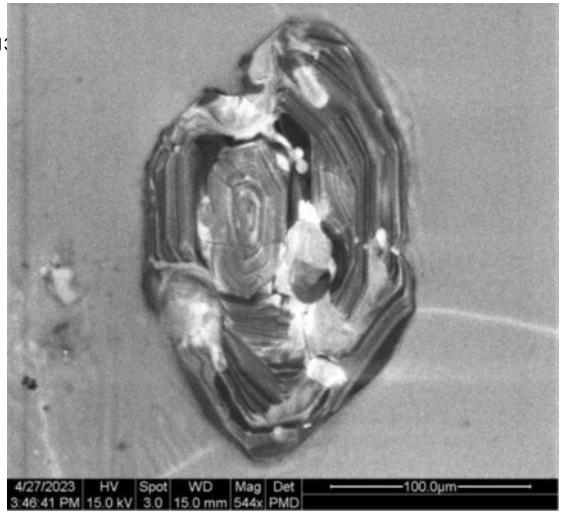
Grain 067
Image CM22RAS01_13



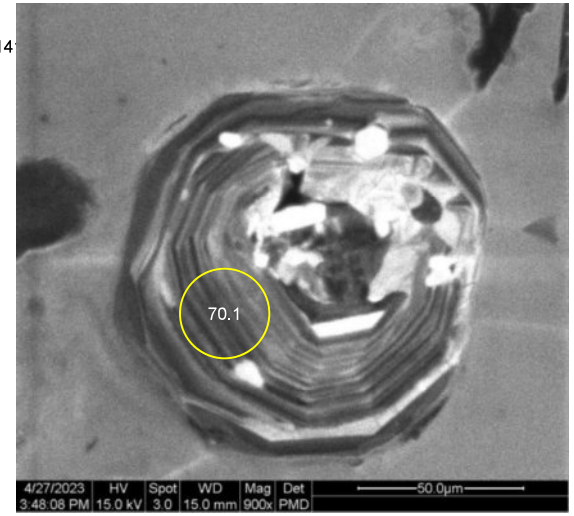
Grain 068
Image CM22RAS01_13



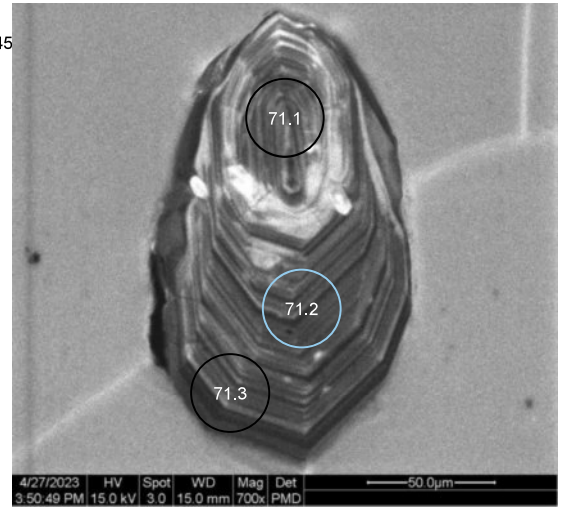
Grain 069
Image CM22RAS01_13



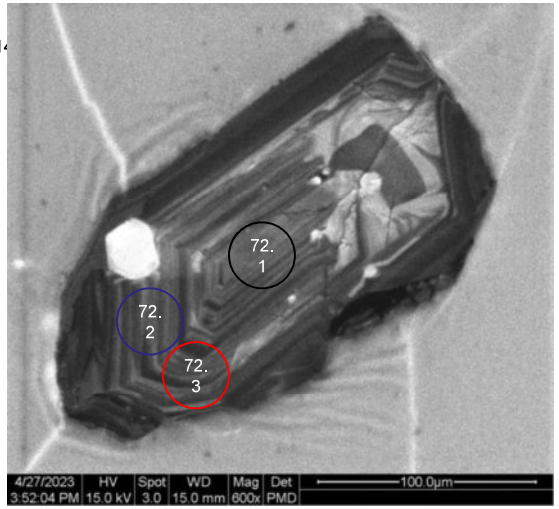
Grain 070
Image CM22RAS01_14



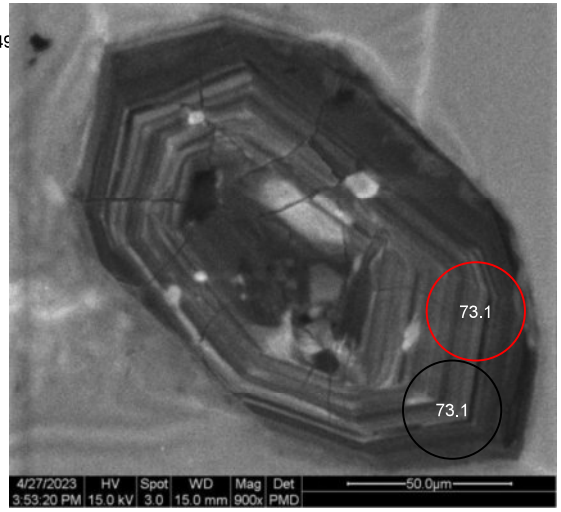
Grain 071
Image CM22RAS01_145



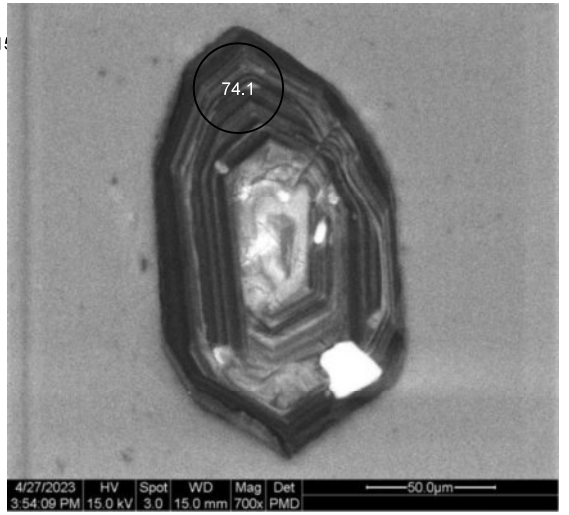
Grain 072
Image CM22RAS01_14



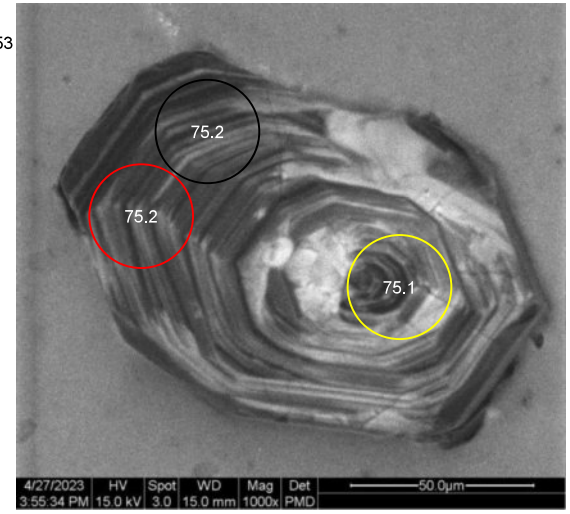
Grain 073
Image CM22RAS01_149



Grain 074
Image CM22RAS01_15

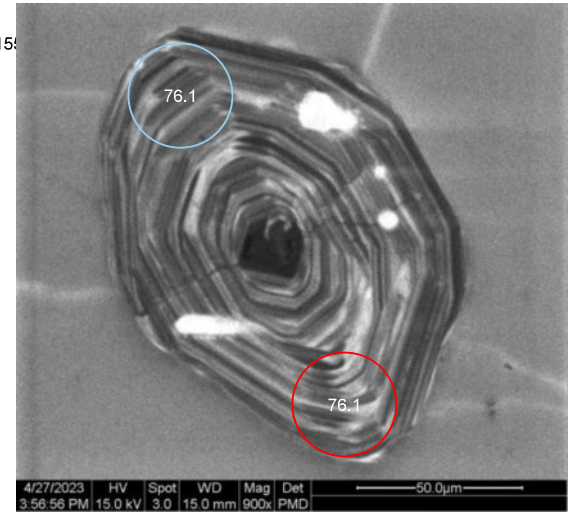


Grain 075
Image CM22RAS01_153

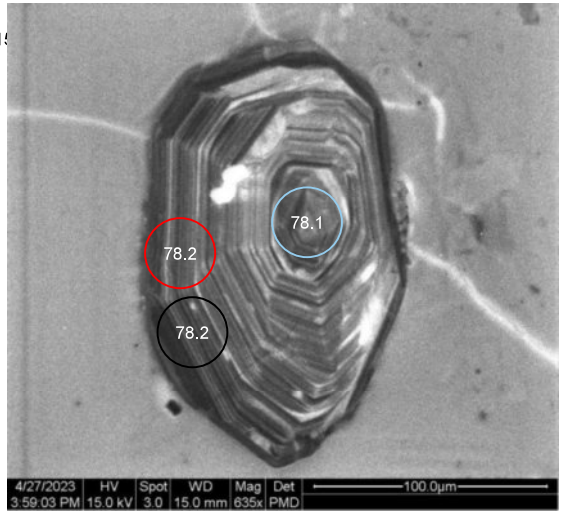


22/12/2023

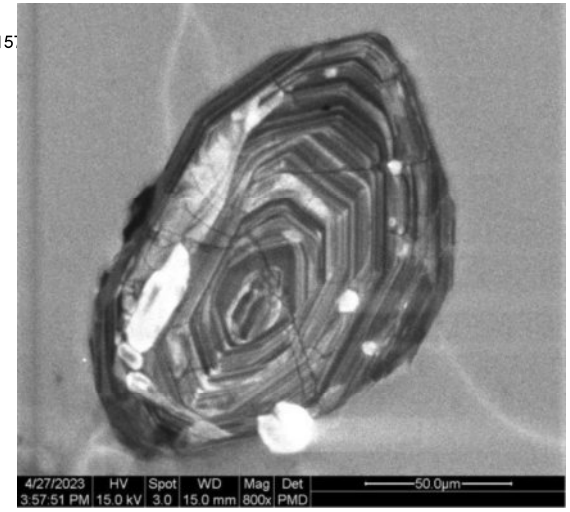
Grain 076
Image CM22RAS01_15



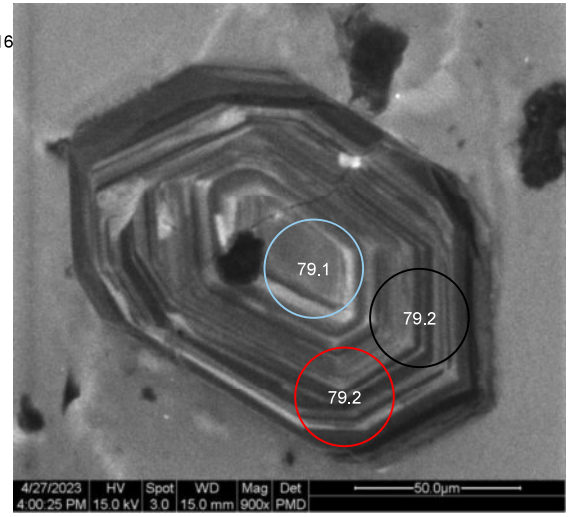
Grain 078
Image CM22RAS01_15



Grain 077
Image CM22RAS01_15

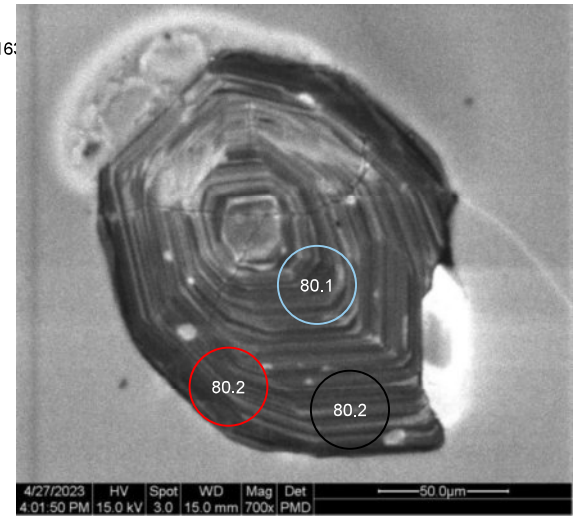


Grain 079
Image CM22RAS01_16

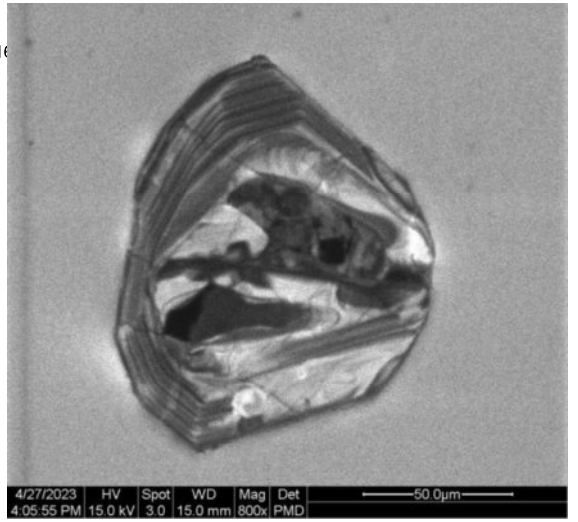


22/12/2023

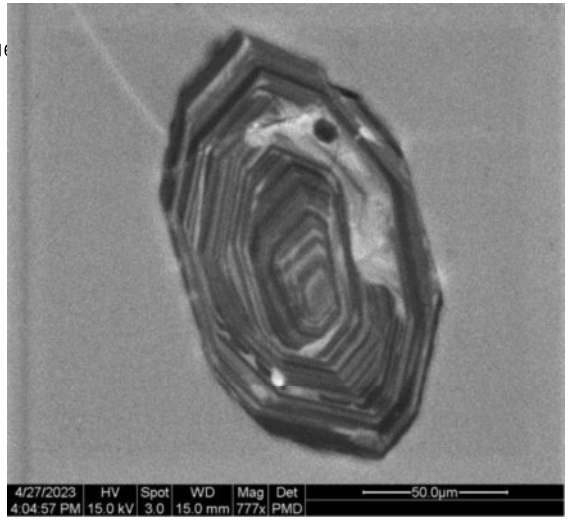
Grain 080
Image CM22RAS01_16



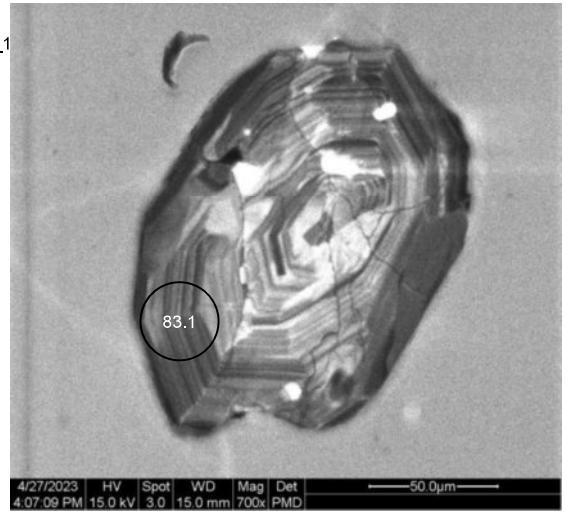
Grain 082
Image CM22RAS01_1



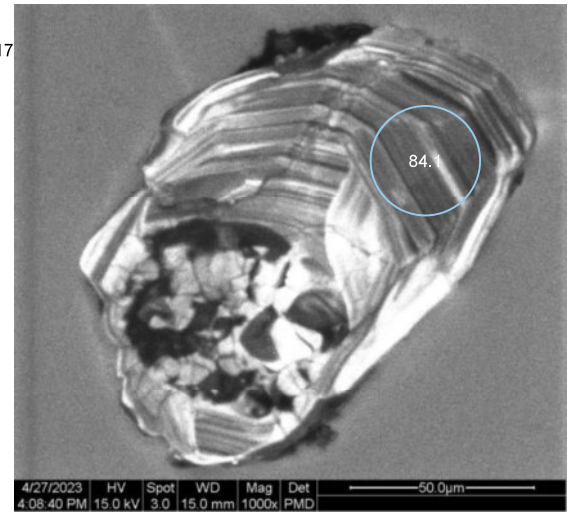
Grain 081
Image CM22RAS01_1



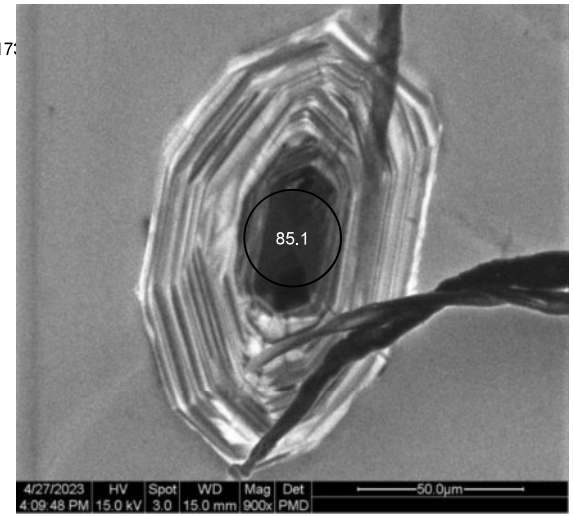
Grain 083
Image CM22RAS01_1



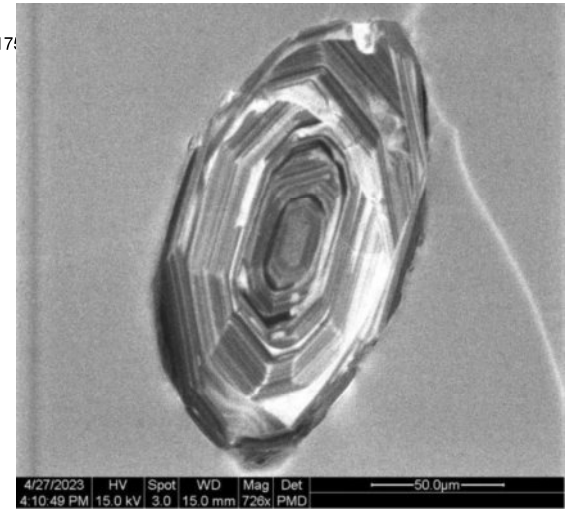
Grain 084
Image CM22RAS01_17



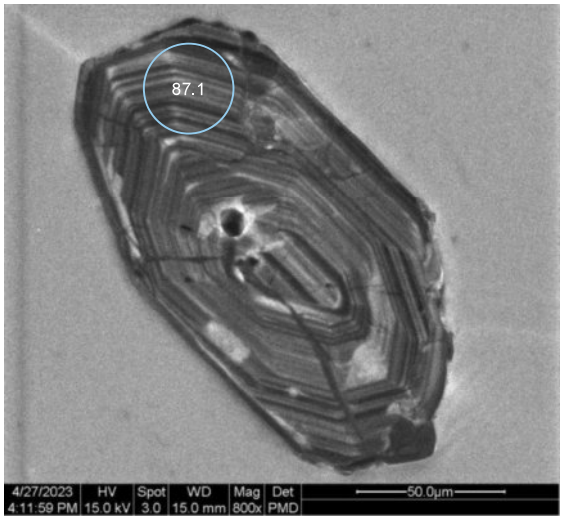
Grain 085
Image CM22RAS01_17



Grain 086
Image CM22RAS01_17



Grain 087
Image CM22RAS01_177



CM22/LS-01

Emplacement

Antecryst

Xenocryst

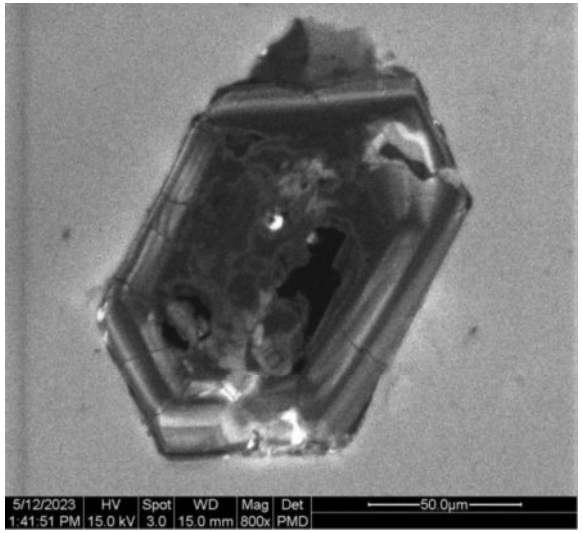
Discordant

Rejected due to Pb loss

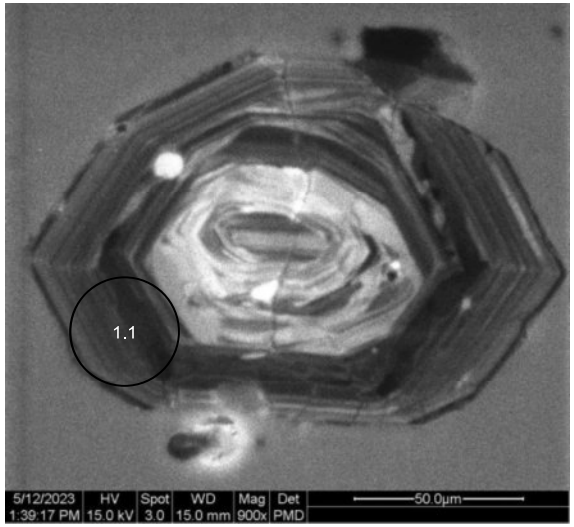
Reserved for future trace element analysis

22/12/2023

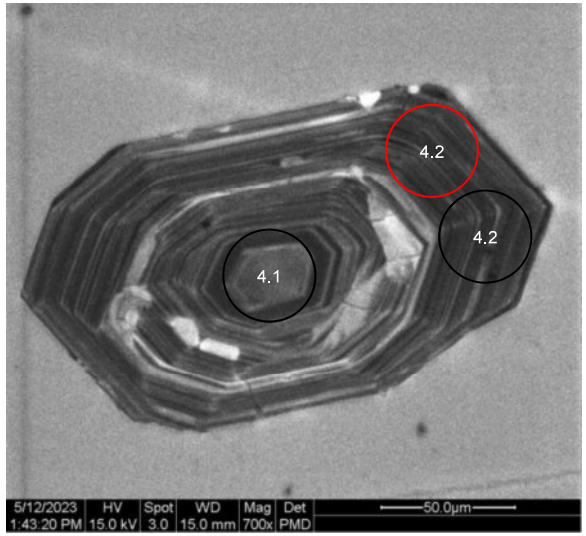
Grain 003
Image CM22LS01_007



Grain 002
Image CM22LS01_005

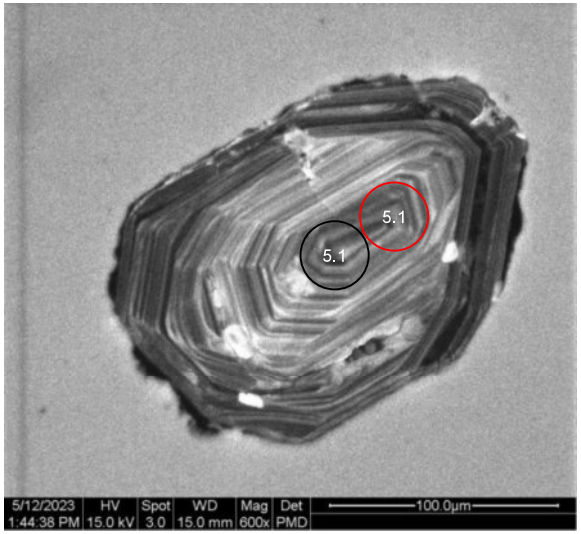


Grain 004
Image CM22LS01_009

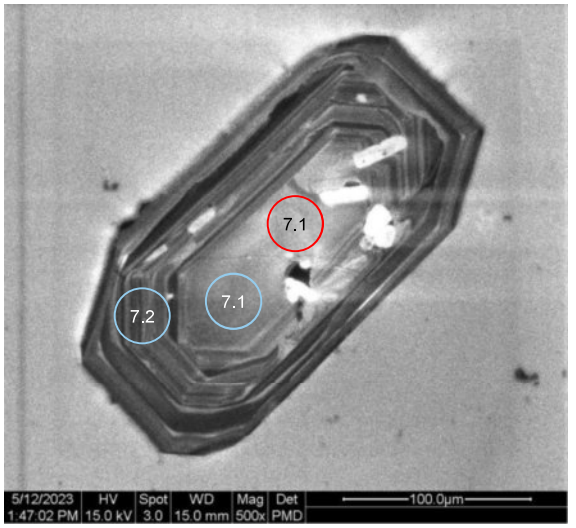


22/12/2023

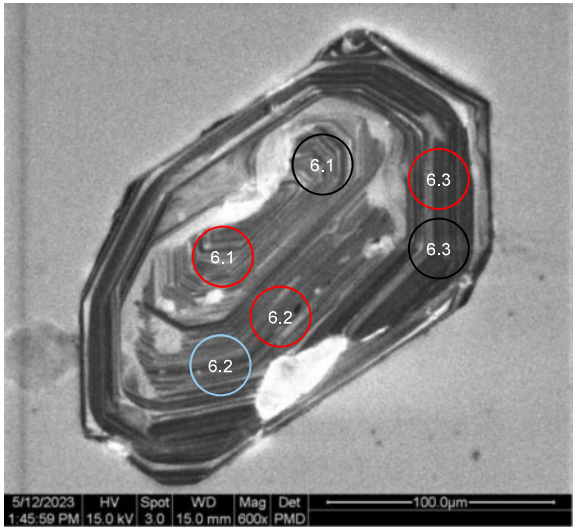
Grain 005
Image CM22LS01_011



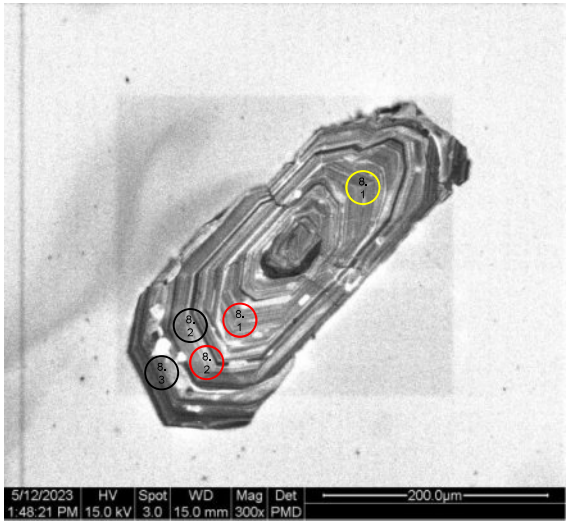
Grain 007
Image CM22LS01_015



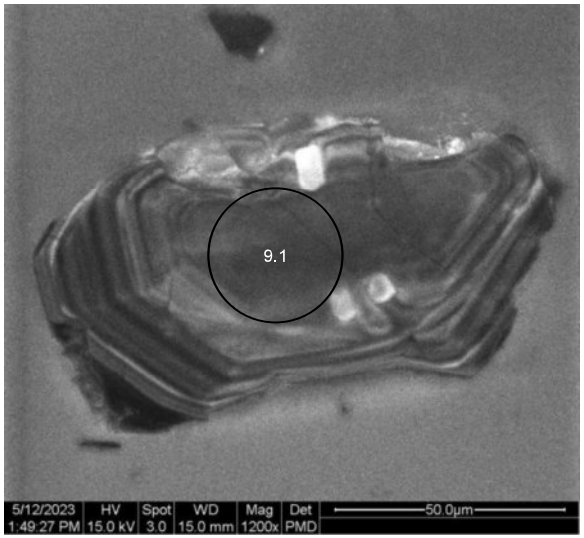
Grain 006
Image CM22LS01_013



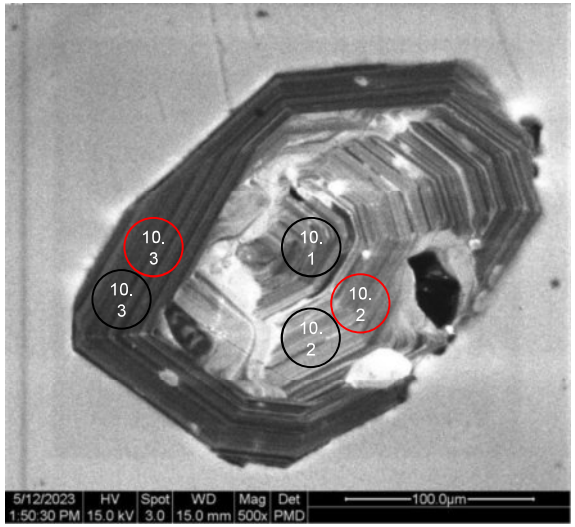
Grain 008
Image CM22LS01_017



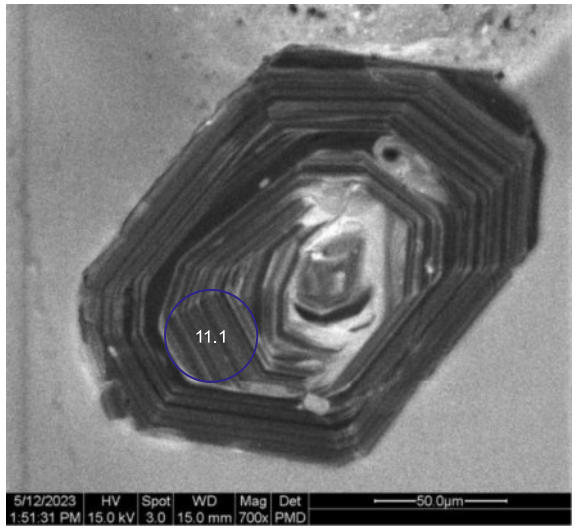
Grain 009
Image CM22LS01_019



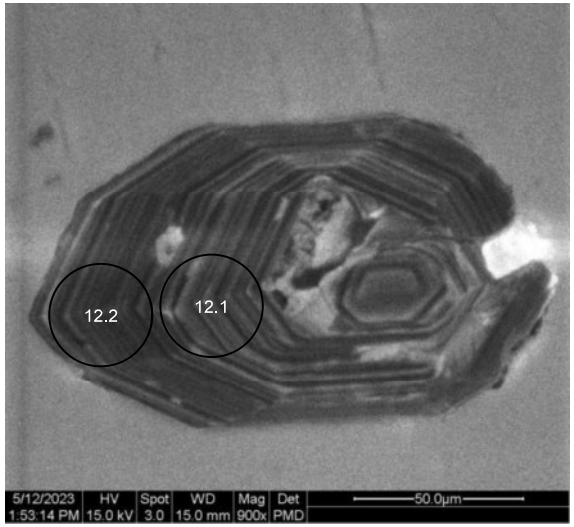
Grain 010
Image CM22LS01_021



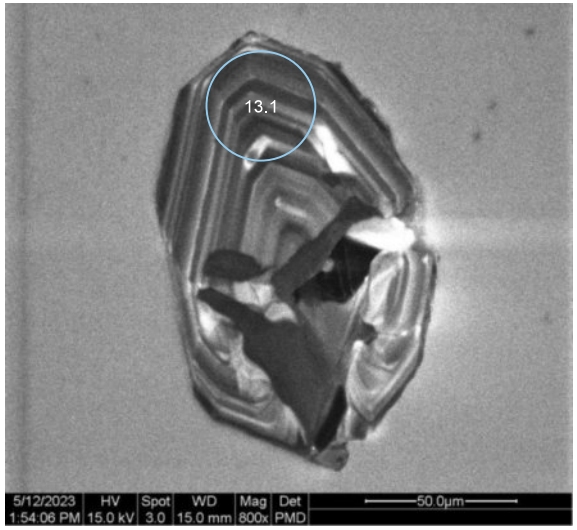
Grain 011
Image CM22LS01_023



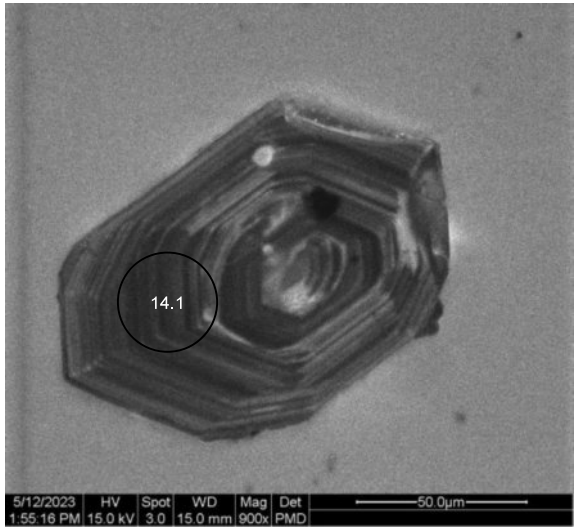
Grain 012
Image CM22LS01_025



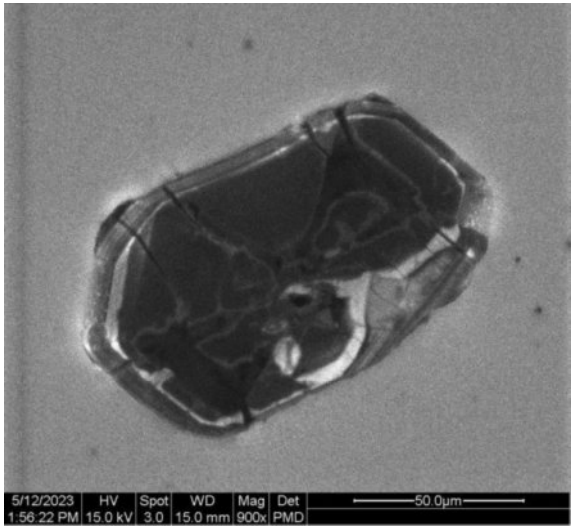
Grain 013
Image CM22LS01_027



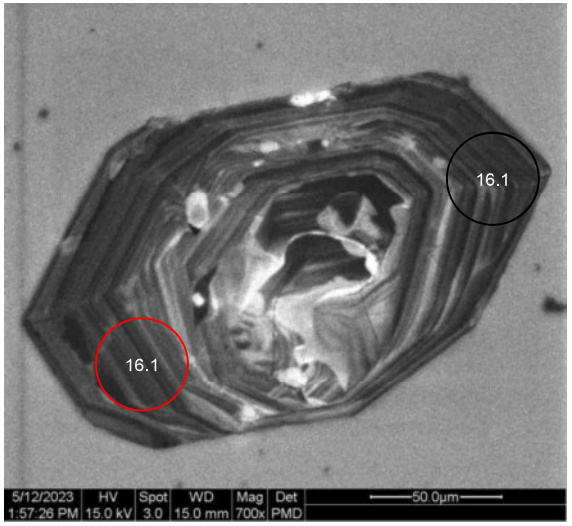
Grain 014
Image CM22LS01_029



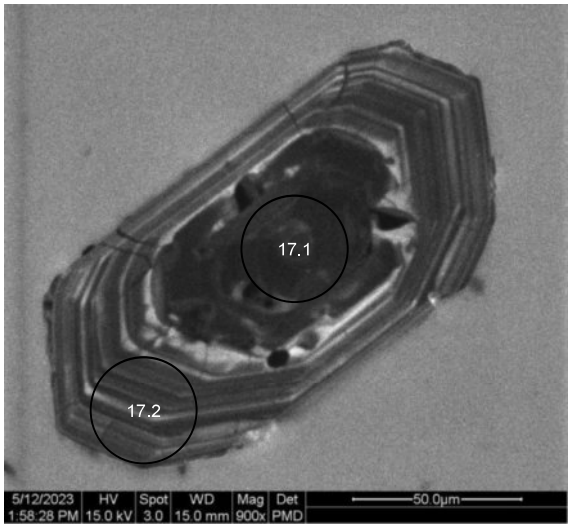
Grain 015
Image CM22LS01_031



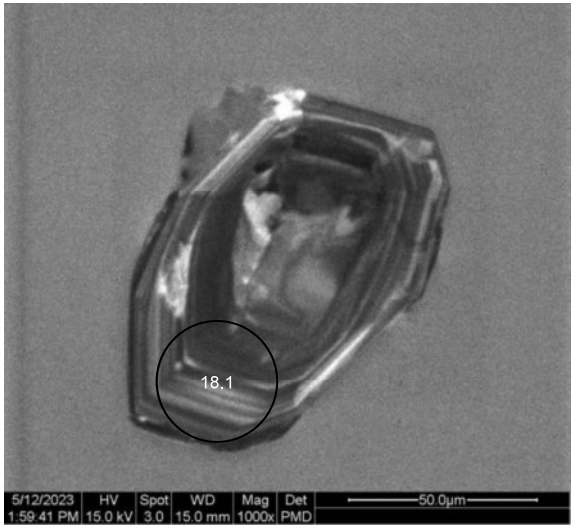
Grain 016
Image CM22LS01_033



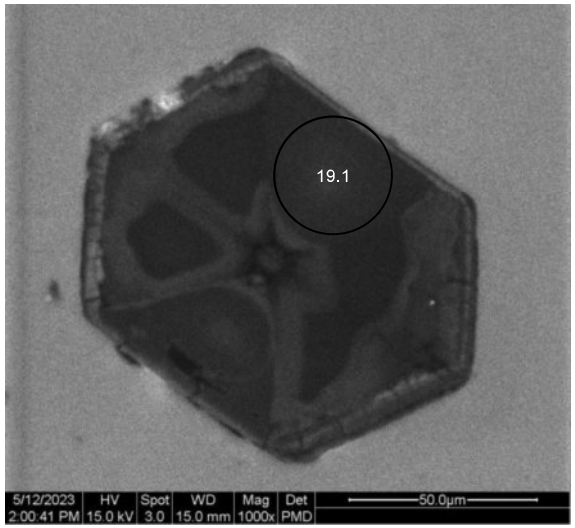
Grain 017
Image CM22LS01_035



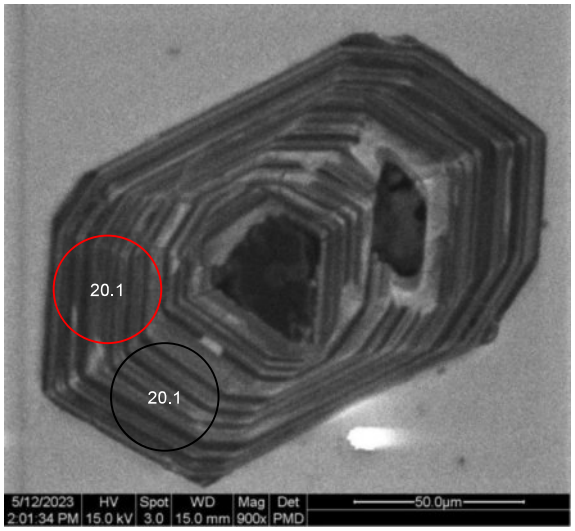
Grain 018
Image CM22LS01_037



Grain 019
Image CM22LS01_039

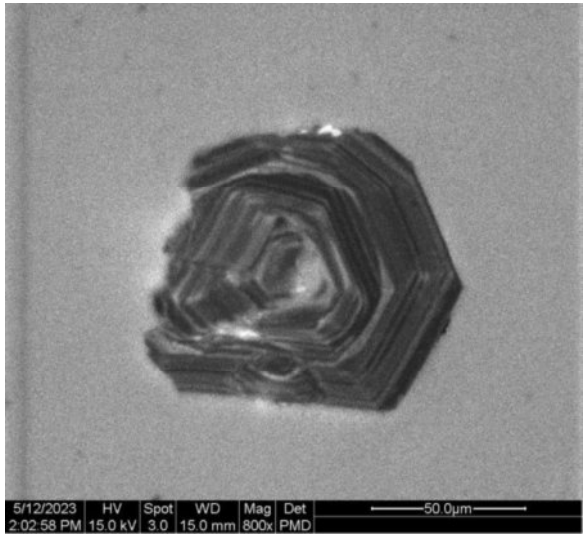


Grain 020
Image CM22LS01_041

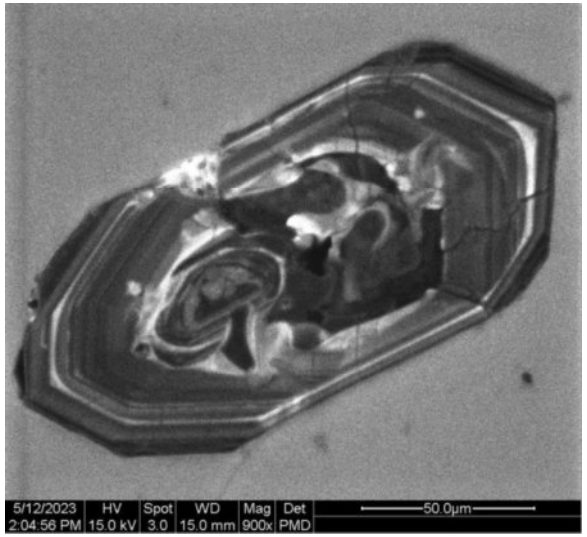


22/12/2023

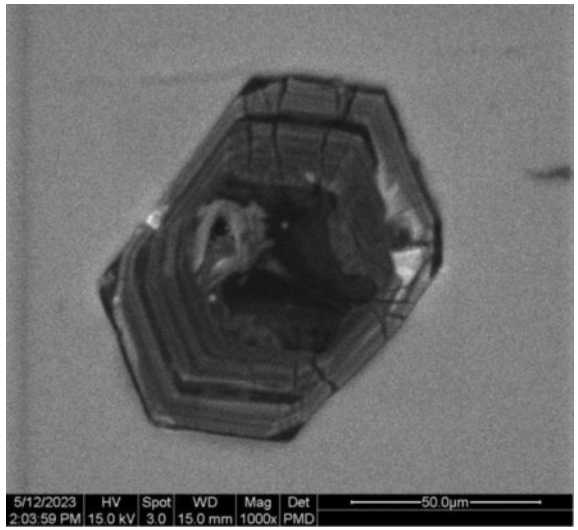
Grain 021
Image CM22LS01_043



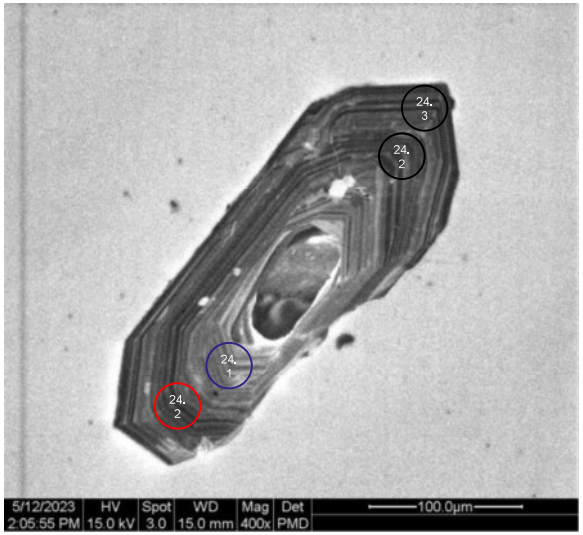
Grain 023
Image CM22LS01_047



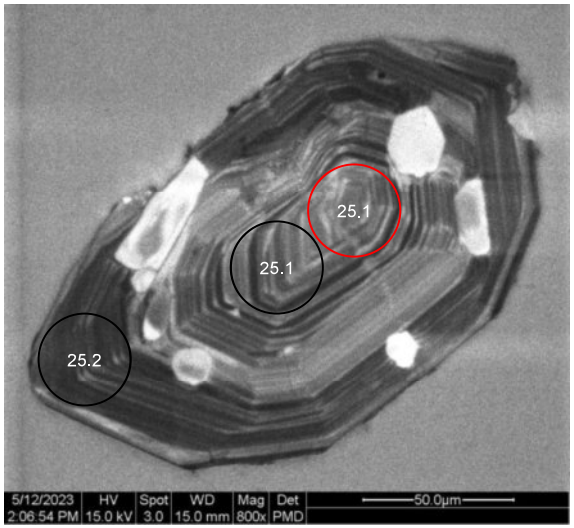
Grain 022
Image CM22LS01_045



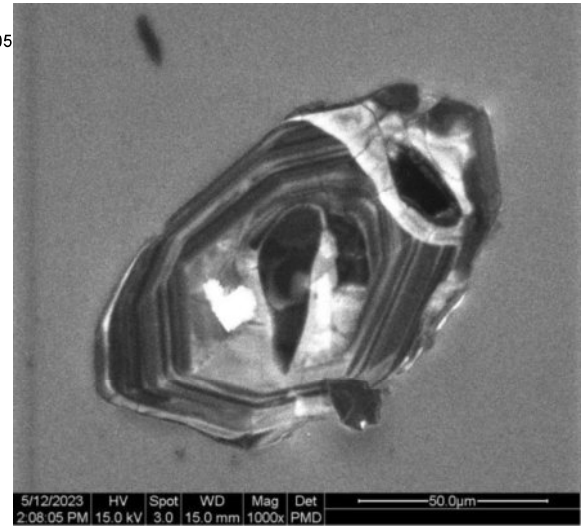
Grain 024
Image CM22LS01_049



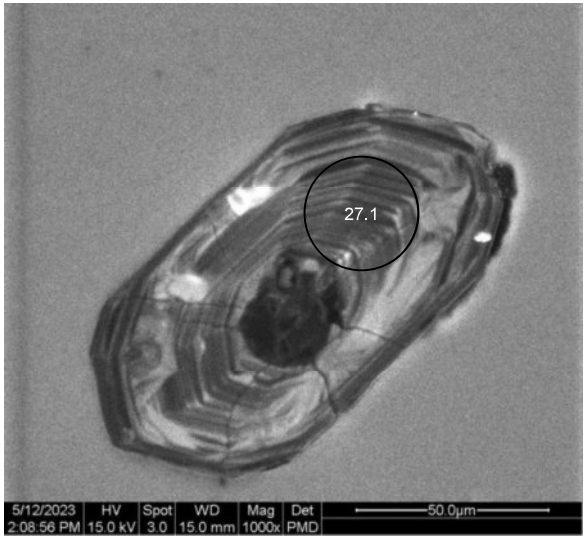
Grain 025
Image CM22LS01_051



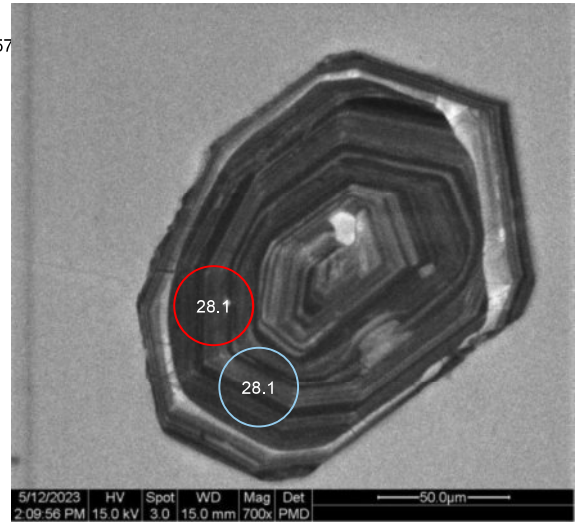
Grain 026
Image CM22LS01_05



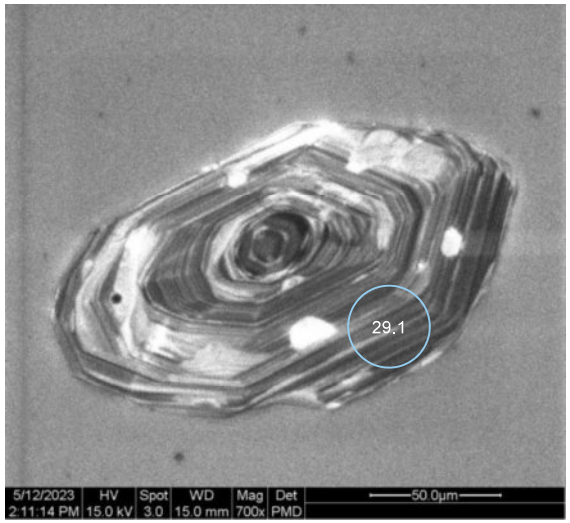
Grain 027
Image CM22LS01_055



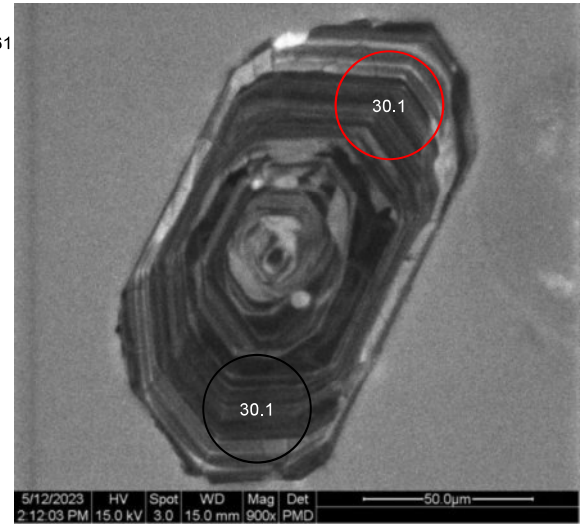
Grain 028
Image CM22LS01_057



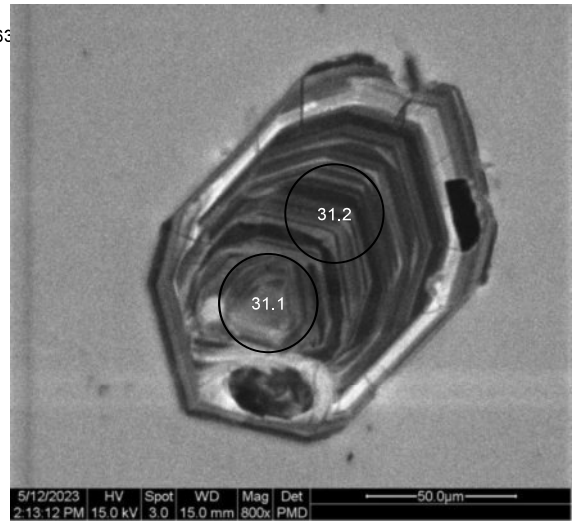
Grain 029
Image CM22LS01_059



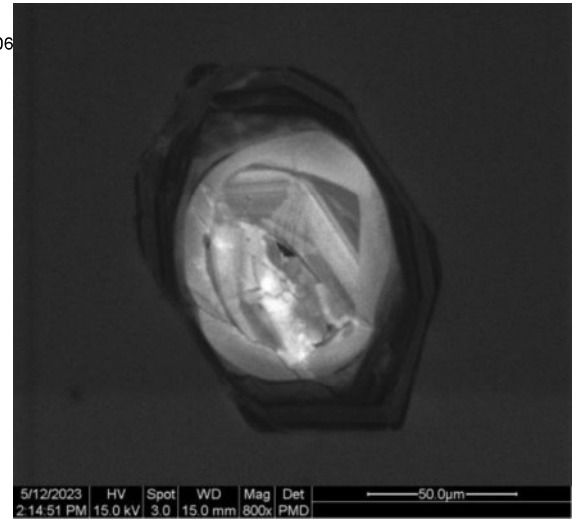
Grain 030
Image CM22LS01_061



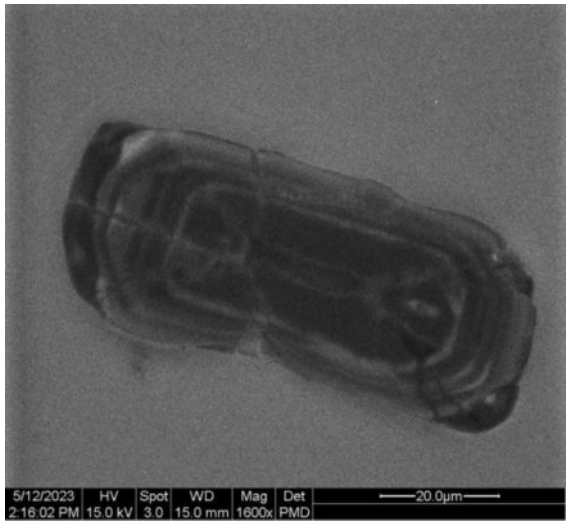
Grain 031
Image CM22LS01_063



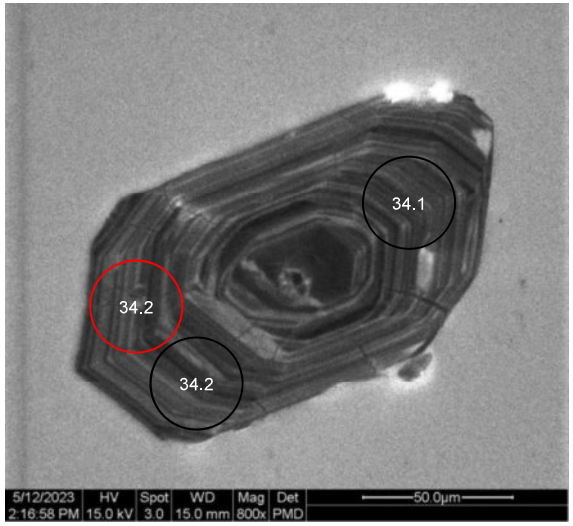
Grain 032
Image CM22LS01_06



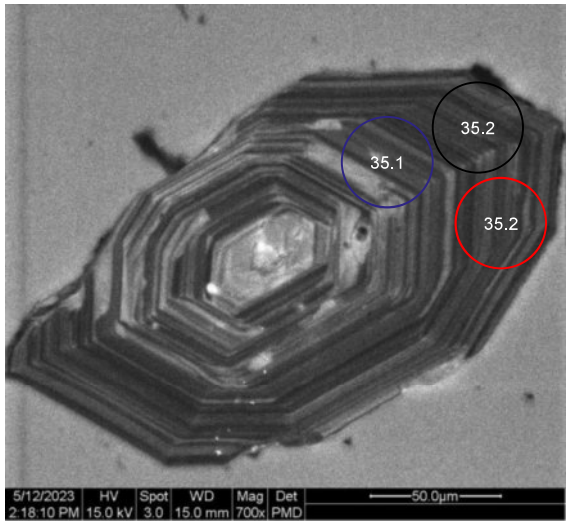
Grain 033
Image CM22LS01_067



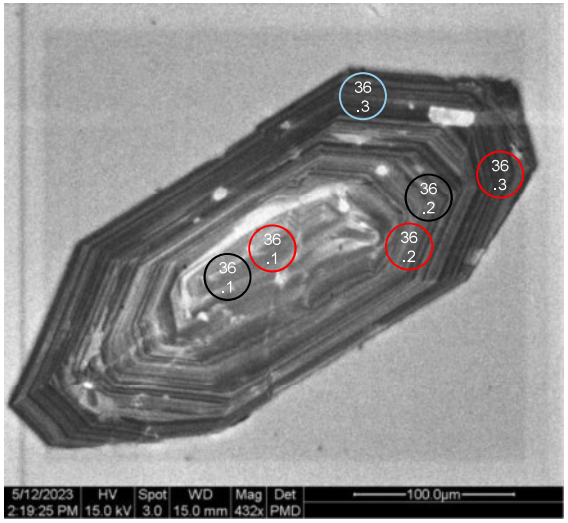
Grain 034
Image CM22LS01_069



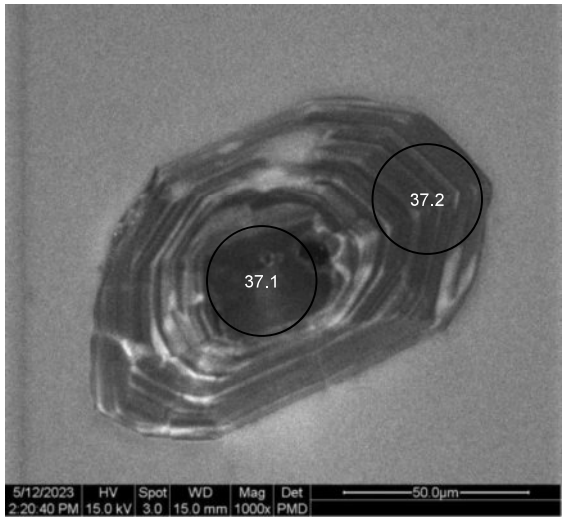
Grain 035
Image CM22LS01_071



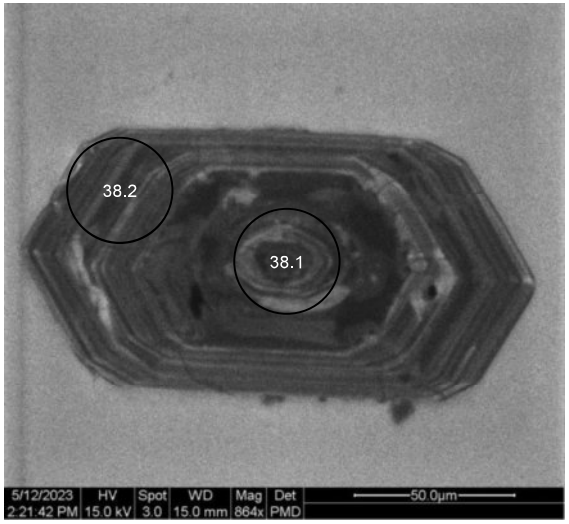
Grain 036
Image CM22LS01_073



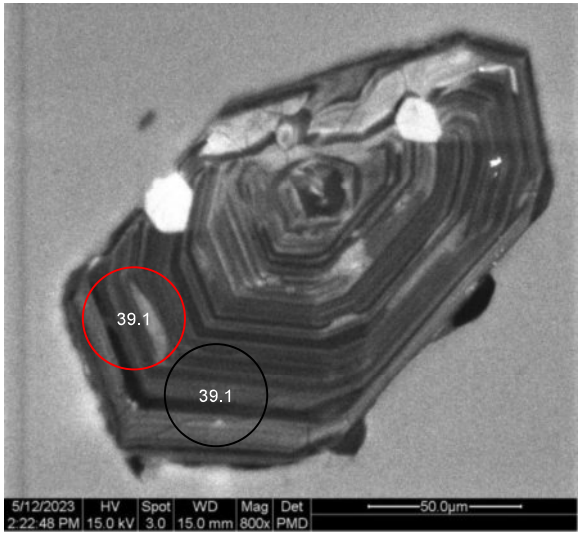
Grain 037
Image CM22LS01_075



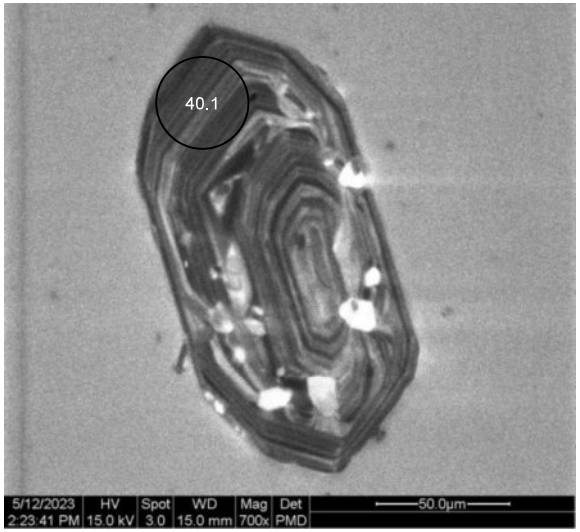
Grain 038
Image CM22LS01_077



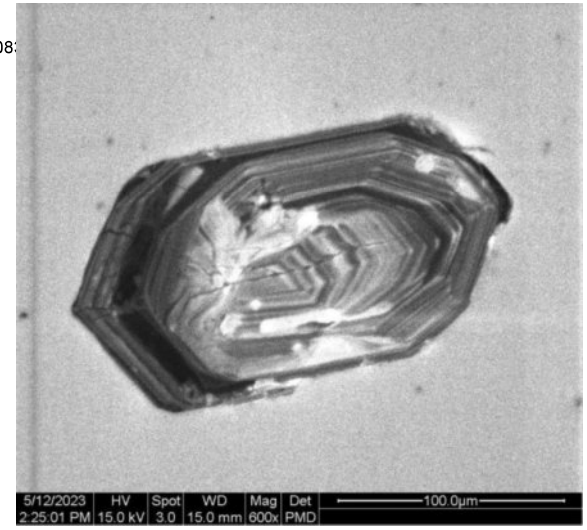
Grain 039
Image CM22LS01_079



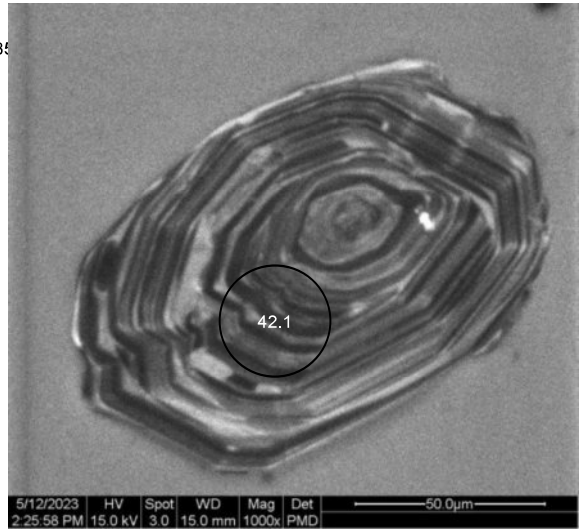
Grain 040
Image CM22LS01_081



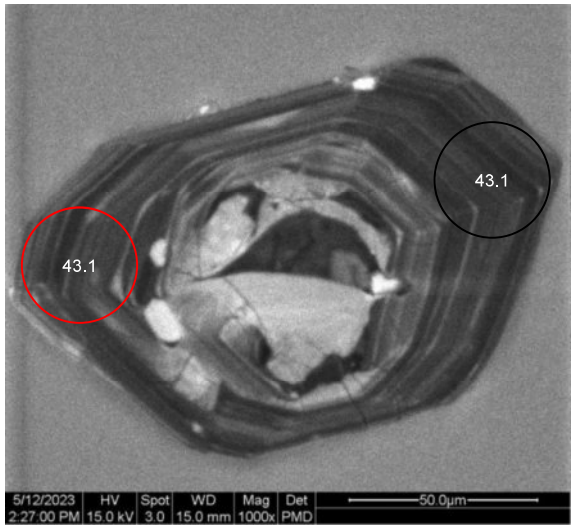
Grain 041
Image CM22LS01_08



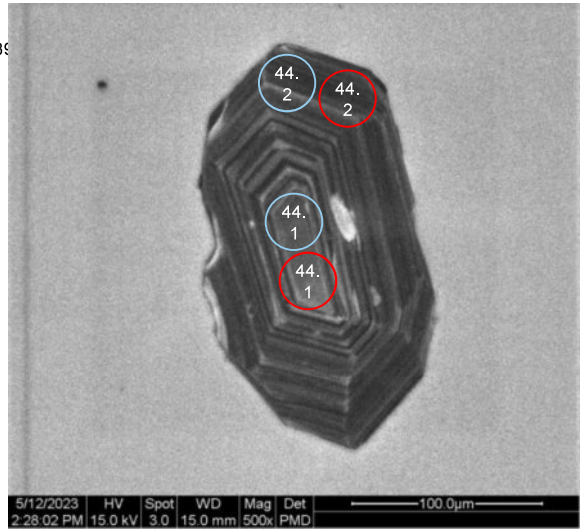
Grain 042
Image CM22LS01_08



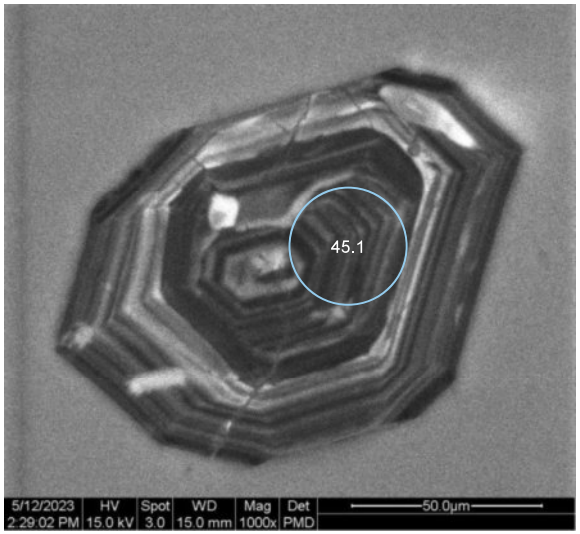
Grain 043
Image CM22LS01_087



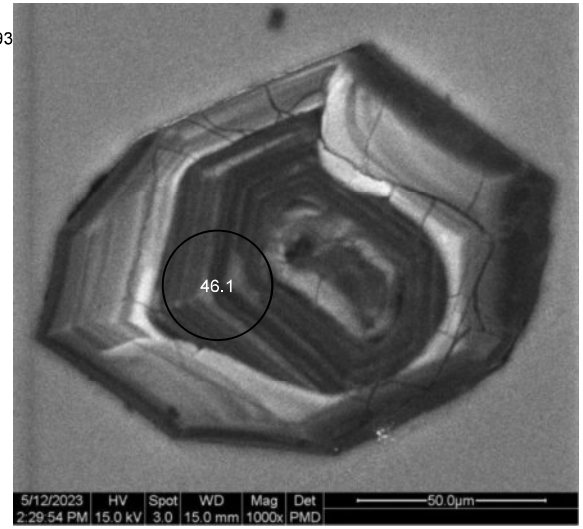
Grain 044
Image CM22LS01_089



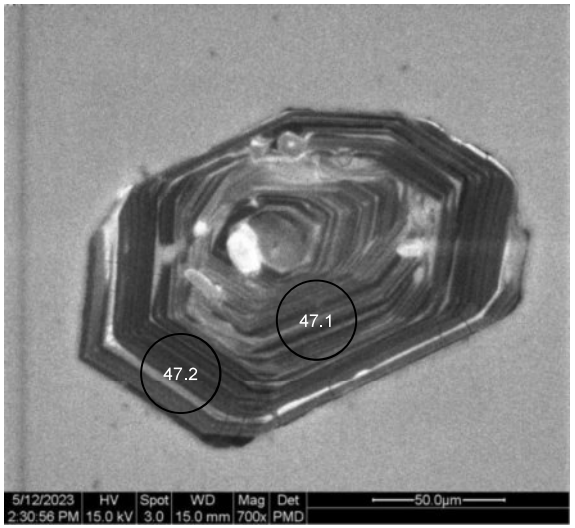
Grain 045
Image CM22LS01_091



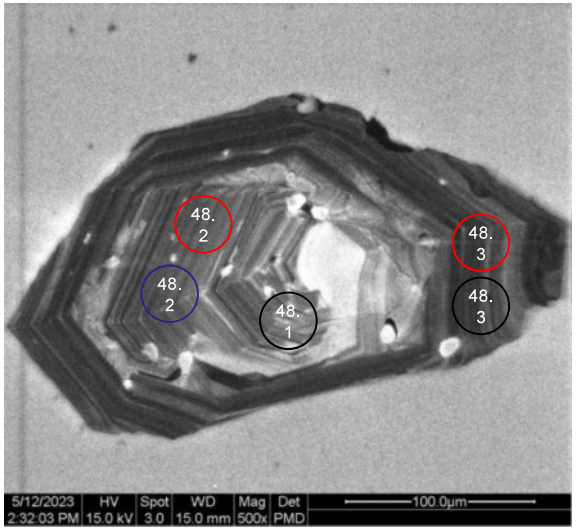
Grain 046
Image CM22LS01_093



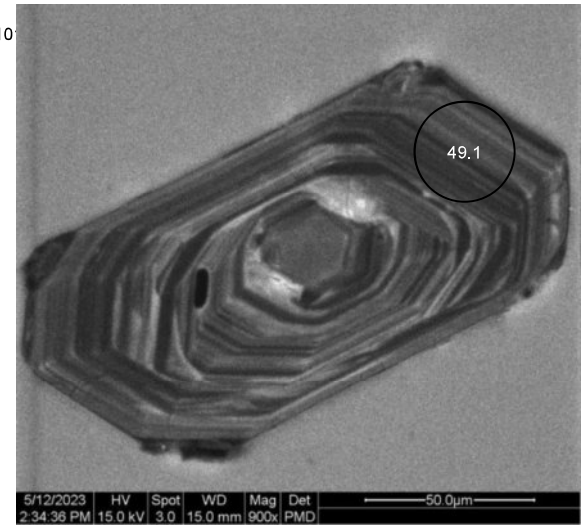
Grain 047
Image CM22LS01_095



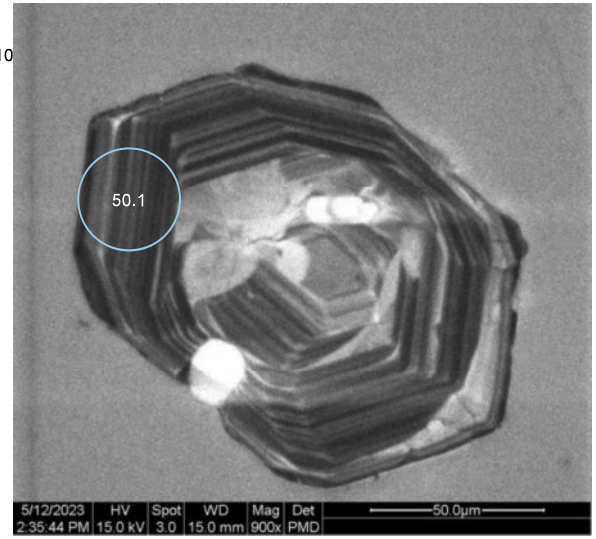
Grain 048
Image CM22LS01_097



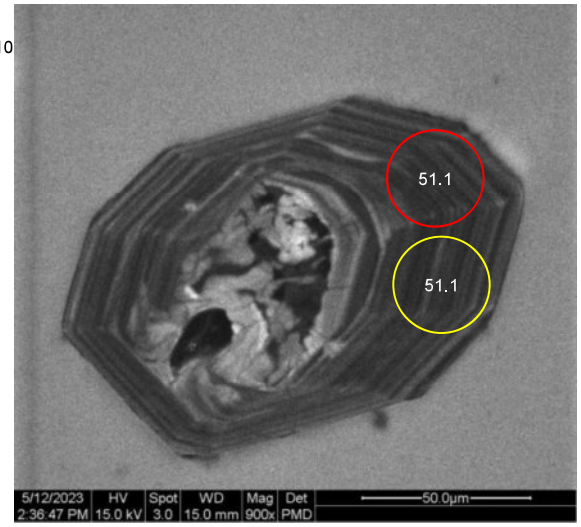
Grain 049
Image CM22LS01_10



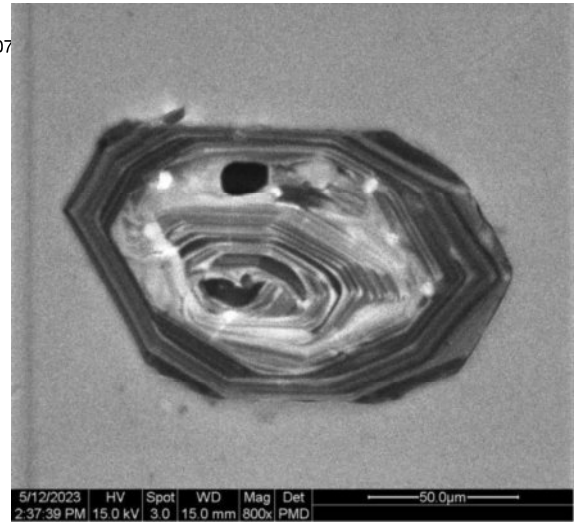
Grain 050
Image CM22LS01_10



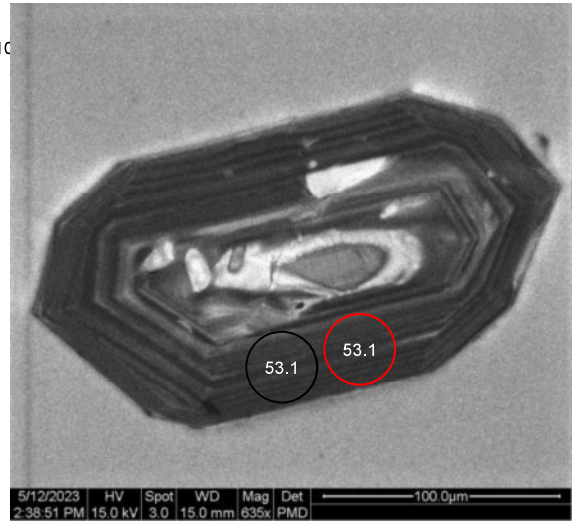
Grain 051
Image CM22LS01_10



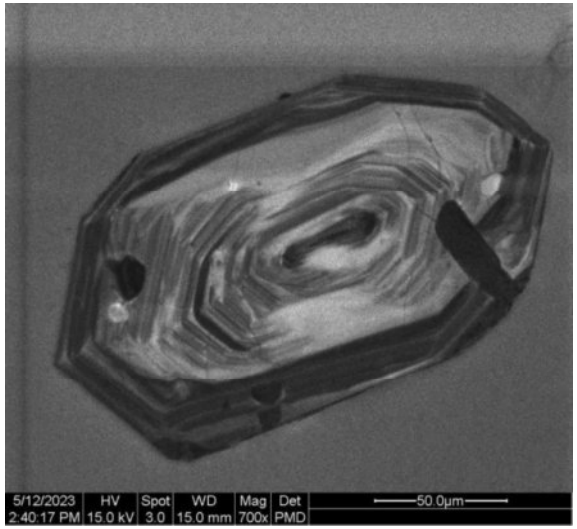
Grain 052
Image CM22LS01_107



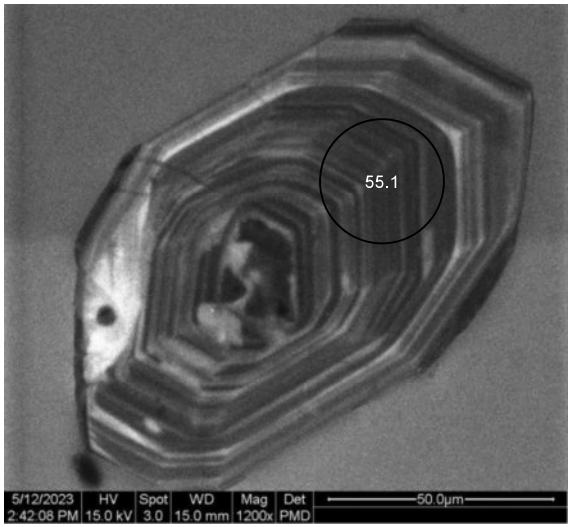
Grain 053
Image CM22LS01_10



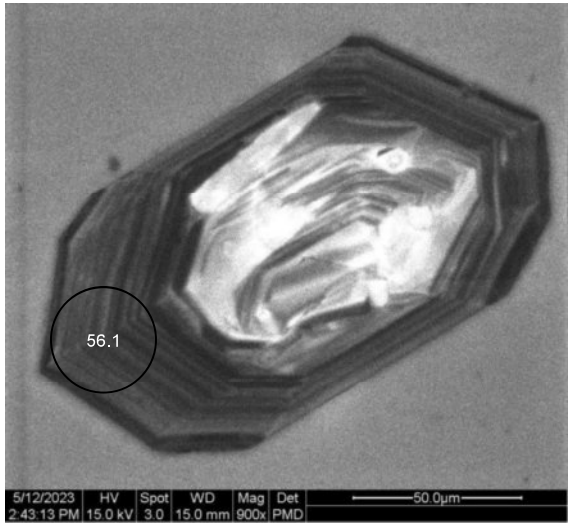
Grain 054
Image CM22LS01_111



Grain 055
Image CM22LS01_113

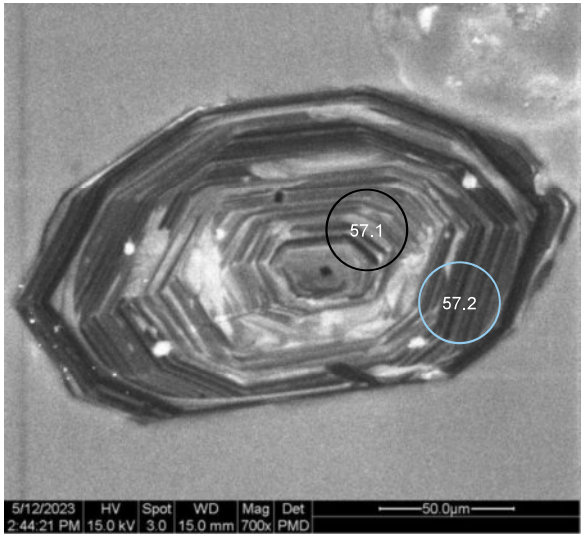


Grain 056
Image CM22LS01_115

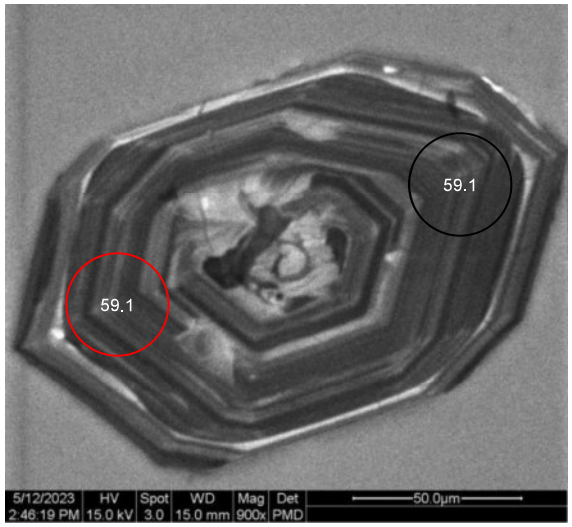


22/12/2023

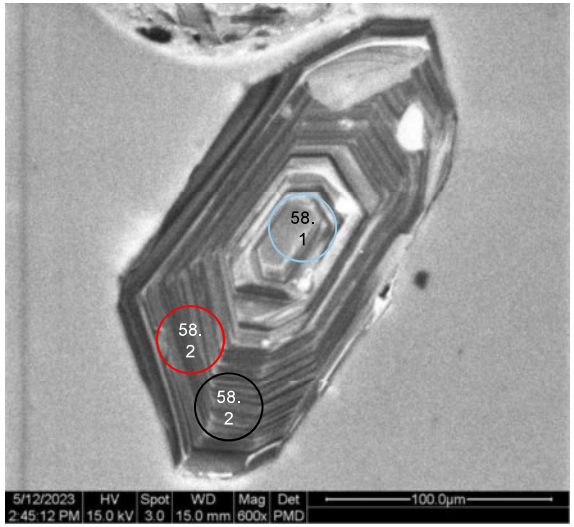
Grain 057
Image CM22LS01_117



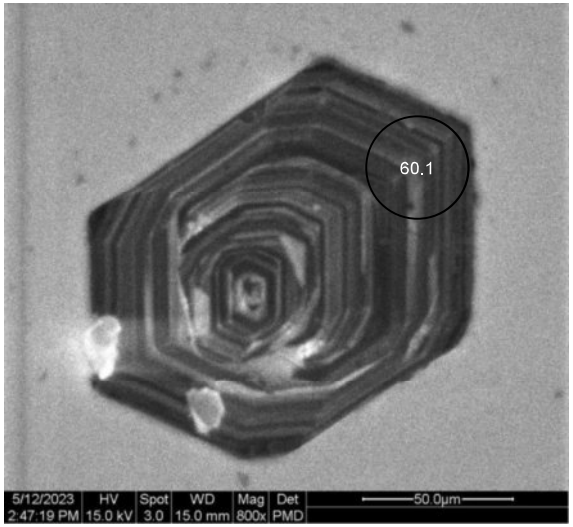
Grain 059
Image CM22LS01_121



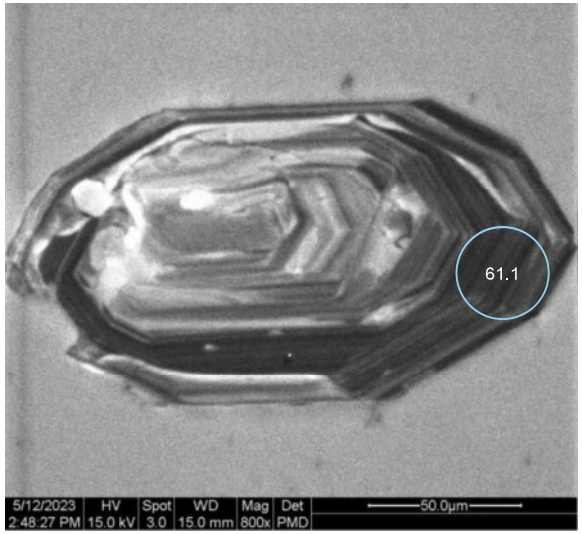
Grain 058
Image CM22LS01_119



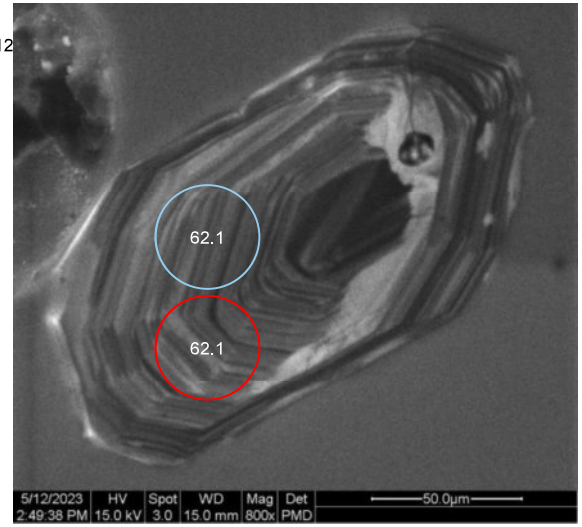
Grain 060
Image CM22LS01_123



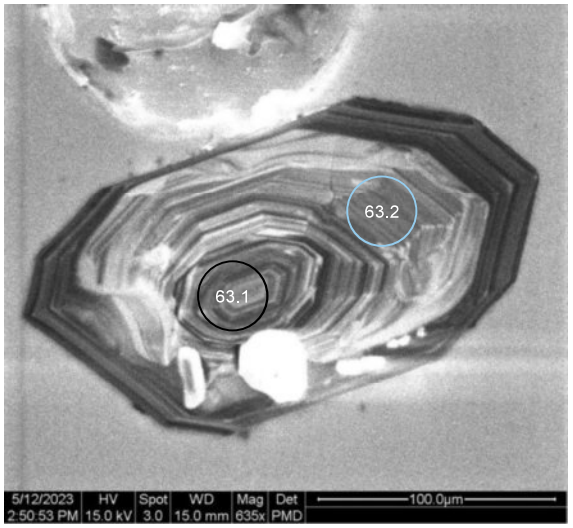
Grain 061
Image CM22LS01_125



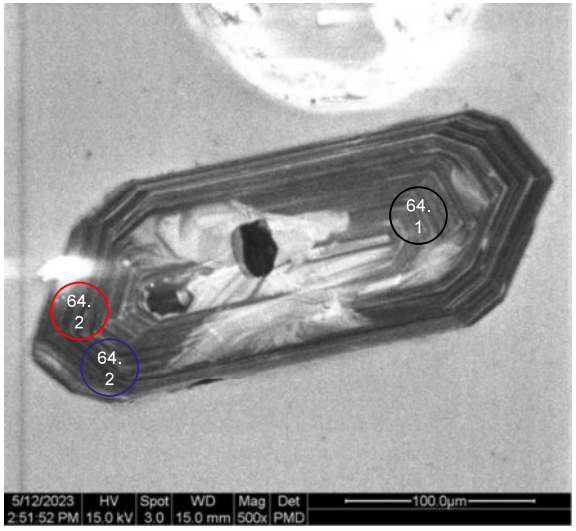
Grain 062
Image CM22LS01_12



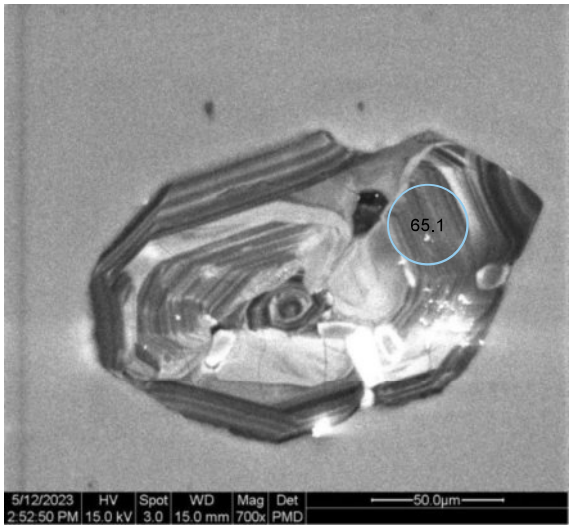
Grain 063
Image CM22LS01_129



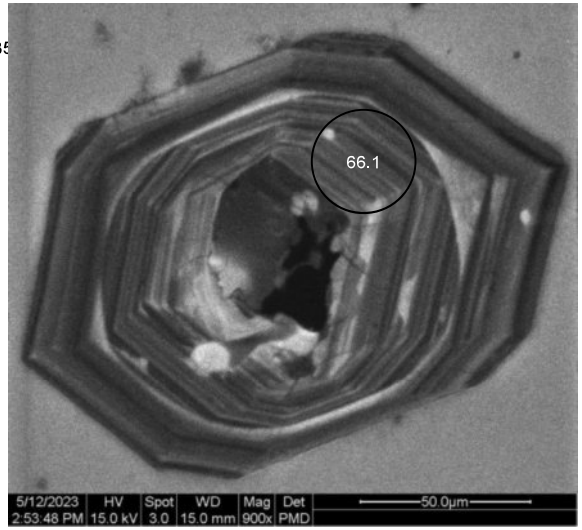
Grain 064
Image CM22LS01_131



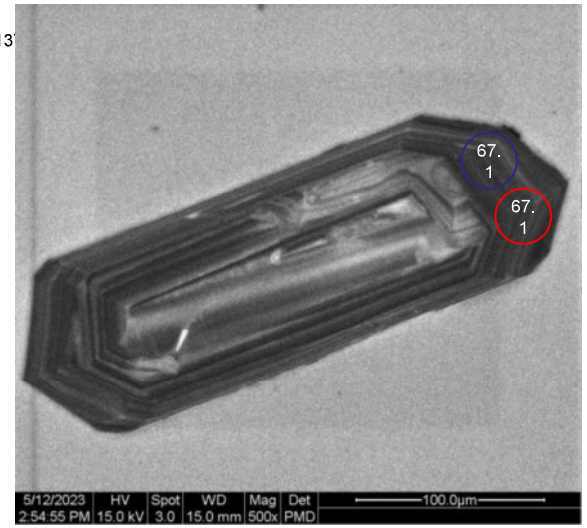
Grain 065
Image CM22LS01_133



Grain 066
Image CM22LS01_135

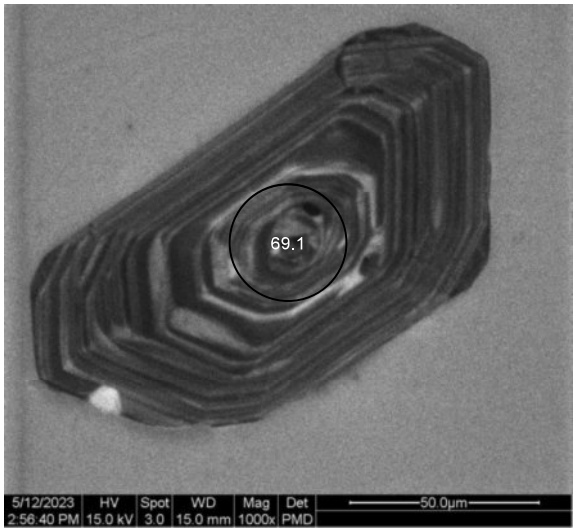


Grain 067
Image CM22LS01_13

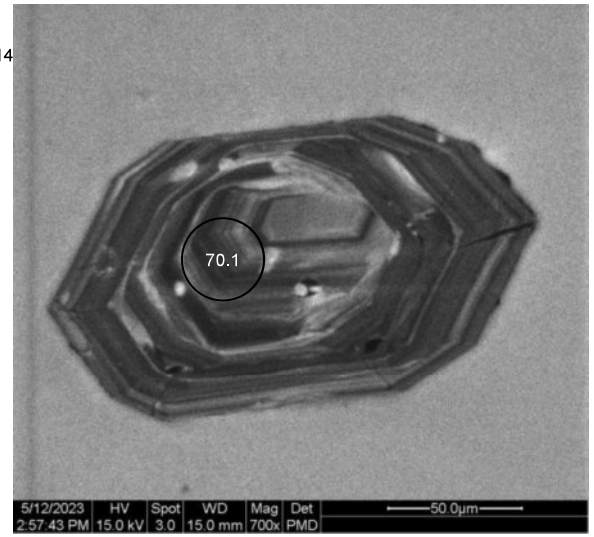


Grain 068
Image CM22LS01_139

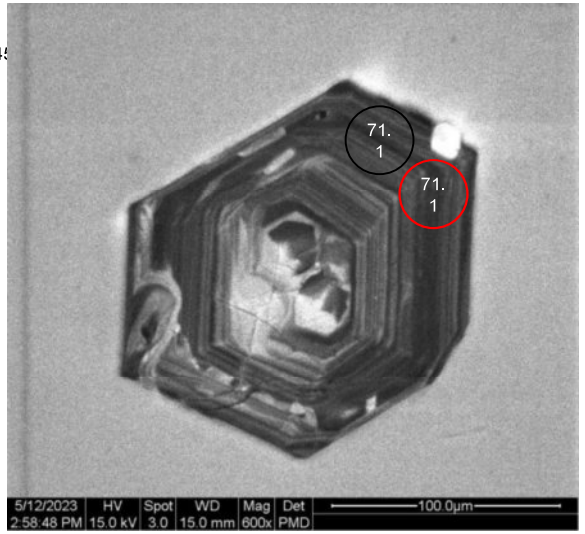
Grain 069
Image CM22LS01_141



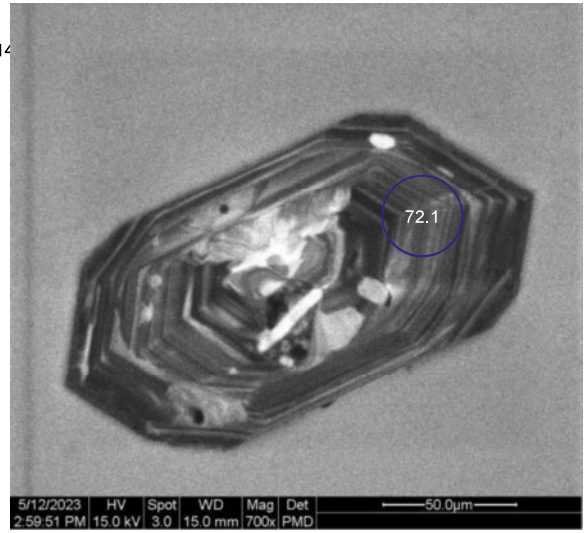
Grain 070
Image CM22LS01_14



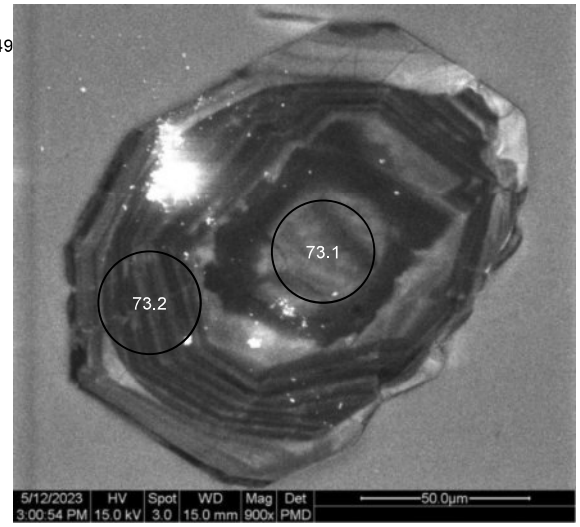
Grain 071
Image CM22LS01_14



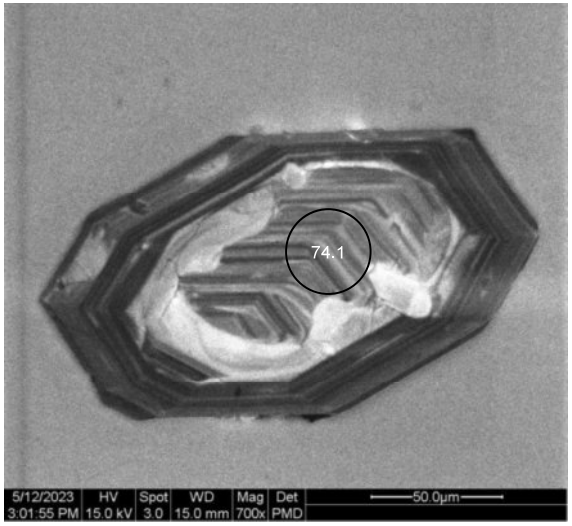
Grain 072
Image CM22LS01_14



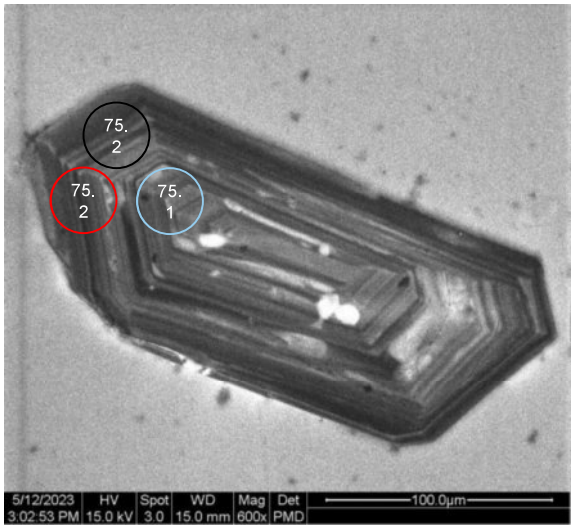
Grain 073
Image CM22LS01_149



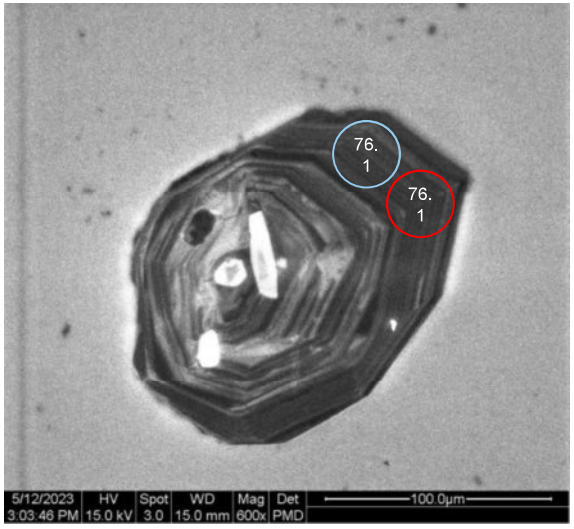
Grain 074
Image CM22LS01_151



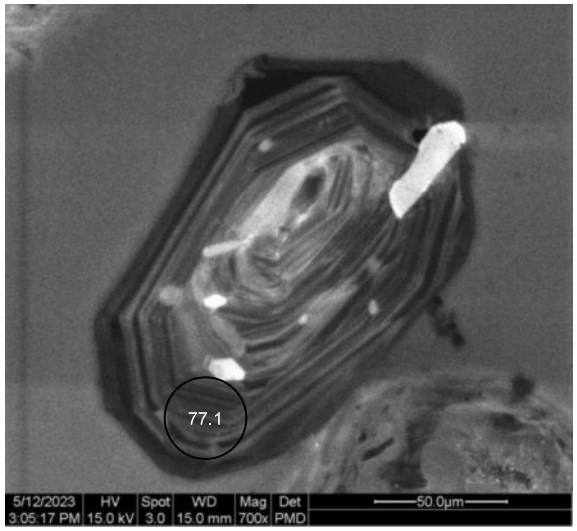
Grain 075
Image CM22LS01_153



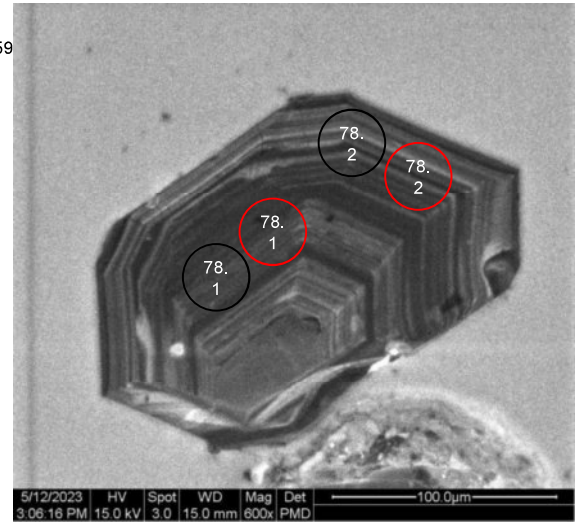
Grain 076
Image CM22LS01_155



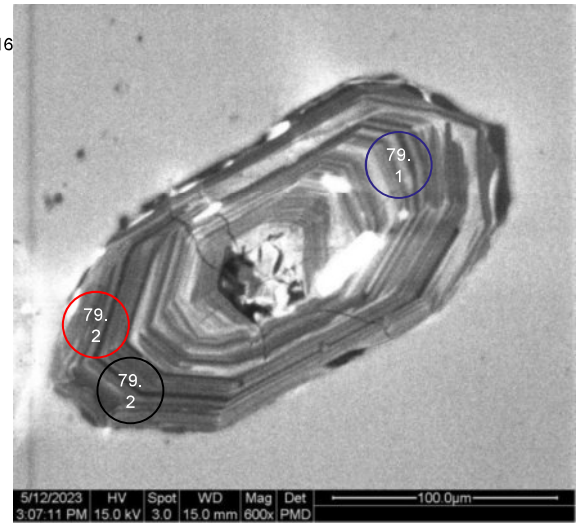
Grain 077
Image CM22LS01_157



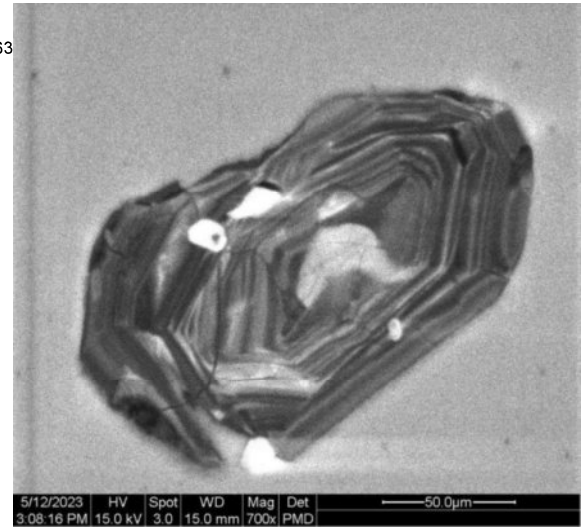
Grain 078
Image CM22LS01_159



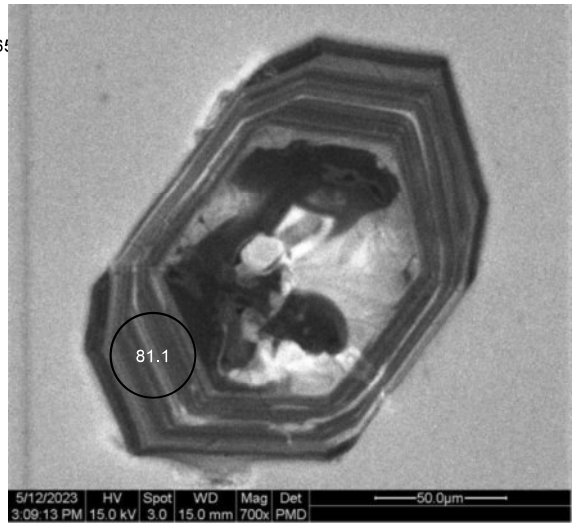
Grain 079
Image CM22LS01_16



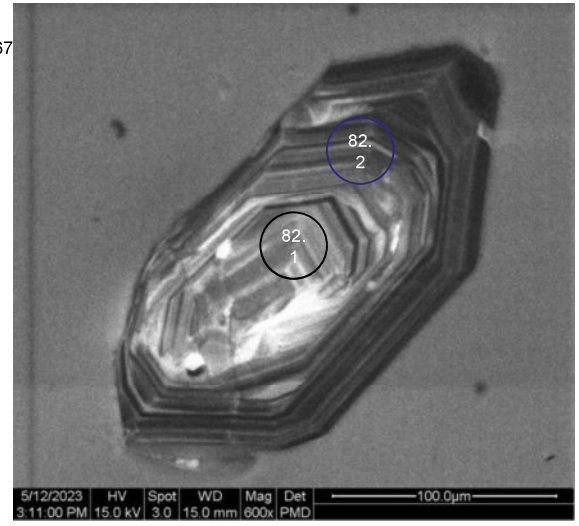
Grain 080
Image CM22LS01_163



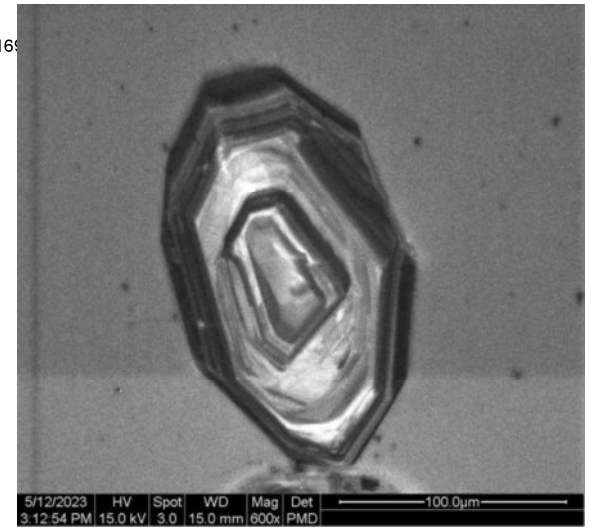
Grain 081
Image CM22LS01_165



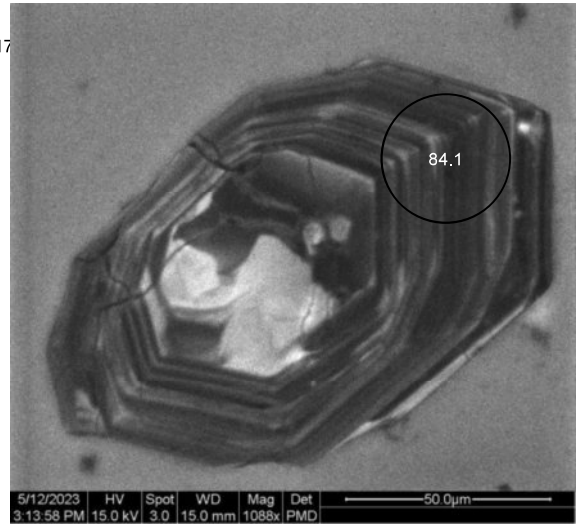
Grain 082
Image CM22LS01_167



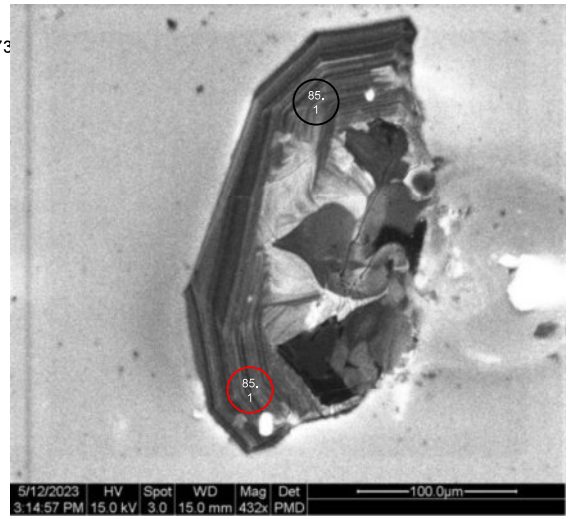
Grain 083
Image CM22LS01_169



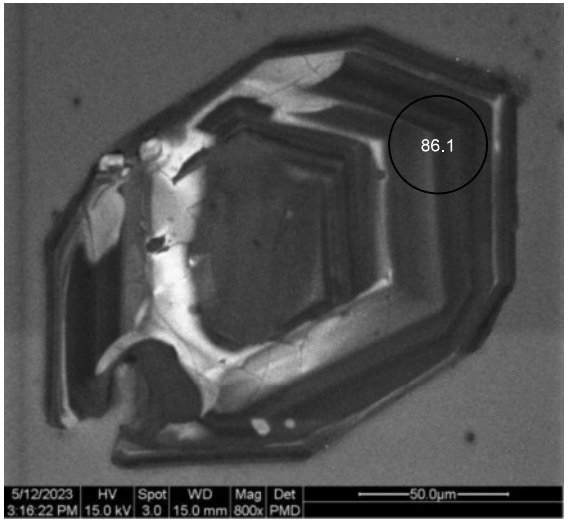
Grain 084
Image CM22LS01_17



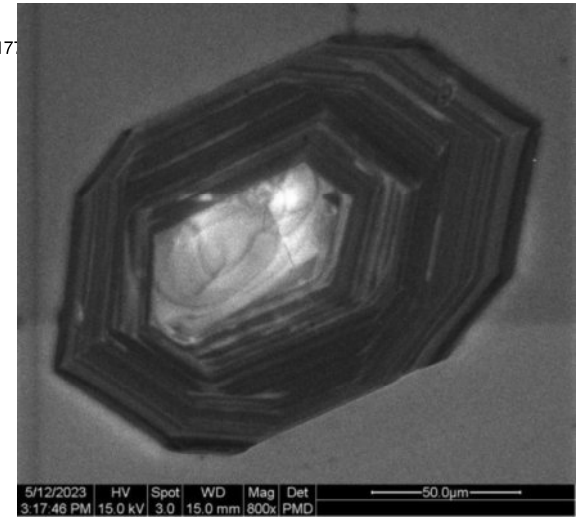
Grain 085
Image CM22LS01_173



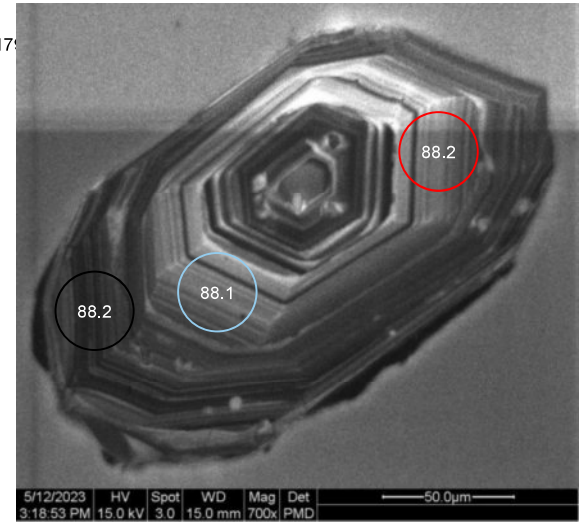
Grain 086
Image CM22LS01_175



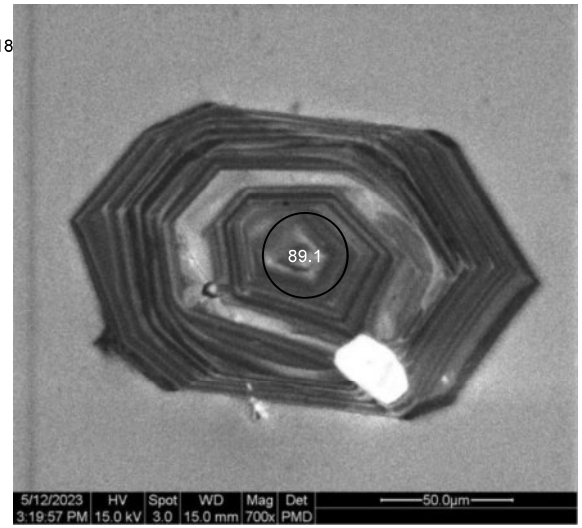
Grain 087
Image CM22LS01_17



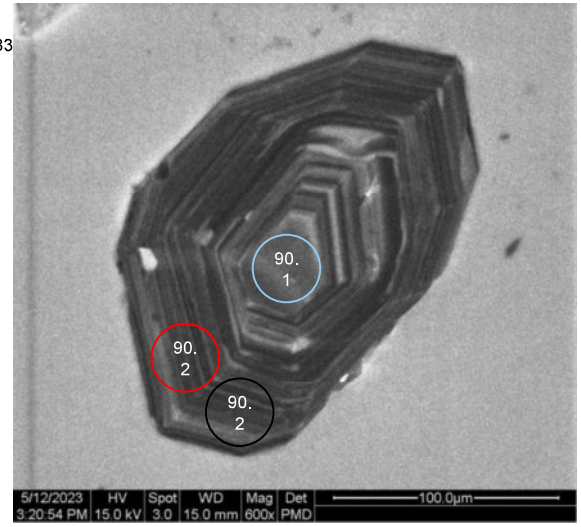
Grain 088
Image CM22LS01_17



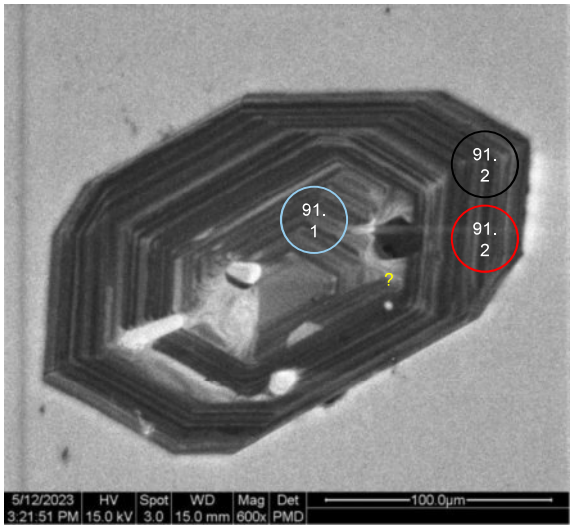
Grain 089
Image CM22LS01_18



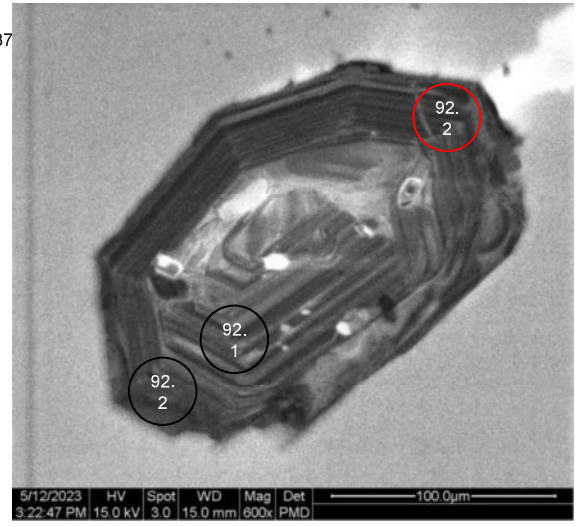
Grain 090
Image CM22LS01_183



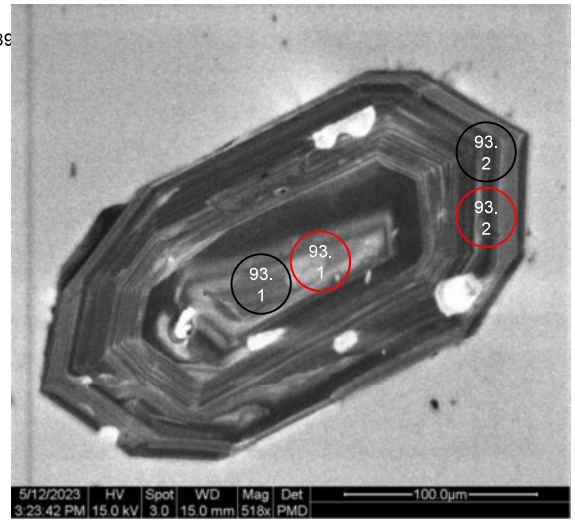
Grain 091
Image CM22LS01_185



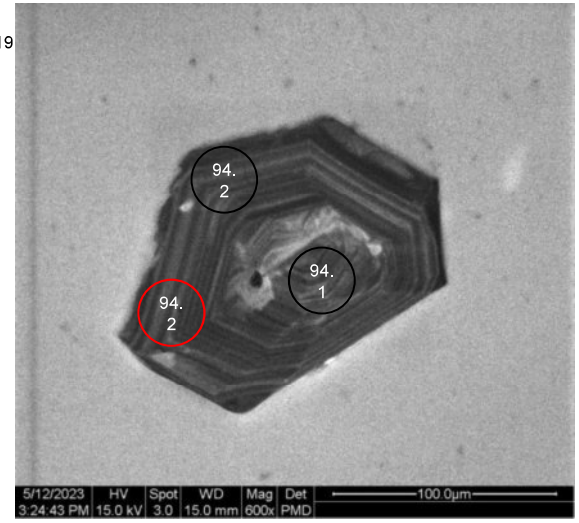
Grain 092
Image CM22LS01_187



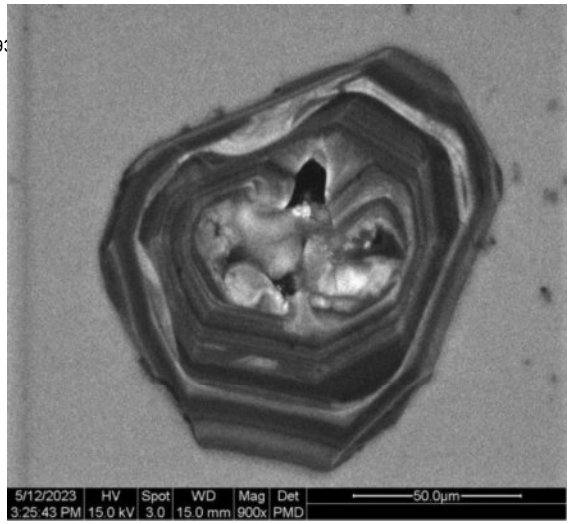
Grain 093
Image CM22LS01_189



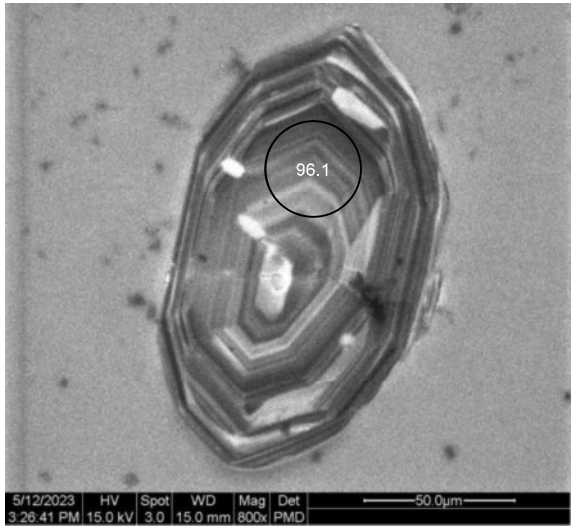
Grain 094
Image CM22LS01_19



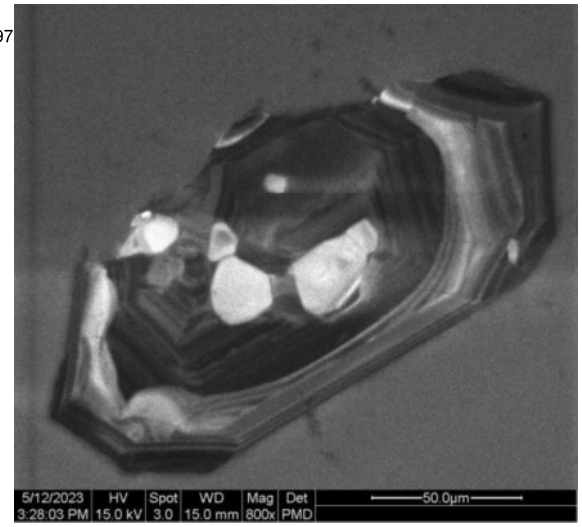
Grain 095
Image CM22LS01_19



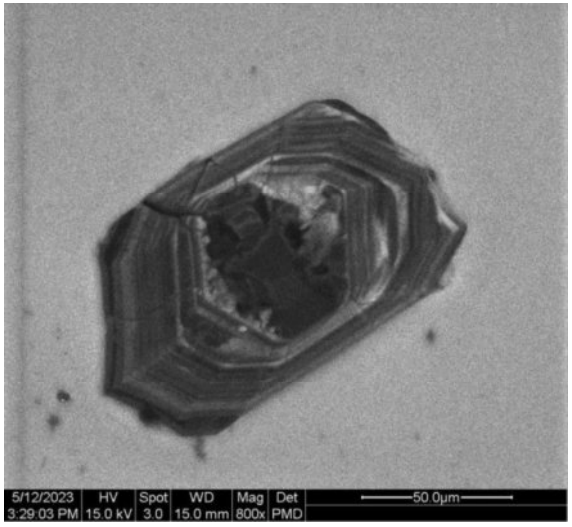
Grain 096
Image CM22LS01_195



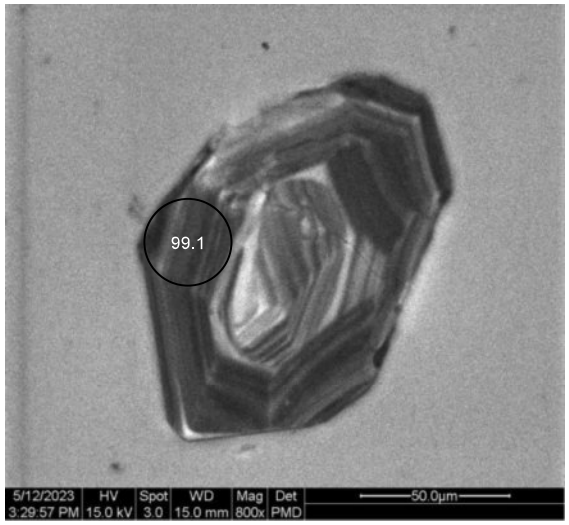
Grain 097
Image CM22LS01_197



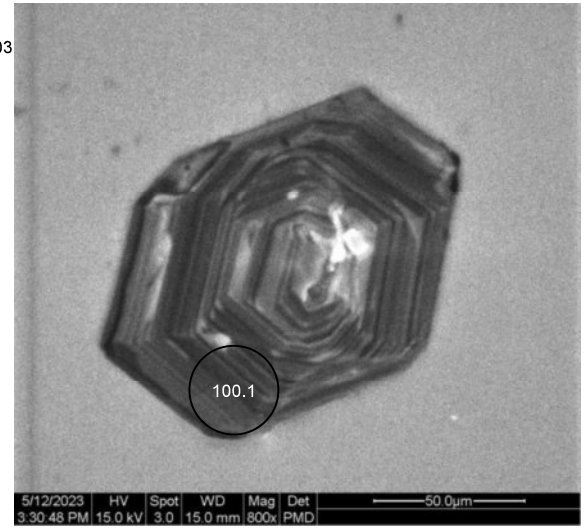
Grain 098
Image CM22LS01_199



Grain 099
Image CM22LS01_201



Grain 100
Image CM22LS01_203



CM22/KG-01

Emplacement

Antecryst

Xenocryst

Discordant

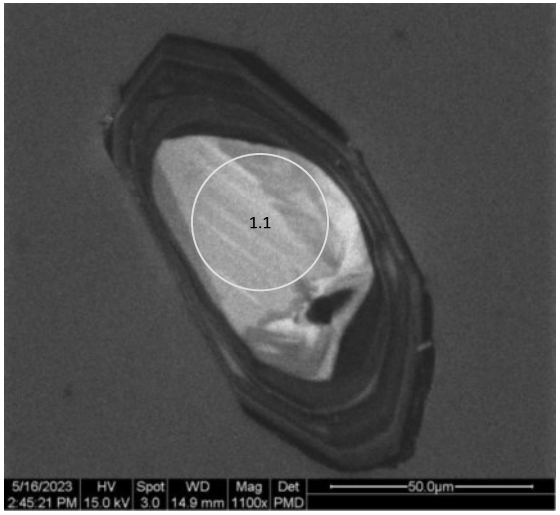
Rejected due to Pb loss

Reserved for future trace element analysis

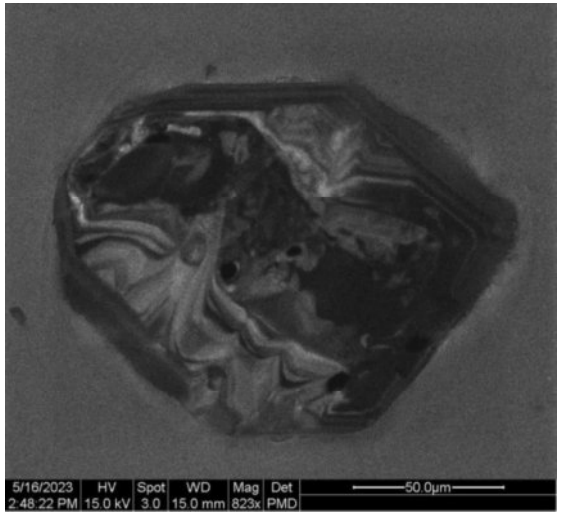
Mount 1

23/12/2023

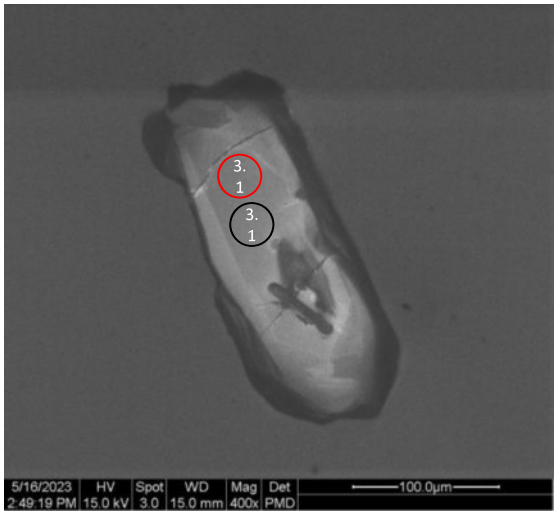
Grain 001 Image CM22KG01_001



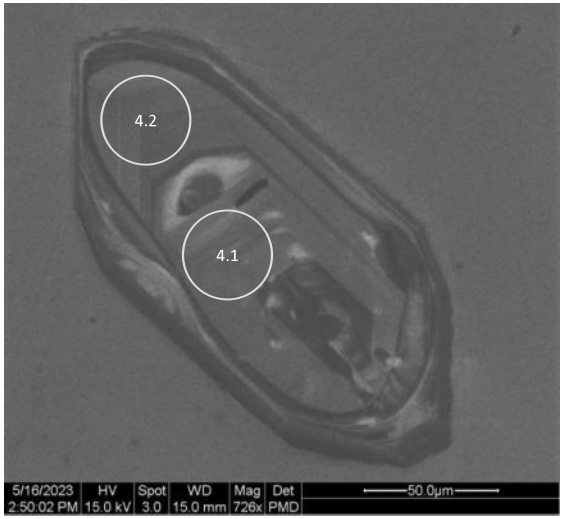
Grain 002 Image CM22KG01_003



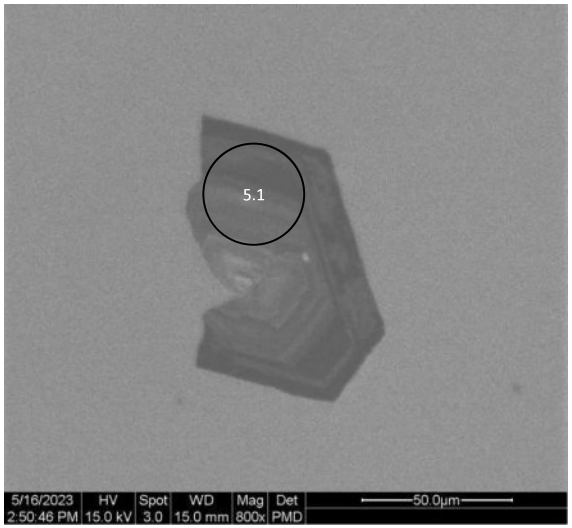
Grain 003 Image CM22KG01_005



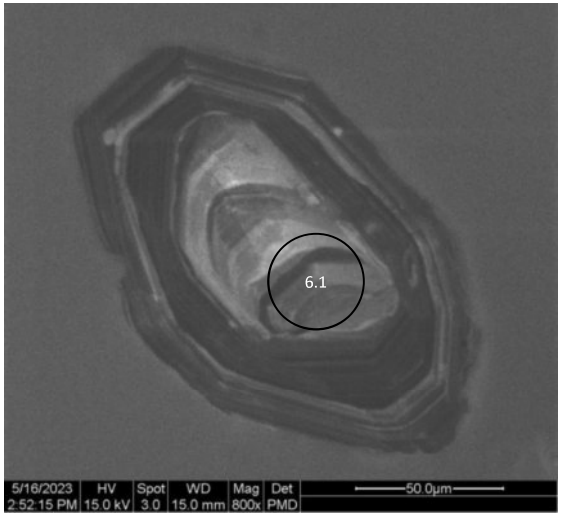
Grain 004 Image CM22KG01_007



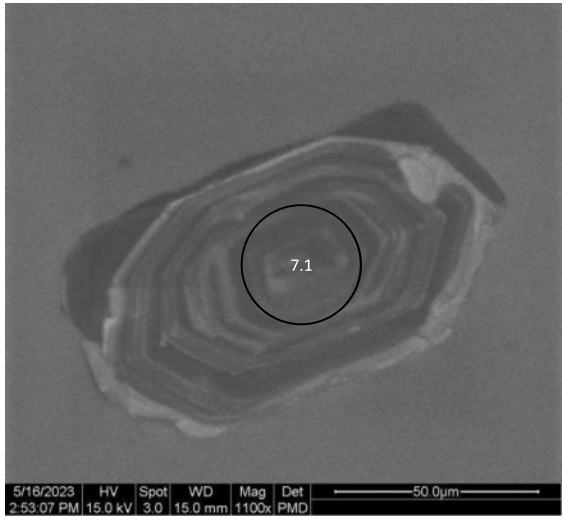
Grain 005 Image CM22KG01_009



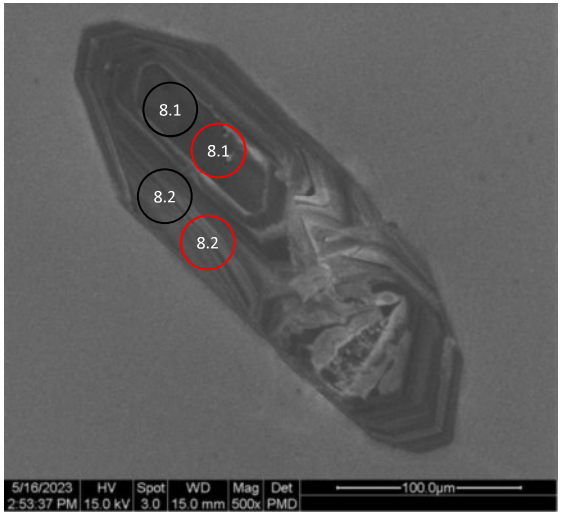
Grain 006 Image CM22KG01_011



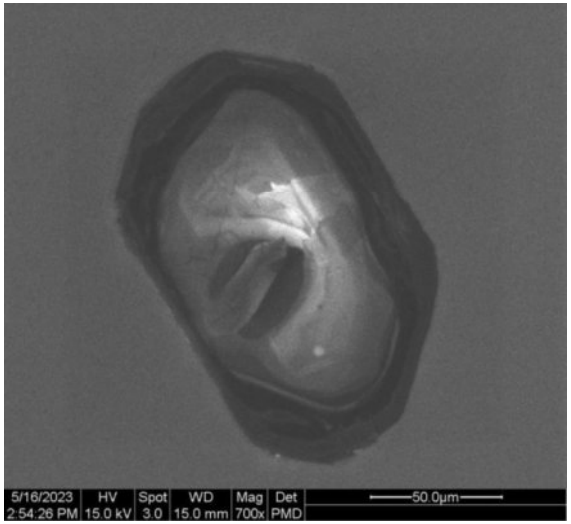
Grain 007 Image CM22KG01_013



Grain 008 Image CM22KG01_015



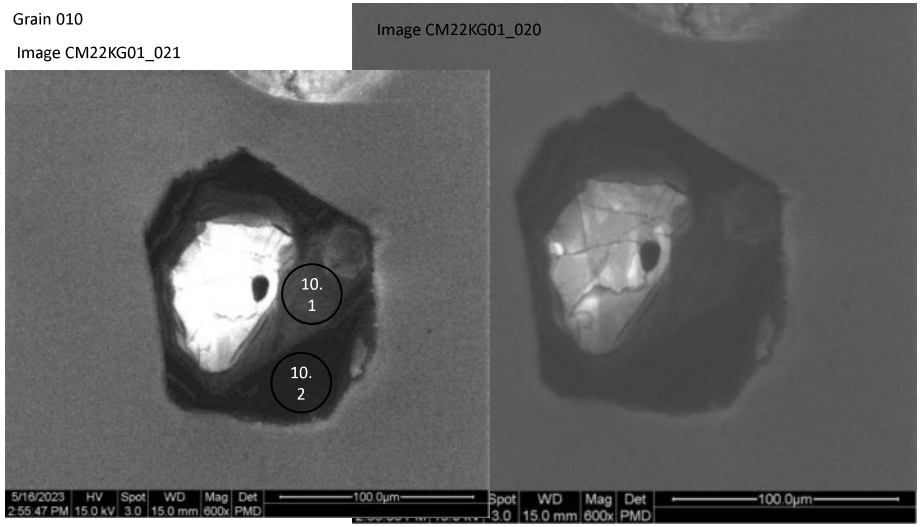
Grain 009 Image CM22KG01_018



Grain 010

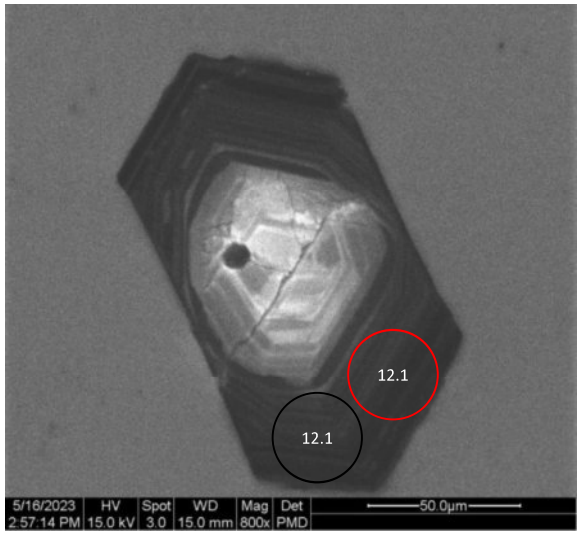
Image CM22KG01_021

Image CM22KG01_020

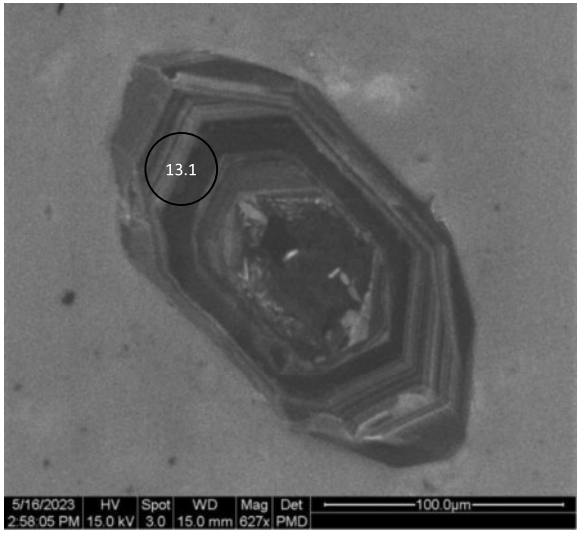


Grain 011 Image CM22KG01_023

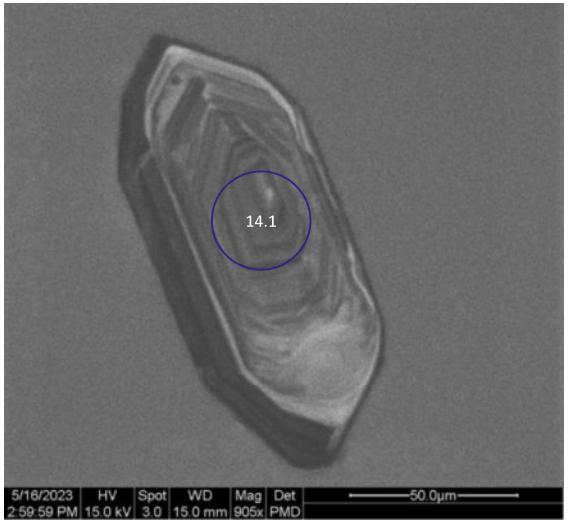
Grain 012 Image CM22KG01_024



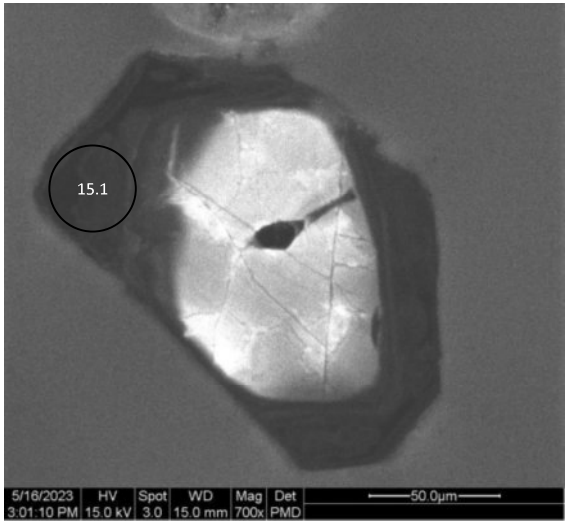
Grain 013 Image CM22KG01_026



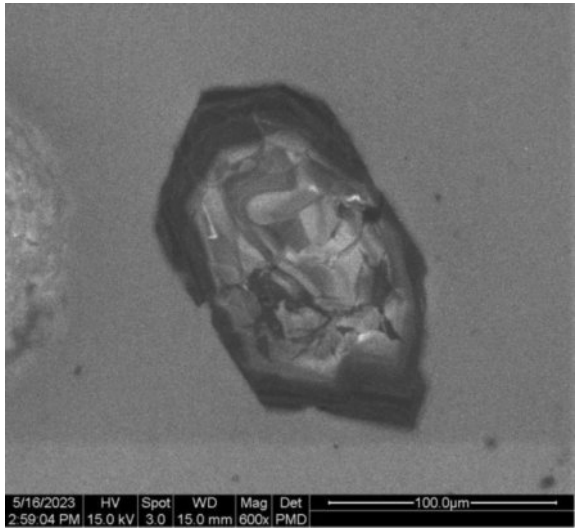
Grain 014 Image CM22KG01_030



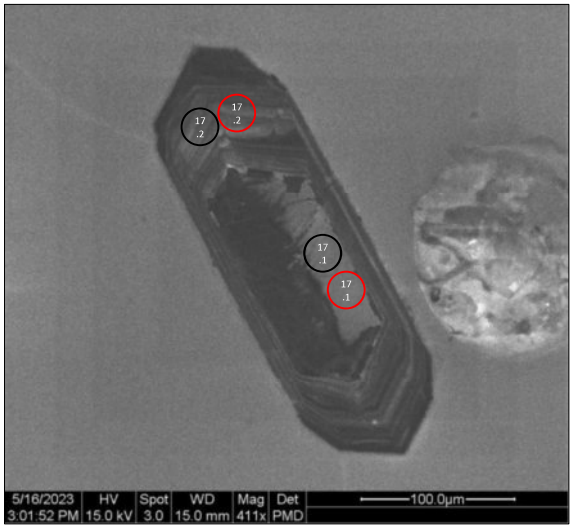
Grain 015 Image CM22KG01_032



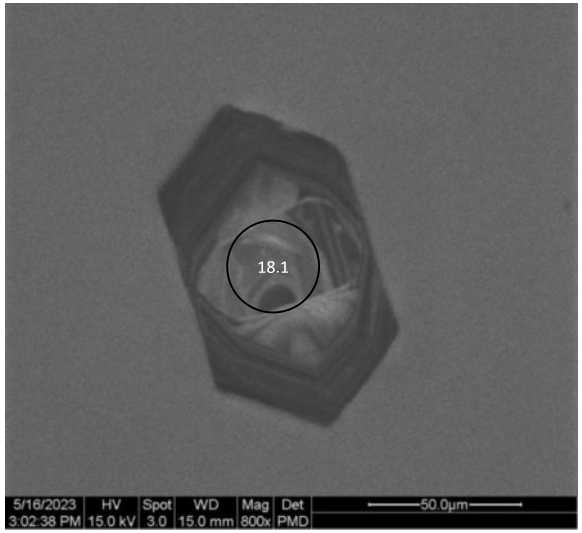
Grain 016 Image CM22KG01_028



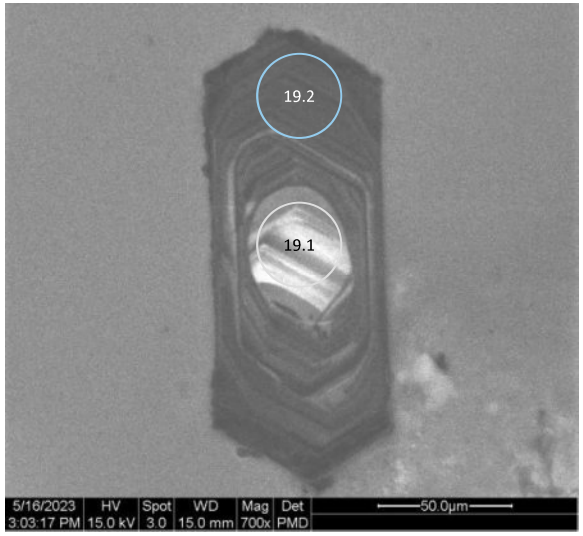
Grain 017 Image CM22KG01_034



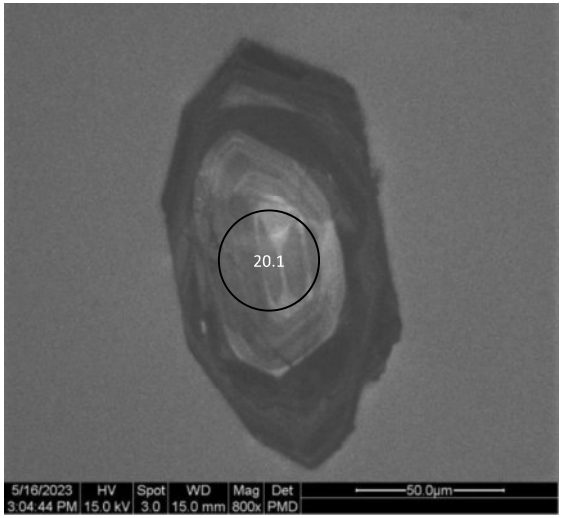
Grain 018 Image CM22KG01_036



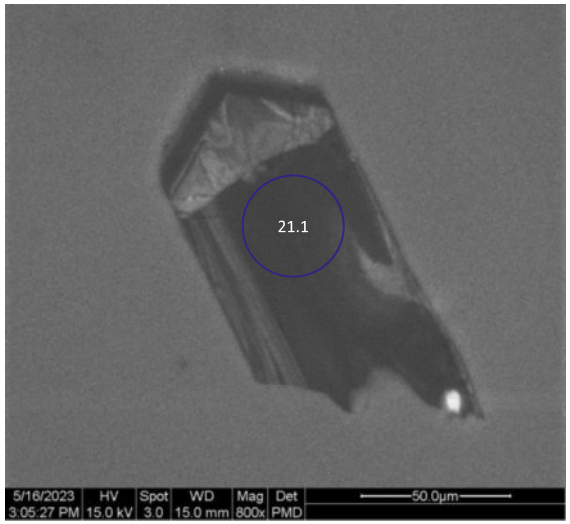
Grain 019 Image CM22KG01_038



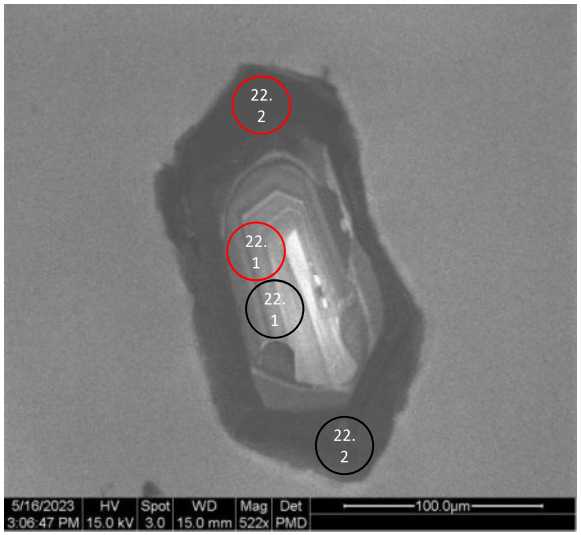
Grain 020 Image CM22KG01_040



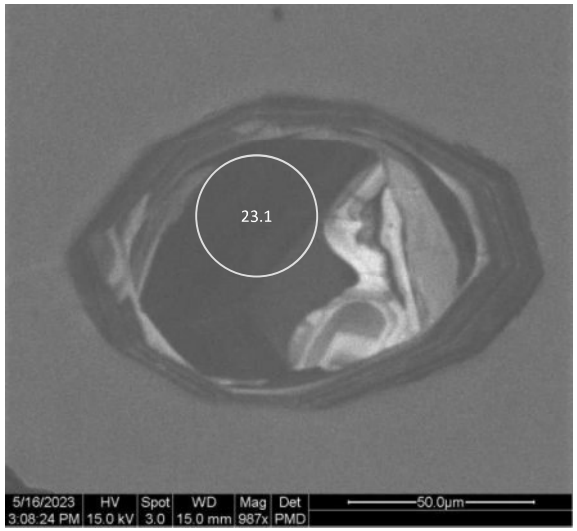
Grain 021 Image CM22KG01_042



Grain 022 Image CM22KG01_044

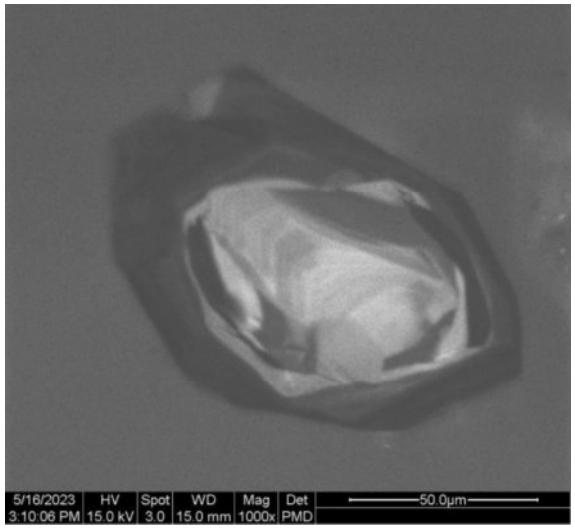


Grain 023 Image CM22KG01_046

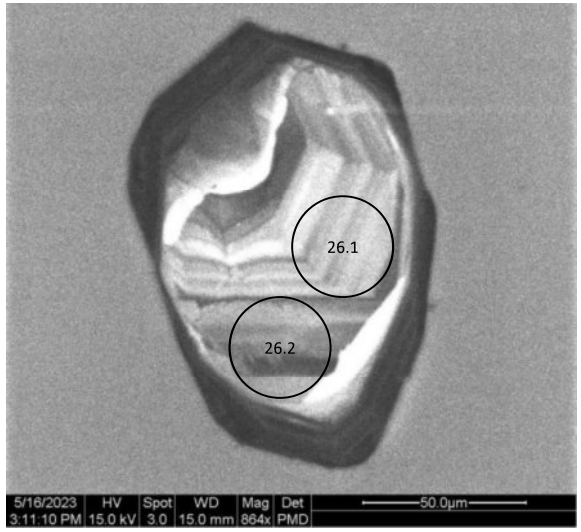


Grain 024 Image CM22KG01_048

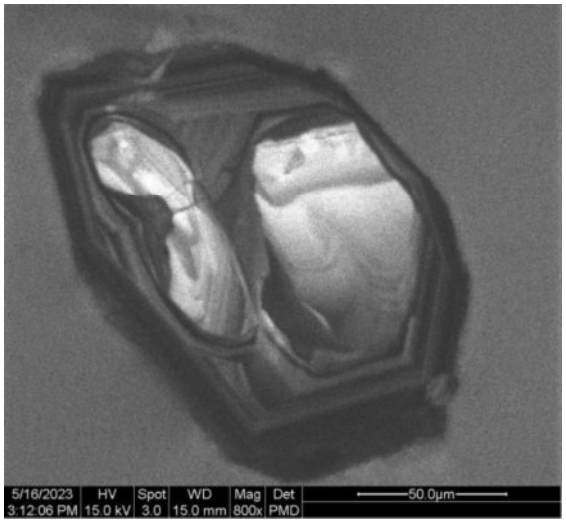
Grain 025 Image CM22KG01_050



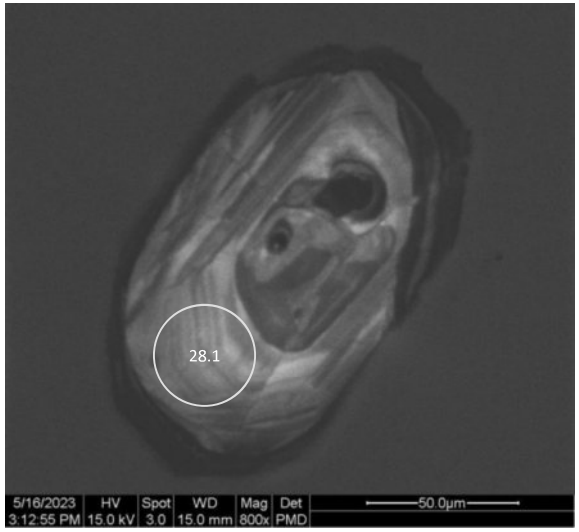
Grain 026 Image CM22KG01_052



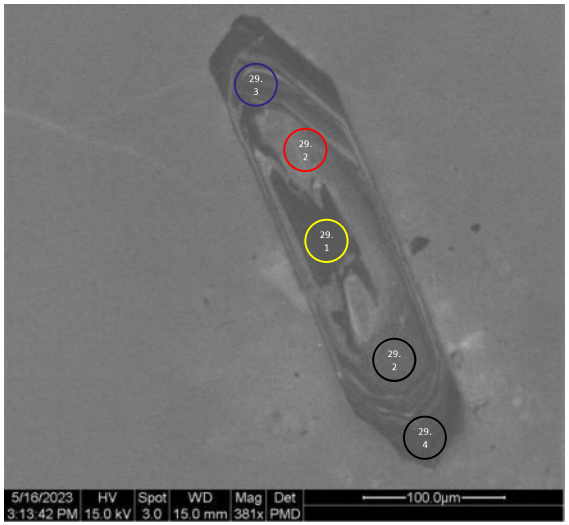
Grain 027 Image CM22KG01_054



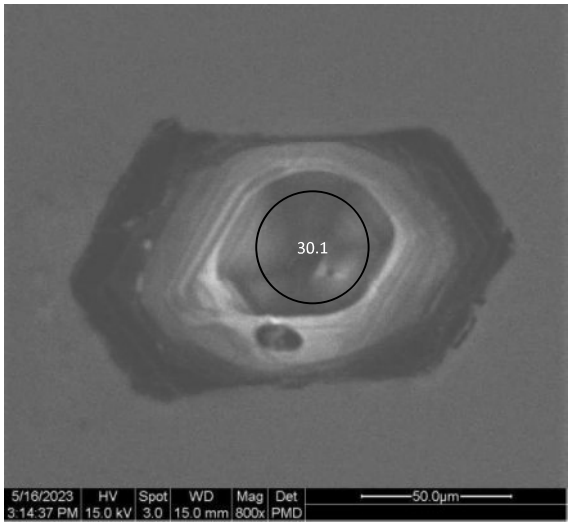
Grain 028 Image CM22KG01_056



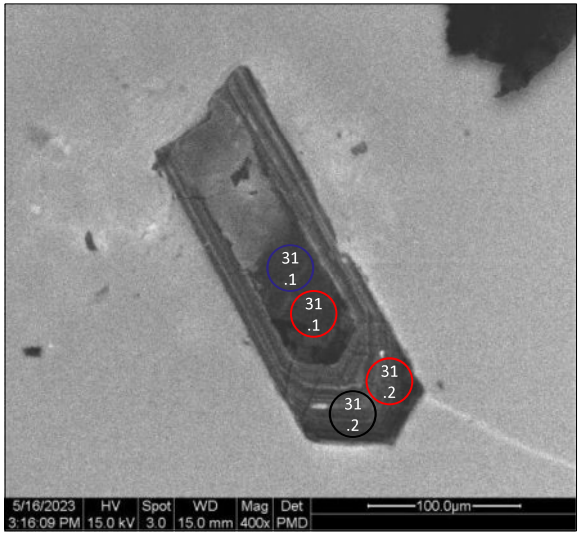
Grain 029 Image CM22KG01_058



Grain 030 Image CM22KG01_059

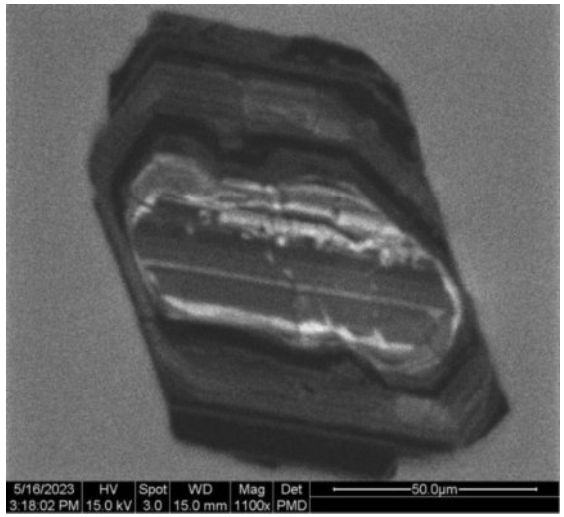


Grain 031 Image CM22KG01_063

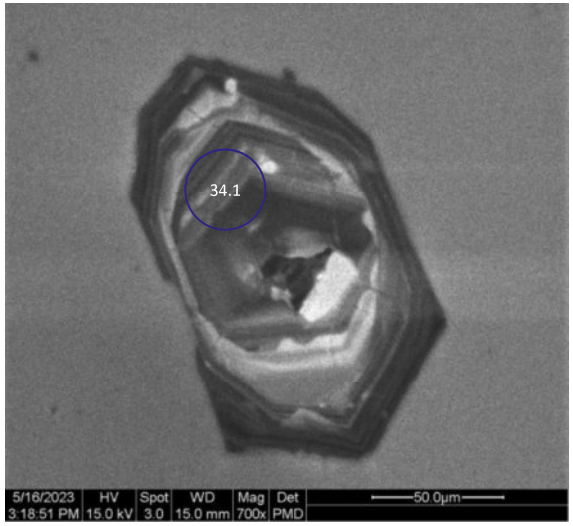


Grain 032 Image CM22KG01_065

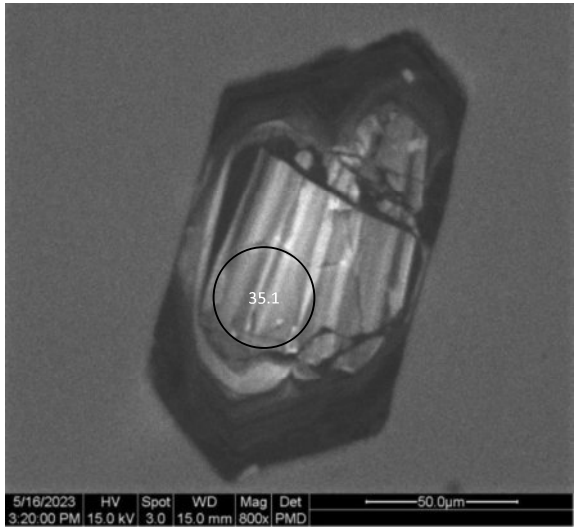
Grain 033 Image CM22KG01_067



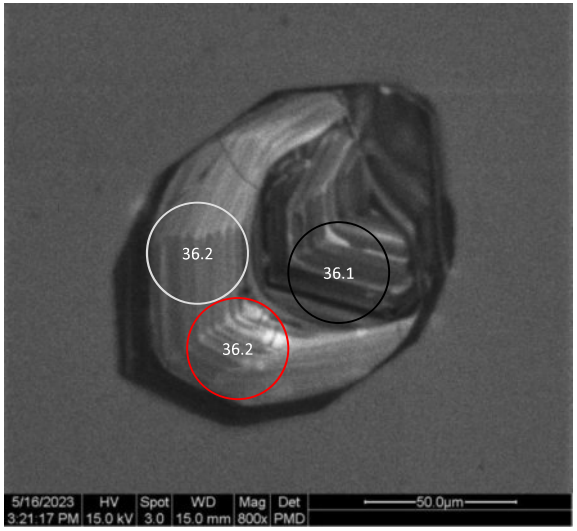
Grain 034 Image CM22KG01_069



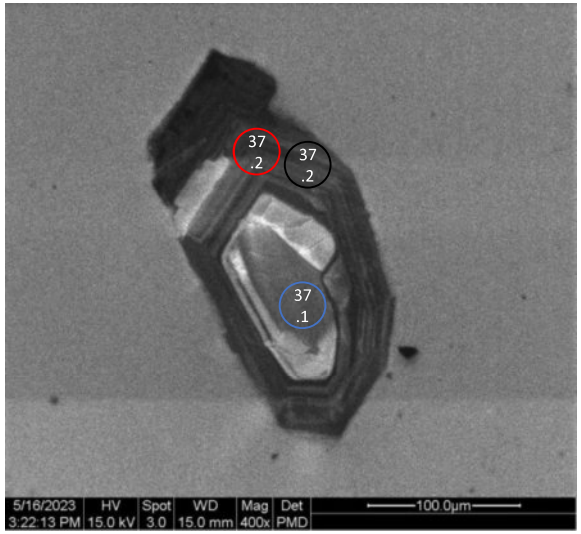
Grain 035 Image CM22KG01_071



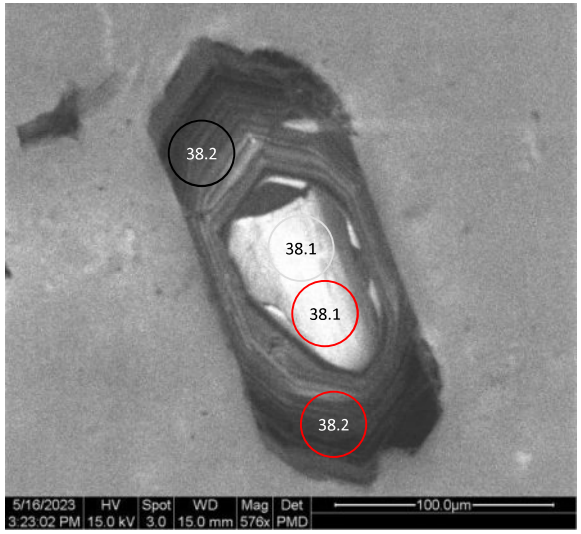
Grain 036 Image CM22KG01_073



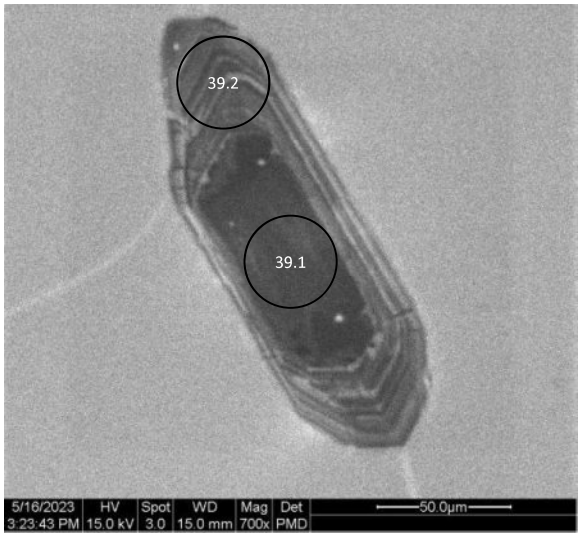
Grain 037 Image CM22KG01_075



Grain 038 Image CM22KG01_077

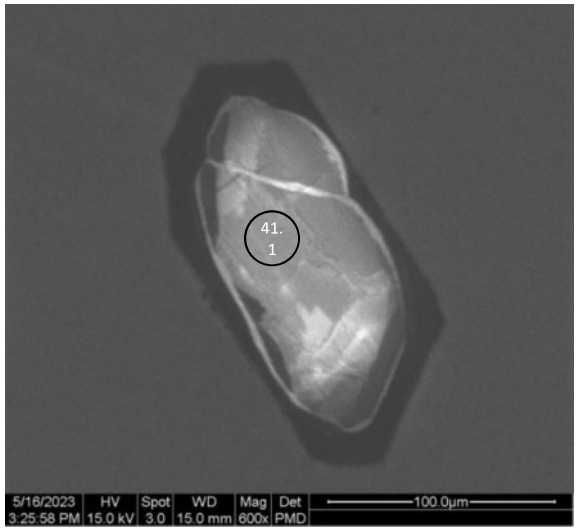


Grain 039 Image CM22KG01_079



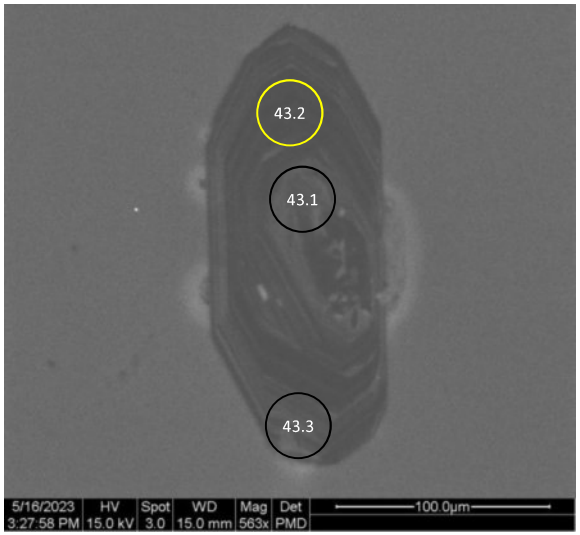
Grain 040 Image CM22KG01_081

Grain 041 Image CM22KG01_083

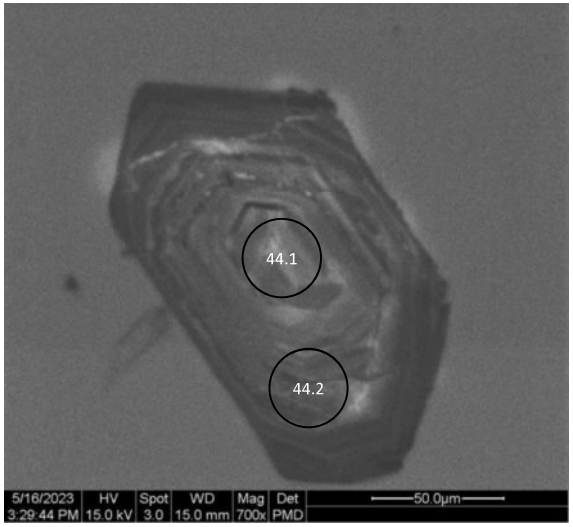


Grain 042 Image CM22KG01_085

Grain 043 Image CM22KG01_087

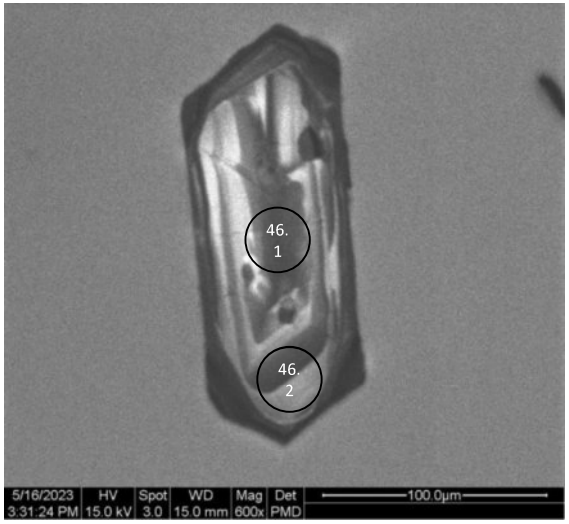


Grain 044 Image CM22KG01_089



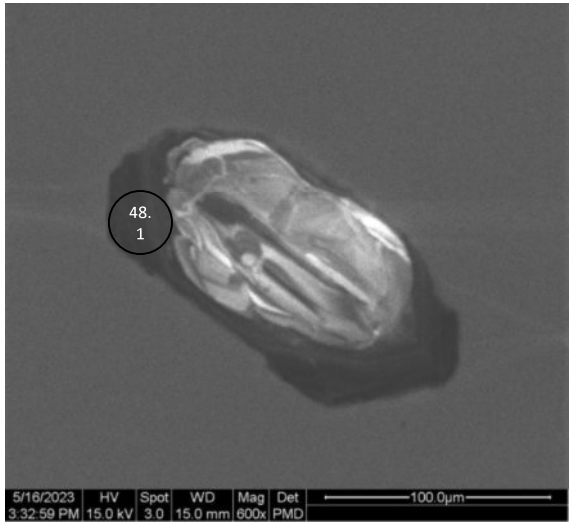
Grain 045 Image CM22KG01_091

Grain 046 Image CM22KG01_093



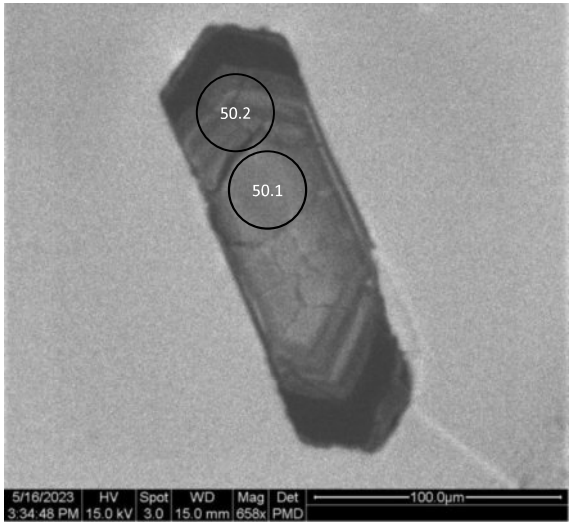
Grain 047 Image CM22KG01_095

Grain 048 Image CM22KG01_097

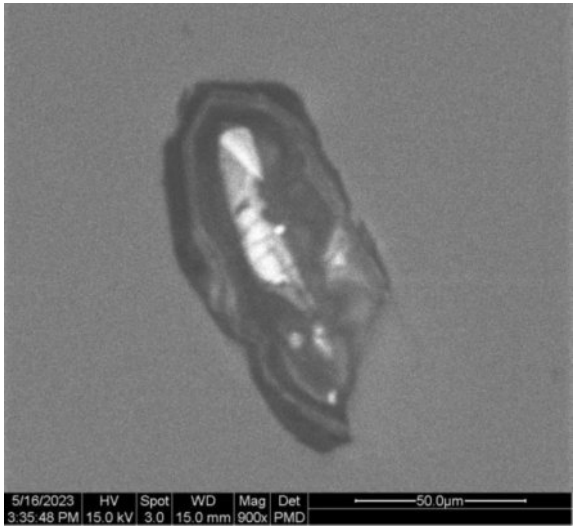


Grain 049 Image CM22KG01_099

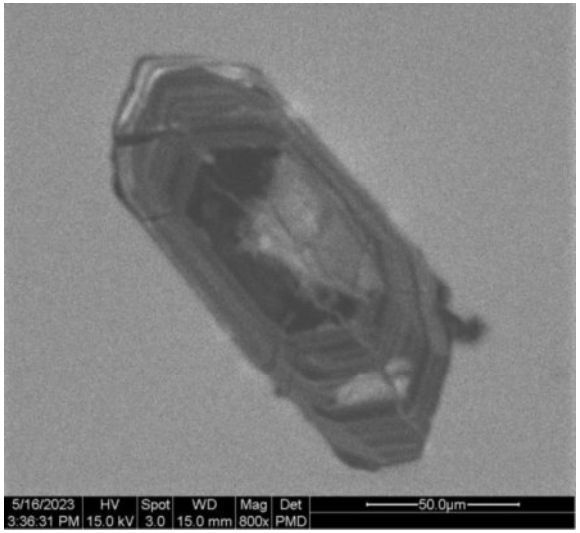
Grain 050 Image CM22KG01_101



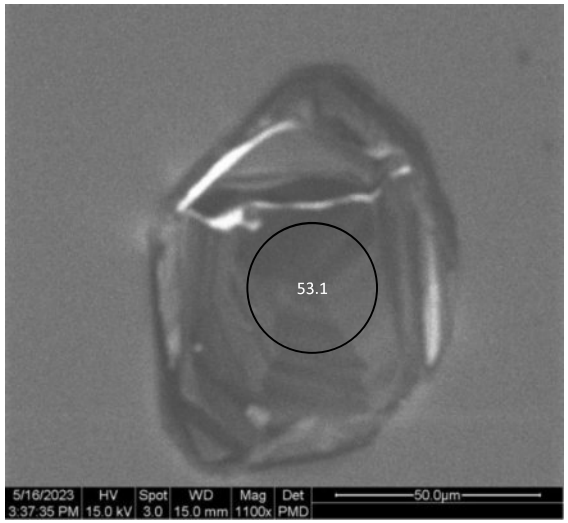
Grain 051 Image CM22KG01_103



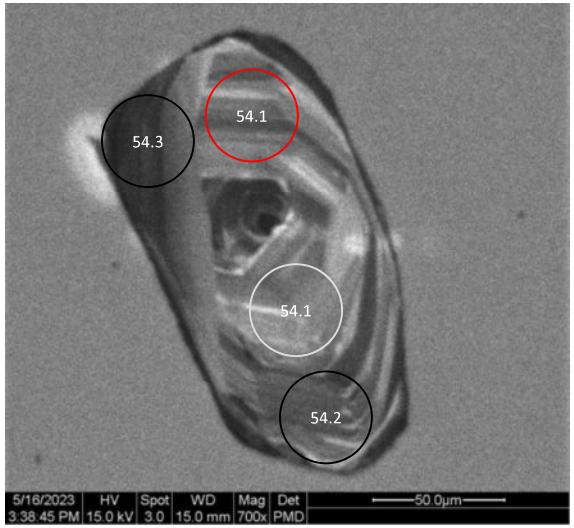
Grain 052 Image CM22KG01_105



Grain 053 Image CM22KG01_107

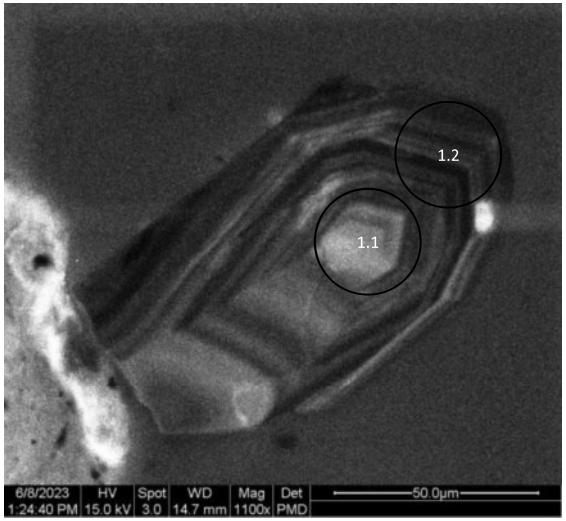


Grain 054 Image CM22KG01_109

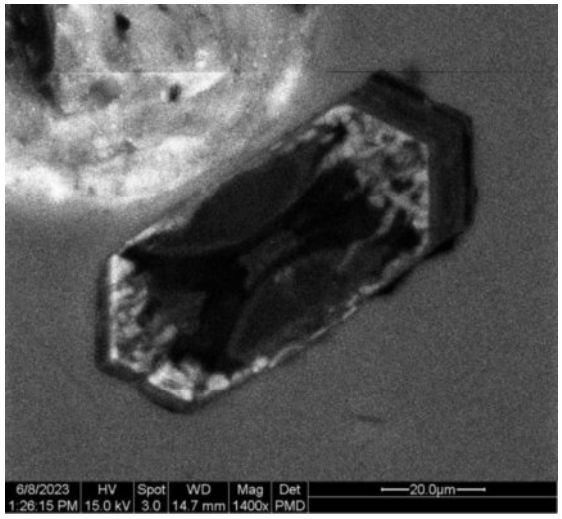


Mount 2

Grain 001
Image CM22KG01_2_002

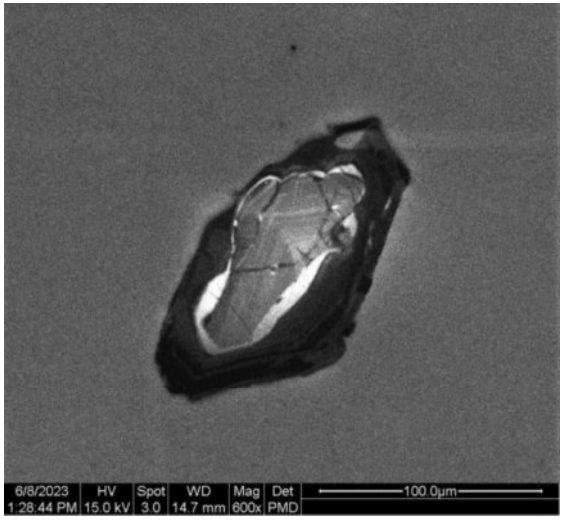


Grain 002
Image CM22KG01_2_003

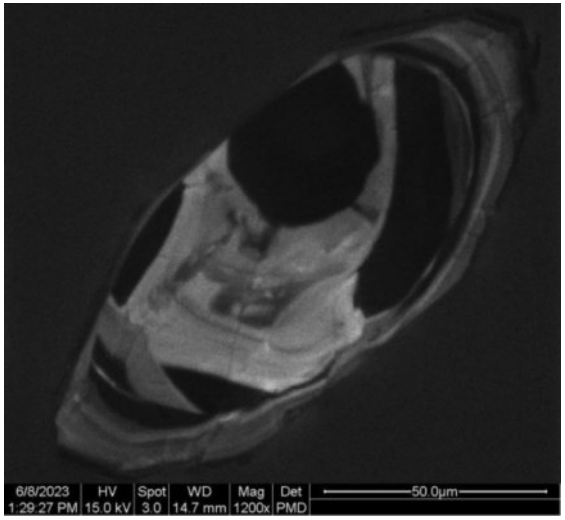


Grain 003
Image CM22KG01_2_005

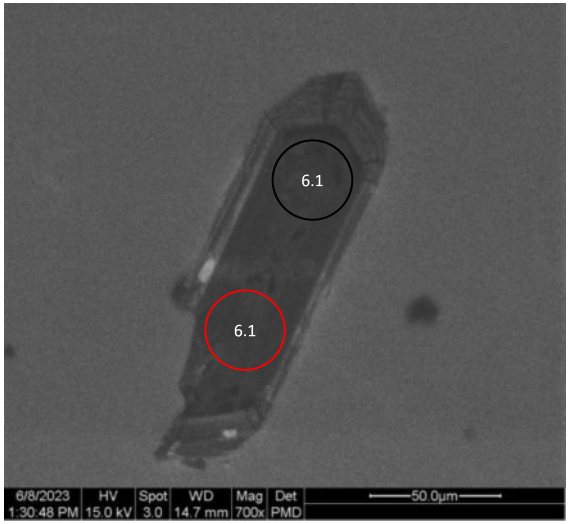
Grain 004
Image CM22KG01_2_007



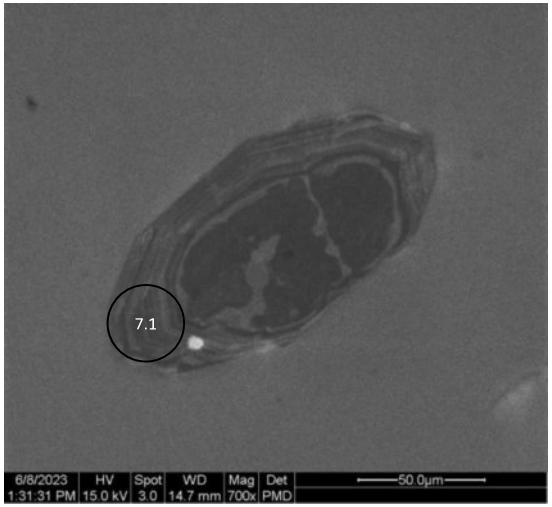
Grain 005
Image CM22KG01_2_009



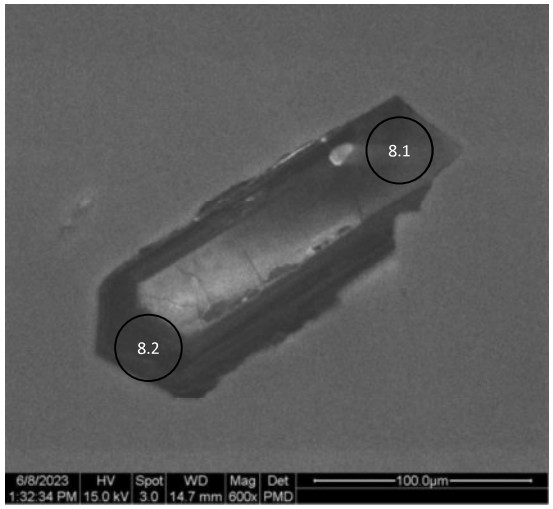
Grain 006
Image CM22KG01_2_011



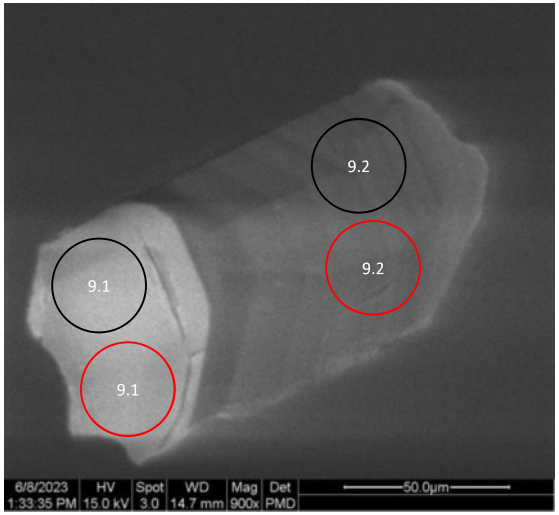
Grain 007
Image CM22KG01_2_013



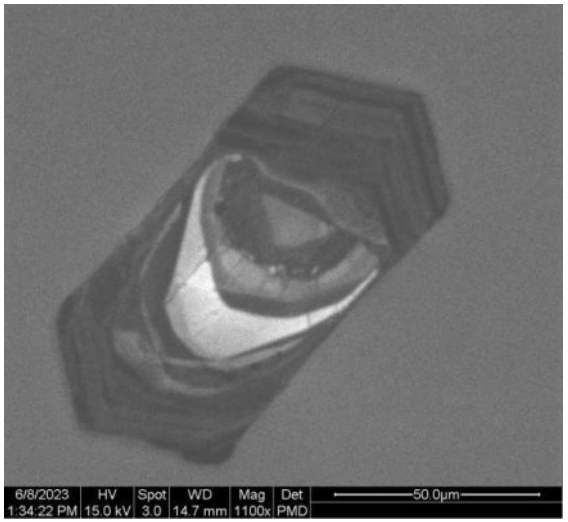
Grain 008
Image CM22KG01_2_015



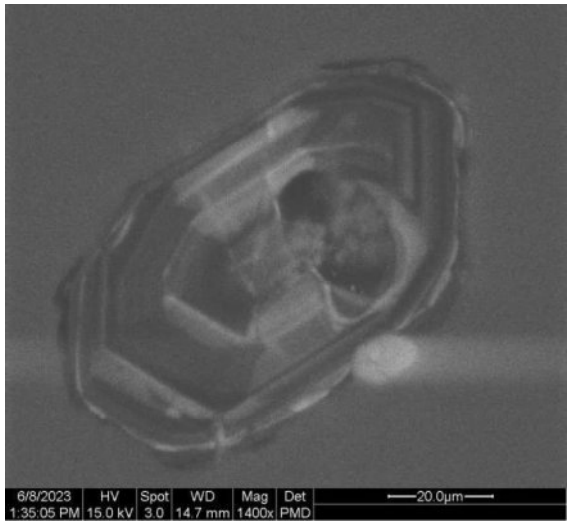
Grain 009
Image CM22KG01_2_017



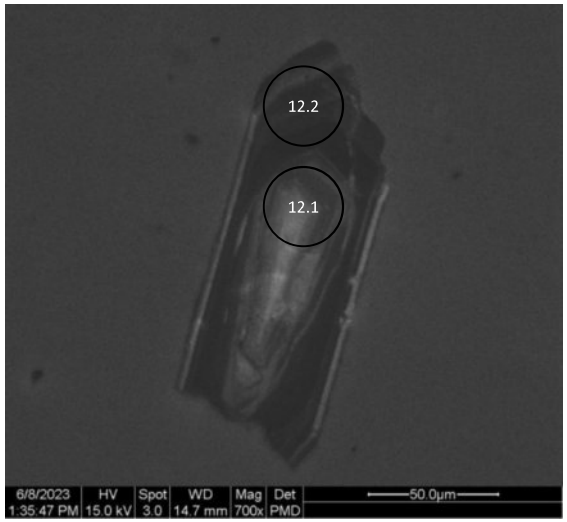
Grain 010
Image CM22KG01_2_019



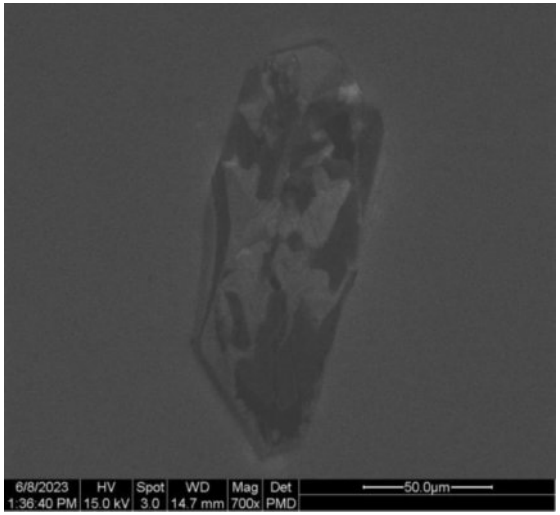
Grain 011
Image CM22KG01_2_021



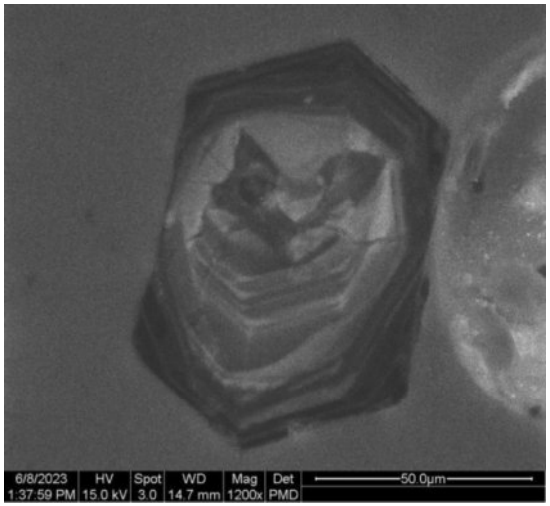
Grain 012
Image CM22KG01_2_023



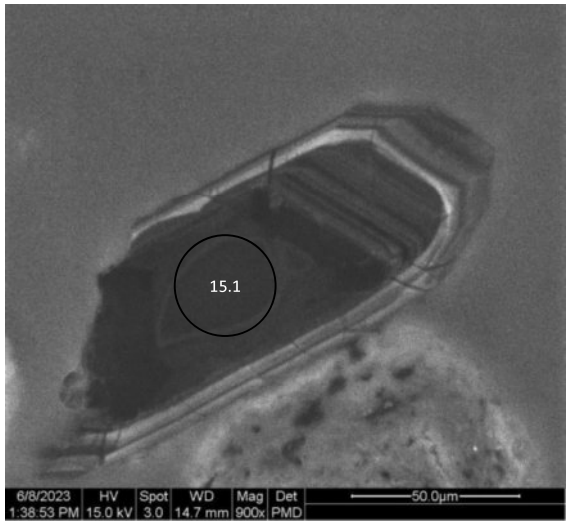
Grain 013
Image CM22KG01_2_025



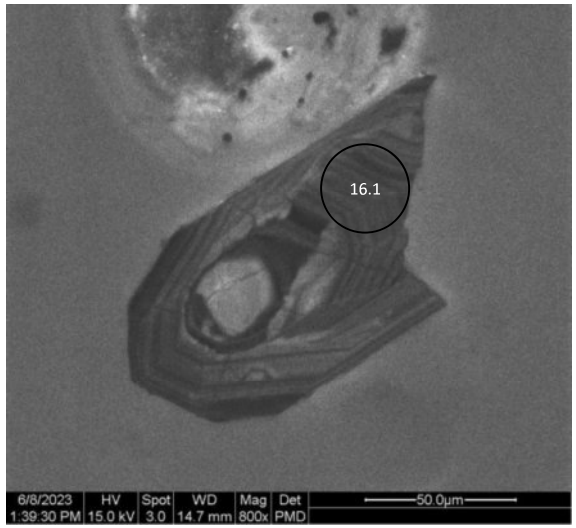
Grain 014
Image CM22KG01_2_027



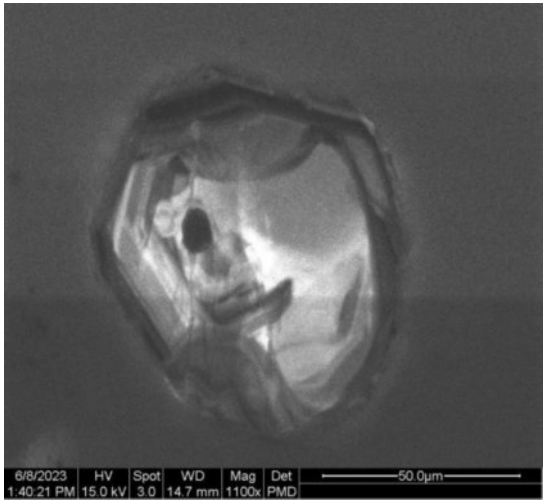
Grain 015
Image CM22KG01_2_029



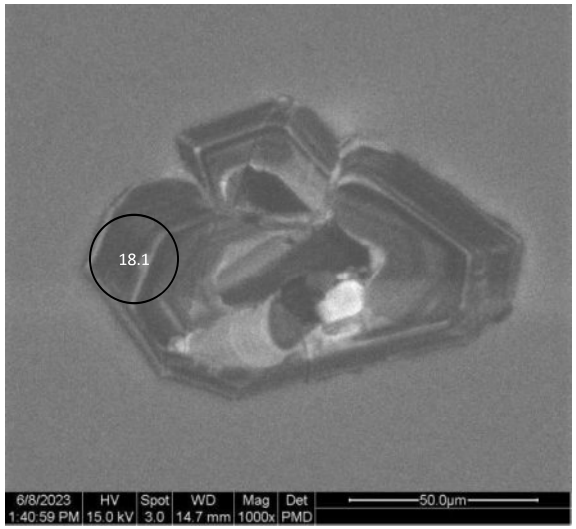
Grain 016
Image CM22KG01_2_031



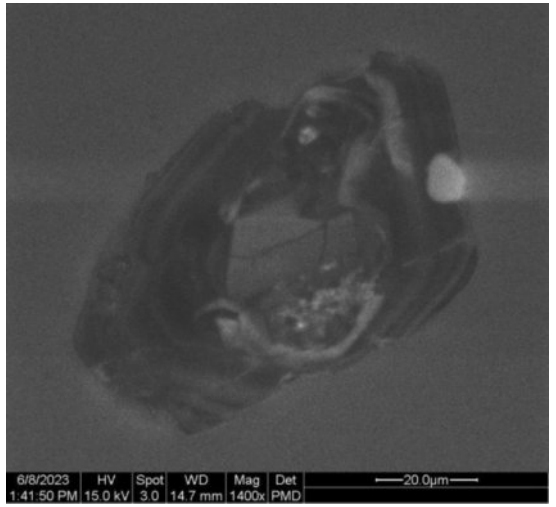
Grain 017
Image CM22KG01_2_033



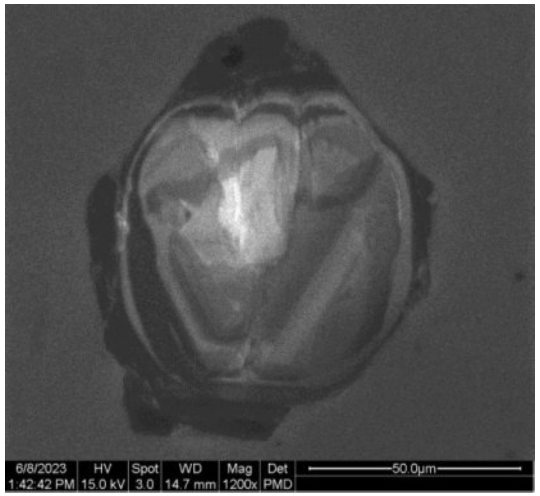
Grain 018
Image CM22KG01_2_035



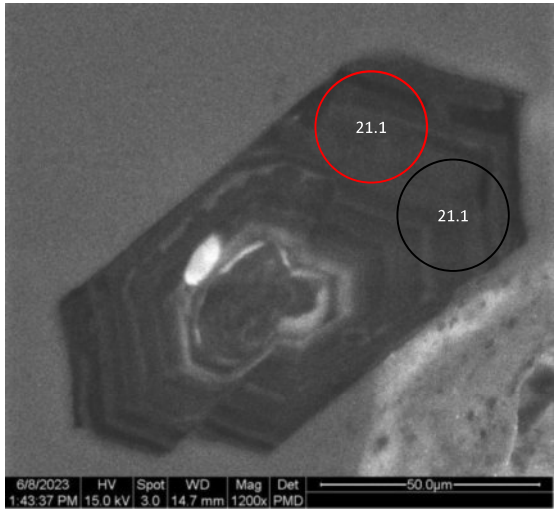
Grain 019
Image CM22KG01_2_037



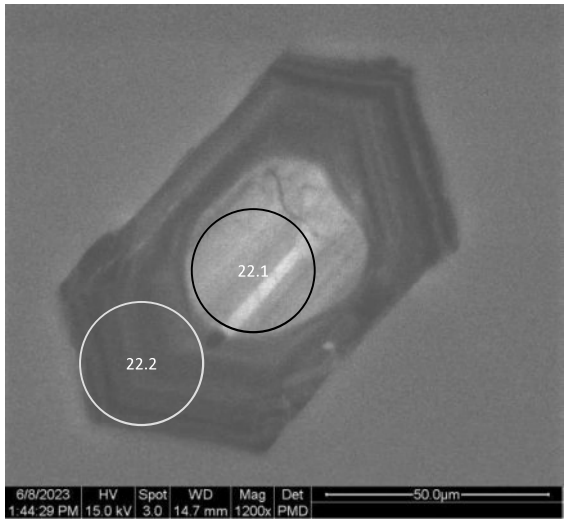
Grain 020
Image CM22KG01_2_039



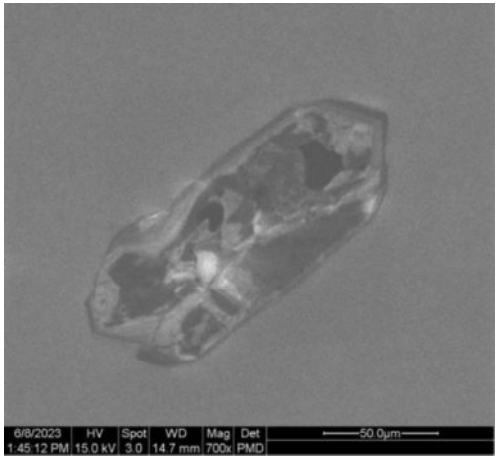
Grain 021
Image CM22KG01_2_041



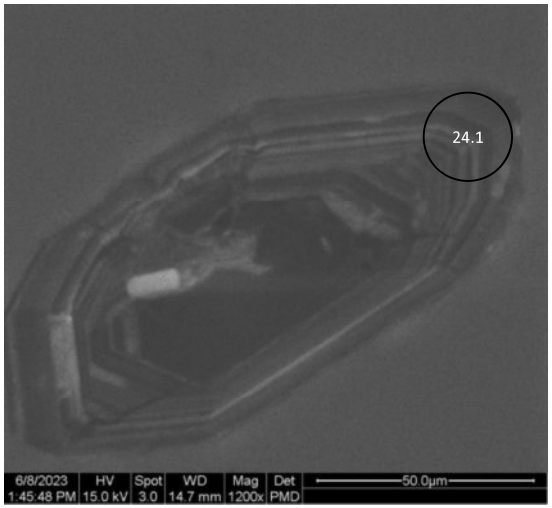
Grain 022
Image CM22KG01_2_043



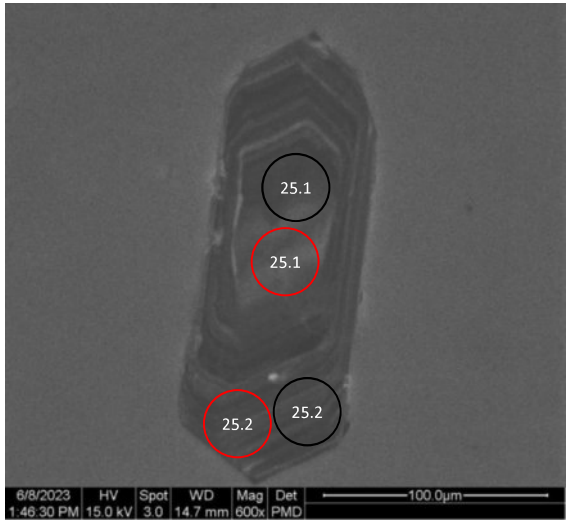
Grain 023
Image CM22KG01_2_045



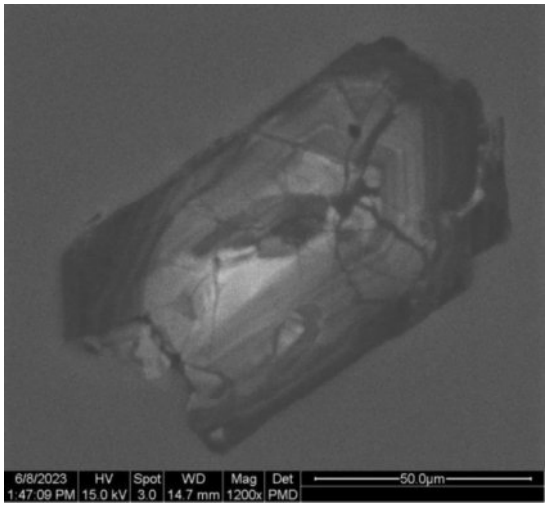
Grain 024
Image CM22KG01_2_047



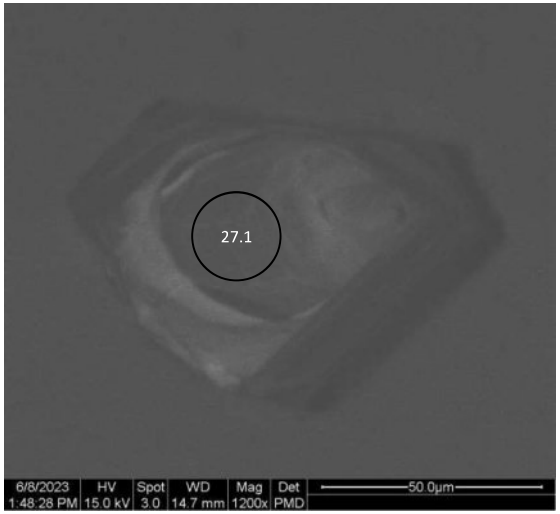
Grain 025
Image CM22KG01_2_049



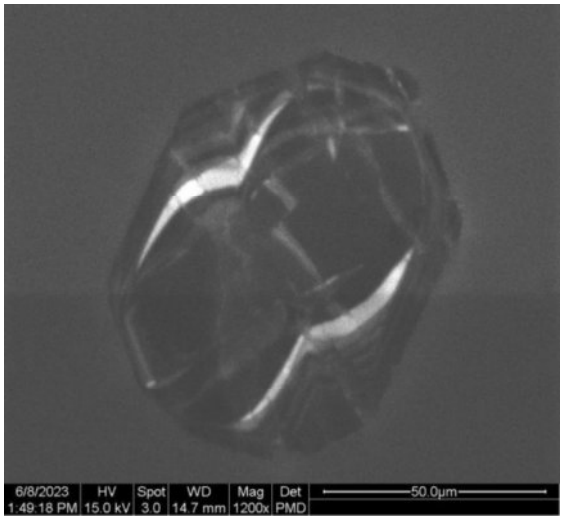
Grain 026
Image CM22KG01_2_051



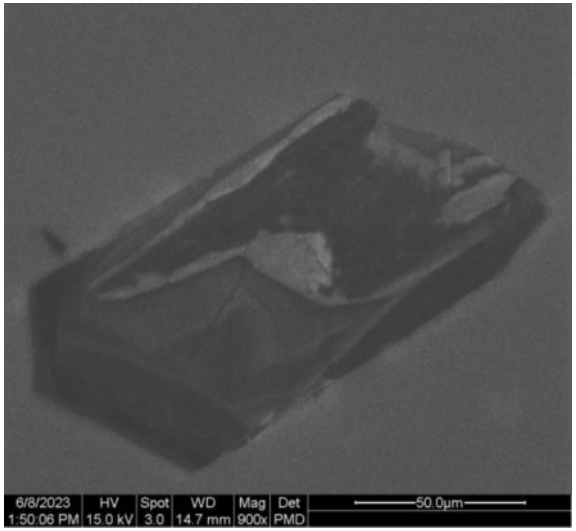
Grain 027
Image CM22KG01_2_053



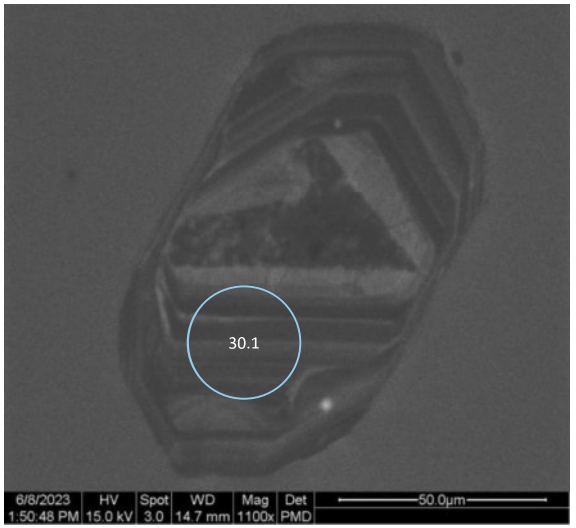
Grain 028
Image CM22KG01_2_055



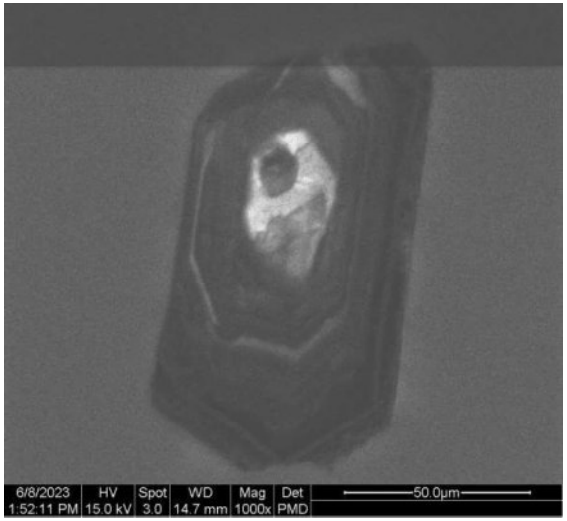
Grain 029
Image CM22KG01_2_057



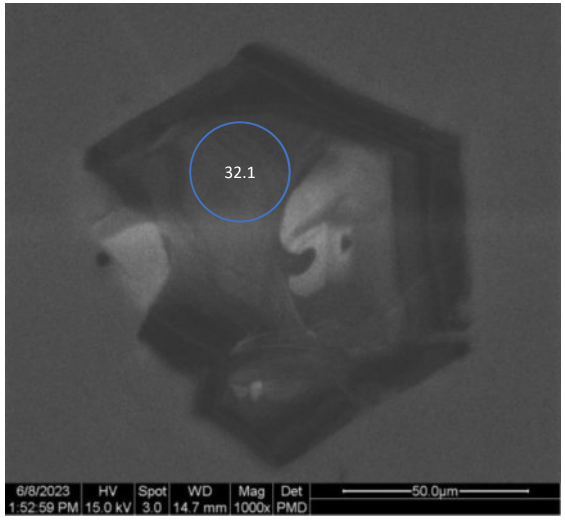
Grain 030
Image CM22KG01_2_059



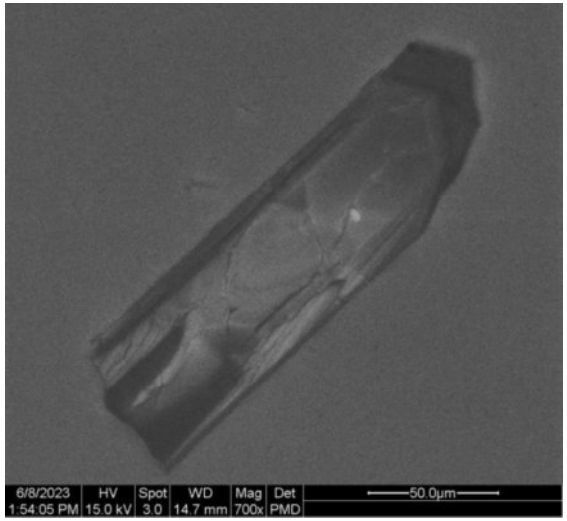
Grain 031
Image CM22KG01_2_061



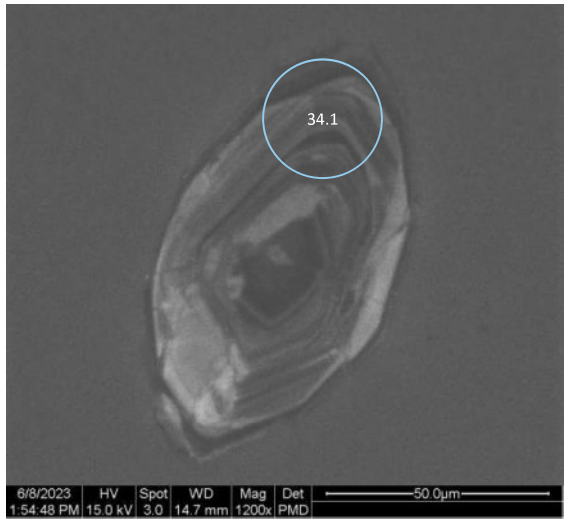
Grain 032
Image CM22KG01_2_061



Grain 033
Image CM22KG01_2_063

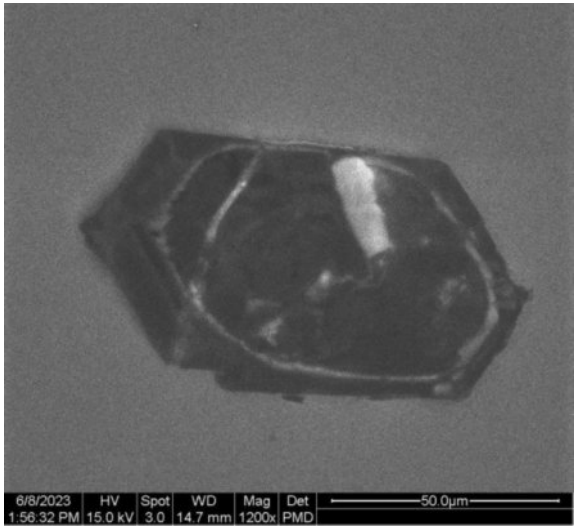


Grain 034
Image CM22KG01_2_065

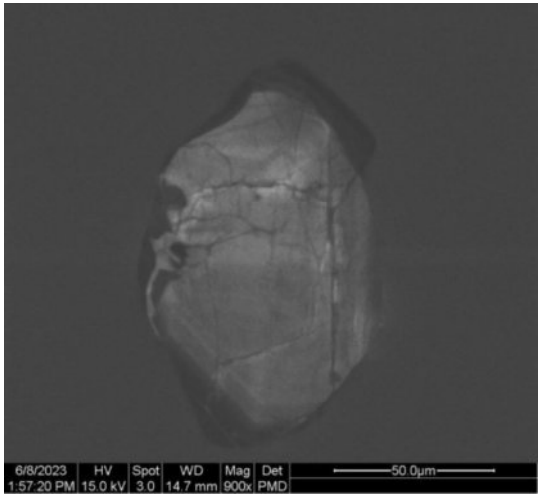


Grain 035
Image CM22KG01_2_067

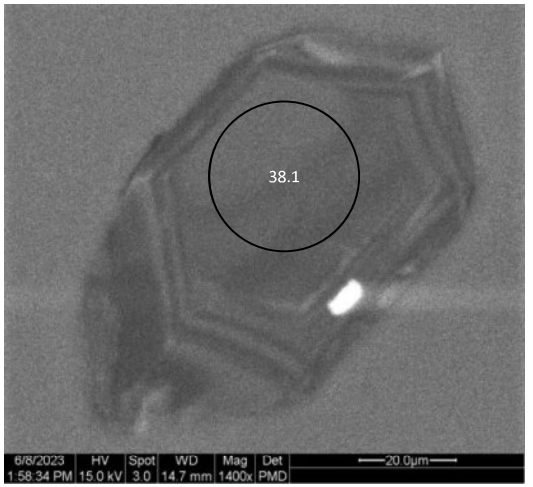
Grain 036
Image CM22KG01_2_071



Grain 037
Image CM22KG01_2_073

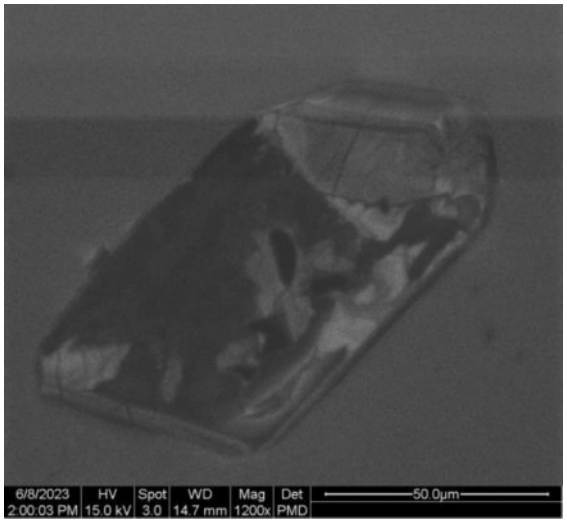


Grain 038
Image CM22KG01_2_075

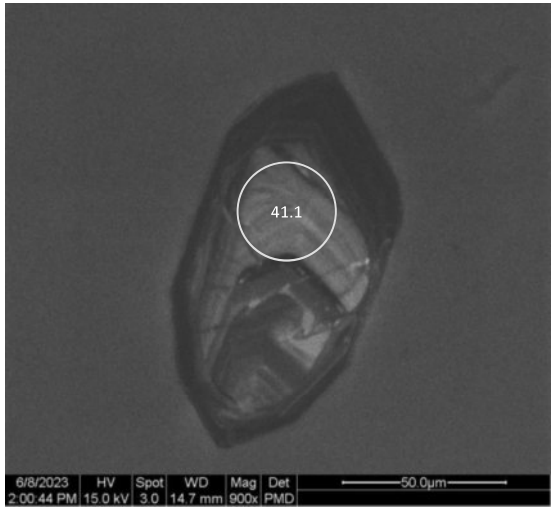


Grain 039
Image CM22KG01_2_077

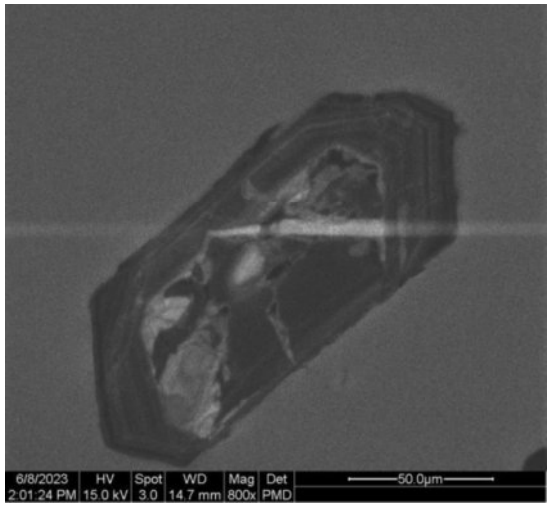
Grain 040
Image CM22KG01_2_079



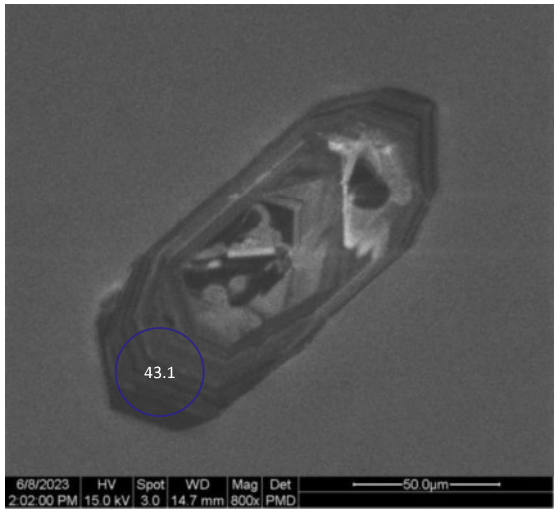
Grain 041
Image CM22KG01_2_081



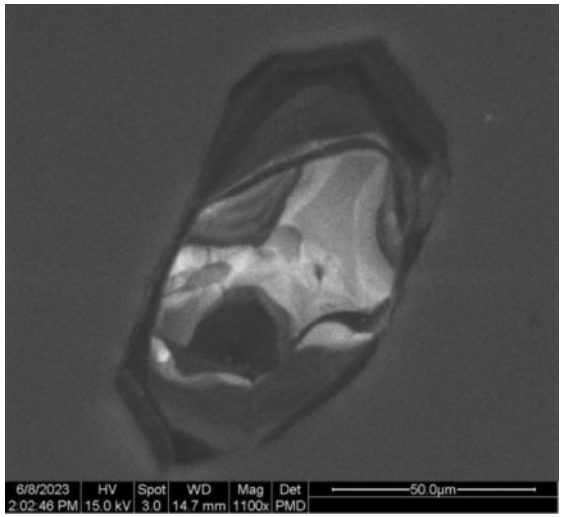
Grain 042
Image CM22KG01_2_083



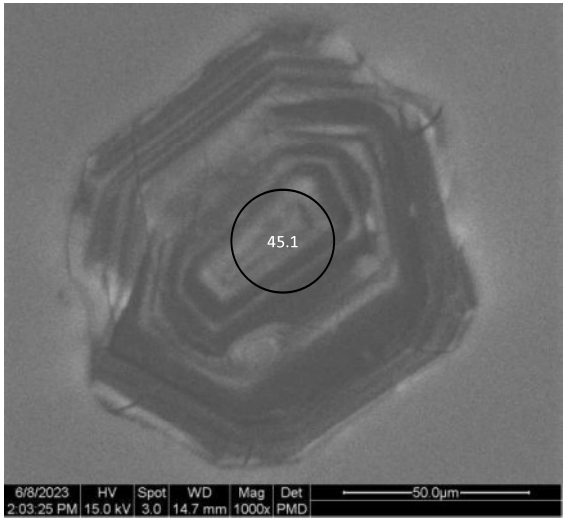
Grain 043
Image CM22KG01_2_085



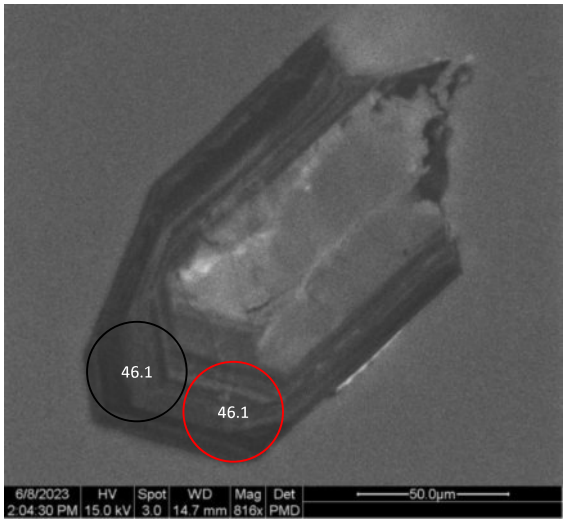
Grain 044
Image CM22KG01_2_087



Grain 045
Image CM22KG01_2_089



Grain 046
Image CM22KG01_2_091



CM22/HD-01

Emplacement

Antecryst

Xenocryst

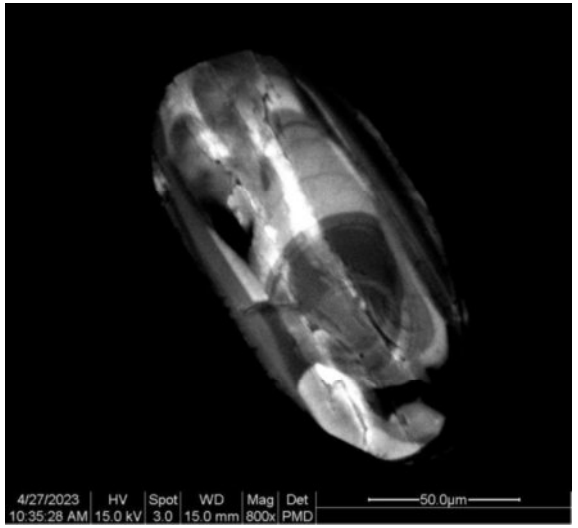
Discordant

Rejected due to Pb loss

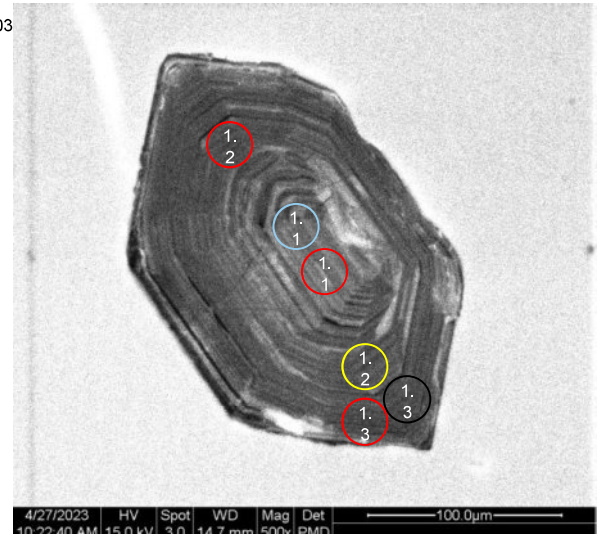
Reserved for future trace element analysis

22/12/2023

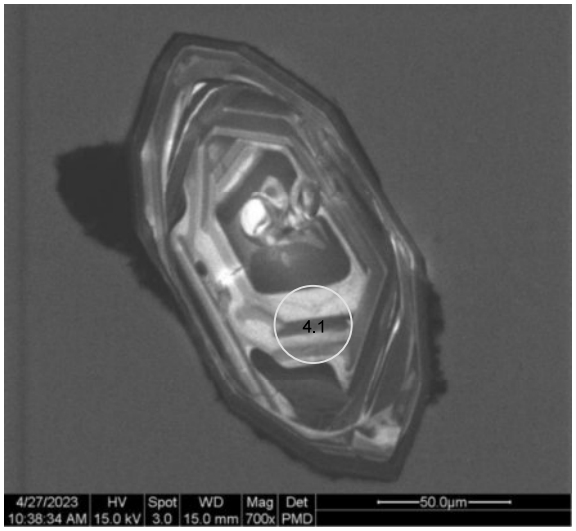
Grain 003 Image CM22HD01_007



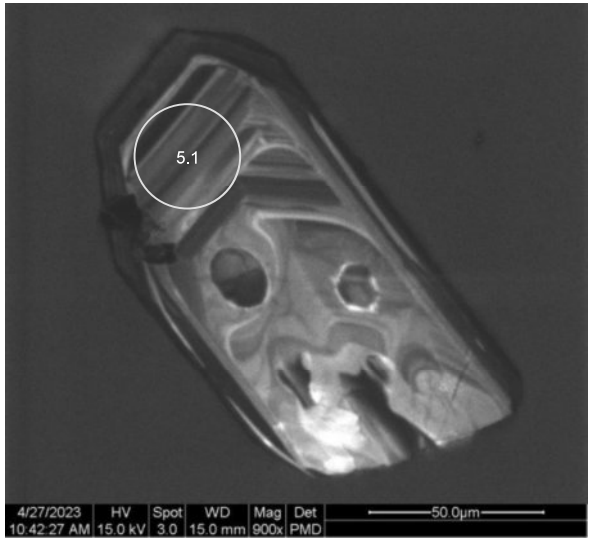
Grain 001 Image CM22HD01_003



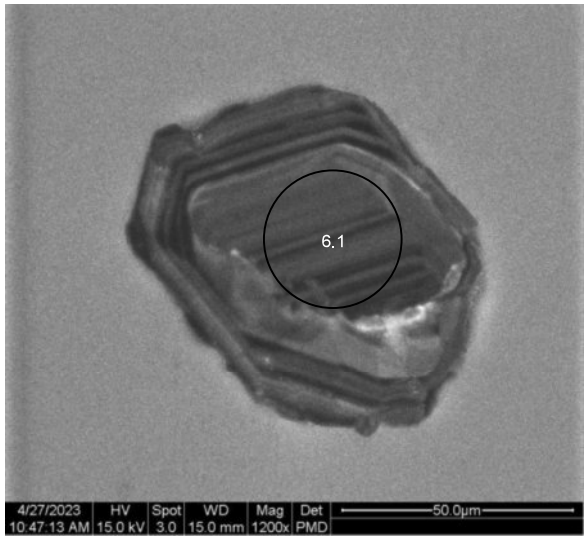
Grain 004
Image CM22HD01_009



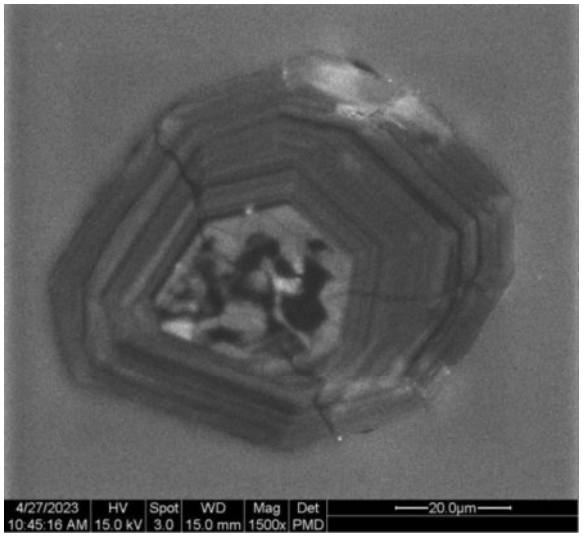
Grain 005
Image CM22HD01_011



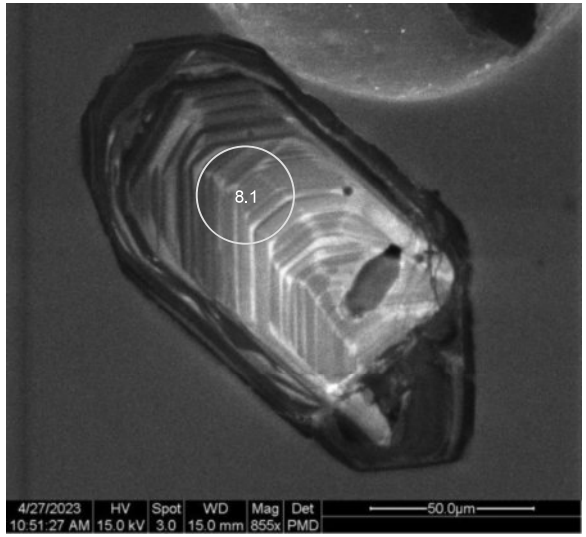
Grain 006
Image CM22HD01_015



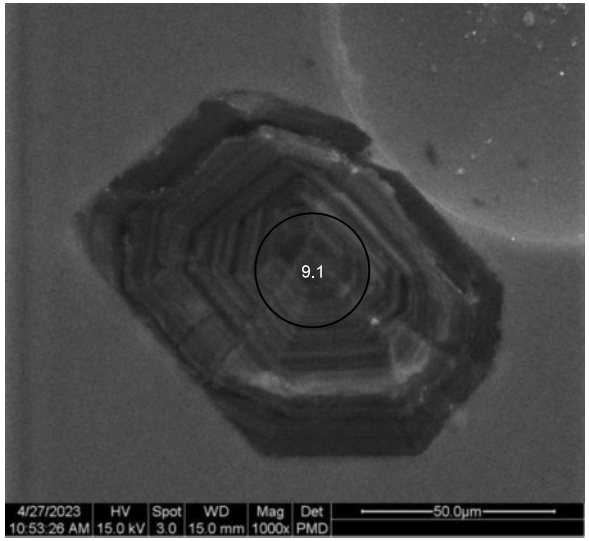
Grain 007
Image CM22HD01_013



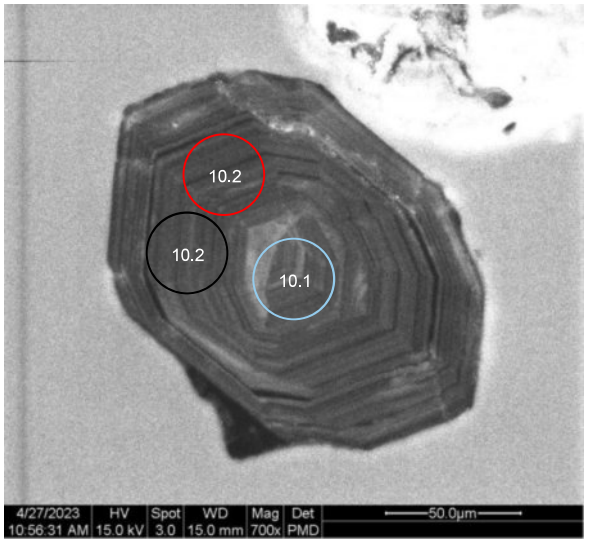
Grain 008
Image CM22HD01_017



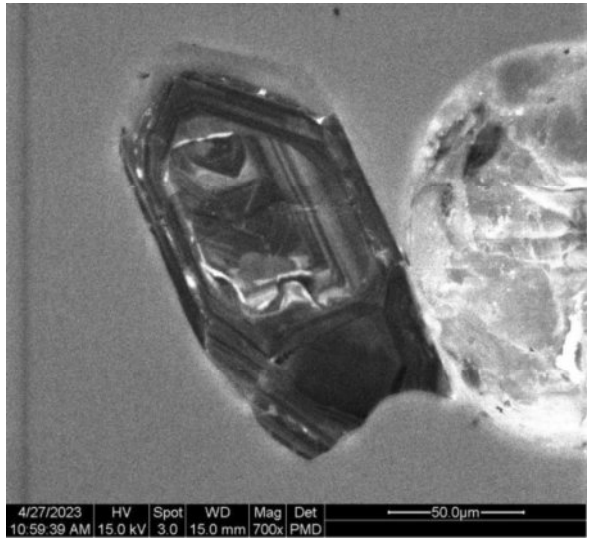
Grain 009
Image CM22HD01_019



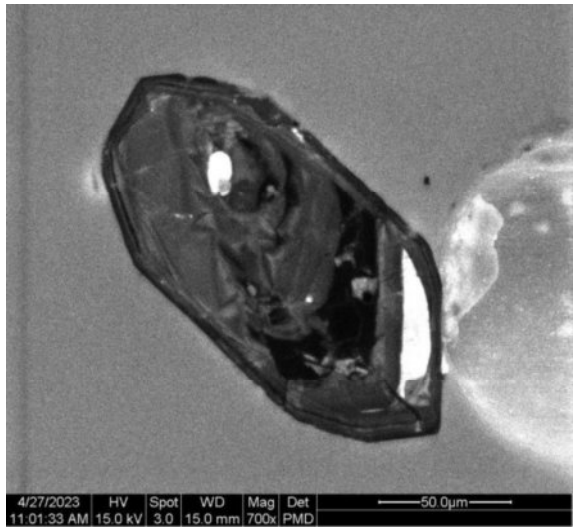
Grain 010
Image CM22HD01_021



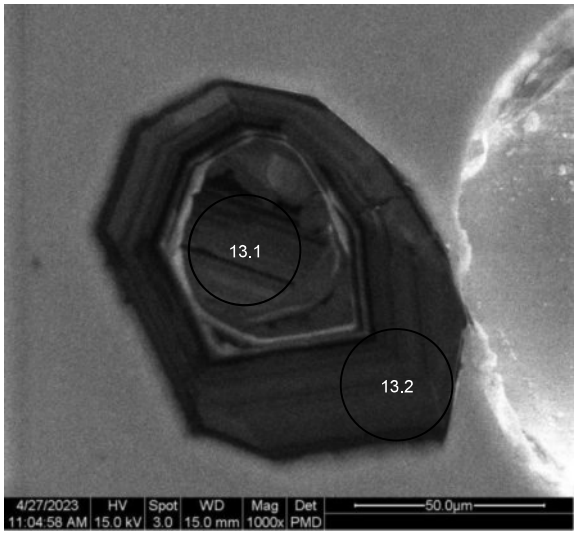
Grain 011
Image CM22HD01_023



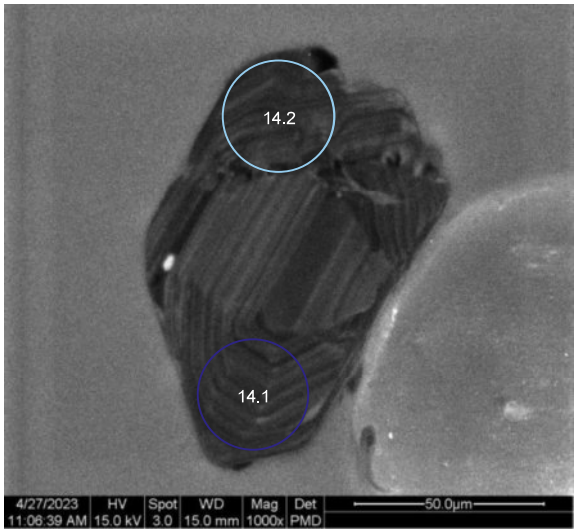
Grain 012
Image CM22HD01_025



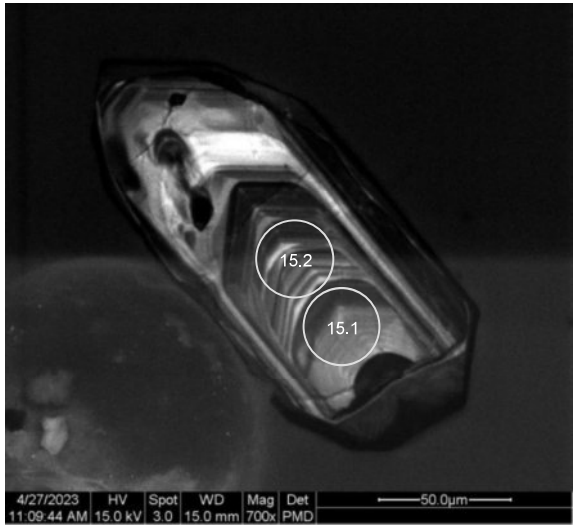
Grain 013
Image CM22HD01_029



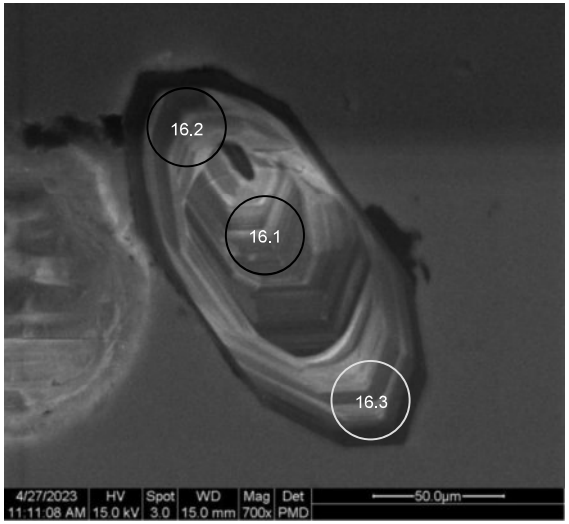
Grain 014
Image CM22HD01_031



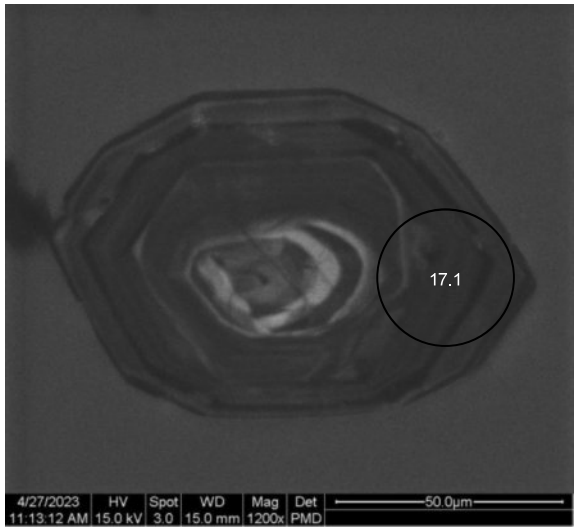
Grain 015
Image CM22HD01_033



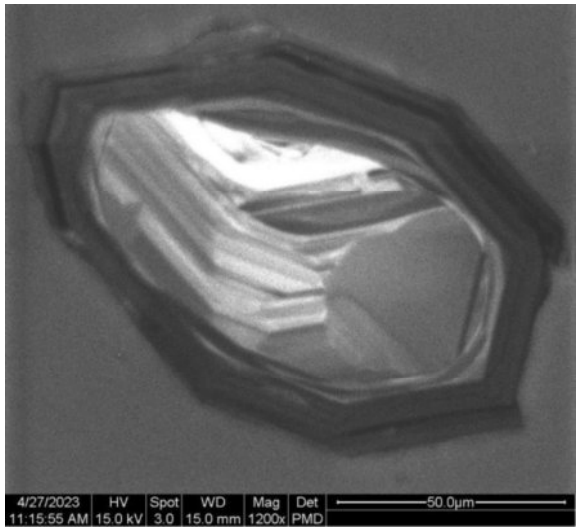
Grain 016
Image CM22HD01_035



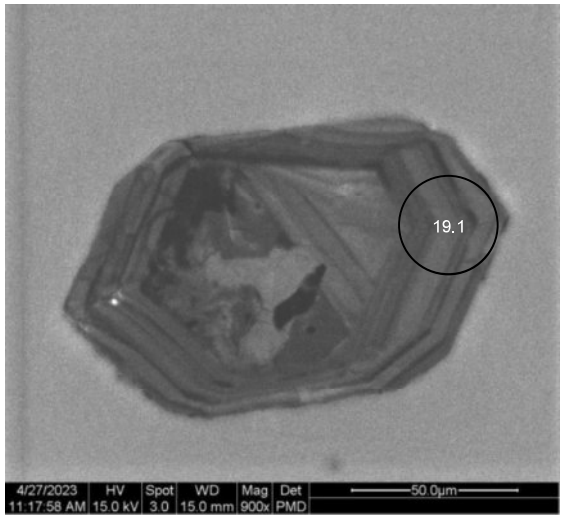
Grain 017
Image CM22HD01_037



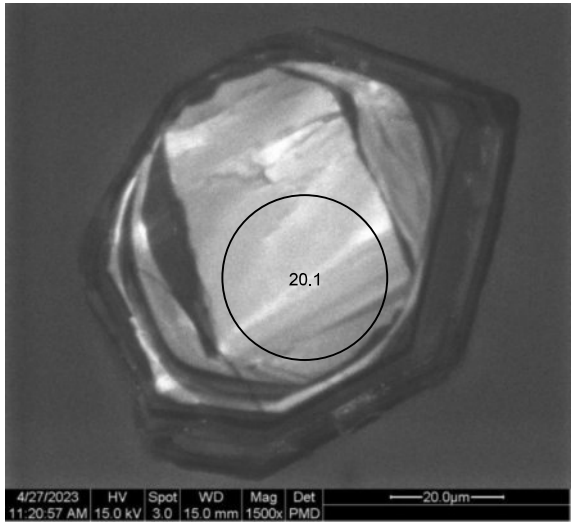
Grain 018
Image CM22HD01_039



Grain 019
Image CM22HD01_041

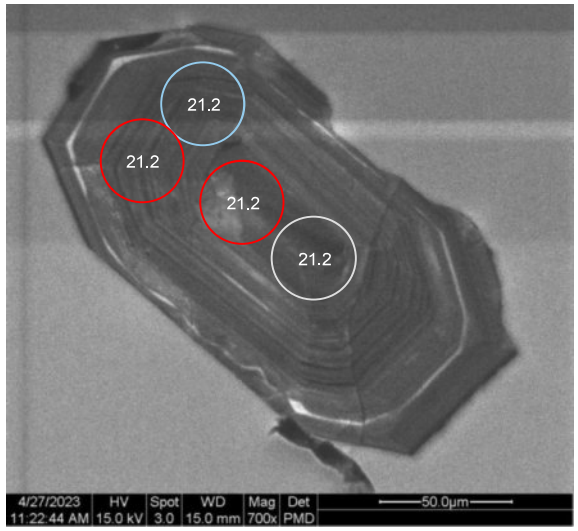


Grain 020
Image CM22HD01_043

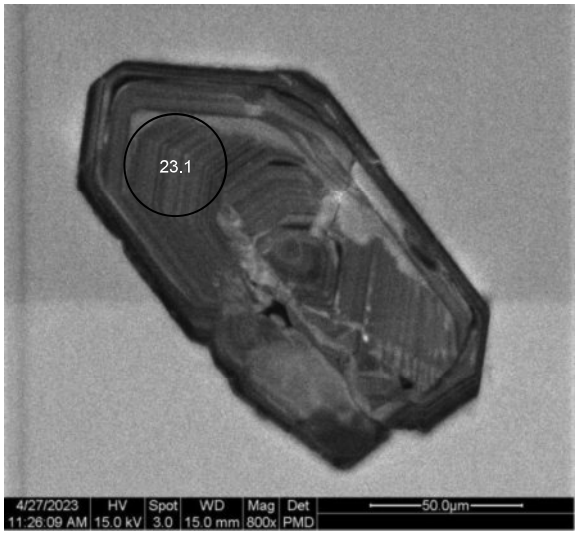


22/12/2023

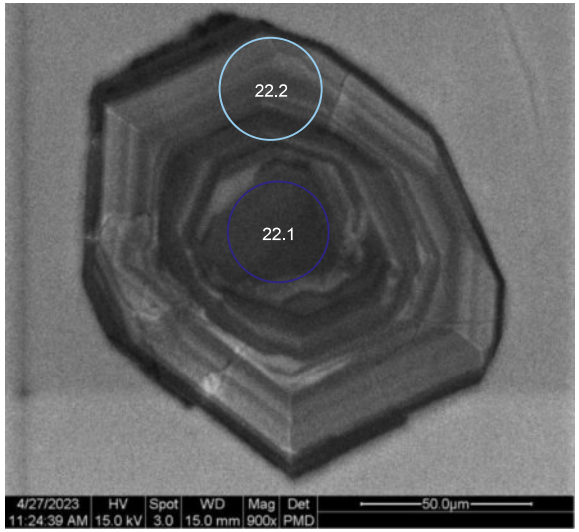
Grain 021
Image CM22HD01_045



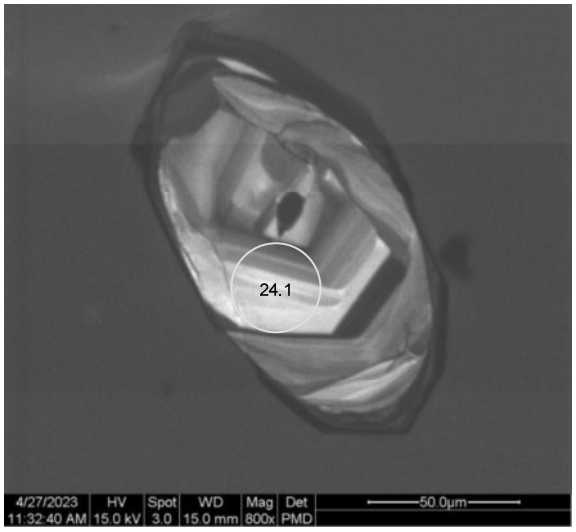
Grain 023
Image CM22HD01_049



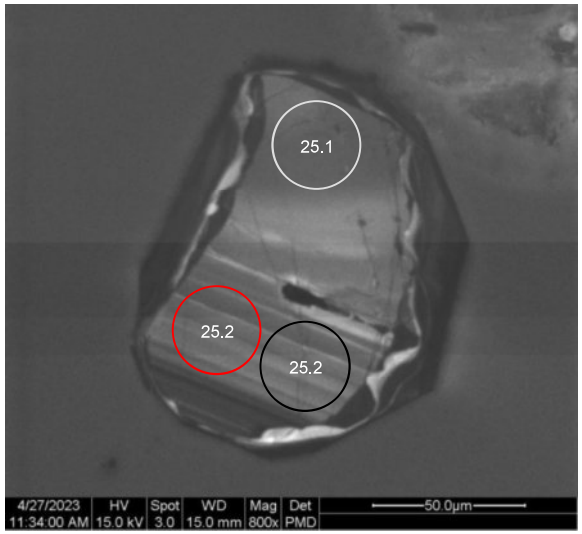
Grain 022
Image CM22HD01_047



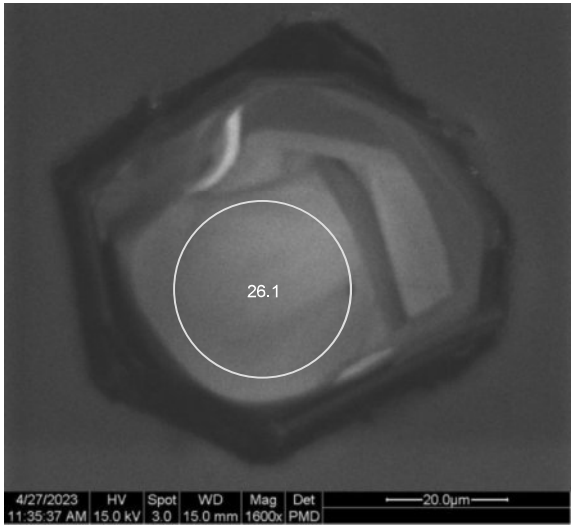
Grain 024
Image CM22HD01_051



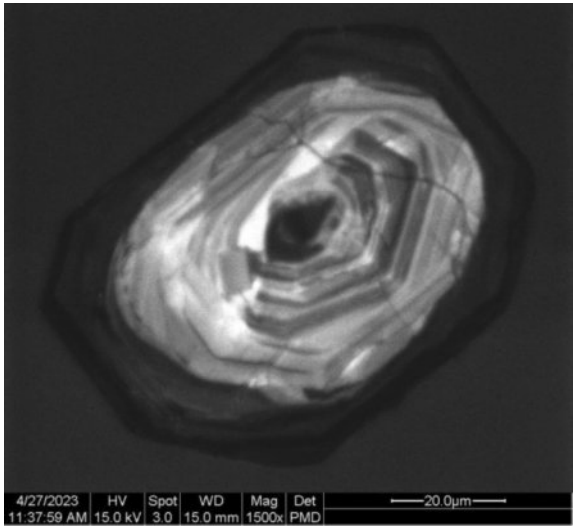
Grain 025
Image CM22HD01_053



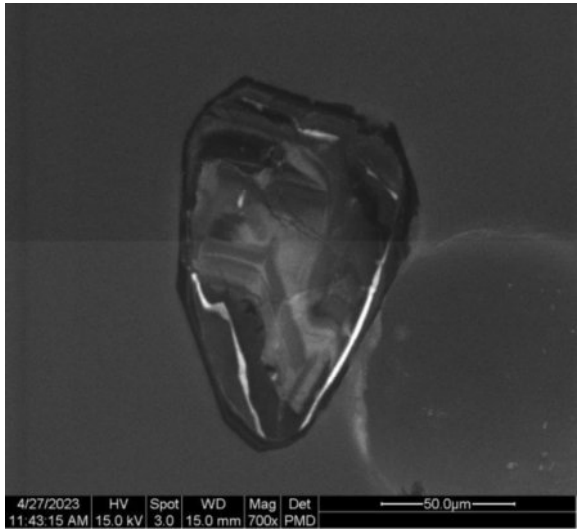
Grain 026
Image CM22HD01_055



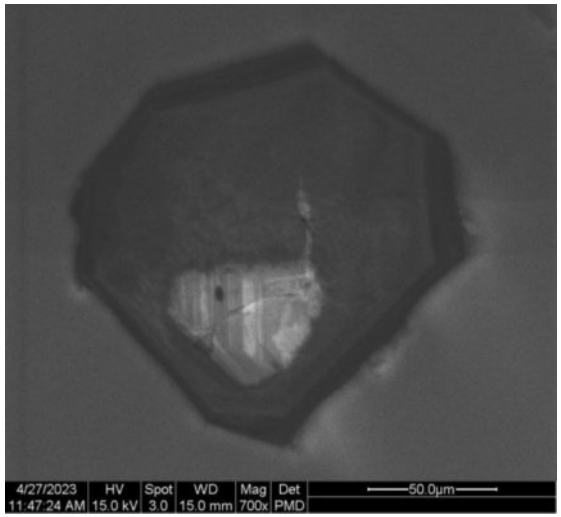
Grain 027
Image CM22HD01_057



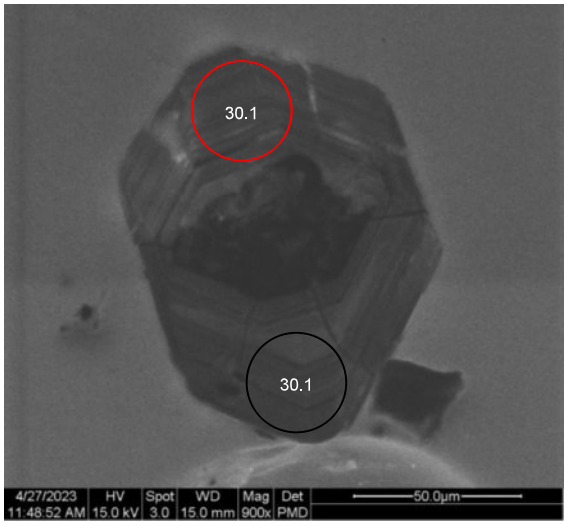
Grain 028
Image CM22HD01_063



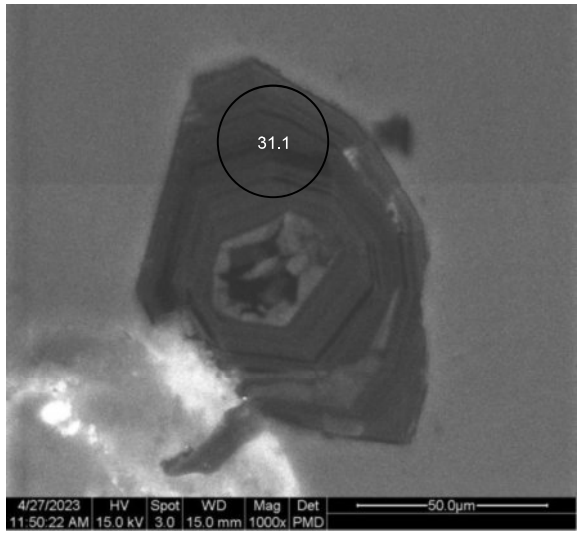
Grain 029
Image CM22HD01_069



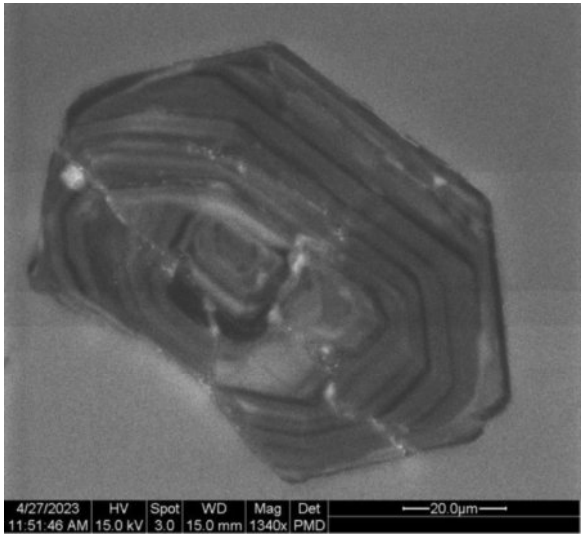
Grain 030
Image CM22HD01_071



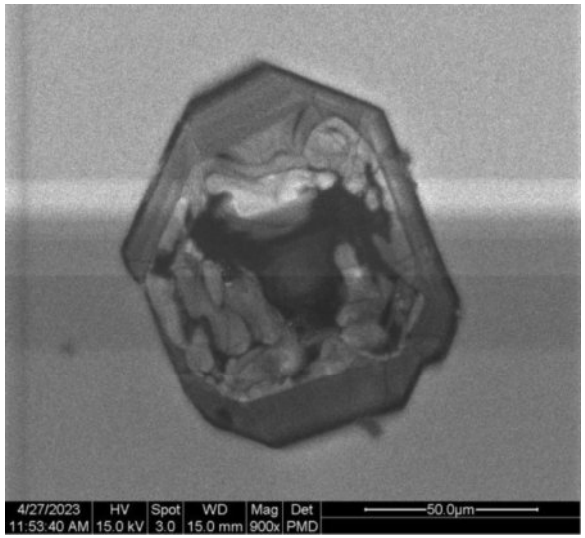
Grain 031
Image CM22HD01_073



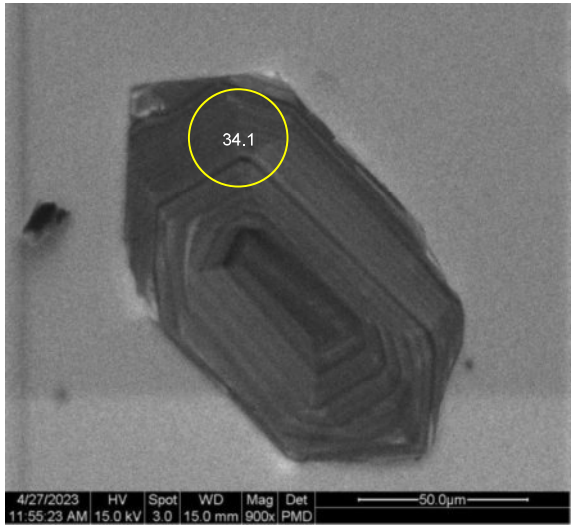
Grain 032
Image CM22HD01_075



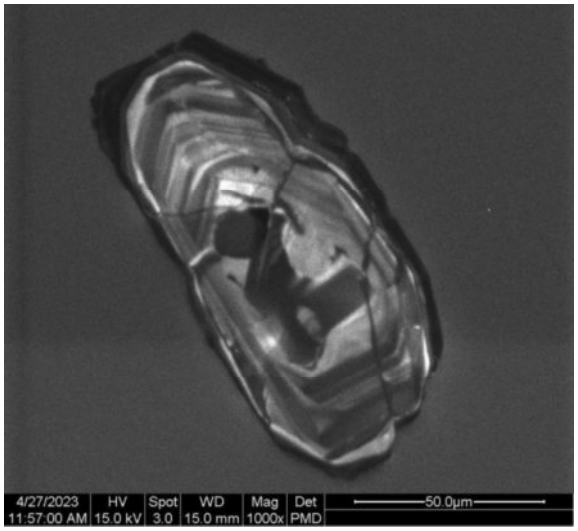
Grain 033
Image CM22HD01_077



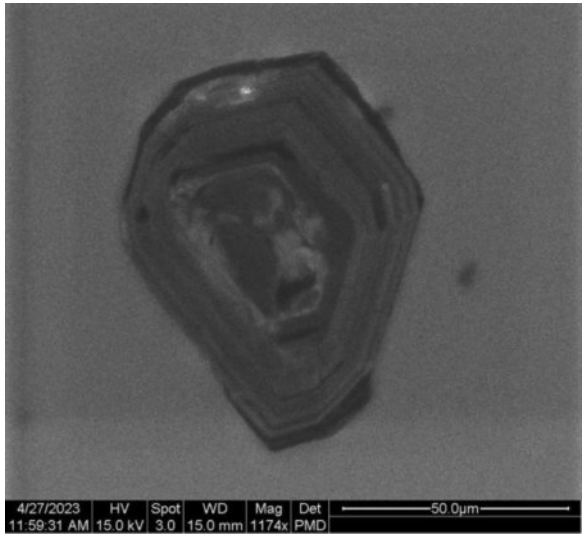
Grain 034
Image CM22HD01_079



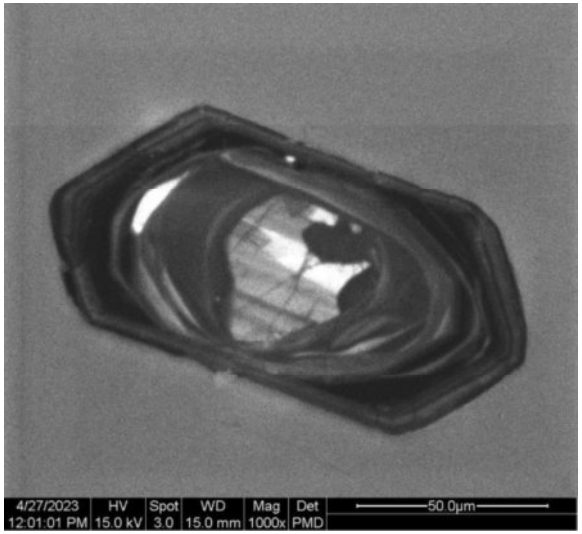
Grain 035
Image CM22HD01_081



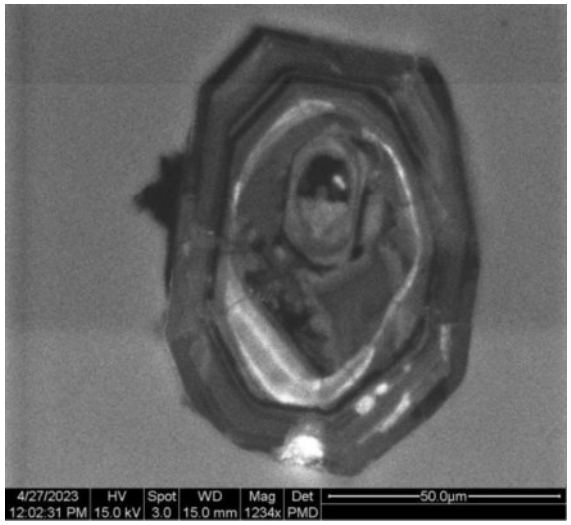
Grain 036
Image CM22HD01_083



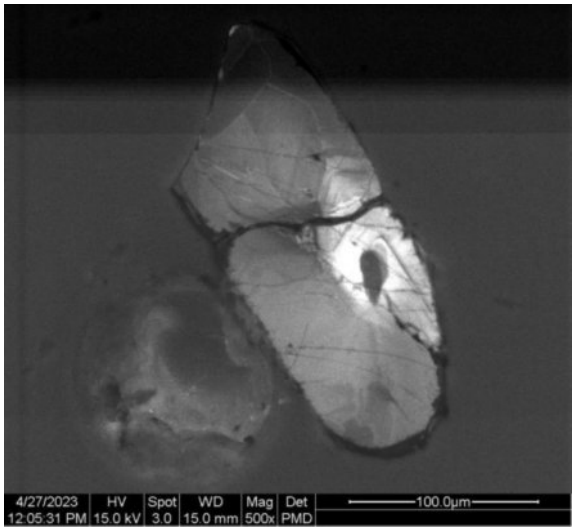
Grain 037
Image CM22HD01_085



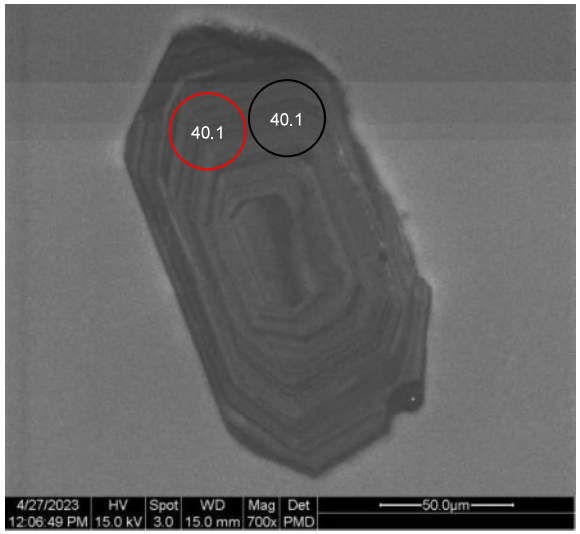
Grain 038
Image CM22HD01_087



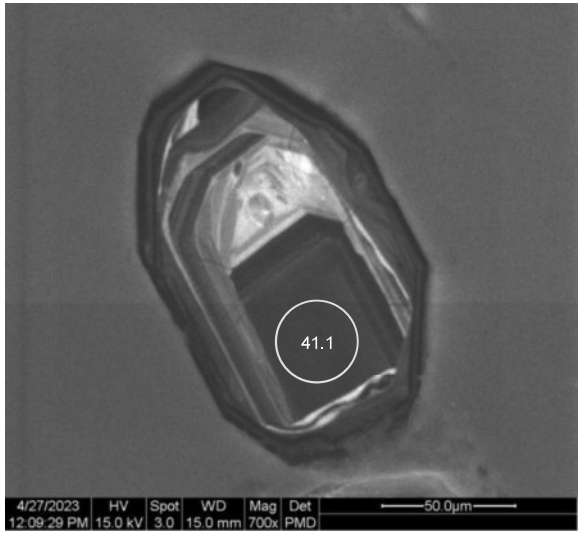
Grain 039
Image CM22HD01_089



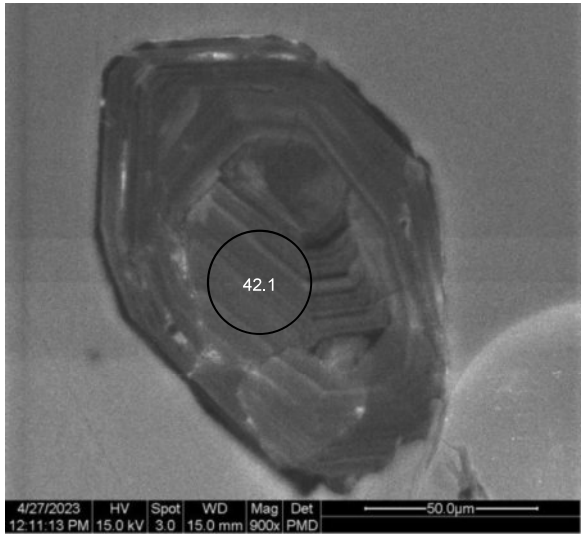
Grain 040
Image CM22HD01_091



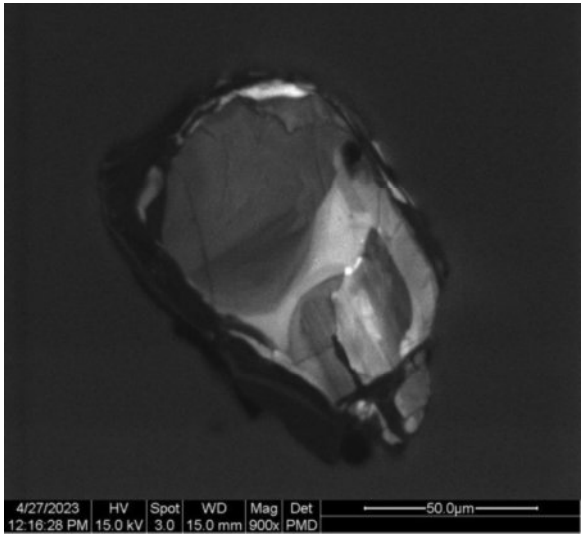
Grain 041
Image CM22HD01_095



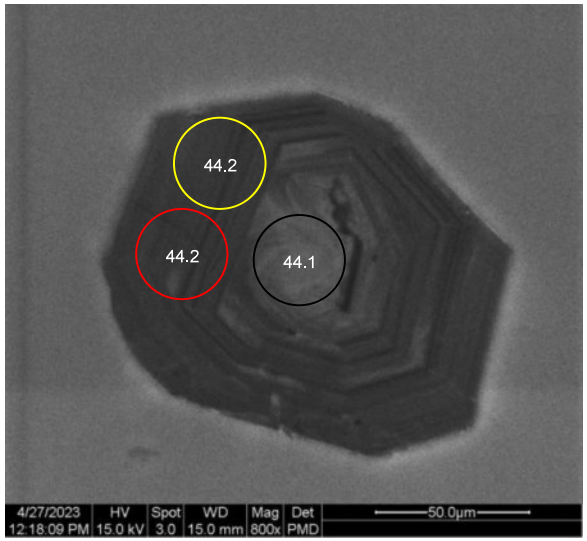
Grain 042
Image CM22HD01_097



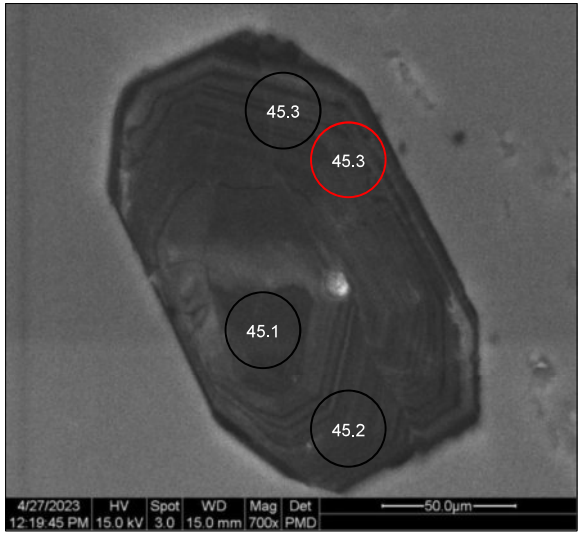
Grain 043
Image CM22HD01_099



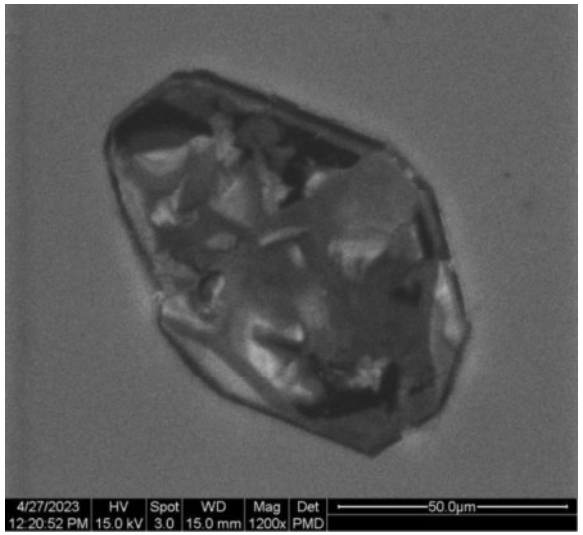
Grain 044
Image CM22HD01_101



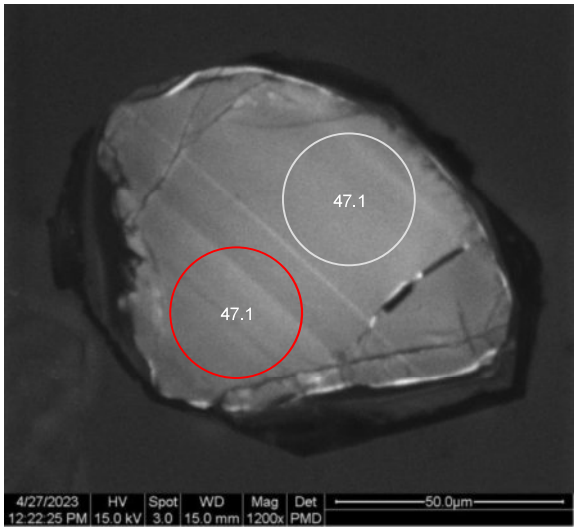
Grain 045
Image CM22HD01_103



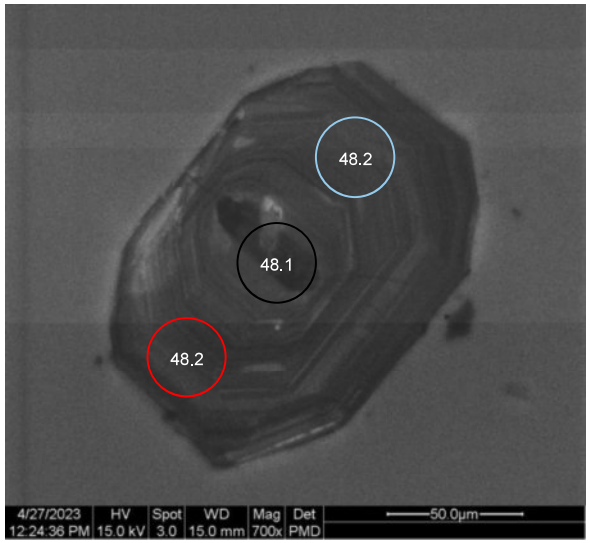
Grain 046
Image CM22HD01_105



Grain 047
Image CM22HD01_107

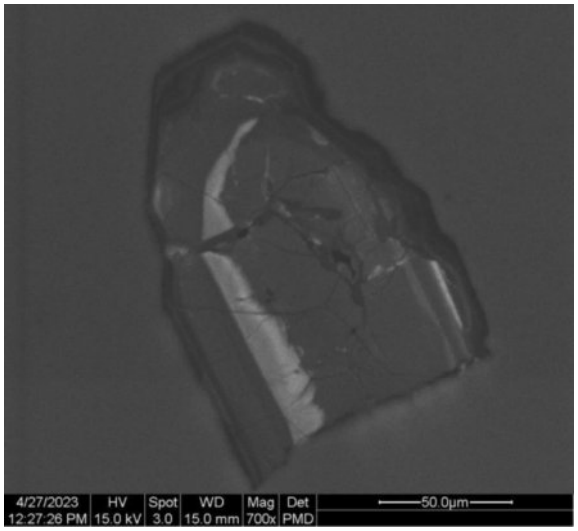


Grain 048
Image CM22HD01_109

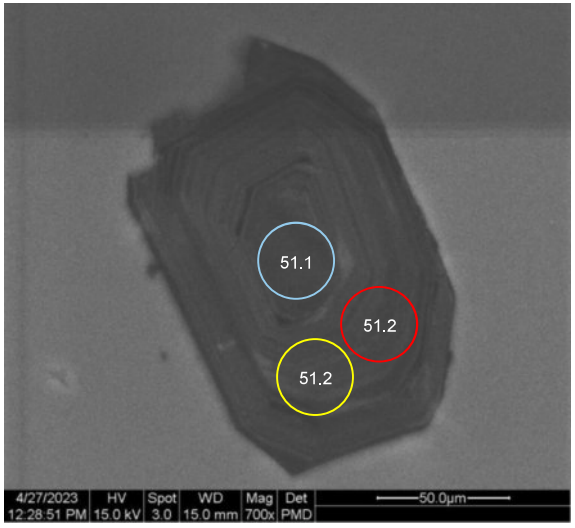


Grain 049
Image CM22HD01_111

Grain 050
Image CM22HD01_113

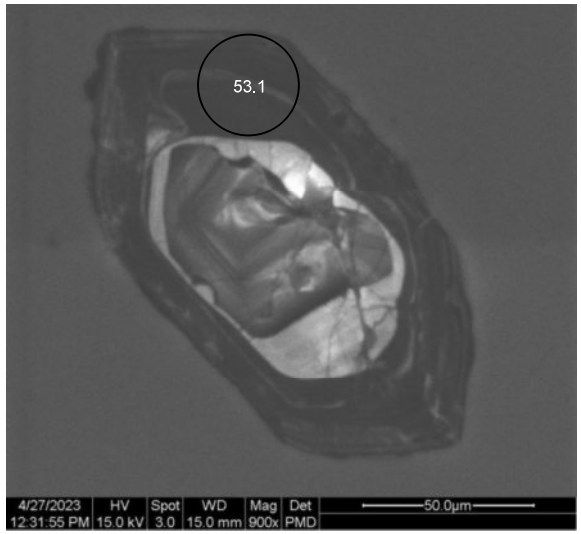


Grain 051
Image CM22HD01_115

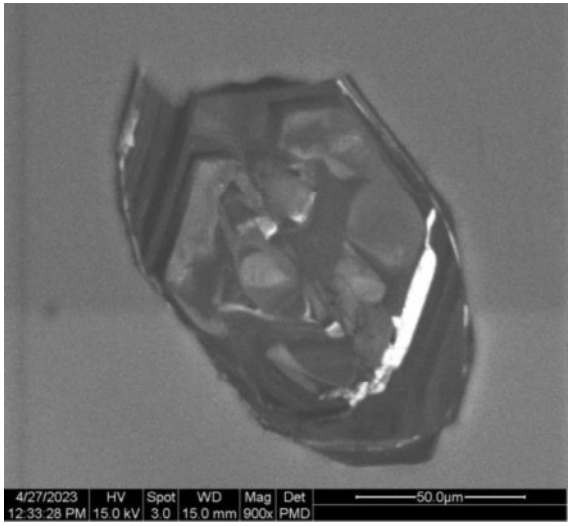


Grain 052
Image CM22HD01_117

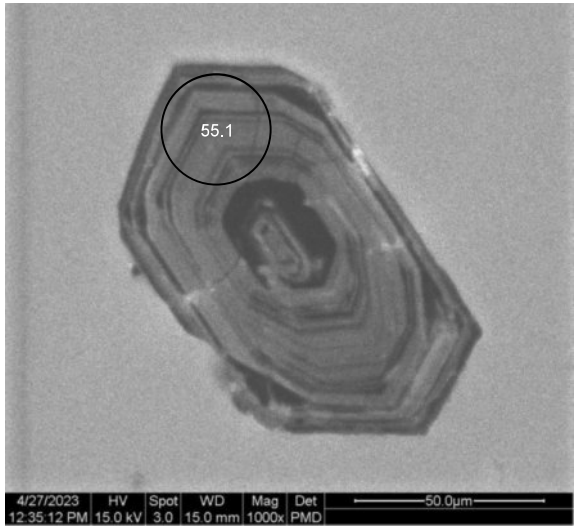
Grain 053
Image CM22HD01_119



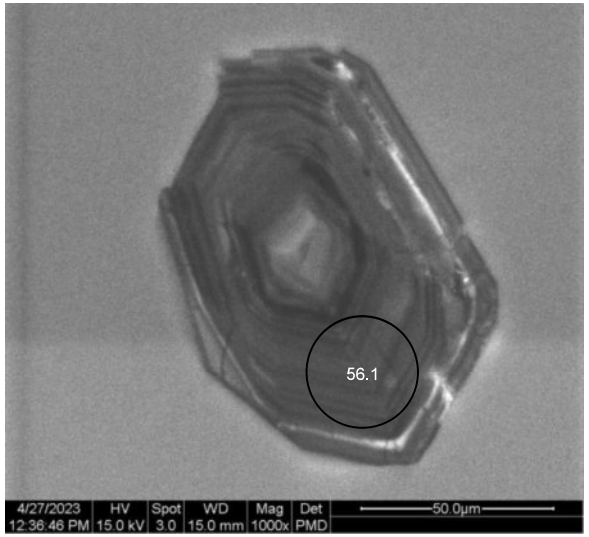
Grain 054
Image CM22HD01_121



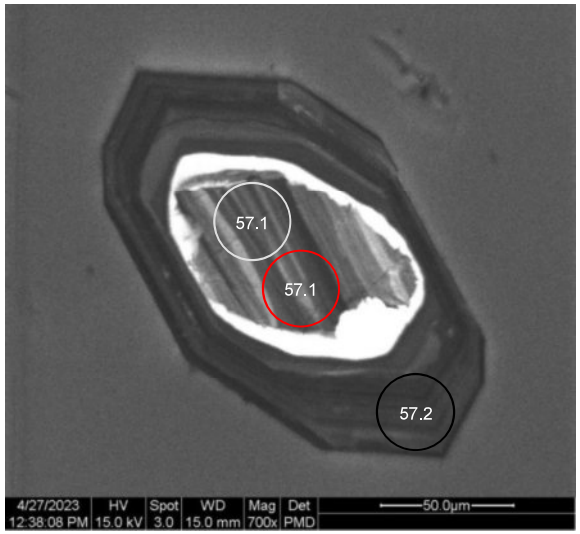
Grain 055
Image CM22HD01_123



Grain 056
Image CM22HD01_125

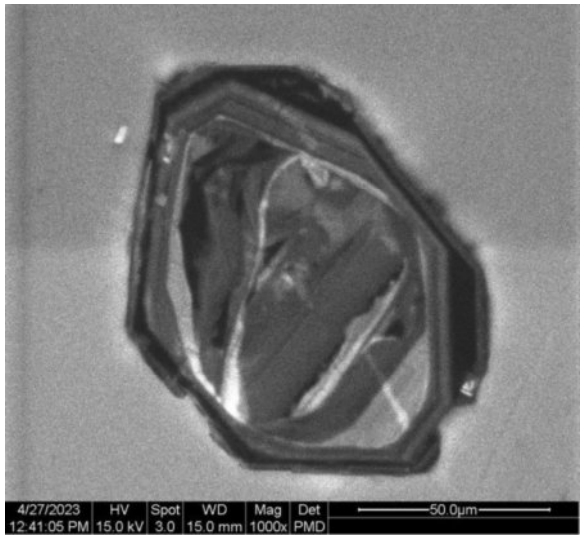


Grain 057
Image CM22HD01_127

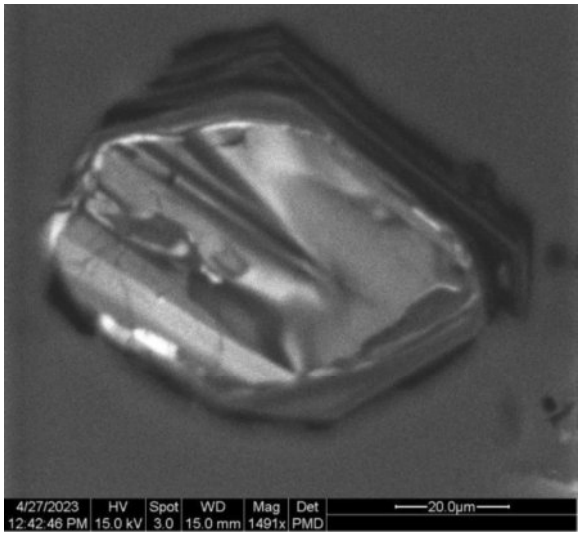


Grain 058
Image CM22HD01_129

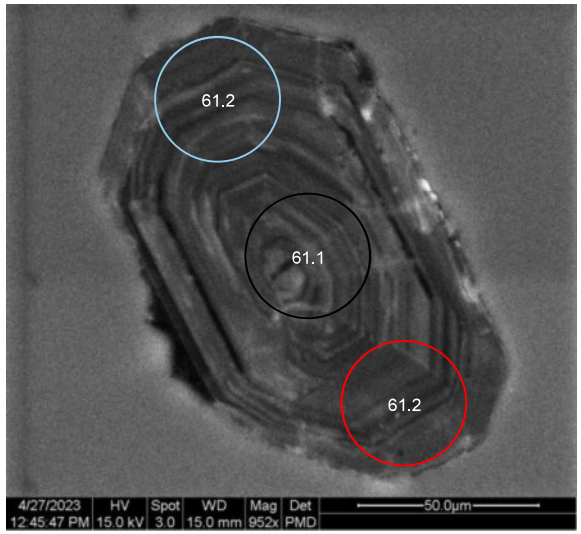
Grain 059
Image CM22HD01_131



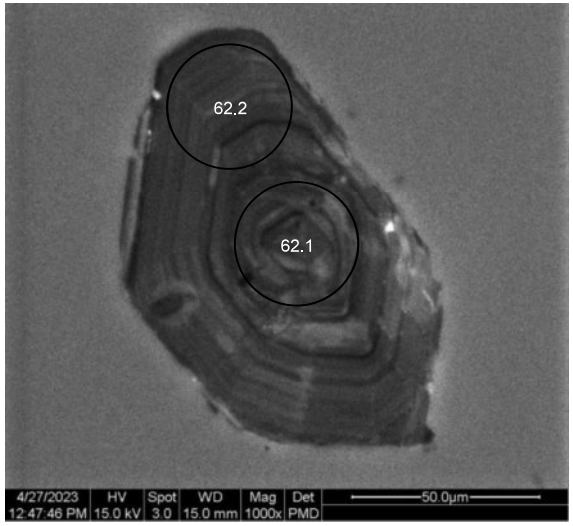
Grain 060
Image CM22HD01_133



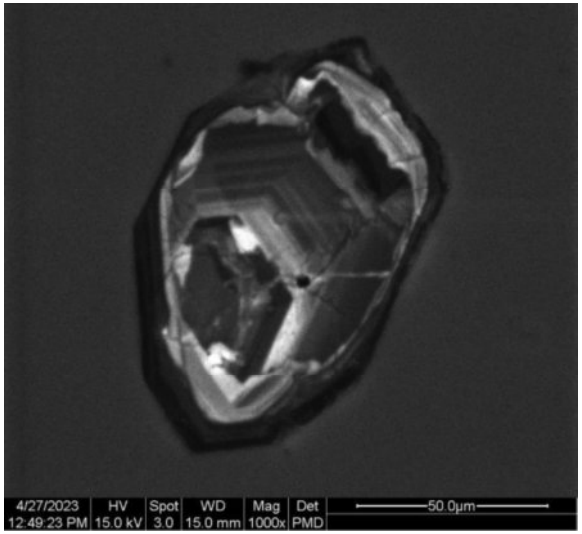
Grain 061
Image CM22HD01_135



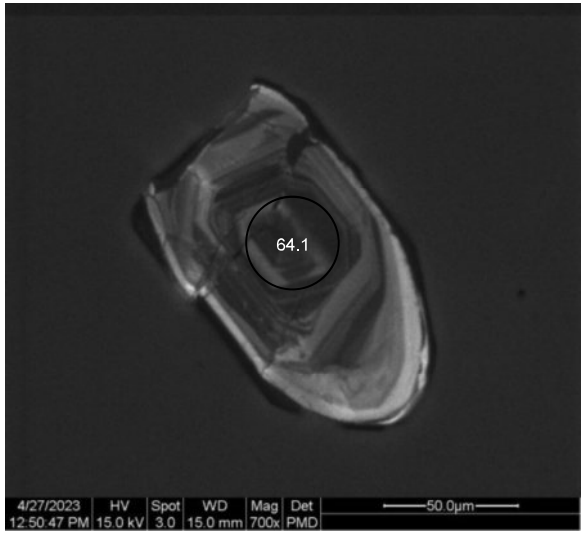
Grain 062
Image CM22HD01_137



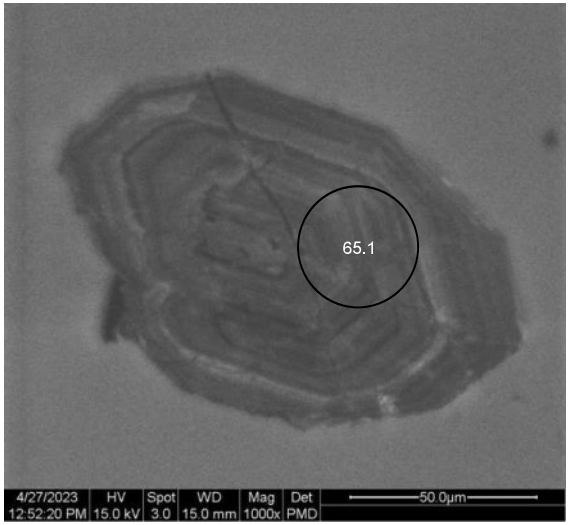
Grain 063
Image CM22HD01_139



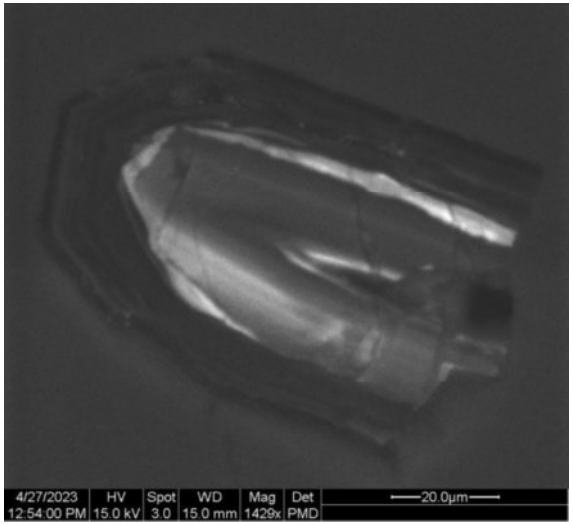
Grain 064
Image CM22HD01_141



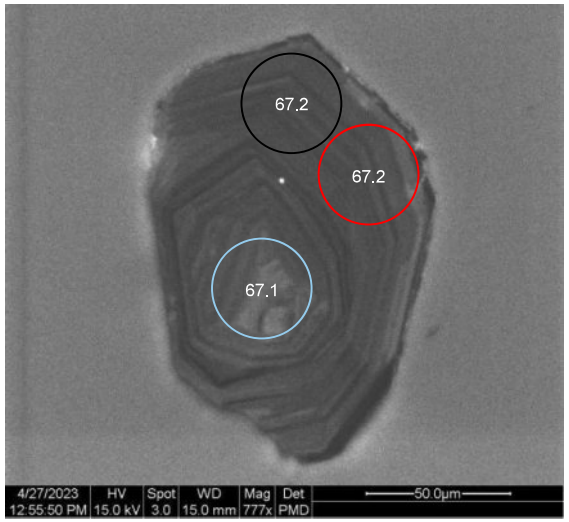
Grain 065
Image CM22HD01_143



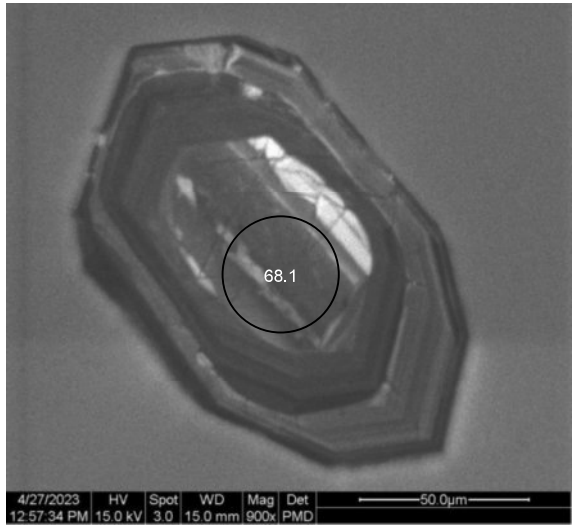
Grain 066
Image CM22HD01_145



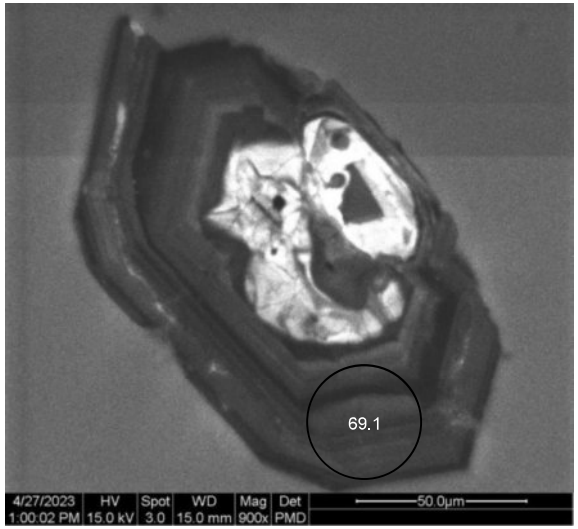
Grain 067
Image CM22HD01_147



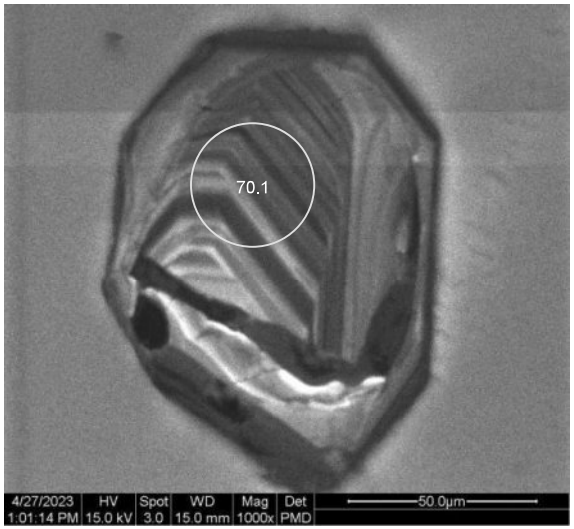
Grain 068
Image CM22HD01_149



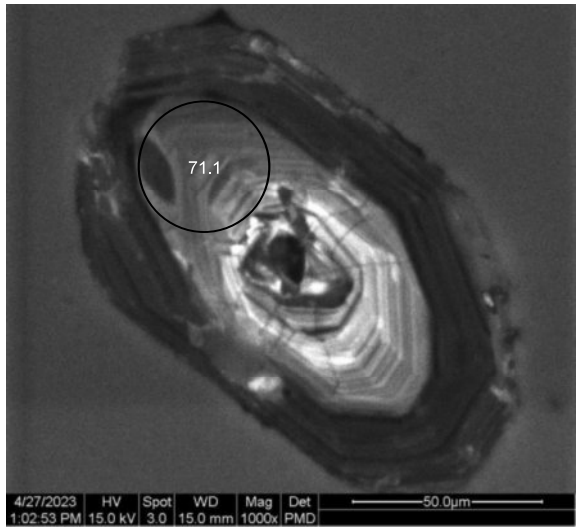
Grain 069
Image CM22HD01_151



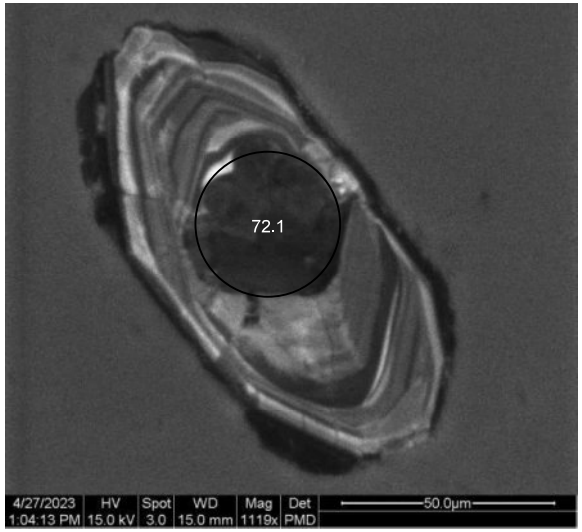
Grain 070
Image CM22HD01_153



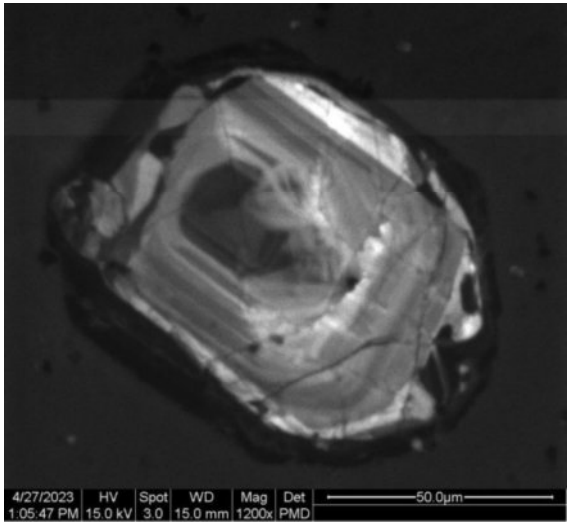
Grain 071
Image CM22HD01_155



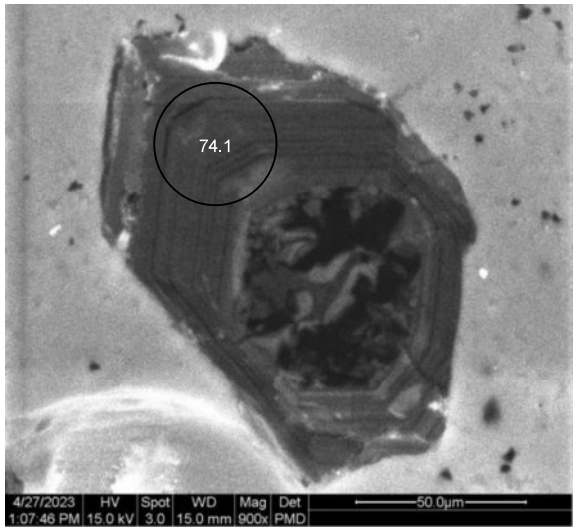
Grain 072
Image CM22HD01_157



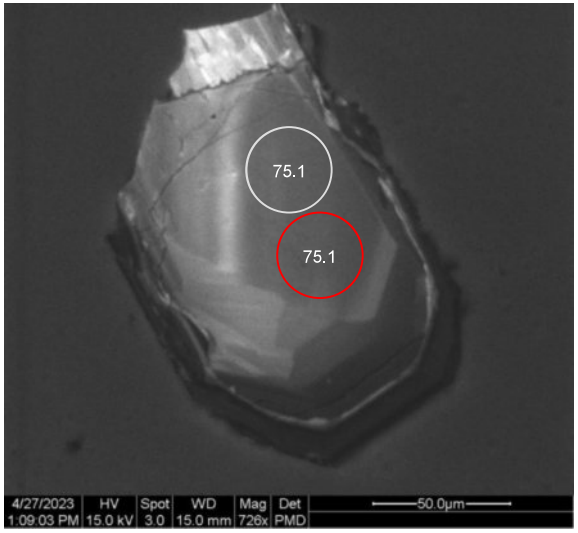
Grain 073
Image CM22HD01_159



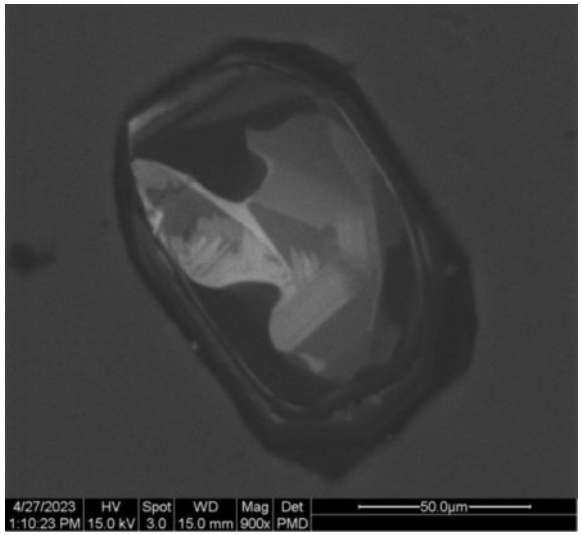
Grain 074
Image CM22HD01_161



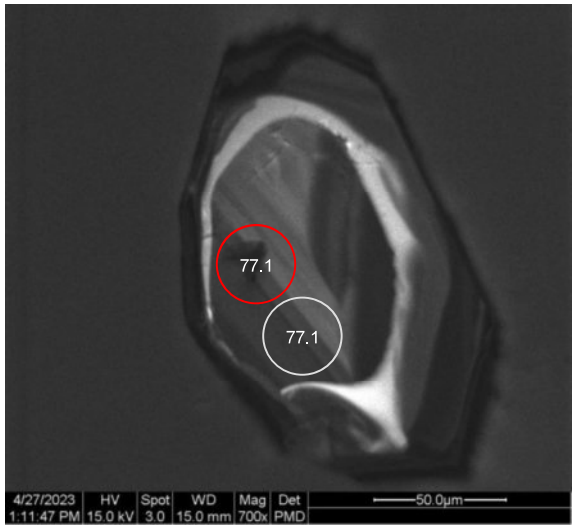
Grain 075
Image CM22HD01_163



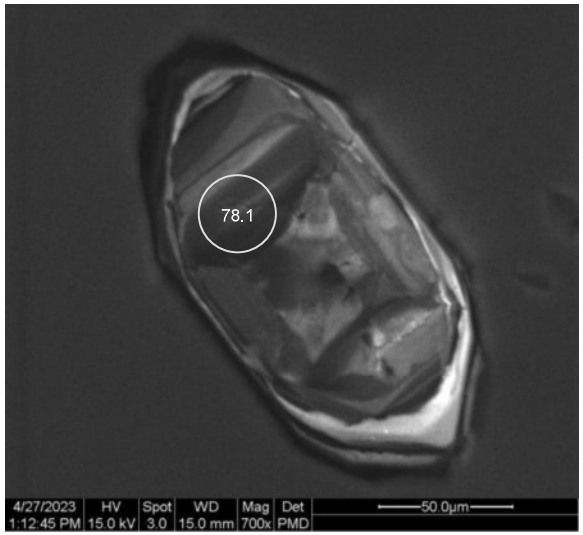
Grain 076
Image CM22HD01_165



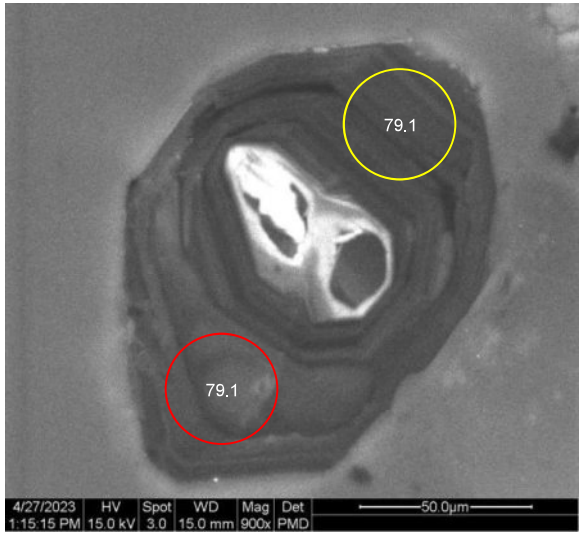
Grain 077
Image CM22HD01_167



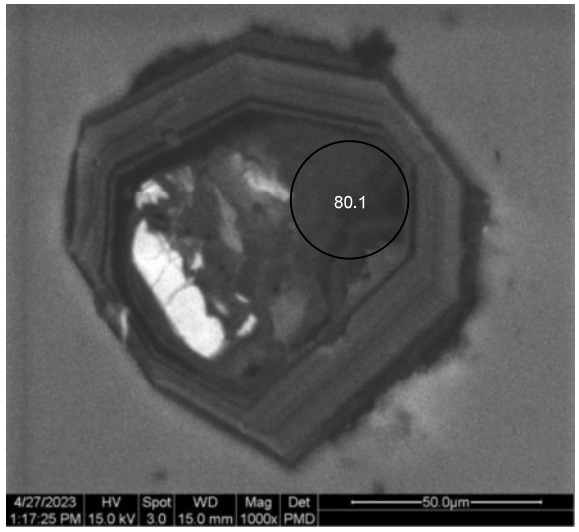
Grain 078
Image CM22HD01_169



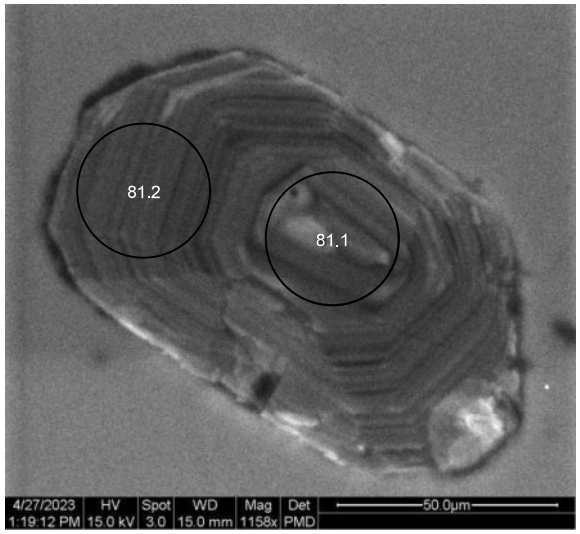
Grain 079
Image CM22HD01_173



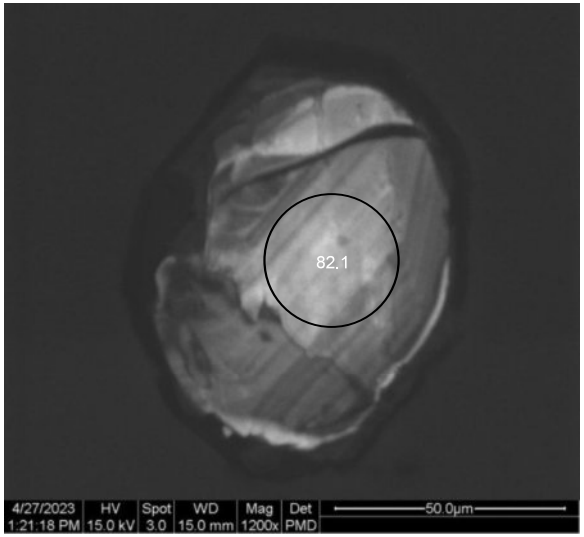
Grain 080
Image CM22HD01_175



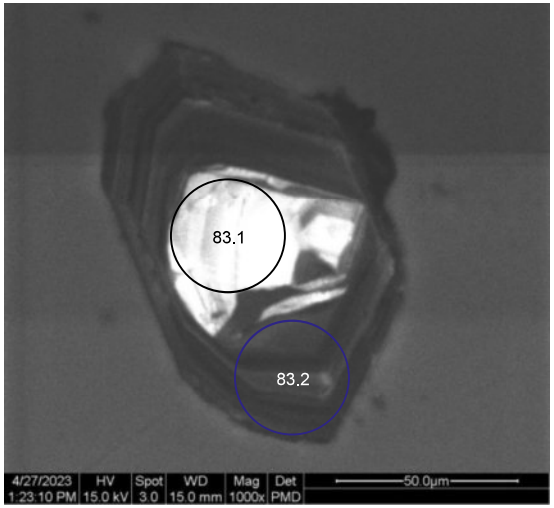
Grain 081
Image CM22HD01_177



Grain 082
Image CM22HD01_179

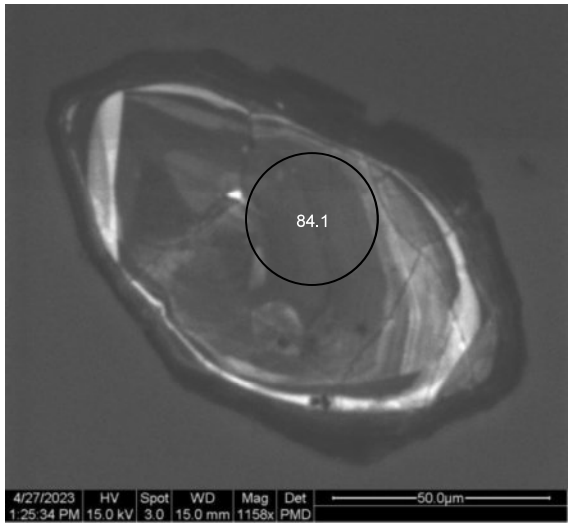


Grain 083
Image CM22HD01_181

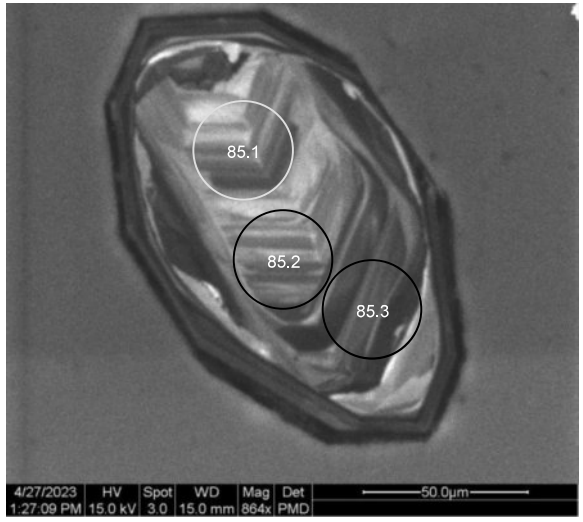


Grain 083
Image CM22HD01_183

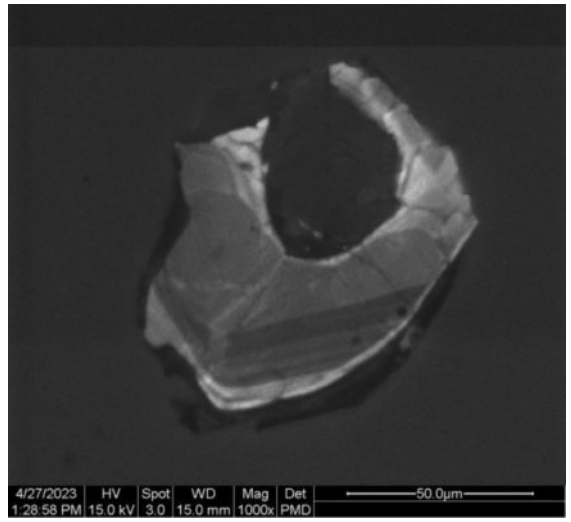
Grain 084
Image CM22HD01_185



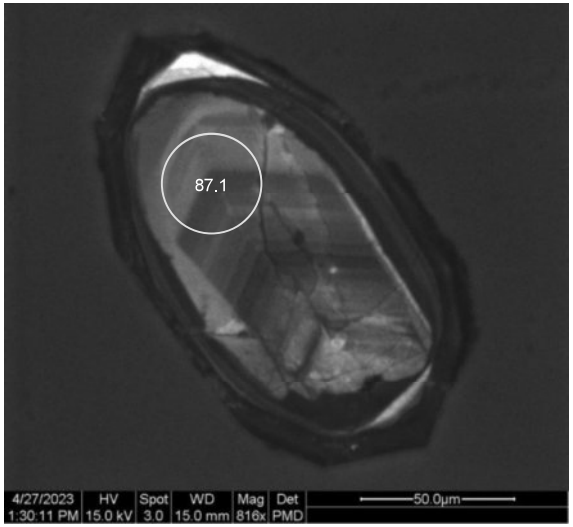
Grain 085
Image CM22HD01_187



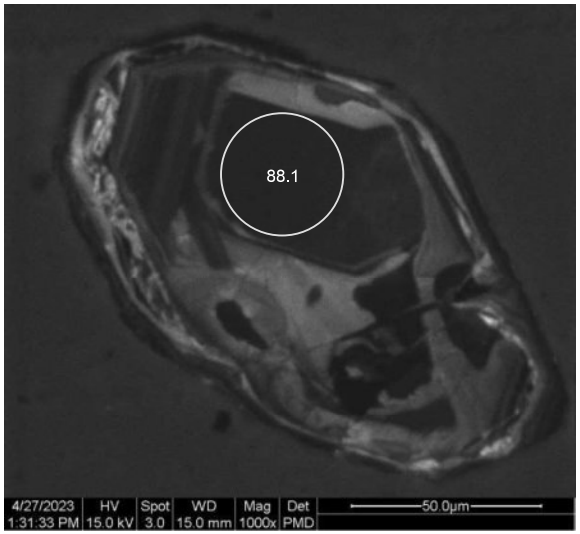
Grain 086
Image CM22HD01_189



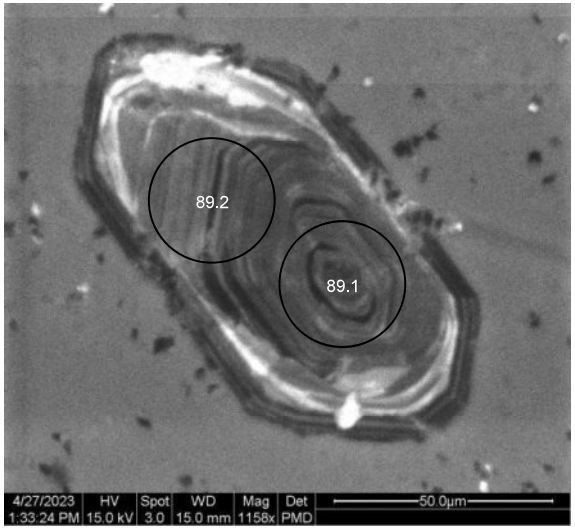
Grain 087
Image CM22HD01_191



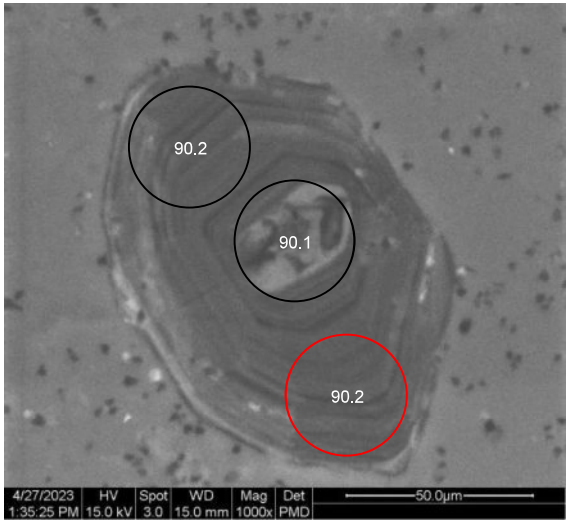
Grain 088
Image CM22HD01_193



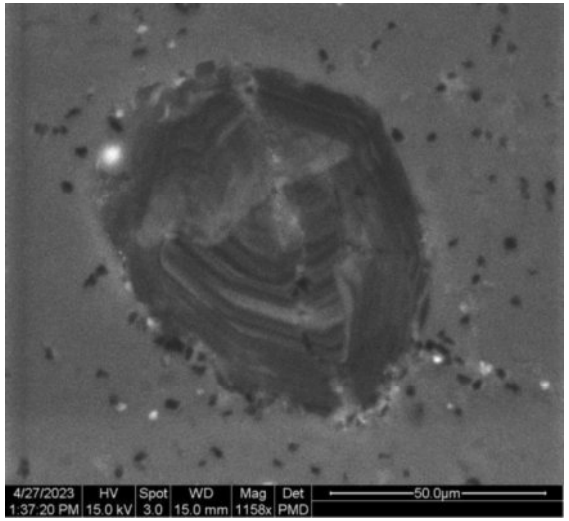
Grain 089
Image CM22HD01_195



Grain 090
Image CM22HD01_197



Grain 091
Image CM22HD01_199



AB

Emplacement

Antecryst

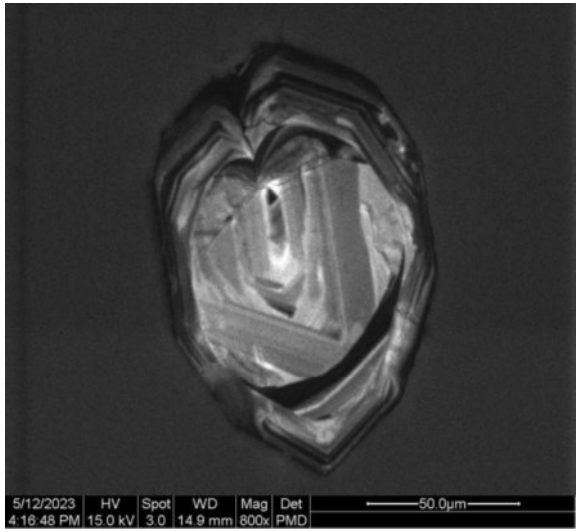
Xenocryst

Discordant

Rejected due to Pb loss

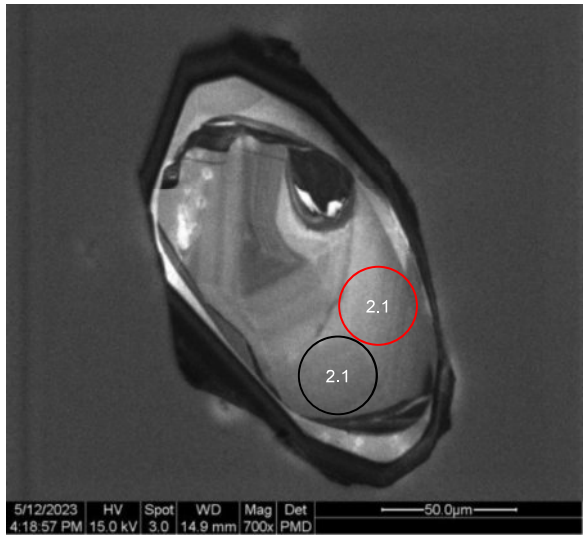
Reserved for future trace element analysis

Grain 001
Image AB_001

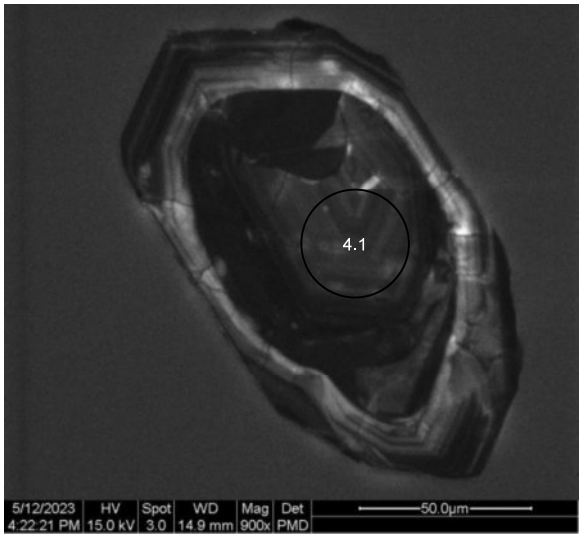


22/12/2023

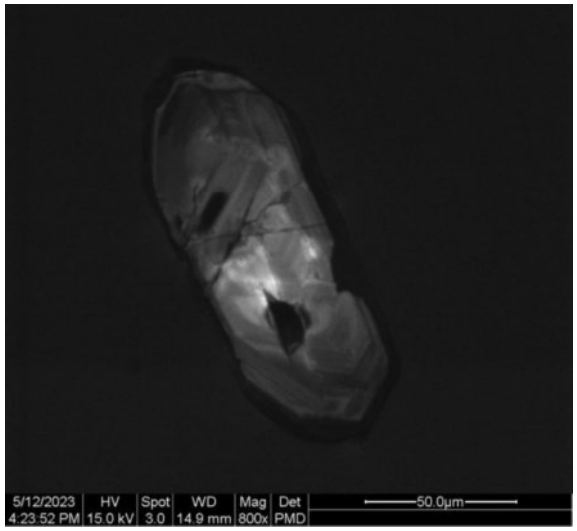
Grain 002
Image AB_003



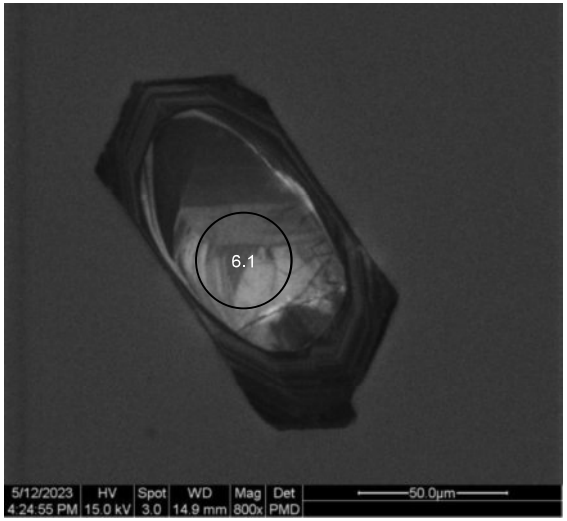
Grain 004
Image AB_007



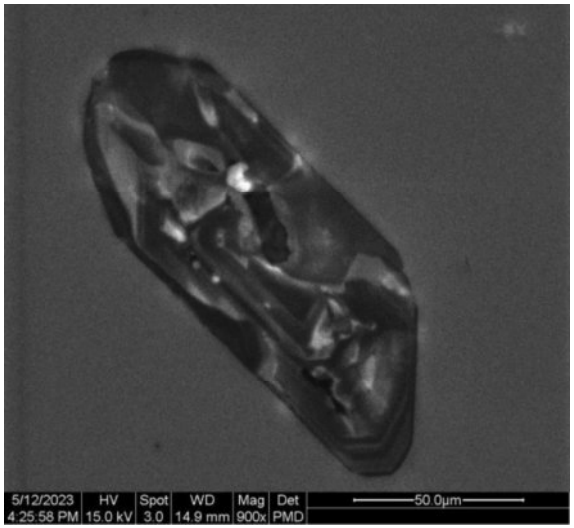
Grain 005
Image AB_009



Grain 006
Image AB_011

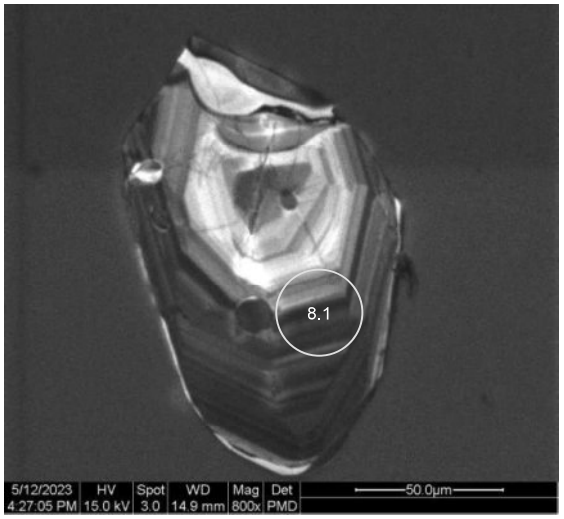


Grain 007
Image AB_013

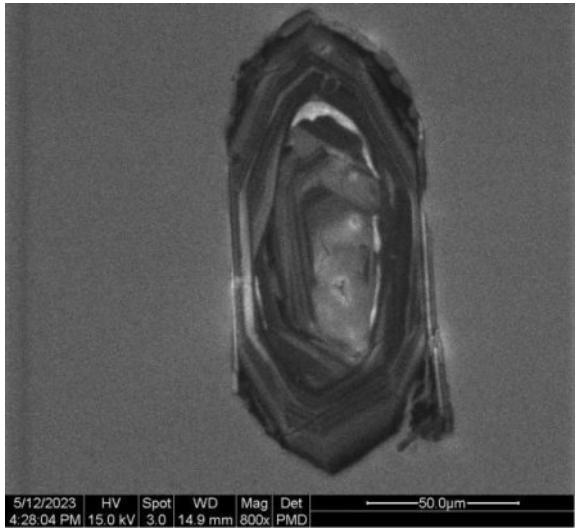


Grain 008
Image AB_015

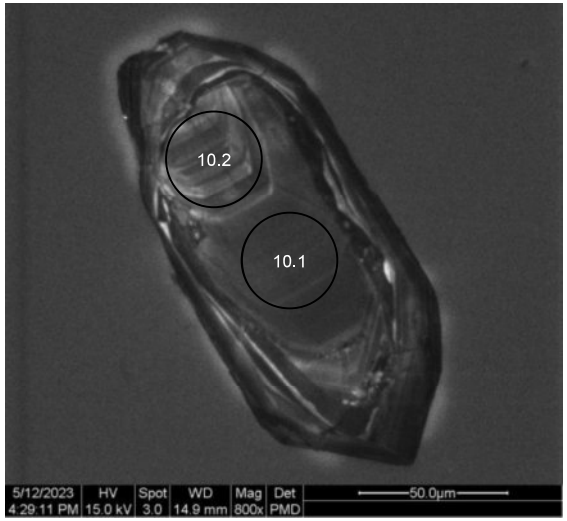
1x U Pb



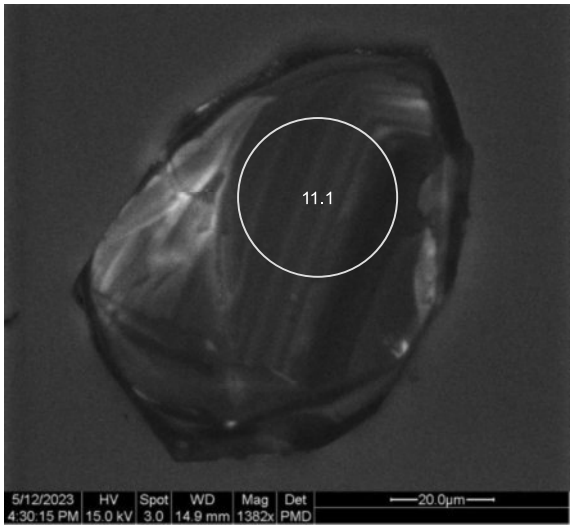
Grain 009
Image AB_017



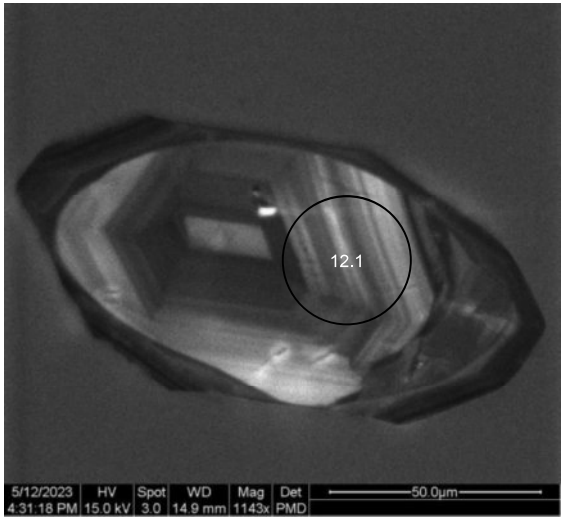
Grain 010
Image AB_019



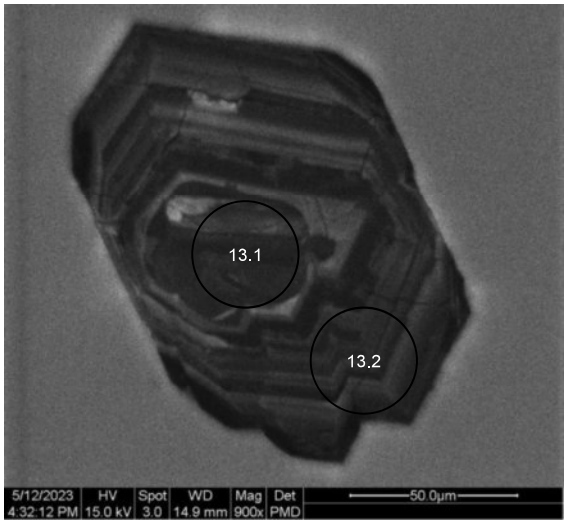
Grain 011
Image AB_021



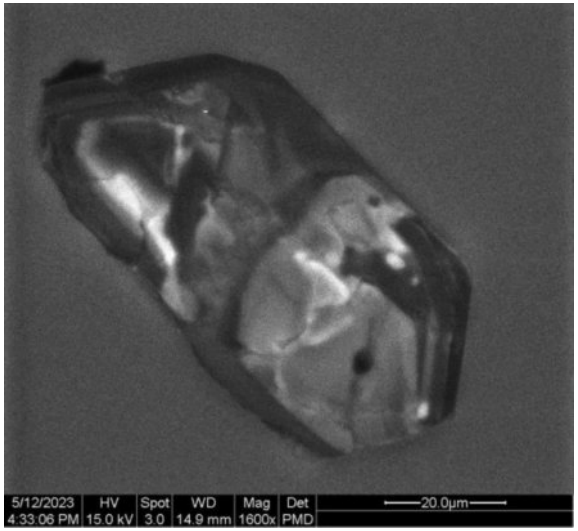
Grain 012
Image AB_023



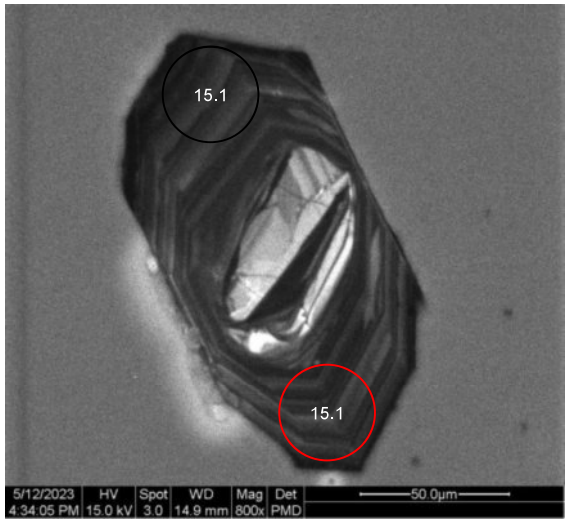
Grain 013
Image AB_025



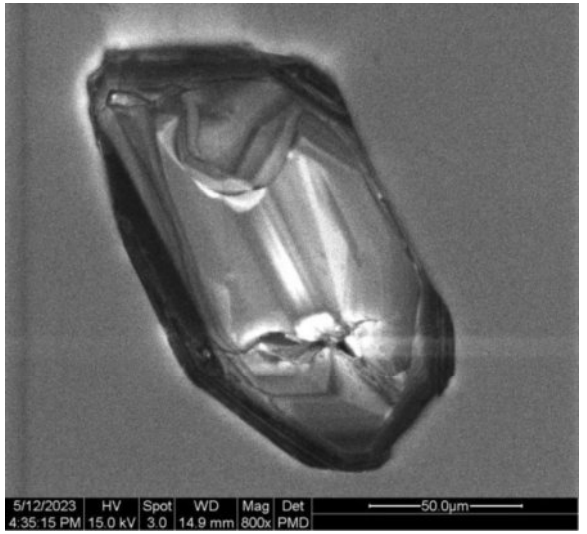
Grain 014
Image AB_027



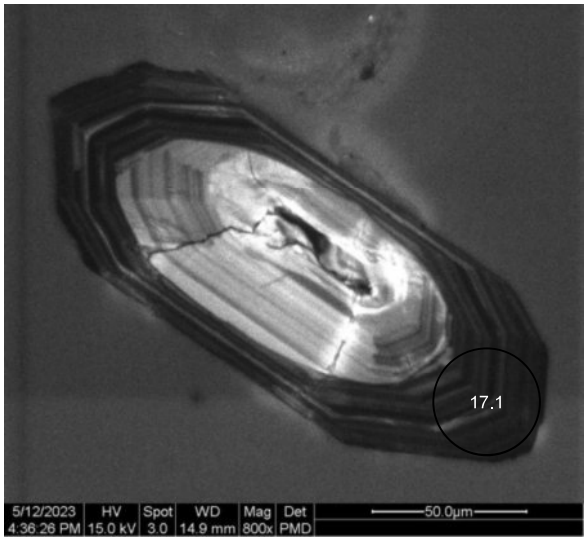
Grain 015
Image AB_029



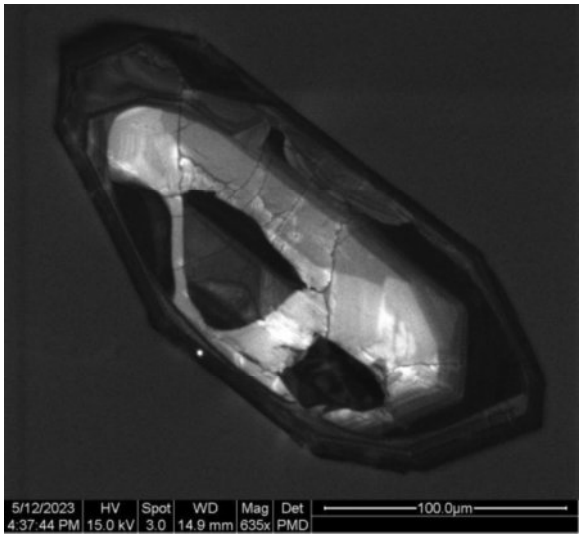
Grain 016
Image AB_031



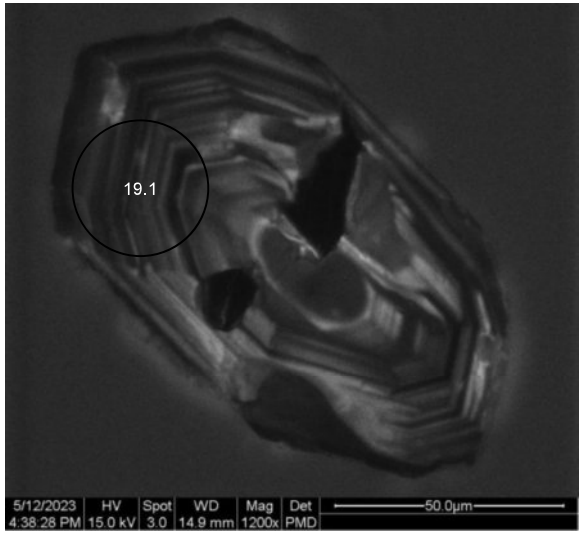
Grain 017
Image AB_033



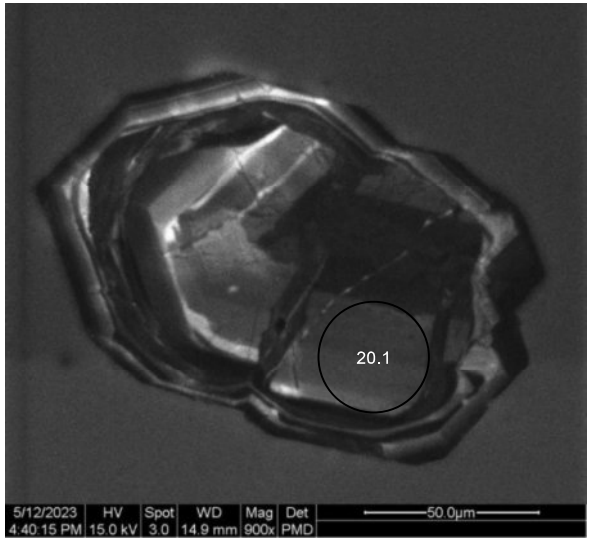
Grain 018
Image AB_035



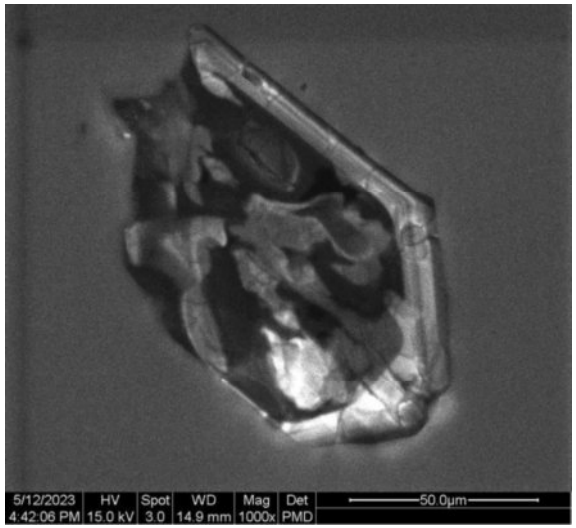
Grain 019
Image AB_037



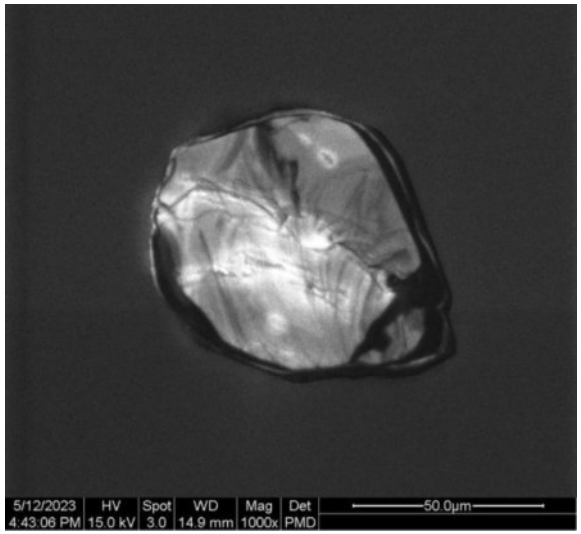
Grain 020
Image AB_039



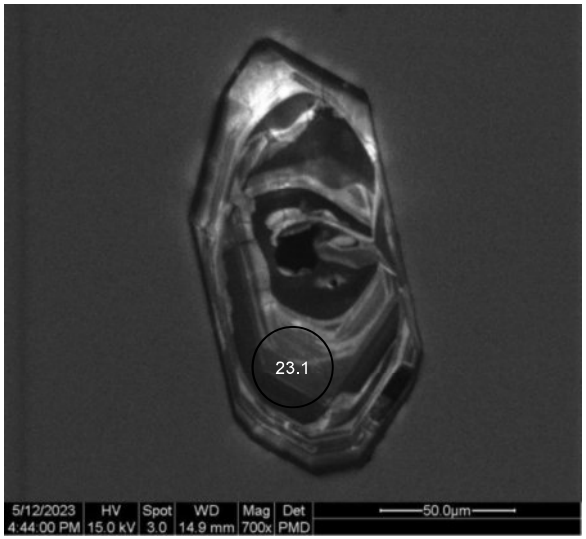
Grain 021
Image AB_041



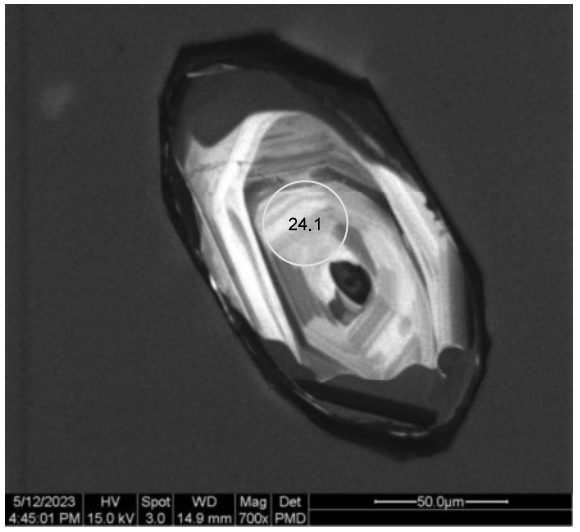
Grain 022
Image AB_043



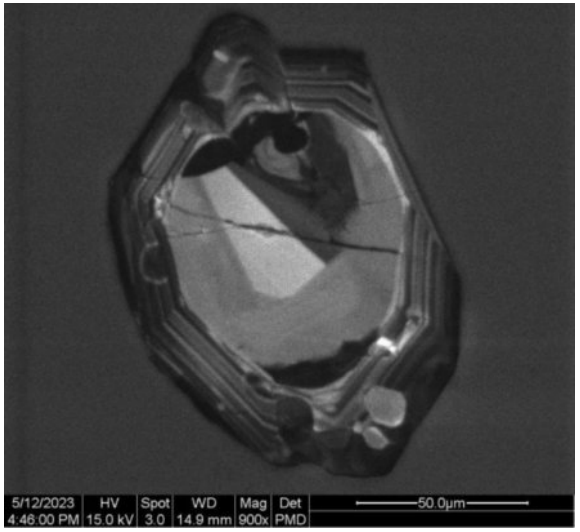
Grain 023
Image AB_045



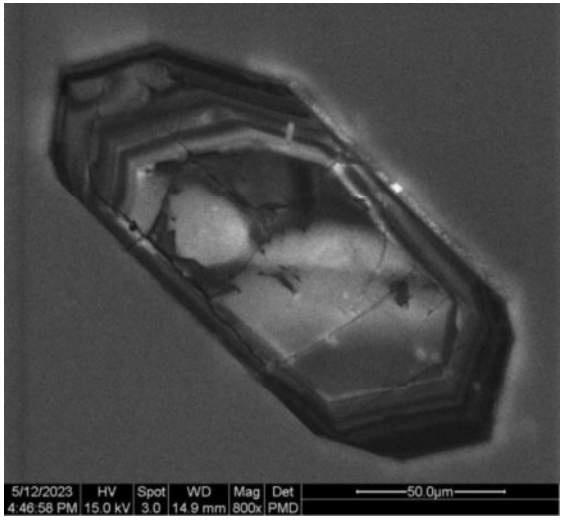
Grain 024
Image AB_047



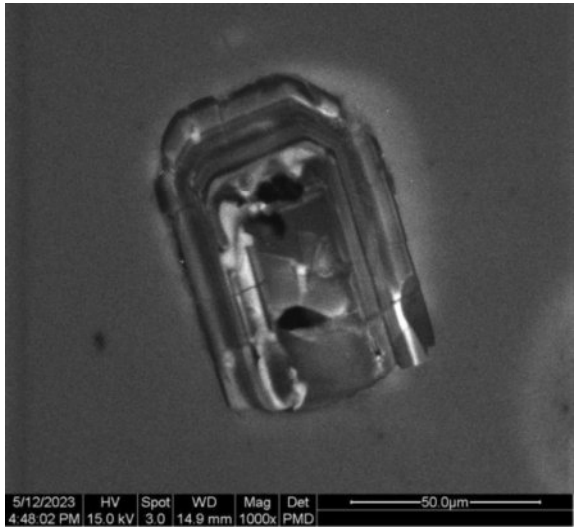
Grain 025
Image AB_049



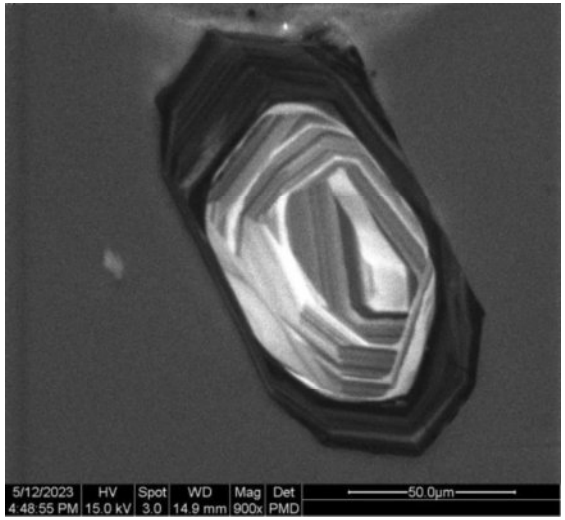
Grain 026
Image AB_051



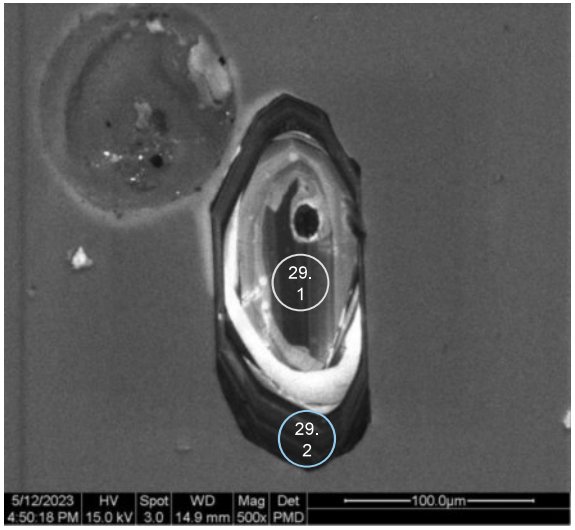
Grain 027
Image AB_053



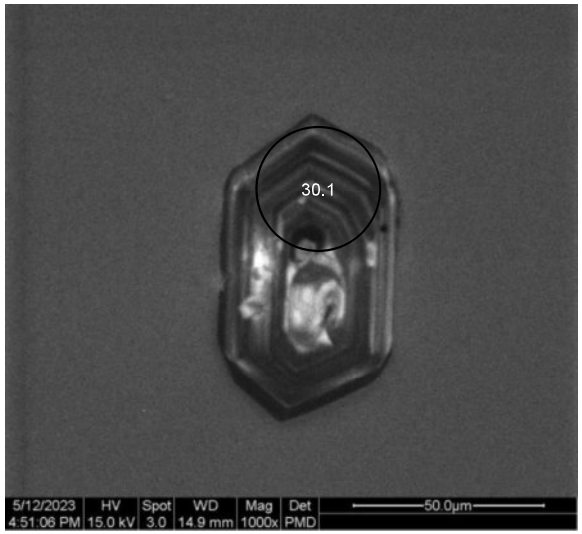
Grain 028
Image AB_055



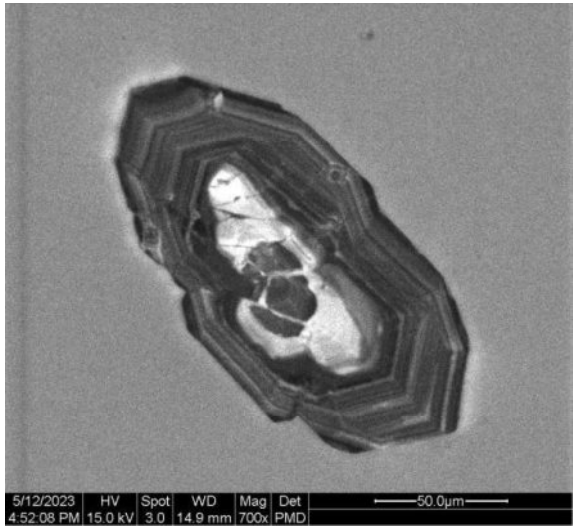
Grain 029
Image AB_057



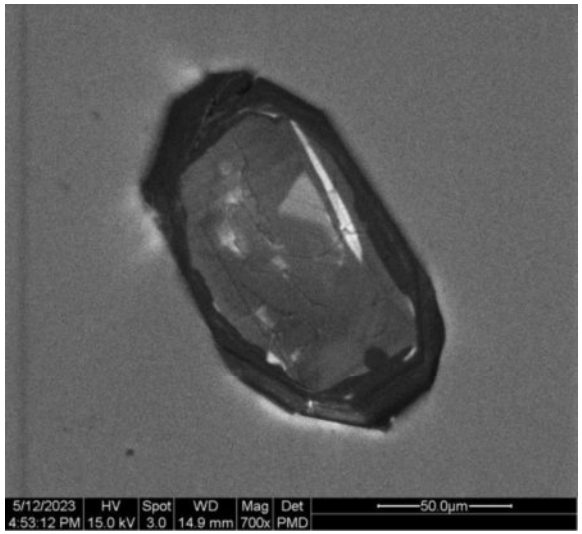
Grain 030
Image AB_059



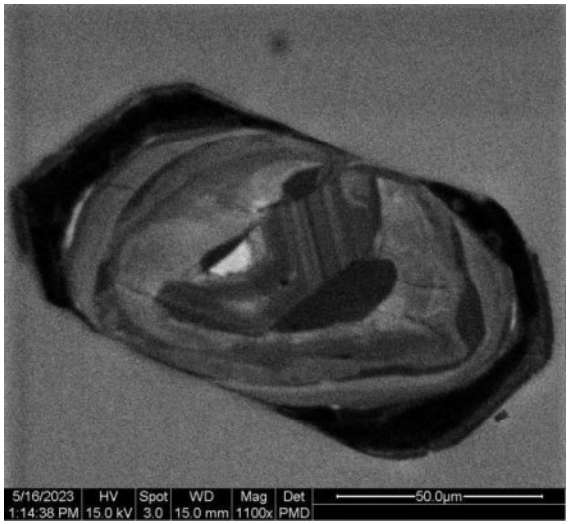
Grain 031
Image AB_061



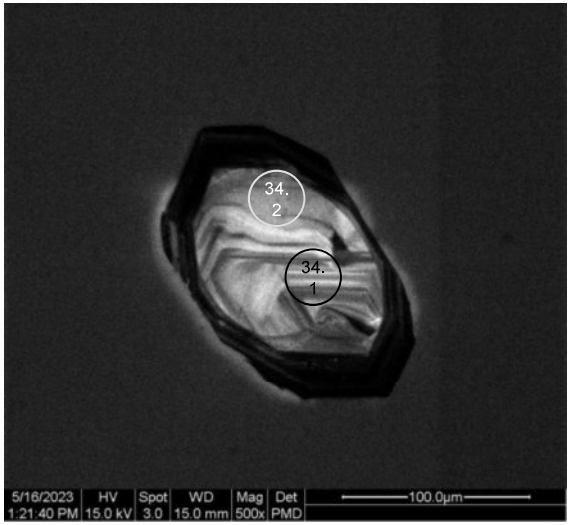
Grain 032
Image AB_063



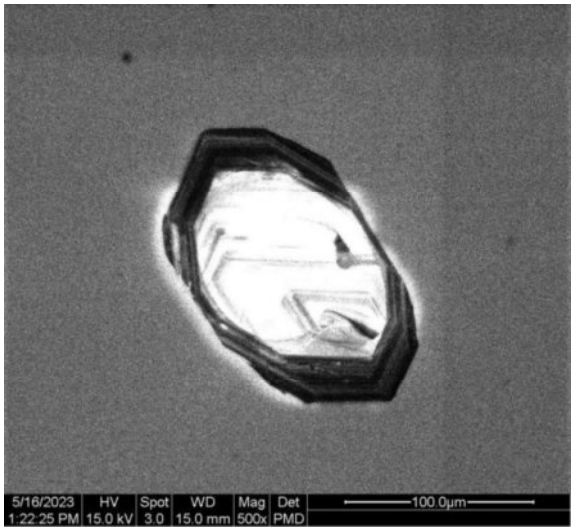
Grain 033
Image AB_066



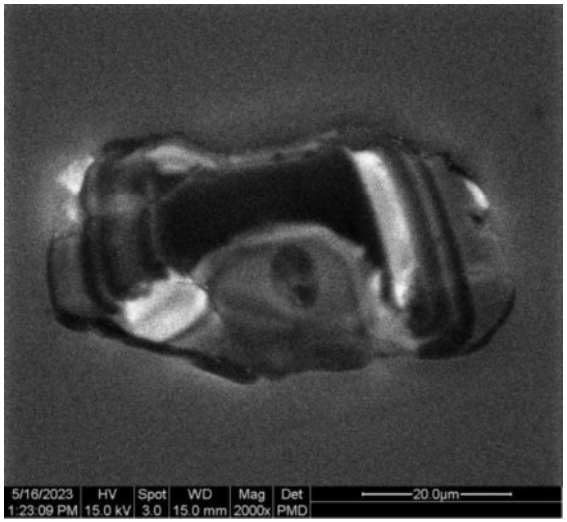
Grain 034
Image AB_068



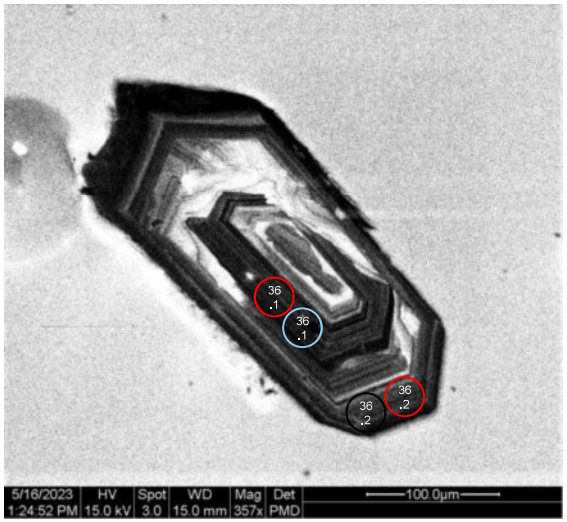
Grain 034
Image AB_070



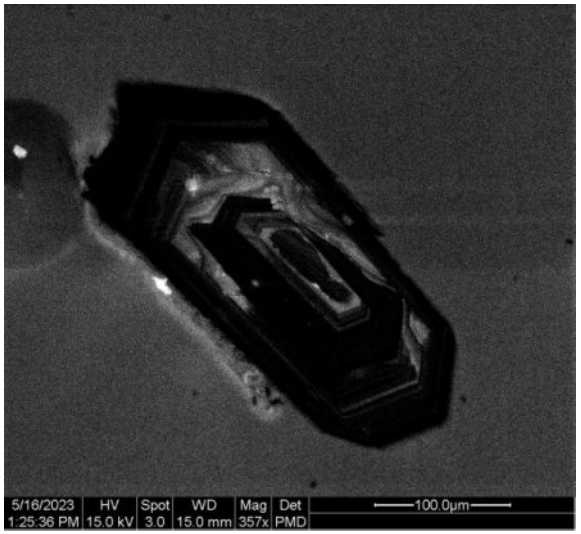
Grain 035
Image AB_072



Grain 036
Image AB_074

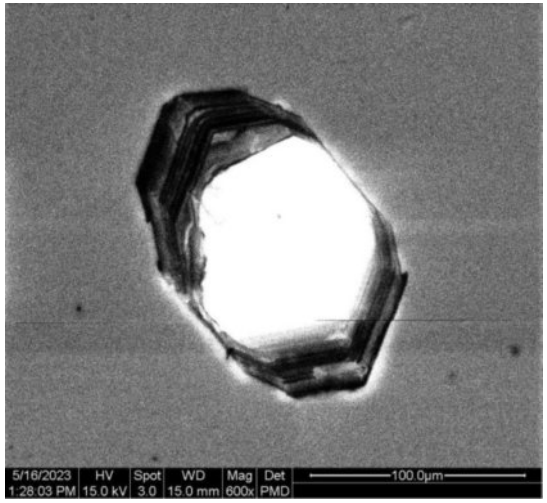


Grain 036
Image AB_076



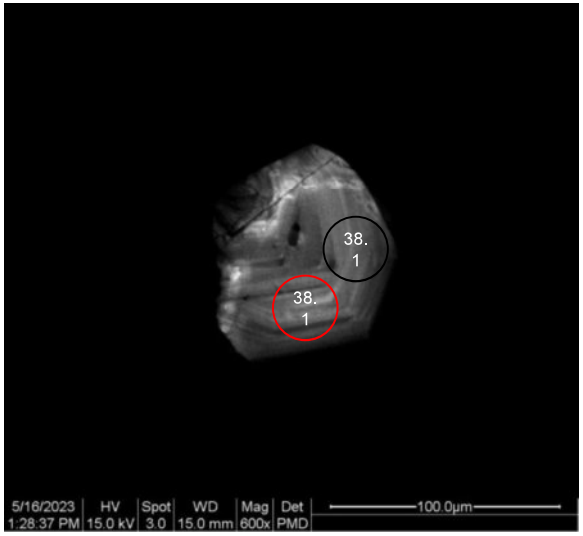
Grain 037
Image AB_079

Grain 038
Image AB_080



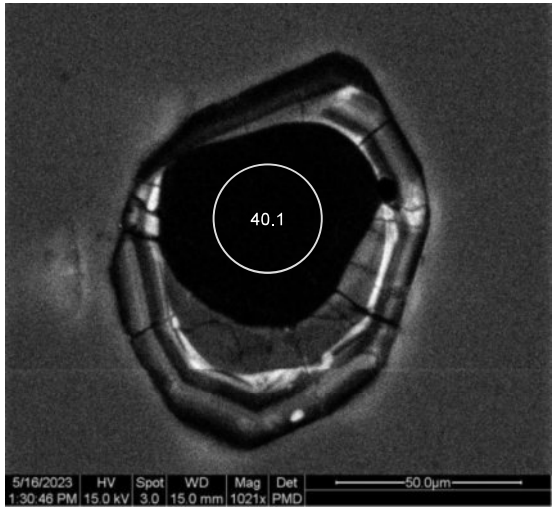
Grain 038

Image AB_082



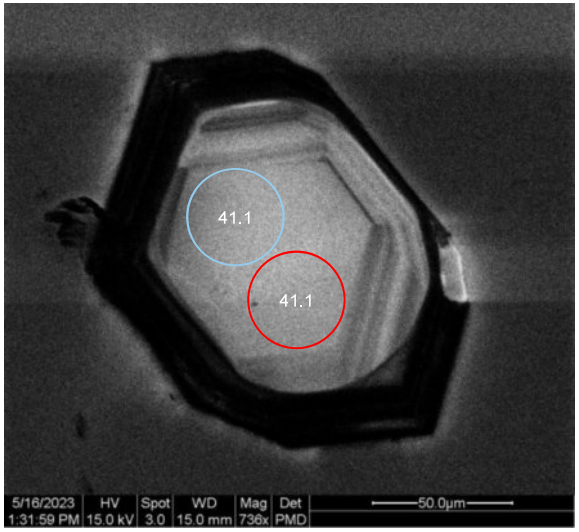
Grain 040

Image AB_085



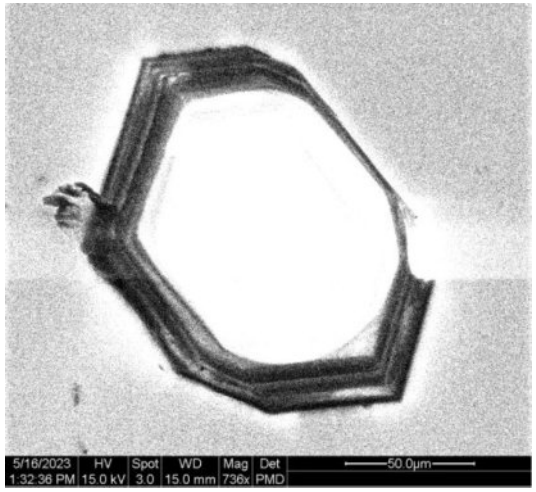
Grain 041

Image AB_087

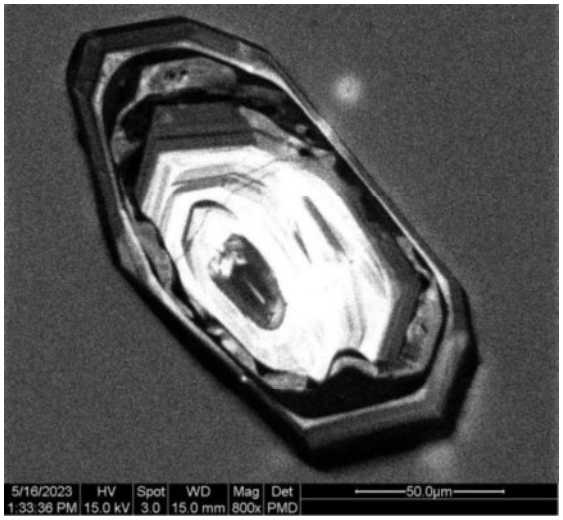


Grain 041

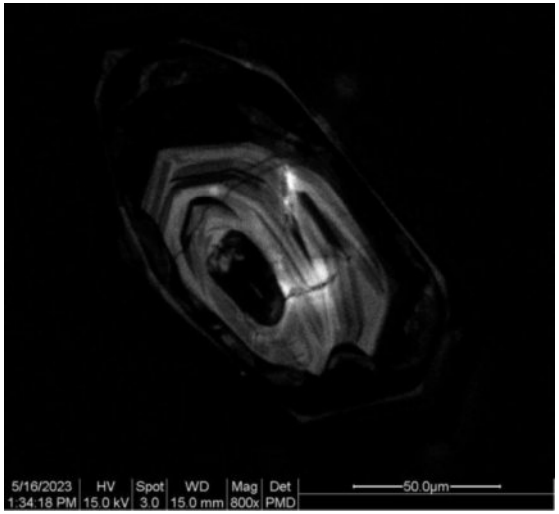
Image AB_089



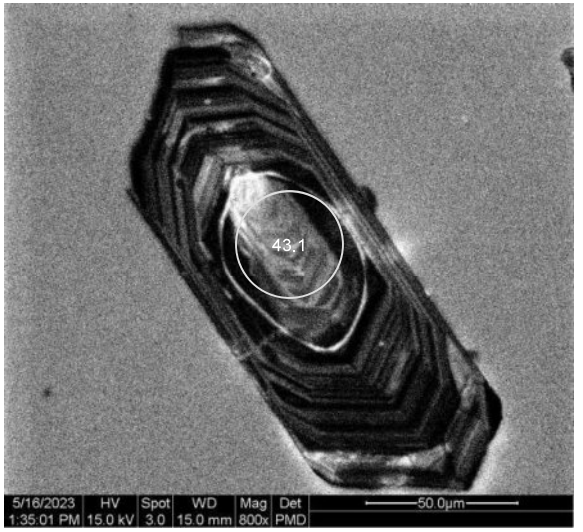
Grain 042
Image AB_090



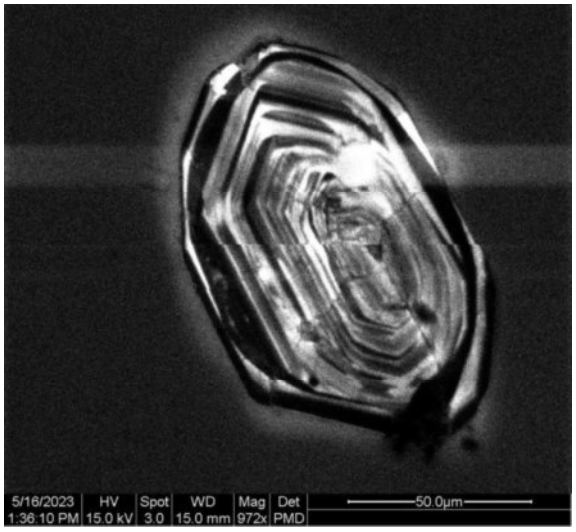
Grain 042
Image AB_092



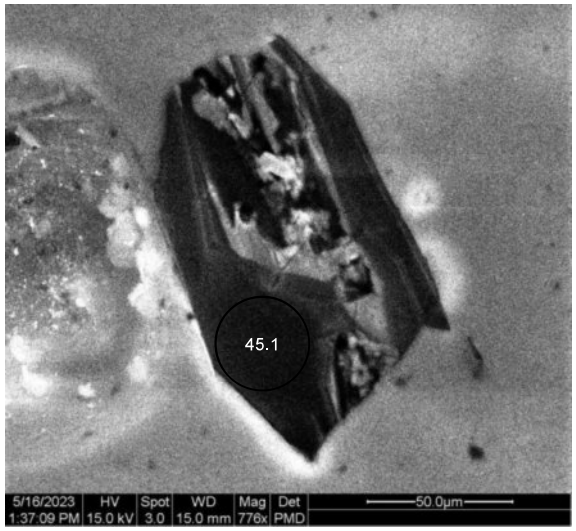
Grain 043
Image AB_093



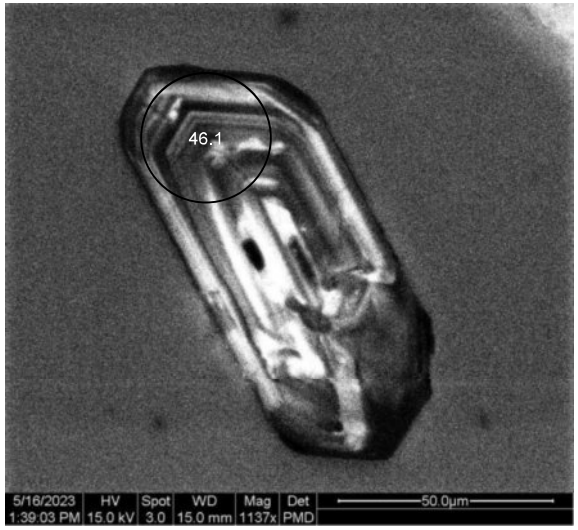
Grain 044
Image AB_095



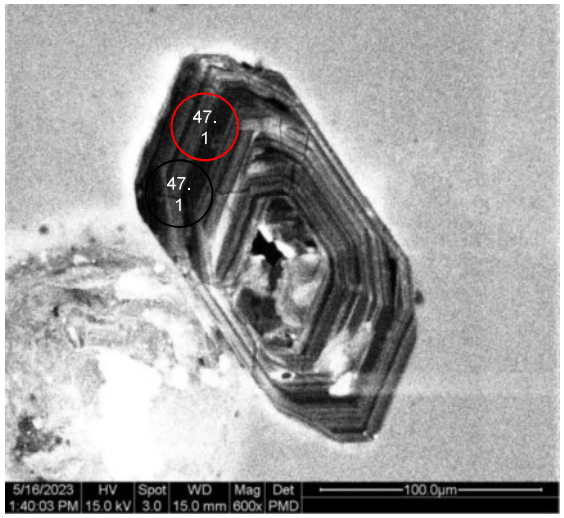
Grain 045
Image AB_097



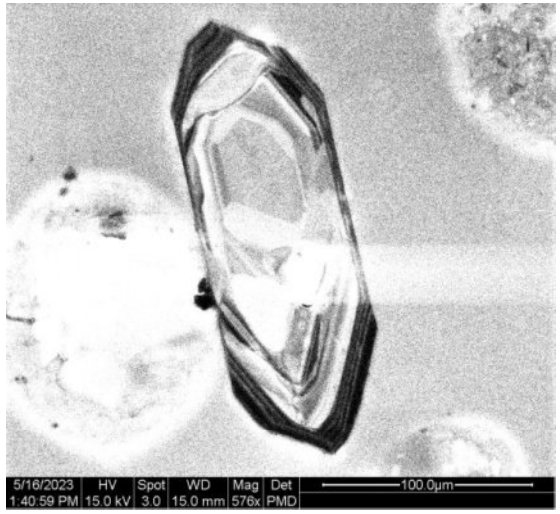
Grain 046
Image AB_101



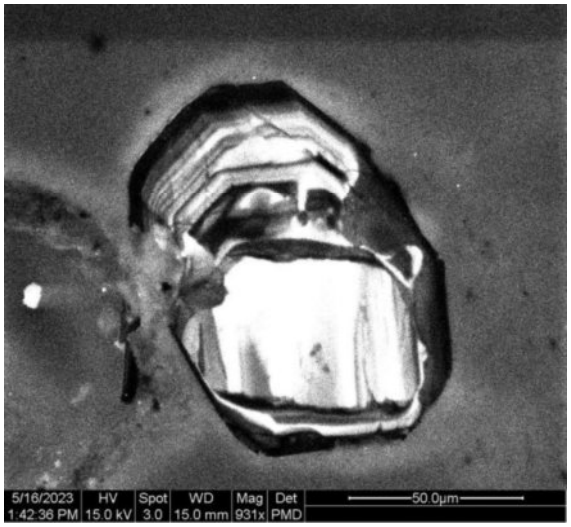
Grain 047
Image AB_102



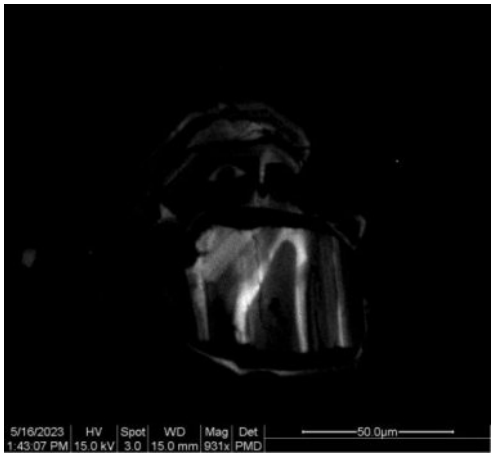
Grain 048
Image AB_104



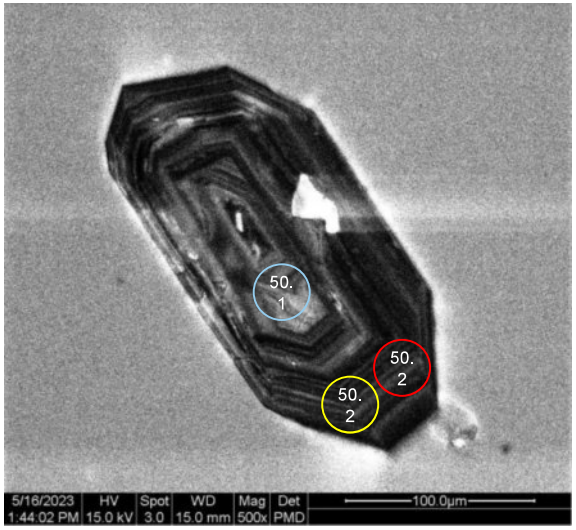
Grain 049
Image AB_107



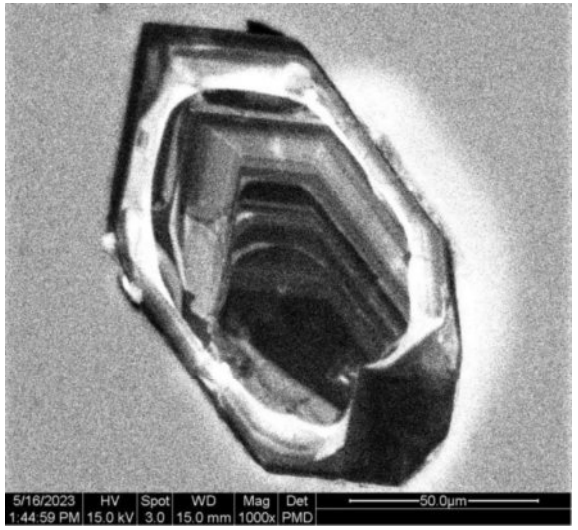
Grain 049
Image AB_109



Grain 050
Image AB_110



Grain 051
Image AB_112



Grain 052
Image AB_114

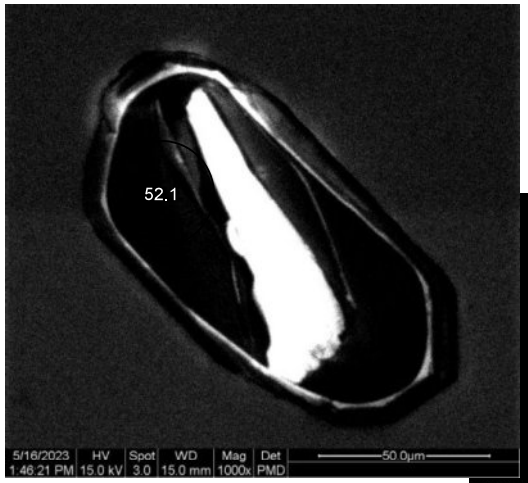
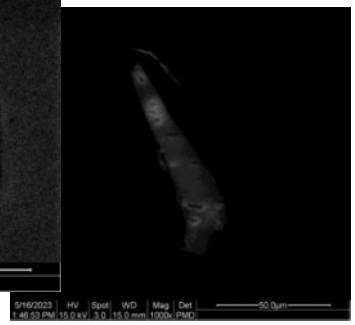
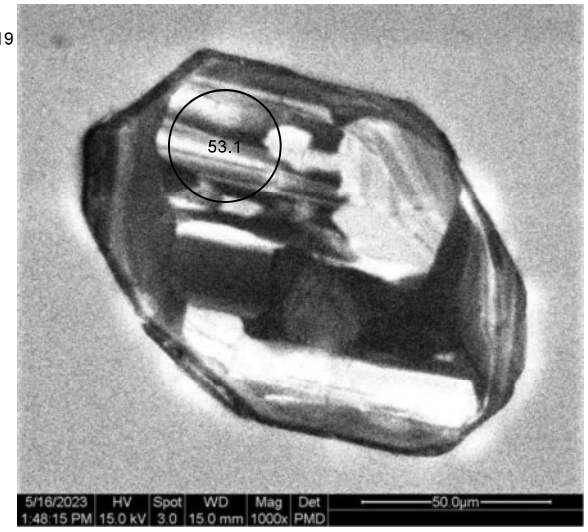


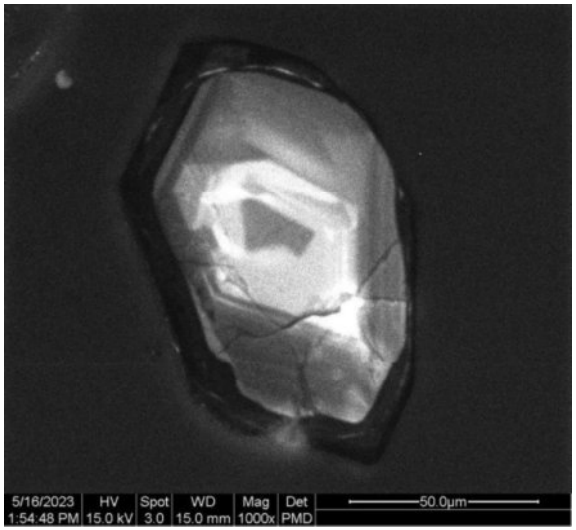
Image AB_115



Grain 053
Image AB_119



Grain 054
Image AB_123



Grain 055
Image AB_124

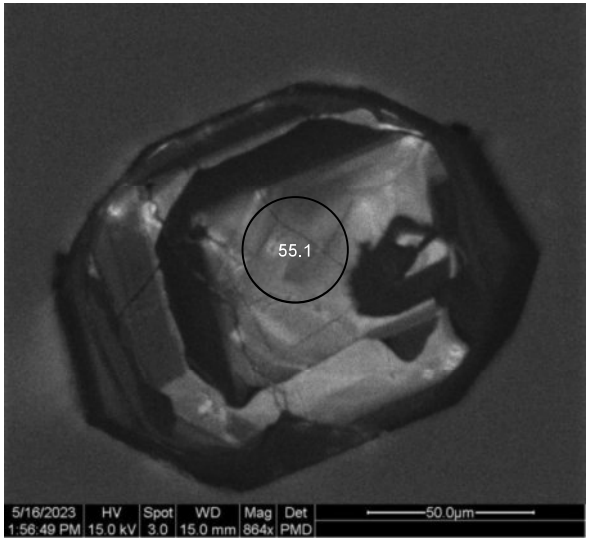


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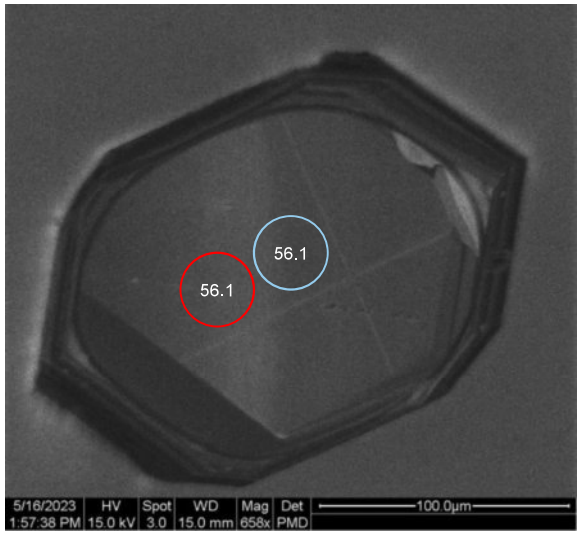
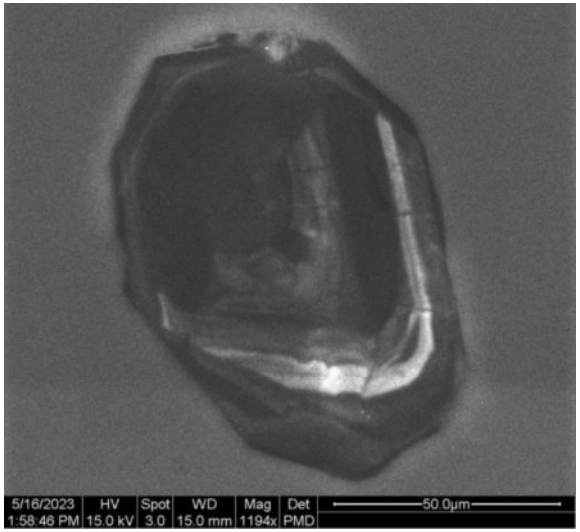
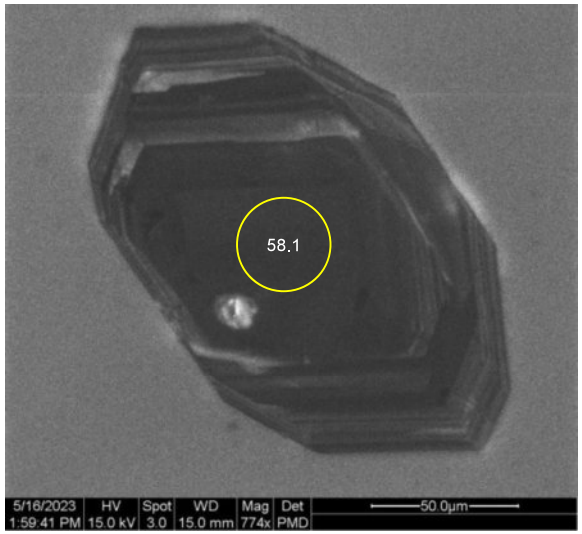
Image AB_126



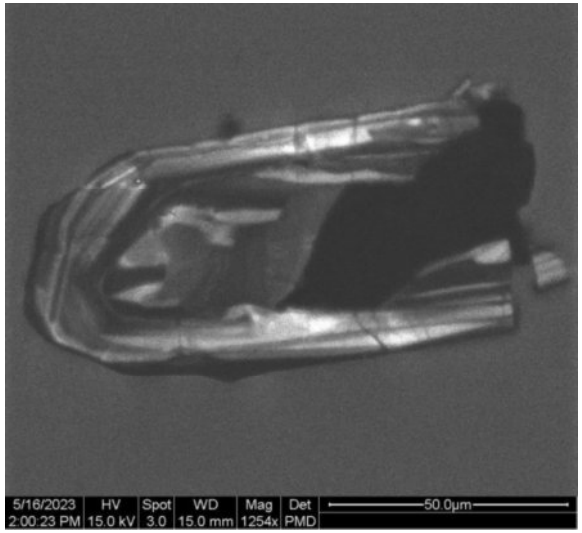
Grain 057
Image AB_128



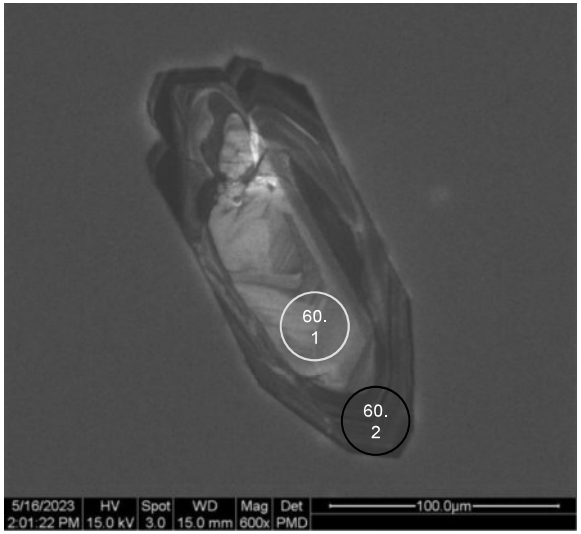
Grain 058
Image AB_130



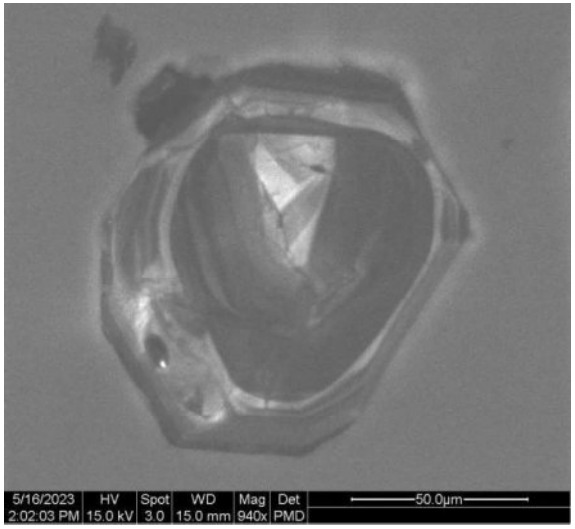
Grain 059
Image AB_132



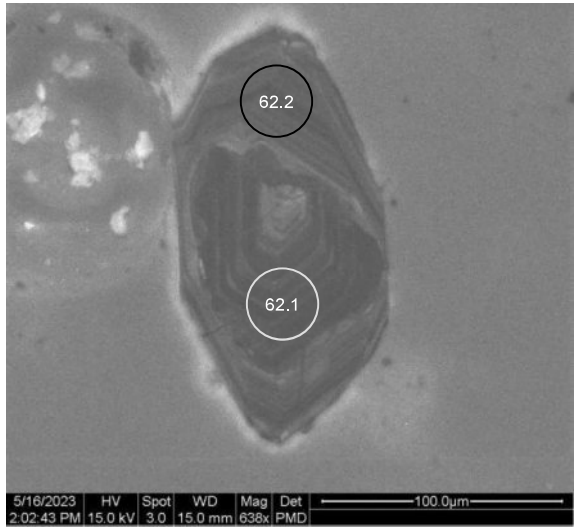
Grain 060
Image AB_134



Grain 061
Image AB_136



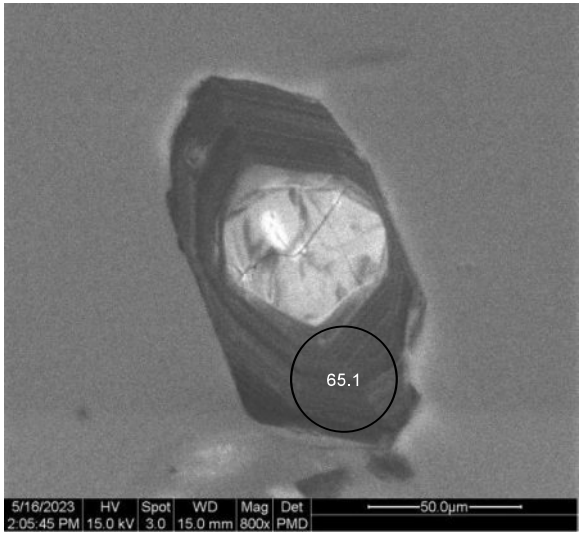
Grain 062
Image AB_138



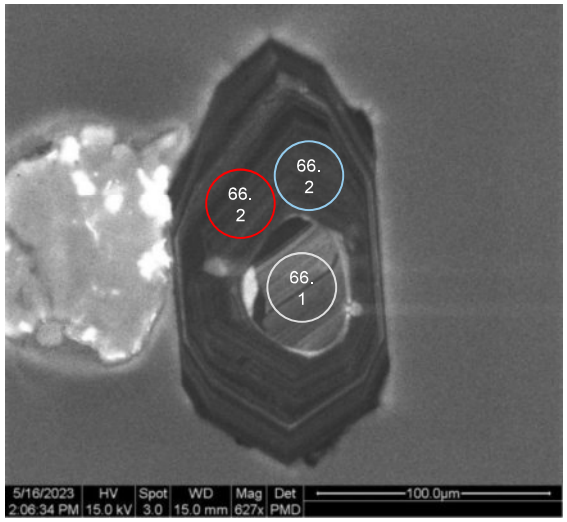
Grain 063
Image AB_140

Grain 064
Image AB_142

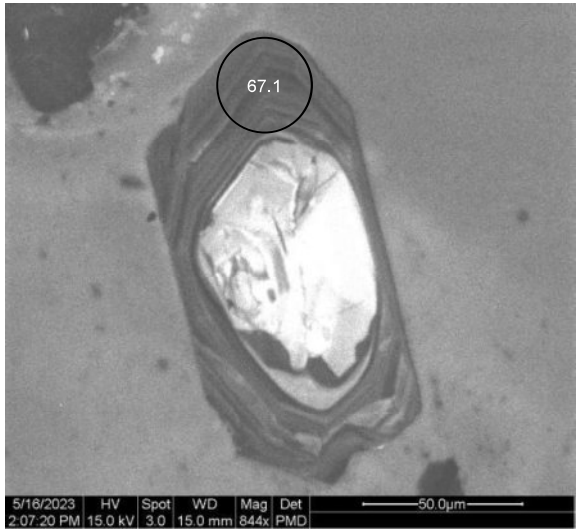
Grain 065
Image AB_144



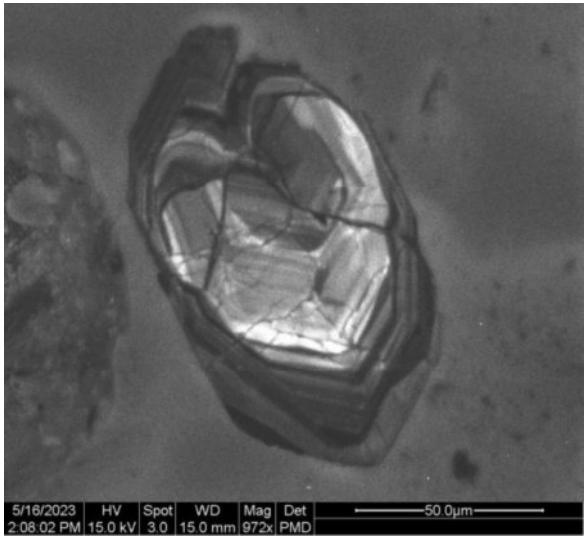
Grain 066
Image AB_146



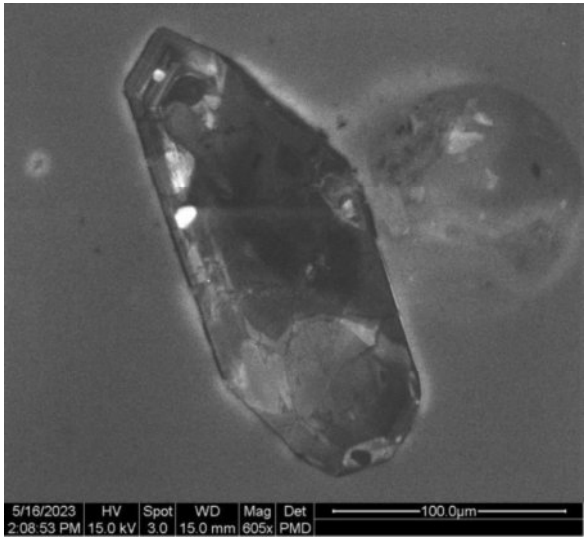
Grain 067
Image AB_148



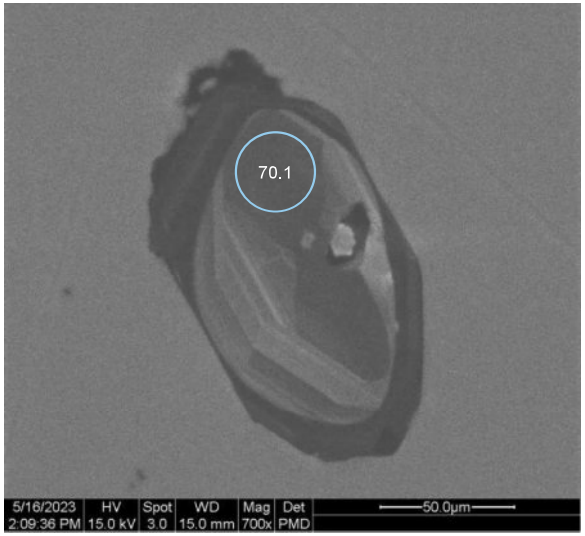
Grain 068
Image AB_150



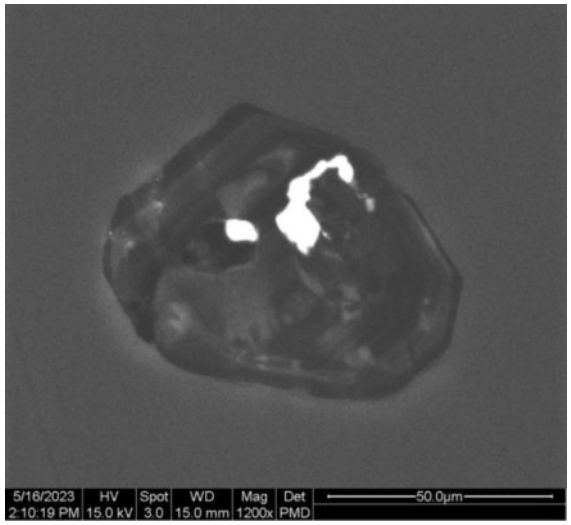
Grain 069
Image AB_152



Grain 070
Image AB_154



Grain 071
Image AB_156



Grain 072
Image AB_158

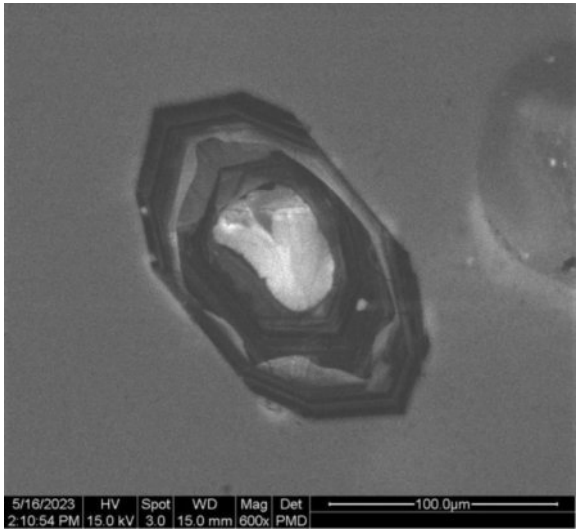


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Image AB_160

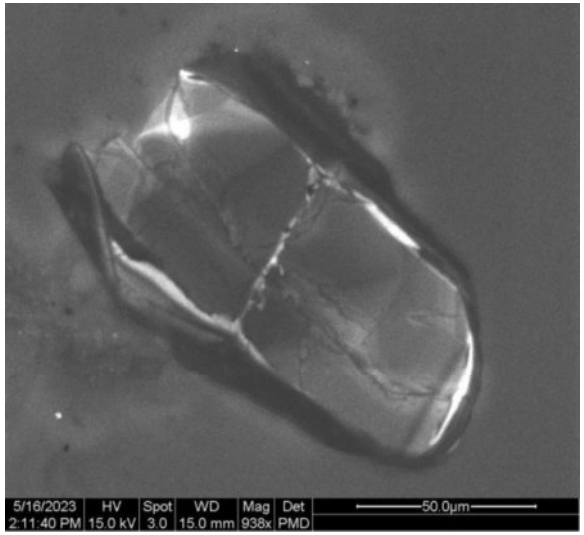

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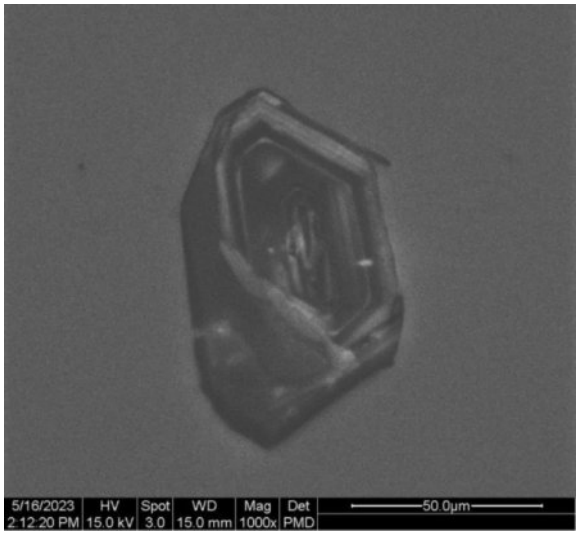
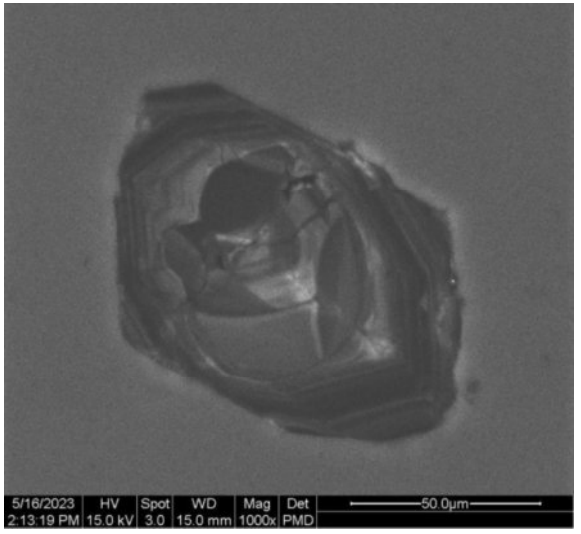
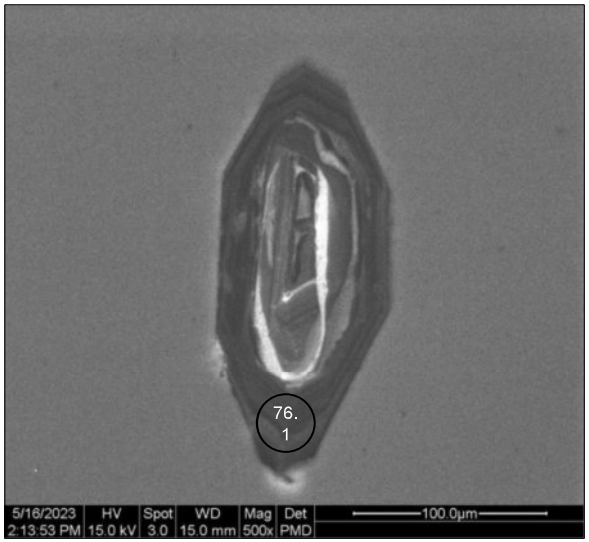
Image AB_162



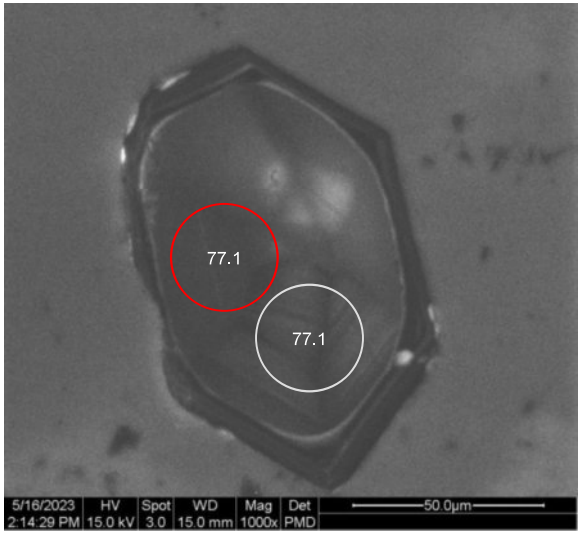
Grain 075
Image AB_164



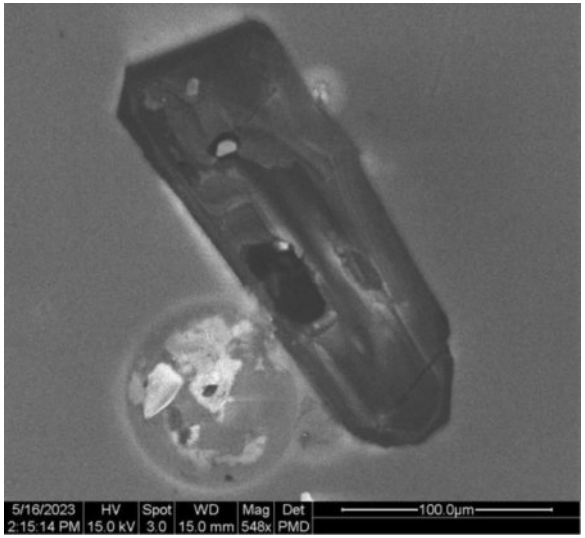
Grain 076
Image AB_166



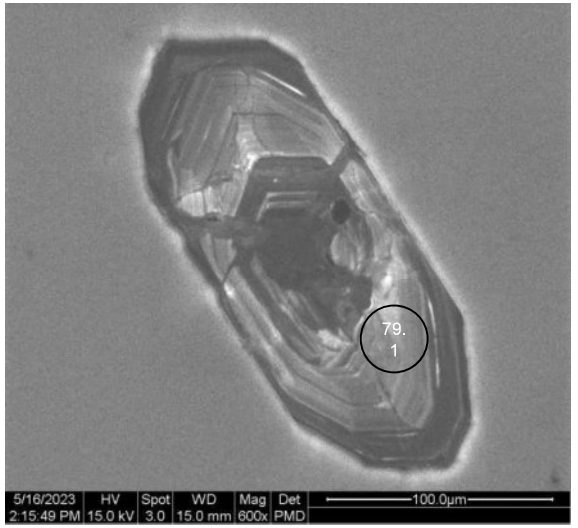
Grain 077
Image AB_168



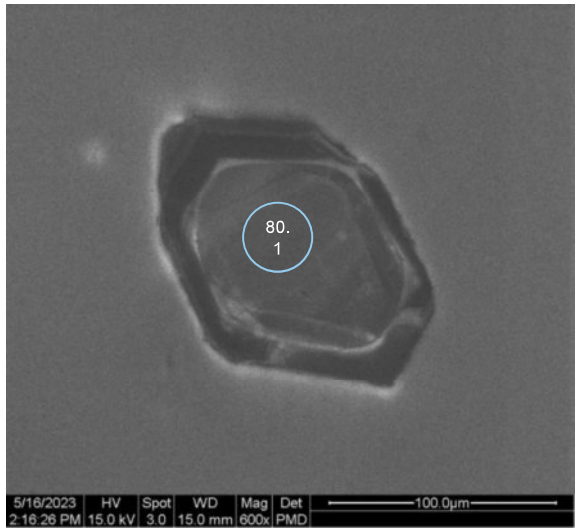
Grain 078
Image AB_170



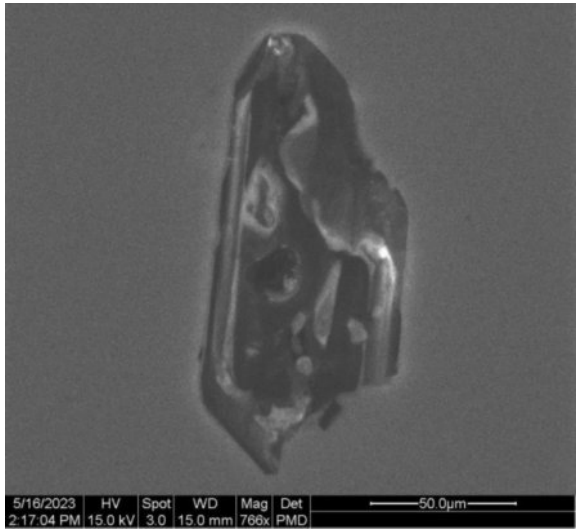
Grain 079
Image AB_172



Grain 080
Image AB_174



Grain 081
Image AB_176



Grain 082
Image AB_178

Grain 083
Image AB_180

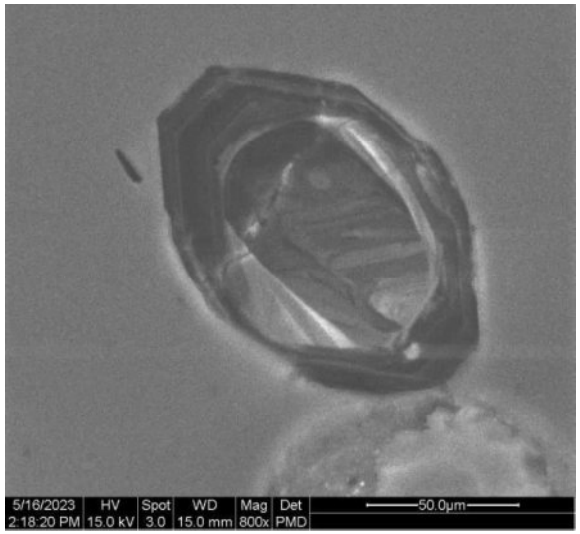


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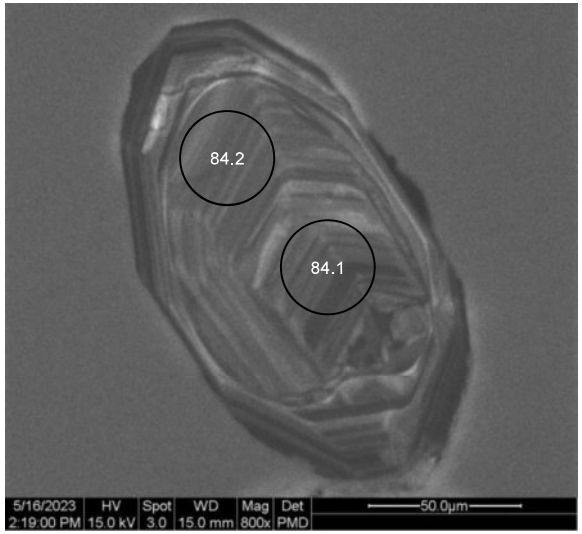
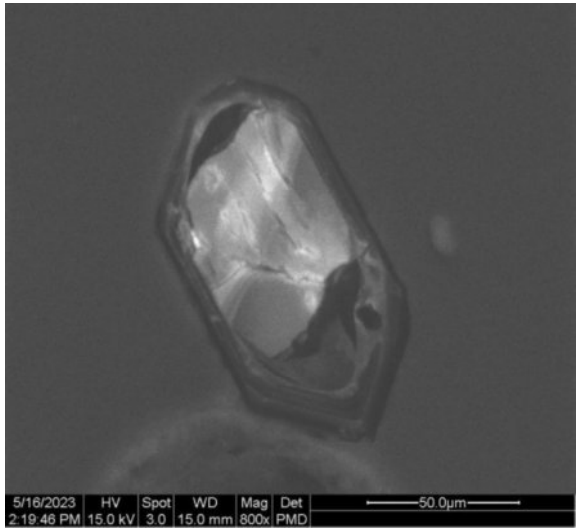
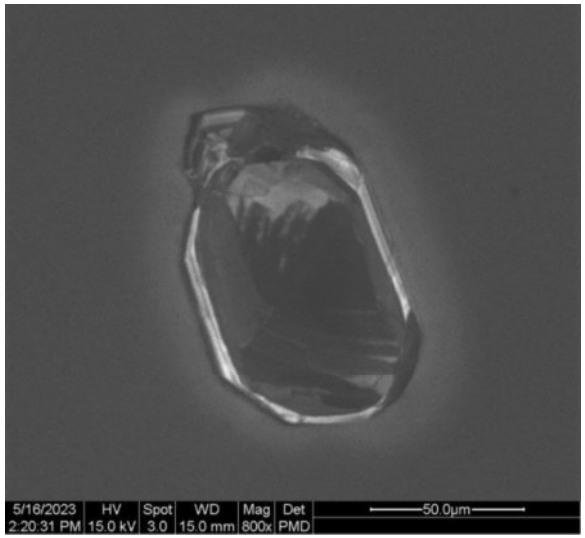
Image AB_182



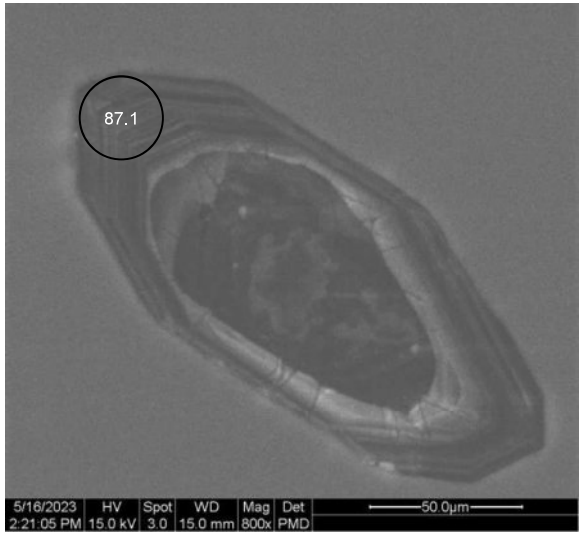
Grain 085
Image AB_184



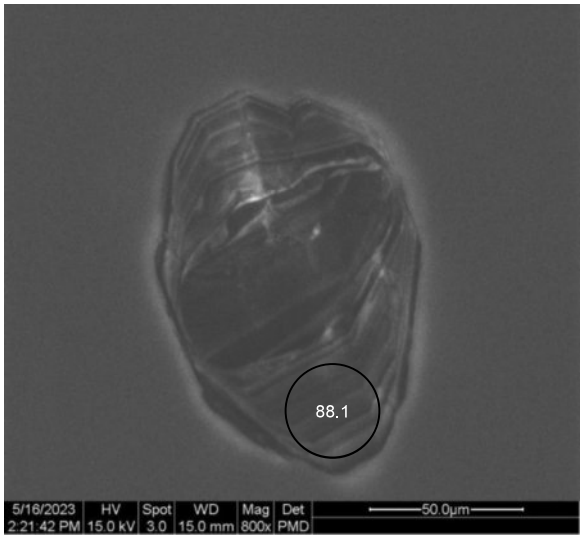
Grain 086
Image AB_186



Grain 087
Image AB_188



Grain 088
Image AB_190



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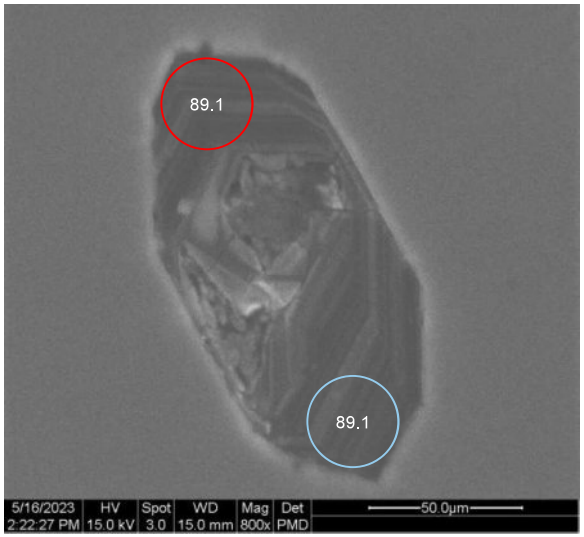
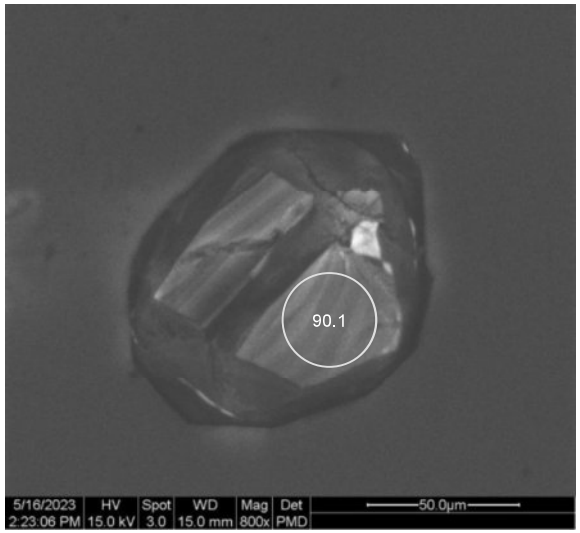
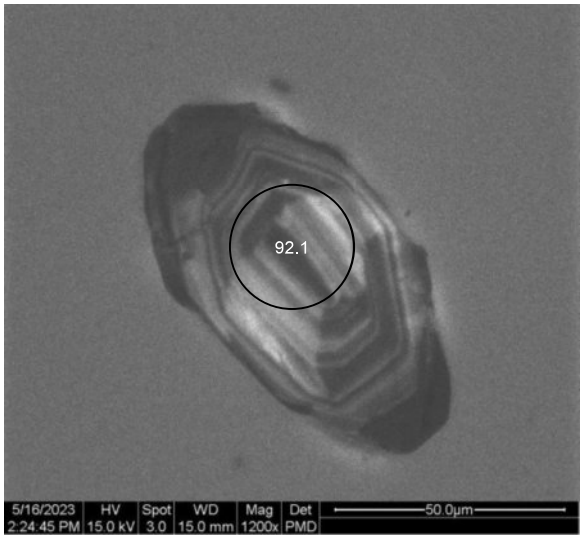


Grain 090
Image AB_194

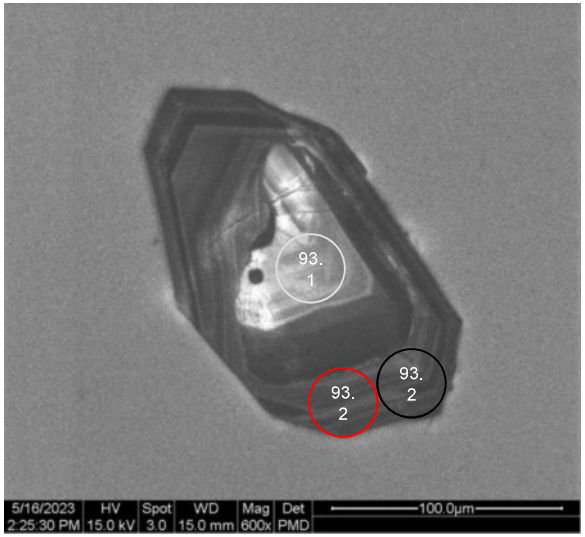


Grain 091
Image AB_196

Grain 092
Image AB_198



Grain 093
Image AB_200



Supplementary Item C – Zircon Textural Descriptions

Colour code as per supplementary item B. Light blue = emplacement, dark blue = antecrystic, grey = xenocrystic, yellow = concordant but rejected due to evidence of Pb loss. Discordant spots are left uncoloured.

1.1 CM22/LS-01

Grain ID	Grain Shape and Texture	Spot ID and Location	Ages			
			$^{206}Pb/^{238}U$	2σ	$^{207}Pb/^{235}U$	2σ
02	Euhedral. Core and rim are of similar proportions. Both core and rim consist of complex oscillatory zoning with resorption textures between zones. Significant fracture across core and rim. Rim contains an inclusion.	002.1 Rim	345.3	10.3	450.8	20.2
03	Euhedral. Large, messy irregular core, moderately narrow rim of finely to broadly spaced oscillatory zoning.	N/A				
04	Subhedral. Fine oscillatory zoning throughout, with inclusions and a very small homogeneous core. Minor bright zone with associated homogeneous patches.	004.1 Core	429.4	9.0	567.2	18.3
		004.2 Rim	427.5	9.8	480.0	10.8
05	Subhedral. Large core with complex oscillatory zoning, resorption textures, inclusions and minor patchy zoning and fractures. Narrow, dark oscillatory zoned rim.	005.1 Core	419.9	8.0	531.3	15.3
06	Subhedral. Large core of fine oscillatory zoning, with a patchy, convolute zone at its margin and partially resorbed boundaries. Moderately narrow rim of oscillatory zoning with pit due to fracturing.	006.1 Core	418.5	9.6	538.9	27.8
		006.2 Core	419.3	9.6	421.8	10.0
		006.3 Rim	430.6	9.9	446.1	11.7
07	Euhedral. Homogeneous core with partially resorbed boundaries. Moderate to narrow rim of complex oscillatory zoning. Multiple inclusions in both core and rim, with one inclusion overlapping both.	007.1 Core	422.7	9.3	422.8	11.4
		007.2 Rim	424.5	9.4	428.9	10.4
08	Subhedral. Complex, fine oscillatory zoning and inclusions throughout. Heavily fractured.	008.1 Core	412.7	12.6	421.6	13.9

		008.2 Core	428.6	9.8	500.9	14.3
		008.3 Rim	382.0	11.3	453.7	14.0
09	Anhedral. Homogeneous core with diffuse boundaries. Rim of prominent oscillatory zoning. Inclusions are situated at the core-rim boundary. Core and rim are of similar proportions.	009.1 Core	418.9	9.7	487.0	18.2
10	Subhedral. Large core with prominent oscillatory zoning, inclusions, and some patchy convolute zoning. Moderate to narrow rim of prominent oscillatory zoning and inclusions.	010.1 Core	417.5	14.1	441.2	12.3
		010.2 Core	415.7	7.7	515.9	13.5
		010.3 Rim	427.2	9.4	431.7	10.1
11	Subhedral. Small semi-homogeneous core. Wide rim of prominent, complex oscillatory zoning with inclusions and minor patchy to convolute zones.	011.1 Oscillatory zoning	451.3	10.2	458.0	10.6
12	Subhedral. Small, semi-homogeneous to complex, patchy zoned core. Narrow to wide rim with well-developed oscillatory zoning, inclusions and minor patchy zoning.	012.1 Oscillatory zoning	425.5	8.5	518.0	12.8
		012.2 Oscillatory zoning	413.0	8.6	469.2	9.5
13	Subhedral. Broad oscillatory zoning with inclusions, partly obscured by later complex patchy zoning. No core-rim boundary present.	013.1 Rim	431.7	9.5	433.2	10.3
14	Subhedral. Small core with moderate to wide rim, both with complex oscillatory zoning and sector zoning.	014.1 Oscillatory zoning	399.9	8.6	536.4	13.5
15	Subhedral. Large, mostly homogeneous core with weak sector zoning, partially resorbed. Very narrow semi-homogeneous rim with inner bright overgrowth and minor oscillatory zoning. Heavily fractured.		N/A			
16	Subhedral. Complex, oscillatory to convolute zoned core. Very narrow to wide complex oscillatory zoned rim. Inclusions occur throughout core and rim.	016.1 Rim	440.5	9.9	496.0	12.3
17	Euhedral. Semi-homogeneous core with partially resorbed boundaries, enclosed by a bright growth. Fractured rim of prominent oscillatory zoning. Core and rim are of similar proportions.	017.1 Core	444.6	9.7	532.3	15.3
		017.2 Rim	349.5	8.8	481.5	13.7
18	Subhedral. Complex, patchy zoned core. Oscillatory zoned rim with minor patchy zoning. Core and rim are of similar proportions.	018.1 Rim	335.1	10.0	400.6	10.9

19	Euhedral. Large semi-homogeneous core with sector zoning. Very narrow semi-continuous narrow rim with feint zoning.	019.1 Core	403.1	7.8	467.4	8.6
20	Euhedral. Very small homogeneous core. Wide rim with complex oscillatory zoning, an inclusion and minor patchy zoning.	020.1 Rim	395.6	9.5	534.8	14.1
21	Anhedral (broken). Complex oscillatory zoning with possible resorption textures. Core and rim are of similar proportions.	N/A				
22	Euhedral. Moderately small complex patchy zoned core. Narrow to wide oscillatory zoned rim with minor patchy zoning. Heavily fractured.	N/A				
23	Euhedral. Complex patchy to convolute zoned core with resorbed boundaries. Rim of oscillatory zoning. Fractured. Core and rim are of similar proportions.	N/A				
24	Anhedral (broken). Small, partially resorbed, semi-homogeneous core. Wide rim with complex oscillatory zoning with inclusions.	024.1 Oscillatory zoning	438.9	8.5	435.0	11.4
		024.2 Oscillatory zoning	433.3	8.6	470.1	13.8
		024.3 Oscillatory zoning	437.8	9.8	440.6	10.1
25	Subhedral. Large core with narrow rim, both consist of complex oscillatory zoning throughout with multiple large inclusions.	025.1 Core	426.5	8.9	504.3	14.5
		025.2 Rim	423.1	9.0	448.6	9.8
26	Anhedral. Moderately small, complex patchy zoned core. Moderately wide oscillatory zoned rim with convolute patchy zoning.	N/A				
27	Subhedral. Very small homogeneous core. Wide rim with oscillatory zoning, inclusions, some patchy convolute zoning and radial fractures.	027.1 Oscillatory zoning	504.4	15.0	1098.7	64.3
28	Subhedral. Prominent oscillatory zoning throughout with an inclusion. No clear core-rim boundary. A bright zone with convolute boundaries cross-cuts oscillatory zoning. Minor marginal fracturing occurs.	028.1 Oscillatory zoning	422.2	10.3	429.4	10.1
29	Subhedral. Complex oscillatory zoning throughout with some patchy zoning and inclusions. No clear core-rim boundary.	029.1 Rim	422.2	8.9	429.6	10.5
30	Subhedral. Complex oscillatory zoning with resorption textures at the core, and minor patchy zoning. No clear core-rim boundary.	030.1 Rim	416.4	9.2	571.8	25.9
31	Subhedral. Very small homogeneous core. Narrow to very wide rim with complex oscillatory zoning with inclusions. Outermost	031.1 Core	472.9	10.4	659.7	42.7

	oscillatory zoning is more broadly spaced, brighter, and fractured with a ~20 µm inclusion.	031.2 Oscillatory zoning	450.7	10.0	491.1	10.6
32	Subhedral. Large heterogeneous, fractured core with resorbed boundaries. Dark, moderate to narrow rim with broad zoning.	N/A				
33	Subhedral. Oscillatory zoned with homogeneous core. Heavily fractured. Core and rim are of similar priportions.	N/A				
34	Subhedral. Small homogeneous to oscillatory zoned core with partially resorbed boundaries. Wide, complex oscillatory zoned rim with radial fracturing.	034.1 Oscillatory zoning	418.0	10.2	635.0	24.3
		034.2 Oscillatory zoning	391.3	8.4	458.2	12.2
35	Subhedral (broken). Very small homogeneous to patchy zoned core with partially resorbed boundaries. Very wide rim with complex oscillatory zoning with inclusions and minor patchy zoning.	035.1 Oscillatory zoning	436.8	10.2	435.7	9.8
		035.2 Oscillatory zoning	423.8	9.1	442.7	9.2
36	Euhedral. Small patchy zoned core. Wide to very wide complex oscillatory zoned rim with multiple inclusions. Fractured.	036.1 Core	424.5	9.7	431.6	12.9
		036.2 Oscillatory zoning	420.6	8.5	451.6	12.8
		036.3 Oscillatory zoning	422.8	8.9	428.9	9.1
37	Subhedral. Small homogeneous core, wide rim of oscillatory zoning with minor patch zoning and fracturing.	037.1 Core	421.9	12.7	727.3	42.6
		037.2 Rim	415.9	9.2	558.6	15.1
38	Euhedral. Patchy zoned core with minor central oscillatory zoning. Oscillatory zoned rim with minor patchy zoning. Core and rim are of similar proportions.	038.1 Core	439.9	9.2	484.0	9.6
		038.2 Rim	435.1	9.2	549.8	11.4
39	Subhedral. Oscillatory zoned with minor patchy to convolute zoning with inclusions. No clear core-rim boundary.	039.1 Oscillatory zoning	331.6	10.6	658.8	22.6
40	Euhedral. Complex oscillatory zoning with minor patchy to convolute zoning and many inclusions. No clear core-rim boundary.	040.1 Oscillatory zoning	427.1	12.8	444.8	15.9
41	Subhedral. Very large complex oscillatory zoned core with some patchy to convolute zoning and inclusions. Very narrow to moderate rim with oscillatory zoning. A fracture runs the length of the grain.	N/A				

42	Subhedral. Complex oscillatory zoning with an inclusion, minor patchy zoning and resorption textures. No clear core-rim boundary.	042.1 Oscillatory zoning	437.3	10.4	517.3	13.8
43	Subhedral. Patchy zoned core enclosed by complex oscillatory zoning with minor patchy zoning and inclusions. Core and rim are of similar proportions.	043.1 Oscillatory zoning	420.8	8.6	442.0	9.1
44	Subhedral. Very small homogeneous core. Very wide oscillatory zoned rim with inclusions.	044.1 Core	430.7	13.4	439.2	17.0
		044.2 Rim	431.8	10.7	435.5	10.3
45	Subhedral. Complex oscillatory zoning with inclusions and resorption textures. Heavily fractured. Core and rim are of similar proportions.	045.1 Oscillatory zoning	425.8	10.4	436.3	10.4
46	Subhedral. Core with inner patchy zoning and outer oscillatory zoning and resorbed boundaries. Heavily fractured rim with oscillatory to convolute zoning. Core and rim are of similar proportions.	046.1 Core - outer	422.3	9.6	451.2	10.4
47	Subhedral. Very small semi-homogeneous core. Very wide rim with complex oscillatory zoning with minor patchy zoning and inclusions.	047.1 Oscillatory zoning	430.3	9.3	463.1	10.4
		047.2 Oscillatory zoning	356.4	7.4	403.9	8.5
48	Subhedral. Moderately large, partially resorbed core with inner homogeneous zone and outer oscillatory zoning with inclusions and marginal patchy zoning. Dark, narrow to moderate rim with oscillatory zoning and inclusions.	048.1 Core – oscillatory zoning	430.4	9.0	487.7	14.0
		048.2 Core – oscillatory zoning	440.4	9.2	448.8	10.7
		048.3 Rim	433.3	9.9	482.1	12.7
49	Euhedral. Very small partially resorbed homogeneous core. Very wide rim with complex oscillatory zoning and minor patchy zoning.	049.1 Rim	434.2	9.3	491.5	10.5
50	Subhedral. Complex oscillatory zoning with ~20 µm inclusions and some patchy zoning. No clear core-rim boundary.	050.1 Rim	421.4	12.4	431.3	14.7
51	Euhedral. Moderately large heterogeneous patchy core. Narrow to wide rim with oscillatory zoning. Fractured.	051.1 Rim	422.8	9.1	425.5	9.4
52	Subhedral. Complex oscillatory zoning with some patchy zoning and inclusions. Core and rim are likely of similar proportions, but their boundary is obscured by later bright homogeneous to convolute zoning.	N/A				

53	Euhedral. Moderately small, fractured, patchy zoned core with inclusions. Narrow to moderately wide, dark oscillatory zoned rim with an inclusion. A fracture cross-cuts the core-rim boundary.	053.1 Rim	434.9	9.6	489.6	10.8
54	Euhedral. Large complex oscillatory zoned core with some homogeneous convolute zones. Dark, narrow, oscillatory zoned rim. Inclusions and fractures occur throughout.	N/A				
55	Euhedral. Very small patchy zoned core. Very wide oscillatory zoned rim with some patchy zoning, a bright cross-cutting zone and approximately radial fractures.	055.1 Rim	436.2	9.7	461.4	9.9
56	Euhedral. Moderately small oscillatory zoned core with patchy zoning. Dark, narrow to wide oscillatory zoned rim. Inclusions in both core and rim, one is ~50 µm.	056.1 Rim	415.2	9.3	435.5	12.2
57	Euhedral. Complex oscillatory zoning with some patchy zoning, resorption textures and inclusions. No clear core-rim boundary.	057.1 Oscillatory zoning	428.8	8.7	434.2	9.6
		057.2 Oscillatory zoning	426.9	9.7	425.0	10.3
58	Subhedral. Very small homogeneous core. Very wide complex oscillatory zoned rim with inclusions, and a spatially limited cross-cutting semi-homogeneous zone.					
		58.1 Core	423.2	8.8	424.9	11.1
		058.2 Rim	396.0	9.9	495.2	23.9
59	Euhedral. Very small patchy zoned core. Wide complex oscillatory zoned rim with minor patchy zoning.	059.1 Oscillatory zoning	428.7	12.5	440.6	11.5
60	Euhedral. Complex oscillatory zoning with inclusions and minor patchy zones. No clear core-rim boundary.	060.1 Oscillatory zoning	405.1	11.2	479.7	14.0
61	Subhedral. Very small homogeneous core/ Narrow to wide rim with complex oscillatory zoning, cross-cutting homogeneous to convolute zoning and inclusions.	061.1 Rim	436.2	9.3	434.9	9.3
62	Subhedral. Very large core with inner homogeneous region and outer oscillatory zoning, partially resorbed with a marginal homogeneous region with irregular boundaries. Narrow oscillatory zoned rim.	062.1 Core – oscillatory zoning	422.4	7.8	424.6	9.5
63	Euhedral. Large core with complex oscillatory zoning, some patchy convolute zoning and marginal inclusions. Narrow dark rim with oscillatory zoning.	063.1 Oscillatory zoning	419.0	9.0	460.3	12.4
		063.2 Oscillatory zoning	433.2	10.7	441.0	13.6
64	Euhedral. Very narrow zoned core. Wide rim with complex oscillatory zoning and cross-cutting patchy to convolute zones.	064.1 Oscillatory zoning	421.6	14.5	442.8	17.2

	Contains ~25-30 μm inclusions. Fractures cross cut the width of the grain.	064.2 Oscillatory zoning	440.8	9.6	442.2	9.2
65	Subhedral (broken). Complex oscillatory zoning with significant cross-cutting convolute to homogeneous regions and fracturing. Contains inclusions. No clear core-rim boundary.	065.1 Oscillatory zoning	425.8	8.2	423.0	9.5
66	Euhedral. Small, irregularly zoned core. Wide to very wide complex oscillatory zoned rim with minor patchy zones, fracturing, and inclusions.	066.1 Oscillatory zoning	438.1	11.0	486.0	14.6
67	Euhedral, elongate. Complex oscillatory zoning with cross-cutting oscillatory to convolute zoning. No clear core-rim boundary.	067.1 Oscillatory zoning	443.1	9.8	435.6	9.5
68	Euhedral, elongate. Ver narrow semi-homogeneous core. Wide to very wide oscillatory zoned rim, with minor patchy zones.	068.1 Oscillatory zoning	434.4	10.5	448.7	10.9
		068.2 Oscillatory zoning	417.0	9.2	724.4	27.0
69	Subhedral. Complex oscillatory zoning with very minor patchy zoning and an inclusion. Oscillatory zoning is less well developed in the core. No clear core-rim boundary.	069.1 Core	435.2	11.0	559.7	23.7
70	Euhedral. Moderately small, oscillatory zoned, partially resorbed core with inclusions. Wide rim with complex oscillatory zoning, inclusions and fracturing.	070.1 Core	445.9	10.3	457.8	11.0
71	Euhedral. Small, patchy zoned core with marginal homogeneous zone. Wide rim with well-developed oscillatory zoning with inclusions and marginal convolute zoning. Fractured.	071.1 Core	438.4	9.7	475.0	11.6
72	Euhedral. Complex oscillatory zoning with inclusions, and some patchy to convolute zoning. No clear core-rim boundary.	072.1 Oscillatory zoning	440.4	9.7	440.3	10.2
73	Subhedral. Moderately small core with ore with broad zoning with irregular zone boundaries Narrow to wide rim with oscillatory zoning and a marginal homogeneous zone with minor convolute zoning.	073.1 Core	412.8	8.9	474.0	12.9
		073.2 Oscillatory zoning	373.7	8.0	449.5	10.0
74	Subhedral. Large, partially resorbed core with complex oscillatory zoning, marginal homogeneous zone with convolute boundaries and inclusions. Moderately narrow, oscillatory zoned rim with minor homogeneous zones.	074.1 Core	416.3	15.1	427.8	19.1
75	Subhedral. Oscillatory zoned with minor homogeneous patches, minor fractures and inclusions. No clear core-rim boundary.	075.1 Oscillatory zoning	428.8	8.9	423.5	9.0
		075.2 Oscillatory zoning	445.9	10.0	517.5	15.4

76	Subhedral. Complex oscillatory zoning with minor convolute zoning and inclusions up to ~40 µm in length. No clear core-rim boundary.	076.1 Rim	435.1	9.3	439.9	9.8
77	Subhedral. Complex oscillatory zoning with minor homogeneous zones and inclusions up to ~45 µm in length. No clear core-rim boundary.	077.1 Rim	387.9	10.3	589.5	25.1
78	Subhedral. Very small homogeneous core. Narrow to very wide rim with oscillatory zoning, minor convolute zoning, and an inclusion.	078.1 Oscillatory zoning	428.3	9.7	441.0	10.5
		078.2 Oscillatory zoning	427.4	8.8	432.0	8.9
79	Subhedral. Very small patchy zoned core. Wide to very wide rim with complex oscillatory zoning with inclusions up to ~40 µm in length. Significant fractures through core and rim.	079.1 Oscillatory zoning	439.8	8.2	442.5	10.9
		079.2 Oscillatory zoning	398.6	9.1	427.3	9.8
80	Anhedral. Small, patchy zoned core. Wide to very wide rim with complex oscillatory zoning and inclusions. Heavily fractured.		N/A			
81	Euhedral. Large patchy to convolute zoned core. Narrow to moderately narrow oscillatory zoned rim. Fractures occur across both core and rim.	081.1 Rim	416.6	10.8	471.3	11.6
82	Subhedral. Complex, feint to prominent oscillatory zoning with minor homogeneous regions, inclusions and fracturing. No clear core-rim boundary.	082.1 Oscillatory zoning	423.2	8.7	422.5	12.2
		082.2 Oscillatory zoning	439.6	9.2	446.1	11.7
83	Euhedral. Small, semi-homogeneous core. Wide, complex oscillatory zoned rim. Fractured across core and rim.		N/A			
84	Subhedral. Small, patchy zoned core. Narrow to wide complex oscillatory zoned rim. Fractures across core and rim, dominantly affecting the rim.	084.1 Rim	420.9	8.7	487.9	10.2
85	Anhedral (broken). Large, patchy zoned, fractured core and a finely oscillatory zoned rim with inclusions. Bright, convolute zoning occurs at the core-rim boundary extending into both. Core and rim are of similar proportions.	085.1 Rim	419.1	9.2	461.4	10.3
86	Euhedral. Broad oscillatory zoning cross-cut by a semi-homogeneous zone. Fracturing spatially with the semi-homogeneous zone. No clear core-rim boundary.	086.1 Oscillatory zoning	428.5	15.1	451.5	14.4
87	Euhedral. Small, partially resorbed, patchy zoned core. Wide to very wide complex oscillatory zoned rim.		N/A			
88	Subhedral. Complex oscillatory zoning with a homogeneous centre and inclusions. No clear core-rim boundary.	088.1 Oscillatory zoning	433.0	8.3	435.5	11.5

		088.2 Oscillatory zoning	418.7	9.7	491.5	10.1
89	Euhedral. Complex oscillatory zoning, with a homogeneous zone cross-cutting oscillatory zoning in places, minor fracture and inclusions. A marginal inclusion is ~35 µm in length. No clear core-rim boundary.	089.1 Core	429.1	10.5	445.8	11.5
90	Subhedral. Very small homogeneous core. Very wide rim with complex oscillatory zoning and inclusions.	090.1 Core	422.5	8.2	426.6	9.8
		090.2 Rim	387.7	8.7	424.1	10.0
91	Euhedral. Complex oscillatory zoning with minor convolute zoning, a homogeneous centre and inclusions up to ~30 µm in length. No clear core-rim boundary.	091.1 Oscillatory zoning	431.9	9.9	440.2	10.6
		091.2 Oscillatory zoning	438.3	10.6	538.0	21.1
92	Subhedral. Complex oscillatory zoning with some cross-cutting patchy to convolute zoning and inclusions. No clear core-rim boundary.	092.1 Oscillatory zoning	414.8	9.8	509.1	20.7
		092.2 Oscillatory zoning	378.3	9.7	745.2	33.2
93	Euhedral. Broad oscillatory zoned to homogeneous core with partially resorbed boundaries and inclusions. Rim is finely oscillatory zoned with inclusions and minor convolute zoning. Rim is moderately larger than the core.	093.1 Core	423.2	9.9	443.0	11.3
		093.2 Rim	405.2	9.0	420.7	9.1
94	Subhedral. Complex oscillatory zoning with some convolute zoning adjacent to the centre, and inclusions. No clear core-rim boundary.	094.1 Oscillatory zoning	421.6	8.9	574.0	22.1
		094.2 Oscillatory zoning	419.2	9.0	464.1	10.9
95	Subhedral. Small, patchy to convolute zoned core, convolute zoning cross-cuts into the rim. Narrow to wide rim consists of fine to broad oscillatory zoning with minor slightly convolute zoning.		N/A			
96	Subhedral. Oscillatory zoning with inclusions and fractures. No clear core-rim boundary.	096.1 Oscillatory zoning	439.9	8.6	505.3	13.5
97	Anhedral (broken). Large, homogeneous to oscillatory zoned core with multiple inclusions up to ~30 µm, and resorbed boundaries. Narrow oscillatory zoned rim with minor convolute zoning.		N/A			
98	Subhedral. Patchy zoned core. Oscillatory zoned rim with radial fracturing from core-rim boundary to grain edge. Core and rim are of similar proportions.		N/A			

99	Subhedral. Small, partially resorbed oscillatory zoned core. Narrow to wide rim consists of broad oscillatory zoning. Fractured across both core and rim.	099.1 Rim	434.4	10.0	458.0	10.9
100	Euhedral. Complex oscillatory zoning with inclusions and minor homogeneous zones. No clear core-rim boundary.	100.1 Oscillatory zoning	414.8	9.7	548.5	21.5

1.2 CM22/RAS-01

Grain ID	Grain Shape and Texture	Spot ID and Location	Ages			
			$^{206}Pb/^{238}U$	2σ	$^{207}Pb/^{235}U$	2σ
01	Euhedral. Complex oscillatory zoning with a patchy zoned centre. Contains inclusions, heavily fractured. No clear core-rim boundary.	01.1 Core	431.1	10.5	606.4	46.4
02	Subhedral. Complex oscillatory zoning with multiple inclusions and a homogeneous centre zone. Fractured. No clear core-rim boundary.	N/A				
03	Subhedral. Oscillatory zoning with multiple inclusions and a dark homogeneous marginal zone. Fractured. No clear core-rim boundary.	03.1 Oscillatory zoning	418.2	10.7	416.2	12.6
		03.2 Oscillatory zoning	441.2	11.7	444.8	11.5
		03.3 Oscillatory zoning	437.2	11.0	501.3	12.5
04	Anhedral. Complex oscillatory zoning with inclusions. Heavily fractured. No clear core-rim boundary.	N/A				
05	Subhedral. Large core with complex oscillatory zoning, resorbed boundaries, and a bright, cross-cutting homogeneous marginal region. Homogeneous to broad oscillatory zoned narrow rim with inclusions. Heavily fractured.	05.1 Core	427.6	9.6	429.3	11.5
		05.2 Rim	324.9	9.8	378.3	11.7
06	Anhedral. Complex oscillatory zoning with inclusions up to ~20 µm. Heavily fractured and chipped. No clear core-rim boundary.	06.1 Core	432.4	12.0	437.6	13.6
07	Subhedral. Small homogeneous core. Narrow to wide rim of fine oscillatory zoning with minor convolute zoning and marginal homogeneous texture.	07.1 Core	369.8	9.3	559.8	15.9
		07.2 Oscillatory zoning	396.3	10.5	452.5	13.9

08	Anhedral. Complex oscillatory zoning with multiple inclusions, up to ~30 μm, and minor convolute zoning. Fractured and chipped. No clear core-rim boundary.	08.1 Oscillatory zoning	427.5	10.9	493.3	17.0
		08.2 Oscillatory zoning	439.7	13.3	473.8	15.8
09	Euhedral. Very small patchy zoned core. Very wide rim with complex, fine oscillatory zoning.	09.1 Oscillatory zoning	441.4	10.7	437.7	11.7
		09.2 Oscillatory zoning	429.4	14.5	441.0	19.3
10	Subhedral. Very small homogeneous core. Wide to very wide rim of complex oscillatory zoning with minor homogeneous zones and inclusions. Bright, cross-cutting patchy zoning occurs at one margin. Fractured.	10.1 Oscillatory zoning	438.7	9.4	453.8	12.1
11	Subhedral. Very large core with oscillatory zoning and a homogeneous centre zone, with cross-cutting convolute zoning. Narrow dark homogeneous rim. Fractured.	11.1 Oscillatory zoning	413.4	11.3	417.9	12.0
12	Subhedral. Large partially resorbed homogeneous core with possible partially annealed fractures. Narrow rim consists of fine oscillatory zoning. Fractured.	12.1 Core	429.1	10.0	425.2	11.2
		12.2 Rim	415.9	10.8	431.4	11.0
13	Euhedral. Complex, fine oscillatory zoning with minor convolute to homogeneous zones and inclusions. No clear core-rim boundary.	13.1 Oscillatory zoning	440.8	10.4	432.7	11.3
		13.2 Oscillatory zoning	437.5	10.8	440.7	11.3
14	Anhedral (broken). Large core consists of oscillatory zoning cross-cut by homogeneous zoning, boundaries are indistinct in places. Core is cross-cut by a dark homogeneous rim with minor oscillatory and convolute boundaries. Contains multiple inclusions. Heavily fractured.		N/A			
15	Subhedral. Very large complex oscillatory zoned core, cross-cut by broad zoned rim with convolute boundaries. Contains multiple inclusions up to ~35 μm. Fractured.	15.1 Oscillatory zoning	423.6	10.5	422.3	10.8
16	Euhedral. Very large core with irregular patchy zoning throughout Narrow oscillatory zoned rim.		N/A			
17	Euhedral. Very large homogeneous to patchy zoned core. Wide rim with fine oscillatory zoning and a marginal dark homogeneous zone. Contains inclusions. Fractured.	17.1 Oscillatory zoning	428.2	10.2	433.8	11.3

18	Subhedral. Large homogeneous core with partially resorbed boundaries. Narrow to wide rim consists of complex oscillatory zoning. Fractured.	18.1 Rim	409.6	10.0	434.8	11.2
19	Subhedral. Very small semi-homogeneous core with partially resorbed boundaries. Very wide rim with complex oscillatory zoning and inclusions, cross-cut by a minor homogeneous zone. Fractured.	19.1 Oscillatory zoning	417.4	9.2	414.2	11.3
		19.2 Oscillatory zoning	432.4	10.0	427.3	10.8
20	Subhedral. Large oscillatory zoned core. Narrow dark, homogenous rim with sharp to diffuse boundaries. Fractured.	20.1 Oscillatory zoning	399.4	9.8	462.3	12.4
21	Subhedral. Very large complex oscillatory zoned core with a homogenous centre zone and inclusions. Very narrow homogeneous rim. A fracture cross-cuts the width of the grain.		N/A			
22	Anhedral (broken). Very large core with oscillatory zoning with inclusions, cross cut by a homogeneous to semi-homogeneous rim with convolute boundaries.	22.1 Oscillatory zoning	404.4	13.0	564.9	20.1
		22.2 Oscillatory zoning	428.0	10.3	516.1	13.0
23	Anhedral. Complex oscillatory zoning with inclusions, cross-cut by bright convolute zoning. No clear core-rim boundary.		N/A			
24	Subhedral. Complex oscillatory zoning cross-cut by a marginal homogeneous zone. Dark, narrow homogeneous rim.		N/A			
25	Anhedral (broken). Fine oscillatory zoning with a homogeneous to convolute zone and clustered inclusions. Fractured. No clear core-rim boundary.	25.1 Oscillatory zoning	414.2	9.6	418.4	11.0
26	Subhedral. Small patchy zoned core . Wide to very wide rim of fine oscillatory zoning with minor homogeneous to convolute zoning. Heavily fractured.	26.1 Oscillatory zoning	413.3	10.7	485.8	15.9
27	Subhedral. Small homogeneous to patchy zoned core. Wide rim with complex oscillatory zoning and some irregularly shaped homogeneous zones. Fractured.		N/A			
28	Euhedral. Homogeneous inner core enclosed by fine oscillatory zoned outer core with inclusions and partially resorbed boundaries. Wide rim consists of fine oscillatory zoning with frequent inclusions and minor homogeneous to convolute zoning.	28.1 Outer core	447.4	12.2	653.9	43.3
		28.2 Rim	474.3	11.3	542.8	17.1

29	Subhedral. Complex oscillatory zoning cross-cut by marginal homogeneous zones. Heavily fractured, with fractures dominantly radial. No clear core-rim boundary.	N/A				
30	Subhedral. Homogeneous to patchy zoned core cross-cut by rim zonation. Rim of fine oscillatory zoning with inclusions. Heavily fractured. Core and rim are of similar proportions.	30.1 Oscillatory zoning	403.3	10.4	603.2	31.0
31	Subhedral. Semi-homogeneous core with marginal oscillatory zoning. Rim consists of irregular patchy zoning with some oscillatory zoning. Core and rim are of similar proportions.	31.1 Core oscillatory zoning	427.3	9.9	421.7	11.1
32	Anhedral (broken). Small homogeneous core. Wide rim consists of oscillatory zoning with minor cross-cutting homogeneous zones.	32.1 Core	446.3	10.7	466.2	12.7
		32.2 Rim	439.3	10.8	444.3	11.8
33	Anhedral. Homogeneous core with an elongate, zoned inclusion ~70 µm in length. Semi-enclosed by prominent oscillatory zoning, followed by weakly developed oscillatory zoning with inclusions and cross-cut by weakly developed convolute zoning. Enclosed by, and in places cross-cut by, a dark, narrow homogeneous rim.	33.1 Core	426.1	9.7	431.5	11.3
		33.2 Prominent oscillatory zoning	430.8	10.5	428.1	11.3
		33.3 Weak oscillatory zoning	415.9	12.3	421.4	11.4
34	Anhedral. Very large core with a patchy zoned centre enclosed by fine, complex oscillatory zoning cross-cut by homogeneous zonation with inclusions. Both homogeneous and oscillatory zonation are partially resorbed and cross-cut by a narrow, dark homogeneous rim. Heavily fractured.	N/A				
35	Subhedral. Very large core with fine oscillatory zoning cross-cut by marginal bright homogeneous to convolute zonation with inclusions. Dark, narrow homogeneous to oscillatory zoned rim.	35.1 Oscillatory zoning	429.0	10.6	425.5	10.7
36	Subhedral. Core mostly homogeneous with inclusions and partially resorbed boundaries, enclosed by a homogeneous zone. Rim consists of complex oscillatory zoning. Fractured. Core and rim are of similar proportions.	N/A				
37	Anhedral (broken). Patchy to oscillatory zoned core with multiple inclusions, enclosed by a narrow homogeneous	N/A				

	zone. Rim is dark, narrow and homogeneous. Heavily fractured.					
38	Subhedral. Very large complex oscillatory zoned core with inclusions and minor convolute zoning. Narrow rim is dark and mostly homogeneous. Core-rim boundary is indistinct in places. Fractured.	38.1 Core	432.2	14.5	442.0	17.1
39	Subhedral. Very small patchy zoned core enclosed by a very wide oscillatory zoned rim with inclusions at the margins. Fractured.	39.1 Oscillatory zoning	410.4	11.0	562.4	18.5
40	Subhedral. Homogeneous core with a wide complex oscillatory zoned rim. Fractures cross-cut the width of the grain.	40.1 Core	408.5	10.4	522.2	19.1
41	Subhedral. Large core consists of complex patchy to oscillatory zoning with inclusions. Narrow rim is dark and largely homogeneous with some patchy zoning. Fractured.		N/A			
42	Anhedral (broken). Large core with a homogeneous centre zone enclosed by oscillatory zoning with minor convolute zoning and an inclusion. Narrow dark rim. Fractured.	42.1 Oscillatory zoning	404.0	9.0	418.6	10.9
43	Anhedral. Very small patchy to broad zoned core. Very wide rim with complex oscillatory zoning and multiple inclusions. Heavily fractured.	43.1 Oscillatory zoning	446.4	10.9	861.3	73.4
44	Euhedral. Prominent oscillatory zoning with minor bright cross-cutting homogeneous zones and inclusions. No clear core-rim boundary.	44.1 Oscillatory zoning	430.7	11.2	430.3	10.9
45	Subhedral. Complex oscillatory zoning with minor homogeneous to convolute zones and inclusions. No clear core-rim boundary.	45.1 Oscillatory zoning	434.5	10.7	665.2	35.1
46	Euhedral. Very large core with fine, complex oscillatory zoning and multiple inclusions. Very narrow, dark homogenous rim.	46.1 Oscillatory zoning	437.4	10.7	439.5	12.5
		46.2 Oscillatory zoning	424.6	12.9	424.5	14.2
47	Subhedral (broken). Very small core is partially resorbed with patchy zoning. Very wide rim consists of oscillatory zoning with minor homogeneous zones and inclusions.	47.1 Rim	438.4	11.5	439.8	12.5
48	Anhedral. Patchy zoned core with resorbed boundaries. Rim consists of fine oscillatory zoning with a very narrow, discontinuous dark outermost zone. A lathe shaped	48.1 Rim	407.0	10.4	406.8	11.0

	inclusion ~40 µm in length is situated within the core, but partially enclosed by the rim. Heavily fractured. Core and rim are of similar proportions.					
49	Anhedral. Large oscillatory zoned core with some patchy zoning and partially resorbed boundaries. Narrow rim is mostly dark with feint zoning and a zoned, euhedral inclusion ~25 µm.	49.1 Core	423.5	10.4	421.4	10.9
50	Subhedral. Innermost homogeneous zone enclosed by prominent to feint oscillatory zoning with inclusions. Some marginal feint patchy zoning. Fractured. No clear core-rim boundary.	50.1 Oscillatory zoning	422.7	13.5	429.1	13.4
51	Subhedral. Complex fine, prominent to feint, broad oscillatory zoning with inclusions. Fractured. No clear core-rim boundary.	51.1 Oscillatory zoning	398.4	9.6	413.0	10.3
52	Subhedral (broken). Very large core with inner homogeneous to patchy zoning and outer moderately space to broad oscillatory zoning. Narrow dark rim is somewhat convolute, and cross-cuts the core and oscillatory zoning. Fractured.	52.1 Oscillatory zoning	394.2	12.2	468.2	13.6
53	Anhedral (broken). Large core with inner small homogeneous zone enclosed by complex oscillatory zoning with inclusions. Dark homogeneous rim is of variable width. Heavily fractured, fractures cross-cut the width of the grain.	53.1 Oscillatory zoning	424.3	11.2	430.2	12.4
54	Euhedral. Homogeneous inner core with outer oscillatory zoned outer core. Zoning cross-cut by further prominent oscillatory zoning. Rim is dark, narrow and mostly homogeneous with some feint zoning. Marginal bright homogeneous to convolute zoning cross cut oscillatory zoning on one side.	54.1 Inner core oscillatory zoning	423.5	9.3	424.5	11.0
		54.2 Outer core oscillatory zoning	402.0	9.6	427.3	10.0
55	Subhedral. Large core with small inner homogeneous zone enclosed by complex oscillatory zoning with inclusions. Rim is dark, mostly homogeneous and narrow. Fractures cross-cut the width of the grain.	55.1 Oscillatory zoning	421.5	9.9	455.3	12.5
		55.2 Oscillatory zoning	417.4	10.7	496.3	13.0
56	Subhedral. Patchy zoned core with rim of oscillatory zoning. Both core and rim are cross-cut by bright homogeneous to convolute zoning. Core-rim boundary not clearly discernable. Heavily fractured.	N/A				
57		57.1	419.6	16.3	439.6	21.0

	Anhedral (broken). Small homogeneous core with outer narrow oscillatory zoning and resorbed boundaries. Narrow to very wide rims consists of complex oscillatory zoning with inclusions.	Core				
		57.2 Rim	413.2	11.2	782.6	23.0
58	Subhedral. Core consists of patchy zoning, enclosed by a wide rim of oscillatory zoning. Both core and rim are cross-cut by further patchy zoning. Fractured.		N/A			
59	Anhedral. Large complex oscillatory zoned core with inclusions, cross-cut by bright homogeneous to convolute zoning. Rim is dark and narrow with broad zoning. Heavily fractured.		N/A			
60	Subhedral. Inner homogeneous core with outer oscillatory zoned core, cross-cut by bright homogeneous zoning. Semi-continuous dark, narrow rim. Cut by a prominent fracture across the width of the grain.	60.1 Oscillatory zoning	424.0	9.8	419.0	10.6
61	Subhedral. Very large core with an inner small homogeneous zone, and wide outer oscillatory zoning with inclusions. Narrow dark homogeneous rim with minor oscillatory zoning. Heavily fractured, fractures are dominantly radial.	61.1 Oscillatory zoning	408.4	10.1	526.6	17.5
62	Anhedral (broken). Very large core consists of homogeneous to patchy zoning with inclusions and is semi-enclosed and cross-cut by homogeneous to oscillatory convolute zoning. Rim is very narrow and dark. Fractured.		N/A			
63	Subhedral. Small patchy to oscillatory zoned core with partially resorbed boundaries. Wide rim with complex oscillatory zoning and inclusions. Fractured.	63.1 Rim	429.3	10.4	503.3	17.4
64	Subhedral. Oscillatory zoning, cross-cut in places by homogeneous zoning. Contains inclusions. No clear core-rim boundary.	64.1 Oscillatory zoning	442.0	10.3	443.6	11.9
65	Subhedral. Very small partially resorbed, patchy zoned core. Very wide complex oscillatory zoned rim with minor convolute zoning and inclusions. Fractured.	65.1 Oscillatory zoning	420.1	16.6	433.6	15.4
66	Subhedral. Complex oscillatory zoning, cross-cut in places by homogeneous to convolute zoning. No clear core-rim boundary.		N/A			

67	Anhedral. Complex oscillatory zoning, cross-cut in places by bright homogeneous zoning. No clear core-rim boundary.	N/A				
68	Anhedral (broken). Large complex patchy zoned core with inclusions. Rim consists of fine oscillatory zoning with a dark outermost zone with a possible inclusion. Heavily fractured.	68.1 Rim	409.6	10.1	687.6	40.7
69	Subhedral. Highly complex oscillatory zoning with some dark homogeneous zones, minor convolute zoning and inclusions. Cross-cut by bright homogeneous to convolute zones. Fractured. No clear core-rim boundary.	N/A				
70	Subhedral. Small patchy zoned core with inclusions. Narrow to wide complex oscillatory zoned rim with inclusions, cross-cut by bright homogeneous zones.	70.1 Rim	410.7	11.9	411.1	12.5
71	Subhedral. Very large core with complex oscillatory zoning, inclusions and some cross cutting homogeneous zones. Narrow dark rim. Fractured.	71.1 Oscillatory zoning	414.3	10.4	425.4	11.4
		71.2 Oscillatory zoning	428.1	10.3	428.4	10.4
		71.3 Oscillatory zoning	388.9	9.9	412.0	10.1
72	Anhedral. Large oscillatory zoned core cross-cut by patchy to convolute zoning. Contains a ~30 µm inclusion also semi-enclosed by the rim. Dark, narrow rim with feint patchy to oscillatory zoning. Fractured.	72.1 Core	410.6	9.8	451.4	12.5
		72.2 Rim	437.5	10.7	446.9	11.7
73	Euhedral. Complex patchy zoned core. Wide oscillatory zoned rim with inclusions and an outermost dark zone of varying width. Heavily fractured, fractures are dominantly radial.	73.1 Oscillatory zoning	414.7	10.0	487.9	12.8
74	Subhedral. Small patchy zoned core with inclusions. Wide rim consists of complex oscillatory zoning with minor convolute zoning, inclusions and an outermost narrow dark zone. Fractured.	74.1 Rim	427.1	9.8	504.0	12.3
75	Subhedral. Complex, fine oscillatory zoning cross-cut by bright homogeneous to convolute zones. Fractured. No clear core-rim boundary.	75.1 Oscillatory zoning	418.1	11.4	428.0	11.9
		75.2 Oscillatory zoning	397.6	9.1	408.5	9.4
76	Subhedral. Very small homogeneous core. Very wide rim with complex oscillatory zoning with inclusions. Cut by a prominent fracture across the width of the grain.	76.1 Oscillatory zoning	427.4	11.8	435.2	13.8

77	Subhedral. Complex oscillatory zoning with inclusions up to ~35 µm in length, cross-cut by bright homogeneous to convolute zoning. Heavily fractured. No clear core-rim boundary.	N/A				
78	Subhedral. Very small homogeneous to oscillatory zoned core with partially resorbed boundaries. Very wide rim of complex oscillatory zoning with inclusions and an outermost narrow dark zone.	78.1 Core	435.6	13.3	435.3	13.6
		78.2 Rim	382.6	9.5	400.3	9.7
79	Euhedral. Small homogeneous, with a very wide rim of complex oscillatory zoned rim with inclusions and minor homogeneous zones. Fractured.	79.1 Core	429.3	10.0	428.9	11.1
		79.2 Rim	265.1	10.1	317.9	10.0
80	Subhedral (broken). Complex oscillatory zoning with inclusions and dark narrow outermost zone, cross-cut by minor homogeneous zoning. Fractures cross-cut the width of the grain. No clear core-rim boundary.	80.1 Oscillatory zoning	430.5	10.5	434.3	12.2
		80.2 Oscillatory zoning	428.2	10.6	446.8	13.0
81	Subhedral. Complex oscillatory zoning cross-cut by homogeneous to convolute zoning. Fractured. No clear core-rim boundary.	N/A				
82	Anhedral. Patchy to convolute zoned core. Oscillatory zoned rim cross-cut by homogeneous to convolute zoning. Fractured. Core and rim are of similar proportions.	N/A				
83	Subhedral. Complex oscillatory zoning with inclusions and a dark narrow rim, cross-cut by both bright and darker homogeneous zones. Heavily fractured.	83.1 Oscillatory zoning	329.6	14.6	390.0	11.4
84	Anhedral (broken). Small, complex patchy zoned core. Narrow to very wide complex oscillatory zoned rim with some convolute zoning. Heavily fractured.	84.1 Rim	423.7	11.8	420.4	13.3
85	Subhedral. Small semi-homogeneous core with feint sector zoning. Very wide complex oscillatory zoned rim. Fractured, fractures are dominantly radial.	85.1 Core	398.1	10.8	419.1	12.1
86	Subhedral. Complex oscillatory zoning with sector zoning and minor homogeneous and convolute zoning. No clear core-rim boundary.	N/A				

87	Subhedral. Very small zoned core with resorbed boundaries. Very wide rim consists of complex oscillatory zoning with inclusions, possible annealed fractures and minor cross-cutting homogeneous zones. Heavily fractured.	87.1 Oscillatory zoning	426.0	13.6	425.6	12.0

1.3 CM22/KG-01

Grain ID	Grain Shape and Texture	Spot ID and Location	Ages			
			$^{206}Pb/^{238}U$	2σ	$^{207}Pb/^{235}U$	2σ
01	Euhedral. Core with feint magmatic zoning and patchy zoning. Magmatic overgrowth with broad oscillatory zoning. Core and rim are of similar proportions.	001.1 Core	1737.8	38.5	1760.4	26.1
02	Subhedal. Very large, highly irregular and convolute zoned core. Narrow, oscillatory zoned rim.		N/A			
03	Subhedral. Large, patchy to homogeneous zoning with lath shaped inclusion. Dark, narrow feint oscillatory zoned rim. A ~40 µm prismatic inclusion is enclosed by both core and rim growth. Affected by two parallel fractures.	003.1 Core	417.1	10.6	461.1	14.4
04	Euhedral. Very large core with inner patchy zoning and outer broad, feint zoning. Resorption texture between core and rim. Narrow rim with fine oscillatory to convolute zoning with resorption textures.	004.1 Core - inner	808.0	17.1	820.8	18.1
		004.2 Core - outer	830.5	16.8	832.4	15.8
05	Anhedral (broken). Core with inner feint patchy zoning, enclosed by feint, oscillatory zoning. Narrow rim with patchy zoning.	005.1 Oscillatory zoning	225.5	14.4	357.9	27.6
06	Subhedral. Small core with broad oscillatory to patchy zoning. Resorption texture between core and rim. Wide rim with fine oscillatory zoning with cross cutting relationships.	006.1 Core	845.2	65.7	952.3	64.2
07	Subhedral. Large core with oscillatory zoning and a marginal bright irregular zone. Incomplete dark homogeneous rim.	007.1 Core	437.5	14.3	565.8	31.1
08	Euhedral. Irregular in structure. One half contains a homogeneous core somewhat enclosed by fine oscillatory zoning. Second half contains irregular patchy to convolute zoning and is heavily fractured. A finely oscillatory zoned rim of variable width encloses the entire grain.	008.1 Core	438.5	10.7	553.3	15.5
		008.2	450.3	11.3	471.8	11.6

		Inner oscillatory zoning				
09	Euhedral. Large patchy zoned, fractured core with resorbed boundaries. Dark, narrow rim with a partially resorbed inner zone and further outermost zone.		N/A			
10	Subhedral. Small core is resorbed and heavily fractured. Narrow to wide rim with feint broad zoning.	010.1 Rim	261.9	17.6	320.8	12.7
		010.2 Rim	424.2	11.4	462.2	16.3
11	Subhedral. Small irregular to feint convolute zoned core. Wide rim with fine oscillatory zoning, inclusions and a marginal homogeneous zone.	011.1 Rim – oscillatory zoning	378.8	9.5	456.4	11.3
		011.2 Rim – homogeneous zone	330.7	10.5	348.6	10.3
12	Euhedral. Patchy to moderate width oscillatory zoned and fractured core with resorbed boundaries. Rim with fine oscillatory zoning. Core and rim are of similar proportions.	012.1 Rim	669.3	94.2	1738.2	170.3
13	Euhedral. Small partially resorbed core with patchy zoning. Wide rim with broad to fine oscillatory.	013.1 Rim	389.1	9.4	419.9	9.9
14	Euhedral. Large core with fine oscillatory zoning and minor patchy zoning. Rim is dark and narrow with feint oscillatory zoning.	014.1 Core	442.6	10.9	444.5	12.1
15	Subhedral. Large, bright fractured and homogeneous to patchy core. Feint, patchy zoned dark rim.	015.1 Rim	520.0	32.5	848.4	30.4
16	Subhedral. Large, highly irregular patchy core, with irregular, angular boundaries. Dark, narrow rim with minor oscillatory zoning.		N/A			
17	Euhedral. Patchy to homogeneous core. Rim consists of fine oscillatory zoning with minor broad to patchy zoning. Core and rim are of similar proportions.	017.1 Core	420.3	12.1	529.6	14.1
		017.2 Rim	442.3	12.4	607.9	27.8
18	Euhedral. Irregular patchy core with minor oscillatory zoning and resorbed boundaries. Rim is dark with feint oscillatory zoning. Core and rim are of similar proportions.	018.1 Core	1583.9	36.4	1626.8	23.6
19	Euhedral. Small oscillatory zoned core with resorbed boundaries. Wide rim consists of moderate width, feint oscillatory zoning with at least one cross cutting relation present.	019.1 Core	1420.2	29.0	1422.4	21.3
		019.2 Rim	415.7	11.5	423.8	12.0

20	Subhedral. Patchy to feint oscillatory zoned core. Dark rim with feint zoning. Core and rim are of similar proportions.	020.1 Core	1496.7	47.6	1611.5	33.3
21	Anhedral (broken). Homogeneous with minor patchy zoning, and minor outer oscillatory zoning. At its termination there is patchy to convolute zoning with a narrow dark rim.	021.1 Core	443.1	11.3	440.5	10.6
22	Subhedral. Broad oscillatory zoned core with resorbed boundaries. Rim is homogeneous with minor feint zoning. Core and rim are of similar proportions.	022.1 Core	1451.1	82.4	1449.7	69.5
		022.2 Rim	437.6	25.3	677.3	24.7
23	Subhedral. Large core is dominantly homogeneous with possible sector zoning, a region of patchy convolute zoning and resorbed boundaries. Rim is finely oscillatory zoned and narrow.	023.1 Core	1638.7	34.6	1639.2	21.6
24	Anhedral (broken). Semi-homogeneous core with resorbed boundaries. Medial zone with feint, fine oscillatory zoning. Narrow rim is finely to moderately oscillatory zoned.	024.1 Medial zone	405.0	12.5	661.4	30.8
		024.2 Rim	373.1	9.6	521.2	12.5
25	Subhedral. Irregular patchy to oscillatory zoned core with resorbed boundaries, partially enclosed by bright zonation. Homogeneous rim with minor feint zoning. Core and rim are of similar proportions.		N/A			
26	Subhedral. Large core with oscillatory zoning with resorbed boundaries and marginal bright zones. Fractured. Dark, narrow rim with feint zoning.	026.1 Core	1447.7	30.6	1549.3	22.2
		026.2 Core	989.5	25.9	1135.9	27.4
27	Subhedral. Large, homogeneous to oscillatory zoned core. Dark, narrow homogeneous rim.		N/A			
28	Subhedral. Very large core with inner patchy zoned core with resorbed edges, enclosed by outer oscillatory zoning and weak sector zoning with minor patchy zoning. Dark, narrow rim with feint zoning and resorption textures.	028.1 Core - oscillatory zoning	811.0	35.7	798.8	34.3
29	Euhedral, elongate. Patchy zoned core with regions of homogeneity. Narrow oscillatory zoned to homogeneous rim.	029.1 Core	425.6	9.9	427.5	10.2
		029.2 Core	427.5	11.2	497.6	24.8
		029.3 Rim	433.4	12.0	431.6	10.8
		029.4 Rim	423.9	11.0	436.2	10.7

30	Euhedral. Small sector zoned core with resorbed edges. Wide rim with oscillatory zoning, an inclusion and internal resorbed boundaries.	030.1	426.4	10.5	448.5	12.0
31	Subhedral (broken). Core with weak patchy zoning. Rim with fine oscillatory zoning. Fractures are both across the grain and radial from the core. Core and rim are of similar proportions.	031.1 Core	435.1	11.1	432.3	10.5
		031.2 Rim	361.8	17.0	403.9	16.9
32	Subhedral. Irregular patchy zoned core with a region of homogeneity and resorbed edges. Narrow, feint oscillatory zoned rim.	032.1 Core	1317.4	26.1	1327.3	20.3
33	Subhedral. Zoned core with irregular boundaries. Narrow to wide homogeneous to feint oscillatory zoned rim.		N/A			
34	Subhedral. Heterogeneous core with patchy and oscillatory zoning, inclusions, and resorbed edges. Narrow rim is oscillatory zoned.	034.1 Core	435.1	13.1	442.2	13.2
35	Subhedral. Large patchy zoned core. Narrow rim with minor feint zoning and minor convolute zoning.	035.1 Core	1489.0	39.2	1515.0	32.6
36	Subhedral. Oscillatory zoned core, with internal resorbed boundaries. Outer core also contains sector zoning. Dark, narrow rim with poorly-developed oscillatory zoning.	036.1 Core - inner	1548.6	32.6	1580.2	22.1
		036.2 Core - outer	1608.5	32.0	1600.2	22.9
37	Anhedral. Patchy zoned core. Dark rim with oscillatory zoning. Core and rim are of similar proportions.	037.1 Core	429.9	9.2	435.2	11.5
		037.2 Oscillatory zoning	445.7	11.4	532.0	16.1
38	Subhedral. Small patchy zoned core with resorbed edges. Narrow to wide rim with oscillatory zoning.	038.1 Core	1594.0	31.5	1633.8	21.6
		038.2 Rim	408.7	10.3	535.2	24.3
39	Euhedral. Homogeneous core enclosed by oscillatory zoned rim. Core and rim are of similar proportions.	039.1 Core	421.7	10.2	528.4	15.9
		039.2 Rim	422.4	11.2	752.8	18.8
40	Euhedral. Partially resorbed patchy zoned core with outer oscillatory zoning. Enclosed by a rim of dark, feint oscillatory zoning. Core and rim are of similar proportions.	040.1 Rim	885.1	23.1	1049.1	24.3
41	Subhedral. Large patchy zoned core with bright resorbed edges. Dark, narrow homogeneous rim. Extensively fractured, one fracture	041.1 Core	1328.7	37.1	1329.3	37.0

	is infilled and continuous with a bright homogeneous zone at the core-rim boundary.					
42	Subhedral. Large, fractured core with inner irregular zoning with resorbed boundaries, outer oscillatory zoning with resorbed boundaries. Dark, narrow homogeneous rim.	N/A				
43	Euhedral. Small core with patchy zoning. Very narrow to wide rim with complex oscillatory zoning.	043.1 Core	534.6	28.1	1092.0	116.9
		043.2 Rim	431.7	10.1	439.2	10.0
		043.3 Rim	438.4	11.9	865.1	65.6
44	Euhedral. Very small patchy zoned core. Wide rim with complex oscillatory to patchy zoning.	044.1 Core	1496.5	47.9	1636.2	36.8
		044.2 Rim	1087.5	33.0	1254.1	33.9
45	Subhedral. Small, patchy zoned, fractured core with resorbed boundaries. Very narrow to wide rim with complex oscillatory zoning.	045.1 Core	1190.7	33.1	1258.1	30.6
		045.2 Rim	430.1	10.6	457.9	10.7
46	Euhedral. Very large, patchy zoned core with broad oscillatory zoning, and partially resorbed boundaries. Dark, narrow outer rim. Fractures cross-cut the width of the grain.	046.1 Core - inner	1180.1	30.1	1408.0	44.1
		046.2 Core - outer	917.6	56.8	930.7	47.6
47	Euhedral. Smal, irregular to broad zoned core with resorbed boundaries. Wide, homogeneous rim with minor marginal zoning.	047.1 Rim	457.4	10.2	472.6	10.2
48	Subhedral. Large patchy to irregular zoned core with resorbed boundaries. Dark, narrow rim with feint oscillatory zoning.	048.1 Rim	366.2	13.0	417.0	18.9
49	Subhedral (broken). Large core, with inner irregular to convolute zoning and an outer homogeneous zone. Dark, narrow rim.	049.1 Rim	400.4	9.1	852.6	34.6
50	Subhedral (broken). Homogeneous and fractured inner core enclosed by broad oscillatory zoning. Rim is homogeneous and dark.	050.1 Core - homogeneous	376.7	17.7	440.8	22.1
		050.2 Core -oscillatory zoning	230.7	13.9	460.2	40.4
51	Anhedral (broken). Large, homogeneous to patchy zoned core. Narrow, zoned rim.	N/A				
52	Euhedral. Small, patchy zoned core. Wide, complex oscillatory zoned rim. Fractures cross-cut the length and width of the grain.	N/A				

53	Subhedral. Sector zoned core. Core-rim boundary not clearly discernible. Bright sub-linear feature may be an annealed fracture.	053.1 Core	1686.5	52.6	1693.3	28.9
54	Subhedral. Very large core with complex oscillatory zoning. Narrow dark rim with minor feint zoning.	054.1 Core	1825.2	35.3	1850.0	21.8
		054.2 Core	1503.9	45.9	1584.2	31.6
		054.3 Rim	546.4	39.2	995.4	69.2
2_01	Euhedral. Broad to moderate oscillatory zoning and sector zoning with inclusion. No clear core-rim boundary.	2_01.1 Core	405.9	10.9	631.5	33.6
		2_01.2 Rim	408.9	10.6	600.4	20.0
2_02	Euhedral. Very large, sector zoned core with irregularly zoned bright margins. Dark, narrow feint zoned rim.		N/A			
2_03	Euhedral. Large, broad oscillatory zoned core with resorbed boundaries. Dark rim with feint oscillatory zoning. A bright homogeneous zone occurs at the core-rim boundary. Fractured.	2_03.1 Core	436.3	13.3	428.2	12.6
2_04	Anhedral. Small, oscillatory zoned and fractured core which is partially resorbed. Bright zone at the core-rim boundary. Feint zoned dark rim.		N/A			
2_05	Subhedral. Very large, homogeneous to irregular zoned core with possible sector zoning, partially resorbed. Very narrow oscillatory zoned rim.		N/A			
2_06	Subhedral (broken). Large, dominantly homogeneous core. Very narrow rim with weak oscillatory zoning and inclusions.	2_06.1 Core	433.7	9.9	667.6	39.7
2_07	Euhedral. Homogeneous core with brighter resorbed edges and possible annealed fractures. Rim fine oscillatory zoning. Core and rim are of similar proportions.	2_07.1 Rim	639.7	18.9	744.9	19.8
2_08	Subhedral (broken). Homogeneous, fractured core. Dark, feint zoned rim with an inclusion approximately at the core-rim boundary. Core and rim are of similar proportions.	2_08.1 Core	423.1	11.3	510.5	18.9
		2_08.2 Rim	294.9	8.8	487.6	29.4
2_09	Subhedral (broken). Small, homogeneous core. Very wide rim with broad oscillatory zoning.	2_09.1 Core	1150.9	92.1	2701.9	162.6
		2_09.2 Rim	427.9	9.4	962.1	21.6
2_10	Euhedral. Irregularly zoned core, partially resorbed. Oscillatory zoned rim. Core and rim are of similar proportions.		N/A			

1_11	Subhedral. Sector zoned with fine to moderate width oscillatory zoning. Minor convolute zoning and resorption textures. No clear core-rim boundary.	N/A				
2_12	Anhedral (broken). Irregular, patchy zoned core with resorbed boundaries. Rim is dark, mostly homogeneous with minor feint zoning, and a semi-continuous, narrow, brighter rim. Core and rim are of similar proportions.	2_12.1 Core	992.3	26.4	1090.5	29.8
		2_12.2 Rim	418.9	10.3	437.9	11.5
2_13	Subhedral. Highly irregular, subrounded zoning. Partial rim of broad zoning.	N/A				
2_14	Euhedral. Large, fractured, partially resorbed core with inner patchy zoning and outer oscillatory zoning. Dark, narrow oscillatory zoned rim.	N/A				
2_15	Subhedral (broken). Large core with a homogeneous to patchy zoned inner core and finely oscillatory zoned outer core with resorbed boundaries. Rim consists of oscillatory zoning. A bright zone occurs at the core-rim boundary.	2_15.1 Core	369.6	10.5	386.2	9.2
2_16	Subhedral (broken). Very small homogeneous core with resorbed boundaries. Rim consists of complex oscillatory zoning. Fractures cross-cut the width of the grain.	2_16.1 Rim	391.2	11.7	929.2	43.7
2_17	Subhedral. Homogeneous to irregularly zoned core. Dark, very narrow rim with minor convolute zoning.	N/A				
2_18	Anhedral. Patchy, convolute zoned core. Dark, narrow, mostly homogeneous rim with minor oscillatory zoning.	2_18.1 Rim	398.2	9.6	561.3	16.1
2_19	Anhedral. Homogeneous to irregularly zoned core with unclear boundaries. Dark oscillatory zoned rim with inclusion. Core and rim are of similar proportions.	N/A				
2_20	Anhedral. Large, broad to irregularly zoned core. Bright zonation at the core-rim boundary. Dark, narrow rim is dominantly homogeneous.	N/A				
2_21	Subhedral. Very small homogeneous core with resorbed boundaries. Rim consists of complex oscillatory zoning textures and an inclusion.	2_21.1 Rim	417.1	12.1	461.5	12.8
2_22	Euhedral. Small homogeneous core with minor patchy zoning and resorbed boundaries. Wide rim consists of feint oscillatory zoning.	2_22.1 Core	1531.4	30.1	1547.6	22.5
		2_22.2 Rim	400.0	17.5	598.5	37.9
2_23	Subhedral. Highly irregular core. Very narrow rim with minor convolute zoning.	N/A				

2_24	Subhedral. Homogeneous core with marginal patchy to convolute zoning and an inclusion. Rim consists of complex oscillatory zoning. Core and rim are of similar proportions.	2_24.1 Rim	409.9	11.4	568.5	22.2
2_25	Euhedral. Small core is dominantly homogeneous. Wide rim consists of oscillatory zoning. Core-rim boundary is indistinct in places.	2_25.1 Core	404.2	10.6	474.4	12.8
		2_25.2 Rim	402.9	9.2	429.0	9.1
2_26	Anhedral (broken). Core is highly fractured with inner patchy zoning and outer oscillatory zoning. Narrow complex oscillatory zoned rim.		N/A			
2_27	Subhedral. Patchy zoned core with resorbed boundaries. Narrow, dark rim of feint oscillatory zoning.	2_27.1 Core	608.0	28.2	696.0	41.4
2_28	Subhedral. Core is dominantly homogeneous and partially resorbed. A discontinuous bright zone occurs at the core-rim boundary. Narrow to very narrow complex oscillatory zoned rim.		N/A			
2_29	Subhedral (broken). Semi-homogeneous core with resorption textures. Narrow, semi-continuous dark rim. Heavily fractured.		N/A			
2_30	Euhedral. Small, feint patchy zoned core. Very narrow to wide rim consists of oscillatory zoning with minor convolute zoning.	2_30.1 Oscillatory zoning	421.5	10.6	428.1	10.2
2_31	Subhedral. Very small, patchy zoned, fractured core. Narrow to wide rim of weakly developed oscillatory zoning.		N/A			
2_32	Subhedral (broken). Large, homogeneous to convolute, patchy zoned core. Dark, narrow rim with feint oscillatory zoning.	2_32.1 Core	425.8	10.8	418.6	11.8
2_33	Subhedral (broken). Semi-homogeneous, fractured core with inclusion. Very narrow, dark homogeneous rim.		N/A			
2_34	Subhedral. Very small homogeneous core. Wide rim consists of complex oscillatory zoning and minor patchy zoning.	2_34.1 Rim	417.8	10.9	417.1	11.7
2_35	Subhedral. Patchy zoned and fractured core. Very narrow to wide rim consists of feint complex oscillatory zoning, minor patchy zoning with an inclusion.	2_35.1 Rim	375.8	9.5	570.1	22.1
2_36	Euhedral. Large semi-homogeneous and partially resorbed core with a significant inclusion. A bright homogeneous zone occurs at the core-rim boundary. Narrow homogeneous rim.		N/A			
2_37	Anhedral. Large, dominantly homogeneous, and highly fractured core. Semi-continuous dark, narrow rim.		N/A			
2_38	Euhedral. Homogeneous core, with a rim of feint oscillatory zoning with an inclusion.	2_38.1 Core	433.4	10.7	468.6	13.1

2_39	Euhedral. Large, fractured core with minor oscillatory zoning and resorbed boundaries. Dark, narrow rim with limited oscillatory zoning.	N/A				
2_40	Subhedral. Very large homogeneous to patchy zoned core. Very narrow rim with minor oscillatory zoning.	N/A				
2_41	Euhedral. Large, fractured core with resorbed boundaries, inner oscillatory to patchy zoning and outer complex oscillatory zoning. Dark, narrow oscillatory zoned rim.	2_41.1 Core – outer oscillatory zoning	1605.1	37.1	1626.1	26.6
2_42	Euhedral. Homogeneous to irregularly zoned core. Dark rim with complex oscillatory zoning. Core and rim are of similar proportions.	N/A				
2_43	Euhedral. Heterogeneous core, with an oscillatory zoned rim. Core and rim are of similar proportions.	2_43.1 Rim	430.4	9.9	426.2	10.1
2_44	Subhedral. Large, heterogeneous core with resorbed boundaries and possible sector zoning. Dark, very narrow to wide rim with weakly developed oscillatory zoning.	N/A				
2_45	Subhedral. Broad to fine, feint to distinct oscillatory zoning with minor patchy zoning and possible resorption textures. Heavily fractured. No clear core-rim boundary.	2_45.1 Core	401.6	11.3	539.6	26.5
2_46	Subhedral (broken). Large, semi-homogeneous, fractured core. Dark, narrow oscillatory zoned rim.	2_46.1 Rim	323.9	7.9	337.6	7.8

1.4 CM22/HD-01

Grain ID	Grain Shape and Texture	Spot ID and Location	Ages			
			$^{206}Pb/^{238}U$	2σ	$^{207}Pb/^{235}U$	2σ
01	Euhedral. Medium size, fine oscillatory zoned and sector zoned core with resorbed boundaries cross-cut by a minor homogeneous zone with convolute boundaries. Wide, fine oscillatory zoned rim. Fractured.	01.1 Core	413.3	13.1	411.4	12.9
		01.2 Rim	412.0	9.5	417.9	9.1
		01.3 Rim	394.8	7.9	411.1	8.1
02	Anhedral. Small semi-homogeneous core with resorbed boundaries. Narrow to wide semi-homogeneous rim. Fractured.	N/A				
03	Subhedral. Large broad oscillatory to patchy zoned core with resorbed boundaries. Narrow broad oscillatory zoned rim, zoning cross-cut by a	N/A				

	minor homogeneous zone. Rim does not fully enclose the core. Heavily fractured.					
04	Euhedral. Large core comprises homogeneous zones, convolute patchy and broad oscillatory zoning. Moderate width, complex oscillatory zoned rim. Minor fractures.	04.1 Core – oscillatory zoning	1600.7	31.9	1600.7	22.6
05	Subhedral (broken). Large patchy to convolute zoned core with inclusions. Wide to narrow oscillatory zoned rim. Fractured.	05.1 Rim	1262.7	22.1	1261.4	16.9
06	Subhedral. Large oscillatory zoned to homogeneous core with marginal patchy zoning. Narrow oscillatory zoned rim.	06.1 Core	567.7	55.7	656.2	49.0
07	Subhedral. Small, patchy zoned core. Wide oscillatory zoned rim. Fractured.	N/A				
08	Euhedral. Large core with fine, complex oscillatory zoning, a large inclusion and partially resorbed boundaries. Narrow dark rim with minor zoning.	08.1 Core	1726.3	31.1	1716.2	20.4
09	Subhedral. Large complex oscillatory zoned core. Narrow dark, semi-homogeneous rim. Fractured.	09.1 Core	369.9	19.4	382.0	18.0
10	Euhedral. Fine oscillatory zoning throughout with minor homogeneous patches. Fractured.	10.1 Oscillatory zoning	414.9	9.1	415.6	9.3
		10.2 Oscillatory zoning	399.0	8.8	425.0	9.2
11	Subhedral (broken). Oscillatory to patchy zoned core with marginal convolute zoning. Narrow to wide, oscillatory zoned to homogeneous dark rim.	N/A				
12	Subhedral. Large core with irregular patchy zoning and homogeneous zones. Very narrow oscillatory zoned dark rim. Fractured.	N/A				
13	Subhedral. Oscillatory zoned core with resorbed boundaries, marginal homogeneous zones. Feint oscillatory zoned rim. Core and rim are approximately proportionate.	13.1 Core	1314.3	45.0	1429.6	32.0
		13.2 Rim	340.2	10.4	362.7	13.0
14	Anhedral. Complex oscillatory zoning throughout with resorption textures and poorly developed sector zoning.	14.1 Oscillatory zoning	429.0	10.3	434.2	10.3
		14.2 Oscillatory zoning	420.9	12.9	423.0	13.0
15		15.1	1093.3	22.5	1092.5	18.3

	Subhedral. Very large complex core with an innermost homogeneous zone, feint to prominent oscillatory zoning and outermost patchy zoning. Very narrow dark rim. Fractured.	Feint oscillatory zoning				
		15.2 Prominent oscillatory zoning	1110.3	19.7	1116.3	15.8
16	Euhedral. Large core with complex oscillatory zoning. Wide to narrow rim with complex oscillatory zoning. Fractured.	16.1 Core	1292.5	25.1	1339.6	19.2
		16.2 Rim	862.9	23.8	914.3	27.0
		16.3 Rim	486.4	16.8	493.1	18.2
17	Subhedral. Small patchy to broad oscillatory zoned core with resorbed boundaries. Wide rim with feint oscillatory zoning. Fractured.	17.1 Rim	335.9	8.2	370.2	8.5
18	Subhedral. Large core with complex oscillatory zoning, marginal homogeneous zone, and resorbed boundaries. Narrow rim with feint oscillatory zoning.	N/A				
19	Euhedral. Large heterogeneous core with patchy zoning and feint oscillatory zoning. Oscillatory zoned rim.	N/A				
20	Subhedral. Large semi-homogeneous core with marginal bright zones and resorbed boundaries. Narrow rim with feint oscillatory zoning. Fractured.	20.1	828.9	51.0	911.6	46.2
21	Subhedral (broken). Very small semi-homogeneous core with indistinct boundaries. Very wide rim with fine oscillatory zoning. Fractured.	21.1 Core	387.7	9.0	401.8	9.4
		21.2 Rim	425.0	9.1	426.7	8.9
22	Subhedral. Small semi-homogeneous core. Wide rim with broad oscillatory zoning and sector zoning, radially fractured.	22.1 Core	439.0	9.0	443.2	10.0
		22.2 Rim	416.3	9.9	416.9	10.2
23	Subhedral. Fine oscillatory zoning throughout, with some patchy to convolute zoning, sometimes approximately parallel to oscillatory zoning.	23.1 oscillatory zoning	396.2	9.3	405.1	9.2
24	Subhedral. Very large core with complex, oscillatory zoning and minor convolute zoning. Very narrow dark rim.	24.1 Core	1624.0	30.7	1631.6	21.9
25	Anhedral. Very large core, approximately 50 % is semi-homogeneous, 50 % comprises oscillatory zoning. Narrow dark rim with an inner bright convolute zone, sometimes cross-cutting the core.	25.1 Core – semi-homogeneous	1782.9	30.6	1787.5	20.4

		25.2 Core – oscillatory zoning	1427.1	27.1	1535.0	22.1
26	Subhedral. Large homogeneous core with marginal complex zoning. Very narrow dark rim.	26.1 Core	1469.4	25.3	1466.8	19.5
27	Euhedral. Very large core with complex oscillatory zoning cross-cut by homogeneous zones. Narrow dark rim with feint zoning. Heavily fractured.	N/A				
28	Anhedral. Heterogeneous, with patchy oscillatory and convolute zoning.	N/A				
29	Subhedral. Very small core with oscillatory and patchy zoning, resorbed boundaries. Wide homogeneous rim with and outermost narrow dark zone. Fractured.	N/A				
30	Euhedral. Small core with patchy zoning. Narrow to wide rim with oscillatory zoning, radially fractured.	30.1 Rim	358.4	10.9	379.5	10.6
31	Subhedral. Small core with patchy zoning. Wide oscillatory zoned rim with minor homogeneous zones.	31.1 Rim	385.3	9.6	400.3	9.3
32	Subhedral (broken). Oscillatory to patchy zoned core. Wide to narrow rim with oscillatory zoning. Heavily fractured.	N/A				
33	Euhedral. Large core with convolute, patchy zoning. Narrow homogeneous rim. Heavily fractured,	N/A				
34	Euhedral. Very small homogeneous core. Wide rim with oscillatory and sector zoning.	34.1 Rim	407.4	8.9	410.6	8.9
35	Anhedral. Very large core with complex oscillatory zoning and a homogeneous centre. Very narrow dark homogeneous rim. Fractured.	N/A				
36	Anhedral. Patchy zoned core and an oscillatory zoned rim.	N/A				
37	Euhedral. Complex semi-homogeneous to homogeneous core with resorbed boundaries. Dark narrow rim with some oscillatory zoning. Fractured.	N/A				
38	Subhedral. Large core with patchy zoning and a marginal irregular bright zone, resorbed boundaries. Narrow semi-homogeneous to zoned rim. Heavily fractured.	N/A				
39	Anhedral (broken). Semi-homogeneous with a significant open fracture and multiple narrow annealed fractures.	N/A				
40	Subhedral. Very small semi-homogeneous core with partially resorbed boundaries. Very wide rim with complex oscillatory zoning,	40.1 Rim	335.9	7.3	358.5	8.7
41	Subhedral. Very large homogeneous to zoned core with significant bright convolute to patchy zones sometimes cross-cutting earlier zoning. Fractured.	41.1 Core	1492.6	32.1	1495.8	22.8

42	Subhedral. Homogeneous to oscillatory zoned core with partially resorbed boundaries. Wide to moderate rim with feint, complex oscillatory zoning. Heavily fractured.	42.1 Core	337.6	8.0	370.4	8.1
43	Anhedral. Large homogeneous to patchy zoned core and resorbed boundaries. Narrow to very narrow dark homogeneous rim.	N/A				
44	Subhedral. Small semi-homogeneous core. Wide to narrow rim with fine oscillatory zoning.	44.1 Core	330.7	10.8	456.6	14.5
		44.2 Rim	392.7	9.2	393.8	9.3
45	Euhedral. Semi-homogeneous core with an oscillatory zoned rim. Core-rim boundary is indistinct.	45.1 Core	365.2	8.0	375.1	8.7
		45.2 Rim	370.9	8.2	380.7	8.3
		45.3 Rim	339.4	8.0	356.8	8.6
46	Subhedral. Irregular patch zoning throughout.	N/A				
47	Anhedral. Very large semi-homogeneous core with some feint zoning and resorbed boundaries. Narrow dark rim with some feint zoning.	47.1 Core	926.9	17.8	941.4	20.4
48	Euhedral. Very small homogeneous core with and inclusion. Very wide, complex oscillatory zoned rim.	48.1 Core	378.0	12.2	387.3	11.2
		48.2 Rim	414.6	8.9	417.7	9.0
49	Anhedral. Very large heterogeneous core with some zoning. Dominantly very narrow rim with complex oscillatory zoning. Heavily fractured.	N/A				
50	Anhedral (broken). Very large core, homogeneous with a single bright zone approximately parallel to the grin edges. Very narrow dark rim with feint oscillatory zoning. Heavily fractured.	N/A				
51	Subhedral (broken). Small homogeneous core wit partially resorbed boundaries. Wide rim with complex oscillatory zoning.	51.1 Core	417.2	8.8	418.0	8.7
		51.2 Rim	411.4	9.5	414.7	8.7
52	Subhedral. Very large core, heterogeneous with minor oscillatory zoning and a prominent bright convolute marginal zone, and resorbed boundaries. Narrow dark homogeneous rim. Core-rim boundaries is highly irregular.	52.1 Core – oscillatory zoning	992.4	19.0	992.2	18.8
53	Euhedral. Large heterogeneous core with minor oscillatory zoning and prominent bright convolute marginal zone. Wide dark rim with minor feint zoning. Heavily fractured.	53.1 Rim	875.7	24.2	940.0	19.9

54	Anhedral (broken). Large patchy to convolute zoned core. Narrow to very narrow rim with complex oscillatory zoning. Fractured.	N/A				
55	Subhedral. Oscillatory zoning throughout, with minor homogeneity. Fractured.	55.1 Rim	210.3	11.6	274.0	15.4
56	Subhedral (broken). Small, semi-homogeneous core with marginal oscillatory zoning and partially resorbed boundaries. Wide, heavily fractured rim with moderately well-developed complex oscillatory zoning.	56.1 Rim	304.8	6.6	523.5	16.8
57	Euhedral. Large core with oscillatory zoning, a bright, narrow marginal zone and resorbed boundaries. Narrow to moderate rim comprises oscillatory zoning.	57.1 Core	1486.5	27.8	1494.2	19.4
		57.2 Rim	367.6	10.4	411.9	10.9
58	Subhedral. Large core with patchy zoning, a very narrow bright marginal zone and resorbed boundaries. Narrow rim with complex oscillatory zoning. Fractured.	58.1 Rim	461.5	14.7	529.0	16.3
59	Subhedral. Large core with patchy zoning, with narrow bright zones at the margins and cross-cutting the core. Narrow rim with oscillatory zoning. Fractured.	N/A				
60	Anhedral. Very large core with patchy zoning and minor oscillatory zoning. Narrow discontinuous dark rim with oscillatory zoning.	N/A				
61	Subhedral. Very small semi-homogeneous core. Very wide rim with oscillatory zoning and minor homogeneous patches. Fractured.	61.1 Core	396.7	9.2	406.8	9.2
		61.2 Rim	425.6	9.4	427.8	9.1
62	Subhedral. Small semi-homogeneous core. Wide rim with feint oscillatory zoning and minor homogeneous patches. Core-rim boundary is indistinct.	62.1 Core	389.0	10.0	397.6	9.6
		62.2 Rim	385.8	10.3	408.9	9.6
63	Subhedral. Very large heterogeneous core with an inner semi-homogeneous zone, outer oscillatory zoning and a marginal narrow bright zone. Core boundaries are partially resorbed. Rim is very narrow and dark.	N/A				
64	Anhedral (broken). Small semi-homogeneous core with marginal oscillatory zoning and partially resorbed boundaries. Wide to narrow rim with poorly-developed broad oscillatory zoning.	64.1	1473.5	51.3	1585.5	34.1
65	Subhedral (broken). Complex oscillatory zoning throughout. Fractured.	65.1	406.9	8.9	424.3	9.8
66	Subhedral (broken). Large, semi-homogeneous, heavily fractured core. Narrow dark rim with feint oscillatory zoning.					
67	Anhedral (broken). Very small semi-homogeneous core. Very wide rim with complex oscillatory zoning.	67.1 Core	425.1	10.8	425.1	10.7

		67.2 Rim	374.3	8.1	388.7	9.1
68	Euhedral. Large core with an inner semi-homogeneous zone with some approximately parallel bright zones, and outer oscillatory zoning with resorbed boundaries. Narrow to very narrow oscillatory zoned rim.	68.1 Core	1439.8	33.8	1526.8	23.2
69	Anhedral (broken). Bright, patchy zoned core with irregular boundaries. Wide rim with moderately well-developed oscillatory zoning.	69.1 Rim	299.9	7.2	378.9	9.6
70	Subhedral. Partially resorbed, complex oscillatory zoned core. Wide to narrow rim with complex zoning.	70.1 Core	474.4	10.3	475.7	10.9
71	Subhedral. Large core with inner patchy zoning, outer complex oscillatory zoning, and radial fracturing. Narrow dark rim with feint oscillatory zoning.	71.1 Core	898.0	46.3	949.3	48.7
72	Subhedral. Small semi-homogeneous core with resorbed boundaries. Wide to narrow rim with broad, complex oscillatory zoning. Fractured.	72.1 Core	966.8	47.2	1069.3	42.2
73	Subhedral. Very large heterogeneous core with an inner homogeneous zone, and outer oscillatory and patchy zoning. Narrow dark rim. Heavily fractured.	N/A				
74	Anhedral. Small core with patchy zoning. Narrow to very wide oscillatory zoned rim, radially fractured.	74.1 Rim	334.2	10.0	352.7	10.2
75	Anhedral (broken). Very large semi-homogeneous core with some patchy zoning and a very narrow marginal bright zone. Very narrow dark rim. Fractured.	75.1 Core	1487.8	30.9	1514.5	27.9
76	Subhedral. Very large patchy zoned core. Very narrow dark rim with feint zoning.	N/A				
77	Subhedral. Partially resorbed core with patchy and oscillatory zoning. Narrow to moderate rim with broad zoning and an inner bright zone with irregular boundaries.	77.1 Core – oscillatory zoning	1535.9	26.7	1539.9	18.4
78	Subhedral. Very large heterogeneous core with patchy and broad oscillatory zoning, resorbed boundaries, and a marginal bright zone. Very narrow dark rim with minor zoning.	78.1 Core – oscillatory zoning	1620.3	31.5	1616.8	20.6
79	Subhedral. Small, irregular shaped patchy zoned core. Wide to narrow rim with fine to broad oscillatory zoning.	79.1 Rim	391.2	10.6	392.2	11.5
80	Euhedral. Large semi-homogeneous to patchy zoned core. Narrow oscillatory zoned rim.	80.1 Core	750.0	55.6	809.8	56.6
81	Subhedral. Very small semi-homogeneous core. Very wide oscillatory and sector zoned rim with minor homogeneous patches.	81.1 Core	370.5	11.6	381.2	10.3
		81.2	365.5	9.6	391.4	9.7

		Rim				
82	Anhedral. Very large bright core with parallel to patchy zoning and resorbed boundaries. Very narrow dark semi-homogeneous rim. Fractured.	82.1 Core	405.2	36.7	464.4	37.9
83	Subhedral. Patchy zoned core. Wide to narrow rim with complex oscillatory zoning. Fractured.	83.1 Core	936.7	21.3	992.2	21.1
		83.2 Rim	434.9	9.2	433.1	9.2
84	Subhedral. Very large heterogeneous core with patchy and oscillatory zoning, and a marginal narrow bright zone. Very narrow dark rim with feint complex oscillatory zoning.	84.1 Core	1393.5	39.0	1476.7	27.3
85	Euhedral. Very large, partially resorbed, complex oscillatory zoned core with minor homogeneous zones and a discontinuous marginal bright zone. Narrow oscillatory zoned rim.	85.1 Core	1459.3	25.0	1459.6	18.1
		85.2 Core	1487.7	25.2	1489.9	18.0
		85.3 Core	1335.9	27.7	1377.8	20.4
86	Subhedral. Small homogeneous core. Narrow to very wide heterogeneous rim with oscillatory and patchy zoning, and homogeneous zones. Heavily fractured.	N/A				
87	Subhedral. Very large oscillatory zoned, heavily fractured, core with marginal homogeneity. Narrow dark rim with poorly developed zoning.	87.1 Core	1660.3	29.0	1675.4	19.8
88	Subhedral. Very large heterogeneous core, dominantly patchy zoned with some homogeneity and oscillatory zoning. Narrow heterogeneous and sometimes convolute rim. Heavily fractured.	88.1 Core - homogeneous	471.8	9.1	467.4	10.5
89	Euhedral. Very large oscillatory zoned core with marginal bright zones. Narrow dark oscillatory zoned rim.	89.1 Core	365.2	11.7	388.0	11.4
		89.2 Core	292.4	9.1	349.0	8.8
90	Subhedral. Very small patchy zoned core. Very wide rim with oscillatory zoning. Grain margins are heavily fractured.	90.1 Core	300.4	7.4	333.0	8.0
		90.2 Rim	312.5	7.6	348.9	8.6
91	Anhedral. Complex oscillatory zoning cross-cut by semi-homogeneous to convolute zonation. Heavily fractured.	N/A				

1.5 AB

Grain ID	Grain Shape and Texture	Spot ID and Location	Ages			
			$^{206}Pb/^{238}U$	2σ	$^{207}Pb/^{235}U$	2σ
1	Subhedral. Large heterogeneous core with poorly developed complex oscillatory zoning and resorbed boundaries. Narrow rim with complex oscillatory zoning and a cross-cutting homogeneous zone. Fractured.	N/A				
2	Subhedral. Large heterogeneous core with resorbed boundaries. Narrow rim with broad zoning.	02.1 Core	673.2	21.0	689.6	19.8
4	Large core with inner feint oscillatory zoning, an outer homogeneous zone with minor patchy zoning, and resorbed boundaries. Narrow oscillatory zoned rim. Fractured, particularly radial fracturing in the rim.	04.1 Core – oscillatory zoning	965.4	37.8	1005.8	30.4
5	Subhedral. Very large complex oscillatory to patchy zoned cores. Very narrow dark rim. Fractures cross-cut the width of the grain.	N/A				
6	Euhedral. Large core with broad, feint oscillatory zoning and patchy zoning, a very narrow bright marginal zone, resorbed boundaries and fractures. Narrow dark, oscillatory zoned rim.	6.1 Core	830.5	30.8	882.4	34.2
7	Subhedral. Very patchy and heterogeneous zoning with some oscillatory zoning.	N/A				
8	Anhedral (broken). Very small homogeneous core. Very wide to moderate rim with complex oscillatory zoning, inclusions, and a narrow discontinuous marginal bright zone. Fractured, core and innermost rim particularly affected.	08.1 Rim	1416.6	27.5	1437.1	20.2
9	Subhedral. Core with an inner semi-homogeneous zone, outer complex oscillatory zoning, a discontinuous bright marginal zone and resorbed boundaries.	N/A				
10	Subhedral. Very large, partially resorbed core with inner oscillatory zoning and an outer semi-homogeneous one with marginal oscillatory zoning. Narrow to very narrow heterogenous rim. Fractured.	10.1 Core - outer	1289.0	102.4	1324.6	103.0
		10.2 Core - inner	1666.8	35.2	1766.8	22.6
11	Anhedral. Very large heterogeneous core with oscillatory zoning. Very narrow, semi-continuous dark rim.	11.1 Core	1746.7	37.7	1744.8	24.7
12	Subhedral. Very large oscillatory zoned core with marginal patchy zoning and resorbed boundaries. Very narrow dark rim with feint complex oscillatory zoning.	12.1 Core	733.8	30.2	779.3	29.0

13	Subhedral. Small semi-homogeneous core with resorbed boundaries. Narrow to wide oscillatory zoned rim. Fractured, rim particularly affected.	13.1 Core	1392.9	34.4	1488.2	23.5
		13.2 Rim	341.8	18.6	515.1	16.9
14	Anhedral. Heterogeneous patchy zoning with marginal poorly developed oscillatory zoning. Fractured.	N/A				
15	Euhedral. Smal heterogeneous core with resorbed boundaries. Very narrow to wide rim with complex oscillatory zoning.	15.1 Rim	422.6	10.4	476.0	18.6
16	Subhedral. Very large semi-homogeneous core with marginal convolute zoning. Very narrow, dark, oscillatory zoned rim. Fractured, core particularly affected.	N/A				
17	Euhedral. Large core with inner patchy zoning and outer oscillatory and sector zoning with radial fractures and resorbed boundaries. Narrow to moderate dark rim with complex oscillatory zoning.	17.1 Rim	401.2	9.6	412.3	10.0
18	Subhedral. Large core with complex patchy zoning and resorbed boundaries. Narrow to moderate rim with complex oscillatory to convolute zoning. Heavily fractured.	N/A				
19	Subhedral. Small homogeneous core with resorbed boundaries. Very wide rim with oscillatory zoning cross-cut by homogeneous to convolute zones. Fractured.	19.1 Rim	383.7	9.7	459.6	18.4
20	Subhedral. Very large partially resorbed core with complex, broad oscillatory zoning, heavily affected by open and some possible filled fractures. Very narrow complex zoned rim.	20.1 Core	1046.3	28.5	1193.1	26.1
21	Anhedral (broken). Very large, complex patchy zoned core. Narrow oscillatory zoned rim cross cut by homogeneous zonation. Heavily fractured throughout.	N/A				
22	Anhedral. Very large semi-homogeneous core heavily affected by open and filled fractures. Very narrow dark rim with a semi-continuous bright zone.	N/A				
23	Euhedral. Heterogeneous core with some oscillatory zoning and partially resorbed boundaries. Narrow core with poorly developed oscillatory zoning cross-cut by minor homogeneous zones.	23.1 Core – oscillatory zoning	1392.2	29.2	1430.2	20.1
24	Subhedral. Very large complex oscillatory and sector zoned core, with marginal homogeneous zones with convolute boundaries and a possible lath-shaped inclusion, and cross-cut by a filled fracture. Very narrow dark rim with a discontinuous bright narrow zone.	24.1 Core	1540.1	31.6	1514.7	24.6

25	Subhedral. Large core with broad zoning and resorbed boundaries. Complex oscillatory zoned rim with inclusions. Affected by open and some filled fractures.	N/A				
26	Euhedral. Large semi-homogeneous to patchy zoned core. Narrow to wide oscillatory zoned rom cross-cut by minor homogeneous zones. Heavily fractured.	N/A				
27	Subhedral (broken). Large semi-homogeneous core. Oscillatory zoned rim with minor homogeneous and convolute zoning. Fractured.	N/A				
28	Euhedral. Large complex oscillatory zoned core with resorbed boundaries. Very narrow to moderate complex oscillatory zoned rim.	N/A				
29	Large broad zoned core with resorbed boundaries, and inclusion and a bright cross-cutting marginal zone. Narrow, dark oscillatory zoned rim.	29.1 Core	1364.1	28.5	1361.2	20.6
		29.2 Rim	422.1	10.3	425.6	10.2
30	Euhedral. Small patchy zoned core. Rim with well developed oscillatory zoning.	30.1 Rim	434.3	13.2	564.5	38.3
31	Subhedral. Large semi-homogeneous to patchy zoned core. Wide, dark, complex oscillatory zoned rim. Fractured, core particularly affected.	N/A				
32	Subhedral. Very large semi-homogeneous core. Narrow semi-homogeneous rim. Heavily fractured.	N/A				
33	Very large heterogeneous core with resorbed boundaries. Dark homogeneous rim.	N/A				
34	Subhedral. Large core with oscillatory zoning cross-cut by homogeneous zones, and resorbed boundaries. Narrow, dark oscillatory zoned rim.	34.1 Core – oscillatory zoning	700.3	24.0	734.0	24.6
		34.2 Core - homogeneous	1017.7	20.8	1017.9	20.5
35	Anhedral. Dark homogeneous core. Oscillatory zoned to semi-homogeneous rim.	N/A				
36	Euhedral. Fine, prominent oscillatory zoning cross-cut by bright convolute zoning, sometimes approximately parallel to oscillatory zoning.	36.1 Oscillatory zoning	422.6	10.3	419.1	9.9
		36.2	400.9	10.4	428.8	14.5

		Oscillatory zoning				
37	Euhedral. Large heterogeneous core with resorbed boundaries. Narrow to wide rim with complex oscillatory zoning. Heavily fractured.	37.1 Rim	1746.8	36.4	1740.6	21.1
38	Euhedral. Large core with complex, feint oscillatory zoning. Narrow to wide rim oscillatory zoning. Heavily fractured, rim particularly affected.	38.1 Core	729.3	39.3	844.1	40.9
40	Anhedral. Dark homogeneous core with resorbed boundaries. Narrow to wide broad zoned rim with radial fracturing.	40.1 Core	1019.8	23.6	1023.9	17.7
41	Euhedral. Larger homogeneous core with marginal oscillatory zoning and resorbed boudaries. Narrow dark rim with oscillatory zoning.	41.1 Core	416.1	9.1	406.9	12.7
42	Subhedral. Complex oscillatory zoned core with open and filled fractures, and partially resorbed boundaries. Narrow to wide heterogeneous rim.	N/A				
43	Subhedral (broken). Small, partially resorbed complex oscillatory zoned core with a marginal, very narrow bright zone. Narrow to very wide, dark, complex oscillatory zoned rim. Fractured.	43.1 Core	1756.9	35.3	1750.2	22.1
44	Subhedral. Complex oscillatory zoning throughout, with minor homogeneous zones, and a marginal bright zone which cross-cuts oscillatory zoning. Heavily fractured.	N/A				
45	Anhedral (broken). Elongate patchy zoned core. Narrow to wide, dark homogeneous rim.	45.1 Rim	402.3	10.5	536.3	21.2
46	Subhedral. Oscillatory zoning throughout, with some marginal homogeneous zones which cross-cut oscillatory zoning. Fractured.	46.1 Rim	369.5	15.6	413.3	14.4
47	Subhedral. Small, patchy zoned core with open fractures. Narrow to very wide complex oscillatory zoned rim with minor homogeneous zones, contains some filled fractures.	47.1 Rim	361.8	10.5	442.0	11.1
48	Euhedral. Small, semi-homogeneous core. Narrow to wide complex oscillatory zoned rim with some homogeneous zones, minor convolute zoning and a possible inclusion.	N/A				
49	Subhedral. Semi-homogeneous core with some parallel zoning. Very narrow to wide heterogeneous rim. Heavily fractured.	N/A				
50	Euhedral. Small, lighter complex oscillatory zoned core. Narrow to wide dark oscillatory zoned rim, affected by open fractures.	50.1 Core	428.8	11.3	432.8	14.5
		50.2 Rim	408.3	9.8	411.8	10.0

51	Euhedral. Large, partially resorbed, complex oscillatory zoned core with an inner homogeneous zone. Narrow, dark homogeneous rim with minor oscillatory zoning and an innermost bright zone with irregular boundaries.	N/A				
52	Subhedral. Very large semi-homogeneous core with a central bright zone oblique to grain edges, and resorbed boundaries. Narrow dark homogeneous rim with an innermost narrow bright zone.	52.1 Core	477.0	12.3	477.6	12.1
53	Subhedral. Very large heterogeneous core with minor oscillatory zoning. Very narrow rim with minor oscillatory zoning.	53.1 Core – oscillatory zoning	1305.3	29.7	1394.1	22.5
54	Subhedral. Very large semi-homogeneous to patchy core cross-cut by open fractures. Narrow, dark homogeneous rim with a very narrow, discontinuous bright zone.	N/A				
55	Euhedral. Semi homogeneous core with an outer homogeneous zone, possible filled fractures and resorbed boundaries. Narrow to moderate heterogeneous rim. Heavily fractured.	55.1 Core	1574.1	35.3	1617.3	21.7
56	Euhedral. Very large, semi-homogeneous core with resorbed boundaries, Narrow, dark complex oscillatory zoned rim with minor cross-cutting homogeneous zones.	56.1 Core	421.6	9.1	416.7	11.6
57	Subhedral. Large, semi-homogeneous to homogeneous core. Narrow to wide broad oscillatory zoned rim. Fractured.	N/A				
58	Euhedral. Semi-homogeneous core. Narrow to moderate complex oscillatory zoned rim with minor homogeneous zones.	58.1 Core	407.6	9.8	409.4	11.4
59	Anhedral (broken). Large, homogeneous to patchy zoned core with resorbed boundaries. Narrow complex oscillatory zoned rim.	N/A				
60	Subhedral. Large semi-homogeneous to complex oscillatory zoned core. Narrow complex oscillatory zoned rim with minor convolute zoning. Heavily fractured, rim and a limited region of the core are particularly affected.	60.1 Core	982.1	22.4	984.9	28.3
		60.2 Rim	604.3	15.9	1293.7	28.2
61	Subhedral. Large semi-homogeneous to patchy zoned core with resorbed boundaries. Narrow to moderate rim with poorly developed oscillatory zoning and some patchy zoning. Heavily fractured.	N/A				
62	Subhedral. Large, partially resorbed complex oscillatory zoned core. Very narrow to wide complex oscillatory zoned rim. Fractured.	62.1 Core	1413.2	39.8	1438.5	26.0
		62.2 Rim	470.2	14.8	510.6	16.2

63	Subhedral. Large core with homogeneous zones, complex oscillatory zoning, and possible inclusions. Narrow zoned rim with a possible large inclusion. Heavily fractured, fractures dominantly parallel.	N/A				
64	Subhedral. Large core with broad homogeneous zones. Narrow dark homogeneous rim. Heavily fractured.	64.1 Core	1640.3	36.2	1620.4	31.3
65	Subhedral. Semi-homogeneous core, fractured. Narrow to wide complex oscillatory zoned rim.	65.1 Rim	271.1	8.0	384.2	9.7
66	Euhedral. Small, partially resorbed core with oscillatory zoning and minor homogeneous zones. Narrow to very wide complex oscillatory zoned rim, with inclusions and an innermost very narrow bright zone.	66.1 Core	1460.4	27.8	1479.2	20.0
		66.2 Rim	418.9	16.4	425.2	19.5
67	Subhedral. Large semi-homogeneous core with resorbed boundaries, fractured. Narrow to wide, complex oscillatory zoned rim.	67.1 Rim	749.7	24.3	833.9	26.0
68	Subhedral. Complex zoning, each zone comprised of complex oscillatory zoning and inner zones have resorbed to partially resorbed boundaries. Heavily fractured.	N/A				
69	Subhedral. Semi-homogeneous to patchy zoning with inclusions and minor, marginal oscillatory zoning. Heavily fractured.	N/A				
70	Subhedral. Large core with inner sector zoning, outer oscillatory zoning and resorbed boundaries. Narrow, dark rim with feint broad zoning.	70.1 Core - inner	413.2	9.2	414.5	10.7
71	Anhedral. Heterogeneous with marginal broad oscillatory zoning.	N/A				
72	Euhedral. Semi-homogeneous core with resorbed boundaries. Wide complex oscillatory zoned rim with small inclusions, a discontinuous bright homogeneous zone with convolute boundaries which cross-cut oscillatory zoning, and a further cross cutting homogeneous zone.	N/A				
73	Anhedral (broken). Very large semi-homogeneous core with resorbed boundaries, heavily fractured by open fractures, and one filled fracture which is continuous with a bright marginal zone. Narrow, dark homogeneous rim.	N/A				
74	Subhedral. Moderately well-developed complex oscillatory zoning cross-cut by marginal semi-homogeneous zoning.	N/A				
75	Subhedral. Patchy zoned core with resorbed boundaries. Narrow to moderate complex oscillatory zoned rim. Heavily fractured.	N/A				
76	Euhedral. Complex zoned, elongate core with a marginal bright zone and resorbed boundaries. Narrow oscillatory zoned rim.	76.1 Rim	408.9	10.7	423.9	10.4

77	Euhedral. Semi-homogeneous core with feint oscillatory and sector zoning, a very narrow bright marginal zone, and resorbed boundaries. Very narrow, dark oscillatory zoned rim.	77.1 Core	1634.2	31.4	1644.0	20.9
78	Subhedral. Very large heterogeneous core. Narrow rim with feint oscillatory zoning. Core-rim boundary is at times indistinct. Heavily fractured.	N/A				
79	Subhedral. Very small homogeneous core. Very wide, complex oscillatory zoned rim with minor homogeneous zones. Heavily fractured throughout, some are filled.	79.1 Rim	1649.4	31.2	1737.1	21.9
80	Euhedral. Homogeneous core with a bright, narrow, marginal zone and resorbed boundaries. Narrow, semi-homogeneous dark rim.	80.1 Core	415.7	10.5	415.9	11.1
81	Anhedral (broken). Very large, patchy zoned core. Narrow rim with some poorly developed oscillatory zoning and some convolute boundaries cross-cutting the core.	N/A				
82	Subhedral. Patchy zoned core with a bright, narrow marginal zone and resorbed boundaries. Narrow to wide rim with fine oscillatory zoning, and some homogeneous to convolute zoning.	N/A				
83	Euhedral. Partially resorbed core with indistinct patchy zoning. Narrow to moderate rim with oscillatory zoning and an inclusion. Fractured.	N/A				
84	Subhedral. Very large, partially resorbed core with complex oscillatory zoning and a very narrow marginal bright zone. Narrow rim with complex oscillatory zoning.	84.1 Core	1036.3	75.8	1151.2	81.1
		84.2 Core	1160.9	108.0	1213.2	111.4
85	Euhedral. Semi-homogeneous to patchy zoned core, affected by dominantly parallel fractures and with resorbed boundaries. Narrow, dark rim with oscillatory zoning.	N/A				
86	Anhedral. Heterogeneous with minor feint oscillatory zoning and a discontinuous marginal bright zone.	N/A				
87	Euhedal. Large, patchy zoned core with resorbed boundaries. Narrow to wide rim with oscillatory zoning and radial fractures.	87.1 Rim	399.2	13.6	482.4	13.5
88	Anhedral. Semi-homogeneous core with resorbed boundaries. Very narrow to wide rim with complex oscillatory zoning.	88.1 Rim	418.2	10.0	430.2	10.0
89	Subhedral. Highly patchy core with resorbed boundaries, fractured. Very narrow to very wide rim with complex oscillatory zoning.	89.1 Rim	424.4	10.1	428.5	10.2
90	Anhedral. Heterogeneous core with broad oscillatory zoning. Narrow to moderate dark rim with feint zoning.	90.1 Core – oscillatory zoning	1617.7	34.1	1622.2	22.4

91	Euhedral. Heterogeneous core with minor, marginal bright convolute zoning. Narrow dark oscillatory zoned rim.	91.1 Rim	342.6	14.0	743.9	49.6
92	Subhedral. Very large oscillatory and sector zoned core. Semi-continuous, dark, homogeneous rim.	92.1 Core	278.9	10.7	304.9	12.0
93	Subhedral. Partially resorbed core with semi-homogeneous zones and an inclusion. Narrow to very wide rim with complex oscillatory zoning. Fractures cross-cut the core and rim.	93.1 Core	1013.2	20.4	1018.3	18.6
		93.2 Rim	583.2	28.5	694.5	31.9

Data Reduction Scheme Settings

U-Pb Geochronology

238U/235U	137.818
BeamSecon	30
BeamSecon	Laser log
BeamSecon	1000
DefaultFitT	Exponential
FitEndCrop	1
FitStartCro	1
IndexChan	U238
MaskChan	U238
MaskMeth	Laser log
MaskResul	TRUE
MaskThres	1000
MaskTrim	0
Pb206_U238	
Pb207_U235	
Pb208_Th232	
ReferenceI	Z_91500
UIsotopeC	1000000
UIsotopeM	235 when 238 high
l232	4.95E-11
l235	9.85E-10
l238	1.55E-10

Mass Spectrometer Files

File	File start time	File end time	Time file loaded	No of data points	No of channels	Channels	Samples
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 10:49:27.000	2023-06-15 10:50:32.963	2023-08-17 10:30:53.165	227	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:29:18.000	2023-06-15 11:30:23.962	2023-08-17 10:31:00.100	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-5
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:34:19.000	2023-06-15 13:35:24.962	2023-08-17 10:30:54.360	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb61.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:35:45.000	2023-06-15 13:36:50.962	2023-08-17 10:30:54.469	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb63.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:37:10.000	2023-06-15 13:38:15.963	2023-08-17 10:30:54.500	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb64.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:05:11.000	2023-06-15 11:06:16.962	2023-08-17 10:30:54.531	227	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-3
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:38:35.000	2023-06-15 13:39:40.963	2023-08-17 10:30:54.656	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb65.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:40:01.000	2023-06-15 13:41:06.962	2023-08-17 10:30:54.687	227	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-16
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:41:27.000	2023-06-15 13:42:32.963	2023-08-17 10:30:54.718	227	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-17
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:42:53.000	2023-06-15 13:43:58.962	2023-08-17 10:30:54.843	227	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-18
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:44:19.000	2023-06-15 13:45:24.963	2023-08-17 10:30:54.890	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-16
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:10:05.000	2023-06-15 13:11:10.962	2023-08-17 10:30:53.207	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-13
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 10:52:27.000	2023-06-15 10:53:32.963	2023-08-17 10:31:00.132	227	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-3
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:45:44.000	2023-06-15 13:46:49.962	2023-08-17 10:30:54.921	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-17
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:47:10.000	2023-06-15 13:48:15.962	2023-08-17 10:30:55.046	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-18
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:48:36.000	2023-06-15 13:49:41.962	2023-08-17 10:30:55.077	227	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-16
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:50:02.000	2023-06-15 13:51:07.962	2023-08-17 10:30:55.108	227	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-17
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:51:27.000	2023-06-15 13:52:32.962	2023-08-17 10:30:55.249	227	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-18
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:06:36.000	2023-06-15 11:07:41.963	2023-08-17 10:30:55.280	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb1.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:52:53.000	2023-06-15 13:53:58.963	2023-08-17 10:30:55.311	227	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-16
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:54:19.000	2023-06-15 13:55:24.962	2023-08-17 10:30:55.436	227	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-17
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:55:44.000	2023-06-15 13:56:49.962	2023-08-17 10:30:55.483	227	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-18
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:57:09.000	2023-06-15 13:58:14.963	2023-08-17 10:30:55.514	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb68.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:30:43.000	2023-06-15 11:31:48.963	2023-08-17 10:31:00.288	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-6
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:11:31.000	2023-06-15 13:12:36.962	2023-08-17 10:30:53.309	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-14
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:58:34.000	2023-06-15 13:59:39.962	2023-08-17 10:30:55.639	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb7.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:59:59.000	2023-06-15 14:01:04.962	2023-08-17 10:30:55.670	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb7.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:01:24.000	2023-06-15 14:02:29.963	2023-08-17 10:30:55.701	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb70.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:02:50.000	2023-06-15 14:03:55.963	2023-08-17 10:30:55.826	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb71.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:04:15.000	2023-06-15 14:05:20.963	2023-08-17 10:30:55.857	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb71.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:05:41.000	2023-06-15 14:06:46.963	2023-08-17 10:30:55.888	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb71.3
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:08:01.000	2023-06-15 11:09:06.963	2023-08-17 10:30:55.998	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb10.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:07:07.000	2023-06-15 14:08:12.963	2023-08-17 10:30:56.029	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb72.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:08:33.000	2023-06-15 14:09:38.963	2023-08-17 10:30:56.060	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb72.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:21:31.000	2023-06-15 13:22:36.963	2023-08-17 10:30:53.673	227	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-15
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:09:59.000	2023-06-15 14:11:04.962	2023-08-17 10:30:56.169	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb73.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:12:56.000	2023-06-15 13:14:01.963	2023-08-17 10:30:53.338	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-15
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:11:24.000	2023-06-15 14:12:29.962	2023-08-17 10:30:56.216	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb74.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:12:50.000	2023-06-15 14:13:55.963	2023-08-17 10:30:56.247	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb75.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:14:16.000	2023-06-15 14:15:21.962	2023-08-17 10:30:56.356	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb75.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:15:41.000	2023-06-15 14:16:46.962	2023-08-17 10:30:56.388	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb76.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:17:07.000	2023-06-15 14:18:12.962	2023-08-17 10:30:56.403	227	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-19
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:18:33.000	2023-06-15 14:19:38.962	2023-08-17 10:30:56.528	227	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-20
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:19:59.000	2023-06-15 14:21:04.963	2023-08-17 10:30:56.575	227	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-21
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:09:27.000	2023-06-15 11:10:32.962	2023-08-17 10:30:56.622	227	9	Si29,Hg200,Pb204,Pb206,Pb	UPb11.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:32:07.000	2023-06-15 11:33:12.962	2023-08-17 10:31:00.319	227	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-4
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:21:25.000	2023-06-15 14:22:30.963	2023-08-17 10:30:56.731	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-19
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:22:49.000	2023-06-15 14:23:54.962	2023-08-17 10:30:56.762	227	9	Si29,Hg200,Pb204,Pb206,Pb	91500-20

C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:14:23.000	2023-06-15 13:15:28.962	2023-08-17 10:30:53.366	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-13
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:24:15.000	2023-06-15 14:25:20.962	2023-08-17 10:30:56.793	227	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-21
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:25:41.000	2023-06-15 14:26:46.962	2023-08-17 10:30:56.934	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-19
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:27:06.000	2023-06-15 14:28:11.962	2023-08-17 10:30:56.980	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-20
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:28:32.000	2023-06-15 14:29:37.962	2023-08-17 10:30:57.012	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-21
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:29:58.000	2023-06-15 14:31:03.962	2023-08-17 10:30:57.152	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-19
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:31:24.000	2023-06-15 14:32:29.962	2023-08-17 10:30:57.199	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-20
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:32:50.000	2023-06-15 14:33:55.963	2023-08-17 10:30:57.246	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-21
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:33:32.000	2023-06-15 11:34:37.963	2023-08-17 10:31:00.366	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-5
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:34:15.000	2023-06-15 14:35:20.962	2023-08-17 10:30:57.355	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb78.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:10:52.000	2023-06-15 11:11:57.962	2023-08-17 10:30:57.417	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb12.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:35:41.000	2023-06-15 14:36:46.963	2023-08-17 10:30:57.448	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb78.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:15:49.000	2023-06-15 13:16:54.962	2023-08-17 10:30:53.486	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-14
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:37:06.000	2023-06-15 14:38:11.962	2023-08-17 10:30:57.573	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb79.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:38:32.000	2023-06-15 14:39:37.962	2023-08-17 10:30:57.620	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb79.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:39:58.000	2023-06-15 14:41:03.963	2023-08-17 10:30:57.636	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb8.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:41:24.000	2023-06-15 14:42:29.963	2023-08-17 10:30:57.745	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb8.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:42:49.000	2023-06-15 14:43:54.669	2023-08-17 10:30:57.776	226	9 Si29,Hg200,Pb204,Pb206,Pb: UPb80.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:44:15.000	2023-06-15 14:45:20.669	2023-08-17 10:30:57.807	226	9 Si29,Hg200,Pb204,Pb206,Pb: UPb80.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:34:58.000	2023-06-15 11:36:03.963	2023-08-17 10:31:00.506	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-6
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:45:40.000	2023-06-15 14:46:45.669	2023-08-17 10:30:57.932	226	9 Si29,Hg200,Pb204,Pb206,Pb: UPb83.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:47:05.000	2023-06-15 14:48:10.962	2023-08-17 10:30:57.963	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb84.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:48:31.000	2023-06-15 14:49:36.669	2023-08-17 10:30:57.994	226	9 Si29,Hg200,Pb204,Pb206,Pb: UPb85.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:12:18.000	2023-06-15 11:13:23.964	2023-08-17 10:30:58.119	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb12.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:17:15.000	2023-06-15 13:18:21.256	2023-08-17 10:30:53.529	228	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-15
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:49:56.000	2023-06-15 14:51:01.962	2023-08-17 10:30:58.166	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb87.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:51:21.000	2023-06-15 14:52:26.670	2023-08-17 10:30:58.197	226	9 Si29,Hg200,Pb204,Pb206,Pb: UPb9.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:52:47.000	2023-06-15 14:53:52.670	2023-08-17 10:30:58.338	226	9 Si29,Hg200,Pb204,Pb206,Pb: UPb9.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:54:12.000	2023-06-15 14:55:17.669	2023-08-17 10:30:58.384	226	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-22
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:55:37.000	2023-06-15 14:56:42.376	2023-08-17 10:30:58.400	225	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-23
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:36:23.000	2023-06-15 11:37:28.963	2023-08-17 10:31:00.553	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-4
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:57:02.000	2023-06-15 14:58:07.962	2023-08-17 10:30:58.525	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-24
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:58:29.000	2023-06-15 14:59:34.670	2023-08-17 10:30:58.572	226	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-22
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 14:59:55.000	2023-06-15 15:01:00.963	2023-08-17 10:30:58.603	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-23
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 15:01:20.000	2023-06-15 15:02:25.669	2023-08-17 10:30:58.759	226	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-24
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 15:02:47.000	2023-06-15 15:03:52.669	2023-08-17 10:30:58.821	226	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-22
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:18:40.000	2023-06-15 13:19:45.963	2023-08-17 10:30:53.567	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-13
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:13:43.000	2023-06-15 11:14:48.963	2023-08-17 10:30:58.884	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb13.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 15:04:13.000	2023-06-15 15:05:18.670	2023-08-17 10:30:59.055	226	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-23
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 15:05:38.000	2023-06-15 15:06:44.256	2023-08-17 10:30:59.086	228	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-24
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 15:07:04.000	2023-06-15 15:08:09.669	2023-08-17 10:30:59.118	226	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-22
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:37:48.000	2023-06-15 11:38:53.962	2023-08-17 10:31:00.584	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-5
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 15:08:29.000	2023-06-15 15:09:34.962	2023-08-17 10:30:59.258	227	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-23
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 15:09:55.000	2023-06-15 15:11:00.669	2023-08-17 10:30:59.305	226	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-24
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:15:09.000	2023-06-15 11:16:14.962	2023-08-17 10:30:59.336	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb13.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 10:51:02.000	2023-06-15 10:52:07.962	2023-08-17 10:30:59.461	227	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:16:34.000	2023-06-15 11:17:39.963	2023-08-17 10:30:59.492	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb15.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:17:59.000	2023-06-15 11:19:04.963	2023-08-17 10:30:59.523	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb17.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:39:13.000	2023-06-15 11:40:18.963	2023-08-17 10:31:00.724	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-6
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:20:06.000	2023-06-15 13:21:11.963	2023-08-17 10:30:53.658	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-14

C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:40:39.000	2023-06-15 11:41:44.963	2023-08-17 10:31:00.787	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb20.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:42:03.000	2023-06-15 11:43:08.963	2023-08-17 10:31:00.818	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb22.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:43:28.000	2023-06-15 11:44:33.963	2023-08-17 10:31:00.974	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb22.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 10:53:51.000	2023-06-15 10:54:56.962	2023-08-17 10:31:01.005	227	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:22:56.000	2023-06-15 13:24:01.962	2023-08-17 10:30:53.704	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb54.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:44:52.000	2023-06-15 11:45:57.962	2023-08-17 10:31:01.052	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb25.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:46:17.000	2023-06-15 11:47:22.963	2023-08-17 10:31:01.177	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb26.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:47:42.000	2023-06-15 11:48:47.963	2023-08-17 10:31:01.224	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb28.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:49:06.000	2023-06-15 11:50:11.963	2023-08-17 10:31:01.270	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb28.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:50:31.000	2023-06-15 11:51:36.963	2023-08-17 10:31:01.395	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb3.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:19:24.000	2023-06-15 11:20:29.963	2023-08-17 10:30:59.648	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb18.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:51:56.000	2023-06-15 11:53:01.962	2023-08-17 10:31:01.442	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb3.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:53:21.000	2023-06-15 11:54:26.962	2023-08-17 10:31:01.504	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb3.3
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:54:46.000	2023-06-15 11:55:51.962	2023-08-17 10:31:01.629	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb30.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:56:12.000	2023-06-15 11:57:18.256	2023-08-17 10:31:01.692	228	9 Si29,Hg200,Pb204,Pb206,Pb: UPb31.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:57:37.000	2023-06-15 11:58:42.962	2023-08-17 10:31:01.723	227	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-7
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:03:47.000	2023-06-15 11:04:52.962	2023-08-17 10:30:53.814	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 10:55:17.000	2023-06-15 10:56:22.962	2023-08-17 10:31:01.879	227	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:59:01.000	2023-06-15 12:00:06.963	2023-08-17 10:31:01.941	227	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-8
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:00:27.000	2023-06-15 12:01:32.962	2023-08-17 10:31:01.972	227	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-9
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:01:52.000	2023-06-15 12:02:57.962	2023-08-17 10:31:02.113	227	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-7
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:20:49.000	2023-06-15 11:21:54.962	2023-08-17 10:30:59.695	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb19.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:03:17.000	2023-06-15 12:04:22.963	2023-08-17 10:31:02.144	227	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-8
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:04:42.000	2023-06-15 12:05:47.962	2023-08-17 10:31:02.191	227	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-9
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:06:07.000	2023-06-15 12:07:12.962	2023-08-17 10:31:02.331	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-7
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:07:33.000	2023-06-15 12:08:38.962	2023-08-17 10:31:02.409	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-8
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:08:58.000	2023-06-15 12:10:03.963	2023-08-17 10:31:02.472	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-9
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:10:24.000	2023-06-15 12:11:29.963	2023-08-17 10:31:02.612	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-7
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:24:21.000	2023-06-15 13:25:26.963	2023-08-17 10:30:53.860	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb54.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:11:50.000	2023-06-15 12:12:55.963	2023-08-17 10:31:02.643	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-8
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 10:56:42.000	2023-06-15 10:57:47.963	2023-08-17 10:31:02.674	227	9 Si29,Hg200,Pb204,Pb206,Pb: 91500-3
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:13:15.000	2023-06-15 12:14:20.963	2023-08-17 10:31:02.799	227	9 Si29,Hg200,Pb204,Pb206,Pb: PLE-9
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:22:13.000	2023-06-15 11:23:18.962	2023-08-17 10:30:59.742	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb19.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:14:40.000	2023-06-15 12:15:45.963	2023-08-17 10:31:02.846	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb32.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:16:05.000	2023-06-15 12:17:10.962	2023-08-17 10:31:02.893	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb32.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:17:30.000	2023-06-15 12:18:35.963	2023-08-17 10:31:03.049	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb33.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:18:56.000	2023-06-15 12:20:01.962	2023-08-17 10:31:03.080	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb33.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:20:21.000	2023-06-15 12:21:26.963	2023-08-17 10:31:03.111	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb33.3
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:21:47.000	2023-06-15 12:22:52.962	2023-08-17 10:31:03.221	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb35.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:23:11.000	2023-06-15 12:24:16.963	2023-08-17 10:31:03.252	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb38.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:25:47.000	2023-06-15 13:26:52.963	2023-08-17 10:30:53.892	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb55.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:24:36.000	2023-06-15 12:25:41.963	2023-08-17 10:31:03.299	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb39.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:26:01.000	2023-06-15 12:27:06.963	2023-08-17 10:31:03.408	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb40.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:23:39.000	2023-06-15 11:24:44.962	2023-08-17 10:30:59.851	227	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-4
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 10:58:07.000	2023-06-15 10:59:12.962	2023-08-17 10:31:03.470	227	9 Si29,Hg200,Pb204,Pb206,Pb: TEM-1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:27:27.000	2023-06-15 12:28:32.963	2023-08-17 10:31:03.517	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb42.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:28:51.000	2023-06-15 12:29:56.962	2023-08-17 10:31:03.704	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb43.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:30:16.000	2023-06-15 12:31:21.962	2023-08-17 10:31:03.751	227	9 Si29,Hg200,Pb204,Pb206,Pb: UPb44.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:31:41.000	2023-06-15 12:32:46.962	2023-08-17 10:31:03.782	227	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-10
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:33:08.000	2023-06-15 12:34:13.962	2023-08-17 10:31:03.891	227	9 Si29,Hg200,Pb204,Pb206,Pb: NIST610-11

C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:34:33.000	2023-06-15 12:35:38.962	2023-08-17 10:31:03.938	227	9	Si29,Hg200,Pb204,Pb206,Pb: NIST610-12
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:35:59.000	2023-06-15 12:37:04.963	2023-08-17 10:31:03.969	227	9	Si29,Hg200,Pb204,Pb206,Pb: 91500-10
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:27:12.000	2023-06-15 13:28:17.963	2023-08-17 10:30:54.032	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb55.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:37:25.000	2023-06-15 12:38:30.962	2023-08-17 10:31:04.110	227	9	Si29,Hg200,Pb204,Pb206,Pb: 91500-11
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:25:03.000	2023-06-15 11:26:08.962	2023-08-17 10:30:59.898	227	9	Si29,Hg200,Pb204,Pb206,Pb: NIST610-5
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:38:50.000	2023-06-15 12:39:55.962	2023-08-17 10:31:04.157	227	9	Si29,Hg200,Pb204,Pb206,Pb: 91500-12
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:40:15.000	2023-06-15 12:41:20.962	2023-08-17 10:31:04.188	227	9	Si29,Hg200,Pb204,Pb206,Pb: TEM-10
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 10:59:32.000	2023-06-15 11:00:37.963	2023-08-17 10:31:04.344	227	9	Si29,Hg200,Pb204,Pb206,Pb: TEM-2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:41:41.000	2023-06-15 12:42:46.963	2023-08-17 10:31:04.391	227	9	Si29,Hg200,Pb204,Pb206,Pb: TEM-11
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:43:05.000	2023-06-15 12:44:10.962	2023-08-17 10:31:04.422	227	9	Si29,Hg200,Pb204,Pb206,Pb: TEM-12
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:44:30.000	2023-06-15 12:45:35.963	2023-08-17 10:31:04.531	227	9	Si29,Hg200,Pb204,Pb206,Pb: PLE-10
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:45:55.000	2023-06-15 12:47:01.255	2023-08-17 10:31:04.562	228	9	Si29,Hg200,Pb204,Pb206,Pb: PLE-11
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:47:21.000	2023-06-15 12:48:26.962	2023-08-17 10:31:04.593	227	9	Si29,Hg200,Pb204,Pb206,Pb: PLE-12
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:48:47.000	2023-06-15 12:49:52.963	2023-08-17 10:31:04.718	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb45.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:28:37.000	2023-06-15 13:29:42.962	2023-08-17 10:30:54.063	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb57.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:26:28.000	2023-06-15 11:27:33.963	2023-08-17 10:30:59.944	227	9	Si29,Hg200,Pb204,Pb206,Pb: NIST610-6
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:50:13.000	2023-06-15 12:51:18.962	2023-08-17 10:31:04.765	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb46.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:51:38.000	2023-06-15 12:52:43.963	2023-08-17 10:31:04.796	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb46.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:53:03.000	2023-06-15 12:54:08.962	2023-08-17 10:31:04.968	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb47.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:54:29.000	2023-06-15 12:55:34.963	2023-08-17 10:31:05.015	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb48.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:00:56.000	2023-06-15 11:02:01.963	2023-08-17 10:31:05.046	227	9	Si29,Hg200,Pb204,Pb206,Pb: TEM-3
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:55:55.000	2023-06-15 12:57:00.962	2023-08-17 10:31:05.217	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb49.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:57:20.000	2023-06-15 12:58:25.962	2023-08-17 10:31:05.280	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb5.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 12:58:44.000	2023-06-15 12:59:49.962	2023-08-17 10:31:05.311	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb5.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:00:10.000	2023-06-15 13:01:15.962	2023-08-17 10:31:05.451	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb50.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:01:35.000	2023-06-15 13:02:40.963	2023-08-17 10:31:05.483	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb51.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:27:53.000	2023-06-15 11:28:58.963	2023-08-17 10:31:00.069	227	9	Si29,Hg200,Pb204,Pb206,Pb: 91500-4
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:30:02.000	2023-06-15 13:31:07.962	2023-08-17 10:30:54.110	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb57.2
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:03:00.000	2023-06-15 13:04:05.962	2023-08-17 10:31:05.514	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb52.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:04:25.000	2023-06-15 13:05:30.963	2023-08-17 10:31:05.639	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb53.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:05:51.000	2023-06-15 13:06:56.962	2023-08-17 10:31:05.685	227	9	Si29,Hg200,Pb204,Pb206,Pb: NIST610-13
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:07:15.000	2023-06-15 13:08:20.963	2023-08-17 10:31:05.717	227	9	Si29,Hg200,Pb204,Pb206,Pb: NIST610-14
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:08:40.000	2023-06-15 13:09:45.963	2023-08-17 10:31:05.873	227	9	Si29,Hg200,Pb204,Pb206,Pb: NIST610-15
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:31:27.000	2023-06-15 13:32:32.963	2023-08-17 10:30:54.297	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb6.1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:02:21.000	2023-06-15 11:03:26.962	2023-08-17 10:30:53.188	227	9	Si29,Hg200,Pb204,Pb206,Pb: PLE-1
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 13:32:53.000	2023-06-15 13:33:58.963	2023-08-17 10:30:54.328	227	9	Si29,Hg200,Pb204,Pb206,Pb: UPb60.1

Laser Log Files

File	File start time	File end time	Time file loaded	Samples	Offset (s)	Widths
C:/Users/Supervisor/Documents/ChloeCa	2023-06-15 11:49:42.091	2023-06-15 16:11:25.500	2023-08-17 10:31:40.410	NIST610-1,PLE-14,UPb18.1,U	-3619.705197	30

	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final U238	Final U238	Final U/Th	Approx_U	Approx_Th	Approx_Pb_PPM_me	rho 206Pb	rho 207Pb/206Pb v 238U/206Pb
G_NIST610																							
NIST610-1	0.245135	0.005509	1413.177	28.46676	30.21787	0.778091	3493.542	25.23744	0.525107	0.012879	8529.792	170.0661	0.893854	0.011226	4997.147	0	4.084509	0.090229	0.936154	291.1507	311.7703	1490.922	0.624	0.446619
NIST610-2	0.296025	0.036125	1619.628	160.8321	36.80679	4.395293	3606.621	92.52708	0.491315	0.012143	8076.302	163.9261	0.899251	0.010886			3.970888	0.248782	0.945301	376.3208	398.57	1839.315	0.998927	0.47293
NIST610-3	0.301315	0.039929	1636.084	175.2358	38.14705	5.088334	3591.804	94.73854	0.485086	0.012074	7991.523	163.4326	0.895928	0.011363	4963.828	103.9122	4.022315	0.252805	0.943249	377.8892	402.1965	1832.315	0.997306	0.617529
NIST610-4	0.284899	0.035194	1567.645	157.2381	35.34467	4.253665	3546.318	84.16793	0.479588	0.011984	7916.507	162.8852	0.904038	0.010831			4.093657	0.252454	0.953032	366.3133	384.0537	1726.862	0.9987	0.293807
NIST610-5	0.313834	0.043409	1687.825	188.6206	39.14151	5.390392	3606.893	98.37436	0.486856	0.011945	8016.054	161.8363	0.906076	0.011021			4.003141	0.258937	0.958382	362.6181	378.6004	1718.077	0.998964	0.286043
NIST610-6	0.302366	0.03948	1643.419	173.1283	37.3445	4.741129	3599.051	93.64602	0.48655	0.012054	8011.607	163.1741	0.900467	0.011055	4980.888	72.55601	4.025718	0.254035	0.95574	365.2138	383.9082	1747.591	0.99839	0.191433
NIST610-7	0.282213	0.03503	1554.355	153.3425	35.23003	4.306748	3570.785	86.72084	0.48061	0.011821	7930.942	161.0176	0.905233	0.010995			4.1215	0.234294	0.950276	349.0422	367.2674	1654.7	0.997696	0.161939
NIST610-8	0.273057	0.030776	1517.874	136.2478	33.51427	3.604914	3532.063	72.95715	0.485633	0.012161	7998.739	164.6514	0.906672	0.011046			4.143135	0.218155	0.94882	346.2008	365.8455	1651.751	0.998738	0.084265
NIST610-9	0.303483	0.039758	1648.13	174.3294	38.02605	4.929003	3611.972	95.10164	0.480867	0.011982	7934.07	162.5276	0.908538	0.011083			4.017052	0.252783	0.951509	359.8782	378.0966	1706.065	0.998072	-0.02707
NIST610-10	0.268347	0.031635	1493.499	137.1385	33.48386	3.988665	3525.172	76.03943	0.482972	0.012144	7962.405	164.2021	0.903905	0.011048			4.113683	0.223345	0.93949	374.6714	403.4577	1813.527	0.998685	-0.11266
NIST610-11	0.275681	0.032087	1552.009	148.6406	33.29579	3.682485	3534.516	78.46822	0.476299	0.01193	7871.368	161.9297	0.897852	0.010733	4945.304	257.2688	4.136129	0.220521	0.935791	376.4918	406.7603	1806.212	0.997388	-0.04238
NIST610-12	0.278136	0.031755	1540.8	141.4348	34.464	3.93415	3556.49	83.36124	0.476805	0.012058	7877.97	163.8955	0.898212	0.010854	4998.275	0	4.120342	0.227739	0.939186	376.771	405.2061	1796.625	0.997973	-0.0776
NIST610-13	0.292275	0.036699	1601.054	162.5885	36.639	4.539939	3588.038	90.17566	0.476964	0.011943	7880.578	162.0685	0.907903	0.011036			4.085946	0.248284	0.950596	375.5118	396.4734	1784.363	0.998126	0.061528
NIST610-14	0.298801	0.038563	1625.85	169.553	37.3876	4.70249	3598.653	91.49003	0.480615	0.011893	7930.739	161.4357	0.909988	0.01109			4.085425	0.254789	0.950139	363.8214	383.4458	1732.169	0.998506	0.274574
NIST610-15	0.276575	0.033522	1528.874	147.1993	35.7097	4.470294	3565.912	85.28519	0.483671	0.012034	7972.239	162.4315	0.913995	0.011192			4.142551	0.239105	0.9561	366.3262	384.7165	1747.599	0.998891	0.098502
NIST610-16	0.296073	0.039978	1610.717	171.9182	36.82422	4.861825	3584.59	89.95737	0.481332	0.012072	7940.143	163.5819	0.909049	0.010915			4.077514	0.23391	0.935727	377.0514	408.5214	1831.529	0.998977	0.100638
NIST610-17	0.296599	0.038364	1616.589	167.4899	36.33303	4.534022	3591.953	91.0491	0.477185	0.011922	7883.606	162.0062	0.910869	0.01107	4956.605	0	4.068861	0.241336	0.936537	386.6371	418.696	1880.484	0.998311	-0.03038
NIST610-18	0.288836	0.039025	1629.103	183.309	37.00673	5.064754	3564.579	89.78409	0.475752	0.012031	7863.584	162.9211	0.908948	0.010639			4.160653	0.249779	0.939163	389.3391	419.4403	1886.482	0.984787	-0.05927
NIST610-19	0.294192	0.038172	1632.175	174.4902	36.87286	4.7336	3599.929	93.38343	0.472921	0.011902	7824.94	161.4047	0.910031	0.010744			4.064409	0.24452	0.935897	371.9959	400.116	1774.824	0.997812	-0.05283
NIST610-20	0.29767	0.039741	1618.195	171.0168	36.44245	4.687554	3579.123	87.51292	0.480122	0.012094	7923.432	163.3758	0.911548	0.011255			4.067129	0.235254	0.942808	371.8578	396.9312	1783.858	0.998464	-0.1412
NIST610-21	0.292724	0.037057	1628.741	170.3306	35.75052	4.225207	3588.975	87.52156	0.480709	0.011966	7931.825	162.361	0.911107	0.011285			4.039129	0.239778	0.945351	371.9251	394.9311	1778.961	0.997951	0.061763
NIST610-22	0.295805	0.038322	1611.993	166.4332	36.81217	4.743587	3583.466	88.87983	0.482241	0.012036	7952.603	162.3217	0.900388	0.011458	4941.799	111.4404	4.079654	0.238598	0.954567	353.4133	373.1253	1693.641	0.996797	0.156083
NIST610-23	0.303674	0.041417	1643.428	178.226	36.81771	4.805163	3583.866	89.7654	0.486985	0.012621	8015.916	169.4574	0.903595	0.011344	4958.718	89.15892	4.07052	0.236778	0.955705	355.6146	373.2355	1698.172	0.996458	0.141051
NIST610-24	0.275658	0.032495	1527.638	142.1679	34.8283	4.16388	3552.228	80.70274	0.490722	0.012393	8067.513	166.6275	0.899383	0.010803	4982.645	75.86648	4.094013	0.222035	0.956104	352.5482	369.668	1689.075	0.998243	0.087293
RAS01																								
UPb1.1	0.06918	0.00174	431.1437	10.48966	0.867802	0.099399	606.4044	46.42932	0.026405	0.001031	526.6132	20.26929	0.091632	0.010466	1196.412	178.9551	14.52907	0.367907	1.349048	623.0575	514.8028	132.7106	-0.02098	0.155906
UPb10.1	0.070422	0.001557	438.6775	9.380157	0.564781	0.018781	453.8465	12.10648	0.020963	0.000674	419.2809	13.34903	0.058778	0.001751	531.0509	63.20199	14.22103	0.316784	1.359444	402.59	357.7196	65.0165	-0.06426	0.451807
UPb11.1	0.066218	0.001902	413.2833	11.48471	0.509939	0.018077	418.0572	12.11546	0.02289	0.000892	457.3885	17.60655	0.056687	0.001303	472.5935	50.28048	15.15659	0.42113	1.457407	1009.174	705.7533	139.5071	0.678856	0.041391
UPb12.1	0.068842	0.001662	429.1258	10.02128	0.52098	0.016877	425.1833	11.20925	0.021577	0.000562	431.4712	11.11181	0.05461	0.00105	390.949	45.08498	14.52173	0.351293	1.195292	468.8907	438.3624	86.71183	0.606989	0.067305
UPb12.2	0.066651	0.001796	415.8585	10.84865	0.530113	0.016509	431.3546	10.96574	0.020785	0.000525	415.7986	10.39333	0.057751	0.001037	511.8555	39.8437	15.1128	0.407878	1.536773	807.403	521.6499	101.4937	0.680179	0.298246
UPb13.1	0.070779	0.001724	440.79	10.384	0.532291	0.017009	432.7251	11.2874	0.022358	0.000579	446.9084	11.44499	0.054533	0.001173	379.0166	49.01071	14.157	0.365929	1.387387	473.2051	347.1495	71.05056	0.480881	0.226882
UPb13.2	0.070239	0.001797	437.5186	10.83265	0.544369	0.017241	440.6986	11.29751	0.022602	0.00067	451.7069	13.24455	0.056364	0.001201	459.4657	45.14159	14.31993	0.382766	1.538755	646.9192	467.0599	91.96784	0.595388	0.256267
UPb15.1	0.067929	0.001739	423.5945	10.49578	0.516503	0.016146	422.2941	10.75381	0.020916	0.000518	418.3937	10.26241	0.055198	0.000998	411.3399	40.89587	14.76773	0.366766	1.600577	780.6402	484.6544	94.26822	0.654305	0.217923
UPb17.1	0.068691	0.001696	428.2029	10.2223	0.534024	0.017187	433.8385	11.34539	0.022097	0.000566	441.756	11.18356	0.056607	0.001123	464.8714	44.45393	14.59091	0.342132	1.776642	591.0968	332.6706	67.81442	0.636136	-0.00409
UPb18.1	0.065604	0.001655	409.5575	10.02178	0.535481	0.016994	434.8485	11.22996	0.020193	0.000495	404.077	9.80434	0.059073	0.001037	566.4321	39.7982	15.32342	0.402417	1.297049	1245.304	953.0849	181.3805	0.664661	0.106019
UPb19.1	0.066965	0.001521	417.8205	9.200255	0.505926	0.016642	416.2271	10.73729	0.021246	0.000564	424.9152	11.16894	0.054753	0.001234	393.7704	49.39338	14.96474	0.35324	1.628194	400.8124	245.4607	49.19285	0.426339	0.039587
UPb19.2	0.069385	0.001653	432.4044	9.964677	0.523946	0.016282	427.2668	10.79511	0.021612	0.000546	432.1731	10.80262	0.054583	0.000982	391.9274	38.61608	14.43651	0.362007	1.53937	533.2594	342.6061	68.80489	0.587801	0.119072
UPb20.1	0.063929	0.001612	399.4167	9.768752	0.577977	0.019446	462.3487	12.44461	0.022191	0.00058	443.6124	11.47143	0.065063	0.00108	770.3324	35.20415	15.64655	0.433655	1.446501	1216.373	833.2936	176.0602	0.821111	-0.12565
UPb22.1	0.064778	0.002154	404.427	13.032	0.750058	0.034705	564.851	20.11459	0.027107	0.000998	540.4564	19.62524	0.085438	0.004106	1252.969	101.1969	15.69091	0.524996	1.438489	517.5374	366.6729	91.6979	-0.15723	0.615951
UPb22.2	0.068649	0.001713	427.9506	10.33119	0.66387	0.021505	516.1468	13.00824	0.024958	0.000676	498.2444	13.32529	0.069646	0.001287	910.1841	36.77498	14.6343	0.364135	1.495755	1032.649	687.6077	161.4347	0.546596	0.105106
UPb25.1	0.066373	0.001584	414.238	9.576557	0.510508	0.016234	418.4245	11.0096	0.021167	0.000535	423.3622	10.59387	0.056478	0.001	465.5256	39.67296	15.10017	0.366665	1.307341	1196.57	913.4093	175.2778	0.725714	0.156992
UPb26.1	0.066233	0.001778	413.3321	10.74464	0.616711	0.025879	485.7749	15.88029	0.022341	0.000781	446.5077	15.43215	0.067594	0.002075	835.8373	64.62644	15.20641	0.409826	1.417432	655.8551	460.9789	97.83605	0.465358	0.00088
UPb28.1	0.071882	0.002027	447.3575	12.17433	0.914374	0.087268	653.9329	43.33809	0.026632	0.001324	530.9455	25.89	0.091065	0.007014	1380.527	129.8923	14.03189	0.389989	1.02342	557.236	554.1648	145.3814	0.608908	-0.46158
UPb28.2	0.07637	0.001889	474.3441	11.31033	0.710463	0.029135	542.7675	17.10745	0.028207	0.000911	562.1472	17.87085	0.068238	0.00251	856.782	79.8703	13.03619	0.283994	1.817064	433.1617	241.2209	63.77414	0.457254	-0.02479
UPb3.1	0.06675	0.001887	416.4917	11.4284	0.503026	0.020107	413.0778	13.58739	0.020843	0.000569	416.9415	11.26971	0.055062	0.001547	401.1595	63.40131	15.05368	0.463883	1.601494	436.0007	272.5972	50.66007	0.537293	0.127405
UPb3.2	0.070848	0.001945	441.2094	11.6962	0.55015	0.017582	444.7763	11.54013	0.022256	0.000623	444.8937	12.31828	0.056476	0.001337	461.7198	53.54907	14.16932	0.379466	1.789116	544.4065	300.9532	59.39156	0.485741	0.537822
UPb3.3	0.070195	0.001819	437.2498	10.95453	0.639506	0.020211	501.2728	12.5403	0.024095	0.000628	481.2217	12.38801	0.065724	0.001408	791.7575	46.65531	14.26133	0.374074	1.181035	1236.993	1008.753	227.6893	0.505309	0.364621
UPb30.1	0.064579	0.001725	403.3317	10.4379	0.820742	0.054477	603.2363	31.03461	0.025489	0.000994	508.5825	19.57073	0.092586	0.005587	1372.061	119.5986	15.55515	0.42286	1.16282	838.7064	712.847	168.7128	0.262548	0.048844
UPb31.1	0.068532	0.001635	427.2614	9.877488	0.515746	0.016566	421.6991	11.10609	0.021449	0.000572	428.9321	11.32332	0.05457	0.001106	382.4596	45.62968	14.58235	0.325777	1.758496	425.9241	248.5952	48.63502	0.488916	0.182784
UPb32.1	0.071696	0.001789	446.2959	10.74536	0.584112	0.019945	466.1796	12.67295	0.023626	0.000758	471.9201	14.93845	0.058987	0.001228	566.8511	41.47184	13.98279	0.323883	1.473344	561.4176	380.2159	82.41886	0.61883	0.005776
UPb32.2	0.070533	0.001797	439.3178	10.81558	0.549606	0.018135	444.2734	11.81107	0.022087	0.00056	441.5661	11.0763	0.05685	0.00117	477.7409	44.78381	14.22566	0.359117	1.199143	709.5127	594.7382	117.9884	0.566806	0.045418
UPb33.1	0.069154	0.001723	431.0159	10.38922	0.522112	0.017001	426.1224	11.34622	0.021417	0.000561	428.2967	11.10768	0.05496	0.001104	402.4143	44.76481	14.5064	0.363534	1.188682	675.2035	582.5937	110.1965	0.594453	0.072876
UPb33.2	0.069272	0.001734	431.703	10.45696	0.526241	0.017019	428.6863	11.34242	0.021165	0.000537	423.3116	10.63333	0.054983	0.001029	401.9668	41.99171	14.50513	0.367214	1.656361	798.289	482.0884	94.47164	0.67756	-0.00229
UPb33.3	0.066663	0.00203	415.8666	12.27075	0.513618	0.016312	421.3639	11.4011	0.019785	0.000784	395.9042	15.57413	0.056304	0.00121	450.632	47.3517	15.19417	0.483769	1.808433	844.7412	446.853	78.11756	0.567452	0.703416
UPb35.1	0.068819	0.001762	428.9669	10.62988	0.52114	0.015927	425.4636	10.67506	0.021033	0.000529	420.704	10.46577	0.055048	0.001037	404.599	42.37083	14.57447	0.364503	1.685202	787.5516	475.1538	93.09239	0.619576	0.211288
UPb38.1	0.069351	0.002408	432.1549	14.50264	0.546853	0.025912	442.046	17.12528	0.021525	0.00067	430.4334	13.25939	0.057706	0.00173	507.3746	67.46822	14.51421	0.502946	1.497599	533.2517	358.1542	66.62759	0.699405	-0.05091
UPb39.1	0.065749	0.001812	410.3967	10.97302	0.744566	0.031573	562.372	18.46135	0.027816	0.00097	554.4189	19.04835	0.083467	0.004096	1205.935	100.0691	15.33957	0.446006	1.47717	866.8239	655.2677	169.0083	-0.50647	0.76968
UPb40.1	0.065435	0.001724	408.5175	10.4323	0.677824	0.032358	522.1581	19.10537	0.023374	0.000733	466.9436	14.45764	0.075652	0.003591	1024.191	86.747	15.38467	0.414643	1.317473	795.4506	642.6349	138.4333	-0.10211	0.490056
UPb42.1	0.064679	0.001488	403.988	9.008033	0.511065	0.016378	418.598	10.91218	0.019954	0.000527	399.3226	10.45135	0.057079	0.001254	480.8909	47.17504	15.49803	0.356056	1.855686	463.5802	252.7078	46.82535	0.470558	0.053881
UPb43.1	0.071707	0.001816	446.3558	10.90996	1.492785	0.193998	861.2529	73.40065	0.045714	0.004945	898.2232	94.74425	0.14875	0.017894	1954.111	216.6507	14.01757	0.349577	1.350762	1227.968	917.2742	435.0574	0.534944	-0.42785
UPb44.1	0.069115	0.001858	430.7252	11.19652	0.528557	0.016382	430.3405	10.92273	0.021267	0.000554	425.3233	10.9717	0.055482	0.000986	423.5037	39.24497	14.57206	0.393059	1.211107	837.331	692.9924	134.6475	0.706401	0.310858
UPb45.1	0.069733	0.001769	434.4762	10.65995	0.950986	0.070259	665.199	35.14513	0.025073	0.001064	500.3499	20.95332	0.09856	0.006553	1477.891	123.4728	14.41522	0.36681	1.095836	1159.219	1254.26	297.2395	0.446753	-0.2413

UPb46.1	0.070212	0.001774	437.3798	10.68713	0.542596	0.018996	439.4759	12.46956	0.022405	0.000719	447.8228	14.20279	0.056534	0.001475	458.1778	56.20402	14.29497	0.368141	1.690533	414.9391	246.8262	49.06461	0.481681	0.105435
UPb46.2	0.068107	0.002113	424.6492	12.76813	0.522416	0.021473	425.9102	14.35855	0.02101	0.000616	420.2327	12.19822	0.055593	0.001419	434.9329	61.01113	14.7117	0.443208	1.51011	568.9121	378.6514	70.89954	0.624743	0.089682
UPb47.1	0.070375	0.001907	438.3621	11.49159	0.542703	0.019013	439.7553	12.46791	0.021545	0.000594	430.8418	11.74063	0.056272	0.001027	458.21	41.28468	14.26168	0.394135	1.341821	1142.315	858.2132	162.8375	0.816904	-0.07277
UPb48.1	0.065186	0.00159	407.0372	9.616336	0.502358	0.015219	412.8908	10.18528	0.02003	0.000492	400.8382	9.741109	0.055816	0.000912	438.7382	36.22612	15.40142	0.373715	1.115363	1237.295	1115.713	206.3328	0.697653	0.118349
UPb49.1	0.067846	0.001713	423.0986	10.34071	0.514799	0.016154	421.1458	10.83664	0.020997	0.000534	419.9844	10.58088	0.055095	0.00089	418.2031	36.0048	14.77803	0.360164	1.289652	1097.715	872.4602	170.0001	0.801693	-0.06148
UPb5.1	0.068588	0.001592	427.6082	9.59254	0.527161	0.017264	429.2613	11.46048	0.021551	0.000549	430.9489	10.85366	0.055865	0.001185	440.1943	45.30947	14.6172	0.332952	1.565734	493.3932	316.5701	63.36365	0.543935	0.064184
UPb5.2	0.051707	0.001591	324.897	9.75353	0.452675	0.016634	378.26	11.65757	0.020097	0.000625	402.1386	12.37463	0.063318	0.001135	710.9935	38.16537	19.59184	0.617457	3.891264	1723.49	410.3666	77.12849	0.877019	-0.11632
UPb50.1	0.067958	0.002373	423.7268	14.32251	0.526481	0.021377	428.7792	14.0779	0.020732	0.000538	414.7406	10.65717	0.056542	0.001195	467.0417	47.54309	14.84906	0.531343	1.130502	882.6781	778.7093	143.7091	0.82764	0.17399
UPb51.1	0.063761	0.00158	398.4045	9.572715	0.502604	0.01529	413.039	10.2818	0.019558	0.000486	391.4875	9.63635	0.0569	0.000918	481.4997	35.95045	15.68752	0.392638	1.293666	927.4487	708.0508	127.8619	0.762581	0.15554
UPb52.1	0.063082	0.00201	394.1754	12.22015	0.587786	0.021508	468.2397	13.58333	0.022522	0.000664	450.125	13.10355	0.066919	0.002869	786.4657	77.05916	15.82632	0.433478	1.593161	1145.433	689.564	150.0533	-0.13495	0.788601
UPb53.1	0.068042	0.001862	424.3133	11.22698	0.528075	0.018815	430.1963	12.44815	0.020849	0.000537	417.0732	10.62998	0.056803	0.001344	477.2526	52.04276	14.73564	0.392286	1.225717	1372.02	1119.301	204.5713	0.556757	0.151116
UPb54.1	0.0679	0.001548	423.4641	9.343215	0.520853	0.016497	425.1614	11.00242	0.02097	0.000541	419.4515	10.7137	0.055604	0.001167	423.5179	47.26519	14.75987	0.338392	1.395875	485.0165	351.486	68.53326	0.408321	0.119539
UPb54.2	0.064353	0.001587	401.9956	9.605139	0.523726	0.015125	427.3208	10.04557	0.020178	0.000517	403.7654	10.23265	0.058787	0.000854	555.0054	31.59014	15.60635	0.384795	1.351693	1397.443	1032.045	194.4608	0.860213	-0.03944
UPb55.1	0.067574	0.001646	421.4701	9.941887	0.567227	0.019248	455.3448	12.48913	0.023009	0.000668	459.7554	13.18972	0.060869	0.001444	617.3479	52.45015	14.82863	0.350798	1.763501	535.2837	306.9747	64.74749	0.475921	0.104788
UPb55.2	0.066901	0.001771	417.3765	10.70452	0.631692	0.02086	496.2651	12.96695	0.024529	0.000666	489.7669	13.13988	0.068326	0.001381	878.3447	43.1153	15.04915	0.407134	1.63683	740.5526	445.4892	101.2955	0.623317	0.181414
UPb57.1	0.067266	0.002706	419.5781	16.34141	0.543205	0.031843	439.5598	20.95416	0.021469	0.000882	429.3072	17.44377	0.059308	0.002379	565.8658	84.08406	14.96405	0.602228	1.753652	595.7842	342.2219	63.6812	0.6775	-0.06216
UPb57.2	0.066208	0.001846	413.1648	11.15248	1.170121	0.049142	782.6456	22.95038	0.031126	0.000799	619.5064	15.65871	0.128331	0.00422	2048.876	60.30729	15.2294	0.42196	1.146809	1154.735	991.9765	290.2408	0.428277	0.256431
UPb6.1	0.069388	0.001995	432.3886	12.02581	0.539938	0.020578	437.6265	13.56325	0.021453	0.000707	431.4999	15.53409	0.056792	0.001479	470.2695	57.22635	14.42952	0.387507	1.539647	503.4469	360.596	67.11373	0.577624	0.16192
UPb60.1	0.067989	0.001624	423.981	9.799531	0.511697	0.015708	419.1192	10.54849	0.021	0.000532	420.0539	10.52212	0.054614	0.000966	387.9148	40.34147	14.75996	0.354905	1.424155	663.0524	463.4339	90.50401	0.607149	0.034073
UPb61.1	0.065411	0.001678	408.3824	10.14728	0.68389	0.029515	526.6023	17.47377	0.025211	0.000847	503.1644	16.67651	0.076675	0.003261	1060.336	82.2614	15.34335	0.404762	1.347082	963.1611	718.8236	170.4057	-0.00334	0.37938
UPb63.1	0.068871	0.001726	429.2841	10.41482	0.641771	0.027619	503.2946	17.44064	0.023167	0.000674	462.8804	13.30789	0.068121	0.002619	827.9263	78.90202	14.55668	0.359224	1.147597	560.2826	493.7965	108.0724	0.215101	0.218935
UPb64.1	0.071096	0.001705	443.5068	9.818034	0.550251	0.01803	444.464	11.82072	0.022674	0.000649	453.1454	12.81596	0.056067	0.001097	450.9048	40.92356	14.08479	0.330951	1.635512	602.8319	369.3746	77.79708	0.625691	-0.09072
UPb65.1	0.067358	0.002741	420.1076	16.55027	0.533598	0.023116	433.6491	15.37038	0.0207	0.00058	414.1226	11.49696	0.058364	0.001362	538.0664	50.63282	14.97523	0.617162	1.67982	867.6265	521.585	92.7567	0.844424	0.280269
UPb68.1	0.065618	0.001677	409.6328	10.14781	0.960094	0.074782	687.6017	40.74232	0.030633	0.001448	609.5026	28.26749	0.107188	0.007496	1695.907	118.7103	15.32623	0.401635	1.354032	1024.483	762.862	222.8034	0.51251	-0.35902
UPb7.1	0.059047	0.001534	369.7649	9.346094	0.738395	0.027039	559.8099	15.90117	0.022835	0.000667	456.3208	13.17661	0.09141	0.002736	1432.127	55.62105	17.04292	0.460575	1.473784	519.5383	417.6242	83.99448	0.261877	0.391698
UPb7.2	0.063416	0.001732	396.285	10.495	0.563461	0.021547	452.5374	13.85179	0.020315	0.000575	406.481	11.38378	0.064225	0.001874	735.0885	60.5939	15.77968	0.422367	1.89852	653.0098	372.7076	69.54864	0.338743	0.284678
UPb70.1	0.065904	0.002146	411.3758	12.97036	0.493229	0.020469	406.6521	13.83938	0.019798	0.000514	396.2578	10.18769	0.054989	0.001317	405.5936	52.95253	15.2451	0.49511	1.276647	1157.682	924.173	159.5224	0.770524	-0.04968
UPb71.1	0.066382	0.00172	414.2503	10.41102	0.52144	0.017146	425.4327	11.4425	0.020031	0.000557	401.7918	11.53545	0.057067	0.001166	487.7596	44.20133	15.15846	0.414139	1.248821	510.1692	425.8671	77.45328	0.611141	0.195609
UPb71.2	0.068681	0.001704	428.1432	10.26911	0.525478	0.015745	428.394	10.43912	0.020645	0.000521	413.0222	10.30869	0.0555	0.00088	430.2407	36.73772	14.59505	0.372746	1.225007	958.1193	805.3712	153.5997	0.758812	0.12446
UPb71.3	0.062045	0.001559	388.8522	9.88572	0.501042	0.014925	412.0334	10.11427	0.018989	0.000486	380.1991	9.632812	0.058518	0.000906	547.5842	32.60506	16.16568	0.419632	1.478434	1390.009	921.0725	164.2387	0.747596	0.11697
UPb72.1	0.065782	0.001631	410.6397	9.848764	0.561166	0.019243	451.3812	12.46083	0.02172	0.000559	434.3006	11.05383	0.061985	0.001733	659.1802	60.61845	15.26907	0.366007	1.403139	487.4642	357.7213	71.28181	-0.00973	0.526642
UPb72.2	0.070242	0.001774	437.5409	10.67824	0.553868	0.017824	446.8666	11.69312	0.021745	0.000546	434.7961	10.79184	0.057499	0.00106	501.6594	40.93366	14.2786	0.37244	1.346423	851.7849	629.2556	127.4487	0.73783	-0.0487
UPb73.1	0.06646	0.001661	414.7313	10.04286	0.616087	0.019712	487.8569	12.80837	0.023485	0.000626	469.1653	12.37077	0.06646	0.001467	823.228	50.85566	15.08325	0.366929	1.567735	721.9264	483.7988	103.0641	-0.02921	0.596942
UPb74.1	0.06851	0.001629	427.1299	9.825621	0.643791	0.01996	503.9919	12.31145	0.022268	0.000581	445.13	11.47328	0.068211	0.00119	867.9684	35.93937	14.64504	0.348902	1.329393	1507.533	1163.419	239.9808	0.680247	-0.05844
UPb75.1	0.067117	0.001889	418.6527	11.42729	0.526184	0.017956	428.4807	11.92633	0.020868	0.00063	417.4166	12.46325	0.056996	0.00116	479.6541	45.12271	15.03801	0.450903	1.273809	561.9945	474.6787	87.20787	0.692861	0.235448
UPb75.2	0.063621	0.001498	397.5729	9.081333	0.495638	0.01381	408.5264	9.398371	0.018629	0.000471	373.0523	9.350053	0.056529	0.000786	469.5455	30.95241	15.7669	0.380319	1.393249	1970.313	1416.725	248.1154	0.787541	0.07966
UPb76.1	0.068686	0.001962	428.162	11.82929	0.535878	0.021293	434.8685	13.90427	0.021114	0.000548	422.306	10.84911	0.056624	0.001235	477.3379	44.23515	14.58306	0.443631	1.480092	747.6109	513.7646	97.06255	0.80689	-0.14068
UPb78.1	0.069918	0.002207	435.5536	13.28786	0.536303	0.020537	435.259	13.58775	0.021141	0.000563	422.8347	11.14392	0.05594	0.001153	442.3778	47.03214	14.41441	0.457433	1.338081	608.0099	458.5349	86.35345	0.807966	0.056937
UPb78.2	0.061154	0.001568	382.5791	9.523625	0.483662	0.014238	400.2579	9.71688	0.015032	0.000846	301.4384	16.85098	0.057203	0.000866	494.4736	33.40356	16.442	0.42242	1.583531	1329.171	885.7052	121.9722	0.76725	0.147218
UPb79.1	0.068878	0.001661	429.3435	10.02189	0.526468	0.016807	428.8622	11.13764	0.021251	0.000566	425.0041	11.19295	0.055212	0.001115	409.0443	44.52901	14.54331	0.339284	1.502514	512.7486	341.344	66.65475	0.439566	0.169651
UPb79.2	0.042009	0.001627	265.1326	10.08754	0.368445	0.013372	317.8538	10.00821	0.011912	0.000477	239.3164	9.524528	0.063876	0.001384	731.9571	42.38502	24.59422	1.193159	1.421747	2042.542	1370.736	150.2283	0.853583	0.550337
UPb8.1	0.068577	0.0018	427.4905	10.8696	0.629564	0.027851	493.3466	17.03232	0.023075	0.000852	460.9925	16.82285	0.066101	0.001899	792.6729	61.03011	14.6806	0.399992	1.332798	584.9966	457.8969	94.98112	0.617177	-0.19367
UPb8.2	0.070627	0.002206	439.7437	13.25567	0.597679	0.025229	473.7714	15.78859	0.023733	0.000947	473.9562	18.66072	0.061064	0.001417	625.5994	50.02694	14.34158	0.429348	1.459268	411.8165	299.6605	62.4918	0.824166	-0.07836
UPb80.1	0.069076	0.001747	430.5405	10.53499	0.534582	0.01844	434.2821	12.16015	0.021299	0.000585	425.9639	11.5853	0.056035	0.001233	443.5553	50.1234	14.5263	0.373616	1.452743	656.9306	480.618	91.51934	0.460078	0.142295
UPb80.2	0.06868	0.001761	428.1608	10.62895	0.553556	0.019913	446.7541	13.02352	0.02075	0.000529	415.1082	10.47588	0.058702	0.001351	547.3072	49.55568	14.55326	0.346918	1.217746	1152.39	941.5768	174.7579	0.566389	0.024388
UPb83.1	0.052509	0.002385	329.5919	14.61689	0.469433	0.016437	390.0303	11.356	0.015563	0.00079	312.0141	15.71994	0.065833	0.002033	774.8482	59.54843	19.88388	0.982302	1.582544	862.066	548.7057	82.57584	0.761361	0.819835
UPb84.1	0.0686	0.002157	427.6447	13.00473	0.515665	0.021307	421.6326	14.1566	0.020481	0.000569	409.776	11.27448	0.054865	0.001421	397.5712	57.03696	14.65637	0.459339	1.142161	726.6601	634.8028	115.7317	0.708164	0.062993
UPb85.1	0.063725	0.001774	398.1443	10.75706	0.512266	0.018083	419.073	12.12952	0.018952	0.000902	379.3217	17.87079	0.058271	0.001289	532.7031	47.60056	15.83121	0.459474	1.017275	888.3201	1213.385	218.1566	0.60527	0.031327
UPb87.1	0.068221	0.002242	425.3879	13.53838	0.525099	0.018303	428.3895	12.19386	0.02105	0.00067	421.044	13.25565	0.056635	0.001404	473.0261	54.09897	14.70233	0.494917	1.467562	1616.912	1104.168	197.7773	0.611344	0.523051
UPb9.1	0.070874	0.001783	441.3514	10.72827	0.538107	0.017022	437.7091	11.6524	0.022023	0.000564	440.2853	11.14478	0.055208	0.001175	407.4527	47.191	14.14353	0.337414	1.370303	470.8396	351.6272	71.42471	0.481362	0.255618
UPb9.2	0.068886	0.002402	429.3779	14.48919	0.545257	0.029303	440.987	19.26398	0.02182	0.000679	436.2755	13.42997	0.057905	0.002097	513.9012	80.03359	14.58952	0.519695	1.485512	514.5484	346.61	66.99847	0.683363	-0.15366
Z_91500																									
91500-1	0.178844	0.004087	1060.484	22.38264	1.828788	0.059353	1055.657	22.13191	0.054033	0.001741	1063.315	33.40468	0.074515	0.001836	1045.435	47.99896	5.5936	0.121759	2.703651	78.6802	29.16608	14.66575	0.274724	0.306508
91500-2	0.178761	0.003977	1060.08	21.73706	1.867861	0.060871	1067.369	21.71598	0.052673	0.001694	1037.251	32.4789	0.075559	0.001713	1069.337	47.04337	5.603116	0.1242	2.651099	79.88675	30.26833	14.90658	0.313427	0.119603
91500-3	0.17999	0.004096	1066.759	22.33803	1.853576	0.058751	1062.639	20.90806	0.054446	0.001653	1071.306	31.69908	0.07451	0.001707	1040.85	47.53235	5.567815	0.124592	2.651555	81.94141	30.9262	15.66572	0.159547	0.311987
91500-4	0.180114	0.004076	1067.446	22.27056	1.86484	0.063511	1065.838	22.49789	0.053515	0.001581	1053.507	30.32939	0.075274	0.002032	1055.518	54.34106	5.555161	0.120698	2.669622	79.40262	29.7344	14.8089	0.045382	0.340687
91500-5	0.178745	0.004028	1059.971	22.0409	1.862583	0.063411	1064.996	22.75961	0.054709	0.00168	1076.343	32.17976	0.075737	0.002008	1076.367	52.09126	5.605445	0.127884	2.676362	79.7683	29.81306	15.14414	0.106269	0.271433
91500-6	0.178828	0.003993	1060.448	21.83361	1.827939	0.060021	1053.19	21.51147	0.052996	0.001622	1043.508	31.10099	0.073948	0.001748	1031.011	49.88427	5.601258	0.125339	2.657963	80.36716	30.23488	14.95041	0.179262	0.198953
91500-7	0.180626	0.004101	1070.241	22.38735	1.85554	0.063855	1062.501	22.73756	0.05333	0.001572	1049.962	30.16769	0.074531	0.001958	1037.003	53.69296	5.547624	0.12617	2.657613	79.16101	29.81669	14.84379	0.208506	0.221046
91500-8	0.18007	0.004107	1067.186	22.46351	1.857317	0.060083	1065.728	22.17761	0.05369	0.001716	1056.761	32.92282	0.075155	0.00184	1056.346	49.20647	5.566162	0.129791	2.657548	79.284	29.85085	14.88895	0.210128	0.28836
91500-9	0.177471	0.003934	1053.03	21.55321	1.835635	0.057735	1056.343	20.58283	0.054207	0.001568	1066.787	30.06437	0.074859	0.001715	1056.796	44.64952	5.643479	0.126888	2.675374	84.56202	31.58507	16.0108	0.116244	0.319099
91500-10	0.178499	0.003967	1058.649	21.67118	1.858271	0.063299	1063.444	22.69882	0.053549	0.001708	1054.06	32.81832	0.075518	0.001931	1078.631	48.53817	5.611091	0.122967	2.792464	72.50044	26.25649	13.05011	0.200013	0.169356
91500-11	0.180235	0.003961	1068.161	21.63675	1.852505	0.066057	1060.91	23.37394	0.054585	0.001734	1073.913	33.21459	0.074221	0.002054	1032.715	57.49287	5.555629	0.122514	2.65978	81.97959	31.05146	15.58828	0.034271	0.265988
91500-12	0.178394	0.00404	1058.045	22.07661	1.84839	0.060992	1060.328	21.89532	0.053175	0.001703	1046.872	32.64674	0.075024	0.001855	1051.919	50.99367	5.617007	0.126104	2.623741	84.76566	32.59281	16.11198	0.207457	0.228095

91500-13	0.180642	0.003958	1070.39	21.60271	1.880591	0.06636	1070.94	23.54197	0.054354	0.001684	1069.529	32.27755	0.075299	0.002015	1064.587	52.15559	5.542579	0.121005	2.668639	79.28468	29.74376	14.97123	0.223172	0.08375
91500-14	0.176819	0.003884	1049.479	21.28375	1.820928	0.056536	1051.205	20.26258	0.053296	0.001621	1049.255	31.11595	0.074565	0.001679	1049.531	46.6371	5.662979	0.12547	2.6652	82.68839	31.15175	15.49937	0.457084	-0.0116
91500-15	0.180355	0.004003	1068.8	21.85119	1.860386	0.060587	1064.819	21.40921	0.0535	0.001546	1053.241	29.63161	0.074707	0.001917	1050.038	50.20457	5.553071	0.122862	2.653396	80.54353	30.42352	15.07746	-0.04992	0.392797
91500-16	0.17799	0.003951	1055.872	21.61038	1.843866	0.061872	1058.574	22.08709	0.053615	0.001644	1055.383	31.53467	0.07509	0.002044	1050.062	55.11275	5.619276	0.131057	2.605136	85.66543	33.33048	16.81173	-0.06793	0.414492
91500-17	0.179988	0.003998	1066.799	21.86242	1.850309	0.061648	1061.057	22.12337	0.053903	0.001678	1060.885	32.11462	0.074707	0.001907	1050.41	51.43537	5.564314	0.125574	2.578439	92.7806	36.5683	18.5303	0.288561	0.178382
91500-18	0.180233	0.00414	1068.064	22.59629	1.872824	0.068731	1067.644	24.03695	0.054271	0.00198	1073.025	35.54155	0.075121	0.002076	1065.208	54.14136	5.553872	0.132434	2.994869	65.27432	22.44792	11.18392	0.281374	0.096463
91500-19	0.176066	0.003987	1045.303	21.83611	1.794491	0.061224	1040.703	22.07884	0.053168	0.001661	1046.791	31.85648	0.07356	0.001894	1018.618	54.34769	5.691087	0.128195	2.679443	79.62997	29.73167	14.85556	0.067889	0.30573
91500-20	0.18116	0.004049	1073.176	22.06687	1.87732	0.063761	1070.224	22.25885	0.05374	0.001675	1057.735	32.12613	0.075203	0.001911	1055.329	52.21284	5.529605	0.121819	2.64302	81.56111	30.86621	15.51597	0.225546	0.132588
91500-21	0.179696	0.004086	1065.148	22.34312	1.875888	0.062785	1069.842	22.44061	0.054094	0.00167	1064.551	32.03332	0.076021	0.001988	1083.541	51.19485	5.577332	0.128636	2.656226	80.67736	30.30569	15.19738	0.15235	0.313399
91500-22	0.179826	0.004106	1065.853	22.43985	1.821818	0.064211	1052.797	22.08334	0.054737	0.001655	1076.901	31.68751	0.0733	0.002016	1017.699	52.02253	5.573564	0.128341	2.671712	79.30242	29.65671	15.0413	0.184092	0.232829
91500-23	0.177408	0.003991	1052.662	21.84305	1.831104	0.057978	1056.853	21.92701	0.053297	0.001601	1049.299	30.71955	0.075044	0.001903	1060.465	49.25643	5.647202	0.127029	2.672697	81.35706	30.39757	15.20845	0.136699	0.300746
91500-24	0.180449	0.004053	1069.286	22.11911	1.890376	0.061001	1075.373	21.62996	0.053376	0.001565	1050.847	30.03277	0.075813	0.001798	1074.148	49.56247	5.544865	0.129355	2.658119	79.07227	29.76399	14.71852	0.168377	0.291504
Z_Plesovice																								
PLE-1	0.056168	0.001508	352.2113	9.191293	0.411094	0.014278	349.0381	10.13077	0.017169	0.000576	344.0405	11.44837	0.052812	0.001155	305.9233	48.75731	17.88731	0.485616	10.28837	654.611	63.71446	10.14103	0.363212	0.213364
PLE-2	0.054359	0.00141	341.1752	8.616563	0.403042	0.01613	342.9285	10.91271	0.018617	0.002063	371.9127	39.44154	0.05376	0.001895	330.3545	60.72113	18.50477	0.474396	10.30211	674.8319	65.48015	10.96098	-0.37527	0.768053
PLE-3	0.054915	0.001322	344.5906	8.06897	0.40088	0.013278	341.7988	9.368155	0.018936	0.00254	377.7063	48.08407	0.055611	0.004259	328.8149	54.72064	18.27733	0.429306	10.27459	681.6466	66.37528	11.51418	-0.2179	0.950115
PLE-4	0.05437	0.001381	341.2473	8.440657	0.394494	0.013545	337.091	9.722264	0.017495	0.001209	350.2571	23.57879	0.052759	0.001191	302.9024	49.34996	18.49018	0.465746	10.33464	634.0202	61.25896	10.12631	0.365031	-0.15194
PLE-5	0.053743	0.00138	337.4111	8.436748	0.400066	0.013565	341.1492	9.751543	0.018216	0.001808	364.1429	34.84089	0.054447	0.001427	370.449	51.06481	18.71321	0.47602	10.40552	635.3829	60.97473	10.13821	-0.06029	0.565872
PLE-6	0.055986	0.00142	351.1206	8.664486	0.415748	0.016134	352.0729	11.13076	0.018357	0.001512	367.17	29.24229	0.053866	0.001447	345.7368	50.99829	17.90626	0.42698	10.3653	635.7631	61.31043	10.18224	0.005129	0.476258
PLE-7	0.054355	0.001434	341.1449	8.759077	0.401834	0.013907	342.3747	9.942124	0.017341	0.000778	347.3788	15.33314	0.05356	0.001354	322.4178	42.74978	18.51853	0.476993	10.30898	644.0636	62.49625	10.11979	0.131822	0.22926
PLE-8	0.054883	0.001459	344.372	8.901358	0.40215	0.014151	342.5693	10.02482	0.018574	0.002324	370.7623	44.31229	0.053703	0.001569	336.8664	51.4345	18.34328	0.470059	10.26332	647.2058	63.041	10.78944	-0.00919	0.859601
PLE-9	0.055005	0.001438	345.1221	8.773821	0.41218	0.016067	347.0867	9.173635	0.018619	0.001714	372.2055	33.0261	0.055284	0.002319	365.6223	50.09272	18.29354	0.461144	10.22604	656.8751	64.8873	10.85121	0.103743	0.907491
PLE-10	0.054471	0.001476	341.8442	9.022742	0.399011	0.013829	340.3269	10.02219	0.018048	0.001481	361.0633	28.72566	0.053468	0.0014	328.9499	52.19669	18.49961	0.504797	10.25798	661.1207	64.84617	10.5925	-0.00988	0.761843
PLE-11	0.054851	0.001416	344.1872	8.645415	0.402813	0.013223	343.212	9.508175	0.017042	0.000583	341.5097	11.58621	0.05336	0.001137	330.1695	48.16976	18.33678	0.468896	10.21036	662.4145	65.34206	10.27609	0.565902	0.083365
PLE-12	0.054491	0.001384	341.9912	8.456109	0.403161	0.012937	343.5086	9.293599	0.017393	0.00073	348.4489	14.4216	0.053852	0.001106	352.0521	46.38302	18.45119	0.475478	10.17859	671.6291	66.24778	10.51339	0.642655	0.174487
PLE-13	0.054676	0.00136	343.1247	8.313323	0.403527	0.012949	343.7804	9.315961	0.0173	0.00061	346.6277	12.10713	0.053643	0.001103	343.632	45.8351	18.33937	0.476698	10.24816	634.8481	62.42144	10.01271	0.591753	0.041951
PLE-14	0.05383	0.001307	337.9561	7.99658	0.406029	0.015112	345.228	10.52761	0.018305	0.001593	366.0743	30.78217	0.054628	0.001409	378.0091	51.08592	18.65404	0.464561	10.3449	650.6344	62.80854	10.4481	-0.01649	0.463231
PLE-15	0.053736	0.001347	337.3728	8.23171	0.390779	0.013818	334.2961	10.10088	0.018675	0.002168	372.9253	41.41063	0.054606	0.002446	333.9446	50.95036	18.70059	0.456201	10.29369	656.3948	64.05126	10.70164	0.014863	0.506531
PLE-16	0.054856	0.001396	344.2218	8.524559	0.394857	0.012748	337.4912	9.261267	0.017311	0.000569	346.8666	11.2944	0.05228	0.001091	290.6051	50.62035	18.28812	0.474693	10.15956	687.7635	68.54481	10.9817	0.543643	0.170695
PLE-17	0.054663	0.001456	343.0279	8.903528	0.407684	0.014616	346.5021	10.44183	0.018115	0.001486	362.3927	28.82289	0.053991	0.001302	353.5551	50.08469	18.38492	0.517779	10.10536	689.5208	69.11791	11.37053	0.149743	0.1684
PLE-18	0.054345	0.001396	341.0927	8.524416	0.402352	0.015879	342.4438	10.84761	0.017502	0.001322	350.316	25.70036	0.053783	0.001354	343.3359	51.80794	18.50405	0.462685	10.12015	702.1616	70.36782	11.26042	0.115839	0.289268
PLE-19	0.055128	0.001386	345.8823	8.460702	0.410054	0.013801	348.3717	9.909975	0.017197	0.000617	344.5759	12.26177	0.053853	0.001213	354.6841	54.13804	18.22745	0.446129	10.29245	623.0972	60.9834	9.706126	0.517246	0.121876
PLE-20	0.053723	0.001306	337.3055	7.993207	0.39874	0.01347	340.1928	9.692962	0.01711	0.000839	342.7651	16.53278	0.053646	0.001201	340.8697	48.82481	18.62012	0.497906	10.36737	625.2221	60.28111	9.652155	0.404068	-0.18454
PLE-21	0.054806	0.001352	344.6623	8.650833	0.407334	0.016071	346.0108	11.01758	0.017906	0.001501	358.2224	29.06829	0.053782	0.001344	343.4661	51.07959	18.24313	0.427977	10.44521	636.3627	60.98782	9.910852	0.297801	-0.06004
PLE-22	0.055456	0.001426	347.8795	8.700027	0.410057	0.015641	348.0492	10.95013	0.017808	0.001008	356.561	19.76204	0.053212	0.001279	319.995	51.73729	18.01467	0.470401	10.43799	623.8931	59.90984	9.99938	0.365886	0.015706
PLE-23	0.054882	0.001367	344.3853	8.354211	0.406093	0.013725	345.5038	9.865072	0.017386	0.000862	348.2438	16.95266	0.053461	0.001093	335.7421	46.09326	18.23059	0.498839	10.44489	621.7062	59.5062	9.653436	0.563502	-0.28918
PLE-24	0.054331	0.001332	341.0219	8.139014	0.398373	0.012799	340.0567	9.26654	0.017766	0.000602	355.8893	11.94021	0.05314	0.001096	322.0543	47.22385	18.44156	0.429978	10.50464	608.9316	58.20909	9.556478	0.521939	0.128336
Z_Temora2																								
TEM-1	0.170868	0.00609	1015.509	33.4509	13.22188	0.592611	2681.351	41.47017	0.11195	0.004959	2141.381	89.66834	0.558699	0.017264	4393.831	47.3395	5.972314	0.214985	0.375231	10.27219	27.98355	27.43714	0.607047	0.318704
TEM-2	0.068141	0.00156	424.9173	9.421474	0.518798	0.018382	423.4548	12.31544	0.021372	0.000622	427.3968	12.30538	0.054531	0.001349	388.5914	61.78648	14.70885	0.344245	2.201363	321.4056	152.6842	30.1057	0.31552	0.123616
TEM-3	0.066331	0.001486	413.993	8.981332	0.530285	0.023876	429.9418	15.79655	0.022231	0.000737	444.3586	14.57865	0.057891	0.002317	468.8095	91.60883	15.10205	0.339227	2.355935	125.4334	52.61478	10.92526	-0.01727	0.244117
TEM-4	0.067816	0.001518	422.9589	9.164062	0.514505	0.015816	421.0113	10.59557	0.021923	0.000694	438.2681	13.7174	0.055019	0.001134	400.4053	47.1403	14.77123	0.329389	4.856511	293.0001	60.34877	12.36566	0.205499	0.248728
TEM-5	0.066425	0.001504	414.5574	9.095137	0.50167	0.019205	411.6526	13.082	0.020813	0.000642	416.3085	12.71889	0.055191	0.001713	397.5664	68.73935	15.08538	0.346649	1.981469	193.424	98.0032	18.95627	0.251036	0.138249
TEM-6	0.066178	0.001501	413.0659	9.073403	0.50167	0.020896	411.3516	14.17418	0.020621	0.000629	412.5299	12.45121	0.0551	0.002041	382.5338	83.13146	15.14032	0.340085	1.956843	136.3115	69.99212	13.53933	-0.08795	0.355439
TEM-7	0.069605	0.001654	433.7332	9.967693	0.547836	0.019631	442.5404	13.03606	0.022187	0.00072	443.4933	14.24308	0.057083	0.001691	476.7952	64.4609	14.41355	0.343919	3.07749	158.4511	51.44601	10.62661	0.118776	0.361659
TEM-8	85.86038	50.79377	29479.45	931.7361	10195.21	5769.227	9471.272	147.2397	-3.8E+07	10219969	111409.9	2837.42	0.851752	0.016278	4922.084	19.73128	0.012002	0.001819	-170095	0.05377	0.028337	99.12627	0.999095	0.158286
TEM-9	0.067946	0.001672	423.7138	10.08706	0.521868	0.027539	423.3321	17.93743	0.021557	0.000945	430.9326	18.67812	0.055788	0.002687	379.3563	103.2734	14.78107	0.364344	2.666349	75.59641	30.01883	5.925984	0.167731	-0.00455
TEM-10	0.067036	0.001646	418.2208	9.943541	0.519207	0.016271	424.0931	10.89375	0.020788	0.000556	415.8382	11.01202	0.055857	0.00106	441.9556	44.22237	14.91459	0.363338	3.612751	535.456	149.0765	29.07209	0.563173	0.178874
TEM-11	0.067395	0.001552	420.4114	9.376499	0.520971	0.017105	425.1562	11.36904	0.020776	0.00054	415.6178	10.69273	0.05572	0.001276	431.9134	52.9323	14.82251	0.382622	1.48355	415.946	300.2018	57.0581	0.309423	0.252544
TEM-12	0.066555	0.001547	415.3312	9.354428	0.506518	0.02067	414.6528	13.87592	0.021142	0.000745	422.7963	14.74324	0.055187	0.001893	377.724	79.50252	15.03937	0.336469	2.928621	126.9222	43.94387	8.612351	0.11816	0.193335
TEM-13	0.066272	0.001489	414.1868	9.400739	0.510793	0.017163	418.2569	11.47667	0.021363	0.000636	427.2188	12.5824	0.055772	0.001467	430.5429	54.70663	15.09856	0.350491	2.708307	239.5038	88.17089	17.86381	0.132725	0.30274
TEM-14	0.066055	0.001489	412.3188	9.007011	0.522093	0.019456	425.4295	12.97323	0.020886	0.000696	417.7516	13.77977	0.056914	0.001697	477.5792	66.87708	15.16815	0.343872	4.334061	162.4646	36.9786	7.213913	0.29833	0.003403
TEM-15	0.066294	0.001524	413.7623	9.212464	0.514861	0.019772	420.5043	13.24538	0.020182	0.000643	403.8175	12.74589	0.056167	0.001769	433.6445	74.1333	15.11994	0.345063	2.24969	198.6384	87.70874	16.42298	0.163457	0.204839
TEM-16	0.065639	0.001555	409.7928	9.406977	0.504148	0.026429	411.6308	17.78823	0.020096	0.00077	402.0623	15.25405	0.055524	0.002583	365.4208	112.7325	15.28248	0.361495	2.842932	84.7429	30.33913	5.686793	0.073677	0.206087
TEM-17	0.065531	0.001508	409.1439	9.125916	0.506992	0.022364	414.6047	14.98183	0.020201	0.000745	404.1623	14.75697	0.056183	0.002131	410.3154	84.40394	15.2971	0.355903	2.96499	138.5875	47.24505	8.971608	0.170494	0.138972
TEM-18	0.068704	0.001645	428.299	9.925505	0.53758	0.024162	434.6837	16.26166	0.021028	0.000785	420.533	15.53786	0.057117	0.002399	479.5313	88.13904	14.60588	0.35263	3.036585	107.4384	35.84602	6.931073	-0.1121	0.422309
TEM-19	0.066467	0.001578	414.7959	9.533884	0.501683	0.021739	411.1582	14.5969	0.020228	0.000694	404.7177	13.75161	0.054847	0.002062	358.0007	83.52137	15.09296	0.358743	1.935372	99.34991	51.43575	9.711368	0.156656	0.141092
TEM-20	0.068543	0.001515	427.3492	9.141061	0.527651	0.017032	429.6039	11.31878	0.021767	0.000609	435.207	12.04532	0.055617	0.001335	418.5729	53.61772	14.61126	0.327037	2.24279	329.6754	152.3358	31.11615	0.078302	0.340551
TEM-21	0.06841	0.001717	426.5031	10.34318	0.518412	0.016871	423.4415	11.35409	0.0207	0.000568	414.104	11.24298	0.055033	0.001122	407.2458	44.88821	14.65788	0.367694	2.549993	475.8069	188.8715	36.25619	0.664839	-0.00928
TEM-22	0.067317	0.001546	419.9407	9.339242	0.517201	0.022532	423.2877	15.5501	0.020853	0.000783	417.0645	15.49282	0.055594	0.002092	397.3005	89.70285	14.89107	0.344142	2.98759	95.5805	32.17495	6.235842	0.081366	0.214477
TEM-23	0.066748	0.001598	416.4897	9.657106	0.520153	0.026253	422.5284	17.396	0.021133	0.000765	422.6103	15.14939	0.056297	0.002407	413.497	94.61826	15.03368	0.360979	2.846789	71.73054	25.44221	4.977347	0.309519	-0.02906
TEM-24	0.067436	0.0015	420.6677	9.063366	0.511524	0.018573	418.4887	12.51678	0.020904	0.000652	418.1264	12.904	0.054962	0.001558	394.4074	61.83811	14.85252	0.334183	2.764725	247.8145	92.88712	17.71063	0.194575	0.108156

Mass Spectrometer Files

File	File start time	File end time	Time file loaded	No of data points	No of channels	Channels	Samples
C:/Users/Supervisor/Docum	2023-07-05 10:24:26.000	2023-07-05 10:25:26.980	2023-08-21 09:34:29.361	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-1
C:/Users/Supervisor/Docum	2023-07-05 13:40:37.000	2023-07-05 13:41:37.980	2023-08-21 09:34:34.313	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-18
C:/Users/Supervisor/Docum	2023-07-05 15:06:21.000	2023-07-05 15:07:21.979	2023-08-21 09:34:39.493	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_27.1
C:/Users/Supervisor/Docum	2023-07-05 12:37:17.000	2023-07-05 12:38:17.980	2023-08-21 09:34:30.757	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-11
C:/Users/Supervisor/Docum	2023-07-05 10:59:22.000	2023-07-05 11:00:22.980	2023-08-21 09:34:41.770	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-5
C:/Users/Supervisor/Docum	2023-07-05 10:51:47.000	2023-07-05 10:52:47.980	2023-08-21 09:34:39.555	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_UPb_004.2
C:/Users/Supervisor/Docum	2023-07-05 13:54:51.000	2023-07-05 13:55:51.979	2023-08-21 09:34:35.187	210	9	Si29,Hg200,Pb204,Pb206,Pb	AB_UPb_64.1
C:/Users/Supervisor/Docum	2023-07-05 12:27:30.000	2023-07-05 12:28:30.980	2023-08-21 09:34:30.242	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_UPb_049.1
C:/Users/Supervisor/Docum	2023-07-05 15:07:28.000	2023-07-05 15:08:28.980	2023-08-21 09:34:39.602	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_30.1
C:/Users/Supervisor/Docum	2023-07-05 15:08:34.000	2023-07-05 15:09:34.979	2023-08-21 09:34:39.758	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_32.1
C:/Users/Supervisor/Docum	2023-07-05 15:09:39.000	2023-07-05 15:10:39.980	2023-08-21 09:34:39.820	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_34.1
C:/Users/Supervisor/Docum	2023-07-05 15:10:46.000	2023-07-05 15:11:46.980	2023-08-21 09:34:39.867	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_35.1
C:/Users/Supervisor/Docum	2023-07-05 13:41:42.000	2023-07-05 13:42:42.980	2023-08-21 09:34:34.345	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-16
C:/Users/Supervisor/Docum	2023-07-05 15:11:52.000	2023-07-05 15:12:52.980	2023-08-21 09:34:39.929	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_38.1
C:/Users/Supervisor/Docum	2023-07-05 15:12:58.000	2023-07-05 15:13:58.980	2023-08-21 09:34:39.992	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_41.1
C:/Users/Supervisor/Docum	2023-07-05 15:22:54.000	2023-07-05 15:23:54.981	2023-08-21 09:34:40.725	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-27
C:/Users/Supervisor/Docum	2023-07-05 12:11:08.000	2023-07-05 12:12:08.980	2023-08-21 09:34:49.666	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_UPb_039.1
C:/Users/Supervisor/Docum	2023-07-05 15:14:05.000	2023-07-05 15:15:05.980	2023-08-21 09:34:40.163	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_43.1
C:/Users/Supervisor/Docum	2023-07-05 11:00:27.000	2023-07-05 11:01:27.980	2023-08-21 09:34:41.801	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-6
C:/Users/Supervisor/Docum	2023-07-05 15:15:12.000	2023-07-05 15:16:12.980	2023-08-21 09:34:40.210	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_45.1
C:/Users/Supervisor/Docum	2023-07-05 15:16:18.000	2023-07-05 15:17:18.980	2023-08-21 09:34:40.273	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_2_UPb_46.1
C:/Users/Supervisor/Docum	2023-07-05 12:30:46.000	2023-07-05 12:31:46.979	2023-08-21 09:34:30.460	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-11
C:/Users/Supervisor/Docum	2023-07-05 15:17:25.000	2023-07-05 15:18:25.980	2023-08-21 09:34:40.319	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-25
C:/Users/Supervisor/Docum	2023-07-05 13:42:48.000	2023-07-05 13:43:48.980	2023-08-21 09:34:34.376	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-17
C:/Users/Supervisor/Docum	2023-07-05 11:01:32.000	2023-07-05 11:02:32.980	2023-08-21 09:34:41.833	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-4
C:/Users/Supervisor/Docum	2023-07-05 11:02:38.000	2023-07-05 11:03:38.980	2023-08-21 09:34:44.609	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-5
C:/Users/Supervisor/Docum	2023-07-05 11:03:44.000	2023-07-05 11:04:44.980	2023-08-21 09:34:44.656	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-6
C:/Users/Supervisor/Docum	2023-07-05 11:04:49.000	2023-07-05 11:05:49.980	2023-08-21 09:34:44.703	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-4
C:/Users/Supervisor/Docum	2023-07-05 11:05:55.000	2023-07-05 11:06:55.980	2023-08-21 09:34:44.750	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-5
C:/Users/Supervisor/Docum	2023-07-05 12:20:57.000	2023-07-05 12:21:57.980	2023-08-21 09:34:29.883	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_UPb_045.1
C:/Users/Supervisor/Docum	2023-07-05 10:27:52.000	2023-07-05 10:28:52.980	2023-08-21 09:34:44.797	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-1
C:/Users/Supervisor/Docum	2023-07-05 11:07:00.000	2023-07-05 11:08:00.980	2023-08-21 09:34:44.968	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-6
C:/Users/Supervisor/Docum	2023-07-05 11:08:06.000	2023-07-05 11:09:06.980	2023-08-21 09:34:45.015	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-4
C:/Users/Supervisor/Docum	2023-07-05 12:05:42.000	2023-07-05 12:06:42.980	2023-08-21 09:34:49.245	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-9
C:/Users/Supervisor/Docum	2023-07-05 11:09:11.000	2023-07-05 11:10:11.980	2023-08-21 09:34:45.046	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-5
C:/Users/Supervisor/Docum	2023-07-05 12:28:36.000	2023-07-05 12:29:36.979	2023-08-21 09:34:30.273	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_UPb_050.1
C:/Users/Supervisor/Docum	2023-07-05 11:10:15.000	2023-07-05 11:11:15.980	2023-08-21 09:34:45.093	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-6
C:/Users/Supervisor/Docum	2023-07-05 12:31:51.000	2023-07-05 12:32:51.980	2023-08-21 09:34:30.491	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST610-12
C:/Users/Supervisor/Docum	2023-07-05 11:11:20.000	2023-07-05 11:12:20.981	2023-08-21 09:34:45.124	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_UPb_010.1
C:/Users/Supervisor/Docum	2023-07-05 12:38:23.000	2023-07-05 12:39:23.980	2023-08-21 09:34:30.788	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-12
C:/Users/Supervisor/Docum	2023-07-05 11:12:24.000	2023-07-05 11:13:24.980	2023-08-21 09:34:45.296	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_UPb_010.2
C:/Users/Supervisor/Docum	2023-07-05 11:13:29.000	2023-07-05 11:14:29.980	2023-08-21 09:34:45.343	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_UPb_011.1
C:/Users/Supervisor/Docum	2023-07-05 11:14:34.000	2023-07-05 11:15:34.980	2023-08-21 09:34:45.374	210	9	Si29,Hg200,Pb204,Pb206,Pb	KG01_UPb_011.2
C:/Users/Supervisor/Docum	2023-07-05 13:59:14.000	2023-07-05 14:00:14.979	2023-08-21 09:34:35.343	210	9	Si29,Hg200,Pb204,Pb206,Pb	AB_UPb_67.1
C:/Users/Supervisor/Docum	2023-07-05 13:43:54.000	2023-07-05 13:44:54.980	2023-08-21 09:34:34.407	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-18

C:/Users/Supervisor/Docume	2023-07-05 11:15:39.000	2023-07-05 11:16:39.980	2023-08-21 09:34:45.421	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_012.1
C:/Users/Supervisor/Docume	2023-07-05 11:16:45.000	2023-07-05 11:17:45.980	2023-08-21 09:34:45.452	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_013.1
C:/Users/Supervisor/Docume	2023-07-05 10:28:56.000	2023-07-05 10:29:56.980	2023-08-21 09:34:45.623	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-2
C:/Users/Supervisor/Docume	2023-07-05 10:52:51.000	2023-07-05 10:53:51.980	2023-08-21 09:34:40.351	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_005.1
C:/Users/Supervisor/Docume	2023-07-05 11:17:50.000	2023-07-05 11:18:50.980	2023-08-21 09:34:45.670	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_014.1
C:/Users/Supervisor/Docume	2023-07-05 11:18:55.000	2023-07-05 11:19:55.980	2023-08-21 09:34:45.717	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_015.1
C:/Users/Supervisor/Docume	2023-07-05 12:12:13.000	2023-07-05 12:13:13.980	2023-08-21 09:34:29.457	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_039.2
C:/Users/Supervisor/Docume	2023-07-05 11:20:00.000	2023-07-05 11:21:00.980	2023-08-21 09:34:45.764	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_017.1
C:/Users/Supervisor/Docume	2023-07-05 12:32:58.000	2023-07-05 12:33:58.980	2023-08-21 09:34:30.523	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-11
C:/Users/Supervisor/Docume	2023-07-05 11:21:05.000	2023-07-05 11:22:05.980	2023-08-21 09:34:45.826	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_017.2
C:/Users/Supervisor/Docume	2023-07-05 13:45:00.000	2023-07-05 13:46:00.980	2023-08-21 09:34:34.563	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_53.1
C:/Users/Supervisor/Docume	2023-07-05 11:22:09.000	2023-07-05 11:23:09.980	2023-08-21 09:34:46.009	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_018.1
C:/Users/Supervisor/Docume	2023-07-05 11:23:14.000	2023-07-05 11:24:14.980	2023-08-21 09:34:46.059	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_019.1
C:/Users/Supervisor/Docume	2023-07-05 14:00:19.000	2023-07-05 14:01:19.980	2023-08-21 09:34:35.483	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_70.1
C:/Users/Supervisor/Docume	2023-07-05 11:24:19.000	2023-07-05 11:25:19.980	2023-08-21 09:34:46.120	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_019.2
C:/Users/Supervisor/Docume	2023-07-05 11:25:25.000	2023-07-05 11:26:25.980	2023-08-21 09:34:46.178	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_020.1
C:/Users/Supervisor/Docume	2023-07-05 15:18:30.000	2023-07-05 15:19:30.979	2023-08-21 09:34:40.538	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-26
C:/Users/Supervisor/Docume	2023-07-05 11:26:31.000	2023-07-05 11:27:31.980	2023-08-21 09:34:46.229	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_021.1
C:/Users/Supervisor/Docume	2023-07-05 15:25:06.000	2023-07-05 15:26:06.980	2023-08-21 09:34:40.928	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-26
C:/Users/Supervisor/Docume	2023-07-05 11:27:36.000	2023-07-05 11:28:36.981	2023-08-21 09:34:46.390	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_022.1
C:/Users/Supervisor/Docume	2023-07-05 10:30:02.000	2023-07-05 10:31:02.980	2023-08-21 09:34:46.468	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-3
C:/Users/Supervisor/Docume	2023-07-05 13:55:56.000	2023-07-05 13:56:56.981	2023-08-21 09:34:35.234	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_65.1
C:/Users/Supervisor/Docume	2023-07-05 11:28:41.000	2023-07-05 11:29:41.980	2023-08-21 09:34:46.499	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_022.2
C:/Users/Supervisor/Docume	2023-07-05 11:29:47.000	2023-07-05 11:30:47.980	2023-08-21 09:34:46.546	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_023.1
C:/Users/Supervisor/Docume	2023-07-05 10:36:33.000	2023-07-05 10:37:33.980	2023-08-21 09:34:30.554	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-3
C:/Users/Supervisor/Docume	2023-07-05 11:30:52.000	2023-07-05 11:31:52.980	2023-08-21 09:34:46.609	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_024.1
C:/Users/Supervisor/Docume	2023-07-05 11:31:57.000	2023-07-05 11:32:57.980	2023-08-21 09:34:46.796	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-7
C:/Users/Supervisor/Docume	2023-07-05 10:25:40.000	2023-07-05 10:26:40.980	2023-08-21 09:34:35.530	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-2
C:/Users/Supervisor/Docume	2023-07-05 11:33:02.000	2023-07-05 11:34:02.980	2023-08-21 09:34:46.858	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-8
C:/Users/Supervisor/Docume	2023-07-05 15:19:36.000	2023-07-05 15:20:36.980	2023-08-21 09:34:40.569	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-27
C:/Users/Supervisor/Docume	2023-07-05 12:39:29.000	2023-07-05 12:40:29.980	2023-08-21 09:34:30.819	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_053.1
C:/Users/Supervisor/Docume	2023-07-05 11:34:07.000	2023-07-05 11:35:07.980	2023-08-21 09:34:46.905	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-7
C:/Users/Supervisor/Docume	2023-07-05 15:29:31.000	2023-07-05 15:30:31.980	2023-08-21 09:34:41.333	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-27
C:/Users/Supervisor/Docume	2023-07-05 11:35:12.000	2023-07-05 11:36:12.980	2023-08-21 09:34:46.952	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-8
C:/Users/Supervisor/Docume	2023-07-05 11:36:16.000	2023-07-05 11:37:16.980	2023-08-21 09:34:46.999	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-7
C:/Users/Supervisor/Docume	2023-07-05 11:37:22.000	2023-07-05 11:38:22.980	2023-08-21 09:34:47.186	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-8
C:/Users/Supervisor/Docume	2023-07-05 11:38:28.000	2023-07-05 11:39:28.980	2023-08-21 09:34:47.233	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-7
C:/Users/Supervisor/Docume	2023-07-05 10:31:08.000	2023-07-05 10:32:08.980	2023-08-21 09:34:47.279	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-1
C:/Users/Supervisor/Docume	2023-07-05 11:39:33.000	2023-07-05 11:40:33.980	2023-08-21 09:34:47.311	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-8
C:/Users/Supervisor/Docume	2023-07-05 12:34:02.000	2023-07-05 12:35:02.980	2023-08-21 09:34:30.569	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-12
C:/Users/Supervisor/Docume	2023-07-05 11:40:38.000	2023-07-05 11:41:38.980	2023-08-21 09:34:47.389	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_024.2
C:/Users/Supervisor/Docume	2023-07-05 10:45:15.000	2023-07-05 10:46:15.980	2023-08-21 09:34:35.561	210	9	Si29,Hg200,Pb204,Pb206,Pb LB01zrc_UPb_02.2
C:/Users/Supervisor/Docume	2023-07-05 12:40:34.000	2023-07-05 12:41:34.979	2023-08-21 09:34:30.944	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_054.1
C:/Users/Supervisor/Docume	2023-07-05 13:46:05.000	2023-07-05 13:47:05.980	2023-08-21 09:34:34.610	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_55.1
C:/Users/Supervisor/Docume	2023-07-05 15:20:42.000	2023-07-05 15:21:42.980	2023-08-21 09:34:40.631	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-25
C:/Users/Supervisor/Docume	2023-07-05 11:41:44.000	2023-07-05 11:42:44.980	2023-08-21 09:34:47.576	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_026.1
C:/Users/Supervisor/Docume	2023-07-05 11:42:49.000	2023-07-05 11:43:49.980	2023-08-21 09:34:47.654	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_026.2

C:/Users/Supervisor/Docume	2023-07-05 11:43:54.000	2023-07-05 11:44:54.980	2023-08-21 09:34:47.701	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_028.1
C:/Users/Supervisor/Docume	2023-07-05 11:44:59.000	2023-07-05 11:45:59.980	2023-08-21 09:34:47.747	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_029.1
C:/Users/Supervisor/Docume	2023-07-05 11:46:06.000	2023-07-05 11:47:06.980	2023-08-21 09:34:47.779	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_029.2
C:/Users/Supervisor/Docume	2023-07-05 11:47:11.000	2023-07-05 11:48:11.980	2023-08-21 09:34:47.981	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_029.3
C:/Users/Supervisor/Docume	2023-07-05 11:48:16.000	2023-07-05 11:49:16.980	2023-08-21 09:34:48.044	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_029.4
C:/Users/Supervisor/Docume	2023-07-05 11:49:21.000	2023-07-05 11:50:21.980	2023-08-21 09:34:48.091	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_030.1
C:/Users/Supervisor/Docume	2023-07-05 10:32:12.000	2023-07-05 10:33:12.981	2023-08-21 09:34:48.122	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-2
C:/Users/Supervisor/Docume	2023-07-05 14:11:20.000	2023-07-05 14:12:20.980	2023-08-21 09:34:36.139	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-20
C:/Users/Supervisor/Docume	2023-07-05 12:41:40.000	2023-07-05 12:42:40.980	2023-08-21 09:34:30.991	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_054.2
C:/Users/Supervisor/Docume	2023-07-05 12:35:07.000	2023-07-05 12:36:07.980	2023-08-21 09:34:30.694	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-11
C:/Users/Supervisor/Docume	2023-07-05 15:21:48.000	2023-07-05 15:22:48.980	2023-08-21 09:34:40.678	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-26
C:/Users/Supervisor/Docume	2023-07-05 14:01:24.000	2023-07-05 14:02:24.980	2023-08-21 09:34:35.593	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_76.1
C:/Users/Supervisor/Docume	2023-07-05 11:50:26.000	2023-07-05 11:51:26.980	2023-08-21 09:34:48.169	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_031.1
C:/Users/Supervisor/Docume	2023-07-05 11:51:31.000	2023-07-05 11:52:31.980	2023-08-21 09:34:48.325	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_031.2
C:/Users/Supervisor/Docume	2023-07-05 11:52:37.000	2023-07-05 11:53:37.980	2023-08-21 09:34:48.371	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_032.1
C:/Users/Supervisor/Docume	2023-07-05 11:53:41.000	2023-07-05 11:54:41.980	2023-08-21 09:34:48.418	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_034.1
C:/Users/Supervisor/Docume	2023-07-05 11:54:46.000	2023-07-05 11:55:46.980	2023-08-21 09:34:48.481	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_035.1
C:/Users/Supervisor/Docume	2023-07-05 11:55:52.000	2023-07-05 11:56:52.980	2023-08-21 09:34:48.512	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_036.1
C:/Users/Supervisor/Docume	2023-07-05 12:04:36.000	2023-07-05 12:05:36.981	2023-08-21 09:34:49.183	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-10
C:/Users/Supervisor/Docume	2023-07-05 13:47:11.000	2023-07-05 13:48:11.980	2023-08-21 09:34:34.657	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_56.1
C:/Users/Supervisor/Docume	2023-07-05 11:56:57.000	2023-07-05 11:57:57.980	2023-08-21 09:34:48.683	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_036.2
C:/Users/Supervisor/Docume	2023-07-05 12:42:45.000	2023-07-05 12:43:45.980	2023-08-21 09:34:31.037	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_054.3
C:/Users/Supervisor/Docume	2023-07-05 11:58:03.000	2023-07-05 11:59:03.981	2023-08-21 09:34:48.746	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_037.1
C:/Users/Supervisor/Docume	2023-07-05 11:59:09.000	2023-07-05 12:00:09.980	2023-08-21 09:34:48.793	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_037.2
C:/Users/Supervisor/Docume	2023-07-05 14:04:43.000	2023-07-05 14:05:43.980	2023-08-21 09:34:35.795	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_8.1
C:/Users/Supervisor/Docume	2023-07-05 12:00:15.000	2023-07-05 12:01:15.980	2023-08-21 09:34:48.839	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_038.1
C:/Users/Supervisor/Docume	2023-07-05 12:43:51.000	2023-07-05 12:44:51.980	2023-08-21 09:34:31.069	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_02.1
C:/Users/Supervisor/Docume	2023-07-05 10:37:39.000	2023-07-05 10:38:39.980	2023-08-21 09:34:31.100	210	9	Si29,Hg200,Pb204,Pb206,Pb DT01zrc_UPb_03.1
C:/Users/Supervisor/Docume	2023-07-05 12:44:57.000	2023-07-05 12:45:57.980	2023-08-21 09:34:31.240	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_10.1
C:/Users/Supervisor/Docume	2023-07-05 12:46:03.000	2023-07-05 12:47:03.981	2023-08-21 09:34:31.287	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_10.2
C:/Users/Supervisor/Docume	2023-07-05 13:48:17.000	2023-07-05 13:49:17.980	2023-08-21 09:34:34.688	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_58.1
C:/Users/Supervisor/Docume	2023-07-05 12:47:08.000	2023-07-05 12:48:08.980	2023-08-21 09:34:31.318	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_11.1
C:/Users/Supervisor/Docume	2023-07-05 13:57:02.000	2023-07-05 13:58:02.980	2023-08-21 09:34:35.281	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_66.1
C:/Users/Supervisor/Docume	2023-07-05 12:48:13.000	2023-07-05 12:49:13.980	2023-08-21 09:34:31.365	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_12.1
C:/Users/Supervisor/Docume	2023-07-05 12:13:19.000	2023-07-05 12:14:19.980	2023-08-21 09:34:29.482	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_040.1
C:/Users/Supervisor/Docume	2023-07-05 12:49:18.000	2023-07-05 12:50:18.980	2023-08-21 09:34:31.396	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_13.1
C:/Users/Supervisor/Docume	2023-07-05 12:50:23.000	2023-07-05 12:51:23.980	2023-08-21 09:34:31.521	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_13.2
C:/Users/Supervisor/Docume	2023-07-05 14:02:31.000	2023-07-05 14:03:31.979	2023-08-21 09:34:35.624	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_77.1
C:/Users/Supervisor/Docume	2023-07-05 12:51:28.000	2023-07-05 12:52:28.980	2023-08-21 09:34:31.568	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_15.1
C:/Users/Supervisor/Docume	2023-07-05 14:05:50.000	2023-07-05 14:06:50.980	2023-08-21 09:34:35.842	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_80.1
C:/Users/Supervisor/Docume	2023-07-05 12:52:32.000	2023-07-05 12:53:32.980	2023-08-21 09:34:31.599	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_17.1
C:/Users/Supervisor/Docume	2023-07-05 10:46:20.000	2023-07-05 10:47:20.980	2023-08-21 09:34:36.170	210	9	Si29,Hg200,Pb204,Pb206,Pb LB01zrc_UPb_05.1
C:/Users/Supervisor/Docume	2023-07-05 12:53:39.000	2023-07-05 12:54:39.979	2023-08-21 09:34:31.615	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_19.1
C:/Users/Supervisor/Docume	2023-07-05 12:54:44.000	2023-07-05 12:55:44.980	2023-08-21 09:34:31.661	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_20.1
C:/Users/Supervisor/Docume	2023-07-05 10:38:43.000	2023-07-05 10:39:43.980	2023-08-21 09:34:31.786	210	9	Si29,Hg200,Pb204,Pb206,Pb DT01zrc_UPb_03.2
C:/Users/Supervisor/Docume	2023-07-05 15:26:12.000	2023-07-05 15:27:12.980	2023-08-21 09:34:40.975	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-27
C:/Users/Supervisor/Docume	2023-07-05 12:55:49.000	2023-07-05 12:56:49.980	2023-08-21 09:34:31.833	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_23.1

C:/Users/Supervisor/Docume	2023-07-05 12:56:56.000	2023-07-05 12:57:56.980	2023-08-21 09:34:31.864	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_24.1
C:/Users/Supervisor/Docume	2023-07-05 12:58:02.000	2023-07-05 12:59:02.980	2023-08-21 09:34:31.911	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_29.1
C:/Users/Supervisor/Docume	2023-07-05 12:36:12.000	2023-07-05 12:37:12.980	2023-08-21 09:34:30.741	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-12
C:/Users/Supervisor/Docume	2023-07-05 12:14:25.000	2023-07-05 12:15:25.980	2023-08-21 09:34:29.505	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_041.1
C:/Users/Supervisor/Docume	2023-07-05 12:59:07.000	2023-07-05 13:00:07.980	2023-08-21 09:34:31.942	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_29.2
C:/Users/Supervisor/Docume	2023-07-05 13:49:22.000	2023-07-05 13:50:22.980	2023-08-21 09:34:34.735	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_6.1
C:/Users/Supervisor/Docume	2023-07-05 13:00:12.000	2023-07-05 13:01:12.980	2023-08-21 09:34:32.067	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-13
C:/Users/Supervisor/Docume	2023-07-05 14:06:56.000	2023-07-05 14:07:56.980	2023-08-21 09:34:35.873	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-19
C:/Users/Supervisor/Docume	2023-07-05 13:01:18.000	2023-07-05 13:02:18.980	2023-08-21 09:34:32.114	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-14
C:/Users/Supervisor/Docume	2023-07-05 13:02:22.000	2023-07-05 13:03:22.980	2023-08-21 09:34:32.145	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-15
C:/Users/Supervisor/Docume	2023-07-05 13:03:27.000	2023-07-05 13:04:27.980	2023-08-21 09:34:32.176	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-13
C:/Users/Supervisor/Docume	2023-07-05 15:27:19.000	2023-07-05 15:28:19.980	2023-08-21 09:34:41.006	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-25
C:/Users/Supervisor/Docume	2023-07-05 13:04:34.000	2023-07-05 13:05:34.980	2023-08-21 09:34:32.192	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-14
C:/Users/Supervisor/Docume	2023-07-05 13:05:39.000	2023-07-05 13:06:39.980	2023-08-21 09:34:32.317	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-15
C:/Users/Supervisor/Docume	2023-07-05 10:33:17.000	2023-07-05 10:34:17.980	2023-08-21 09:34:48.886	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-3
C:/Users/Supervisor/Docume	2023-07-05 10:39:48.000	2023-07-05 10:40:48.980	2023-08-21 09:34:32.363	210	9	Si29,Hg200,Pb204,Pb206,Pb DT01zrc_UPb_05.1
C:/Users/Supervisor/Docume	2023-07-05 12:06:47.000	2023-07-05 12:07:47.979	2023-08-21 09:34:49.432	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-10
C:/Users/Supervisor/Docume	2023-07-05 13:06:45.000	2023-07-05 13:07:45.980	2023-08-21 09:34:32.395	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-13
C:/Users/Supervisor/Docume	2023-07-05 13:07:50.000	2023-07-05 13:08:50.980	2023-08-21 09:34:32.426	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-14
C:/Users/Supervisor/Docume	2023-07-05 12:15:29.000	2023-07-05 12:16:29.980	2023-08-21 09:34:29.646	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_043.1
C:/Users/Supervisor/Docume	2023-07-05 13:08:55.000	2023-07-05 13:09:55.980	2023-08-21 09:34:32.473	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-15
C:/Users/Supervisor/Docume	2023-07-05 12:22:02.000	2023-07-05 12:23:02.980	2023-08-21 09:34:29.930	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_045.2
C:/Users/Supervisor/Docume	2023-07-05 13:10:01.000	2023-07-05 13:11:01.980	2023-08-21 09:34:32.613	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-13
C:/Users/Supervisor/Docume	2023-07-05 13:11:07.000	2023-07-05 13:12:07.980	2023-08-21 09:34:32.644	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-14
C:/Users/Supervisor/Docume	2023-07-05 10:34:22.000	2023-07-05 10:35:22.980	2023-08-21 09:34:29.417	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-1
C:/Users/Supervisor/Docume	2023-07-05 13:12:13.000	2023-07-05 13:13:13.980	2023-08-21 09:34:32.691	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-15
C:/Users/Supervisor/Docume	2023-07-05 12:01:20.000	2023-07-05 12:02:20.980	2023-08-21 09:34:49.058	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-9
C:/Users/Supervisor/Docume	2023-07-05 14:12:27.000	2023-07-05 14:13:27.980	2023-08-21 09:34:36.201	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-21
C:/Users/Supervisor/Docume	2023-07-05 13:13:18.000	2023-07-05 13:14:18.980	2023-08-21 09:34:32.722	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_30.1
C:/Users/Supervisor/Docume	2023-07-05 13:14:24.000	2023-07-05 13:15:24.980	2023-08-21 09:34:32.738	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_34.1
C:/Users/Supervisor/Docume	2023-07-05 13:15:29.000	2023-07-05 13:16:29.980	2023-08-21 09:34:32.878	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_34.2
C:/Users/Supervisor/Docume	2023-07-05 13:16:35.000	2023-07-05 13:17:35.980	2023-08-21 09:34:32.925	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_36.1
C:/Users/Supervisor/Docume	2023-07-05 10:40:53.000	2023-07-05 10:41:53.980	2023-08-21 09:34:32.972	210	9	Si29,Hg200,Pb204,Pb206,Pb DT01zrc_UPb_06.1
C:/Users/Supervisor/Docume	2023-07-05 13:17:41.000	2023-07-05 13:18:41.980	2023-08-21 09:34:33.019	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_36.2
C:/Users/Supervisor/Docume	2023-07-05 12:16:35.000	2023-07-05 12:17:35.980	2023-08-21 09:34:29.681	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_043.2
C:/Users/Supervisor/Docume	2023-07-05 14:08:02.000	2023-07-05 14:09:02.980	2023-08-21 09:34:35.920	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-20
C:/Users/Supervisor/Docume	2023-07-05 13:18:47.000	2023-07-05 13:19:47.980	2023-08-21 09:34:33.065	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_37.1
C:/Users/Supervisor/Docume	2023-07-05 12:29:41.000	2023-07-05 12:30:41.979	2023-08-21 09:34:30.304	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_050.2
C:/Users/Supervisor/Docume	2023-07-05 14:13:33.000	2023-07-05 14:14:33.980	2023-08-21 09:34:36.341	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-19
C:/Users/Supervisor/Docume	2023-07-05 12:02:25.000	2023-07-05 12:03:25.980	2023-08-21 09:34:49.105	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-10
C:/Users/Supervisor/Docume	2023-07-05 13:19:51.000	2023-07-05 13:20:51.980	2023-08-21 09:34:33.190	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_38.1
C:/Users/Supervisor/Docume	2023-07-05 13:20:57.000	2023-07-05 13:21:57.980	2023-08-21 09:34:33.221	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_4.1
C:/Users/Supervisor/Docume	2023-07-05 13:22:02.000	2023-07-05 13:23:02.980	2023-08-21 09:34:33.253	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_40.1
C:/Users/Supervisor/Docume	2023-07-05 13:23:06.000	2023-07-05 13:24:06.980	2023-08-21 09:34:33.284	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_41.1
C:/Users/Supervisor/Docume	2023-07-05 13:24:11.000	2023-07-05 13:25:11.980	2023-08-21 09:34:33.315	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_43.1
C:/Users/Supervisor/Docume	2023-07-05 13:25:17.000	2023-07-05 13:26:17.980	2023-08-21 09:34:33.424	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_45.1
C:/Users/Supervisor/Docume	2023-07-05 13:26:23.000	2023-07-05 13:27:23.980	2023-08-21 09:34:33.471	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_46.1

C:/Users/Supervisor/Docume	2023-07-05 13:27:28.000	2023-07-05 13:28:28.980	2023-08-21 09:34:33.518	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_47.1
C:/Users/Supervisor/Docume	2023-07-05 10:41:58.000	2023-07-05 10:42:58.980	2023-08-21 09:34:33.565	210	9	Si29,Hg200,Pb204,Pb206,Pb DT01zrc_UPb_07.1
C:/Users/Supervisor/Docume	2023-07-05 14:14:39.000	2023-07-05 14:15:39.980	2023-08-21 09:34:36.373	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-20
C:/Users/Supervisor/Docume	2023-07-05 14:09:08.000	2023-07-05 14:10:08.979	2023-08-21 09:34:36.061	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-21
C:/Users/Supervisor/Docume	2023-07-05 12:03:30.000	2023-07-05 12:04:30.980	2023-08-21 09:34:49.136	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-9
C:/Users/Supervisor/Docume	2023-07-05 15:28:25.000	2023-07-05 15:29:25.980	2023-08-21 09:34:41.053	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-26
C:/Users/Supervisor/Docume	2023-07-05 12:17:41.000	2023-07-05 12:18:41.980	2023-08-21 09:34:29.717	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_043.3
C:/Users/Supervisor/Docume	2023-07-05 13:28:33.000	2023-07-05 13:29:33.980	2023-08-21 09:34:33.611	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_50.1
C:/Users/Supervisor/Docume	2023-07-05 13:29:40.000	2023-07-05 13:30:40.980	2023-08-21 09:34:33.721	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_50.2
C:/Users/Supervisor/Docume	2023-07-05 13:30:46.000	2023-07-05 13:31:46.980	2023-08-21 09:34:33.767	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_52.1
C:/Users/Supervisor/Docume	2023-07-05 13:31:51.000	2023-07-05 13:32:51.980	2023-08-21 09:34:33.799	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-16
C:/Users/Supervisor/Docume	2023-07-05 13:32:56.000	2023-07-05 13:33:57.273	2023-08-21 09:34:33.845	211	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-17
C:/Users/Supervisor/Docume	2023-07-05 13:34:03.000	2023-07-05 13:35:03.980	2023-08-21 09:34:33.877	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-18
C:/Users/Supervisor/Docume	2023-07-05 14:15:45.000	2023-07-05 14:16:45.980	2023-08-21 09:34:36.419	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-21
C:/Users/Supervisor/Docume	2023-07-05 13:35:09.000	2023-07-05 13:36:09.980	2023-08-21 09:34:33.986	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-16
C:/Users/Supervisor/Docume	2023-07-05 13:36:14.000	2023-07-05 13:37:14.980	2023-08-21 09:34:34.048	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-17
C:/Users/Supervisor/Docume	2023-07-05 10:55:01.000	2023-07-05 10:56:01.980	2023-08-21 09:34:41.396	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_007.1
C:/Users/Supervisor/Docume	2023-07-05 13:37:20.000	2023-07-05 13:38:20.980	2023-08-21 09:34:34.079	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-18
C:/Users/Supervisor/Docume	2023-07-05 14:16:50.000	2023-07-05 14:17:50.980	2023-08-21 09:34:36.451	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-19
C:/Users/Supervisor/Docume	2023-07-05 10:35:27.000	2023-07-05 10:36:27.980	2023-08-21 09:34:29.961	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-2
C:/Users/Supervisor/Docume	2023-07-05 14:17:56.000	2023-07-05 14:18:56.979	2023-08-21 09:34:36.482	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-20
C:/Users/Supervisor/Docume	2023-07-05 14:19:02.000	2023-07-05 14:20:02.979	2023-08-21 09:34:36.591	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-21
C:/Users/Supervisor/Docume	2023-07-05 14:20:08.000	2023-07-05 14:21:08.980	2023-08-21 09:34:36.622	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_84.1
C:/Users/Supervisor/Docume	2023-07-05 15:24:00.000	2023-07-05 15:25:00.980	2023-08-21 09:34:40.881	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-25
C:/Users/Supervisor/Docume	2023-07-05 14:21:14.000	2023-07-05 14:22:14.980	2023-08-21 09:34:36.653	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_84.2
C:/Users/Supervisor/Docume	2023-07-05 10:44:09.000	2023-07-05 10:45:09.980	2023-08-21 09:34:34.875	210	9	Si29,Hg200,Pb204,Pb206,Pb LB01zrc_UPb_02.1
C:/Users/Supervisor/Docume	2023-07-05 14:22:19.000	2023-07-05 14:23:19.980	2023-08-21 09:34:36.700	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_87.1
C:/Users/Supervisor/Docume	2023-07-05 10:47:25.000	2023-07-05 10:48:25.980	2023-08-21 09:34:36.731	210	9	Si29,Hg200,Pb204,Pb206,Pb LB01zrc_UPb_09.1
C:/Users/Supervisor/Docume	2023-07-05 10:53:56.000	2023-07-05 10:54:56.980	2023-08-21 09:34:41.271	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_006.1
C:/Users/Supervisor/Docume	2023-07-05 14:23:25.000	2023-07-05 14:24:25.980	2023-08-21 09:34:36.872	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_88.1
C:/Users/Supervisor/Docume	2023-07-05 10:26:46.000	2023-07-05 10:27:46.981	2023-08-21 09:34:41.427	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-3
C:/Users/Supervisor/Docume	2023-07-05 14:24:31.000	2023-07-05 14:25:31.980	2023-08-21 09:34:36.919	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_89.1
C:/Users/Supervisor/Docume	2023-07-05 14:25:38.000	2023-07-05 14:26:38.980	2023-08-21 09:34:36.965	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_90.1
C:/Users/Supervisor/Docume	2023-07-05 14:26:44.000	2023-07-05 14:27:44.980	2023-08-21 09:34:36.997	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_91.1
C:/Users/Supervisor/Docume	2023-07-05 12:23:07.000	2023-07-05 12:24:07.980	2023-08-21 09:34:29.992	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_046.1
C:/Users/Supervisor/Docume	2023-07-05 12:07:52.000	2023-07-05 12:08:52.980	2023-08-21 09:34:49.479	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-9
C:/Users/Supervisor/Docume	2023-07-05 14:27:49.000	2023-07-05 14:28:49.980	2023-08-21 09:34:37.043	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_92.1
C:/Users/Supervisor/Docume	2023-07-05 14:28:55.000	2023-07-05 14:29:55.980	2023-08-21 09:34:37.168	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_93.1
C:/Users/Supervisor/Docume	2023-07-05 14:30:01.000	2023-07-05 14:31:01.980	2023-08-21 09:34:37.231	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_93.2
C:/Users/Supervisor/Docume	2023-07-05 14:10:14.000	2023-07-05 14:11:14.981	2023-08-21 09:34:36.107	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-19
C:/Users/Supervisor/Docume	2023-07-05 13:50:28.000	2023-07-05 13:51:28.980	2023-08-21 09:34:34.937	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_60.1
C:/Users/Supervisor/Docume	2023-07-05 14:31:07.000	2023-07-05 14:32:07.980	2023-08-21 09:34:37.262	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_01.1
C:/Users/Supervisor/Docume	2023-07-05 14:32:12.000	2023-07-05 14:33:12.980	2023-08-21 09:34:37.309	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_01.2
C:/Users/Supervisor/Docume	2023-07-05 10:56:06.000	2023-07-05 10:57:06.980	2023-08-21 09:34:41.489	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_008.1
C:/Users/Supervisor/Docume	2023-07-05 14:33:18.000	2023-07-05 14:34:18.980	2023-08-21 09:34:37.355	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_03.1
C:/Users/Supervisor/Docume	2023-07-05 10:48:30.000	2023-07-05 10:49:30.980	2023-08-21 09:34:37.527	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_001.1
C:/Users/Supervisor/Docume	2023-07-05 14:34:24.000	2023-07-05 14:35:24.980	2023-08-21 09:34:37.574	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_06.1

C:/Users/Supervisor/Docume	2023-07-05 12:08:57.000	2023-07-05 12:09:57.980	2023-08-21 09:34:49.541	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-10
C:/Users/Supervisor/Docume	2023-07-05 14:35:30.000	2023-07-05 14:36:31.273	2023-08-21 09:34:37.605	211	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_07.1
C:/Users/Supervisor/Docume	2023-07-05 14:36:37.000	2023-07-05 14:37:37.980	2023-08-21 09:34:37.652	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_08.1
C:/Users/Supervisor/Docume	2023-07-05 13:38:25.000	2023-07-05 13:39:25.980	2023-08-21 09:34:34.095	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-16
C:/Users/Supervisor/Docume	2023-07-05 12:24:13.000	2023-07-05 12:25:13.980	2023-08-21 09:34:30.023	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_046.2
C:/Users/Supervisor/Docume	2023-07-05 14:37:42.000	2023-07-05 14:38:42.979	2023-08-21 09:34:37.714	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_08.2
C:/Users/Supervisor/Docume	2023-07-05 14:38:48.000	2023-07-05 14:39:48.980	2023-08-21 09:34:37.855	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_09.1
C:/Users/Supervisor/Docume	2023-07-05 13:51:34.000	2023-07-05 13:52:34.979	2023-08-21 09:34:34.984	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_60.2
C:/Users/Supervisor/Docume	2023-07-05 14:39:54.000	2023-07-05 14:40:54.980	2023-08-21 09:34:37.886	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_09.2
C:/Users/Supervisor/Docume	2023-07-05 13:58:07.000	2023-07-05 13:59:07.980	2023-08-21 09:34:35.312	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_66.2
C:/Users/Supervisor/Docume	2023-07-05 14:41:01.000	2023-07-05 14:42:01.980	2023-08-21 09:34:37.917	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_12.1
C:/Users/Supervisor/Docume	2023-07-05 14:42:06.000	2023-07-05 14:43:06.980	2023-08-21 09:34:37.979	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-22
C:/Users/Supervisor/Docume	2023-07-05 12:19:52.000	2023-07-05 12:20:52.980	2023-08-21 09:34:29.779	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_044.2
C:/Users/Supervisor/Docume	2023-07-05 14:43:12.000	2023-07-05 14:44:12.980	2023-08-21 09:34:38.011	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-23
C:/Users/Supervisor/Docume	2023-07-05 12:18:46.000	2023-07-05 12:19:46.980	2023-08-21 09:34:29.752	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_044.1
C:/Users/Supervisor/Docume	2023-07-05 14:44:18.000	2023-07-05 14:45:18.980	2023-08-21 09:34:38.135	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-24
C:/Users/Supervisor/Docume	2023-07-05 10:49:36.000	2023-07-05 10:50:36.981	2023-08-21 09:34:38.167	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_003.1
C:/Users/Supervisor/Docume	2023-07-05 14:45:24.000	2023-07-05 14:46:24.979	2023-08-21 09:34:38.213	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-22
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C:/Users/Supervisor/Docume	2023-07-05 12:25:19.000	2023-07-05 12:26:19.980	2023-08-21 09:34:30.164	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_047.1
C:/Users/Supervisor/Docume	2023-07-05 14:47:35.000	2023-07-05 14:48:35.980	2023-08-21 09:34:38.291	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-24
C:/Users/Supervisor/Docume	2023-07-05 13:52:40.000	2023-07-05 13:53:40.980	2023-08-21 09:34:35.047	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_62.1
C:/Users/Supervisor/Docume	2023-07-05 10:57:11.000	2023-07-05 10:58:11.980	2023-08-21 09:34:41.661	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_008.2
C:/Users/Supervisor/Docume	2023-07-05 14:48:41.000	2023-07-05 14:49:41.980	2023-08-21 09:34:38.447	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-22
C:/Users/Supervisor/Docume	2023-07-05 14:03:37.000	2023-07-05 14:04:37.980	2023-08-21 09:34:35.749	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_79.1
C:/Users/Supervisor/Docume	2023-07-05 10:43:03.000	2023-07-05 10:44:03.980	2023-08-21 09:34:34.126	210	9	Si29,Hg200,Pb204,Pb206,Pb LB01zrc_UPb_01.1
C:/Users/Supervisor/Docume	2023-07-05 14:49:48.000	2023-07-05 14:50:48.980	2023-08-21 09:34:38.510	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-23
C:/Users/Supervisor/Docume	2023-07-05 14:50:54.000	2023-07-05 14:51:54.980	2023-08-21 09:34:38.557	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-24
C:/Users/Supervisor/Docume	2023-07-05 14:51:59.000	2023-07-05 14:52:59.979	2023-08-21 09:34:38.588	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-22
C:/Users/Supervisor/Docume	2023-07-05 14:53:05.000	2023-07-05 14:54:05.980	2023-08-21 09:34:38.635	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-23
C:/Users/Supervisor/Docume	2023-07-05 14:54:12.000	2023-07-05 14:55:12.980	2023-08-21 09:34:38.775	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-24
C:/Users/Supervisor/Docume	2023-07-05 14:55:19.000	2023-07-05 14:56:19.980	2023-08-21 09:34:38.806	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_12.2
C:/Users/Supervisor/Docume	2023-07-05 10:50:41.000	2023-07-05 10:51:41.980	2023-08-21 09:34:38.837	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_004.1
C:/Users/Supervisor/Docume	2023-07-05 14:56:25.000	2023-07-05 14:57:25.980	2023-08-21 09:34:38.869	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_15.1
C:/Users/Supervisor/Docume	2023-07-05 12:26:24.000	2023-07-05 12:27:24.980	2023-08-21 09:34:30.195	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_048.1
C:/Users/Supervisor/Docume	2023-07-05 10:58:17.000	2023-07-05 10:59:17.980	2023-08-21 09:34:41.723	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST610-4
C:/Users/Supervisor/Docume	2023-07-05 13:39:31.000	2023-07-05 13:40:31.980	2023-08-21 09:34:34.282	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-17
C:/Users/Supervisor/Docume	2023-07-05 12:10:03.000	2023-07-05 12:11:03.980	2023-08-21 09:34:49.604	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_UPb_038.2
C:/Users/Supervisor/Docume	2023-07-05 13:53:45.000	2023-07-05 13:54:45.980	2023-08-21 09:34:35.078	210	9	Si29,Hg200,Pb204,Pb206,Pb AB_UPb_62.2
C:/Users/Supervisor/Docume	2023-07-05 14:57:31.000	2023-07-05 14:58:31.980	2023-08-21 09:34:38.915	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_16.1
C:/Users/Supervisor/Docume	2023-07-05 14:58:37.000	2023-07-05 14:59:37.980	2023-08-21 09:34:39.056	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_18.1
C:/Users/Supervisor/Docume	2023-07-05 14:59:43.000	2023-07-05 15:00:43.980	2023-08-21 09:34:39.103	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_21.1
C:/Users/Supervisor/Docume	2023-07-05 15:00:50.000	2023-07-05 15:01:50.980	2023-08-21 09:34:39.134	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_22.1
C:/Users/Supervisor/Docume	2023-07-05 15:01:56.000	2023-07-05 15:02:56.980	2023-08-21 09:34:39.196	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_22.2
C:/Users/Supervisor/Docume	2023-07-05 15:03:02.000	2023-07-05 15:04:02.980	2023-08-21 09:34:39.227	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_24.1
C:/Users/Supervisor/Docume	2023-07-05 15:04:08.000	2023-07-05 15:05:08.980	2023-08-21 09:34:39.399	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_25.1
C:/Users/Supervisor/Docume	2023-07-05 15:05:15.000	2023-07-05 15:06:15.980	2023-08-21 09:34:39.461	210	9	Si29,Hg200,Pb204,Pb206,Pb KG01_2_UPb_25.2

Laser Log Files

File	File start time	File end time	Time file loaded	Samples	Offset (s)	Widths
C:/Users/Supervisor/Docum	2023-07-05 11:24:07.023	2023-07-05 16:30:14.114	2023-08-21 09:35:13.478	NIST610-1,91500-10,TEM-16	-3576.66	30

AB	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final U238	Final U238	Final U/Th	Approx_U	Approx_Th	Approx_Pb_PPM_me	rho 207Pb	rho 206Pb/238U v 207Pb/235U
AB_UPb_02.1	0.110155	0.003606	673.1559	20.98163	0.977957	0.038712	689.6008	19.79946	0.040053	0.001445	793.5956	28.0689	0.064114	0.0011	734.6785	36.38459	9.189479	0.309508	3.789968	380.6592	100.5796	37.06666	-0.05406	0.835417
AB_UPb_10.1	0.224836	0.01915	1288.985	102.4459	3.09718	0.345415	1324.562	103.0242	0.0768	0.00477	1491.761	90.60525	0.091153	0.004287	1370.561	104.8123	5.625069	0.6296	22.1078	666.7062	133.6397	100.5027	-0.96389	0.997049
AB_UPb_10.2	0.295092	0.007068	1666.797	35.17541	4.699228	0.128802	1766.776	22.6282	0.107901	0.003543	2070.985	64.61311	0.114856	0.001489	1875.924	23.37167	3.391351	0.081174	2.536253	356.8899	140.8518	131.1381	0.426832	0.534387
AB_UPb_11.1	0.311297	0.007648	1746.706	37.6506	4.582333	0.135807	1744.801	24.70916	0.090384	0.00275	1748.902	51.03779	0.105982	0.001241	1728.864	21.68179	3.219199	0.080355	1.670746	479.352	290.02	231.1509	-0.00718	0.760293
AB_UPb_12.1	0.120785	0.005195	733.7894	30.21219	1.169865	0.058239	779.2917	28.95938	0.044781	0.001595	885.2485	30.94104	0.069762	0.001109	912.5681	32.43429	8.655059	0.481606	1.936554	346.2221	215.2334	90.59481	-0.23681	0.934803
AB_UPb_13.1	0.241336	0.006633	1392.947	34.43729	3.338161	0.100837	1488.224	23.54263	0.089342	0.003384	1728.954	62.65408	0.099782	0.000864	1617.84	15.92718	4.167511	0.116931	2.683642	889.4291	395.3657	292.1447	0.867808	0.935083
AB_UPb_13.2	0.054497	0.003039	341.8181	18.64392	0.662428	0.027241	515.0749	16.8799	0.03192	0.001094	635.0494	21.41045	0.086828	0.001766	1350.084	40.66184	18.63304	1.07082	2.996869	1906.711	641.4278	185.1956	0.574197	0.907081
AB_UPb_15.1	0.067763	0.001727	422.5926	10.39635	0.603409	0.032161	475.9572	18.56945	0.02936	0.004433	580.8453	83.3717	0.065864	0.003156	746.0437	78.71372	14.77532	0.400212	2.995814	1216.583	414.7101	111.3604	0.098923	0.605795
AB_UPb_17.1	0.064216	0.001589	401.158	9.627611	0.501507	0.014807	412.2927	10.00631	0.020395	0.000623	408.0691	12.34715	0.056418	0.000727	461.8658	28.70871	15.60972	0.373419	2.215675	1133.884	519.2539	97.8363	0.18181	0.659533
AB_UPb_19.1	0.061345	0.00159	383.7348	9.652793	0.567285	0.025923	459.5535	18.38929	0.022828	0.000977	456.1043	19.2815	0.067483	0.002121	841.6612	67.65668	16.39803	0.42414	2.365685	358.5316	287.4794	57.6743	-0.42025	0.699088
AB_UPb_20.1	0.176373	0.005175	1046.343	28.52124	2.252772	0.08072	1193.13	26.06039	0.046365	0.00192	915.6467	37.09137	0.092276	0.000937	1469.375	19.24665	5.737566	0.186339	1.982578	478.015	230.3738	101.2416	-0.40007	0.93859
AB_UPb_23.1	0.241135	0.005602	1392.244	29.16394	3.088246	0.084373	1430.175	20.11468	0.067658	0.002225	1323.006	42.17003	0.092964	0.000836	1484.095	17.17766	4.159445	0.099939	2.774712	513.9834	188.516	115.9382	0.076708	0.808249
AB_UPb_24.1	0.269935	0.006215	1540.096	31.57062	3.44599	0.102485	1514.698	24.56646	0.08064	0.002886	1566.939	53.9334	0.092743	0.001488	1474.56	30.89385	3.714257	0.086534	1.967571	78.98773	44.12629	32.20101	0.193377	0.439152
AB_UPb_29.1	0.235714	0.005442	1364.066	28.46711	2.826078	0.077267	1361.228	20.63176	0.068657	0.002094	1342.061	39.61591	0.087043	0.0007	1358.849	15.5826	4.25405	0.101654	1.28905	469.2123	367.4379	232.3083	-0.03035	0.818584
AB_UPb_29.2	0.067583	0.001704	421.5259	10.28077	0.520086	0.015378	424.8737	10.21856	0.020506	0.000638	410.2627	12.6406	0.055706	0.000634	436.2301	25.40943	14.81695	0.38342	2.472627	1046.812	436.0381	81.54207	-0.00539	0.822734
AB_UPb_30.1	0.069709	0.002194	434.2644	13.19095	0.76657	0.076001	564.4619	38.33671	0.024212	0.001263	483.3621	24.83585	0.080399	0.006471	1131.313	149.9413	14.43302	0.461238	0.636014	427.995	702.1785	170.4454	-0.63741	0.816713
AB_UPb_34.1	0.114886	0.004151	700.3364	24.0163	1.071037	0.049608	733.9972	24.61784	0.044835	0.001613	886.2843	31.16875	0.067424	0.001384	842.9153	42.10065	8.897283	0.331125	4.255982	199.2061	50.04622	21.02701	-0.33522	0.884554
AB_UPb_34.2	0.17103	0.003787	1017.665	20.83206	1.731207	0.055321	1017.872	20.52769	0.050386	0.001706	993.4091	32.81952	0.073385	0.001497	1009.973	42.02948	5.85681	0.12886	2.23045	78.5598	35.12857	16.31776	0.111707	0.307639
AB_UPb_36.1	0.067848	0.001705	423.1084	10.28701	0.51246	0.014775	419.7172	9.901309	0.020654	0.000638	413.2093	12.63091	0.054883	0.000588	402.2818	24.28207	14.81386	0.371777	2.110752	1033.178	489.0448	94.91446	0.142403	0.772025
AB_UPb_36.2	0.064178	0.00172	400.9005	10.42288	0.52819	0.022489	428.8002	14.50162	0.023209	0.001503	463.3214	29.47324	0.059685	0.001555	577.6036	54.94456	15.6521	0.410479	4.344604	843.7322	189.7804	41.96955	-0.20732	0.641643
AB_UPb_37.1	0.311335	0.007357	1746.831	36.38861	4.544406	0.124332	1740.568	21.06989	0.087584	0.002806	1696.781	52.16425	0.105739	0.00081	1725.299	14.16769	3.211177	0.07298	3.953281	433.2054	109.2904	87.13829	-0.03042	0.906949
AB_UPb_38.1	0.120216	0.00688	729.2902	39.30794	1.338162	0.098912	844.0923	40.92626	0.046557	0.002429	918.8667	46.84763	0.079465	0.001626	1170.299	40.3352	8.869453	0.469973	2.774342	281.2707	97.82683	40.02759	-0.56524	0.970931
AB_UPb_4.1	0.161794	0.006792	965.3941	37.77597	1.70693	0.079437	1005.812	30.37689	0.052331	0.001962	1030.755	37.73853	0.076095	0.000682	1098.58	19.23136	6.323911	0.283705	1.862311	1577.045	836.4436	399.4803	-0.28145	0.974431
AB_UPb_40.1	0.171448	0.004286	1019.783	23.59334	1.743388	0.047642	1023.886	17.67706	0.056601	0.002146	1112.462	40.95772	0.073745	0.000513	1034.581	14.62235	5.844668	0.141143	7.839053	2729.596	364.2449	185.4342	0.358099	0.907431
AB_UPb_41.1	0.066678	0.001504	416.0812	9.092315	0.494622	0.018586	406.9011	12.66199	0.020526	0.000664	410.6543	13.14624	0.053995	0.001672	331.9393	72.52982	15.00595	0.329235	1.132311	157.5875	138.9666	26.44203	0.301299	0.002939
AB_UPb_43.1	0.313375	0.00718	1756.925	35.33372	4.609625	0.120856	1750.153	22.0511	0.089658	0.002774	1735.34	51.42894	0.106722	0.000872	1742.024	14.88956	3.197607	0.075631	3.858569	414.0045	107.5798	86.66783	0.326263	0.802819
AB_UPb_45.1	0.064416	0.001739	402.337	10.53781	0.702789	0.035822	536.2754	21.1654	0.019981	0.000756	399.832	14.97508	0.080062	0.003756	1127.712	96.20316	15.59049	0.411412	2.72285	855.7919	508.5447	94.23107	0.297833	0.10524
AB_UPb_46.1	0.059036	0.002574	369.4708	15.64318	0.501245	0.020321	413.2674	14.42156	0.021832	0.000716	436.5064	14.16255	0.062632	0.00197	668.1186	65.52734	17.42215	0.739073	0.991799	414.1305	459.1144	89.17709	0.505742	0.655525
AB_UPb_47.1	0.057754	0.001714	361.8401	10.45617	0.546372	0.016952	441.9878	11.07586	0.026644	0.000948	531.4106	18.62441	0.06829	0.001267	866.0739	35.55901	17.41144	0.54205	3.99851	1479.844	383.508	92.32632	0.521501	0.286074
AB_UPb_50.1	0.068812	0.001825	428.946	11.01961	0.538491	0.022574	436.5228	14.81294	0.022174	0.000882	443.2363	17.43582	0.056168	0.001347	447.1974	53.80116	14.52283	0.359646	3.022522	410.5399	137.3567	27.58311	-0.16477	0.606643
AB_UPb_50.2	0.065531	0.001608	409.1433	9.724113	0.499879	0.014881	411.3764	10.05577	0.020628	0.00069	412.6779	13.65186	0.055204	0.000807	415.1866	32.82743	15.29638	0.373872	3.254263	1454.929	451.5793	82.64813	0.163577	0.611291
AB_UPb_52.1	0.076822	0.002047	477.0416	12.25452	0.601425	0.019147	477.5602	12.13225	0.028966	0.001408	576.9398	27.66372	0.056705	0.000768	474.1842	30.37938	13.00141	0.39496	44.67289	841.2988	25.16049	6.802359	0.153117	0.79087
AB_UPb_53.1	0.223955	0.005946	1305.291	29.69836	2.945609	0.083145	1394.077	22.51927	0.07094	0.002335	1385.017	44.15724	0.095646	0.001013	1536.948	19.9177	4.480288	0.112109	1.365993	620.063	474.1999	308.7309	0.349993	0.814392
AB_UPb_55.1	0.276738	0.006996	1574.114	35.27355	3.923596	0.105492	1617.28	21.72527	0.08389	0.002587	1628.072	48.24873	0.102567	0.00104	1670.317	19.20156	3.623205	0.086578	1.88644	448.8393	240.6912	191.8936	0.407125	0.721198
AB_UPb_56.1	0.067595	0.001511	421.6279	9.123348	0.50655	0.016282	416.7036	11.55375	0.021215	0.00092	424.2124	18.20063	0.054572	0.001354	377.7986	60.13765	14.79972	0.317709	10.75918	255.2757	24.73382	4.873136	0.398959	-0.0573
AB_UPb_58.1	0.065269	0.001617	407.5785	9.78819	0.496798	0.016734	409.363	11.37624	0.020654	0.000751	413.2026	14.86219	0.055021	0.000844	410.1853	34.2645	15.33673	0.381644	2.697486	2542.773	950.8069	168.6269	0.813129	-0.33628
AB_UPb_6.1	0.137719	0.005361	830.4655	30.78144	1.41044	0.0766	882.3651	34.20179	0.04698	0.002438	927.0202	46.99536	0.07315	0.001793	1004.772	50.7653	7.407839	0.344899	3.417923	199.1528	60.18335	26.02528	-0.46108	0.876665
AB_UPb_60.1	0.164581	0.004047	982.0983	22.41593	1.643464	0.07477	984.9378	28.28715	0.049655	0.001789	979.439	34.42913	0.072155	0.002846	974.8875	78.47793	6.084192	0.151184	1.505693	141.0976	94.70937	41.14682	0.220424	0.137525
AB_UPb_60.2	0.098308	0.002711	604.2734	15.8959	2.597621	0.103063	1293.656	28.20514	0.126374	0.0051	2402.882	91.3176	0.193711	0.007691	2739.81	61.12878	10.2562	0.281259	3.228787	759.8033	235.2955	266.398	0.337587	0.129958
AB_UPb_62.1	0.245325	0.007692	1413.229	39.83461	3.133838	0.105065	1438.456	26.01537	0.073798	0.00234	1439.025	44.03329	0.092388	0.000558	1473.946	11.43578	4.112508	0.131447	1.636593	1948.731	1186.138	785.4644	0.105257	0.96855
AB_UPb_62.2	0.075709	0.002474	470.2038	14.8004	0.657043	0.02692	510.6368	16.24575	0.025812	0.000842	515.0615	16.58778	0.062701	0.000928	689.6453	31.29708	13.41592	0.426888	3.548701	808.1464	233.4431	53.74261	-0.37831	0.910318
AB_UPb_64.1	0.289911	0.007244	1640.332	36.20856	3.964815	0.150161	1620.428	31.25011	0.084547	0.003604	1639.122	66.90618	0.099014	0.002641	1585.789	50.66552	3.456205	0.082056	2.631506	29.14769	10.71169	8.219693	0.022935	0.459164
AB_UPb_65.1	0.042956	0.001292	271.0626	7.983692	0.460535	0.013965	384.1894	9.695695	0.023749	0.000833	474.363	16.42542	0.07761	0.001296	1133.191	33.43099	23.55734	0.718824	3.365943	2019.373	639.2031	135.2125	0.280561	0.760424
AB_UPb_66.1	0.254282	0.005405	1460.423	27.80418	3.2954	0.084691	1479.23	19.9931	0.07478	0.002269	1457.527	42.65564	0.093894	0.000987	1502.097	19.98288	3.935577	0.08462	2.295039	279.3141	122.2281	84.44016	0.197814	0.399727
AB_UPb_66.2	0.067295	0.002434	419.79	14.69951	0.518777	0.02617	423.817	17.18639	0.021092	0.000781	421.8681	15.45057	0.055757	0.001633	435.7419	65.53179	14.91933	0.540921	3.308248	1198.073	364.1699	65.72911	-0.03623	0.726932
AB_UPb_67.1	0.123448	0.004212	749.6929	24.28138	1.285709	0.056884	833.9136	25.99287	0.063001	0.003411	1233.136	65.04427	0.075057	0.001265	1066.221	32.81574	8.261088	0.31721	4.633423	427.9414	99.83828	51.99018	-0.48931	0.914254
AB_UPb_70.1	0.066198	0.001516	413.1757	9.16805	0.505049	0.015811	414.5308	10.65419	0.020796	0.000637	416.0117	12.62283	0.055034	0.000963	401.086	39.64175	15.11957	0.363764	1.398588	557.5871	404.2927	77.71119	0.028899	0.540476
AB_UPb_76.1	0.065497	0.001772	408.8783	10.74117	0.517221	0.016479	423.9337	10.43003	0.020705	0.000651	414.2034	12.89814	0.057164	0.000802	494.094	31.99223	15.39527	0.459691	3.973475	958.6594	240.9362	46.266	0.225129	0.795884
AB_UPb_77.1	0.288572	0.006256	1634.196	31.36872	4.05219	0.103318	1644.011	20.8661	0.083877	0.00249	1627.919	46.4435	0.101696	0.00077	1653.026	14.06236	3.469534	0.077033	0.51101	390.1259	781.2949	598.7562	0.165738	0.627293
AB_UPb_79.1	0.291609	0.006232	1649.427	31.15972	4.538889	0.118522	1737.131	21.86364	0.076076	0.002573	1481.616	48.44594	0.112397	0.001104	1835.351	17.79742	3.432142	0.074637	1.283988	269.0078	209.1379	145.7929	-0.08137	0.5924
AB_UPb_8.1	0.245791	0.005301	1416.599	27.48665	3.121954	0.082139	1437.142	20.23971	0.074191	0.002239	1446.468	42.11791	0.091814	0.00096	1459.576	19.94886	4.072988	0.089972	1.645838	260.1918	161.3708	110.4053	0.305907	0.492551
AB_UPb_80.1	0.066627	0.001744	415.7227	10.53885	0.507209	0.016619	415.8723	11.05253	0.020861	0.000645	417.3042	12.77151	0.055157	0.000987	412.0192	38.73115	15.06282	0.376533	1.936125	621.751	327.1715	64.61579	0.164229	0.60585
AB_UPb_84.1	0.17623	0.013658	1036.273	75.83096	2.321347	0.228722	1151.246	81.07778	0.073334	0.005581	1424.58	106.5294	0.089551	0.003268	1380.959	78.20548	6.913944	0.740978	4.712775	569.246	146.9128	105.1926	-0.95282	0.994969
AB_UPb_84.2	0.201154	0.019894	1160.902	107.9808	2.747937	0.35213	1213.238	111.3827	0.072923	0.006	1415.907	114.5593	0.088205	0.004638	1288.65	117.6077	6.825266	0.856748	9.076219	381.2582	88.609	65.39647	-0.96219	0.99521
AB_UPb_87.1	0.063914	0.002233	399.1536	13.56479	0.610043	0.021257	482.3766	13.54884	0.025644	0.001172	511.5888	23.08799	0.069556	0.00146	899.0975	44.38107	16.00499	0.637604	3.079618	1134.863	391.6827	86.61372	0.527793	0.718274
AB_UPb_88.1	0.067038	0.001662	418.2257	10.04452	0.528147	0.015117	430.1951	10.0464	0.022135	0.000711	442.4941	14.05737	0.057182	0.000831	490.0276	31.92359	14.94946	0.354828	3.40041	630.6832	185.2196	37.89514	0.279192	0.583498
AB_UPb_89.1	0.068151	0.001681	424.9638	10.1378	0.523003	0.015254	426.8568	10.18734	0.021567	0.000695	431.2765	13.74104	0.055345	0.000742	420.558	30.10507	14.71937	0.358493	2.770482	1287.745	462.864	89.64735	0.172381	0.64652
AB_UPb_90.1	0.285358	0.006768	1617.745	34.06914	3.94824	0.10771	1622.15	22.40026	0.078449	0.00264	1526.133	49.51785	0.099985	0.000816	1621.264	15.11318	3.516844	0.086825	6.969241	252.9909	40.70115	29.58187	0.091984	0.837519
AB_UPb_91.1	0.054605	0.002289	342.5603	13.99194	1.114921	0.100818	743.8869	49.60125	0.022112	0.001033	441.9758	20.42471	0.15603	0.017861	2176.126	225.9227	18.55795	0.754409	1.433854	1328.409	1400.264	269.0575	0.9045	-0.82433
AB_UPb_92.1	0.044233	0.001739	278.9452	10.73016	0.350975	0.01604	304.8788	12.03453	0.015634	0.000498	313.554	9.906846	0.057257	0.001569	487.7896	61.35511	22.88755	0.89837	0.89414	584.667	657.4293	90.85075	0.153056	0.717171
AB_UPb_93.1	0.170212	0.003704	1013.19	20.41359	1.72977	0.049623	1018.335	18.55285	0.052065	0.001687	1025.744	32.41537	0.073571	0.00112	1026.286	29.68469	5.882588	0.129133	2.991218	174.9562	58.23514	28.16037	0.058255	0.414683
AB_UPb_93.2	0.094902	0.00485	583.1894	28.54201	1.001755	0.062038	694.5299	31.8833	0.042926	0.00247	848.5068	47.86412	0.074998	0.001586	1060.294	44.74599	11.13529	0.592538	5.068425	1114.614	224.6812	85.81778	-0.3333	0.94395

G_NIST610																									
NIST610-1	0.236807	0.005238	1369.927	27.29644	29.51043	0.736763	3470.084	24.36813	0.508175	0.01504	8304.453	201.1889	0.900929	0.006395	4977.014	0.226205	4.221946	0.098726	0.930099	334.1639	372.1282	1678.085	0.447908	0.68218	
NIST610-2	0.242678	0.018274	1387.351	82.46823	30.94752	2.626367	3464.211	45.88549	0.482556	0.014391	7957.562	195.4777	0.906342	0.004964	4970.769	0	4.369565	0.113419	0.921535	408.1514	457.9143	2014.514	0.045017	0.998936	
NIST610-3	0.246751	0.020692	1404.35	93.19224	31.71534	2.993649	3489.19	57.08479	0.484942	0.01451	7989.889	197.1142	0.909179	0.005755			4.18447	0.185948	0.925233	411.1025	458.0184	2034.908	0.251633	0.99656	
NIST610-4	0.261455	0.027074	1468.348	119.1731	32.78246	3.454604	3508.145	63.99928	0.491093	0.014788	8073.192	199.2244	0.908079	0.005575	4994.069	0	4.168074	0.189731	0.947835	363.4491	383.5383	1762.452	-0.04516	0.998783	
NIST610-5	0.249872	0.022225	1418.616	98.85295	31.38946	2.826939	3485.988	54.08342	0.493668	0.014827	8108.218	200.0332	0.910411	0.005408	4991.005	0	4.326882	0.132	0.953159	359.4505	377.3014	1740.874	0.020295	0.999167	
NIST610-6	0.244849	0.022001	1393.07	96.71377	30.94982	2.903935	3471.617	52.74778	0.48774	0.014543	8028.195	196.8638	0.911102	0.005254			4.365527	0.137279	0.953978	358.8897	375.7868	1721.423	0.031945	0.998403	
NIST610-7	0.246823	0.018861	1407.901	85.9638	30.74397	2.374054	3464.385	43.21478	0.493179	0.014751	8101.835	199.3359	0.901644	0.005038			4.288013	0.138506	0.955705	352.0809	369.6784	1695.986	0.089824	0.998238	
NIST610-8	0.24795	0.021179	1410.144	95.02208	30.84753	2.637021	3472.549	51.99308	0.48952	0.014682	8052.137	198.3872	0.900786	0.00473	4993.925	0	4.281524	0.157014	0.948545	354.3929	374.4547	1703.929	0.143716	0.998933	
NIST610-9	0.23811	0.015619	1367.277	70.67851	29.68462	2.00205	3439.564	31.50837	0.490658	0.014776	8067.312	199.2889	0.89807	0.005599	4969.134	23.56549	4.394365	0.094283	0.944187	343.3095	364.1269	1668.282	0.093603	0.993723	
NIST610-10	0.242701	0.018205	1387.476	82.01171	30.39578	2.397974	3452.712	40.39399	0.48792	0.014554	8030.613	197.141	0.90141	0.005608	4997.341	0	4.368423	0.112163	0.940554	344.4476	366.6263	1670.568	-0.14775	0.997443	
NIST610-11	0.239933	0.018047	1373.652	80.28803	30.12983	2.309539	3423.735	12.15887	0.490486	0.015037	8064.132	200.9428	0.90196	0.004886			4.467125	0.047623	0.942905	337.7381	359.2669	1652.522	0.163429	0.998081	
NIST610-12	0.237196	0.016686	1361.732	72.8617	31.1035	2.936941	3449.111	36.43724	0.4947	0.014857	8132.281	213.9102	0.900242	0.004883	4956.614	0	4.408606	0.078204	0.945974	332.9877	353.8826	1619.372	-0.01417	0.9961	
NIST610-13	0.234809	0.012834	1353.314	58.81111	29.24918	1.607862	3445.769	34.52812	0.486481	0.01505	8009.355	199.9206	0.900541	0.005158			4.405575	0.082043	0.946505	341.5365	360.6735	1647.443	0.152656	0.996398	
NIST610-14	0.224866	0.005268	1307.209	27.29895	28.02646	0.751246	3418.394	24.29067	0.480848	0.014498	7933.966	196.4909	0.903102	0.004722			4.458899	0.09142	0.946615	342.8736	362.0583	1641.701	0.172987	0.998939	
NIST610-15	0.236521	0.015227	1359.547	69.18255	29.65837	2.027285	3437.736	34.33829	0.482683	0.015292	7956.626	199.8448	0.900922	0.005274	4985.356	7.449173	4.451818	0.076362	0.94809	338.8133	358.2994	1606.367	0.07808	0.995027	
NIST610-16	0.233765	0.014722	1346.019	66.48544	29.08877	1.889082	3422.531	29.37951	0.480194	0.014586	7924.648	194.7241	0.90214	0.005001	4958.691	0	4.486123	0.058838	0.95585	345.1027	362.0788	1602.549	-0.01042	0.997393	
NIST610-17	0.250493	0.022361	1396.255	85.31826	31.07201	2.762429	3464.523	46.70767	0.486776	0.014613	8014.758	197.9652	0.9025	0.004624	4874.249	157.4276	4.348778	0.111822	0.954365	338.9729	356.5898	1592.613	-0.01622	0.975969	
NIST610-18	0.228502	0.00699	1325.299	35.28301	28.22449	0.961493	3421.536	27.37738	0.486738	0.015274	8012.16	201.5751	0.897067	0.004796	4947.661	108.1193	4.416452	0.098253	0.958841	340.7512	358.0702	1596.674	0.028798	0.997443	
NIST610-19	0.255054	0.026366	1410.745	101.8161	32.02522	3.199701	3468.547	45.57535	0.490922	0.014632	8071.388	197.6524	0.91416	0.005901	4949.286	0	4.402111	0.112673	0.963348	352.5848	367.0795	1686.37	0.06909	0.996068	
NIST610-20	0.240889	0.019079	1377.119	83.81254	30.92508	2.710883	3474.85	50.64522	0.489993	0.014693	8058.498	198.0761	0.910297	0.005493	4742.916	0	4.433904	0.077129	0.96031	351.1299	366.4764	1677.035	0.045544	0.991164	
NIST610-21	0.24834	0.020529	1412.93	92.23145	31.99778	2.916141	3466.333	40.9867	0.490265	0.014782	8061.909	199.2721	0.910665	0.004872			4.417364	0.077275	0.960523	349.8805	365.1606	1656.403	-0.06019	0.998397	
NIST610-22	0.231836	0.014134	1314.573	45.15384	28.14021	1.383174	3401.127	13.65911	0.488732	0.014776	8041.032	198.6528	0.893815	0.00512	4973.803	25.9292	4.511377	0.048745	0.954625	363.062	381.7371	1735.895	0.015429	0.995944	
NIST610-23	0.230744	0.010509	1334.485	48.18694	28.50697	1.288253	3416.224	16.38498	0.493621	0.014833	8107.599	199.5967	0.893608	0.005522	4918.687	102.2818	4.439112	0.059267	0.954738	363.7555	382.4706	1756.913	0.071116	0.995788	
NIST610-24	0.2274	0.009118	1318.062	42.50989	28.33146	1.187831	3412.465	14.41246	0.492063	0.014881	8086.19	200.1512	0.89925	0.006497	4973.872	0	4.484205	0.050523	0.952225	362.059	381.2754	1741.133	0.001155	0.993313	
NIST610-25	0.234581	0.013219	1351.775	60.31873	29.7305	2.165593	3437.442	35.46699	0.486768	0.015045	8024.569	194.9142	0.898316	0.006103	4977.1	45.99373	4.384107	0.10539	0.951835	357.5532	377.5939	1719.423	0.082424	0.997806	
NIST610-26	0.227976	0.008887	1304.712	16.99952	27.73201	0.744458	3407.873	24.96957	0.482671	0.014534	7958.785	196.0334	0.900144	0.005282	4869.745	250.3601	4.471407	0.058286	0.959223	354.3116	369.4103	1690.746	0.088066	0.997442	
NIST610-27	0.225082	0.005343	1308.292	27.75547	28.02294	0.753481	3418.111	24.61877	0.482984	0.014545	7963.037	196.7918	0.903552	0.005599			4.456875	0.094668	0.954856	350.1103	366.9256	1670.3	0.226771	0.997497	
KG01																									
KG01_UPb_001.1	0.309471	0.007799	1737.844	38.50305	4.667001	0.145383	1760.387	26.05368	0.088388	0.003534	1711.587	65.54982	0.109078	0.002239	1780.132	37.25435	3.236103	0.083848	1.982844	145.8781	73.89046	56.62158	0.379591	0.36882	
KG01_UPb_003.1	0.066855	0.001744	417.1029	10.56129	0.577229	0.02233	461.1342	14.37149	0.02227	0.000814	445.1305	16.08189	0.062832	0.001931	678.3822	64.83559	15.06055	0.432008	1.606785	173.0587	123.5078	24.71693	0.113816	0.412742	
KG01_UPb_004.1	0.133542	0.003011	808.0093	17.13075	1.245515	0.040134	820.8009	18.08036	0.042615	0.001498	843.4403	29.0421	0.067438	0.001559	844.7072	48.30031	7.493363	0.170078	1.587851	416.7777	263.7601	98.25027	0.350675	0.061702	
KG01_UPb_004.2	0.137501	0.002963	830.4697	16.7657	1.271813	0.035369	832.3957	15.84585	0.041398	0.001289	819.8484	25.01451	0.067044	0.000992	831.2661	30.81763	7.2798	0.153587	1.685152	352.7685	210.4025	80.77959	0.023479	0.49822	
KG01_UPb_005.1	0.035605	0.002306	225.4755	14.35397	0.424657	0.040461	357.9261	27.59684	0.024503	0.004258	488.6069	83.54016	0.08874	0.013071	1315.531	233.2148	28.52478	1.895255	2.783116	4205.89	1522.129	317.2486	0.811871	-0.51179	
KG01_UPb_006.1	0.141442	0.011588	845.218	65.73676	1.668218	0.157806	952.3463	64.16197	0.053846	0.003904	1057.225	75.1671	0.08259	0.002049	1246.837	49.84694	8.516903	0.797435	2.679822	331.1257	125.7649	62.51928	-0.55713	0.979426	
KG01_UPb_007.1	0.070248	0.002377	437.4909	14.31479	0.75719	0.053373	565.7579	31.13481	0.033047	0.003484	655.4888	67.75138	0.0777	0.004726	1062.519	122.6956	14.40041	0.493688	1.827134	728.1948	508.8016	119.5973	-0.05746	0.503333	
KG01_UPb_008.1	0.070408	0.001784	438.5384	10.7368	0.723865	0.025539	553.3495	15.52359	0.027601	0.001118	550.1677	22.0004	0.074961	0.001933	1046.792	49.26273	14.21364	0.391729	0.768192	1874.424	2828.122	725.036	0.363923	0.458492	
KG01_UPb_008.2	0.072372	0.001887	450.3378	11.34198	0.592512	0.018192	471.8087	11.60631	0.02407	0.000874	480.672	17.2362	0.059559	0.001017	581.5141	37.85997	13.86741	0.347959	3.380448	685.7432	214.9505	47.6782	0.183715	0.575399	
KG01_UPb_010.1	0.041523	0.002837	261.9201	17.57633	0.372865	0.01712	320.845	12.67535	0.040992	0.004969	808.5488	96.26779	0.06749	0.003019	809.9094	89.75202	26.02191	1.995907	10.02075	1527.281	298.1939	66.15198	0.836709	0.805701	
KG01_UPb_010.2	0.068028	0.00189	424.1588	11.43207	0.579954	0.0255	462.2413	16.28411	0.026582	0.001547	529.8583	30.40736	0.061812	0.001572	653.4651	54.05014	14.7005	0.369824	3.408499	1599.311	516.3452	101.1233	-0.19987	0.734135	
KG01_UPb_011.1	0.060536	0.00157	378.82	9.541353	0.566736	0.01666	456.4371	11.30534	0.029958	0.001003	596.5623	19.68006	0.068238	0.000993	872.4265	31.34203	16.56693	0.403389	3.866123	1238.531	318.388	88.46841	0.376118	0.659878	
KG01_UPb_011.2	0.052658	0.00171	330.6944	10.49925	0.410537	0.014073	348.6077	10.2648	0.019705	0.000688	395.7355	12.81552	0.056562	0.000455	471.3276	17.68457	19.23844	0.692221	4.414041	3436.931	724.4556	136.1073	0.228411	0.953724	
KG01_UPb_012.1	0.112317	0.017076	669.2629	94.18136	6.635166	1.563618	1738.163	170.3053	0.432465	0.098994	6341.492	1182.699	0.344376	0.027269	3577.263	119.871	12.61815	1.187645	2.231569	3269.048	1427.698	6735.823	-0.85784	0.959415	
KG01_UPb_013.1	0.062223	0.001541	389.0818	9.35345	0.512718	0.014759	419.9046	9.911221	0.021121	0.000733	422.4286	14.50354	0.059658	0.000726	589.1827	27.44069	16.14469	0.405555	2.660717	1988.859	763.0157	151.0183	0.246612	0.620327	
KG01_UPb_014.1	0.071242	0.001795	443.5599	10.80549	0.55147	0.018432	445.1114	12.12918	0.022498	0.000758	449.6602	14.97342	0.056124	0.001102	449.9076	43.33979	14.07485	0.348348	1.478557	379.0707	265.9094	54.45094	0.079931	0.576632	
KG01_UPb_015.1	0.084305	0.005456	519.9832	32.47238	1.326235	0.070411	848.3501	30.37637	0.101029	0.004776	1942.435	87.97304	0.116125	0.003581	1900.31	59.15322	13.17713	0.963916	5.457237	1447.226	313.4711	245.5104	0.72125	0.879903	
KG01_UPb_017.1	0.067394	0.002006	420.294	12.09696	0.686714	0.023539	529.5927	14.05977	0.029631	0.001113	590.0979	21.82088	0.073552	0.001194	1020.19	32.62716	14.94479	0.413094	1.39047	1742.243	1422.419	388.0966	0.292686	0.677542	
KG01_UPb_017.2	0.070817	0.001975	442.2507	12.42451	0.815239	0.047333	607.8665	27.77578	0.034163	0.00191	678.3836	37.073	0.084988	0.004381	1275.605	93.14691	14.16407	0.393362	2.689082	657.1626	243.3036	77.22544	-0.26263	0.567227	
KG01_UPb_018.1	0.278696	0.00718	1583.859	36.41299	3.964966	0.117553	1626.76	23.63561	0.090684	0.003884	1752.804	71.3899	0.103099	0.000772	1678.375	13.78043	3.601647	0.094791	6.251456	601.2815	158.9263	130.0862	0.000739	0.884261	
KG01_UPb_019.1	0.246485	0.005609	1420.151	28.95007	3.052154	0.091793	1422.372	21.27628	0.072207	0.002256	1409.085	42.51391	0.08968	0.001654	1412.151	35.6665	4.062426	0.091121	0.607329	134.6859	222.3252	143.8493	0.23795	0.302554	
KG01_UPb_019.2	0.066694	0.001919	416.1698	11.60505	0.51945	0.018162	424.4792	12.12284	0.024228	0.001171	483.7906	23.08122	0.056226	0.000849	457.6639	33.31307	15.04203	0.441766	4.288068	2136.851	503.4239	105.5708	-0.0289	0.811293	
KG01_UPb_020.1	0.261899	0.009332	1496.7	47.61661	3.935053	0.168167	1611.545	33.25199	0.115946	0.011346	2196.163	192.574	0.109102	0.003175	1765.424	44.72387	3.898289	0.139746	3.302639	375.9128	116.4167	122.0575	0.11903	0.529025	
KG01_UPb_021.1	0.071164	0.00187	443.1111	11.25084	0.543526	0.016139	440.4586	10.57127	0.026567	0.001061	529.9002	20.8828	0.055148	0.000507	415.4904	20.3787	14.10565	0.368639	1.032652	2597.478	2521.681	613.1257	0.07871	0.86582	
KG01_UPb_022.1	0.254582	0.015359	1451.081	82.44555	3.350458	0.23259	1449.689	69.52863	0.074653	0.003967	1452.865	75.34419	0.093375	0.001801	1483.207	38.95555	4.395419	0.451299	1.63509	338.9979	200.2302	111.4503	-0.80415	0.985507	
KG01_UPb_022.2	0.070421	0.004173	437.6152	25.27081	0.95974	0.048107	677.3382	24.73594	0.100183	0.005207	1925.956	95.47745	0.099516	0.005204	1559.571	75.07571	15.2142	1.065135	10.08849	970.2871	136.835	97.69484	0.860679	0.531003	
KG01_UPb_023.1	0.28956	0.006958	1638.727	34.64254	4.030859	0.107808	1639.232	21.58458	0.084147	0.002555	1632.902	47.64847	0.101102	0.000528	1643.009	9.66537	3.466076	0.080982	10.00059	1589.195	166.7595	129.3616	0.135711	0.926941	
KG01_UPb_024.1	0.064877	0.002065	405.0492	12.51388	0.927753	0.059841	661.3811	30.81639	0.031096	0.001776	618.4211	34.7831	0.10501	0.005934	1631.307	100.5732	15.58227	0.504099	1.845661	1118.652	726.117	179.8462	0.13168	0.334614	
KG01_UPb_024.2	0.059591	0.001577	373.0714	9.588052	0.671975	0.020559	521.1684	12.5039	0.018801	0.000758	376.4268	15.01878	0.081985	0.001699	1231.657	40.36189	16.85085	0.457526	1.396607	1127.882	824.3824	144.8403	0.434725	0.411648	
KG01_UPb_026.1	0.25187	0.005938	1447.693	30.63698	3.599094	0.103199	1549.343	22.22364	0.07364	0.002444	1435.873	46.0403	0.103433	0.001139	1682.616	20.38887	3.983419	0.096324	3.167531	238.2789	75.50728	51.50076	-0.0169	0.748183	
KG01_UPb_026.2	0.166017	0.004667	989.5276	25.93409	2.077215	0.078599	1135.945	27.39969	0.047514	0.001621	938.076	31.30972	0.089956	0.001329	1421.663	28.18961	6.06069	0.177786	3.865919	458.2824	117.8976	51.45674	-0.67742	0.93823	
KG01_UPb_028.1	0.134389	0.006274	810.9616	35.74816	1.221027	0.073601	798.7804	34.25546	0.04042	0.001746	800.5198	33.96606	0.064772	0.001348	758.1117	45.15641	7.790969	0.397817	4.998804	197.7193	40.01643	14.86054	-0.49858	0.933597	
KG01_UPb_029.1	0.068247	0.001647	425.5521	9.937648	0.524018	0.015407	427.5494	10.21308	0.026926	0.001155	536.9298	22.75296	0.055409	0.00072	423.9524	28.39718	14.68913	0.352882	0.694552	2333.522	3654.032	890.2525	0.642356	0.026495	
KG01_UPb_029.2	0.06858	0.001868	427.4935	11.24323	0.643623	0.04483	497.6362	24.80889	0.023546	0.000959	470.3046	18.88469	0.069112	0.004129	847.6553	107.4051	14.6472	0.396875	1.581468	858.6604	834.7016	188.0764	-0.55807	0.759198	

KG01_UPb_029.3	0.069561	0.001992	433.4384	11.99391	0.530132	0.01631	431.5841	10.816	0.021369	0.000691	427.3569	13.6687	0.055048	0.001006	415.0367	38.39661	14.45093	0.409409	2.244788	845.9825	390.929	73.73637	0.446172	0.546562
KG01_UPb_029.4	0.067975	0.001827	423.853	11.04869	0.537372	0.016024	436.197	10.68824	0.021619	0.000695	432.2871	13.75688	0.057318	0.000663	498.1394	25.60592	14.82548	0.43332	2.128515	1352.833	624.1627	126.8412	0.245837	0.869049
KG01_UPb_030.1	0.068401	0.001739	426.4427	10.49568	0.554565	0.019298	448.4977	12.02727	0.022635	0.000876	452.3354	17.30016	0.058941	0.001244	555.3241	44.83975	14.7002	0.385436	1.146659	482.4151	706.8188	134.9798	0.058151	0.565835
KG01_UPb_031.1	0.06943	0.001869	432.6822	11.25161	0.528473	0.016439	430.5656	10.94771	0.030082	0.000928	599.0407	18.21698	0.054856	0.000791	402.3371	33.08303	14.44205	0.375441	0.731971	2600.63	3819.416	1020.391	0.18943	0.734001
KG01_UPb_031.2	0.057798	0.002794	361.7769	17.04786	0.492281	0.024684	403.8533	16.883	0.022918	0.000886	457.9141	17.50343	0.061679	0.000664	658.0935	23.47988	18.22357	0.993464	2.710254	2186.283	797.2684	165.2334	0.136696	0.97253
KG01_UPb_032.1	0.226779	0.004975	1317.437	26.14068	2.700255	0.073862	1327.299	20.26925	0.068052	0.002186	1330.522	41.37353	0.08654	0.001228	1343.646	27.46119	4.415929	0.097164	1.922089	131.27	68.4331	43.30621	0.278029	0.329431
KG01_UPb_034.1	0.069927	0.00226	435.6105	13.59841	0.548623	0.020858	443.3893	13.65164	0.021846	0.000714	436.797	14.12775	0.056516	0.001085	465.0252	41.23955	14.40978	0.455857	1.480448	615.5759	413.8696	81.50173	0.047651	0.765432
KG01_UPb_035.1	0.260121	0.007582	1489.026	39.2373	3.479314	0.134605	1515.026	32.57342	0.078049	0.002406	1518.862	45.1115	0.096026	0.001463	1545.351	30.55855	3.875332	0.124206	1.015437	185.9797	183.6141	133.209	-0.56684	0.903663
KG01_UPb_036.1	0.271643	0.006442	1548.646	32.62463	3.747788	0.102806	1580.172	22.12188	0.0844	0.002679	1637.487	49.97754	0.099931	0.000736	1620.626	13.73287	3.693572	0.087278	1.494332	422.3328	288.5999	223.6569	0.142911	0.858166
KG01_UPb_036.2	0.28346	0.006367	1608.542	32.00613	3.84143	0.108633	1600.154	22.8978	0.082865	0.002566	1608.977	47.91668	0.097854	0.001371	1579.003	26.22563	3.532864	0.080213	1.389727	224.2009	161.1069	120.3163	0.169891	0.486353
KG01_UPb_037.1	0.068968	0.001524	429.914	9.199058	0.536335	0.017632	435.2262	11.51497	0.021476	0.000659	429.4696	13.04508	0.05604	0.001229	442.0242	50.21573	14.50489	0.316083	0.80662	309.9777	383.1233	76.73927	0.202221	0.15852
KG01_UPb_037.2	0.071595	0.001901	445.6587	11.44722	0.691979	0.027381	531.9559	16.07107	0.027693	0.001368	551.8307	26.87063	0.070387	0.002379	909.9903	71.49048	14.0684	0.387696	2.499132	630.8004	222.4341	59.47868	0.335575	0.199879
KG01_UPb_038.1	0.280575	0.006238	1593.987	31.47276	4.004435	0.107501	1633.833	21.6289	0.084629	0.002665	1641.775	49.59897	0.103221	0.001397	1677.109	24.89834	3.570542	0.081442	1.265215	169.1687	137.1716	109.3109	0.375922	0.313036
KG01_UPb_038.2	0.065471	0.001706	408.7334	10.32074	0.704198	0.041519	535.2336	24.3362	0.030171	0.001727	600.2898	33.85611	0.077371	0.003621	1063.854	90.26068	15.37072	0.401426	2.795329	1416.368	484.2973	125.2212	-0.34014	0.618332
KG01_UPb_039.1	0.067612	0.001685	421.6888	10.17077	0.685789	0.026668	528.3658	15.93059	0.02505	0.001184	499.8774	23.3188	0.072975	0.002193	1004.206	58.21228	14.82315	0.351592	0.9886	1586.638	1919.546	469.3128	0.250663	0.199124
KG01_UPb_039.2	0.067743	0.001855	422.4389	11.1761	1.104097	0.039736	752.8173	18.84375	0.040105	0.001703	794.419	33.05831	0.119305	0.003286	1924.719	49.21252	14.87821	0.391781	1.718278	1097.31	885.085	295.0972	0.379968	0.410384
KG01_UPb_040.1	0.147257	0.00409	885.1173	23.07859	1.820825	0.065451	1049.067	24.30039	0.069814	0.002708	1363.331	51.3469	0.08907	0.001795	1393.106	38.54355	6.853829	0.207918	1.437384	200.0547	152.4494	93.81666	-0.01347	0.68251
KG01_UPb_041.1	0.228973	0.007077	1328.683	37.06479	2.716903	0.134527	1329.333	36.99344	0.069647	0.00366	1360.27	69.10426	0.085454	0.003866	1305.936	90.96278	4.384158	0.135229	1.77139	38.52454	22.03206	13.20347	0.334883	0.177268
KG01_UPb_043.1	0.086672	0.004781	534.5538	28.06223	2.469195	0.447967	1092.041	116.901	0.047086	0.005467	923.9253	103.7804	0.179393	0.023473	2234.208	226.4977	12.16736	0.567123	0.979267	1112.291	1369.363	610.3931	-0.89773	0.956676
KG01_UPb_043.2	0.06928	0.001676	431.7617	10.10347	0.540927	0.015073	438.7082	9.93422	0.022135	0.000683	442.5089	13.4941	0.056114	0.000638	451.4204	24.86274	14.49102	0.350972	2.731156	1776.194	646.8504	133.523	0.322452	0.587202
KG01_UPb_043.3	0.070393	0.001976	438.4056	11.87924	1.454284	0.161695	865.1175	65.63576	0.063765	0.00765	1238.383	143.8006	0.145341	0.013786	2050.786	183.6028	14.31994	0.385981	2.218837	1260.639	573.8276	343.2781	-0.64917	0.777008
KG01_UPb_044.1	0.261863	0.009325	1496.498	47.90278	4.06453	0.176055	1636.192	36.7799	0.084435	0.002955	1637.808	55.23457	0.111349	0.0012	1817.708	19.86897	3.880844	0.140327	1.263842	328.4975	263.2953	204.9431	-0.67491	0.975882
KG01_UPb_044.2	0.183262	0.006305	1087.482	32.96297	2.474532	0.115943	1254.086	33.92133	0.074825	0.003294	1457.127	61.91492	0.096664	0.001649	1551.599	31.83832	5.533706	0.190587	2.392717	639.5764	264.9369	178.3351	-0.53878	0.93346
KG01_UPb_045.1	0.202216	0.00646	1190.701	33.0634	2.476328	0.09921	1258.142	30.57487	0.070179	0.002328	1370.635	44.01468	0.088168	0.001394	1387.285	30.43619	5.002046	0.185707	2.123832	164.0947	77.93835	50.77367	-0.21072	0.887953
KG01_UPb_045.2	0.069008	0.001758	430.1039	10.59346	0.570567	0.016524	457.9363	10.66316	0.024421	0.000777	487.648	15.32355	0.059683	0.000768	585.5908	27.57955	14.53742	0.381633	3.100152	1253.05	404.1667	91.95089	0.366834	0.646897
KG01_UPb_046.1	0.201034	0.005578	1180.115	30.05592	3.077666	0.177474	1408.022	44.1156	0.117278	0.012167	2215.364	217.4136	0.109248	0.004357	1743.262	73.28035	5.000432	0.139859	2.346843	291.058	173.2879	124.3219	-0.53177	0.748874
KG01_UPb_046.2	0.153956	0.01003	917.6294	56.79686	1.55765	0.109945	930.6621	47.58108	0.047426	0.002954	934.9909	57.22445	0.07233	0.000899	989.4113	25.48082	7.324088	0.647937	3.658066	601.5352	189.8399	64.07119	-0.4956	0.983929
KG01_UPb_047.1	0.073529	0.001699	457.3616	10.20591	0.592904	0.015984	472.5817	10.18392	0.134829	0.015715	2535.494	276.3252	0.057916	0.000706	523.0598	26.75574	13.61825	0.318563	160.7895	3507.441	21.99351	24.81693	0.358717	0.505429
KG01_UPb_048.1	0.058476	0.002135	366.247	13.02436	0.510636	0.031448	417.0275	18.85214	0.024642	0.00396	490.4047	75.99023	0.062026	0.00356	635.2505	94.56874	17.29637	0.683929	3.058307	2346.681	793.7549	163.6557	0.275796	0.085703
KG01_UPb_049.1	0.064093	0.001507	400.4335	9.133417	1.341603	0.07668	852.6395	34.58955	0.035496	0.001279	704.888	24.95304	0.151951	0.007819	2293.124	100.1098	15.65163	0.372697	0.880906	2434.855	6219.855	1841.566	0.134918	0.103219
KG01_UPb_050.1	0.060206	0.00291	376.6997	17.70143	0.546703	0.036635	440.8358	22.08525	0.023556	0.002472	470.1164	48.11938	0.066472	0.00529	762.6859	131.383	16.9114	0.854843	3.475528	1121.144	332.8137	66.81344	0.156233	0.118809
KG01_UPb_050.2	0.036442	0.002238	230.6674	13.92863	0.580138	0.066027	460.1827	40.40115	0.033973	0.004824	674.1184	93.70966	0.113732	0.008545	1828.668	124.157	27.97822	1.805714	2.627732	3497.594	1307.545	351.1353	-0.2488	0.691676
KG01_UPb_053.1	0.299269	0.010666	1686.494	52.60015	4.308856	0.14889	1693.272	28.88145	0.087131	0.002709	1688.504	50.38477	0.104441	0.000925	1702.979	16.39357	3.364152	0.116493	2.080685	538.4049	261.2222	199.1072	0.018653	0.954733
KG01_UPb_054.1	0.327357	0.007259	1825.227	35.28611	5.189736	0.134122	1850.002	21.77748	0.105731	0.003835	2030.414	69.75232	0.114771	0.001203	1872.756	18.65398	3.060013	0.06864	2.591854	269.1962	105.4236	103.634	0.37021	0.424537
KG01_UPb_054.2	0.263243	0.008966	1503.92	45.91982	3.794313	0.14694	1584.224	31.57162	0.088683	0.003236	1716.611	59.96391	0.103974	0.001081	1692.646	19.01436	3.853133	0.132868	3.814868	454.033	122.019	95.03065	-0.27167	0.952008
KG01_UPb_054.3	0.091115	0.008123	546.4314	39.20637	1.885622	0.342523	995.4384	69.2246	0.211381	0.071333	3360.682	812.9826	0.152268	0.015299	2276.096	148.3862	12.31049	0.860791	6.284326	1623.914	302.9004	766.9016	-0.30189	0.829084
KG01_2_UPb_01.1	0.065007	0.001802	405.9029	10.90247	0.884364	0.063038	631.4983	33.63982	0.023175	0.001015	462.9442	20.05182	0.099999	0.007545	1462.016	145.7399	15.5115	0.435721	1.208472	1253.988	1773.508	384.9159	0.496176	-0.27141
KG01_2_UPb_01.2	0.065505	0.001759	408.9287	10.64415	0.812395	0.03576	600.4037	19.95844	0.025343	0.001478	505.4774	29.12241	0.089805	0.0031	1383.641	69.60736	15.37918	0.420757	1.184355	1334.167	1635.027	348.0972	0.077696	0.350303
KG01_2_UPb_03.1	0.070022	0.002414	436.1694	14.55073	0.52175	0.019765	425.7337	13.14773	0.021384	0.000657	427.6486	13.00252	0.053802	0.001268	351.9433	53.38452	14.40989	0.518585	1.598493	640.8023	424.1973	80.93305	0.369917	0.667357
KG01_2_UPb_06.1	0.069606	0.001646	433.7456	9.923602	0.955335	0.078776	667.6213	39.71668	0.032346	0.001422	643.235	27.87526	0.098838	0.007278	1490.539	134.5097	14.40334	0.346602	0.778254	3271.037	5676.398	1734.079	-0.26305	0.390537
KG01_2_UPb_07.1	0.104395	0.003239	639.7378	18.92942	1.088251	0.039992	744.9457	19.79598	0.031286	0.001204	622.5192	23.60644	0.075211	0.000867	1069.1	23.61217	9.711732	0.316849	4.284999	1148.131	263.3269	77.20264	-0.21221	0.924147
KG01_2_UPb_08.1	0.067853	0.001869	423.1058	11.28704	0.6586	0.03174	510.5282	18.89636	0.02865	0.00175	570.4035	34.25231	0.070594	0.00302	892.0358	81.0551	14.81156	0.39825	1.685213	1613.058	1251.728	292.1293	0.13981	0.294478
KG01_2_UPb_08.2	0.046814	0.001432	294.8508	8.816702	0.631874	0.048725	487.6441	29.38615	0.033667	0.002846	667.6334	55.41162	0.094533	0.005015	1449.898	103.1779	21.63722	0.675651	2.904916	2871.867	984.5241	251.962	-0.74941	0.857958
KG01_2_UPb_09.1	0.198302	0.016778	1150.93	92.06704	16.88378	1.8669	2701.926	162.6489	0.259036	0.018711	4605.975	314.9904	0.566028	0.03601	4306.268	125.1983	6.475122	0.977704	1.111685	32.63588	23.87222	46.47646	-0.71761	0.917419
KG01_2_UPb_09.2	0.06864	0.001551	427.9269	9.360453	1.58709	0.054997	962.1124	21.64466	0.058089	0.0019	1141.098	36.30043	0.166799	0.004106	2510.32	41.75812	14.60135	0.333979	1.857607	210.6904	114.2785	61.46619	0.179428	0.240001
KG01_2_UPb_12.1	0.166527	0.004763	992.3264	26.41318	1.935381	0.083621	1090.48	29.81468	0.062032	0.003322	1214.811	62.73222	0.08357	0.002638	1256.94	54.15686	6.065554	0.184821	5.627853	363.9969	70.1193	39.57598	-0.0147	0.459348
KG01_2_UPb_12.2	0.067146	0.001702	418.8682	10.29604	0.54026	0.017524	437.8513	11.52672	0.025144	0.000983	501.8348	19.37166	0.058013	0.000724	528.0444	27.80052	14.94046	0.384002	5.955642	2482.513	450.8138	107.0988	-0.20264	0.807676
KG01_2_UPb_15.1	0.059029	0.001725	369.6084	10.47685	0.463302	0.013309	386.2192	9.176384	0.024316	0.000898	485.5366	17.7001	0.057152	0.000409	494.6795	15.85247	17.11393	0.47671	0.589088	4181.333	7352.565	1583.027	0.528511	0.93189
KG01_2_UPb_16.1	0.062593	0.001925	391.2342	11.67217	1.545555	0.10536	929.2026	43.74465	0.057283	0.004628	1121.772	88.46482	0.175604	0.008521	2544.524	93.87797	16.11441	0.475753	1.211169	2189.704	1856.75	1018.126	-0.60726	0.797268
KG01_2_UPb_18.1	0.063731	0.001585	398.2218	9.598129	0.737989	0.026689	561.3465	16.08173	0.02773	0.001383	552.5562	27.11263	0.084168	0.002098	1276.876	49.02168	15.73099	0.373124	1.497069	1229.71	948.6404	226.1092	-0.00319	0.524315
KG01_2_UPb_21.1	0.066867	0.002002	417.1476	12.114	0.576562	0.020065	461.4958	12.79176	0.026266	0.001046	523.9492	20.59817	0.062017	0.00086	669.2573	28.66453	15.08675	0.48419	3.259015	2900.781	999.5983	219.1924	0.171055	0.799975
KG01_2_UPb_22.1	0.268199	0.005923	1531.422	30.0729	3.599574	0.101935	1547.587	22.49318	0.080387	0.002437	1562.698	45.56707	0.097491	0.001607	1568.179	31.08363	3.734539	0.081912	0.670494	105.9089	157.5823	118.0513	0.244768	0.236744
KG01_2_UPb_22.2	0.064092	0.002875	400.0029	17.46566	0.830951	0.067488	598.4521	37.85827	0.050882	0.006196	995.1425	117.7035	0.090966	0.004572	1370.986	95.89925	16.21742	0.827469	3.499063	1375.501	561.7332	157.233	-0.63832	0.846825
KG01_2_UPb_24.1	0.065673	0.001886	409.9143	11.39608	0.758822	0.03904	568.5415	22.21327	0.024184	0.001362	482.6754	26.85404	0.082868	0.002493	1237.082	59.58825	15.37713	0.43556	0.909813	1445.719	1874.325	450.035	-0.54503	0.838022
KG01_2_UPb_25.1	0.064723	0.001752	404.1954	10.60265	0.597115	0.020237	474.386	12.76764	0.024006	0.001014	479.3461	19.99242	0.067512	0.00236	813.9634	69.35069	15.56953	0.426017	1.451891	1772.703	1355.536	318.9304	0.725738	-0.27455
KG01_2_UPb_25.2	0.064501	0.001515	402.9026	9.17412	0.524982	0.014272	428.9947	9.055343	0.022649	0.000695	452.6741	13.72875	0.059132	0.000748	565.2975	28.03437	15.55282	0.367587	3.092293	1692.184	546.9656	114.486	0.321588	0.506293
KG01_2_UPb_27.1	0.099124	0.004868	607.9746	28.24597	1.024588	0.086524	696.0199	41.36044	0.041954	0.002763	829.2347	53.5405	0.072738	0.003392	947.9189	91.39126	10.52978	0.44072	5.235707	463.1187	95.05809	41.10501	-0.55865	0.919089
KG01_2_UPb_30.1	0.067675	0.001795	422.0684	10.83253	0.526013	0.015711	428.8008	10.40144	0.022278	0.000694	445.3301	13.71256	0.056442	0.00092	461.5938	36.29806	14.85131	0.393336	2.728112	1042.129	382.8165	77.84931	0.339241	0.61704
KG01_2_UPb_32.1	0.068296	0.001784	425.8398	10.76086	0.510838	0.017449	418.5868	11.7771	0.021205	0.00085	424.0777	16.8121	0.054083	0.001151	364.6727	49.65787	14.68829	0.387822	4.342541	573.3098	134.0776	25.62975	0.336217	0.419604
KG01_2_UPb_34.1	0.066778	0.001811	416.6556	10.94992	0.506431	0.01721	415.5138	11.63596	0.021302	0.000668	426.0229	13.2187	0.054793	0.001043	394.0967	42.94346	15.05028	0.422384	1.301441	713.664	553.955	105.8945	0.100224	0.638402
KG01_2_UPb_35.1	0.060033	0.001555	375.7816	9.452948	0.750584	0.036585	570.0915	22.10485	0.028465	0.001549	567.0376	30.2796	0.090793	0.003426	1431.421	70.61758	16.72548	0.429257	2.334808	1940.478	866.7585	218.459	-0.13076	0.443198
KG01_2_UPb_38.1	0.069553	0.001771	433.3905	10.67247	0.588201	0.020826	468.5769	13.14539	0.023384	0.000796	467.156	15.70419	0.060841	0.001218	632.3548	45.47984	14.41854	0.352227	2.555172	921.7446	363.7366	78.72045	-0.03078	0.578396
KG01_2_UPb_41.1	0.282848	0.007358	1605.086	37.11247	3.972122	0.127947	1626.132	26.63764	0.09335	0.003551	1803.198	65.69043	0.101765	0.001016	1654.093	18.60461	3.549553	0.095948	2.291717	425.8808	184.9164	156.6582	-0.15164	0.896465
KG01_2_UPb_43.1	0.069046	0.001646	430.3585	9.925882	0.521206	0.015123	425.5515	10.10067	0.021372	0.000673	427.4128	13.31174	0.054766	0.000842	393.0013	34.62265	14.53455	0.349287	2.2786	829.0012	352.4434	69.5391	0.220187	0.60795
KG01_2_UPb_45.1	0.064306	0.001866	401.6362	11.31557	0.714766	0.047913	539.5867	26.4898	0.024633	0.001305	491.5712	25.66856	0.081559	0.00505	1140.897	112.8501	15.72733	0.48695	1.178499	778.5381	662.3087	128.2593	0.158282	0.228309

KG01_2_UPb_46.1	0.051533	0.001288	323.8864	7.89532	0.394715	0.010707	337.6304	7.781741	0.018008	0.00057	360.7229	11.30997	0.055539	0.000603	428.674	24.32616	19.45281	0.465005	2.820266	2546.887	912.6119	152.8351	0.479632	0.677474
Z_91500																								
91500-1	0.182172	0.004578	1078.452	24.90802	1.904169	0.075189	1077.482	26.05543	0.055933	0.002229	1099.555	42.62868	0.076129	0.002548	1064.68	65.56095	5.516051	0.137142	3.025658	67.6076	23.3835	11.77343	0.30115	0.159745
91500-2	0.178993	0.003984	1061.336	21.80295	1.831092	0.058597	1056.455	21.81483	0.053487	0.001936	1052.878	37.14115	0.07428	0.001633	1039.143	45.45771	5.589084	0.120271	2.612825	83.72521	32.86914	16.03479	0.210559	0.172973
91500-3	0.178211	0.003973	1057.056	21.73667	1.843555	0.061727	1058.183	22.09817	0.052927	0.001838	1042.19	35.27316	0.075011	0.001774	1049.898	48.21195	5.614443	0.13035	2.614741	88.54159	34.70036	16.88719	0.155774	0.224037
91500-4	0.17971	0.004007	1065.249	21.91574	1.867345	0.060452	1066.997	21.3275	0.053744	0.00204	1057.71	39.11795	0.07524	0.001617	1073.134	42.58019	5.575123	0.126305	2.659217	79.27071	29.78355	14.849	0.245528	0.212979
91500-5	0.179077	0.003968	1061.801	21.69896	1.825074	0.062597	1051.25	22.6177	0.05395	0.001853	1061.839	35.55752	0.073796	0.001859	1021.529	52.84062	5.59388	0.124936	2.695094	81.65269	30.15529	15.18678	0.286833	0.067091
91500-6	0.178981	0.00405	1061.243	22.14771	1.852811	0.061317	1061.608	21.88254	0.05357	0.00188	1054.523	36.05895	0.075292	0.001694	1059.122	45.85985	5.589174	0.11881	2.645496	79.70628	30.22623	15.03067	0.176304	0.287595
91500-7	0.178416	0.003932	1058.204	21.52626	1.859432	0.058568	1066.874	19.66271	0.053796	0.001823	1058.915	34.97742	0.075596	0.001645	1076.273	41.78181	5.613525	0.125494	2.645527	79.44276	30.02978	15.02684	0.286084	0.082152
91500-8	0.179607	0.004055	1064.671	22.18161	1.836376	0.059884	1056.025	21.37404	0.053517	0.001875	1053.509	35.92414	0.074168	0.001701	1028.976	46.1669	5.579585	0.128226	2.689209	79.79996	29.65853	14.80699	0.234908	0.190752
91500-9	0.18074	0.003953	1070.909	21.58153	1.875741	0.061614	1072.102	20.74086	0.054338	0.001938	1069.213	37.11094	0.075164	0.001644	1056.343	44.52801	5.540671	0.121695	2.666501	78.65141	29.51665	14.84104	0.230825	0.122825
91500-10	0.177664	0.003992	1054.048	21.85768	1.834367	0.059187	1055.289	21.16016	0.053543	0.001849	1054.01	35.4829	0.074598	0.001745	1038.859	47.61386	5.64041	0.127521	2.670389	81.28751	30.43897	15.20549	0.419298	-0.06381
91500-11	0.177843	0.00398	1055.04	21.82769	1.83154	0.055027	1057.037	20.45667	0.053914	0.001892	1061.112	36.27606	0.074677	0.00154	1046.083	40.66986	5.634006	0.130916	2.666126	80.66557	30.1786	15.16798	0.467386	0.16751
91500-12	0.179947	0.004003	1066.551	21.8476	1.868675	0.059504	1067.645	21.31937	0.053311	0.00183	1049.589	35.11233	0.075123	0.001627	1055.669	44.91547	5.566975	0.122847	2.665267	80.51857	30.172	14.96004	0.222771	0.203129
91500-13	0.180543	0.004061	1069.781	22.15409	1.845218	0.060883	1058.95	21.5837	0.054154	0.0019	1065.712	36.40763	0.074058	0.001687	1032.885	43.64356	5.550333	0.123743	2.69577	78.25512	29.08971	14.51883	0.193805	0.265162
91500-14	0.178112	0.003987	1056.512	21.79406	1.865198	0.055265	1067.178	19.48005	0.05287	0.001942	1041.019	37.23592	0.075811	0.001345	1079.519	35.36728	5.625164	0.124934	2.656615	81.3753	30.65528	15.2725	0.291795	0.175105
91500-15	0.179244	0.004015	1062.699	21.91195	1.830996	0.059666	1054.045	21.24642	0.054235	0.001903	1067.261	36.46471	0.074084	0.001658	1034.678	42.99185	5.582195	0.128135	2.655162	79.43904	30.00069	15.17189	0.175311	0.209912
91500-16	0.180128	0.003979	1067.553	21.70678	1.869398	0.060877	1067.625	21.64732	0.054112	0.001926	1064.885	36.91562	0.075129	0.00159	1062.169	45.14269	5.560596	0.121203	2.705891	78.57486	29.11749	14.67611	0.122418	0.239369
91500-17	0.17923	0.003991	1062.633	21.79765	1.849453	0.058143	1060.939	20.87958	0.053643	0.001876	1055.912	35.99899	0.074898	0.001526	1051.578	41.11201	5.589585	0.123541	2.627385	83.5422	31.87521	15.78423	-0.05637	0.618484
91500-18	0.177809	0.003956	1054.863	21.65847	1.837389	0.059581	1056.397	21.24278	0.053431	0.001923	1051.808	36.84957	0.074932	0.00166	1050.179	45.0648	5.63412	0.126533	2.673984	78.6213	29.37865	14.48078	0.051597	0.33607
91500-19	0.178175	0.004005	1056.843	21.91026	1.848644	0.060637	1060.194	21.40399	0.054088	0.00241	1051.875	32.87597	0.075158	0.00179	1053.753	47.11026	5.608215	0.125663	2.654499	79.18169	29.83434	14.7636	-0.01821	0.220367
91500-20	0.180189	0.003986	1067.879	21.77829	1.8567	0.063927	1062.5	22.49061	0.05415	0.001915	1065.616	36.70636	0.074579	0.00182	1036.987	49.11786	5.559199	0.123814	2.664283	80.1529	30.08799	15.13292	0.062931	0.262061
91500-21	0.179303	0.004013	1063.019	21.92824	1.835344	0.060992	1055.337	21.77172	0.053232	0.001865	1048.03	35.75499	0.074427	0.001649	1036.218	45.12115	5.588123	0.125636	2.676062	80.49544	30.09108	15.04912	0.026867	0.479841
91500-22	0.178071	0.004047	1056.253	22.11757	1.838494	0.061819	1056.21	22.32331	0.052637	0.001879	1036.578	36.06723	0.07465	0.001822	1045.313	51.92532	5.629062	0.12692	2.661823	82.37629	31.00731	15.10571	0.168118	0.25043
91500-23	0.176633	0.003912	1048.431	21.41424	1.817456	0.060501	1048.875	21.92595	0.053233	0.001875	1048.037	35.95575	0.074502	0.001813	1034.725	49.94473	5.664147	0.129335	2.664623	83.48246	31.46782	15.60473	0.091831	0.257944
91500-24	0.183195	0.004091	1084.256	22.2779	1.917354	0.06613	1086.233	23.91692	0.056284	0.002102	1106.369	40.15939	0.075865	0.001759	1072.979	47.26585	5.469188	0.122104	2.677478	74.41772	27.71671	14.26859	0.068411	0.348941
91500-25	0.17862	0.003864	1059.347	21.14543	1.847977	0.063632	1059.367	22.64869	0.053334	0.0019	1049.962	36.4249	0.075083	0.001914	1048.677	51.54526	5.599229	0.127448	2.675802	81.39444	30.42776	15.12959	0.202984	0.082413
91500-26	0.17882	0.003961	1060.395	21.66037	1.849022	0.065118	1059.392	23.26813	0.053564	0.001911	1054.373	36.58297	0.075125	0.001999	1054.931	55.75044	5.60199	0.124314	2.647834	79.40342	29.93594	14.88649	0.3117	0.058972
91500-27	0.179997	0.003929	1066.858	21.46022	1.847852	0.063376	1059.378	22.70543	0.054225	0.001916	1067.058	36.72327	0.074385	0.001789	1032.206	48.99468	5.563178	0.121634	2.673913	79.66268	29.83789	15.0674	0.028153	0.294985
Z_Plesovice																								
PLE-1	0.054062	0.001396	339.3583	8.534408	0.42055	0.017698	352.412	9.707812	0.018961	0.000971	379.4986	19.18288	0.055279	0.001251	404.1509	48.38693	18.42386	0.558368	9.991775	672.6307	69.5773	12.42202	-0.03166	0.419786
PLE-2	0.054259	0.001334	340.5796	8.154667	0.402673	0.014341	342.8829	10.03881	0.017823	0.001115	356.8468	21.78503	0.053733	0.001231	340.1359	48.82874	18.47989	0.473004	10.1449	696.3418	69.11312	11.40207	0.112947	0.080438
PLE-3	0.053753	0.001396	337.4673	8.542399	0.403314	0.015021	343.2413	10.38224	0.018153	0.001474	363.1717	28.58602	0.054353	0.001269	366.932	46.67268	18.67529	0.476461	10.20529	693.2369	68.54527	11.62462	0.201884	0.02779
PLE-4	0.053696	0.001407	337.1192	8.597863	0.412318	0.014712	349.8148	10.3495	0.019836	0.001425	396.6133	27.7427	0.05564	0.001136	422.3863	43.87174	18.678	0.508807	10.27628	637.4523	61.69248	11.66059	0.469865	0.438378
PLE-5	0.053339	0.001347	334.9444	8.245071	0.399721	0.015505	340.568	10.69834	0.018079	0.001362	361.7955	26.49352	0.054366	0.001418	362.8344	53.80899	18.84666	0.481688	10.37331	630.0457	60.53924	10.36442	0.028467	0.229093
PLE-6	0.053734	0.001354	337.3627	8.284943	0.401394	0.014022	342.007	9.896849	0.017735	0.001446	354.9063	28.08342	0.054028	0.001304	352.7799	47.69573	18.61893	0.432179	10.41626	636.5929	60.90494	10.22242	0.37305	-0.14819
PLE-7	0.053957	0.001464	338.7041	8.947885	0.456694	0.018438	380.72	12.40849	0.028066	0.001564	559.0616	30.44504	0.061193	0.001436	626.1245	49.96173	18.6737	0.502821	9.805162	633.3552	64.49818	16.86958	0.037924	0.340576
PLE-8	0.054993	0.001403	345.0539	8.563866	0.417612	0.014911	353.5921	10.44676	0.01893	0.001321	378.7001	25.78522	0.055046	0.001061	399.5654	42.32695	18.28402	0.456246	10.19075	617.9	61.2792	11.04133	-0.15092	0.351651
PLE-9	0.054459	0.001364	341.7978	8.329518	0.404144	0.014405	343.9524	10.03498	0.018557	0.001549	371.1512	30.00545	0.053716	0.001195	342.0047	44.67292	18.45347	0.456958	10.37586	633.9002	61.47538	10.34761	0.45238	-0.24573
PLE-10	0.05372	0.001385	338.1293	8.886946	0.395919	0.014061	337.9787	10.02995	0.018478	0.002015	369.1938	38.64301	0.053548	0.001438	326.8885	54.11645	18.64542	0.501883	10.26723	596.4085	58.25097	9.60242	0.05238	0.312821
PLE-11	0.054537	0.001362	342.2736	8.3202	0.400309	0.01408	341.1977	9.827688	0.017709	0.001148	354.5479	22.43925	0.053225	0.001141	321.2951	44.5304	18.38429	0.432816	10.30138	603.1706	58.56712	9.720527	-0.05189	0.301063
PLE-12	0.054742	0.001412	343.516	8.613857	0.403924	0.014304	343.7978	9.946589	0.01762	0.001316	352.6986	25.63314	0.053335	0.001034	328.6278	41.20707	18.33557	0.471808	10.3013	598.0686	58.0808	9.590472	-0.28649	0.510757
PLE-13	0.053737	0.001311	337.3893	8.007413	0.393093	0.012783	336.1332	9.171222	0.017191	0.001025	344.3187	20.11448	0.053281	0.00106	325.0532	43.44838	18.68636	0.437448	10.38376	591.9351	56.99331	9.156929	-0.51537	0.810169
PLE-14	0.054251	0.001378	340.5177	8.434451	0.396503	0.013156	338.5643	9.36922	0.018286	0.002062	365.3418	39.45684	0.05343	0.001369	324.5086	50.78398	18.42283	0.417099	10.33314	618.5329	59.66048	9.724993	0.140436	0.408378
PLE-15	0.054561	0.001364	342.4182	8.334341	0.398808	0.015088	339.9289	10.698	0.017547	0.000987	351.4232	19.39384	0.05314	0.001286	312.1377	53.36435	18.41987	0.463162	10.3603	618.2184	59.52012	9.795989	-0.48737	0.836837
PLE-16	0.054915	0.001426	344.5698	8.709485	0.398303	0.013664	339.7886	9.818177	0.017224	0.000848	345.061	16.73645	0.052547	0.000981	294.5058	42.67373	18.32399	0.47161	10.42111	598.9888	57.98565	9.21115	-0.3317	0.736719
PLE-17	0.054447	0.001424	341.7073	8.698105	0.399432	0.016754	340.1004	11.38186	0.017706	0.001386	354.3487	26.92197	0.052602	0.00115	293.7347	45.97135	18.43439	0.452458	10.40509	619.2531	59.34385	9.85812	-0.28023	0.576521
PLE-18	0.054468	0.001366	341.8533	8.347808	0.405277	0.014409	344.7629	10.14935	0.017956	0.001306	359.372	25.45923	0.054089	0.001164	358.0997	44.54784	18.40824	0.443064	10.43881	626.5388	60.45135	10.11442	-0.19318	0.376964
PLE-19	0.05334	0.0013	334.9596	7.946503	0.445536	0.020221	369.008	10.505	0.026455	0.002823	526.0614	53.74703	0.060545	0.002208	585.3338	64.59784	18.7647	0.498195	10.20312	643.1342	63.27017	14.91276	0.668128	-0.04341
PLE-20	0.054248	0.001348	340.5091	8.235728	0.400941	0.013696	341.714	9.750118	0.017674	0.001234	353.8113	24.0937	0.05361	0.001221	336.3094	46.02815	18.52166	0.448234	10.44592	634.0914	60.68426	10.02946	-0.39594	0.649263
PLE-21	0.052961	0.001282	332.6398	7.851179	0.400569	0.015014	341.2384	10.37345	0.018378	0.001837	367.3659	35.37047	0.054704	0.001416	378.0644	50.11258	18.96083	0.466424	10.49794	635.6306	60.58231	9.96033	-0.11903	0.331412
PLE-22	0.054213	0.001365	340.2923	8.350229	0.391902	0.012256	335.3392	8.955504	0.017158	0.000738	343.7814	14.63044	0.052393	0.000816	292.0589	35.81144	18.5452	0.480447	10.40048	662.1658	63.64078	10.0314	-0.16624	0.644664
PLE-23	0.052577	0.00138	330.2714	8.450399	0.384148	0.0163	329.0152	11.06479	0.01815	0.001794	362.8853	34.57058	0.052904	0.001393	288.9014	41.29859	19.0877	0.480807	10.33632	660.994	64.3617	10.98666	-0.23313	0.411358
PLE-24	0.053296	0.00137	334.6798	8.383752	0.384117	0.012372	329.6091	9.012646	0.017701	0.001584	354.1356	30.63787	0.052612	0.001232	292.4497	48.62488	18.87331	0.486672	10.3795	675.3882	65.14802	10.84406	-0.24316	0.584436
PLE-25	0.053986	0.001364	338.9023	8.340598	0.395298	0.013865	337.5654	9.8312	0.018754	0.002712	373.9341	51.21611	0.05388	0.001737	320.6071	45.11273	18.58262	0.490922	10.41885	649.7624	62.24751	10.3113	0.447507	0.079628
PLE-26	0.052986	0.001294	332.7892	7.925097	0.388054	0.013285	332.3433	9.588834	0.018491	0.002723	368.6895	51.39299	0.053712	0.00178	311.8983	45.13788	18.90262	0.440896	10.42293	644.6976	62.21063	10.09143	-0.00442	0.548923
PLE-27	0.053335	0.001358	334.9156	8.306622	0.384919	0.017659	333.2356	9.700465	0.019917	0.004187	394.7297	78.07502	0.054723	0.003062	318.7154	54.49733	18.72366	0.571133	10.44803	636.2116	61.18311	9.836174	-0.91093	0.581522
Z_Temora2																								
TEM-1	0.175171	0.009634	1036.205	50.85873	14.26758	1.246732	2707.234	52.62306	0.119179	0.013224	2249.502	205.6718	0.576573	0.025955	4399.744	48.33611	5.781917	0.266182	0.377543	8.067349	22.06476	22.87191	0.941498	0.902797
TEM-2	0.065221	0.001513	407.2754	9.158417	0.519772	0.039752	420.7002	21.06729	0.02205	0.00269	439.665	51.26731	0.057576	0.003879	443.7535	94.66884	15.3662	0.35941	1.876452	281.9731	154.0737	29.37244	-0.00034	0.171394
TEM-3	0.182389	0.01265	1072.693	61.79639	14.80942	1.325832	2755.672	58.16895	0.12207	0.016674	2287.602	242.683	0.597712	0.025991	4444.671	60.42314	5.816966	0.257012	0.361931	5.470987	15.51514	16.41019	-0.05543	0.909134

TEM-4	0.06634	0.0015	414.04	9.060088	0.611761	0.043243	477.6781	24.43291	0.02284	0.001244	456.1891	24.3798	0.066883	0.004386	720.8435	111.6711	15.10692	0.335087	1.710086	137.8766	79.41891	16.49204	-0.66094	0.842933
TEM-5	0.066745	0.001552	416.4801	9.379353	0.546728	0.053237	433.8834	25.1506	0.022208	0.00171	443.3702	32.96647	0.059201	0.005036	442.1642	90.01423	15.02766	0.356428	2.470012	106.4547	47.92055	9.91168	-0.68965	0.861567
TEM-6	0.067363	0.001473	420.2294	8.898241	0.51992	0.020596	423.6992	13.07053	0.021367	0.000916	427.2196	17.99895	0.056063	0.001866	418.6882	65.06583	14.84706	0.311092	3.5231	251.2823	71.30811	14.23611	-0.28813	0.395033
TEM-7	0.06631	0.001438	413.8735	8.693292	0.509975	0.024819	416.3658	14.12951	0.020924	0.001003	418.3977	19.61247	0.055965	0.002313	390.8165	50.73718	15.09874	0.326363	1.913722	289.1543	151.4752	29.58953	-0.19935	0.285706
TEM-8	100.7734	63.97669	33371.79	1088.017	11936.91	7478.241	10086.07	172.1238	-278.56	251.0283	117083.7	2743.959	0.846733	0.012531	4914.745	19.51568	0.005433	0.001195	-0.10406	0.034434	0.03521	127.0888	0.22468	0.99728
TEM-9	0.066637	0.001543	415.8258	9.324563	0.548315	0.060731	422.8318	16.06347	0.022745	0.002347	453.4372	44.59928	0.058561	0.004727	396.045	102.7812	15.04933	0.353322	2.538732	93.3637	36.418	7.841575	-0.64869	0.802136
TEM-10	0.066302	0.001456	413.8201	8.797691	0.517413	0.032187	419.8098	17.40779	0.021572	0.001247	431.1113	24.2267	0.056262	0.002914	378.6215	67.80299	15.10488	0.329752	2.141235	190.3409	90.24513	18.31825	-0.45646	0.541605
TEM-11	0.066456	0.001517	414.7413	9.166172	0.531503	0.048975	425.0755	23.95435	0.022087	0.002191	440.5902	41.86242	0.057464	0.004434	365.8461	96.26954	15.08352	0.342044	2.471637	96.473	39.53398	8.171862	-0.80664	0.952046
TEM-12	0.067522	0.001526	421.1822	9.215513	0.543257	0.040246	435.1048	20.69583	0.021825	0.001456	435.9835	28.18822	0.057932	0.003623	418.6126	80.75211	14.84302	0.340407	1.962866	124.9401	63.41663	12.98235	-0.69543	0.847354
TEM-13	0.06679	0.0016	416.7426	9.656671	0.572934	0.05992	439.3895	17.07529	0.022334	0.001675	445.916	32.26152	0.061931	0.005181	509.2585	106.9667	15.02708	0.35515	1.942193	95.36072	49.08307	10.34129	-0.638	0.813208
TEM-14	0.066552	0.001474	415.3246	8.908093	0.554289	0.057908	428.1774	14.20457	0.02314	0.003352	459.9789	62.27797	0.059836	0.004892	446.2095	67.28785	15.05172	0.330802	4.20498	186.9995	44.92333	9.131158	-0.42994	0.581234
TEM-15	0.066498	0.00149	414.9947	9.00743	0.523301	0.029437	424.1752	16.90396	0.021073	0.000967	421.3711	18.94609	0.057232	0.002785	435.9602	84.92142	15.06866	0.34042	1.86756	167.2285	90.25255	17.75421	-0.27239	0.360073
TEM-16	0.067091	0.001493	418.5813	9.022975	0.511923	0.025555	413.2917	13.5974	0.020963	0.000956	419.2019	18.88756	0.054711	0.001918	364.5965	77.93426	14.9123	0.320518	3.547758	123.9395	35.16345	6.789988	-0.2681	0.421168
TEM-17	0.067293	0.001479	419.8076	8.93407	0.517006	0.018308	422.1688	12.0438	0.020655	0.000694	413.2088	13.7212	0.055879	0.00159	418.3521	60.38799	14.86562	0.340677	1.865636	229.8091	123.349	23.48476	-0.06553	0.213118
TEM-18	0.067656	0.001753	421.9396	10.57332	0.525205	0.016679	427.9656	11.02213	0.021754	0.000713	434.9503	14.0798	0.056386	0.001106	454.3372	39.04876	14.87002	0.380435	2.414069	882.9109	371.0669	75.83856	0.533064	-0.15147
TEM-19	0.06671	0.001505	416.2794	9.097751	0.537736	0.031935	433.4626	18.539	0.021067	0.001094	421.2077	21.39223	0.058288	0.003099	469.4373	95.07759	15.01997	0.340818	1.882669	165.6298	87.74206	17.0402	-0.66694	0.829428
TEM-20	0.066049	0.001521	412.2728	9.186819	0.53256	0.039086	428.144	20.66573	0.021657	0.001911	432.3207	36.75312	0.058193	0.003551	424.723	89.02643	15.18013	0.342031	3.889544	127.1126	33.01577	6.727125	-0.69991	0.863152
TEM-21	0.066568	0.001535	415.4138	9.270774	0.519211	0.038477	419.402	20.15398	0.021589	0.001135	431.5031	22.15176	0.056346	0.003614	350.9371	84.08136	15.06302	0.344032	1.881556	153.7315	82.07506	16.50023	-0.68536	0.855619
TEM-22	0.069266	0.001687	431.675	10.16662	0.542493	0.021835	438.5705	13.29281	0.021778	0.000754	435.4158	14.88371	0.056549	0.001594	447.4204	55.84022	14.47132	0.367977	2.08651	448.7062	237.1305	45.84401	-0.07456	0.238468
TEM-23	0.067065	0.001565	418.4076	9.454566	0.545888	0.025178	439.9157	16.06324	0.022352	0.001205	446.5738	23.46268	0.059	0.002308	512.8794	82.14688	14.95687	0.348719	1.652371	119.6397	72.61741	14.71228	-0.47798	0.666219
TEM-24	0.065817	0.0015	410.8748	9.074447	0.501769	0.022213	411.0383	14.43706	0.020653	0.000809	413.1199	15.99422	0.055259	0.002089	373.3714	77.98697	15.23105	0.353596	1.951492	136.0827	69.75569	13.26255	-0.44157	0.615989
TEM-25	0.065136	0.001448	406.7629	8.767655	0.508133	0.027731	414.4097	16.20917	0.02099	0.000868	419.7733	17.0616	0.056594	0.002625	397.7629	71.85281	15.37983	0.344888	1.781492	167.9519	94.32471	18.62395	-0.60745	0.743185
TEM-26	0.066525	0.001445	415.1701	8.734778	0.519093	0.022625	422.8197	13.64111	0.02107	0.00083	421.3666	16.33525	0.056572	0.001897	440.2105	63.04823	15.05082	0.326599	2.069248	317.5967	159.6806	31.34429	-0.15508	0.264164
TEM-27	0.065738	0.001557	410.3848	9.413177	0.491016	0.014496	405.1756	9.803354	0.020481	0.000645	409.7632	12.76963	0.054171	0.000801	368.9765	32.70965	15.26493	0.36274	1.772284	568.1761	322.627	61.64372	0.151581	0.146629

Mass Spectrometer Files

File	File start time	File end time	Time file loaded	No of data points	No of channels	Channels	Samples
C:/Users/Supervisor/Docum	2023-07-06 09:33:18.000	2023-07-06 09:34:18.980	2023-08-09 10:44:37.655	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-1
C:/Users/Supervisor/Docum	2023-07-06 13:48:05.000	2023-07-06 13:49:05.980	2023-08-09 10:44:45.323	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb058.1
C:/Users/Supervisor/Docum	2023-07-06 15:06:30.000	2023-07-06 15:07:30.980	2023-08-09 10:44:50.034	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb100.1
C:/Users/Supervisor/Docum	2023-07-06 13:20:36.000	2023-07-06 13:21:36.980	2023-08-09 10:44:43.841	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb044.1
C:/Users/Supervisor/Docum	2023-07-06 10:48:34.000	2023-07-06 10:49:34.980	2023-08-09 10:44:53.872	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_47.1
C:/Users/Supervisor/Docum	2023-07-06 15:07:37.000	2023-07-06 15:08:37.980	2023-08-09 10:44:50.065	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-25
C:/Users/Supervisor/Docum	2023-07-06 15:08:43.000	2023-07-06 15:09:43.980	2023-08-09 10:44:50.096	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-26
C:/Users/Supervisor/Docum	2023-07-06 13:09:35.000	2023-07-06 13:10:35.979	2023-08-09 10:44:43.248	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-18
C:/Users/Supervisor/Docum	2023-07-06 15:09:49.000	2023-07-06 15:10:49.980	2023-08-09 10:44:50.143	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-27
C:/Users/Supervisor/Docum	2023-07-06 15:10:55.000	2023-07-06 15:11:55.980	2023-08-09 10:44:50.190	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-25
C:/Users/Supervisor/Docum	2023-07-06 14:27:47.000	2023-07-06 14:28:47.980	2023-08-09 10:44:47.569	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb079.1
C:/Users/Supervisor/Docum	2023-07-06 10:06:04.000	2023-07-06 10:07:04.980	2023-08-09 10:44:50.362	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_16.3
C:/Users/Supervisor/Docum	2023-07-06 13:00:48.000	2023-07-06 13:01:48.980	2023-08-09 10:44:42.749	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb036.2
C:/Users/Supervisor/Docum	2023-07-06 15:12:01.000	2023-07-06 15:13:01.980	2023-08-09 10:44:50.408	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-26
C:/Users/Supervisor/Docum	2023-07-06 15:13:07.000	2023-07-06 15:14:07.980	2023-08-09 10:44:50.440	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-27
C:/Users/Supervisor/Docum	2023-07-06 09:38:52.000	2023-07-06 09:39:52.980	2023-08-09 10:44:52.873	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-3
C:/Users/Supervisor/Docum	2023-07-06 12:22:27.000	2023-07-06 12:23:27.980	2023-08-09 10:44:40.705	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb011.1
C:/Users/Supervisor/Docum	2023-07-06 15:14:14.000	2023-07-06 15:15:14.980	2023-08-09 10:44:50.471	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-25
C:/Users/Supervisor/Docum	2023-07-06 10:49:40.000	2023-07-06 10:50:40.980	2023-08-09 10:44:53.918	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_48.1
C:/Users/Supervisor/Docum	2023-07-06 15:15:21.000	2023-07-06 15:16:21.981	2023-08-09 10:44:50.502	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-26
C:/Users/Supervisor/Docum	2023-07-06 09:45:25.000	2023-07-06 09:46:25.980	2023-08-09 10:44:38.662	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-3
C:/Users/Supervisor/Docum	2023-07-06 15:16:28.000	2023-07-06 15:17:28.979	2023-08-09 10:44:50.549	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-27
C:/Users/Supervisor/Docum	2023-07-06 15:17:33.000	2023-07-06 15:18:33.980	2023-08-09 10:44:50.689	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-25
C:/Users/Supervisor/Docum	2023-07-06 13:49:11.000	2023-07-06 13:50:11.980	2023-08-09 10:44:45.370	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb058.2
C:/Users/Supervisor/Docum	2023-07-06 09:34:32.000	2023-07-06 09:35:32.980	2023-08-09 10:44:43.279	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-2
C:/Users/Supervisor/Docum	2023-07-06 15:18:39.000	2023-07-06 15:19:39.980	2023-08-09 10:44:50.736	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-26
C:/Users/Supervisor/Docum	2023-07-06 14:28:54.000	2023-07-06 14:29:54.980	2023-08-09 10:44:47.616	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb079.2
C:/Users/Supervisor/Docum	2023-07-06 15:19:45.000	2023-07-06 15:20:45.980	2023-08-09 10:44:50.783	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-27
C:/Users/Supervisor/Docum	2023-07-06 12:23:34.000	2023-07-06 12:24:34.980	2023-08-09 10:44:40.736	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb012.1
C:/Users/Supervisor/Docum	2023-07-06 10:07:09.000	2023-07-06 10:08:09.980	2023-08-09 10:44:50.830	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-4
C:/Users/Supervisor/Docum	2023-07-06 10:08:15.000	2023-07-06 10:09:15.980	2023-08-09 10:44:50.892	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-5
C:/Users/Supervisor/Docum	2023-07-06 13:13:58.000	2023-07-06 13:14:58.980	2023-08-09 10:44:43.544	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb038.1
C:/Users/Supervisor/Docum	2023-07-06 10:09:20.000	2023-07-06 10:10:20.980	2023-08-09 10:44:50.939	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-4
C:/Users/Supervisor/Docum	2023-07-06 10:10:24.000	2023-07-06 10:11:24.980	2023-08-09 10:44:51.142	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-5
C:/Users/Supervisor/Docum	2023-07-06 11:24:32.000	2023-07-06 11:25:32.980	2023-08-09 10:44:37.804	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_74.1
C:/Users/Supervisor/Docum	2023-07-06 10:11:29.000	2023-07-06 10:12:29.980	2023-08-09 10:44:51.188	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-4
C:/Users/Supervisor/Docum	2023-07-06 10:12:35.000	2023-07-06 10:13:35.980	2023-08-09 10:44:51.266	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-5
C:/Users/Supervisor/Docum	2023-07-06 11:43:05.000	2023-07-06 11:44:05.980	2023-08-09 10:44:38.849	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-10
C:/Users/Supervisor/Docum	2023-07-06 10:13:40.000	2023-07-06 10:14:40.980	2023-08-09 10:44:51.329	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-4
C:/Users/Supervisor/Docum	2023-07-06 09:54:07.000	2023-07-06 09:55:07.980	2023-08-09 10:44:43.310	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_09.1
C:/Users/Supervisor/Docum	2023-07-06 12:24:40.000	2023-07-06 12:25:40.980	2023-08-09 10:44:40.768	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb012.2
C:/Users/Supervisor/Docum	2023-07-06 14:30:01.000	2023-07-06 14:31:01.980	2023-08-09 10:44:47.756	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb081.1
C:/Users/Supervisor/Docum	2023-07-06 10:14:46.000	2023-07-06 10:15:46.980	2023-08-09 10:44:51.391	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-5
C:/Users/Supervisor/Docum	2023-07-06 09:36:42.000	2023-07-06 09:37:42.980	2023-08-09 10:44:51.438	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-1
C:/Users/Supervisor/Docum	2023-07-06 10:32:12.000	2023-07-06 10:33:12.980	2023-08-09 10:44:52.514	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_41.1

C:/Users/Supervisor/Docume	2023-07-06 13:50:18.000	2023-07-06 13:51:18.980	2023-08-09 10:44:45.416	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb059.1
C:/Users/Supervisor/Docume	2023-07-06 10:50:45.000	2023-07-06 10:51:45.980	2023-08-09 10:44:53.965	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_48.2
C:/Users/Supervisor/Docume	2023-07-06 10:15:52.000	2023-07-06 10:16:52.980	2023-08-09 10:44:51.563	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_17.1
C:/Users/Supervisor/Docume	2023-07-06 10:16:57.000	2023-07-06 10:17:57.980	2023-08-09 10:44:51.610	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_20.1
C:/Users/Supervisor/Docume	2023-07-06 10:18:03.000	2023-07-06 10:19:03.980	2023-08-09 10:44:51.641	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_21.1
C:/Users/Supervisor/Docume	2023-07-06 10:19:07.000	2023-07-06 10:20:07.980	2023-08-09 10:44:51.688	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_21.2
C:/Users/Supervisor/Docume	2023-07-06 10:20:13.000	2023-07-06 10:21:13.980	2023-08-09 10:44:51.719	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_22.1
C:/Users/Supervisor/Docume	2023-07-06 12:25:46.000	2023-07-06 12:26:46.980	2023-08-09 10:44:40.892	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb013.1
C:/Users/Supervisor/Docume	2023-07-06 10:21:19.000	2023-07-06 10:22:19.980	2023-08-09 10:44:51.750	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_22.2
C:/Users/Supervisor/Docume	2023-07-06 10:22:24.000	2023-07-06 10:23:24.980	2023-08-09 10:44:51.922	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_23.1
C:/Users/Supervisor/Docume	2023-07-06 11:44:11.000	2023-07-06 11:45:11.980	2023-08-09 10:44:38.896	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-11
C:/Users/Supervisor/Docume	2023-07-06 13:51:24.000	2023-07-06 13:52:24.980	2023-08-09 10:44:45.463	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb060.1
C:/Users/Supervisor/Docume	2023-07-06 14:31:07.000	2023-07-06 14:32:08.273	2023-08-09 10:44:47.803	211	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb082.1
C:/Users/Supervisor/Docume	2023-07-06 13:10:40.000	2023-07-06 13:11:40.980	2023-08-09 10:44:43.342	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-15
C:/Users/Supervisor/Docume	2023-07-06 10:51:50.000	2023-07-06 10:52:51.273	2023-08-09 10:44:54.184	211	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_51.1
C:/Users/Supervisor/Docume	2023-07-06 10:23:29.000	2023-07-06 10:24:29.980	2023-08-09 10:44:51.968	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_24.1
C:/Users/Supervisor/Docume	2023-07-06 10:24:34.000	2023-07-06 10:25:34.980	2023-08-09 10:44:52.000	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_25.1
C:/Users/Supervisor/Docume	2023-07-06 10:25:40.000	2023-07-06 10:26:40.980	2023-08-09 10:44:52.046	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_25.2
C:/Users/Supervisor/Docume	2023-07-06 09:37:48.000	2023-07-06 09:38:48.980	2023-08-09 10:44:52.078	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-2
C:/Users/Supervisor/Docume	2023-07-06 10:38:45.000	2023-07-06 10:39:45.980	2023-08-09 10:44:52.951	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-7
C:/Users/Supervisor/Docume	2023-07-06 10:26:45.000	2023-07-06 10:27:45.980	2023-08-09 10:44:52.124	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_26.1
C:/Users/Supervisor/Docume	2023-07-06 10:27:51.000	2023-07-06 10:28:51.980	2023-08-09 10:44:52.296	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_30.1
C:/Users/Supervisor/Docume	2023-07-06 14:32:14.000	2023-07-06 14:33:14.980	2023-08-09 10:44:47.850	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb082.2
C:/Users/Supervisor/Docume	2023-07-06 10:28:57.000	2023-07-06 10:29:57.980	2023-08-09 10:44:52.358	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_31.1
C:/Users/Supervisor/Docume	2023-07-06 10:30:02.000	2023-07-06 10:31:02.980	2023-08-09 10:44:52.421	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_34.1
C:/Users/Supervisor/Docume	2023-07-06 10:31:08.000	2023-07-06 10:32:08.980	2023-08-09 10:44:52.483	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_40.1
C:/Users/Supervisor/Docume	2023-07-06 11:47:26.000	2023-07-06 11:48:26.980	2023-08-09 10:44:38.989	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_85.2
C:/Users/Supervisor/Docume	2023-07-06 10:52:56.000	2023-07-06 10:53:56.981	2023-08-09 10:44:54.215	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_51.2
C:/Users/Supervisor/Docume	2023-07-06 10:54:01.000	2023-07-06 10:55:01.980	2023-08-09 10:44:54.277	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_52.1
C:/Users/Supervisor/Docume	2023-07-06 13:06:18.000	2023-07-06 13:07:18.980	2023-08-09 10:44:42.998	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-17
C:/Users/Supervisor/Docume	2023-07-06 10:55:06.000	2023-07-06 10:56:06.980	2023-08-09 10:44:54.324	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_53.1
C:/Users/Supervisor/Docume	2023-07-06 09:49:44.000	2023-07-06 09:50:44.980	2023-08-09 10:44:40.924	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_04.1
C:/Users/Supervisor/Docume	2023-07-06 10:56:12.000	2023-07-06 10:57:12.980	2023-08-09 10:44:54.371	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_55.1
C:/Users/Supervisor/Docume	2023-07-06 10:43:06.000	2023-07-06 10:44:06.980	2023-08-09 10:44:53.326	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-8
C:/Users/Supervisor/Docume	2023-07-06 10:57:18.000	2023-07-06 10:58:18.980	2023-08-09 10:44:54.402	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_56.1
C:/Users/Supervisor/Docume	2023-07-06 10:58:24.000	2023-07-06 10:59:24.981	2023-08-09 10:44:54.620	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_57.1
C:/Users/Supervisor/Docume	2023-07-06 13:11:47.000	2023-07-06 13:12:47.980	2023-08-09 10:44:43.498	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-16
C:/Users/Supervisor/Docume	2023-07-06 09:41:03.000	2023-07-06 09:42:03.980	2023-08-09 10:44:54.683	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-2
C:/Users/Supervisor/Docume	2023-07-06 13:15:05.000	2023-07-06 13:16:05.981	2023-08-09 10:44:43.576	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb038.2
C:/Users/Supervisor/Docume	2023-07-06 10:59:28.000	2023-07-06 11:00:28.980	2023-08-09 10:44:54.745	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_57.2
C:/Users/Supervisor/Docume	2023-07-06 11:00:33.000	2023-07-06 11:01:33.980	2023-08-09 10:44:54.792	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_58.1
C:/Users/Supervisor/Docume	2023-07-06 11:01:39.000	2023-07-06 11:02:39.980	2023-08-09 10:44:54.839	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_61.1
C:/Users/Supervisor/Docume	2023-07-06 11:21:15.000	2023-07-06 11:22:15.980	2023-08-09 10:44:37.734	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_70.1
C:/Users/Supervisor/Docume	2023-07-06 12:26:52.000	2023-07-06 12:27:52.980	2023-08-09 10:44:40.955	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb014.1
C:/Users/Supervisor/Docume	2023-07-06 13:52:30.000	2023-07-06 13:53:30.980	2023-08-09 10:44:45.494	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb061.1
C:/Users/Supervisor/Docume	2023-07-06 14:35:31.000	2023-07-06 14:36:31.980	2023-08-09 10:44:47.959	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-24
C:/Users/Supervisor/Docume	2023-07-06 11:48:31.000	2023-07-06 11:49:31.980	2023-08-09 10:44:39.020	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_85.3

C:/Users/Supervisor/Docume	2023-07-06 11:02:44.000	2023-07-06 11:03:44.980	2023-08-09 10:44:54.886	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_61.2
C:/Users/Supervisor/Docume	2023-07-06 11:03:50.000	2023-07-06 11:04:50.980	2023-08-09 10:44:55.088	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_62.1
C:/Users/Supervisor/Docume	2023-07-06 11:45:16.000	2023-07-06 11:46:16.980	2023-08-09 10:44:38.927	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_84.1
C:/Users/Supervisor/Docume	2023-07-06 11:04:55.000	2023-07-06 11:05:55.980	2023-08-09 10:44:55.135	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_62.2
C:/Users/Supervisor/Docume	2023-07-06 11:06:01.000	2023-07-06 11:07:01.981	2023-08-09 10:44:55.182	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_64.1
C:/Users/Supervisor/Docume	2023-07-06 11:07:06.000	2023-07-06 11:08:07.273	2023-08-09 10:44:55.229	211	9	Si29,Hg200,Pb204,Pb206,Pb NIST-8
C:/Users/Supervisor/Docume	2023-07-06 13:16:11.000	2023-07-06 13:17:11.980	2023-08-09 10:44:43.622	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb039.1
C:/Users/Supervisor/Docume	2023-07-06 11:08:10.000	2023-07-06 11:09:10.980	2023-08-09 10:44:55.276	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST-9
C:/Users/Supervisor/Docume	2023-07-06 14:46:35.000	2023-07-06 14:47:35.980	2023-08-09 10:44:48.568	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb084.1
C:/Users/Supervisor/Docume	2023-07-06 11:25:37.000	2023-07-06 11:26:37.980	2023-08-09 10:44:37.972	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_75.1
C:/Users/Supervisor/Docume	2023-07-06 11:09:15.000	2023-07-06 11:10:15.980	2023-08-09 10:44:55.307	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-8
C:/Users/Supervisor/Docume	2023-07-06 09:42:09.000	2023-07-06 09:43:09.980	2023-08-09 10:44:55.478	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-3
C:/Users/Supervisor/Docume	2023-07-06 14:36:37.000	2023-07-06 14:37:37.980	2023-08-09 10:44:48.084	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-22
C:/Users/Supervisor/Docume	2023-07-06 11:10:20.000	2023-07-06 11:11:20.980	2023-08-09 10:44:55.525	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-9
C:/Users/Supervisor/Docume	2023-07-06 11:11:26.000	2023-07-06 11:12:26.980	2023-08-09 10:44:55.588	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-9
C:/Users/Supervisor/Docume	2023-07-06 10:33:18.000	2023-07-06 10:34:18.980	2023-08-09 10:44:52.561	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_42.1
C:/Users/Supervisor/Docume	2023-07-06 11:49:36.000	2023-07-06 11:50:36.980	2023-08-09 10:44:39.145	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_87.1
C:/Users/Supervisor/Docume	2023-07-06 11:12:31.000	2023-07-06 11:13:31.980	2023-08-09 10:44:55.650	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-10
C:/Users/Supervisor/Docume	2023-07-06 11:13:36.000	2023-07-06 11:14:36.980	2023-08-09 10:44:55.712	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-8
C:/Users/Supervisor/Docume	2023-07-06 12:16:58.000	2023-07-06 12:17:58.980	2023-08-09 10:44:40.456	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb008.3
C:/Users/Supervisor/Docume	2023-07-06 13:53:36.000	2023-07-06 13:54:36.980	2023-08-09 10:44:45.526	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb062.1
C:/Users/Supervisor/Docume	2023-07-06 11:14:42.000	2023-07-06 11:15:42.980	2023-08-09 10:44:55.759	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-9
C:/Users/Supervisor/Docume	2023-07-06 12:27:58.000	2023-07-06 12:28:59.273	2023-08-09 10:44:40.986	211	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb016.1
C:/Users/Supervisor/Docume	2023-07-06 11:15:47.000	2023-07-06 11:16:47.980	2023-08-09 10:44:55.978	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_65.1
C:/Users/Supervisor/Docume	2023-07-06 11:31:06.000	2023-07-06 11:32:06.980	2023-08-09 10:44:38.141	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_81.1
C:/Users/Supervisor/Docume	2023-07-06 11:16:53.000	2023-07-06 11:17:53.980	2023-08-09 10:44:56.056	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_67.11
C:/Users/Supervisor/Docume	2023-07-06 11:17:58.000	2023-07-06 11:18:58.980	2023-08-09 10:44:56.087	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_67.2
C:/Users/Supervisor/Docume	2023-07-06 09:43:14.000	2023-07-06 09:44:14.980	2023-08-09 10:44:37.697	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-1
C:/Users/Supervisor/Docume	2023-07-06 11:19:04.000	2023-07-06 11:20:04.980	2023-08-09 10:44:56.134	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_68.1
C:/Users/Supervisor/Docume	2023-07-06 10:34:24.000	2023-07-06 10:35:24.980	2023-08-09 10:44:52.748	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_44.1
C:/Users/Supervisor/Docume	2023-07-06 11:20:10.000	2023-07-06 11:21:10.980	2023-08-09 10:44:56.180	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_69.1
C:/Users/Supervisor/Docume	2023-07-06 09:58:27.000	2023-07-06 09:59:27.980	2023-08-09 10:44:45.682	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_13.2
C:/Users/Supervisor/Docume	2023-07-06 11:50:43.000	2023-07-06 11:51:43.980	2023-08-09 10:44:39.176	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_88.1
C:/Users/Supervisor/Docume	2023-07-06 14:39:57.000	2023-07-06 14:40:57.980	2023-08-09 10:44:48.240	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-12
C:/Users/Supervisor/Docume	2023-07-06 11:51:49.000	2023-07-06 11:52:49.980	2023-08-09 10:44:39.208	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_89.1
C:/Users/Supervisor/Docume	2023-07-06 11:52:54.000	2023-07-06 11:53:54.980	2023-08-09 10:44:39.239	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_89.2
C:/Users/Supervisor/Docume	2023-07-06 09:46:30.000	2023-07-06 09:47:31.273	2023-08-09 10:44:39.270	211	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_01.1
C:/Users/Supervisor/Docume	2023-07-06 11:53:59.000	2023-07-06 11:54:59.980	2023-08-09 10:44:39.301	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_90.1
C:/Users/Supervisor/Docume	2023-07-06 13:17:18.000	2023-07-06 13:18:18.980	2023-08-09 10:44:43.638	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb040.1
C:/Users/Supervisor/Docume	2023-07-06 11:55:05.000	2023-07-06 11:56:05.980	2023-08-09 10:44:39.426	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_90.2
C:/Users/Supervisor/Docume	2023-07-06 11:38:42.000	2023-07-06 11:39:42.980	2023-08-09 10:44:38.552	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-10
C:/Users/Supervisor/Docume	2023-07-06 13:54:42.000	2023-07-06 13:55:42.980	2023-08-09 10:44:45.713	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb063.1
C:/Users/Supervisor/Docume	2023-07-06 10:35:28.000	2023-07-06 10:36:28.980	2023-08-09 10:44:52.811	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_44.2
C:/Users/Supervisor/Docume	2023-07-06 11:56:10.000	2023-07-06 11:57:10.980	2023-08-09 10:44:39.457	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb001.1
C:/Users/Supervisor/Docume	2023-07-06 11:57:15.000	2023-07-06 11:58:15.980	2023-08-09 10:44:39.488	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb004.1
C:/Users/Supervisor/Docume	2023-07-06 12:12:37.000	2023-07-06 12:13:37.980	2023-08-09 10:44:40.175	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-12
C:/Users/Supervisor/Docume	2023-07-06 12:29:04.000	2023-07-06 12:30:04.980	2023-08-09 10:44:41.017	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb017.1

C:/Users/Supervisor/Docume	2023-07-06 11:22:20.000	2023-07-06 11:23:20.687	2023-08-09 10:44:37.764	209	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_71.1
C:/Users/Supervisor/Docume	2023-07-06 11:58:21.000	2023-07-06 11:59:21.980	2023-08-09 10:44:39.520	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb004.2
C:/Users/Supervisor/Docume	2023-07-06 11:59:27.000	2023-07-06 12:00:27.980	2023-08-09 10:44:39.551	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb005.1
C:/Users/Supervisor/Docume	2023-07-06 12:00:33.000	2023-07-06 12:01:33.980	2023-08-09 10:44:39.566	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb006.1
C:/Users/Supervisor/Docume	2023-07-06 12:01:39.000	2023-07-06 12:02:39.980	2023-08-09 10:44:39.707	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb006.2
C:/Users/Supervisor/Docume	2023-07-06 13:55:48.000	2023-07-06 13:56:48.980	2023-08-09 10:44:45.775	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb063.2
C:/Users/Supervisor/Docume	2023-07-06 12:02:44.000	2023-07-06 12:03:44.980	2023-08-09 10:44:39.738	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb006.3
C:/Users/Supervisor/Docume	2023-07-06 12:03:51.000	2023-07-06 12:04:51.980	2023-08-09 10:44:39.769	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb007.1
C:/Users/Supervisor/Docume	2023-07-06 13:18:24.000	2023-07-06 13:19:24.980	2023-08-09 10:44:43.778	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb042.1
C:/Users/Supervisor/Docume	2023-07-06 10:36:34.000	2023-07-06 10:37:34.980	2023-08-09 10:44:52.842	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_45.1
C:/Users/Supervisor/Docume	2023-07-06 14:37:44.000	2023-07-06 14:38:44.980	2023-08-09 10:44:48.131	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-23
C:/Users/Supervisor/Docume	2023-07-06 12:30:10.000	2023-07-06 12:31:10.980	2023-08-09 10:44:41.064	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb017.2
C:/Users/Supervisor/Docume	2023-07-06 09:47:35.000	2023-07-06 09:48:35.980	2023-08-09 10:44:39.800	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_01.2
C:/Users/Supervisor/Docume	2023-07-06 12:04:57.000	2023-07-06 12:05:57.980	2023-08-09 10:44:39.847	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb007.2
C:/Users/Supervisor/Docume	2023-07-06 12:06:03.000	2023-07-06 12:07:03.980	2023-08-09 10:44:39.878	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST-12
C:/Users/Supervisor/Docume	2023-07-06 12:07:08.000	2023-07-06 12:08:08.981	2023-08-09 10:44:40.003	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST-13
C:/Users/Supervisor/Docume	2023-07-06 12:18:03.000	2023-07-06 12:19:03.980	2023-08-09 10:44:40.487	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb009.1
C:/Users/Supervisor/Docume	2023-07-06 11:23:27.000	2023-07-06 11:24:27.980	2023-08-09 10:44:37.784	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_72.1
C:/Users/Supervisor/Docume	2023-07-06 12:08:14.000	2023-07-06 12:09:14.980	2023-08-09 10:44:40.050	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-12
C:/Users/Supervisor/Docume	2023-07-06 12:09:19.000	2023-07-06 12:10:19.980	2023-08-09 10:44:40.081	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-13
C:/Users/Supervisor/Docume	2023-07-06 12:10:25.000	2023-07-06 12:11:25.980	2023-08-09 10:44:40.112	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-13
C:/Users/Supervisor/Docume	2023-07-06 12:11:32.000	2023-07-06 12:12:32.980	2023-08-09 10:44:40.144	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-14
C:/Users/Supervisor/Docume	2023-07-06 09:55:12.000	2023-07-06 09:56:12.980	2023-08-09 10:44:43.856	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_10.1
C:/Users/Supervisor/Docume	2023-07-06 12:31:16.000	2023-07-06 12:32:16.980	2023-08-09 10:44:41.220	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb018.1
C:/Users/Supervisor/Docume	2023-07-06 12:32:20.000	2023-07-06 12:33:20.980	2023-08-09 10:44:41.267	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb019.1
C:/Users/Supervisor/Docume	2023-07-06 14:33:20.000	2023-07-06 14:34:20.980	2023-08-09 10:44:47.897	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST-22
C:/Users/Supervisor/Docume	2023-07-06 12:33:27.000	2023-07-06 12:34:27.980	2023-08-09 10:44:41.298	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb020.1
C:/Users/Supervisor/Docume	2023-07-06 11:34:21.000	2023-07-06 11:35:21.980	2023-08-09 10:44:38.350	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_83.1
C:/Users/Supervisor/Docume	2023-07-06 12:34:33.000	2023-07-06 12:35:34.273	2023-08-09 10:44:41.329	211	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb024.1
C:/Users/Supervisor/Docume	2023-07-06 12:35:39.000	2023-07-06 12:36:39.980	2023-08-09 10:44:41.360	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST-14
C:/Users/Supervisor/Docume	2023-07-06 12:36:44.000	2023-07-06 12:37:44.980	2023-08-09 10:44:41.376	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST-15
C:/Users/Supervisor/Docume	2023-07-06 10:02:47.000	2023-07-06 10:03:47.980	2023-08-09 10:44:48.162	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_15.2
C:/Users/Supervisor/Docume	2023-07-06 09:50:49.000	2023-07-06 09:51:49.980	2023-08-09 10:44:41.516	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_05.1
C:/Users/Supervisor/Docume	2023-07-06 14:41:03.000	2023-07-06 14:42:03.980	2023-08-09 10:44:48.271	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-19
C:/Users/Supervisor/Docume	2023-07-06 11:26:43.000	2023-07-06 11:27:43.980	2023-08-09 10:44:38.000	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_77.1
C:/Users/Supervisor/Docume	2023-07-06 12:37:49.000	2023-07-06 12:38:49.980	2023-08-09 10:44:41.563	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-14
C:/Users/Supervisor/Docume	2023-07-06 12:38:54.000	2023-07-06 12:39:54.980	2023-08-09 10:44:41.594	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-15
C:/Users/Supervisor/Docume	2023-07-06 12:58:37.000	2023-07-06 12:59:37.980	2023-08-09 10:44:42.562	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb035.2
C:/Users/Supervisor/Docume	2023-07-06 13:56:54.000	2023-07-06 13:57:54.980	2023-08-09 10:44:45.822	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb064.1
C:/Users/Supervisor/Docume	2023-07-06 10:39:49.000	2023-07-06 10:40:49.980	2023-08-09 10:44:53.154	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-6
C:/Users/Supervisor/Docume	2023-07-06 13:21:42.000	2023-07-06 13:22:42.980	2023-08-09 10:44:43.888	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb044.2
C:/Users/Supervisor/Docume	2023-07-06 12:39:59.000	2023-07-06 12:40:59.980	2023-08-09 10:44:41.626	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-16
C:/Users/Supervisor/Docume	2023-07-06 12:41:04.000	2023-07-06 12:42:04.980	2023-08-09 10:44:41.657	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-17
C:/Users/Supervisor/Docume	2023-07-06 13:19:30.000	2023-07-06 13:20:30.980	2023-08-09 10:44:43.810	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb043.1
C:/Users/Supervisor/Docume	2023-07-06 12:42:11.000	2023-07-06 12:43:11.980	2023-08-09 10:44:41.688	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-14
C:/Users/Supervisor/Docume	2023-07-06 12:43:16.000	2023-07-06 12:44:16.980	2023-08-09 10:44:41.797	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-15
C:/Users/Supervisor/Docume	2023-07-06 12:44:22.000	2023-07-06 12:45:22.980	2023-08-09 10:44:41.828	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb024.2

C:/Users/Supervisor/Docume	2023-07-06 14:42:10.000	2023-07-06 14:43:10.980	2023-08-09 10:44:48.412	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-20
C:/Users/Supervisor/Docume	2023-07-06 12:45:28.000	2023-07-06 12:46:29.273	2023-08-09 10:44:41.875	211	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb024.3
C:/Users/Supervisor/Docume	2023-07-06 13:01:54.000	2023-07-06 13:02:54.980	2023-08-09 10:44:42.796	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb036.3
C:/Users/Supervisor/Docume	2023-07-06 12:46:34.000	2023-07-06 12:47:34.980	2023-08-09 10:44:41.922	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb025.1
C:/Users/Supervisor/Docume	2023-07-06 12:47:40.000	2023-07-06 12:48:40.981	2023-08-09 10:44:41.953	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb025.2
C:/Users/Supervisor/Docume	2023-07-06 10:40:55.000	2023-07-06 10:41:55.980	2023-08-09 10:44:53.216	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-7
C:/Users/Supervisor/Docume	2023-07-06 11:27:49.000	2023-07-06 11:28:49.980	2023-08-09 10:44:38.031	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_78.1
C:/Users/Supervisor/Docume	2023-07-06 09:51:55.000	2023-07-06 09:52:55.980	2023-08-09 10:44:41.984	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_06.1
C:/Users/Supervisor/Docume	2023-07-06 12:13:43.000	2023-07-06 12:14:43.980	2023-08-09 10:44:40.300	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-13
C:/Users/Supervisor/Docume	2023-07-06 13:22:48.000	2023-07-06 13:23:48.980	2023-08-09 10:44:43.919	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb045.1
C:/Users/Supervisor/Docume	2023-07-06 12:48:45.000	2023-07-06 12:49:45.980	2023-08-09 10:44:42.125	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb027.1
C:/Users/Supervisor/Docume	2023-07-06 12:49:50.000	2023-07-06 12:50:50.980	2023-08-09 10:44:42.187	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb028.1
C:/Users/Supervisor/Docume	2023-07-06 12:50:56.000	2023-07-06 12:51:56.981	2023-08-09 10:44:42.218	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb029.1
C:/Users/Supervisor/Docume	2023-07-06 13:58:01.000	2023-07-06 13:59:01.980	2023-08-09 10:44:45.838	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb064.2
C:/Users/Supervisor/Docume	2023-07-06 12:52:00.000	2023-07-06 12:53:00.980	2023-08-09 10:44:42.250	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb030.1
C:/Users/Supervisor/Docume	2023-07-06 13:07:24.000	2023-07-06 13:08:24.980	2023-08-09 10:44:43.139	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-16
C:/Users/Supervisor/Docume	2023-07-06 12:53:06.000	2023-07-06 12:54:06.980	2023-08-09 10:44:42.281	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb031.1
C:/Users/Supervisor/Docume	2023-07-06 12:54:12.000	2023-07-06 12:55:12.980	2023-08-09 10:44:42.312	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb031.2
C:/Users/Supervisor/Docume	2023-07-06 11:28:54.000	2023-07-06 11:29:54.980	2023-08-09 10:44:38.075	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_79.1
C:/Users/Supervisor/Docume	2023-07-06 12:55:18.000	2023-07-06 12:56:18.980	2023-08-09 10:44:42.437	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb034.1
C:/Users/Supervisor/Docume	2023-07-06 12:14:48.000	2023-07-06 12:15:48.980	2023-08-09 10:44:40.346	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb008.1
C:/Users/Supervisor/Docume	2023-07-06 12:56:25.000	2023-07-06 12:57:25.980	2023-08-09 10:44:42.484	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb034.2
C:/Users/Supervisor/Docume	2023-07-06 12:57:30.000	2023-07-06 12:58:30.980	2023-08-09 10:44:42.530	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb035.1
C:/Users/Supervisor/Docume	2023-07-06 13:23:54.000	2023-07-06 13:24:54.980	2023-08-09 10:44:44.059	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb046.1
C:/Users/Supervisor/Docume	2023-07-06 10:44:11.000	2023-07-06 10:45:12.274	2023-08-09 10:44:53.404	211	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-6
C:/Users/Supervisor/Docume	2023-07-06 13:25:00.000	2023-07-06 13:26:00.980	2023-08-09 10:44:44.106	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb047.1
C:/Users/Supervisor/Docume	2023-07-06 13:26:06.000	2023-07-06 13:27:06.980	2023-08-09 10:44:44.137	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb047.2
C:/Users/Supervisor/Docume	2023-07-06 09:44:20.000	2023-07-06 09:45:20.980	2023-08-09 10:44:38.256	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-2
C:/Users/Supervisor/Docume	2023-07-06 13:27:11.000	2023-07-06 13:28:11.980	2023-08-09 10:44:44.184	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb048.1
C:/Users/Supervisor/Docume	2023-07-06 14:43:16.000	2023-07-06 14:44:16.980	2023-08-09 10:44:48.458	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-22
C:/Users/Supervisor/Docume	2023-07-06 13:28:17.000	2023-07-06 13:29:17.980	2023-08-09 10:44:44.246	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb048.2
C:/Users/Supervisor/Docume	2023-07-06 13:12:51.000	2023-07-06 13:13:51.980	2023-08-09 10:44:43.529	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-17
C:/Users/Supervisor/Docume	2023-07-06 09:48:39.000	2023-07-06 09:49:39.980	2023-08-09 10:44:40.393	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_01.3
C:/Users/Supervisor/Docume	2023-07-06 13:29:24.000	2023-07-06 13:30:24.980	2023-08-09 10:44:44.293	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb048.3
C:/Users/Supervisor/Docume	2023-07-06 13:30:29.000	2023-07-06 13:31:29.980	2023-08-09 10:44:44.434	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb049.1
C:/Users/Supervisor/Docume	2023-07-06 13:43:41.000	2023-07-06 13:44:41.980	2023-08-09 10:44:45.120	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb055.1
C:/Users/Supervisor/Docume	2023-07-06 13:59:08.000	2023-07-06 14:00:09.273	2023-08-09 10:44:45.884	211	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb065.1
C:/Users/Supervisor/Docume	2023-07-06 09:53:01.000	2023-07-06 09:54:01.980	2023-08-09 10:44:42.593	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_08.1
C:/Users/Supervisor/Docume	2023-07-06 13:31:35.000	2023-07-06 13:32:35.980	2023-08-09 10:44:44.465	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb050.1
C:/Users/Supervisor/Docume	2023-07-06 09:56:17.000	2023-07-06 09:57:18.273	2023-08-09 10:44:44.496	211	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_10.2
C:/Users/Supervisor/Docume	2023-07-06 13:32:41.000	2023-07-06 13:33:41.979	2023-08-09 10:44:44.527	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb051.1
C:/Users/Supervisor/Docume	2023-07-06 13:33:47.000	2023-07-06 13:34:47.979	2023-08-09 10:44:44.558	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-18
C:/Users/Supervisor/Docume	2023-07-06 13:34:53.000	2023-07-06 13:35:53.980	2023-08-09 10:44:44.590	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-19
C:/Users/Supervisor/Docume	2023-07-06 13:36:00.000	2023-07-06 13:37:00.980	2023-08-09 10:44:44.746	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-18
C:/Users/Supervisor/Docume	2023-07-06 14:44:22.000	2023-07-06 14:45:22.979	2023-08-09 10:44:48.490	210	9	Si29,Hg200,Pb204,Pb206,Pb	PLE-23
C:/Users/Supervisor/Docume	2023-07-06 12:15:53.000	2023-07-06 12:16:53.980	2023-08-09 10:44:40.424	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb008.2
C:/Users/Supervisor/Docume	2023-07-06 10:42:00.000	2023-07-06 10:43:00.980	2023-08-09 10:44:53.279	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-7

C:/Users/Supervisor/Docume	2023-07-06 14:00:13.000	2023-07-06 14:01:13.979	2023-08-09 10:44:46.009	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb066.1
C:/Users/Supervisor/Docume	2023-07-06 11:32:11.000	2023-07-06 11:33:11.980	2023-08-09 10:44:38.287	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_81.2
C:/Users/Supervisor/Docume	2023-07-06 13:37:06.000	2023-07-06 13:38:06.686	2023-08-09 10:44:44.792	209	9	Si29,Hg200,Pb204,Pb206,Pb 91500-19
C:/Users/Supervisor/Docume	2023-07-06 13:38:14.000	2023-07-06 13:39:14.980	2023-08-09 10:44:44.839	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-23
C:/Users/Supervisor/Docume	2023-07-06 13:39:19.000	2023-07-06 13:40:19.980	2023-08-09 10:44:44.870	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-24
C:/Users/Supervisor/Docume	2023-07-06 12:59:41.000	2023-07-06 13:00:41.980	2023-08-09 10:44:42.624	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb036.1
C:/Users/Supervisor/Docume	2023-07-06 13:40:24.000	2023-07-06 13:41:24.980	2023-08-09 10:44:44.902	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-18
C:/Users/Supervisor/Docume	2023-07-06 13:41:31.000	2023-07-06 13:42:31.980	2023-08-09 10:44:44.933	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-19
C:/Users/Supervisor/Docume	2023-07-06 13:42:36.000	2023-07-06 13:43:36.980	2023-08-09 10:44:45.058	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb053.1
C:/Users/Supervisor/Docume	2023-07-06 09:57:22.000	2023-07-06 09:58:22.980	2023-08-09 10:44:45.089	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_13.1
C:/Users/Supervisor/Docume	2023-07-06 11:39:48.000	2023-07-06 11:40:48.980	2023-08-09 10:44:38.584	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-11
C:/Users/Supervisor/Docume	2023-07-06 14:01:19.000	2023-07-06 14:02:19.979	2023-08-09 10:44:46.025	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb067.1
C:/Users/Supervisor/Docume	2023-07-06 14:02:26.000	2023-07-06 14:03:26.980	2023-08-09 10:44:46.072	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb068.1
C:/Users/Supervisor/Docume	2023-07-06 10:37:40.000	2023-07-06 10:38:40.980	2023-08-09 10:44:52.920	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST-6
C:/Users/Supervisor/Docume	2023-07-06 14:03:32.000	2023-07-06 14:04:32.980	2023-08-09 10:44:46.103	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST-20
C:/Users/Supervisor/Docume	2023-07-06 14:04:37.000	2023-07-06 14:05:37.686	2023-08-09 10:44:46.134	209	9	Si29,Hg200,Pb204,Pb206,Pb NIST-21
C:/Users/Supervisor/Docume	2023-07-06 09:59:32.000	2023-07-06 10:00:32.980	2023-08-09 10:44:46.165	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_14.1
C:/Users/Supervisor/Docume	2023-07-06 14:05:44.000	2023-07-06 14:06:44.980	2023-08-09 10:44:46.306	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-20
C:/Users/Supervisor/Docume	2023-07-06 11:46:21.000	2023-07-06 11:47:21.979	2023-08-09 10:44:38.958	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_85.1
C:/Users/Supervisor/Docume	2023-07-06 11:35:25.000	2023-07-06 11:36:25.980	2023-08-09 10:44:38.381	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_83.2
C:/Users/Supervisor/Docume	2023-07-06 10:45:17.000	2023-07-06 10:46:17.980	2023-08-09 10:44:53.450	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-7
C:/Users/Supervisor/Docume	2023-07-06 13:03:00.000	2023-07-06 13:04:00.980	2023-08-09 10:44:42.842	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb037.1
C:/Users/Supervisor/Docume	2023-07-06 14:06:50.000	2023-07-06 14:07:50.980	2023-08-09 10:44:46.368	210	9	Si29,Hg200,Pb204,Pb206,Pb 91500-21
C:/Users/Supervisor/Docume	2023-07-06 14:07:57.000	2023-07-06 14:08:57.980	2023-08-09 10:44:46.415	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-21
C:/Users/Supervisor/Docume	2023-07-06 14:26:42.000	2023-07-06 14:27:42.980	2023-08-09 10:44:47.476	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb078.2
C:/Users/Supervisor/Docume	2023-07-06 12:19:09.000	2023-07-06 12:20:09.980	2023-08-09 10:44:40.627	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb010.1
C:/Users/Supervisor/Docume	2023-07-06 14:47:41.000	2023-07-06 14:48:41.980	2023-08-09 10:44:48.599	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb085.1
C:/Users/Supervisor/Docume	2023-07-06 14:09:03.000	2023-07-06 14:10:03.980	2023-08-09 10:44:46.446	210	9	Si29,Hg200,Pb204,Pb206,Pb TEM-22
C:/Users/Supervisor/Docume	2023-07-06 14:10:09.000	2023-07-06 14:11:09.980	2023-08-09 10:44:46.493	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-20
C:/Users/Supervisor/Docume	2023-07-06 14:45:28.000	2023-07-06 14:46:28.980	2023-08-09 10:44:48.521	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-24
C:/Users/Supervisor/Docume	2023-07-06 14:11:15.000	2023-07-06 14:12:15.980	2023-08-09 10:44:46.524	210	9	Si29,Hg200,Pb204,Pb206,Pb PLE-21
C:/Users/Supervisor/Docume	2023-07-06 14:12:21.000	2023-07-06 14:13:21.980	2023-08-09 10:44:46.680	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb068.2
C:/Users/Supervisor/Docume	2023-07-06 14:13:28.000	2023-07-06 14:14:28.980	2023-08-09 10:44:46.711	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb069.1
C:/Users/Supervisor/Docume	2023-07-06 10:46:23.000	2023-07-06 10:47:23.981	2023-08-09 10:44:53.700	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_45.2
C:/Users/Supervisor/Docume	2023-07-06 14:14:33.000	2023-07-06 14:15:33.980	2023-08-09 10:44:46.742	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb070.1
C:/Users/Supervisor/Docume	2023-07-06 14:15:39.000	2023-07-06 14:16:39.980	2023-08-09 10:44:46.774	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb071.1
C:/Users/Supervisor/Docume	2023-07-06 10:00:38.000	2023-07-06 10:01:38.980	2023-08-09 10:44:46.805	210	9	Si29,Hg200,Pb204,Pb206,Pb HD01_UPb_14.2
C:/Users/Supervisor/Docume	2023-07-06 12:20:15.000	2023-07-06 12:21:15.980	2023-08-09 10:44:40.658	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb010.2
C:/Users/Supervisor/Docume	2023-07-06 13:04:06.000	2023-07-06 13:05:06.980	2023-08-09 10:44:42.905	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb037.2
C:/Users/Supervisor/Docume	2023-07-06 11:36:31.000	2023-07-06 11:37:31.980	2023-08-09 10:44:38.412	210	9	Si29,Hg200,Pb204,Pb206,Pb NIST-10
C:/Users/Supervisor/Docume	2023-07-06 13:44:48.000	2023-07-06 13:45:48.980	2023-08-09 10:44:45.151	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb056.1
C:/Users/Supervisor/Docume	2023-07-06 14:48:48.000	2023-07-06 14:49:48.980	2023-08-09 10:44:48.770	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb086.1
C:/Users/Supervisor/Docume	2023-07-06 14:16:46.000	2023-07-06 14:17:46.980	2023-08-09 10:44:46.836	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb072.1
C:/Users/Supervisor/Docume	2023-07-06 14:17:52.000	2023-07-06 14:18:52.980	2023-08-09 10:44:46.992	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb073.1
C:/Users/Supervisor/Docume	2023-07-06 14:18:58.000	2023-07-06 14:19:58.980	2023-08-09 10:44:47.023	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb073.2
C:/Users/Supervisor/Docume	2023-07-06 14:20:04.000	2023-07-06 14:21:04.980	2023-08-09 10:44:47.070	210	9	Si29,Hg200,Pb204,Pb206,Pb LS01_UPb074.1
C:/Users/Supervisor/Docume	2023-07-06 14:34:26.000	2023-07-06 14:35:26.686	2023-08-09 10:44:47.928	209	9	Si29,Hg200,Pb204,Pb206,Pb NIST-23

C:/Users/Supervisor/Docum	2023-07-06 14:21:11.000	2023-07-06 14:22:11.980	2023-08-09 10:44:47.101	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb075.1
C:/Users/Supervisor/Docum	2023-07-06 14:22:18.000	2023-07-06 14:23:18.980	2023-08-09 10:44:47.148	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb075.2
C:/Users/Supervisor/Docum	2023-07-06 13:05:12.000	2023-07-06 13:06:12.980	2023-08-09 10:44:42.952	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-16
C:/Users/Supervisor/Docum	2023-07-06 14:23:24.000	2023-07-06 14:24:24.980	2023-08-09 10:44:47.210	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb076.1
C:/Users/Supervisor/Docum	2023-07-06 13:45:53.000	2023-07-06 13:46:53.980	2023-08-09 10:44:45.182	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb057.1
C:/Users/Supervisor/Docum	2023-07-06 14:24:30.000	2023-07-06 14:25:30.980	2023-08-09 10:44:47.351	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb077.1
C:/Users/Supervisor/Docum	2023-07-06 14:25:36.000	2023-07-06 14:26:37.273	2023-08-09 10:44:47.429	211	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb078.1
C:/Users/Supervisor/Docum	2023-07-06 10:03:53.000	2023-07-06 10:04:53.980	2023-08-09 10:44:48.817	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_16.1
C:/Users/Supervisor/Docum	2023-07-06 14:49:55.000	2023-07-06 14:50:55.980	2023-08-09 10:44:48.864	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb088.1
C:/Users/Supervisor/Docum	2023-07-06 14:51:03.000	2023-07-06 14:52:03.980	2023-08-09 10:44:48.911	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb088.2
C:/Users/Supervisor/Docum	2023-07-06 11:30:00.000	2023-07-06 11:31:00.980	2023-08-09 10:44:38.114	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_80.1
C:/Users/Supervisor/Docum	2023-07-06 14:52:09.000	2023-07-06 14:53:10.273	2023-08-09 10:44:48.958	211	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb089.1
C:/Users/Supervisor/Docum	2023-07-06 10:47:28.000	2023-07-06 10:48:28.980	2023-08-09 10:44:53.747	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_45.3
C:/Users/Supervisor/Docum	2023-07-06 14:53:16.000	2023-07-06 14:54:16.981	2023-08-09 10:44:48.989	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb090.1
C:/Users/Supervisor/Docum	2023-07-06 14:38:50.000	2023-07-06 14:39:50.980	2023-08-09 10:44:48.209	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-24
C:/Users/Supervisor/Docum	2023-07-06 11:33:16.000	2023-07-06 11:34:16.980	2023-08-09 10:44:38.318	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_82.1
C:/Users/Supervisor/Docum	2023-07-06 14:54:22.000	2023-07-06 14:55:22.980	2023-08-09 10:44:49.192	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb090.2
C:/Users/Supervisor/Docum	2023-07-06 14:55:28.000	2023-07-06 14:56:28.980	2023-08-09 10:44:49.223	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb091.1
C:/Users/Supervisor/Docum	2023-07-06 11:37:37.000	2023-07-06 11:38:37.980	2023-08-09 10:44:38.506	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-11
C:/Users/Supervisor/Docum	2023-07-06 14:56:35.000	2023-07-06 14:57:35.980	2023-08-09 10:44:49.270	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb091.2
C:/Users/Supervisor/Docum	2023-07-06 11:40:54.000	2023-07-06 11:41:54.980	2023-08-09 10:44:38.615	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-6
C:/Users/Supervisor/Docum	2023-07-06 14:57:42.000	2023-07-06 14:58:42.980	2023-08-09 10:44:49.316	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb092.1
C:/Users/Supervisor/Docum	2023-07-06 14:58:48.000	2023-07-06 14:59:48.980	2023-08-09 10:44:49.379	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb092.2
C:/Users/Supervisor/Docum	2023-07-06 14:59:54.000	2023-07-06 15:00:54.687	2023-08-09 10:44:49.426	209	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb093.1
C:/Users/Supervisor/Docum	2023-07-06 09:35:37.000	2023-07-06 09:36:37.980	2023-08-09 10:44:49.613	210	9	Si29,Hg200,Pb204,Pb206,Pb	NIST-3
C:/Users/Supervisor/Docum	2023-07-06 09:39:58.000	2023-07-06 09:40:58.980	2023-08-09 10:44:53.809	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-1
C:/Users/Supervisor/Docum	2023-07-06 13:46:59.000	2023-07-06 13:47:59.980	2023-08-09 10:44:45.214	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb057.2
C:/Users/Supervisor/Docum	2023-07-06 12:21:21.000	2023-07-06 12:22:21.980	2023-08-09 10:44:40.674	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb010.3
C:/Users/Supervisor/Docum	2023-07-06 13:08:29.000	2023-07-06 13:09:29.980	2023-08-09 10:44:43.186	210	9	Si29,Hg200,Pb204,Pb206,Pb	91500-17
C:/Users/Supervisor/Docum	2023-07-06 10:04:58.000	2023-07-06 10:05:58.980	2023-08-09 10:44:49.660	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_16.2
C:/Users/Supervisor/Docum	2023-07-06 15:01:00.000	2023-07-06 15:02:00.687	2023-08-09 10:44:49.691	209	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb093.2
C:/Users/Supervisor/Docum	2023-07-06 15:02:06.000	2023-07-06 15:03:06.980	2023-08-09 10:44:49.738	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb094.1
C:/Users/Supervisor/Docum	2023-07-06 10:01:43.000	2023-07-06 10:02:43.980	2023-08-09 10:44:47.507	210	9	Si29,Hg200,Pb204,Pb206,Pb	HD01_UPb_15.1
C:/Users/Supervisor/Docum	2023-07-06 15:03:12.000	2023-07-06 15:04:12.980	2023-08-09 10:44:49.769	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb094.2
C:/Users/Supervisor/Docum	2023-07-06 15:04:18.000	2023-07-06 15:05:18.979	2023-08-09 10:44:49.800	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb096.1
C:/Users/Supervisor/Docum	2023-07-06 15:05:24.000	2023-07-06 15:06:24.980	2023-08-09 10:44:49.987	210	9	Si29,Hg200,Pb204,Pb206,Pb	LS01_UPb099.1
C:/Users/Supervisor/Docum	2023-07-06 11:42:00.000	2023-07-06 11:43:00.980	2023-08-09 10:44:38.630	210	9	Si29,Hg200,Pb204,Pb206,Pb	TEM-11

Laser Log Files

File	File start time	File end time	Time file loaded	Samples	Offset (s)	Widths
C:/Users/Supervisor/Docum	2023-07-06 10:33:01.331	2023-07-06 16:20:29.129	2023-08-09 10:47:08.896	NIST-1,HD01_UPb_74.1,LS01	-3576.29	30

	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final Pb20	Final U238	Final U238	Final U/Th	Approx_U	Approx_Th	Approx_Pb_PPM_me	rho 206Pb	rho 207Pb/206Pb v 238U/206Pb
G_NIST610																								
NIST-1	0.237496	0.004698	1373.537	24.44696	29.39461	0.653998	3467.679	20.41314	0.517673	0.006311	8430.353	83.61886	0.895091	0.020032	4974.021	0	4.215087	0.082543	0.966978	300.7616	311.0452	1469.939	0.585013	0.354792
NIST-2	0.223901	0.004874	1302.12	25.46344	27.61914	0.621689	3404.818	21.96528	0.481843	0.006099	7946.96	82.75695	0.89715	0.020036	4888.87	783.0035	4.479303	0.090793	0.951249	390.3248	411.6017	1840.914	0.995912	-0.10127
NIST-3	0.227407	0.011603	1291.819	12.64158	28.27105	1.410948	3404.815	9.445037	0.48404	0.005678	7977.248	76.99787	0.900052	0.020201	4990.846	62.54997	4.516678	0.047285	0.959083	376.8691	395.1108	1793.839	0.997883	0.255532
NIST-4	0.247807	0.021527	1409.189	94.79229	31.94958	3.049659	3498.294	55.77351	0.49255	0.005867	8092.664	79.0111	0.911687	0.020217			4.366585	0.098864	0.958607	346.8318	361.3923	1667.712	0.998053	0.066994
NIST-5	0.250006	0.02233	1418.217	98.81724	31.59136	2.870126	3490.176	53.27787	0.490924	0.005983	8070.377	80.59149	0.910267	0.020172	4994.399	0	4.27446	0.157458	0.957863	350.0556	366.0396	1683.417	0.998017	0.070987
NIST-6	0.243782	0.020584	1341.742	61.95103	30.4879	2.555425	3451.13	42.15998	0.487457	0.00568	8023.685	76.7976	0.904822	0.020287	4993.976	6.577718	4.490523	0.038646	0.961902	347.4319	360.4526	1662.003	0.997108	-0.01922
NIST-7	0.247912	0.019967	1411.541	90.00456	30.8341	2.497972	3452.579	38.46229	0.484658	0.005657	7985.653	76.8898	0.900665	0.020063	4973.398	57.78369	4.413013	0.072894	0.9539	347.5429	364.6157	1659.113	0.998582	0.001584
NIST-8	0.241434	0.020426	1377.336	90.44992	30.27608	2.493799	3458.296	47.77912	0.485341	0.005512	7995.137	74.51468	0.911167	0.020149			4.405393	0.133431	0.962703	363.303	378.7962	1733.992	0.998759	0.191483
NIST-9	0.252467	0.023675	1428.142	105.3605	32.20232	3.135619	3497.287	60.3263	0.487197	0.00639	8019.194	85.96984	0.910848	0.020272	4981.747	91.68214	4.158962	0.205728	0.96559	360.5219	373.4932	1714.49	0.997456	0.171235
NIST-10	0.231766	0.009503	1340.431	44.49159	28.56063	1.150589	3420.483	12.91573	0.489245	0.006268	8047.223	84.38302	0.896076	0.019756	4914	417.7182	4.411398	0.06198	0.953214	354.9308	373.3789	1698.997	0.9974	0.190751
NIST-11	0.229465	0.009727	1328.219	44.64163	28.90047	1.672283	3421.258	25.3971	0.485097	0.006501	7990.453	87.53121	0.894844	0.019835	4951.798	316.8423	4.45476	0.048858	0.952845	361.6558	379.9105	1738.248	0.996951	-0.12412
NIST-12	0.254393	0.02452	1437.044	108.398	31.84818	2.911531	3471.927	44.12736	0.488974	0.00578	8044.214	78.03937	0.912278	0.020127	4886.549	0	4.348474	0.130482	0.96058	357.5435	373.9527	1703.023	0.997706	0.408136
NIST-13	0.227772	0.010077	1319.091	46.20081	28.71034	1.354837	3433.226	27.45641	0.488446	0.005909	8036.882	79.64933	0.913473	0.020097	4964.214	119.0405	4.493166	0.049034	0.965026	354.7534	369.2794	1674.076	0.998542	0.006791
NIST-14	0.236216	0.015419	1336.6	56.4713	29.85352	2.002538	3445.169	33.34654	0.491068	0.006298	8071.915	84.24503	0.915098	0.020173			4.494854	0.04773	0.960162	352.3159	369.7621	1676.848	0.999017	-0.25087
NIST-15	0.24191	0.019891	1357.112	74.65573	30.65973	2.518086	3446.264	32.4269	0.491251	0.006427	8074.26	85.60072	0.915894	0.020327			4.479548	0.068499	0.955545	351.5173	369.6042	1691.979	0.995415	-0.14501
NIST-16	0.232032	0.012867	1338.734	58.74902	29.13479	1.526815	3443.43	32.62169	0.496246	0.00619	8142.262	82.81201	0.911159	0.020196			4.4875	0.042112	0.964867	345.5496	359.6057	1655.072	0.997341	0.21381
NIST-17	0.24461	0.019523	1395.475	87.31949	30.67632	2.391689	3440.247	24.83017	0.499365	0.006309	8184.218	84.22006	0.909949	0.020015			4.453903	0.048144	0.963755	336.9181	350.6293	1630.802	0.999474	0.317866
NIST-18	0.230352	0.009664	1313.715	13.80229	28.27907	0.640552	3427.858	21.69877	0.495164	0.005912	8128.032	79.36931	0.906521	0.019987			4.433999	0.0489	0.962263	341.1003	355.0277	1648.299	0.998206	-0.19989
NIST-19	0.226632	0.004878	1316.48	25.38493	28.42465	0.657961	3432.681	21.83219	0.495589	0.006188	8133.443	82.99403	0.907985	0.020119	4959.634	0	4.425101	0.087343	0.9609	338.7034	353.4034	1637.193	0.997112	0.383128
NIST-20	0.22763	0.009978	1318.304	46.25542	27.90991	0.636835	3414.807	22.30321	0.489814	0.006315	8054.876	84.56887	0.902141	0.019959	4991.068	0	4.277777	0.166055	0.964699	353.2148	366.7828	1692.892	0.996264	0.451656
NIST-21	0.228813	0.008539	1308.832	12.39406	27.85922	0.627199	3413.254	21.66487	0.487094	0.005765	8027.903	81.24767	0.898549	0.019781	4995.278	14.9614	4.449964	0.044582	0.958953	345.7778	361.3936	1642.168	0.998868	0.081686
NIST-22	0.243174	0.020851	1339.739	65.13829	30.32119	2.545528	3411.3	8.475907	0.48641	0.006094	8009.007	82.09492	0.907683	0.02016	4993.616	0	4.505805	0.040691	0.961047	364.3459	380.5317	1723.886	0.99895	0.223421
NIST-23	0.240536	0.019909	1373.902	86.64042	31.42751	3.191366	3437.181	35.62777	0.488358	0.006218	8035.266	83.12339	0.9047	0.020171	4887.082	481.89	4.456585	0.07813	0.96322	367.481	382.7639	1773.727	0.994253	0.499172
NIST-24	0.2283	0.008698	1322.945	40.92758	28.07727	0.662218	3420.366	22.15862	0.489212	0.006297	8046.79	84.77178	0.908705	0.020194			4.465131	0.053759	0.957905	356.1098	373.2783	1713.105	0.997495	-0.13395
NIST-25	0.223528	0.004461	1300.315	23.43134	28.101	0.625135	3421.836	21.57184	0.481895	0.005236	7948.527	70.97177	0.915566	0.020193			4.480809	0.086827	0.956216	343.8882	360.214	1616.947	0.999047	-0.14122
NIST-26	0.224494	0.004734	1305.278	24.6709	28.288	0.643432	3428.091	21.67176	0.480878	0.005619	7934.151	76.30958	0.916766	0.020374			4.465859	0.086037	0.955601	343.997	360.0913	1619.617	0.997123	0.131329
NIST-27	0.224701	0.004497	1306.487	23.59998	28.25547	0.63682	3427.055	22.00856	0.483916	0.005734	7975.493	77.60732	0.913038	0.020308			4.457665	0.087	0.957195	342.4368	358.3175	1614.835	0.99851	0.153422
HD01																								
HD01_UPb_01.1	0.066223	0.002169	413.2753	13.11588	0.50039	0.019044	411.4155	12.9252	0.021118	0.00056	422.3657	11.09639	0.054856	0.001475	401.4865	61.06397	15.20948	0.510534	2.190635	1404.233	640.9496	118.8274	0.867759	-0.00586
HD01_UPb_01.2	0.066015	0.001568	412.0357	9.479223	0.50979	0.013496	417.9315	9.054848	0.019827	0.000341	396.8017	6.752238	0.055908	0.001348	443.45	53.87964	15.23262	0.365501	3.227206	1514.72	475	86.95725	0.764127	0.248368
HD01_UPb_01.3	0.063155	0.001307	394.7561	7.92378	0.499416	0.01205	411.0944	8.137327	0.018668	0.000413	373.8068	8.204347	0.057351	0.001357	500.6304	51.75521	15.8714	0.329123	3.200862	1877.846	613.7097	104.7475	0.653592	0.256432
HD01_UPb_04.1	0.281984	0.006304	1600.731	31.8987	3.849633	0.104915	1600.734	22.61586	0.079898	0.001181	1553.45	22.11236	0.098673	0.002291	1596.336	43.69129	3.552593	0.080109	1.515239	430.7558	297.4458	222.8587	0.899761	-0.4316
HD01_UPb_05.1	0.216402	0.00418	1262.732	22.14452	2.465834	0.057474	1261.357	16.8662	0.064258	0.000896	1258.655	17.00334	0.082841	0.001989	1261.306	47.18098	4.620765	0.084998	2.713581	247.8052	91.22841	53.7986	0.28764	0.307584
HD01_UPb_06.1	0.09298	0.009469	567.6508	55.7376	0.958728	0.093913	656.1728	49.00743	0.012838	0.001544	257.2743	30.79159	0.075646	0.002023	1077.664	51.11266	14.08972	1.487527	0.723634	1498.197	2294.554	237.5772	0.993335	0.43326
HD01_UPb_08.1	0.30711	0.006303	1726.256	31.07445	4.424976	0.109467	1716.199	20.40222	0.088131	0.001146	1707.073	21.29527	0.104798	0.002521	1708.233	44.51333	3.260041	0.066901	1.767284	249.9901	141.9991	112.036	0.494531	0.252919
HD01_UPb_09.1	0.059121	0.003164	369.9076	19.35859	0.459588	0.025177	382.0169	18.03623	0.016705	0.001023	334.7027	20.39349	0.056448	0.001452	464.7327	56.41186	17.52346	1.164098	1.624976	1416.802	920.1934	127.3315	0.958114	0.088052
HD01_UPb_10.1	0.06649	0.0015	414.921	9.065284	0.506481	0.013864	415.6297	9.346892	0.020391	0.000282	407.9959	5.59555	0.054989	0.001323	406.4678	53.97935	15.10529	0.344467	3.024648	1168.913	397.2703	74.68439	0.787671	-0.05328
HD01_UPb_10.2	0.063853	0.001455	398.9654	8.818074	0.520441	0.013805	425.0497	9.203922	0.018217	0.000818	364.7422	16.25039	0.058966	0.001397	561.4103	51.88631	15.65572	0.324334	2.430201	1646.954	670.1743	114.5934	0.80572	0.052488
HD01_UPb_13.1	0.226688	0.008529	1314.27	44.99529	3.122521	0.126235	1429.568	32.03635	0.048963	0.001764	965.5413	33.92313	0.099414	0.002214	1613.074	43.19717	4.53652	0.186239	1.098064	1046.153	992.8278	420.6784	0.985103	-0.19734
HD01_UPb_13.2	0.054207	0.0017	340.2473	10.38689	0.430167	0.018408	362.7204	12.95997	0.009018	0.000298	181.4562	5.969441	0.057193	0.001611	493.3824	63.53788	18.55466	0.572456	1.796297	2198.85	1273.356	96.68599	0.798181	-0.1893
HD01_UPb_14.1	0.068549	0.001604	427.3772	9.674078	0.530929	0.014497	432.2067	9.603811	0.019949	0.000351	399.2297	6.954548	0.056253	0.001447	457.9672	57.19399	14.62371	0.344021	1.601165	1641.496	1027.941	180.8487	0.655631	0.201454
HD01_UPb_14.2	0.067484	0.002134	420.9238	12.86104	0.517287	0.019386	422.975	13.00959	0.016319	0.000364	327.1764	7.240237	0.055725	0.001557	437.4147	62.07329	14.8772	0.446487	1.324311	1707.48	1285.314	180.5674	0.828095	-0.07083
HD01_UPb_15.1	0.184849	0.004124	1093.285	22.46013	1.934848	0.053545	1092.514	18.34263	0.056474	0.001101	1110.315	21.07012	0.076008	0.002053	1091.194	53.35278	5.418529	0.122886	2.61541	359.4078	136.9471	68.61512	0.522017	0.273226
HD01_UPb_15.2	0.187972	0.003633	1110.299	19.71678	2.000581	0.048748	1116.272	15.79096	0.05701	0.000834	1120.538	15.94068	0.077361	0.00191	1129.554	46.5646	5.325309	0.103387	2.45972	186.1107	75.58089	39.90537	0.401582	0.071909
HD01_UPb_16.1	0.222066	0.004744	1292.468	25.05837	2.746294	0.070051	1339.622	19.16463	0.068228	0.001287	1333.746	24.3196	0.089463	0.00214	1413.488	43.48326	4.516697	0.098464	2.670114	237.3529	88.72347	55.97695	0.734259	-0.01661
HD01_UPb_16.2	0.143347	0.004212	862.9162	23.84664	1.476383	0.06373	914.3237	26.97421	0.055744	0.001437	1096.029	27.57072	0.074015	0.002215	1033.662	60.14528	7.04084	0.213822	4.033736	215.4809	58.92686	30.67028	0.908258	-0.60268
HD01_UPb_16.3	0.078407	0.002821	486.4337	16.84986	0.627455	0.028774	493.1254	18.18542	0.013958	0.001345	279.979	26.78237	0.058508	0.0018	540.2641	66.2026	12.88559	0.460484	3.512187	652.3437	201.4734	23.52447	0.840117	-0.04767
HD01_UPb_17.1	0.053499	0.001339	335.9091	8.205737	0.440414	0.012088	370.1873	8.506651	0.012954	0.000841	259.981	16.79323	0.059589	0.00146	583.1536	52.78609	18.82909	0.507872	1.856699	1928.343	1076.865	135.7951	0.8445	0.101103
HD01_UPb_20.1	0.138003	0.009013	828.9448	50.95773	1.510337	0.11364	911.6045	46.18094	0.037024	0.003043	732.7645	59.41893	0.078137	0.002123	1141.309	53.44644	8.005477	0.549207	1.550355	331.7478	214.5038	64.89898	0.980772	-0.60473
HD01_UPb_21.1	0.062003	0.001475	387.734	8.954043	0.48453	0.013097	401.7921	9.444154	0.013573	0.000379	272.4668	7.570537	0.056774	0.001362	477.7472	53.16479	16.21991	0.388663	1.239756	1073.828	875.9006	107.1836	0.801332	-0.00893
HD01_UPb_21.2	0.068208	0.001501	425.3021	9.054273	0.523166	0.013337	426.9365	8.922056	0.020318	0.000324	406.5343	6.418455	0.055806	0.001346	439.3884	53.15227	14.71553	0.324781	1.724723	1185.807	689.9641	127.6354	0.696956	0.120698
HD01_UPb_22.1	0.070555	0.001496	439.4584	8.998582	0.548827	0.015197	443.7021	9.936031	0.020915	0.000267	418.3639	5.283504	0.056339	0.001497	455.7244	59.50669	14.21317	0.295491	0.960103	600.3909	612.5508	119.8357	0.591867	0.043746
HD01_UPb_22.2	0.066839	0.001605	417.0463	9.68903	0.509272	0.014954	417.6395	10.01637	0.019623	0.000397	392.7651	7.857498	0.05528	0.001473	417.6725	60.19407	15.0073	0.354754	2.903659	1294.073	446.4376	78.16446	0.659104	0.11442
HD01_UPb_23.1	0.063402	0.001537	396.2087	9.306585	0.49092	0.013496	405.0987	9.150125	0.014623	0.000396	293.3931	7.881923	0.056101	0.001403	449.4894	55.0023	15.86797	0.374257	1.390836	1049.853	787.4969	103.9043	0.770359	0.186994
HD01_UPb_24.1	0.286529	0.006124	1624.007	30.67989	3.991156	0.108575	1631.617	21.88637	0.084122	0.001473	1632.437	27.47953	0.101289	0.002904	1643.847	53.38794	3.493439	0.074656	1.331177	128.7106	96.73779	71.4967	0.217027	0.391721
HD01_UPb_25.1	0.318645	0.006252	1782.864	30.57113	4.82276	0.117121	1787.506	20.38666	0.089447	0.001408	1731.291	26.13987	0.109363	0.002755	1787.106	47.91786	3.142355	0.061943	1.935968	115.7242	59.36849	50.695	0.431149	0.191301
HD01_UPb_25.2	0.247871	0.005258	1427.126	27.14047	3.546068	0.098578	1534.974	22.05421	0.060467	0.001581	1186.156	30.08576	0.103442	0.002535	1682.249	45.18663	4.045798	0.085396	1.937658	196.591	99.52159	55.1991	0.80348	-0.30693
HD01_UPb_26.1	0.256026	0.004932	1469.351	25.29642	3.246527	0.082196	1466.83	19.48529	0.074133	0.001032	1445.313	19.42415	0.091635	0.002325	1457.605	50.12673	3.909567	0.075041	1.468387	129.6026	87.93411	60.97708	0.323505	0.127131
HD01_UPb_30.1	0.057176	0.001791	358.3774	10.92202	0.453558	0.015062	379.4733	10.55972	0.008932	0.000307	179.7226	6.161636	0.057729	0.001577	514.8908	58.72595	17.5914	0.562482	0.982143	1787.302	1830.355	143.1992	0.810293	0.270958
HD01_UPb_31.1	0.061604	0.001581	385.2868	9.614264	0.483925	0.013466	400.3109	9.273846	0.019468	0.000478	389.6603	9.475845	0.05711	0.00135	494.8313	49.29434	16.31227	0.422943	2.624527	1929.746	849.7404	146.3407	0.876877	0.364812
HD01_UPb_34.1	0.06524	0.00147	407.3627	8.889162	0.498974	0.013229	410.6493	8.943164	0.018692	0.000308	374.2933	6.123209	0.055329	0.001339	428.2169	53.59461	15.35365	0.322848	1.897707	1382.357	728.1916	127.1448	0.782163	0.080345
HD01_UPb_40.1	0.053486	0.001202	335.856	7.348852	0.424003	0.01239	358.4531	8.742252	0.011205	0.000435	225.1739	8.684279	0.057181	0.001404	492.5426	54.03932	18.7342	0.42931	1.591756	1494.368	955.055	94.29705	0.828869	-0.22259
HD01_UPb_41.1	0.260626	0.006266	1492.599	32.13344	3.369674	0.097441	1495.752	22.75069	0.077467	0.000919	1508.034	17.24775	0.093527	0.002172	1496.585	44.07185	3.837551	0.101907	1.713015	806.3172	469.4652	327.6917	0.901769	-0.14628
HD01_UPb_42.1	0.053775	0.001302	337.6084	7.969618	0.440574	0.011391	370.3819	8.055734	0.011733	0.000248	235.7508	4.943572	0.059487	0.001506	577.976	53.92325	18.71238	0.467315	1.473146	1470.11	1001.542	110.3648	0.656428	0.416522
HD01_UPb_44.1	0.052666	0.00176	330.7138	10.76817	0.570667	0.022877	456.5887	14.53633	0.010057	0.00053	202.186	10.58851	0.078862	0.002744	1143.619	72.29616	19.34626	0.642482	0.628017	755.2575	1317.527	118.0351	0.598899	0.322098

HD01_UPb_44.2	0.062825	0.001513	392.7187	9.166394	0.474443	0.013548	393.7766	9.25594	0.011939	0.000459	239.8379	9.152403	0.054532	0.001375	390.0847	59.62516	15.96765	0.391923	1.818368	1280.164	780.7359	78.5869	0.770998	0.109615
HD01_UPb_45.1	0.058292	0.001314	365.186	8.000677	0.44742	0.012439	375.0728	8.693054	0.016074	0.000323	322.2902	6.423454	0.055428	0.001365	432.003	59.75194	17.18833	0.371994	1.630279	1257.142	761.0074	113.8893	0.729692	-0.02323
HD01_UPb_45.2	0.059233	0.001342	370.9155	8.165669	0.455315	0.011964	380.6788	8.344356	0.013065	0.000275	262.3426	5.493403	0.055758	0.001315	438.3725	52.75115	16.95635	0.383785	2.292984	1571.899	670.5567	82.20238	0.805213	0.046098
HD01_UPb_45.3	0.054068	0.001303	339.3984	7.970968	0.420299	0.011526	356.8108	8.604567	0.013783	0.000435	276.643	8.674242	0.05658	0.001355	470.3806	53.04958	18.60559	0.460246	3.221796	1700.588	545.6616	66.63605	0.841302	0.104737
HD01_UPb_47.1	0.154645	0.003187	926.8534	17.80448	1.532767	0.05083	941.4473	20.37747	0.047016	0.00055	928.6103	10.62134	0.072088	0.002452	971.1045	71.15289	6.47702	0.135296	0.418518	104.3194	248.615	106.5888	0.125403	0.243157
HD01_UPb_48.1	0.060422	0.002005	377.9978	12.21522	0.465687	0.016083	387.2594	11.24965	0.015039	0.000907	301.5134	18.04231	0.056061	0.001298	451.1822	51.81773	16.7851	0.579924	0.698258	1785.773	3194.967	437.9002	0.94472	0.243327
HD01_UPb_48.2	0.066438	0.00147	414.6111	8.879853	0.50944	0.013336	417.7073	8.984968	0.019718	0.000339	394.652	6.710538	0.055616	0.001319	432.3529	53.66057	15.07929	0.346427	2.424407	1216.604	507.3479	92.2767	0.780766	0.093064
HD01_UPb_51.1	0.066909	0.001455	417.4642	8.789258	0.510146	0.012919	418.2477	8.683014	0.020305	0.000316	406.2845	6.261117	0.05541	0.001374	422.297	55.00497	14.97187	0.340078	1.829756	1153.898	624.2839	120.0294	0.647515	0.22121
HD01_UPb_51.2	0.065901	0.001574	411.3568	9.517402	0.5048	0.012866	414.6994	8.703534	0.020285	0.000296	405.8994	5.867133	0.055683	0.001375	434.3963	55.50909	15.24485	0.367667	3.562196	1573.089	438.633	84.45646	0.700392	0.437659
HD01_UPb_52.1	0.166462	0.003423	992.4402	18.96068	1.662762	0.049678	992.1953	18.7573	0.050146	0.001019	988.7648	19.63543	0.072528	0.002098	987.9731	58.18082	6.001465	0.12519	2.701085	94.46164	34.93434	16.4174	0.443837	0.082546
HD01_UPb_53.1	0.145618	0.00429	875.6946	24.17576	1.530215	0.048739	939.9645	19.85195	0.015167	0.000694	304.1557	13.80349	0.076271	0.001725	1099.86	45.56189	6.932398	0.206904	2.673874	984.9684	360.9572	50.87656	0.961086	-0.11125
HD01_UPb_55.1	0.033204	0.001869	210.3455	11.61387	0.313003	0.01994	274.023	15.38963	0.008217	0.000419	165.3668	8.401555	0.068316	0.002739	843.5235	76.88276	31.90205	1.522906	1.159418	2198.297	2252.44	147.7222	0.837983	-0.1392
HD01_UPb_56.1	0.048417	0.001073	304.7687	6.590324	0.670941	0.027708	523.5104	16.78191	0.029153	0.001429	580.3757	28.02415	0.101606	0.004066	1622.859	72.59212	20.73031	0.447532	2.352782	1767.128	813.2029	224.5531	0.453252	-0.0885
HD01_UPb_57.1	0.259388	0.005392	1486.471	27.78823	3.360141	0.082384	1494.228	19.43604	0.0764	0.000962	1487.981	18.06356	0.094371	0.002304	1512.027	46.27871	3.862464	0.086596	1.505714	338.8677	221.288	155.1401	0.707733	0.213093
HD01_UPb_57.2	0.058704	0.001706	367.6205	10.37105	0.49931	0.015284	411.8873	10.87238	0.019417	0.000822	388.545	16.27513	0.062301	0.001587	681.7824	55.85619	17.23503	0.487539	4.114203	1397.738	388.9963	63.38329	0.868582	0.299516
HD01_UPb_58.1	0.074262	0.002458	461.499	14.74203	0.687579	0.027135	529.0295	16.34012	0.029215	0.002007	581.1321	39.2998	0.066893	0.001642	828.9381	51.10654	13.71939	0.45695	3.081272	1385.38	528.3546	112.278	0.928275	-0.31982
HD01_UPb_61.1	0.063477	0.001513	396.6685	9.171667	0.493472	0.013655	406.824	9.243304	0.017414	0.000639	348.8466	12.69215	0.056388	0.001383	465.5504	56.58216	15.81155	0.392261	1.70312	1058.913	708.879	106.513	0.766843	0.125626
HD01_UPb_61.2	0.068341	0.001558	426.0931	9.397742	0.524985	0.013602	428.1234	9.080111	0.017371	0.000373	348.0637	7.420321	0.055846	0.001377	440.0661	54.70837	14.69839	0.33657	1.799804	1001.571	557.078	90.21191	0.675732	0.245388
HD01_UPb_62.1	0.062023	0.001571	388.9783	10.02302	0.48019	0.014088	397.6467	9.573001	0.014592	0.000485	292.7613	9.662525	0.056111	0.001368	454.8919	52.50179	16.16087	0.425876	1.357543	1181.055	964.4613	122.5638	0.839724	0.075728
HD01_UPb_62.2	0.061692	0.001702	385.7961	10.33027	0.496635	0.014136	408.9141	9.551823	0.016166	0.000353	324.1153	7.019239	0.058689	0.00159	545.2618	58.25274	16.37687	0.455756	1.803668	1343.753	787.5017	117.5947	0.712472	0.503397
HD01_UPb_64.1	0.257529	0.009831	1473.48	51.34411	3.808613	0.146281	1585.53	34.07389	0.087284	0.001692	1690.94	31.28177	0.107345	0.002513	1751.839	42.53193	4.016529	0.19335	3.039493	373.5045	123.0586	102.0558	0.960316	0.12484
HD01_UPb_65.1	0.065008	0.001544	406.8769	8.925837	0.519428	0.014692	424.2515	9.757278	0.022165	0.000429	443.0731	8.463432	0.058019	0.001447	524.0254	54.08539	15.42111	0.340413	3.08694	1239.571	405.3035	82.892	0.763725	0.089113
HD01_UPb_67.11	0.068242	0.001636	425.4782	9.869403	0.52656	0.015123	428.941	10.03244	0.018257	0.000789	365.5405	15.65256	0.056019	0.001406	445.965	55.8569	14.70742	0.36563	1.48562	707.946	536.3592	86.44364	0.779484	-0.05974
HD01_UPb_67.2	0.059794	0.001328	374.3322	8.075546	0.46708	0.013141	388.7183	9.091895	0.017701	0.00031	354.6282	6.161675	0.056766	0.001447	474.7915	56.03819	16.78885	0.370932	2.781321	1576.011	575.1116	94.30197	0.782383	0.067899
HD01_UPb_68.1	0.250473	0.006568	1439.835	33.83018	3.512472	0.103331	1526.849	23.22857	0.080219	0.000798	1559.61	14.93266	0.101601	0.002272	1651.796	41.2591	4.026089	0.105903	1.028347	795.145	764.5819	574.7809	0.950727	-0.12796
HD01_UPb_69.1	0.047627	0.001167	299.8922	7.178921	0.453132	0.013773	378.8866	9.609575	0.011586	0.000333	232.8028	6.642156	0.069025	0.001797	891.5758	54.28103	21.13312	0.526846	1.848409	1703.136	955.9743	99.80453	0.75257	0.02674
HD01_UPb_70.1	0.076377	0.001723	474.3875	10.32482	0.598634	0.017248	475.6657	10.89346	0.023709	0.000313	473.6127	6.171238	0.056861	0.001494	476.8672	57.66633	13.15163	0.305118	1.200663	690.0249	564.2512	122.7379	0.65479	0.049868
HD01_UPb_71.1	0.15009	0.008215	898.0443	46.29774	1.608405	0.118666	949.3291	48.71066	0.035798	0.002201	709.8588	42.89819	0.075782	0.002584	1066.01	71.868	7.167244	0.458629	2.300805	406.3347	220.0335	65.0835	0.982192	-0.84205
HD01_UPb_72.1	0.16237	0.008382	966.7909	47.18265	1.908816	0.108847	1069.295	42.15401	0.005783	0.0005	116.4953	10.03588	0.085089	0.002045	1313.71	47.9549	6.590358	0.468386	0.652644	952.6713	1442.281	77.64733	0.986834	-0.6134
HD01_UPb_74.1	0.053224	0.001637	334.1637	10.01267	0.416438	0.014359	352.7052	10.21503	0.013453	0.000519	270.0406	10.3484	0.056381	0.001391	461.1736	54.69572	19.06311	0.575404	1.781609	1796.685	1196.845	139.417	0.874638	0.012086
HD01_UPb_75.1	0.259737	0.006058	1487.803	30.8612	3.434003	0.113661	1514.494	27.8875	0.082511	0.002872	1600.882	53.27505	0.096434	0.002756	1545.674	53.07246	3.860294	0.091174	2.304149	79.9598	34.74637	25.96315	0.797959	-0.29037
HD01_UPb_77.1	0.269077	0.005249	1535.944	26.69167	3.560187	0.082623	1539.864	18.42318	0.078778	0.001139	1532.48	21.36443	0.095949	0.00233	1542.377	46.19823	3.720869	0.073571	2.769949	179.2183	61.89264	46.08897	0.326281	0.358876
HD01_UPb_78.1	0.285885	0.006328	1620.339	31.53104	3.924366	0.102204	1616.842	20.58173	0.082057	0.002241	1593.08	41.59672	0.099773	0.002426	1615.611	44.85711	3.510451	0.07393	1.604185	228.1124	144.4622	108.1009	0.73229	0.093676
HD01_UPb_79.1	0.06257	0.00175	391.2037	10.61495	0.471918	0.016693	392.2335	11.4884	0.019551	0.000406	391.3457	8.042339	0.054895	0.00146	404.503	59.5324	16.02934	0.452159	3.019613	2422.081	805.7048	136.2257	0.842549	-0.1545
HD01_UPb_80.1	0.124282	0.009545	750.0155	55.58981	1.289775	0.112183	809.7845	56.61101	0.035426	0.002271	702.5409	44.62827	0.072845	0.002215	993.2791	66.61896	10.01706	1.255232	1.621033	1260.664	714.674	229.2129	0.993012	-0.88781
HD01_UPb_81.1	0.059186	0.001905	370.5048	11.60442	0.456594	0.014705	381.1531	10.25986	0.015164	0.000912	304.0147	18.14905	0.056076	0.001398	448.5775	56.04565	17.20708	0.601888	1.565623	1304.663	1055.667	122.2009	0.881348	0.421584
HD01_UPb_81.2	0.058354	0.001583	365.5122	9.643447	0.471078	0.014089	391.3518	9.662749	0.015577	0.000537	312.3517	10.69087	0.058548	0.001469	543.4404	55.05847	17.30977	0.487115	1.589273	1391.408	938.6655	127.9824	0.811745	0.259971
HD01_UPb_82.1	0.06529	0.00617	405.2224	36.71053	0.607995	0.066491	464.4048	37.89995	0.01871	0.002688	372.9815	52.8355	0.066095	0.002051	791.6586	64.45024	17.8788	1.209833	2.222944	508.9207	229.168	29.65122	0.978031	-0.39524
HD01_UPb_83.1	0.156463	0.003808	936.7176	21.30094	1.66524	0.055009	992.1854	21.07111	0.053364	0.000889	1050.671	17.07208	0.07696	0.002135	1109.797	55.62344	6.434052	0.166863	1.826373	124.8729	76.78301	39.46015	0.736171	-0.13165
HD01_UPb_83.2	0.069855	0.001524	435.2352	9.177585	0.532382	0.013721	433.0362	9.05959	0.023186	0.000391	463.2539	7.728279	0.055208	0.001326	415.4836	53.56384	14.36477	0.30817	5.772859	1239.953	217.6448	47.58562	0.734393	0.074977
HD01_UPb_84.1	0.241559	0.007429	1393.504	38.95466	3.297601	0.111001	1476.699	27.27601	0.053279	0.001837	1048.686	35.37927	0.098902	0.002353	1600.696	44.48082	4.188831	0.145198	1.252513	322.9934	257.141	126.705	0.904127	0.03469
HD01_UPb_85.1	0.254069	0.004873	1459.345	25.03403	3.212581	0.075088	1459.582	18.09951	0.074873	0.001095	1459.25	20.60102	0.091589	0.002172	1455.992	45.57993	3.938406	0.075315	3.629869	348.9498	97.21418	67.13286	0.45729	0.106238
HD01_UPb_85.2	0.259607	0.004917	1487.743	25.16666	3.340546	0.076574	1489.874	17.98763	0.075572	0.00102	1472.383	19.15767	0.093145	0.002198	1487.414	45.04394	3.854474	0.073138	3.521067	309.3876	87.19507	61.12432	0.330693	0.203744
HD01_UPb_85.3	0.230356	0.005282	1335.868	27.70439	2.891725	0.078408	1377.819	20.36057	0.075524	0.001413	1471.288	26.53659	0.090492	0.002055	1433.771	43.05921	4.360524	0.102075	6.794478	724.1689	122.6277	87.54479	0.909042	-0.08573
HD01_UPb_87.1	0.293786	0.00582	1660.311	28.99566	4.209819	0.101884	1675.354	19.82866	0.080655	0.001715	1567.561	32.05739	0.104088	0.002572	1695.604	45.91796	3.406127	0.06752	3.243691	260.2827	80.3039	57.29131	0.377083	0.293034
HD01_UPb_88.1	0.075932	0.001513	471.7725	9.068626	0.585509	0.016441	467.4054	10.52968	0.023725	0.000326	473.9265	6.428144	0.055665	0.001574	439.0015	63.22214	13.19031	0.267133	0.754565	353.4045	471.6104	104.5565	0.198073	0.236902
HD01_UPb_89.1	0.058297	0.001922	365.1522	11.7041	0.466275	0.016444	387.9953	11.36384	0.016298	0.000758	326.6777	15.07426	0.058049	0.00155	525.0915	58.99818	17.3492	0.583503	1.651752	1397.867	955.6498	127.7275	0.833861	0.251823
HD01_UPb_89.2	0.046417	0.001478	292.3888	9.100314	0.410833	0.012247	349.0127	8.797671	0.012607	0.0005	253.1659	9.969006	0.064388	0.001714	745.6824	55.24356	21.89404	0.711155	1.3743	1461.443	1057.196	128.1902	0.813186	0.585411
HD01_UPb_90.1	0.047708	0.001207	300.3866	7.422878	0.388605	0.010971	333.0045	7.997013	0.012398	0.000301	249.0366	6.01062	0.058993	0.001437	561.3589	53.19369	21.04323	0.504293	1.509108	1658.518	1212.02	136.8575	0.810771	0.207489
HD01_UPb_90.2	0.049674	0.001245	312.4657	7.647508	0.410682	0.012078	348.9174	8.626147	0.011626	0.00026	233.627	5.200837	0.059814	0.001465	591.1572	52.93531	20.22109	0.499466	1.514264	1653.191	1120.746	120.3634	0.812642	0.059373
LS01																								
LS01_UPb001.1	0.055052	0.001697	345.3407	10.33701	0.564918	0.031794	450.8056	20.17345	0.020713	0.000444	414.3492	8.795665	0.073808	0.00335	991.6104	87.09069	18.39515	0.521606	1.074767	2354.983	2312.022	447.8971	0.708351	-0.18201
LS01_UPb004.1	0.068884	0.0015	429.3839	9.045311	0.753698	0.033165	567.1869	18.29108	0.020747	0.000361	415.0331	7.161239	0.077432	0.002736	1129.917	75.42348	14.54258	0.331337	1.015721	868.3262	850.0294	163.9749	0.453902	-0.17863
LS01_UPb004.2	0.068575	0.001626	427.492	9.806371	0.60541	0.017293	480.0094	10.8155	0.022871	0.000295	457.0598	5.820704	0.063958	0.00169	731.6601	55.3225	14.66164	0.346352	1.932078	1546.911	817.7599	172.2742	0.619595	0.201695
LS01_UPb005.1	0.067302	0.00133	419.8617	8.036302	0.686806	0.024663	531.2547	15.30813	0.019176	0.000379	383.8903	7.512145	0.073918	0.002565	1032.844	72.90333	14.86102	0.311969	1.137334	412.1523	357.3009	64.8819	0.376611	-0.12301
LS01_UPb006.1	0.067084	0.001583	418.4967	9.566006	0.714592	0.049424	538.8774	27.75727	0.02366	0.000959	472.4448	18.90181	0.076277	0.004536	1017.412	107.8154	14.98896	0.360079	1.162163	522.7072	445.9885	95.43593	0.643135	-0.49707
LS01_UPb006.2	0.067244	0.001579	419.4653	9.535474	0.517417	0.014796	422.8678	9.912815	0.021252	0.000253	425.0365	5.005063	0.055716	0.001466	437.3624	56.3367	14.95055	0.355315	1.633609	597.3871	364.9396	72.4963	0.661598	0.112374
LS01_UPb006.3	0.069078	0.001648	430.5776	9.942652	0.552016	0.017991	446.0617	11.74248	0.021763	0.00037	435.1474	7.316378	0.058147	0.001661	531.0254	62.8002	14.49829	0.350878	1.627584	1640.748	1008.127	186.9342	0.659226	-0.04693
LS01_UPb007.1	0.067863	0.001543	423.2259	9.324324	0.517884	0.016856	423.1062	11.32874	0.020988	0.000363	419.8029	7.182252	0.055502	0.001717	428.4696	65.69839	14.78306	0.347473	1.206513	464.2118	394.2375	74.34508	0.470008	0.138147
LS01_UPb007.2	0.067944	0.001562	423.6965	9.425084	0.525403	0.015792	428.0705	10.43673	0.021036	0.000269	420.7639	5.332436	0.055789	0.001449	435.2146	57.99784	14.72568	0.33506	1.527689	794.5583	514.9874	100.3971	0.749521	-0.1005
LS01_UPb008.1	0.065787	0.002143	410.6418	12.96755	0.511888	0.021325	419.0162	14.56866	0.02028	0.000308	405.8065	6.109212	0.056541	0.00195	462.4421	78.14033	15.30353	0.514217	1.451227	639.6606	441.859	79.09206	0.697238	0.025248
LS01_UPb008.2	0.068555	0.001445	428.5851	9.779673	0.639285	0.022983	500.872	14.28645	0.0234	0.000361	467.5024	7.127311	0.067264	0.002476	826.9391	76.61388	14.57616	0.345845	1.442348	512.3588	357.5501	75.69378	0.191531	0.220297
LS01_UPb008.3	0.061068	0.001854	381.9648	11.26816	0.565833	0.02151	453.6851	14.0079	0.020966	0.000589	419.3152	11.66897	0.066965	0.001884	830.7495	56.70286	16.62137	0.534483	1.769857	993.0113	548.1049	104.3402	0.80166	-0.15321
LS01_UPb009.1	0.067146	0.001607	418.862	9.701647	0.616378	0.02899	487.0466	18.21171	0.022133	0.000434	442.4379	8.581422	0.06642	0.003154	779.3935	91.94258	14.91089	0.350337	1.766821	1148.046	650.1293	134.5057	0.171043	0.193928
LS01_UPb010.1	0.066934	0.00233	417.5498	14.07762	0.544911	0.018663	441.207	12.30808	0.019715	0.000348	394.6012	6.897329	0.059322	0.001799	571.6753	64.96373	15.06829	0.538333	1.185099	651.1253	559.524	95.15864	0.732194	0.452052
LS01_UPb010.2	0.066608	0.001271	415.675	7.678886	0.664221	0.022105	515.8783	13.5241	0.017663	0.000235	353.8802	4.66302	0.071834	0.002377	966.7077	72.87099	15.02502	0.285604	1.292852	284.8517	216.2187	35.24934	0.023016	0.216969
LS01_UPb010.3	0.068514	0.001562	427.1628	9.421008	0.530341	0.015353	431.7109	10.14271	0.021372	0.000241	427.4154	4.774913	0.056158	0.001408	454.3776	55.75875	14.6314	0.334	1.923871	1582.44	822.019	156.2499	0.7771	-0.1107

LS01_UPb011.1	0.072521	0.001693	451.2501	10.17999	0.570903	0.016266	457.9852	10.57626	0.023838	0.000355	476.142	7.015332	0.057079	0.00144	491.8767	59.12026	13.8597	0.329071	1.499875	761.1554	520.0099	112.0117	0.768102	-0.11615
LS01_UPb012.1	0.068235	0.001408	425.4823	8.49576	0.667243	0.021048	517.9536	12.76109	0.023111	0.000276	461.8002	5.448645	0.070524	0.002124	928.7568	61.68621	14.6187	0.313281	1.637137	1328.54	831.3351	176.9201	0.435731	0.028485
LS01_UPb012.2	0.066172	0.001417	413.0216	8.569303	0.587934	0.014879	469.2399	9.530606	0.022147	0.000277	442.7549	5.47457	0.064358	0.001551	749.1317	50.6785	15.15191	0.327597	1.916136	1498.295	794.8296	158.5049	0.677452	0.127482
LS01_UPb013.1	0.069269	0.001568	431.6934	9.460695	0.533012	0.015441	433.1857	10.29236	0.021434	0.000263	428.6473	5.210624	0.055796	0.001528	432.5021	61.6145	14.43668	0.328467	1.371426	601.5797	507.0431	97.88849	0.623699	0.049846
LS01_UPb014.1	0.064006	0.001414	399.8986	8.563871	0.698101	0.022706	536.3707	13.45122	0.025128	0.000675	501.5123	13.28829	0.079037	0.002523	1155.063	63.83755	15.68249	0.347454	1.62823	1469.875	1051.51	226.97	0.313156	0.183569
LS01_UPb016.1	0.07074	0.00164	440.5433	9.865074	0.631462	0.020029	495.9675	12.28085	0.023033	0.000315	460.2622	6.216406	0.064649	0.001749	753.0273	56.79933	14.17678	0.333189	1.170176	1306.49	1142.087	241.3162	0.780203	-0.25715
LS01_UPb017.1	0.071406	0.00161	444.5619	9.675413	0.692368	0.025931	532.2665	15.34228	0.025003	0.000623	499.0666	12.26353	0.070085	0.002363	908.9414	67.39483	14.06255	0.310052	0.921355	1532.298	1817.671	420.4487	0.56021	-0.17064
LS01_UPb017.2	0.055719	0.001443	349.4894	8.802531	0.608282	0.021589	481.4897	13.65445	0.02115	0.000346	423.0091	6.83889	0.079183	0.002759	1161.057	66.53478	18.04432	0.457675	1.432249	1300.077	1014.885	189.0391	0.425662	0.010761
LS01_UPb018.1	0.05337	0.001637	335.1072	10.02035	0.4845	0.015879	400.643	10.928	0.018829	0.000547	376.991	10.85904	0.065688	0.001666	797.4809	56.47011	18.90699	0.594195	1.682698	1433.03	857.9583	146.2211	0.837331	0.153755
LS01_UPb019.1	0.064534	0.001281	403.1208	7.753534	0.584874	0.013467	467.4219	8.587477	0.027023	0.000314	538.9381	6.184654	0.065837	0.001534	801.0333	50.22973	15.49732	0.323532	0.575905	3287.796	5739.797	1408.589	0.586623	0.236707
LS01_UPb020.1	0.063306	0.00157	395.6216	9.531936	0.69268	0.023009	534.755	14.11529	0.024979	0.000391	498.649	7.701568	0.07984	0.002694	1171.652	67.27457	15.81302	0.373256	1.596175	1782.407	1132.917	258.4406	0.338593	0.303515
LS01_UPb024.1	0.07033	0.001492	438.8596	8.534392	0.53611	0.017431	434.9527	11.38997	0.026337	0.002203	524.378	42.89006	0.055101	0.001709	397.0718	69.93385	14.205	0.292835	18.27723	346.0737	120.9965	22.7496	0.423378	0.039299
LS01_UPb024.2	0.069524	0.001433	433.2588	8.637681	0.59132	0.022161	470.1211	13.77535	0.023573	0.000587	470.8663	11.5871	0.061528	0.00225	639.8744	75.70471	14.37217	0.295314	1.614159	507.5901	309.1936	66.90956	0.357195	-0.11118
LS01_UPb024.3	0.070282	0.001621	437.7887	9.761075	0.54419	0.015382	440.6147	10.08319	0.02267	0.000265	453.0835	5.244084	0.056112	0.001432	448.801	57.18829	14.29782	0.33059	1.377642	784.7192	571.4627	118.0394	0.708606	0.062186
LS01_UPb025.1	0.068406	0.001467	426.5063	8.853749	0.646069	0.023645	504.3319	14.53514	0.022229	0.000302	444.3725	5.960806	0.068127	0.002369	846.1675	73.52207	14.61324	0.342354	1.284188	592.7527	503.5989	100.7801	0.433669	-0.00323
LS01_UPb025.2	0.06785	0.001494	423.1496	9.013864	0.556064	0.015023	448.5878	9.778149	0.02082	0.000222	416.4902	4.402179	0.059141	0.001473	571.9799	56.98842	14.74455	0.300746	1.511863	1955.995	1318.665	249.3195	0.640067	0.151019
LS01_UPb027.1	0.081428	0.002518	504.3759	14.99909	2.078571	0.186882	1098.672	64.31713	0.058962	0.005127	1152.53	97.87846	0.178924	0.012908	2520.95	134.3374	12.45864	0.385797	1.036675	749.9504	948.9764	350.5737	0.901502	-0.82889
LS01_UPb028.1	0.067348	0.001709	420.1358	10.32209	0.528118	0.015549	430.3928	10.3163	0.022007	0.000297	439.9741	5.880627	0.057189	0.001724	493.7721	64.65177	14.87744	0.380828	1.774616	2446.217	1390.462	257.91	0.433137	0.412406
LS01_UPb029.1	0.067672	0.00147	422.0731	8.880012	0.527718	0.015751	429.6182	10.46054	0.021441	0.000291	428.7775	5.764459	0.056461	0.001482	461.3797	58.11367	14.82806	0.328751	1.212429	493.5456	412.916	81.79732	0.664539	-0.07194
LS01_UPb030.1	0.066741	0.001526	416.4332	9.227563	0.768797	0.047956	571.7901	25.94306	0.030581	0.001595	608.2799	31.17316	0.083172	0.004533	1204.793	99.5948	15.05316	0.351721	1.587064	1572.55	1111.403	309.4196	0.556638	-0.30498
LS01_UPb031.1	0.076135	0.001733	472.9389	10.38968	0.954641	0.087246	659.7077	42.65824	0.033229	0.002255	659.6154	43.88472	0.089808	0.007639	1245.488	151.6961	13.13589	0.302121	1.388962	697.4393	509.2123	162.2003	0.540217	-0.38383
LS01_UPb031.2	0.07242	0.001664	450.6539	10.00004	0.622947	0.016987	491.1428	10.57739	0.028072	0.000521	559.534	10.25298	0.06253	0.001519	687.157	51.71693	13.8714	0.318061	1.40812	1845.13	1556.103	391.226	0.78398	0.003816
LS01_UPb034.1	0.066998	0.001696	417.9519	10.23098	0.87999	0.047255	635.0145	24.33461	0.029312	0.000761	583.8365	14.9394	0.094645	0.004254	1482.568	76.99983	15.02972	0.366465	1.358141	1711.435	1390.35	360.7281	0.621353	-0.3619
LS01_UPb034.2	0.062581	0.001385	391.275	8.407575	0.571421	0.01918	458.2148	12.24586	0.02324	0.000757	464.2691	14.9181	0.066389	0.002293	802.5866	70.14935	15.97623	0.337255	1.572029	2031.356	1310.342	279.2474	0.144268	0.322098
LS01_UPb035.1	0.070128	0.001693	436.8453	10.19064	0.536552	0.014819	435.653	9.787688	0.022037	0.000262	440.5734	5.183489	0.055724	0.00139	434.6074	56.0681	14.34473	0.346056	1.405567	797.7874	565.9111	116.1394	0.744929	0.038477
LS01_UPb035.2	0.067963	0.001507	423.832	9.090624	0.546971	0.014111	442.7108	9.22493	0.022008	0.00027	440.0011	5.336286	0.058356	0.001407	538.7884	52.41393	14.75966	0.320954	1.95557	1675.296	864.5012	174.848	0.731981	0.137049
LS01_UPb036.1	0.067592	0.001496	421.6131	9.029955	0.525915	0.019041	428.5624	12.64712	0.021682	0.000338	433.5577	6.696205	0.056691	0.002195	462.7176	85.94588	14.81806	0.328186	1.532042	406.3764	267.3982	50.55876	0.03282	0.418426
LS01_UPb036.2	0.067432	0.001415	420.6348	8.53322	0.559546	0.019197	451.6376	12.81904	0.0227	0.000601	453.613	11.87075	0.060385	0.001981	596.2743	68.58992	14.80785	0.345112	1.67214	549.2123	318.0063	68.90355	0.527778	0.027781
LS01_UPb036.3	0.067844	0.001484	423.1096	8.961208	0.526195	0.013708	428.9203	9.079282	0.021163	0.000225	423.2764	4.452839	0.056095	0.001346	455.01	51.62177	14.79184	0.326708	1.822588	1254.113	679.5454	134.1384	0.695414	0.107238
LS01_UPb037.1	0.067662	0.002107	421.8619	12.69092	1.075006	0.096258	727.2899	42.64914	0.028969	0.002156	576.1935	41.99093	0.114365	0.007891	1776.675	109.8962	14.99029	0.446984	1.021262	1092.798	1432.561	342.0016	0.744425	-0.48056
LS01_UPb037.2	0.066652	0.001529	415.9058	9.234269	0.735837	0.025837	558.5945	15.09692	0.021579	0.000374	431.51	7.400104	0.080199	0.002816	1183.096	68.3509	15.01635	0.315462	1.391997	1362.423	1056.786	210.6133	0.340895	0.106889
LS01_UPb038.1	0.070634	0.00152	439.9294	9.151419	0.611233	0.015284	483.9941	9.645826	0.029426	0.000855	586.0331	16.82015	0.062571	0.001534	688.1393	52.4049	14.20161	0.3071	1.224321	2350.907	2212.672	628.3185	0.657076	0.093667
LS01_UPb038.2	0.069828	0.001531	435.0724	9.222917	0.71948	0.019159	549.7516	11.36281	0.02524	0.000699	503.7282	13.74245	0.074755	0.001969	1053.692	53.90431	14.3431	0.302043	1.282023	1547.061	1243.408	299.2126	0.577867	0.192387
LS01_UPb039.1	0.052803	0.001736	331.5625	10.60874	0.922404	0.043089	658.7607	22.57314	0.021697	0.000704	433.7428	13.92093	0.128903	0.007392	2017.168	94.81895	19.26512	0.603216	0.854147	1801.335	2313.716	442.6079	0.034796	0.585915
LS01_UPb040.1	0.068497	0.002124	427.0534	12.81864	0.550434	0.024191	444.8198	15.92502	0.022408	0.00029	447.92	5.730478	0.058529	0.001916	544.3793	71.17308	14.64354	0.459654	1.115788	1374.901	1232.314	233.0432	0.79064	-0.24816
LS01_UPb042.1	0.070213	0.001728	437.3472	10.41348	0.663819	0.023891	517.2606	13.82439	0.02223	0.000383	444.3602	7.572972	0.06884	0.002174	875.9143	64.94544	14.33815	0.363398	1.223232	893.7345	741.3611	153.0965	0.610144	0.050766
LS01_UPb043.1	0.067457	0.001429	420.7838	8.627429	0.545913	0.0139	441.9823	9.093518	0.022183	0.00027	443.4651	5.33628	0.058636	0.001431	548.071	52.8983	14.86558	0.31547	1.744319	1313.229	751.2557	156.0366	0.647445	0.110935
LS01_UPb044.1	0.069109	0.002233	430.6753	13.43766	0.543227	0.026055	439.2125	16.96754	0.021517	0.000266	430.2854	5.268697	0.056942	0.001951	475.8831	75.8291	14.58466	0.455892	1.338086	677.0139	504.6641	97.12392	0.803267	-0.29378
LS01_UPb044.2	0.069107	0.001703	431.8085	10.73142	0.536516	0.015776	435.4945	10.31977	0.021434	0.000242	428.6424	4.798256	0.056089	0.001399	449.1979	55.79359	14.53042	0.363408	1.451504	969.8707	656.198	130.589	0.792984	0.086741
LS01_UPb045.1	0.068301	0.001736	425.8667	10.47441	0.538177	0.015825	436.9428	10.42156	0.020989	0.00024	419.8426	4.746391	0.057309	0.001588	497.8017	60.5782	14.68852	0.374042	1.249092	1505.682	1196.952	222.1787	0.633585	0.300214
LS01_UPb046.1	0.067711	0.001588	422.3145	9.583541	0.55998	0.015981	451.1894	10.39157	0.022303	0.00028	445.8309	5.53521	0.060023	0.001499	600.4643	53.86751	14.80983	0.347213	1.932929	1731.507	889.6562	179.1428	0.763237	0.003659
LS01_UPb047.1	0.069029	0.001535	430.2508	9.263348	0.578789	0.016165	463.102	10.40075	0.023477	0.000377	469.0225	7.434614	0.060888	0.001599	626.506	56.36919	14.43634	0.347139	1.493408	653.8732	492.8497	102.3898	0.756475	-0.01822
LS01_UPb047.2	0.056852	0.001206	356.4239	7.355291	0.488895	0.012457	403.8654	8.450762	0.018873	0.000259	377.8937	5.139061	0.062397	0.001592	680.5878	53.08002	17.61013	0.393289	1.637891	1719.656	1040.371	185.82	0.541726	0.20622
LS01_UPb048.1	0.06906	0.001491	430.4448	9.002855	0.61589	0.021711	487.7434	14.02705	0.023866	0.000439	476.6888	8.66317	0.065598	0.002732	763.8879	84.74998	14.5288	0.332286	1.610957	392.1736	247.3422	55.56726	-0.09007	0.533156
LS01_UPb048.2	0.070707	0.001526	440.3676	9.198868	0.556901	0.016398	448.8406	10.69636	0.02311	0.000411	461.7529	8.120492	0.057149	0.001561	486.348	60.46507	14.18921	0.319827	1.736292	536.5967	325.5061	66.94463	0.583458	-0.01538
LS01_UPb048.3	0.069542	0.001647	433.3204	9.911654	0.609568	0.020198	482.1323	12.68062	0.025401	0.00076	506.8717	14.95643	0.063396	0.00185	707.2472	62.90578	14.45603	0.332577	2.536949	823.4595	350.4889	76.72778	0.641514	-0.06945
LS01_UPb049.1	0.069681	0.001548	434.1789	9.321533	0.623493	0.016725	491.4995	10.47251	0.023214	0.000276	463.824	5.454523	0.064787	0.00171	758.7396	54.79914	14.38076	0.32792	1.282449	1207.834	936.917	204.1908	0.51025	0.215895
LS01_UPb050.1	0.067776	0.002081	422.7032	12.55775	0.529645	0.022964	431.1545	15.22146	0.021576	0.000374	431.4502	7.395163	0.056905	0.001829	482.8147	70.2383	14.79725	0.4521	1.738138	1353.789	779.3393	141.8044	0.79085	-0.26031
LS01_UPb051.1	0.067816	0.001501	422.9557	9.066375	0.521439	0.014014	425.8773	9.358069	0.021045	0.00025	420.9422	4.941205	0.05583	0.001388	447.3821	52.00542	14.77749	0.333922	1.941611	1846.807	975.0122	184.1425	0.690231	0.069105
LS01_UPb053.1	0.069808	0.001586	434.9346	9.554575	0.620677	0.017373	489.6223	10.83449	0.022592	0.000327	451.5412	6.453643	0.064498	0.001752	752.9323	55.7331	14.38994	0.326741	1.712766	985.3483	626.3544	128.189	0.510118	0.238658
LS01_UPb055.1	0.070022	0.001603	436.2249	9.654807	0.57589	0.015465	461.3519	9.949813	0.022375	0.000257	447.264	5.077657	0.059715	0.001499	586.7327	53.60813	14.34589	0.331308	1.562193	1347.008	883.935	182.6115	0.673779	0.129326
LS01_UPb056.1	0.066538	0.001542	415.2322	9.318247	0.536443	0.018632	435.4796	12.20532	0.020639	0.000243	412.9153	4.810393	0.058511	0.001764	540.0815	63.44271	15.06769	0.349703	1.719715	2198.028	1314.406	249.6426	0.636257	-0.1746
LS01_UPb057.1	0.068731	0.001454	428.469	8.763902	0.534156	0.014475	434.1089	9.568027	0.021308	0.000259	426.1481	5.120162	0.056524	0.001553	461.2639	61.48473	14.58952	0.30461	1.130627	604.0642	553.9218	109.8416	0.362701	0.300388
LS01_UPb057.2	0.06848	0.001604	426.943	9.672118	0.520428	0.015422	424.9885	10.26196	0.020646	0.000255	413.0554	5.058319	0.055166	0.001432	412.5941	57.5912	14.65527	0.33791	1.353209	878.8337	652.3681	122.0285	0.735681	-0.06543
LS01_UPb058.1	0.067856	0.001456	423.1979	8.782289	0.520593	0.016595	424.935	11.05065	0.020245	0.000296	405.0979	5.856884	0.055801	0.001744	429.1839	71.54699	14.73167	0.282846	1.397911	398.3319	296.8222	55.94785	0.409399	0.074205
LS01_UPb058.2	0.06337	0.00164	395.9941	9.922417	0.639703	0.047267	495.1708	23.92101	0.021213	0.000884	424.1095	17.39069	0.073187	0.004713	930.9577	75.68723	15.90133	0.396652	1.236592	882.8361	704.1746	141.864	0.620944	-0.47699
LS01_UPb059.1	0.068769	0.002069	428.6971	12.47648	0.543535	0.017389	440.5635	11.47009	0.022384	0.000358	447.4299	7.079932	0.057699	0.001519	515.6794	56.79683	14.58324	0.439812	1.60695	1838.926	1143.399	216.2752	0.814895	0.276649
LS01_UPb060.1	0.064887	0.001849	405.137	11.16486	0.606499	0.022595	479.6929	13.97159	0.025975	0.00087	518.1521	17.1211	0.067523	0.001895	843.0769	54.39933	15.58223	0.416673	1.027783	1719.525	1715.296	399.1539	0.757231	-0.13789
LS01_UPb061.1	0.070009	0.001541	436.1577	9.281954	0.535177	0.013991	434.8577	9.259072	0.021457	0.000242	429.1042	4.796319	0.055441	0.001308	429.0778	50.52866	14.33628	0.314642	1.599785	1533.93	956.9594	189.872	0.791927	-0.06059
LS01_UPb062.1	0.067697	0.001299	422.2536	7.841017	0.519984	0.014301	424.6818	9.582451	0.020765	0.000249	415.3915	4.922709	0.055774	0.001606	429.2144	64.72884	14.78426	0.282909	1.46957	449.4814	308.0424	59.82746	0.026453	0.296904
LS01_UPb063.1	0.067159	0.001492	418.9654	9.018715	0.575256	0.019242	460.3112	12.35619	0.021789	0.000307	435.667	6.06722	0.062401	0.002083	663.9704	74.03619	14.94904	0.344979	1.192663	523.9253	457.5504	92.72764	0.318801	0.194391
LS01_UPb063.2	0.069526	0.001771	433.2446	10.69752	0.54512	0.020698	441.0225	13.62269	0.021654	0.000346	433.0023	6.836278	0.057056	0.001907	480.7732	74.1829	14.37857	0.355151	1.444768	563.1127	391.8903	75.42759	0.61347	-0.0258
LS01_UPb064.1	0.067607	0.002399	421.6282	14.49825	0.548148	0.026526	442.8197	17.23236	0.02092	0.00031	418.4708	6.138264	0.058535	0.001704	544.2568	64.05853	14.90615	0.551992	1.496755	636.685	423.082	77.203	0.796221	-0.1634
LS01_UPb064.2	0.070781	0.001587	440.8009	9.554227	0.546248	0.01408	442.1804	9.24321	0.0217	0.000261	433.9022	5.153257	0.056058	0.001342	449.7775	53.30928	14.18512	0.317736	1.486178	1215.254	807.4093	161.2769	0.747525	0.163988
LS01_UPb065.1	0.06829	0.001359	425.8242	8.20088	0.518557	0.014333	423.6998	9.603387	0.021176	0.000282	423.5286	5.579949	0.055292	0.001519	412.1718	61.40738	14.64113	0.318113	1.495842	446.6096	297.1298	59.48554	0.638466	-0.08732
LS01_UPb066.1	0.070339	0.00183	438.1408	11.01271	0.615283	0.023572	485.9675	14.56481	0.023605	0.000598	471.532	11.79914	0.06363	0.00196	720.2607	63.46478	14.27609	0.365781	1.234833	1234.558	996.7301	208.4225	0.715139	-0.17004
LS01_UPb067.1	0.071164	0.001635	443.0949	9.828331	0.536442	0.014367	435.6441	9.473965	0.022412	0.000421	447.9702	8.313365	0.054769	0.001341	396.7761	55.17287	14.117	0.316963	2.068342	1227.112	603.6595	123.1906	0.736904	0.123532
LS01_UPb068.1	0.069722	0.001742	434.4115	10.47758	0.55646	0.016828	448.6602	10.9231	0.021596	0.000284	431.8528	5.610692	0.058058	0.001575	523.7078	59.84294	14.41444	0.347163	1.285583	995.6314	773.4197	153.1973	0.668674	0.150331

LS01_UPb068.2	0.06683	0.001515	416.975	9.150519	1.05532	0.054762	724.4144	26.96776	0.029758	0.000752	592.5788	14.73585	0.114744	0.0058	1820.551	92.16903	15.02705	0.337238	1.486244	1642.429	1224.773	335.7267	0.33394	-0.06471
LS01_UPb069.1	0.069863	0.00183	435.2325	11.02172	0.743757	0.041828	559.727	23.69257	0.026721	0.000854	532.8616	16.80904	0.077101	0.003793	1075.025	94.7483	14.41517	0.376197	1.416546	1398.231	1090.88	267.9295	0.580377	-0.27996
LS01_UPb070.1	0.071621	0.001709	445.8591	10.28122	0.570542	0.017129	457.8497	11.03557	0.022554	0.000339	450.7921	6.691263	0.057946	0.001454	522.7484	54.87995	14.01687	0.336824	1.009911	1588.505	1579.388	319.2688	0.800838	-0.12807
LS01_UPb071.1	0.070377	0.001617	438.3614	9.730602	0.597789	0.018342	474.9654	11.58994	0.022768	0.000279	455.0166	5.513012	0.061523	0.001626	648.7886	55.62249	14.24369	0.337734	1.380587	1116.052	795.3632	168.4839	0.739866	-0.09533
LS01_UPb072.1	0.070717	0.00162	440.4109	9.748658	0.54198	0.014652	440.3381	10.15466	0.022574	0.000295	451.1812	5.821911	0.055852	0.001386	439.8389	55.45476	14.20695	0.32448	1.018469	1068.291	1161.582	250.4805	0.793189	0.003525
LS01_UPb073.1	0.066135	0.001468	412.7827	8.876106	0.596909	0.02046	474.006	12.92199	0.017302	0.000466	346.6843	9.249607	0.065742	0.002314	771.7448	72.7976	15.14889	0.328192	1.245727	593.9328	499.3375	78.09995	0.269579	0.236894
LS01_UPb073.2	0.059678	0.001318	373.6541	8.014415	0.557175	0.015294	449.5108	9.951512	0.01484	0.000681	297.7108	13.54238	0.068278	0.001766	873.7698	53.50352	16.77816	0.370281	1.425067	2397.112	1689.608	215.8248	0.605706	-0.06312
LS01_UPb074.1	0.066716	0.002499	416.2703	15.1171	0.525137	0.02893	427.7615	19.11113	0.021482	0.000487	429.5843	9.624561	0.057509	0.00235	500.7514	88.32942	15.07784	0.595843	1.520928	614.8207	404.595	73.60971	0.721042	-0.09401
LS01_UPb075.1	0.068661	0.001411	428.0537	8.511971	0.518801	0.013519	423.998	9.029554	0.021574	0.000302	431.4062	5.971147	0.054898	0.001465	398.0521	59.72737	14.57549	0.311811	1.547844	569.6145	364.3974	73.30918	0.333007	0.293356
LS01_UPb075.2	0.071634	0.001666	445.9228	10.0319	0.667934	0.025725	517.453	15.41838	0.027119	0.000619	540.7579	12.17238	0.067712	0.002337	834.9203	72.23357	14.03269	0.341626	2.326118	804.9398	341.164	82.72232	0.534681	-0.07506
LS01_UPb076.1	0.069836	0.00155	435.1154	9.330307	0.542959	0.014828	439.8909	9.751871	0.022359	0.000276	446.9355	5.459631	0.056386	0.001383	461.5687	54.50749	14.34861	0.326002	1.624919	1494.497	907.0117	189.9239	0.749456	-0.02347
LS01_UPb077.1	0.062033	0.001692	387.8685	10.25053	0.798346	0.044901	589.4848	25.07811	0.02786	0.001264	555.0643	24.82802	0.094448	0.005604	1428.525	114.3101	16.22145	0.449854	1.447857	1263.319	848.8627	227.1408	0.068527	0.286222
LS01_UPb078.1	0.068703	0.001605	428.2691	9.677273	0.544866	0.016008	440.9663	10.50317	0.021581	0.000268	431.5481	5.307652	0.057617	0.001504	506.3877	57.50281	14.63096	0.345016	1.176382	1087.25	912.3643	185.5551	0.719682	-0.04606
LS01_UPb078.2	0.068619	0.001455	427.7915	8.777947	0.531046	0.013434	432.1959	8.911313	0.021569	0.000233	431.3093	4.614901	0.056262	0.001371	457.1038	54.07696	14.61415	0.311686	1.940082	1710.586	890.0206	178.8448	0.654348	0.130125
LS01_UPb079.1	0.070613	0.001363	439.8354	8.203504	0.547323	0.016704	442.4859	10.87825	0.022564	0.000341	450.9763	6.727465	0.056578	0.001757	464.6933	64.65528	14.17547	0.271835	1.437484	400.1255	277.4273	58.71727	0.337509	-0.06647
LS01_UPb079.2	0.063797	0.001495	398.6152	9.059692	0.524048	0.014806	427.3398	9.833117	0.018442	0.000331	369.3433	6.577652	0.059776	0.001584	586.4066	57.87859	15.7545	0.37371	1.335951	889.6234	672.28	114.0706	0.634246	0.192461
LS01_UPb081.1	0.066768	0.001794	416.6	10.83095	0.591247	0.018057	471.2797	11.56557	0.023079	0.000372	461.1628	7.357636	0.064609	0.001727	756.928	56.18518	15.03915	0.397441	2.151911	1323.217	617.0176	125.9008	0.738534	0.199406
LS01_UPb082.1	0.067884	0.001431	423.3772	8.635533	0.517417	0.01809	422.8636	12.0527	0.021237	0.000416	424.7381	8.229327	0.055592	0.001951	420.9895	77.99038	14.75105	0.311786	1.738795	359.6822	210.9746	39.68487	0.23739	0.176538
LS01_UPb082.2	0.07057	0.001531	439.5549	9.215001	0.552785	0.017983	446.1313	11.70836	0.021446	0.000295	428.8717	5.827942	0.057128	0.001692	493.5785	61.23985	14.20365	0.305709	1.604764	635.046	392.8792	76.81628	0.609673	-0.10813
LS01_UPb084.1	0.067471	0.001448	420.8597	8.736404	0.617621	0.016241	487.8854	10.15481	0.02269	0.000281	453.4831	5.559352	0.066536	0.001646	817.5224	51.26669	14.84021	0.299781	1.414463	1947.184	1420.361	302.0933	0.641425	0.072258
LS01_UPb085.1	0.067186	0.001527	419.1239	9.217936	0.576056	0.016116	461.364	10.25656	0.021565	0.000296	431.2279	5.860272	0.062402	0.001602	685.2238	56.72007	14.94878	0.339515	1.324014	972.0365	742.3455	146.9469	0.650894	0.079185
LS01_UPb086.1	0.068749	0.002508	428.5486	15.11701	0.560542	0.022069	451.5273	14.41272	0.022442	0.000311	448.5906	6.13911	0.059716	0.001998	587.7728	72.03969	14.61402	0.526411	0.766601	1240.103	1603.375	304.6031	0.70592	0.32119
LS01_UPb088.1	0.069479	0.001382	432.9944	8.331538	0.536904	0.017531	435.4732	11.53902	0.021362	0.000333	427.2063	6.590153	0.056252	0.001893	437.6756	75.36848	14.39569	0.273864	1.819074	306.8179	165.4324	32.6868	0.078685	0.229821
LS01_UPb088.2	0.067119	0.001607	418.7016	9.698712	0.623407	0.01612	491.5482	10.08872	0.022421	0.000416	448.1319	8.219883	0.067849	0.001793	855.4317	54.74909	14.98262	0.349773	1.212767	1229.703	1019.12	210.5779	0.586043	0.440376
LS01_UPb089.1	0.068843	0.001747	429.1096	10.53197	0.552292	0.017644	445.8401	11.50962	0.02211	0.000304	442.0192	6.010296	0.058425	0.001616	544.6392	57.29049	14.60464	0.372809	1.195106	793.2204	678.815	134.0879	0.686248	0.067139
LS01_UPb090.1	0.067742	0.001361	422.5173	8.211614	0.522601	0.014852	426.3541	9.932531	0.021423	0.000249	428.4335	4.932999	0.055826	0.001561	438.2982	66.43868	14.76461	0.276908	1.437476	426.0681	295.155	60.29834	0.346418	0.125839
LS01_UPb090.2	0.061995	0.001427	387.6948	8.65461	0.519337	0.015013	424.1311	10.02561	0.020439	0.000284	408.9486	5.628281	0.060937	0.001653	626.8552	57.53717	16.20581	0.370255	1.874009	1634.123	881.0743	169.9371	0.644107	0.080099
LS01_UPb091.1	0.069298	0.001635	431.852	9.865734	0.543708	0.016342	440.1691	10.64036	0.022355	0.000363	446.8518	7.165608	0.057152	0.001589	498.8408	62.76412	14.47091	0.339324	1.92938	536.6588	286.6417	58.09418	0.56787	0.137353
LS01_UPb091.2	0.070375	0.001765	438.317	10.62273	0.70621	0.037279	537.974	21.12867	0.02744	0.0009	546.9741	17.67103	0.072597	0.003181	960.518	82.77098	14.30826	0.355411	1.800441	1007.298	554.9522	135.321	0.63566	-0.272
LS01_UPb092.1	0.066483	0.00163	414.8486	9.848817	0.658278	0.035336	509.1251	20.67905	0.028434	0.002216	565.5871	43.18689	0.073123	0.004551	939.923	117.7549	15.13862	0.369238	2.646268	1117.015	430.8502	114.0487	-0.23615	0.562389
LS01_UPb092.2	0.060448	0.001598	378.2704	9.70818	1.103692	0.06965	745.2314	33.23658	0.042107	0.002816	832.1742	54.46192	0.131597	0.007129	2066.374	95.04944	16.60993	0.413605	2.219875	902.5596	430.2709	160.3508	0.658409	-0.4344
LS01_UPb093.1	0.067871	0.001638	423.2406	9.884028	0.548266	0.017274	442.9954	11.31174	0.021421	0.000255	428.3791	5.049076	0.058727	0.001616	545.4391	60.62466	14.78188	0.340217	1.338613	598.7484	447.0005	89.85091	0.714821	-0.05114
LS01_UPb093.2	0.064885	0.001483	405.2133	8.972718	0.513869	0.01361	420.6618	9.100294	0.020392	0.000358	407.995	7.089217	0.057616	0.001388	510.0704	52.82004	15.48149	0.348309	1.903409	1414.654	758.939	142.6023	0.767026	0.097726
LS01_UPb094.1	0.067591	0.001479	421.5812	8.932828	0.762492	0.038289	573.9788	22.13124	0.022432	0.000535	448.3388	10.59833	0.082728	0.0042	1204.974	93.32708	14.84686	0.328769	0.876943	1452.565	1784.061	384.9931	0.193885	0.085389
LS01_UPb094.2	0.067202	0.001485	419.2282	8.965563	0.580587	0.017034	464.122	10.87861	0.023309	0.000381	465.6955	7.528272	0.063086	0.001774	699.1669	58.67849	14.93655	0.326054	2.042148	1176.617	571.245	123.896	0.557081	0.045205
LS01_UPb096.1	0.070624	0.001429	439.8962	8.607018	0.646033	0.02184	505.2647	13.45495	0.025624	0.000507	511.3657	9.9875	0.066664	0.002228	813.9056	70.07481	14.17499	0.290367	1.83015	473.7821	259.5198	60.33819	0.278162	0.047287
LS01_UPb099.1	0.069714	0.00166	434.3526	9.999962	0.571074	0.016814	457.9992	10.85637	0.021915	0.000303	438.1505	5.98471	0.059515	0.001679	573.484	60.38821	14.39242	0.357572	1.832686	1065.726	574.0854	115.5516	0.558454	0.246564
LS01_UPb100.1	0.066474	0.001604	414.8056	9.7023	0.7237	0.037129	548.4639	21.48434	0.024311	0.000563	485.4388	11.10422	0.079047	0.003446	1132.312	84.12394	15.13264	0.378823	1.307395	1425.054	1115.887	255.5876	0.625911	-0.34001
Z_91500																								
91500-1	0.183005	0.003748	1083.21	20.45307	1.852462	0.057984	1061.48	20.70413	0.054283	0.001262	1068.132	24.21484	0.073558	0.002333	1011.271	65.1235	5.476031	0.114924	2.658716	75.704	28.4573	14.28628	0.230667	0.177347
91500-2	0.176261	0.003705	1046.318	20.3255	1.831229	0.055625	1054.063	20.2178	0.053261	0.00128	1048.513	24.5196	0.075276	0.002274	1066.751	64.96917	5.689224	0.122124	2.682855	81.84125	30.51073	15.18081	0.326129	0.317011
91500-3	0.177786	0.003628	1054.713	19.84803	1.872911	0.058439	1068.687	20.54473	0.053696	0.001237	1056.877	23.69373	0.076096	0.002449	1078.3	65.3296	5.636458	0.114914	2.658991	82.84476	31.25395	15.63069	0.151236	0.285652
91500-4	0.178002	0.003587	1055.915	19.62073	1.833308	0.053829	1055.176	19.25461	0.053273	0.001084	1048.85	20.7946	0.074579	0.002258	1041.619	61.13962	5.628311	0.113299	2.68401	80.07844	29.822	14.8551	0.146479	0.233985
91500-5	0.18053	0.003604	1069.748	19.67279	1.859854	0.055864	1064.467	19.6003	0.054165	0.001209	1065.882	23.14875	0.074758	0.002325	1045.324	61.71767	5.548349	0.110427	2.647231	80.49416	30.40059	15.2324	0.393322	0.248135
91500-6	0.179995	0.003526	1066.856	19.25652	1.857989	0.061641	1062.745	22.1621	0.053396	0.001095	1051.199	20.99607	0.074653	0.002433	1047.666	63.64197	5.55633	0.113713	2.653171	80.39712	30.34431	15.05682	0.288925	-0.0048
91500-7	0.17772	0.003548	1054.387	19.41711	1.853253	0.05524	1062.153	19.55581	0.054094	0.00123	1064.524	23.55197	0.075707	0.002374	1069.861	62.74443	5.628994	0.107806	2.683854	79.51137	29.59792	14.90309	0.036893	0.327253
91500-8	0.179265	0.003652	1062.801	19.96329	1.831765	0.055274	1054.334	19.99492	0.053684	0.001166	1056.695	22.35848	0.074241	0.002234	1032.239	62.75669	5.589966	0.114336	2.672401	77.82119	29.09768	14.48204	0.163975	0.291335
91500-9	0.179715	0.003628	1065.274	19.83696	1.862013	0.05864	1067.061	20.09207	0.05384	0.001186	1059.674	22.71949	0.074998	0.002354	1058.069	60.49466	5.575013	0.113806	2.655466	82.15501	30.94556	15.4696	0.358335	0.132775
91500-10	0.178612	0.00362	1059.241	19.75986	1.831306	0.054189	1054.381	19.45281	0.05367	0.001125	1056.446	21.5901	0.074333	0.00224	1034.917	61.9097	5.609546	0.111734	2.671748	82.08867	30.59512	15.26479	0.505741	0.142844
91500-11	0.179207	0.003661	1062.482	19.95332	1.878187	0.056259	1070.913	19.77747	0.053727	0.001041	1057.568	19.96657	0.076107	0.002354	1080.51	64.26967	5.60154	0.102795	2.668296	78.64123	29.50632	14.7214	-0.01788	0.427315
91500-12	0.178436	0.003557	1058.299	19.4306	1.870479	0.055829	1068.207	19.52101	0.053479	0.00111	1052.771	21.2864	0.075929	0.00234	1083.208	59.1043	5.613493	0.110495	2.666979	81.29991	30.46675	15.22626	0.412838	0.121268
91500-13	0.180192	0.003543	1067.923	19.34751	1.816662	0.059451	1050.737	20.83459	0.054133	0.001114	1065.325	21.33189	0.072973	0.002466	1006.614	65.62754	5.557086	0.109307	2.658523	78.34348	29.46787	14.755	0.191548	0.282876
91500-14	0.178346	0.003557	1057.808	19.44611	1.834503	0.053508	1058.252	17.92616	0.054324	0.001334	1068.868	25.5508	0.074753	0.002188	1054.889	61.4456	5.616457	0.111435	2.682841	80.01246	29.78261	15.20983	0.416812	0.027043
91500-15	0.179607	0.003619	1064.685	19.7695	1.869646	0.05766	1067.589	20.33157	0.053046	0.001194	1044.426	22.88451	0.075302	0.002404	1064.767	66.47018	5.578126	0.112108	2.658887	80.47179	30.2637	14.94325	0.03834	0.367521
91500-16	0.180446	0.003643	1069.266	19.85222	1.849472	0.055986	1063.156	19.0683	0.053563	0.00113	1054.371	21.69829	0.074113	0.002354	1040.196	65.05538	5.552181	0.10977	2.646002	79.87153	30.23013	14.9957	0.137168	0.268964
91500-17	0.178111	0.003551	1056.524	19.43204	1.850735	0.053831	1063.359	20.17739	0.053894	0.001048	1060.772	20.09832	0.075535	0.002285	1067.072	61.39628	5.623848	0.112881	2.681421	79.99345	29.83839	14.98315	0.187106	0.347113
91500-18	0.178556	0.003541	1058.971	19.35465	1.830832	0.057303	1053.787	20.38462	0.053505	0.001129	1053.275	21.66263	0.074293	0.002468	1028.449	67.12438	5.60877	0.110462	2.673079	79.71281	29.85834	14.86692	-0.03146	0.353672
91500-19	0.180628	0.00367	1070.262	20.01022	1.866948	0.055425	1069.346	20.5484	0.05404	0.001173	1063.524	22.51205	0.075215	0.002333	1057.957	62.96334	5.546689	0.110954	2.661859	80.15273	30.06499	15.12263	0.195789	0.187325
91500-20	0.178083	0.00352	1056.383	19.25506	1.833384	0.057257	1054.563	20.57038	0.053846	0.001078	1059.832	20.65956	0.074521	0.002354	1037.305	63.62675	5.615815	0.117724	2.671048	81.2871	30.44686	15.29131	0.279293	0.137309
91500-21	0.179981	0.003659	1066.722	19.96476	1.865729	0.057962	1066.185	20.48667	0.053634	0.001115	1055.757	21.38121	0.075392	0.002317	1062.704	61.98017	5.567182	0.11204	2.663308	79.15522	29.70784	14.80251	0.540739	-0.00109
91500-22	0.179768	0.003571	1065.595	19.51714	1.846505	0.05686	1062.065	19.24028	0.054097	0.001142	1064.624	21.89105	0.074459	0.00225	1051.492	61.13777	5.571323	0.11172	2.662441	79.92149	29.97383	15.10827	0.454082	0.044869
91500-23	0.177979	0.003527	1055.818	19.28279	1.847728	0.057159	1062.182	21.30679	0.053817	0.001126	1059.272	21.59146	0.075514	0.002416	1070.72	67.65493	5.619569	0.115829	2.678331	81.24592	30.45348	15.21286	0.094956	0.25378
91500-24	0.180082	0.003579	1067.306	19.55611	1.856098	0.061297	1062.172	21.66887	0.053242	0.001136	1048.223	21.82061	0.074654	0.002397	1048.199	63.17834	5.561665	0.111265	2.657973	78.5599	29.51097	14.64947	0.3599	0.067189
91500-25	0.17974	0.003614	1065.425	19.72635	1.860794	0.054041	1065.149	19.10665	0.054242	0.001097	1067.431	21.03256	0.075092	0.002228	1064.626	56.68703	5.57316	0.110778	2.668472	80.07017	30.01856	15.10553	0.331483	0.037727
91500-26	0.179193	0.003536	1062.456	19.32109	1.832345	0.062855	1055.739	23.7149	0.05328	0.001216	1048.905	23.33718	0.074171	0.002592	1026.955	75.45079	5.588517	0.110014	2.662704	79.63659	29.86467	14.70298	0.223011	0.197674
91500-27	0.178481	0.00362	1058.524	19.77933	1.848762	0.058939	1059.807	20.98926	0.053744	0.001275	1057.777	24.43446	0.075146	0.002392	1060.733	66.86914	5.614069	0.112897	2.669297	80.38463	30.15872	15.31254	0.320754	0.059455

Z_Plesovice																							
PLE-1	0.053825	0.001259	337.9164	7.712667	0.3987	0.011734	340.2582	8.480699	0.01679	0.000489	336.4828	9.725261	0.053546	0.001554	335.9469	66.88216	18.57996	0.454519	10.29011	622.2233	60.85057	9.432108	0.45458	0.322334
PLE-2	0.053958	0.001296	338.7237	7.931023	0.399601	0.012705	340.7547	9.204951	0.017127	0.000542	343.182	10.75016	0.05362	0.001494	347.9169	60.45469	18.65157	0.467104	10.29902	644.8384	62.52523	9.777372	0.746059	-0.0628
PLE-3	0.053532	0.001228	336.1301	7.506367	0.388169	0.011943	332.5175	8.69036	0.016727	0.000474	335.2522	9.42174	0.052459	0.001524	289.6809	65.12992	18.73078	0.442339	10.37234	662.7612	63.71231	9.943297	0.497898	-0.06485
PLE-4	0.05454	0.001238	342.2972	7.565967	0.407217	0.012746	346.2953	9.228525	0.016967	0.000386	340.0298	7.676419	0.053973	0.001476	358.0261	62.29655	18.41636	0.414864	10.3553	608.183	58.61075	9.296502	0.665292	-0.06047
PLE-5	0.054784	0.001228	343.7885	7.504074	0.41211	0.012318	349.8885	8.782568	0.017541	0.000624	351.3809	12.34367	0.054269	0.001551	368.021	61.94568	18.33234	0.410209	10.2847	614.7766	59.53259	9.785606	0.48075	-0.09063
PLE-6	0.054275	0.001244	340.6757	7.606054	0.399494	0.012726	340.693	9.201157	0.016946	0.000426	339.6112	8.456977	0.053307	0.001452	330.0871	62.47694	18.47227	0.411379	10.34613	628.3201	60.55079	9.544315	0.758862	-0.2557
PLE-7	0.054898	0.001286	344.4753	7.850315	0.400079	0.012038	341.2158	8.699792	0.016683	0.00045	334.3759	8.947157	0.052658	0.00142	302.687	61.52637	18.31177	0.42096	10.41125	629.3903	60.41408	9.395679	0.695019	0.087672
PLE-8	0.055431	0.001324	347.7267	8.080775	0.406233	0.013883	345.3656	10.01643	0.017506	0.00051	350.7228	10.10315	0.052605	0.001594	291.3497	72.71666	18.09977	0.448076	10.29351	665.2528	65.48642	10.52805	0.590711	0.073303
PLE-9	0.054063	0.001202	339.3821	7.347626	0.405022	0.012974	344.6526	9.288231	0.016829	0.000586	337.2377	11.61026	0.053823	0.001535	348.6815	64.90864	18.57296	0.412176	10.34383	649.4688	62.9668	9.93896	0.467633	0.010289
PLE-10	0.054202	0.001295	340.2157	7.914077	0.3938	0.012097	336.6218	8.816143	0.016832	0.000448	337.3415	8.900905	0.052492	0.00144	301.0089	59.15601	18.5166	0.455932	10.34159	655.5296	63.48604	9.937175	0.640208	-0.04655
PLE-11	0.054045	0.001272	339.2605	7.766954	0.396387	0.011732	338.5642	8.457358	0.016943	0.000498	339.5369	9.892554	0.052781	0.001479	305.4247	64.19361	18.60261	0.419354	10.38042	655.4574	62.78848	9.832132	0.495096	0.131782
PLE-12	0.05432	0.001226	340.9509	7.491646	0.402228	0.01085	342.9484	7.841884	0.017276	0.000505	346.1406	10.01656	0.053592	0.001402	344.0931	60.33374	18.45878	0.431674	10.40192	654.3696	63.14246	10.05494	0.461157	0.139837
PLE-13	0.054604	0.001279	342.6782	7.815718	0.417542	0.013035	353.6953	9.244991	0.017046	0.000551	341.567	10.92124	0.055405	0.001524	416.568	60.49221	18.37212	0.416404	10.39852	656.0554	63.20232	9.970784	0.646523	-0.18261
PLE-14	0.054827	0.001317	344.0335	8.041169	0.403823	0.011894	343.9551	8.570208	0.017746	0.000519	355.4748	10.27431	0.053367	0.001419	333.7014	61.13053	18.31094	0.452447	10.35901	637.6478	61.89625	10.11062	0.558983	-0.13893
PLE-15	0.05426	0.001143	340.5983	6.983163	0.398739	0.011787	341.2293	8.900785	0.01758	0.000389	352.2089	7.727014	0.053427	0.001501	339.9066	61.9399	18.44863	0.393043	10.33233	629.4986	61.49119	9.883662	0.579064	-0.01556
PLE-16	0.052942	0.001192	332.5211	7.291751	0.395748	0.01321	337.8878	9.30006	0.01776	0.001055	355.5479	20.65025	0.054094	0.001597	359.1515	63.2019	18.93131	0.431785	10.41275	637.8465	61.55045	10.34133	0.655862	-0.41811
PLE-17	0.054171	0.001254	340.0348	7.663768	0.399109	0.012184	340.5037	8.854751	0.017486	0.000451	350.3335	8.958698	0.053448	0.001507	334.1689	65.19544	18.50952	0.441581	10.39818	618.3219	59.54494	9.56975	0.631449	0.000479
PLE-18	0.054286	0.001277	340.7371	7.809106	0.400932	0.012744	341.7371	9.206446	0.01706	0.00041	341.8738	8.151676	0.053306	0.001479	334.4004	66.18564	18.52085	0.438355	10.32918	618.0265	59.86092	9.498792	0.714769	-0.00525
PLE-19	0.053694	0.001246	337.119	7.614071	0.395042	0.011213	337.6602	8.138253	0.017174	0.000639	344.0804	12.61674	0.053189	0.001449	324.4007	63.87176	18.71804	0.423386	10.42232	651.9065	62.69999	10.1156	0.306127	0.150763
PLE-20	0.053861	0.001264	338.1374	7.724824	0.393521	0.011252	336.5447	8.150568	0.017002	0.000401	340.7224	7.975369	0.053238	0.001345	331.0696	57.38928	18.66643	0.430859	10.40609	648.401	62.21975	9.710988	0.838603	0.059214
PLE-21	0.054686	0.001277	343.1813	7.794069	0.400053	0.011736	341.2458	8.499206	0.016847	0.000442	337.6303	8.776438	0.053211	0.001484	324.7675	62.69148	18.37931	0.417125	10.35197	622.7601	60.23424	9.351047	0.549258	0.149292
PLE-22	0.053784	0.001219	337.6707	7.449237	0.39809	0.013294	340.7496	9.942546	0.016894	0.000488	338.5522	9.686132	0.053656	0.001634	337.2244	70.04049	18.632	0.437476	10.37341	647.1888	62.3851	9.865882	0.607944	0.022551
PLE-23	0.054541	0.001367	342.2757	8.347206	0.40049	0.01225	341.4909	8.807929	0.017071	0.000437	342.0987	8.672906	0.053479	0.0015	335.6318	63.81912	18.35472	0.443835	10.3547	630.261	61.23774	9.69304	0.681773	0.183994
PLE-24	0.054674	0.001321	343.1025	8.067374	0.403618	0.01297	343.6479	9.343093	0.017415	0.000456	348.9226	9.054293	0.053514	0.001523	341.7221	68.10273	18.35665	0.416581	10.35526	679.2849	66.02898	10.6414	0.616804	0.023486
PLE-25	0.053888	0.001355	338.2835	8.289735	0.396884	0.011883	338.9098	8.678225	0.016738	0.000396	335.4799	7.860414	0.053426	0.001418	336.6188	60.30609	18.62855	0.443169	10.4273	638.0325	61.24191	9.611347	0.715545	0.138137
PLE-26	0.054261	0.00127	340.5835	7.761807	0.403413	0.012912	343.5161	9.362819	0.016684	0.000455	334.3979	9.042987	0.053899	0.001486	366.4058	63.2975	18.52572	0.436142	10.34006	637.0726	61.58719	9.501978	0.694331	-0.14404
PLE-27	0.053426	0.001265	335.4766	7.732786	0.399577	0.012842	340.7251	9.253786	0.016819	0.000403	337.0793	8.015443	0.054168	0.001536	364.1043	63.03576	18.82068	0.433224	10.34072	636.5493	61.52774	9.602104	0.662856	0.004239
Z_Temora2																								
TEM-1	0.071302	0.002048	443.8203	12.30033	0.542317	0.033145	435.3352	20.03191	0.02339	0.00146	466.8189	28.54974	0.055834	0.003323	350.4395	115.9867	14.19419	0.399329	3.338508	108.2156	32.47063	6.607626	0.259813	-0.03629
TEM-2	0.065989	0.001345	411.9234	8.131977	0.496569	0.017792	408.4414	12.07846	0.02025	0.000462	405.1709	9.166115	0.054547	0.001952	366.3089	84.56587	15.17904	0.310784	1.718528	229.1737	132.3781	24.45688	0.137329	0.128722
TEM-3	0.06519	0.001303	407.09	7.890595	0.513592	0.032967	416.9735	17.38374	0.020665	0.000767	413.2894	14.99455	0.057064	0.00363	402.387	67.20933	15.36669	0.315973	1.355703	255.381	188.0797	36.54034	0.8068	-0.65664
TEM-5	0.06775	0.001453	422.5442	8.767372	0.525734	0.032363	424.562	19.3607	0.021396	0.000972	427.6876	19.07216	0.055947	0.003306	376.8474	108.5574	14.80778	0.315857	2.84866	94.85723	33.79059	6.722906	0.694284	-0.50155
TEM-7	0.067063	0.001317	418.4196	7.960154	0.515457	0.018625	420.862	12.27342	0.021503	0.000641	429.9296	12.635	0.055764	0.002041	408.993	81.44236	14.9317	0.296661	3.326014	237.8756	71.38926	14.42244	0.46459	-0.23986
TEM-9	0.066035	0.001309	412.2062	7.911681	0.509524	0.027648	410.3266	13.53039	0.020388	0.000542	407.8868	10.72231	0.055255	0.002413	385.2919	91.72237	15.16638	0.294725	2.227862	153.2116	68.53127	13.07912	0.272998	-0.18899
TEM-6	0.06655	0.001308	415.3175	7.905468	0.49761	0.017502	408.9458	11.87324	0.020604	0.000438	412.1747	8.64968	0.054543	0.002158	352.7177	84.57798	15.04706	0.295898	2.010194	230.929	113.7111	21.95058	0.195166	-0.03227
TEM-13	0.066969	0.001323	417.851	7.995797	0.524071	0.017933	428.3709	11.39173	0.021064	0.000399	421.3044	7.903446	0.056798	0.002004	476.4287	71.93433	14.95336	0.297211	2.117845	164.0084	77.54529	15.44357	0.058491	0.237583
TEM-14	0.068095	0.001339	424.6484	8.08752	0.525864	0.014626	428.5324	9.715933	0.021261	0.000408	425.1962	8.042282	0.055742	0.00161	426.5628	65.16413	14.68267	0.274945	1.910927	379.5554	198.946	38.81257	0.068163	0.111766
TEM-16	0.066285	0.001415	413.6962	8.542983	0.532802	0.022156	431.7336	14.43339	0.020996	0.000881	419.8062	17.33266	0.05834	0.002375	497.6203	89.3242	15.13168	0.315575	3.613707	107.0908	30.13151	5.873708	0.737431	-0.53603
TEM-17	0.067807	0.00133	422.9145	8.028419	0.510789	0.015696	418.2507	10.53707	0.021147	0.000369	422.9382	7.307375	0.054544	0.001756	370.7862	72.83051	14.76688	0.291285	1.852778	222.1183	120.2546	23.21222	0.05263	0.305199
TEM-18	0.065709	0.001283	410.2356	7.758254	0.512481	0.016893	419.1699	11.27743	0.020826	0.000408	416.5869	8.07647	0.056533	0.001919	445.9835	76.53125	15.23744	0.295363	2.120714	268.4418	125.4057	24.4697	-0.00677	0.201972
TEM-15	0.066443	0.00132	414.6709	7.976279	0.50709	0.017658	415.4054	11.79989	0.021184	0.000415	423.6616	8.22043	0.055571	0.002118	398.8031	82.50531	15.07355	0.298599	1.964039	154.1044	79.93889	15.71473	-0.04245	0.339136
TEM-23	0.064982	0.001309	405.8324	7.924883	0.523755	0.027921	424.6911	15.95835	0.020392	0.000791	407.8746	15.49767	0.058457	0.003079	468.0738	76.15535	15.41804	0.313883	2.168845	149.3644	68.97972	13.28249	0.755341	-0.58463
TEM-24	0.066098	0.001363	412.573	8.243721	0.507364	0.023212	414.3581	15.25857	0.020632	0.000674	412.682	13.28963	0.055722	0.002599	377.6154	101.2768	15.16518	0.317213	2.228096	105.3253	46.97863	9.12638	0.73562	-0.49418
TEM-21	0.067146	0.001362	418.9158	8.226623	0.495791	0.01792	407.6357	12.2429	0.02028	0.00048	405.7494	9.506999	0.053846	0.002025	337.1684	85.5522	14.92219	0.303864	1.999106	154.4783	77.43751	14.56215	0.093505	0.164268
TEM-22	0.067569	0.001324	421.4784	7.991377	0.514501	0.018087	420.3142	11.90335	0.021069	0.000441	421.3882	8.7067	0.055369	0.001993	396.2548	76.56525	14.81899	0.28944	1.827379	227.4476	124.1808	24.35519	0.447912	-0.32489
TEM-12	0.066646	0.001372	415.891	8.286566	0.536001	0.026223	432.9037	16.79732	0.021724	0.000671	434.2891	13.26788	0.058425	0.002785	508.6964	105.8825	15.03847	0.305214	2.890867	113.1337	39.18627	8.062771	0.310832	-0.10224
TEM-19	0.066199	0.001332	413.1932	8.054905	0.508999	0.016004	418.2365	11.19201	0.020561	0.000424	411.3288	8.40596	0.05625	0.001851	438.3042	73.18774	15.10933	0.288722	3.728567	270.9037	74.28539	14.08449	0.188271	0.19061
TEM-20	0.066233	0.001325	413.3996	8.010434	0.517031	0.019395	421.7531	12.95001	0.021045	0.000476	420.9123	9.42336	0.056833	0.002181	446.2786	85.89279	15.12373	0.301795	1.953718	141.9565	72.89419	14.25494	0.243873	-0.03561
TEM-25	0.065661	0.001288	409.9459	7.791944	0.524625	0.01951	426.8268	12.89867	0.019683	0.00041	393.9401	8.121837	0.058047	0.002165	495.6994	83.38581	15.24986	0.297555	1.691294	180.67	106.2893	19.52978	0.242963	-0.01711
TEM-26	0.067741	0.001343	422.5101	8.107972	0.520521	0.015393	424.8382	10.20527	0.021116	0.000402	422.3192	7.953885	0.055826	0.001722	426.3648	67.19862	14.78488	0.292977	3.032759	341.1656	113.4788	22.21207	-0.00231	0.275331
TEM-27	0.067082	0.001453	418.5119	8.782027	0.51343	0.015599	420.0457	10.4975	0.020732	0.000282	414.7486	5.583884	0.055456	0.001602	415.8659	64.30673	14.92282	0.30982	2.003122	405.7599	199.457	38.68547	0.528547	0.105334